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Supporting Information (the part 02) for:

Theoretical study on the catalytic mechanism of the retaining α-1,2-mannosyltransferase Kre2p/Mnt1p: The impact of different metal ions on catalysis

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(a) The Cartesian coordinates (in the PDB format) of the M06-2X:OPLS2005 optimized Michaelis complex **1A** (**WT_Mn**).

```
REMARK 888
REMARK 888 WRITTEN BY MAESTRO (A PRODUCT OF SCHRODINGER, LLC)
TITLE     1A (WT_Mn)
MODEL        1
ATOM      1  CH3 ACE A 103      -7.068 -19.250 -19.436  1.00  0.00          C
ATOM      2  C   ACE A 103      -5.982 -18.212 -19.668  1.00  0.00          C
ATOM      3  O   ACE A 103      -5.279 -18.269 -20.678  1.00  0.00          O
ATOM      4 1H   ACE A 103      -8.048 -18.771 -19.427  1.00  0.00          H
ATOM      5 2H   ACE A 103      -7.057 -20.010 -20.216  1.00  0.00          H
ATOM      6 3H   ACE A 103      -6.927 -19.735 -18.470  1.00  0.00          H
ATOM      7  N   LYS A 104      -5.846 -17.266 -18.738  1.00 36.95          N
ATOM      8  CA  LYS A 104      -4.835 -16.219 -18.714  1.00 37.33          C
ATOM      9  C   LYS A 104      -4.821 -15.614 -17.312  1.00 36.73          C
ATOM     10  O   LYS A 104      -5.654 -14.744 -17.027  1.00 37.03          O
ATOM     11  CB  LYS A 104      -5.117 -15.134 -19.790  1.00 38.20          C
ATOM     12  CG  LYS A 104      -4.010 -14.058 -19.913  1.00 40.08          C
ATOM     13  CD  LYS A 104      -4.499 -12.592 -19.889  1.00 40.86          C
ATOM     14  CE  LYS A 104      -4.399 -11.886 -18.519  1.00 41.37          C
ATOM     15  NZ  LYS A 104      -5.556 -12.130 -17.639  1.00 44.72          N1+
ATOM     16  HA  LYS A 104      -3.865 -16.678 -18.913  1.00  0.00          H
ATOM     17  HB2 LYS A 104      -5.236 -15.611 -20.763  1.00  0.00          H
ATOM     18  HB3 LYS A 104      -6.084 -14.670 -19.588  1.00  0.00          H
ATOM     19  HG2 LYS A 104      -3.227 -14.203 -19.166  1.00  0.00          H
ATOM     20  HG3 LYS A 104      -3.502 -14.232 -20.863  1.00  0.00          H
ATOM     21  HD2 LYS A 104      -3.847 -12.034 -20.563  1.00  0.00          H
ATOM     22  HD3 LYS A 104      -5.496 -12.492 -20.322  1.00  0.00          H
ATOM     23  HE2 LYS A 104      -3.478 -12.164 -18.012  1.00  0.00          H
ATOM     24  HE3 LYS A 104      -4.336 -10.808 -18.673  1.00  0.00          H
ATOM     25  HZ1 LYS A 104      -5.395 -11.654 -16.751  1.00  0.00          H
ATOM     26  HZ2 LYS A 104      -6.398 -11.732 -18.043  1.00  0.00          H
ATOM     27  HZ3 LYS A 104      -5.689 -13.126 -17.449  1.00  0.00          H
ATOM     28  H2  LYS A 104      -6.426 -17.371 -17.884  1.00  0.00          H
ATOM     29  N   THR A 105      -3.831 -15.952 -16.475  1.00 34.30          N
ATOM     30  CA  THR A 105      -3.629 -15.232 -15.223  1.00 33.23          C
ATOM     31  C   THR A 105      -2.992 -13.872 -15.572  1.00 32.56          C
ATOM     32  O   THR A 105      -2.187 -13.760 -16.500  1.00 32.13          O
ATOM     33  CB  THR A 105      -2.778 -16.040 -14.198  1.00 32.21          C
ATOM     34  OG1 THR A 105      -1.380 -15.782 -14.176  1.00 35.33          O
ATOM     35  CG2 THR A 105      -3.015 -17.558 -14.220  1.00 33.79          C
ATOM     36  H   THR A 105      -3.106 -16.593 -16.763  1.00  0.00          H
ATOM     37  HA  THR A 105      -4.614 -15.081 -14.778  1.00  0.00          H
ATOM     38  HB  THR A 105      -3.128 -15.689 -13.228  1.00  0.00          H
ATOM     39  HG1 THR A 105      -0.950 -16.166 -14.968  1.00  0.00          H
ATOM     40 HG21 THR A 105      -2.551 -18.039 -13.360  1.00  0.00          H
ATOM     41 HG22 THR A 105      -4.081 -17.785 -14.194  1.00  0.00          H
ATOM     42 HG23 THR A 105      -2.596 -18.014 -15.118  1.00  0.00          H
ATOM     43  N   THR A 106      -3.348 -12.819 -14.841  1.00 30.71          N
ATOM     44  CA  THR A 106      -2.721 -11.505 -14.972  1.00 29.71          C
ATOM     45  C   THR A 106      -1.404 -11.460 -14.150  1.00 28.38          C
ATOM     46  O   THR A 106      -0.652 -10.490 -14.239  1.00 26.84          O
ATOM     47  CB  THR A 106      -3.768 -10.435 -14.571  1.00 29.60          C
ATOM     48  OG1 THR A 106      -4.857 -10.511 -15.488  1.00 29.62          O
ATOM     49  CG2 THR A 106      -3.276  -8.983 -14.673  1.00 29.22          C
ATOM     50  H   THR A 106      -3.983 -12.998 -14.046  1.00  0.00          H
ATOM     51  HA  THR A 106      -2.435 -11.322 -16.009  1.00  0.00          H
ATOM     52  HB  THR A 106      -4.138 -10.637 -13.566  1.00  0.00          H
ATOM     53  HG1 THR A 106      -5.390  -9.724 -15.365  1.00  0.00          H
ATOM     54 HG21 THR A 106      -4.074  -8.269 -14.475  1.00  0.00          H
ATOM     55 HG22 THR A 106      -2.479  -8.767 -13.963  1.00  0.00          H
ATOM     56 HG23 THR A 106      -2.889  -8.764 -15.662  1.00  0.00          H
ATOM     57  N   MET A 107      -1.037 -12.560 -13.464  1.00 27.33          N
ATOM     58  CA  MET A 107       0.296 -12.765 -12.896  1.00 27.87          C
ATOM     59  C   MET A 107       1.330 -12.992 -14.009  1.00 27.83          C
ATOM     60  O   MET A 107       2.505 -12.714 -13.803  1.00 28.87          O
ATOM     61  CB  MET A 107       0.313 -14.001 -11.964  1.00 25.92          C
ATOM     62  CG  MET A 107       1.106 -13.794 -10.660  1.00 26.21          C
ATOM     63  SD  MET A 107       2.919 -13.693 -10.758  1.00 27.25          S
ATOM     64  CE  MET A 107       3.421 -15.136  -9.775  1.00 24.40          C
ATOM     65  H   MET A 107      -1.646 -13.367 -13.530  1.00  0.00          H
ATOM     66  HA  MET A 107       0.570 -11.872 -12.333  1.00  0.00          H
ATOM     67  HB2 MET A 107      -0.708 -14.252 -11.690  1.00  0.00          H
ATOM     68  HB3 MET A 107       0.678 -14.892 -12.481  1.00  0.00          H
ATOM     69  HG2 MET A 107       0.739 -12.906 -10.146  1.00  0.00          H
ATOM     70  HG3 MET A 107       0.886 -14.635 -10.012  1.00  0.00          H
ATOM     71  HE1 MET A 107       4.500 -15.274  -9.835  1.00  0.00          H
ATOM     72  HE2 MET A 107       3.161 -15.006  -8.726  1.00  0.00          H
ATOM     73  HE3 MET A 107       2.947 -16.046 -10.141  1.00  0.00          H
ATOM     74  N   ASP A 108       0.936 -13.466 -15.198  1.00 28.14          N
ATOM     75  CA  ASP A 108       1.866 -13.835 -16.277  1.00 28.57          C
ATOM     76  C   ASP A 108       2.475 -12.646 -17.038  1.00 28.39          C
ATOM     77  O   ASP A 108       3.246 -12.826 -17.979  1.00 28.31          O
ATOM     78  CB  ASP A 108       1.237 -14.880 -17.218  1.00 29.94          C
ATOM     79  CG  ASP A 108       1.142 -16.226 -16.512  1.00 31.66          C
ATOM     80  OD1 ASP A 108       2.229 -16.761 -16.186  1.00 31.67          O
ATOM     81  OD2 ASP A 108      -0.001 -16.642 -16.214  1.00 33.98          O1-
ATOM     82  H   ASP A 108      -0.030 -13.749 -15.314  1.00  0.00          H
ATOM     83  HA  ASP A 108       2.727 -14.292 -15.803  1.00  0.00          H
ATOM     84  HB2 ASP A 108       0.252 -14.564 -17.563  1.00  0.00          H
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ATOM     85  HB3 ASP A 108       1.850 -15.029 -18.107  1.00  0.00           H
ATOM     86  N   TYR A 109       2.236 -11.420 -16.558  1.00 29.03           N
ATOM     87  CA  TYR A 109       3.045 -10.242 -16.868  1.00 29.95           C
ATOM     88  C   TYR A 109       4.184 -10.060 -15.832  1.00 29.37           C
ATOM     89  O   TYR A 109       4.969  -9.121 -15.955  1.00 30.93           O
ATOM     90  CB  TYR A 109       2.135  -8.996 -16.813  1.00 32.34           C
ATOM     91  CG  TYR A 109       0.949  -9.016 -17.770  1.00 34.77           C
ATOM     92  CD1 TYR A 109      -0.367  -8.910 -17.271  1.00 34.89           C
ATOM     93  CD2 TYR A 109       1.154  -9.161 -19.159  1.00 35.80           C
ATOM     94  CE1 TYR A 109      -1.465  -8.980 -18.151  1.00 34.99           C
ATOM     95  CE2 TYR A 109       0.054  -9.230 -20.037  1.00 35.75           C
ATOM     96  CZ  TYR A 109      -1.258  -9.153 -19.530  1.00 36.34           C
ATOM     97  OH  TYR A 109      -2.336  -9.255 -20.357  1.00 36.60           O
ATOM     98  H   TYR A 109       1.557 -11.355 -15.813  1.00  0.00           H
ATOM     99  HA  TYR A 109       3.497 -10.326 -17.858  1.00  0.00           H
ATOM    100  HB2 TYR A 109       1.767  -8.852 -15.797  1.00  0.00           H
ATOM    101  HB3 TYR A 109       2.726  -8.109 -17.045  1.00  0.00           H
ATOM    102  HD1 TYR A 109      -0.541  -8.795 -16.211  1.00  0.00           H
ATOM    103  HD2 TYR A 109       2.154  -9.247 -19.557  1.00  0.00           H
ATOM    104  HE1 TYR A 109      -2.475  -8.916 -17.777  1.00  0.00           H
ATOM    105  HE2 TYR A 109       0.229  -9.363 -21.094  1.00  0.00           H
ATOM    106  HH  TYR A 109      -2.114  -9.251 -21.276  1.00  0.00           H
ATOM    107  N   ILE A 110       4.269 -10.924 -14.807  1.00 28.23           N
ATOM    108  CA  ILE A 110       5.159 -10.855 -13.647  1.00 27.12           C
ATOM    109  C   ILE A 110       5.937 -12.174 -13.449  1.00 28.39           C
ATOM    110  O   ILE A 110       7.095 -12.108 -13.019  1.00 27.18           O
ATOM    111  CB  ILE A 110       4.373 -10.419 -12.369  1.00 26.29           C
ATOM    112  CG1 ILE A 110       3.584  -9.102 -12.555  1.00 26.10           C
ATOM    113  CG2 ILE A 110       5.266 -10.315 -11.116  1.00 24.77           C
ATOM    114  CD1 ILE A 110       2.101  -9.316 -12.888  1.00 26.96           C
ATOM    115  H   ILE A 110       3.555 -11.646 -14.751  1.00  0.00           H
ATOM    116  HA  ILE A 110       5.916 -10.092 -13.841  1.00  0.00           H
ATOM    117  HB  ILE A 110       3.651 -11.200 -12.134  1.00  0.00           H
ATOM    118 HG12 ILE A 110       3.626  -8.527 -11.633  1.00  0.00           H
ATOM    119 HG13 ILE A 110       4.058  -8.473 -13.310  1.00  0.00           H
ATOM    120 HG21 ILE A 110       4.696  -9.978 -10.249  1.00  0.00           H
ATOM    121 HG22 ILE A 110       5.694 -11.277 -10.839  1.00  0.00           H
ATOM    122 HG23 ILE A 110       6.084  -9.613 -11.272  1.00  0.00           H
ATOM    123 HD11 ILE A 110       1.598  -8.377 -13.116  1.00  0.00           H
ATOM    124 HD12 ILE A 110       1.967  -9.969 -13.748  1.00  0.00           H
ATOM    125 HD13 ILE A 110       1.576  -9.775 -12.051  1.00  0.00           H
ATOM    126  N   THR A 111       5.343 -13.347 -13.752  1.00 28.11           N
ATOM    127  CA  THR A 111       5.910 -14.703 -13.612  1.00 29.58           C
ATOM    128  C   THR A 111       7.427 -14.898 -13.871  1.00 30.49           C
ATOM    129  O   THR A 111       8.070 -15.514 -13.016  1.00 30.80           O
ATOM    130  CB  THR A 111       4.998 -15.826 -14.184  1.00 29.32           C
ATOM    131  OG1 THR A 111       4.699 -15.629 -15.548  1.00 32.94           O
ATOM    132  CG2 THR A 111       3.703 -16.037 -13.392  1.00 28.93           C
ATOM    133  H   THR A 111       4.373 -13.319 -14.050  1.00  0.00           H
ATOM    134  HA  THR A 111       5.846 -14.844 -12.532  1.00  0.00           H
ATOM    135  HB  THR A 111       5.543 -16.770 -14.130  1.00  0.00           H
ATOM    136  HG1 THR A 111       3.888 -16.117 -15.773  1.00  0.00           H
ATOM    137 HG21 THR A 111       3.135 -16.883 -13.780  1.00  0.00           H
ATOM    138 HG22 THR A 111       3.915 -16.249 -12.346  1.00  0.00           H
ATOM    139 HG23 THR A 111       3.054 -15.168 -13.433  1.00  0.00           H
ATOM    140  N   PRO A 112       8.055 -14.340 -14.939  1.00 32.29           N
ATOM    141  CA  PRO A 112       9.522 -14.283 -15.096  1.00 33.46           C
ATOM    142  C   PRO A 112      10.332 -13.821 -13.865  1.00 35.96           C
ATOM    143  O   PRO A 112      11.361 -14.420 -13.557  1.00 35.45           O
ATOM    144  CB  PRO A 112       9.762 -13.341 -16.285  1.00 33.51           C
ATOM    145  CG  PRO A 112       8.513 -13.485 -17.136  1.00 31.85           C
ATOM    146  CD  PRO A 112       7.399 -13.798 -16.137  1.00 31.36           C
ATOM    147  HA  PRO A 112       9.850 -15.290 -15.362  1.00  0.00           H
ATOM    148  HB2 PRO A 112       9.848 -12.305 -15.952  1.00  0.00           H
ATOM    149  HB3 PRO A 112      10.672 -13.587 -16.833  1.00  0.00           H
ATOM    150  HG2 PRO A 112       8.301 -12.602 -17.740  1.00  0.00           H
ATOM    151  HG3 PRO A 112       8.633 -14.329 -17.817  1.00  0.00           H
ATOM    152  HD2 PRO A 112       6.856 -12.882 -15.910  1.00  0.00           H
ATOM    153  HD3 PRO A 112       6.690 -14.502 -16.571  1.00  0.00           H
ATOM    154  N   SER A 113       9.869 -12.805 -13.118  1.00 36.66           N
ATOM    155  CA  SER A 113      10.549 -12.313 -11.912  1.00 35.89           C
ATOM    156  C   SER A 113      10.367 -13.266 -10.704  1.00 36.89           C
ATOM    157  O   SER A 113      11.125 -13.195  -9.738  1.00 37.22           O
ATOM    158  CB  SER A 113      10.071 -10.869 -11.609  1.00 35.80           C
ATOM    159  OG  SER A 113       8.713 -10.745 -11.205  1.00 33.01           O
ATOM    160  H   SER A 113       8.964 -12.407 -13.350  1.00  0.00           H
ATOM    161  HA  SER A 113      11.620 -12.264 -12.118  1.00  0.00           H
ATOM    162  HB2 SER A 113      10.694 -10.446 -10.818  1.00  0.00           H
ATOM    163  HB3 SER A 113      10.239 -10.237 -12.483  1.00  0.00           H
ATOM    164  HG  SER A 113       8.146 -11.155 -11.860  1.00  0.00           H
ATOM    165  N   PHE A 114       9.422 -14.212 -10.794  1.00 37.03           N
ATOM    166  CA  PHE A 114       9.158 -15.266  -9.818  1.00 38.15           C
ATOM    167  C   PHE A 114       9.845 -16.588 -10.207  1.00 40.29           C
ATOM    168  O   PHE A 114       9.673 -17.584  -9.502  1.00 41.86           O
ATOM    169  CB  PHE A 114       7.629 -15.479  -9.701  1.00 37.24           C
ATOM    170  CG  PHE A 114       7.002 -14.592  -8.648  1.00 37.59           C
ATOM    171  CD1 PHE A 114       6.923 -13.199  -8.855  1.00 37.08           C
ATOM    172  CD2 PHE A 114       6.523 -15.154  -7.446  1.00 36.59           C
ATOM    173  CE1 PHE A 114       6.394 -12.371  -7.851  1.00 37.47           C
ATOM    174  CE2 PHE A 114       5.999 -14.326  -6.441  1.00 35.73           C
ATOM    175  CZ  PHE A 114       5.947 -12.938  -6.644  1.00 36.89           C
ATOM    176  H   PHE A 114       8.890 -14.263 -11.655  1.00  0.00           H
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ATOM    177  HA  PHE A 114       9.554 -14.992  -8.838  1.00  0.00           H
ATOM    178  HB2 PHE A 114       7.128 -15.295 -10.649  1.00  0.00           H
ATOM    179  HB3 PHE A 114       7.376 -16.511  -9.454  1.00  0.00           H
ATOM    180  HD1 PHE A 114       7.276 -12.759  -9.776  1.00  0.00           H
ATOM    181  HD2 PHE A 114       6.555 -16.221  -7.283  1.00  0.00           H
ATOM    182  HE1 PHE A 114       6.331 -11.305  -8.007  1.00  0.00           H
ATOM    183  HE2 PHE A 114       5.645 -14.748  -5.512  1.00  0.00           H
ATOM    184  HZ  PHE A 114       5.555 -12.308  -5.867  1.00  0.00           H
ATOM    185  N   ALA A 115      10.659 -16.613 -11.273  1.00 -1.00           N
ATOM    186  CA  ALA A 115      11.487 -17.761 -11.652  1.00 -1.00           C
ATOM    187  C   ALA A 115      12.795 -17.808 -10.834  1.00 -1.00           C
ATOM    188  O   ALA A 115      13.464 -18.836 -10.791  1.00 -1.00           O
ATOM    189  CB  ALA A 115      11.865 -17.625 -13.135  1.00 -1.00           C
ATOM    190  H   ALA A 115      10.720 -15.781 -11.850  1.00 -1.00           H
ATOM    191  HA  ALA A 115      10.936 -18.692 -11.501  1.00 -1.00           H
ATOM    192  HB1 ALA A 115      12.411 -18.504 -13.479  1.00 -1.00           H
ATOM    193  HB2 ALA A 115      10.978 -17.527 -13.761  1.00 -1.00           H
ATOM    194  HB3 ALA A 115      12.500 -16.757 -13.317  1.00 -1.00           H
ATOM    195  N   ASN A 116      13.137 -16.713 -10.143  1.00 -1.00           N
ATOM    196  CA  ASN A 116      14.347 -16.461  -9.342  1.00 -1.00           C
ATOM    197  C   ASN A 116      14.352 -17.236  -7.991  1.00 -1.00           C
ATOM    198  O   ASN A 116      14.983 -16.822  -7.013  1.00 -1.00           O
ATOM    199  CB  ASN A 116      14.377 -14.925  -9.130  1.00 -1.00           C
ATOM    200  CG  ASN A 116      15.659 -14.363  -8.510  1.00 -1.00           C
ATOM    201  OD1 ASN A 116      16.753 -14.552  -9.030  1.00 -1.00           O
ATOM    202  ND2 ASN A 116      15.535 -13.682  -7.379  1.00 -1.00           N
ATOM    203  H   ASN A 116      12.488 -15.943 -10.221  1.00 -1.00           H
ATOM    204  HA  ASN A 116      15.222 -16.770  -9.915  1.00 -1.00           H
ATOM    205  HB2 ASN A 116      14.276 -14.428 -10.095  1.00 -1.00           H
ATOM    206  HB3 ASN A 116      13.509 -14.610  -8.552  1.00 -1.00           H
ATOM    207 HD21 ASN A 116      16.344 -13.244  -6.956  1.00 -1.00           H
ATOM    208 HD22 ASN A 116      14.612 -13.612  -6.942  1.00 -1.00           H
ATOM    209  N   LYS A 117      13.658 -18.381  -7.930  1.00 -1.00           N
ATOM    210  CA  LYS A 117      13.430 -19.266  -6.781  1.00 -1.00           C
ATOM    211  C   LYS A 117      14.707 -20.007  -6.325  1.00 -1.00           C
ATOM    212  O   LYS A 117      14.786 -21.235  -6.312  1.00 -1.00           O
ATOM    213  CB  LYS A 117      12.288 -20.246  -7.144  1.00 -1.00           C
ATOM    214  CG  LYS A 117      10.893 -19.604  -7.036  1.00 -1.00           C
ATOM    215  CD  LYS A 117       9.795 -20.476  -7.675  1.00 -1.00           C
ATOM    216  CE  LYS A 117       8.347 -20.084  -7.321  1.00 -1.00           C
ATOM    217  NZ  LYS A 117       8.050 -18.678  -7.617  1.00 -1.00          N1+
ATOM    218  H   LYS A 117      13.307 -18.706  -8.824  1.00 -1.00           H
ATOM    219  HA  LYS A 117      13.116 -18.656  -5.937  1.00 -1.00           H
ATOM    220  HB2 LYS A 117      12.456 -20.652  -8.143  1.00 -1.00           H
ATOM    221  HB3 LYS A 117      12.298 -21.103  -6.468  1.00 -1.00           H
ATOM    222  HG2 LYS A 117      10.683 -19.431  -5.982  1.00 -1.00           H
ATOM    223  HG3 LYS A 117      10.905 -18.618  -7.500  1.00 -1.00           H
ATOM    224  HD2 LYS A 117       9.922 -20.464  -8.759  1.00 -1.00           H
ATOM    225  HD3 LYS A 117       9.942 -21.513  -7.372  1.00 -1.00           H
ATOM    226  HE2 LYS A 117       7.656 -20.698  -7.900  1.00 -1.00           H
ATOM    227  HE3 LYS A 117       8.123 -20.281  -6.273  1.00 -1.00           H
ATOM    228  HZ1 LYS A 117       7.024 -18.582  -7.798  1.00 -1.00           H
ATOM    229  HZ2 LYS A 117       8.257 -18.083  -6.816  1.00 -1.00           H
ATOM    230  HZ3 LYS A 117       8.559 -18.344  -8.432  1.00 -1.00           H
ATOM    231  N   ALA A 118      15.722 -19.221  -5.969  1.00 -1.00           N
ATOM    232  CA  ALA A 118      16.987 -19.610  -5.367  1.00 -1.00           C
ATOM    233  C   ALA A 118      17.625 -18.431  -4.620  1.00 -1.00           C
ATOM    234  O   ALA A 118      18.310 -18.635  -3.619  1.00 -1.00           O
ATOM    235  CB  ALA A 118      17.932 -20.218  -6.416  1.00 -1.00           C
ATOM    236  H   ALA A 118      15.529 -18.233  -6.094  1.00 -1.00           H
ATOM    237  HA  ALA A 118      16.772 -20.375  -4.617  1.00 -1.00           H
ATOM    238  HB1 ALA A 118      18.883 -20.504  -5.966  1.00 -1.00           H
ATOM    239  HB2 ALA A 118      17.501 -21.115  -6.863  1.00 -1.00           H
ATOM    240  HB3 ALA A 118      18.142 -19.512  -7.220  1.00 -1.00           H
ATOM    241  N   GLY A 119      17.397 -17.191  -5.076  1.00 49.69           N
ATOM    242  CA  GLY A 119      18.034 -15.986  -4.552  1.00 48.49           C
ATOM    243  C   GLY A 119      17.021 -15.020  -3.936  1.00 47.46           C
ATOM    244  O   GLY A 119      15.826 -15.316  -3.859  1.00 48.38           O
ATOM    245  H   GLY A 119      16.795 -17.067  -5.882  1.00 -1.00           H
ATOM    246  HA2 GLY A 119      18.808 -16.212  -3.817  1.00  0.00           H
ATOM    247  HA3 GLY A 119      18.529 -15.484  -5.384  1.00  0.00           H
ATOM    248  N   LYS A 120      17.503 -13.850  -3.501  1.00 45.71           N
ATOM    249  CA  LYS A 120      16.670 -12.679  -3.214  1.00 42.69           C
ATOM    250  C   LYS A 120      16.294 -12.050  -4.574  1.00 40.13           C
ATOM    251  O   LYS A 120      17.131 -12.083  -5.483  1.00 39.70           O
ATOM    252  CB  LYS A 120      17.511 -11.602  -2.475  1.00 44.31           C
ATOM    253  CG  LYS A 120      17.838 -11.840  -0.986  1.00 45.11           C
ATOM    254  CD  LYS A 120      18.757 -10.713  -0.452  1.00 45.84           C
ATOM    255  CE  LYS A 120      18.891 -10.617   1.082  1.00 46.18           C
ATOM    256  NZ  LYS A 120      17.802  -9.838   1.687  1.00 44.91          N1+
ATOM    257  H   LYS A 120      18.475 -13.656  -3.692  1.00  0.00           H
ATOM    258  HA  LYS A 120      15.791 -12.961  -2.634  1.00  0.00           H
ATOM    259  HB2 LYS A 120      18.436 -11.425  -3.027  1.00  0.00           H
ATOM    260  HB3 LYS A 120      16.968 -10.654  -2.524  1.00  0.00           H
ATOM    261  HG2 LYS A 120      16.910 -11.883  -0.416  1.00  0.00           H
ATOM    262  HG3 LYS A 120      18.322 -12.808  -0.853  1.00  0.00           H
ATOM    263  HD2 LYS A 120      19.751 -10.869  -0.875  1.00  0.00           H
ATOM    264  HD3 LYS A 120      18.432  -9.746  -0.842  1.00  0.00           H
ATOM    265  HE2 LYS A 120      18.928 -11.607   1.538  1.00  0.00           H
ATOM    266  HE3 LYS A 120      19.826 -10.116   1.339  1.00  0.00           H
ATOM    267  HZ1 LYS A 120      17.239 -10.460   2.309  1.00  0.00           H
ATOM    268  HZ2 LYS A 120      18.103  -9.019   2.213  1.00  0.00           H
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ATOM    269  HZ3 LYS A 120      17.126  -9.549   0.993  1.00  0.00           H
ATOM    270  N   PRO A 121      15.106 -11.433  -4.726  1.00 37.16           N
ATOM    271  CA  PRO A 121      14.841 -10.530  -5.851  1.00 35.52           C
ATOM    272  C   PRO A 121      15.516  -9.168  -5.586  1.00 33.34           C
ATOM    273  O   PRO A 121      16.037  -8.926  -4.492  1.00 31.34           O
ATOM    274  CB  PRO A 121      13.314 -10.402  -5.864  1.00 35.26           C
ATOM    275  CG  PRO A 121      12.904 -10.570  -4.407  1.00 37.08           C
ATOM    276  CD  PRO A 121      13.957 -11.515  -3.821  1.00 36.33           C
ATOM    277  HA  PRO A 121      15.201 -10.936  -6.798  1.00  0.00           H
ATOM    278  HB2 PRO A 121      12.967  -9.462  -6.292  1.00  0.00           H
ATOM    279  HB3 PRO A 121      12.886 -11.207  -6.462  1.00  0.00           H
ATOM    280  HG2 PRO A 121      12.959  -9.601  -3.911  1.00  0.00           H
ATOM    281  HG3 PRO A 121      11.886 -10.946  -4.291  1.00  0.00           H
ATOM    282  HD2 PRO A 121      14.214 -11.223  -2.802  1.00  0.00           H
ATOM    283  HD3 PRO A 121      13.581 -12.540  -3.800  1.00  0.00           H
ATOM    284  N   LYS A 122      15.470  -8.244  -6.556  1.00 31.90           N
ATOM    285  CA  LYS A 122      15.840  -6.854  -6.308  1.00 31.10           C
ATOM    286  C   LYS A 122      14.642  -6.225  -5.571  1.00 29.95           C
ATOM    287  O   LYS A 122      13.601  -5.974  -6.176  1.00 31.41           O
ATOM    288  CB  LYS A 122      16.099  -6.107  -7.640  1.00 33.97           C
ATOM    289  CG  LYS A 122      17.100  -6.799  -8.589  1.00 35.41           C
ATOM    290  CD  LYS A 122      17.728  -5.869  -9.652  1.00 40.19           C
ATOM    291  CE  LYS A 122      16.897  -5.605 -10.927  1.00 42.24           C
ATOM    292  NZ  LYS A 122      15.681  -4.820 -10.677  1.00 43.94           N1+
ATOM    293  H   LYS A 122      14.990  -8.453  -7.419  1.00  0.00           H
ATOM    294  HA  LYS A 122      16.741  -6.799  -5.692  1.00  0.00           H
ATOM    295  HB2 LYS A 122      15.165  -5.942  -8.169  1.00  0.00           H
ATOM    296  HB3 LYS A 122      16.483  -5.117  -7.390  1.00  0.00           H
ATOM    297  HG2 LYS A 122      17.913  -7.199  -7.981  1.00  0.00           H
ATOM    298  HG3 LYS A 122      16.635  -7.663  -9.068  1.00  0.00           H
ATOM    299  HD2 LYS A 122      18.040  -4.929  -9.194  1.00  0.00           H
ATOM    300  HD3 LYS A 122      18.657  -6.338  -9.978  1.00  0.00           H
ATOM    301  HE2 LYS A 122      17.509  -5.051 -11.639  1.00  0.00           H
ATOM    302  HE3 LYS A 122      16.616  -6.543 -11.411  1.00  0.00           H
ATOM    303  HZ1 LYS A 122      15.318  -4.415 -11.525  1.00  0.00           H
ATOM    304  HZ2 LYS A 122      14.952  -5.496 -10.357  1.00  0.00           H
ATOM    305  HZ3 LYS A 122      15.857  -4.089  -9.993  1.00  0.00           H
ATOM    306  N   ALA A 123      14.779  -5.997  -4.266  1.00 25.55           N
ATOM    307  CA  ALA A 123      13.765  -5.418  -3.397  1.00 25.13           C
ATOM    308  C   ALA A 123      14.406  -4.343  -2.524  1.00 23.88           C
ATOM    309  O   ALA A 123      15.605  -4.411  -2.252  1.00 23.84           O
ATOM    310  CB  ALA A 123      13.101  -6.523  -2.567  1.00 23.35           C
ATOM    311  H   ALA A 123      15.668  -6.188  -3.825  1.00  0.00           H
ATOM    312  HA  ALA A 123      13.002  -4.931  -4.003  1.00  0.00           H
ATOM    313  HB1 ALA A 123      12.238  -6.132  -2.027  1.00  0.00           H
ATOM    314  HB2 ALA A 123      12.759  -7.344  -3.193  1.00  0.00           H
ATOM    315  HB3 ALA A 123      13.787  -6.939  -1.832  1.00  0.00           H
ATOM    316  N   CYS A 124      13.607  -3.378  -2.072  1.00 25.75           N
ATOM    317  CA  CYS A 124      14.007  -2.275  -1.209  1.00 23.52           C
ATOM    318  C   CYS A 124      12.892  -1.990  -0.202  1.00 23.67           C
ATOM    319  O   CYS A 124      11.738  -2.369  -0.424  1.00 24.40           O
ATOM    320  CB  CYS A 124      14.399  -1.047  -2.064  1.00 22.25           C
ATOM    321  SG  CYS A 124      12.972  -0.341  -2.961  1.00 23.91           S
ATOM    322  H   CYS A 124      12.632  -3.376  -2.341  1.00  0.00           H
ATOM    323  HA  CYS A 124      14.882  -2.580  -0.632  1.00  0.00           H
ATOM    324  HB2 CYS A 124      14.830  -0.267  -1.435  1.00  0.00           H
ATOM    325  HB3 CYS A 124      15.169  -1.322  -2.781  1.00  0.00           H
ATOM    326  HG  CYS A 124      12.418   0.235  -1.889  1.00  0.00           H
ATOM    327  N   TYR A 125      13.201  -1.228   0.850  1.00 21.36           N
ATOM    328  CA  TYR A 125      12.191  -0.440   1.550  1.00 22.40           C
ATOM    329  C   TYR A 125      12.016   0.846   0.729  1.00 21.88           C
ATOM    330  O   TYR A 125      13.010   1.413   0.271  1.00 20.40           O
ATOM    331  CB  TYR A 125      12.671  -0.046   2.960  1.00 21.32           C
ATOM    332  CG  TYR A 125      13.209  -1.167   3.831  1.00 22.30           C
ATOM    333  CD1 TYR A 125      12.343  -2.047   4.512  1.00 20.05           C
ATOM    334  CD2 TYR A 125      14.603  -1.306   3.982  1.00 18.10           C
ATOM    335  CE1 TYR A 125      12.876  -3.066   5.328  1.00 20.76           C
ATOM    336  CE2 TYR A 125      15.131  -2.324   4.790  1.00 18.47           C
ATOM    337  CZ  TYR A 125      14.270  -3.213   5.457  1.00 18.41           C
ATOM    338  OH  TYR A 125      14.785  -4.216   6.222  1.00 19.18           O
ATOM    339  H   TYR A 125      14.172  -0.943   0.961  1.00  0.00           H
ATOM    340  HA  TYR A 125      11.256  -0.980   1.611  1.00  0.00           H
ATOM    341  HB2 TYR A 125      13.450   0.704   2.879  1.00  0.00           H
ATOM    342  HB3 TYR A 125      11.858   0.446   3.496  1.00  0.00           H
ATOM    343  HD1 TYR A 125      11.272  -1.945   4.419  1.00  0.00           H
ATOM    344  HD2 TYR A 125      15.279  -0.627   3.484  1.00  0.00           H
ATOM    345  HE1 TYR A 125      12.216  -3.735   5.858  1.00  0.00           H
ATOM    346  HE2 TYR A 125      16.202  -2.402   4.887  1.00  0.00           H
ATOM    347  HH  TYR A 125      15.741  -4.216   6.193  1.00  0.00           H
ATOM    348  N   VAL A 126      10.776   1.295   0.529  1.00 22.88           N
ATOM    349  CA  VAL A 126      10.457   2.574  -0.086  1.00 20.05           C
ATOM    350  C   VAL A 126       9.707   3.411   0.953  1.00 20.90           C
ATOM    351  O   VAL A 126       8.820   2.919   1.660  1.00 19.39           O
ATOM    352  CB  VAL A 126       9.706   2.399  -1.433  1.00 21.97           C
ATOM    353  CG1 VAL A 126       8.289   1.821  -1.314  1.00 21.20           C
ATOM    354  CG2 VAL A 126       9.667   3.718  -2.227  1.00 17.14           C
ATOM    355  H   VAL A 126       9.999   0.796   0.962  1.00  0.00           H
ATOM    356  HA  VAL A 126      11.384   3.089  -0.322  1.00  0.00           H
ATOM    357  HB  VAL A 126      10.288   1.691  -2.024  1.00  0.00           H
ATOM    358 HG11 VAL A 126       7.858   1.649  -2.301  1.00  0.00           H
ATOM    359 HG12 VAL A 126       8.302   0.870  -0.785  1.00  0.00           H
ATOM    360 HG13 VAL A 126       7.615   2.494  -0.784  1.00  0.00           H
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ATOM    361 HG21 VAL A 126       9.232   3.573  -3.215  1.00  0.00           H
ATOM    362 HG22 VAL A 126       9.075   4.479  -1.720  1.00  0.00           H
ATOM    363 HG23 VAL A 126      10.671   4.121  -2.370  1.00  0.00           H
ATOM    364  N   THR A 127      10.078   4.684   1.036  1.00 20.50           N
ATOM    365  CA  THR A 127       9.538   5.654   1.958  1.00 20.93           C
ATOM    366  C   THR A 127       9.398   6.976   1.199  1.00 21.13           C
ATOM    367  O   THR A 127      10.395   7.660   0.986  1.00 23.81           O
ATOM    368  CB  THR A 127      10.466   5.700   3.198  1.00 22.06           C
ATOM    369  OG1 THR A 127      10.329   4.514   3.962  1.00 22.71           O
ATOM    370  CG2 THR A 127      10.184   6.859   4.151  1.00 19.49           C
ATOM    371  H   THR A 127      10.885   4.977   0.488  1.00  0.00           H
ATOM    372  HA  THR A 127       8.536   5.361   2.274  1.00  0.00           H
ATOM    373  HB  THR A 127      11.505   5.779   2.869  1.00  0.00           H
ATOM    374  HG1 THR A 127       9.390   4.338   4.058  1.00  0.00           H
ATOM    375 HG21 THR A 127      10.879   6.826   4.983  1.00  0.00           H
ATOM    376 HG22 THR A 127      10.352   7.811   3.655  1.00  0.00           H
ATOM    377 HG23 THR A 127       9.164   6.842   4.535  1.00  0.00           H
ATOM    378  N   LEU A 128       8.175   7.365   0.827  1.00 20.38           N
ATOM    379  CA  LEU A 128       7.872   8.727   0.401  1.00 18.73           C
ATOM    380  C   LEU A 128       7.589   9.509   1.681  1.00 18.52           C
ATOM    381  O   LEU A 128       6.758   9.082   2.480  1.00 17.90           O
ATOM    382  CB  LEU A 128       6.628   8.707  -0.507  1.00 18.41           C
ATOM    383  CG  LEU A 128       6.102  10.083  -0.979  1.00 18.76           C
ATOM    384  CD1 LEU A 128       7.204  11.041  -1.465  1.00 18.77           C
ATOM    385  CD2 LEU A 128       5.032   9.872  -2.055  1.00 14.06           C
ATOM    386  H   LEU A 128       7.381   6.810   1.140  1.00  0.00           H
ATOM    387  HA  LEU A 128       8.709   9.167  -0.127  1.00  0.00           H
ATOM    388  HB2 LEU A 128       6.868   8.102  -1.382  1.00  0.00           H
ATOM    389  HB3 LEU A 128       5.819   8.185   0.003  1.00  0.00           H
ATOM    390  HG  LEU A 128       5.613  10.576  -0.140  1.00  0.00           H
ATOM    391 HD11 LEU A 128       6.777  11.940  -1.911  1.00  0.00           H
ATOM    392 HD12 LEU A 128       7.828  11.388  -0.644  1.00  0.00           H
ATOM    393 HD13 LEU A 128       7.861  10.573  -2.197  1.00  0.00           H
ATOM    394 HD21 LEU A 128       4.659  10.817  -2.435  1.00  0.00           H
ATOM    395 HD22 LEU A 128       5.412   9.301  -2.903  1.00  0.00           H
ATOM    396 HD23 LEU A 128       4.182   9.331  -1.645  1.00  0.00           H
ATOM    397  N   VAL A 129       8.328  10.589   1.925  1.00 18.42           N
ATOM    398  CA  VAL A 129       8.346  11.278   3.202  1.00 18.44           C
ATOM    399  C   VAL A 129       8.595  12.776   3.015  1.00 18.85           C
ATOM    400  O   VAL A 129       9.219  13.190   2.038  1.00 19.12           O
ATOM    401  CB  VAL A 129       9.288  10.510   4.168  1.00 19.71           C
ATOM    402  CG1 VAL A 129      10.760  10.544   3.710  1.00 19.20           C
ATOM    403  CG2 VAL A 129       9.124  10.913   5.638  1.00 16.64           C
ATOM    404  H   VAL A 129       9.037  10.876   1.249  1.00  0.00           H
ATOM    405  HA  VAL A 129       7.344  11.227   3.607  1.00  0.00           H
ATOM    406  HB  VAL A 129       8.964   9.471   4.140  1.00  0.00           H
ATOM    407 HG11 VAL A 129      11.377   9.868   4.296  1.00  0.00           H
ATOM    408 HG12 VAL A 129      10.865  10.231   2.671  1.00  0.00           H
ATOM    409 HG13 VAL A 129      11.177  11.548   3.790  1.00  0.00           H
ATOM    410 HG21 VAL A 129       9.591  10.194   6.306  1.00  0.00           H
ATOM    411 HG22 VAL A 129       9.572  11.881   5.840  1.00  0.00           H
ATOM    412 HG23 VAL A 129       8.068  10.953   5.903  1.00  0.00           H
ATOM    413  N   ARG A 130       8.097  13.588   3.950  1.00 21.17           N
ATOM    414  CA  ARG A 130       8.432  15.000   4.084  1.00 21.51           C
ATOM    415  C   ARG A 130       9.631  15.121   5.037  1.00 21.74           C
ATOM    416  O   ARG A 130       9.777  14.319   5.961  1.00 18.71           O
ATOM    417  CB  ARG A 130       7.240  15.717   4.757  1.00 24.72           C
ATOM    418  CG  ARG A 130       6.015  15.797   3.839  1.00 26.46           C
ATOM    419  CD  ARG A 130       4.736  16.305   4.516  1.00 30.21           C
ATOM    420  NE  ARG A 130       4.029  15.192   5.167  1.00 33.85           N
ATOM    421  CZ  ARG A 130       2.714  14.945   5.250  1.00 35.23           C
ATOM    422  NH1 ARG A 130       1.798  15.791   4.777  1.00 35.12           N
ATOM    423  NH2 ARG A 130       2.321  13.823   5.842  1.00 31.29           N1+
ATOM    424  H   ARG A 130       7.532  13.180   4.686  1.00  0.00           H
ATOM    425  HA  ARG A 130       8.667  15.445   3.115  1.00  0.00           H
ATOM    426  HB2 ARG A 130       6.982  15.225   5.695  1.00  0.00           H
ATOM    427  HB3 ARG A 130       7.523  16.730   5.025  1.00  0.00           H
ATOM    428  HG2 ARG A 130       6.255  16.430   2.985  1.00  0.00           H
ATOM    429  HG3 ARG A 130       5.819  14.807   3.434  1.00  0.00           H
ATOM    430  HD2 ARG A 130       4.937  17.117   5.214  1.00  0.00           H
ATOM    431  HD3 ARG A 130       4.094  16.709   3.740  1.00  0.00           H
ATOM    432  HE  ARG A 130       4.662  14.386   5.410  1.00  0.00           H
ATOM    433 HH11 ARG A 130       2.064  16.636   4.256  1.00  0.00           H
ATOM    434 HH12 ARG A 130       0.843  15.456   4.636  1.00  0.00           H
ATOM    435 HH21 ARG A 130       3.011  13.211   6.338  1.00  0.00           H
ATOM    436 HH22 ARG A 130       1.374  13.435   5.803  1.00  0.00           H
ATOM    437  N   ASN A 131      10.433  16.185   4.913  1.00 21.83           N
ATOM    438  CA  ASN A 131      11.556  16.499   5.821  1.00 20.92           C
ATOM    439  C   ASN A 131      11.088  16.726   7.277  1.00 21.34           C
ATOM    440  O   ASN A 131      11.805  16.452   8.243  1.00 20.83           O
ATOM    441  CB  ASN A 131      12.370  17.714   5.316  1.00 24.29           C
ATOM    442  CG  ASN A 131      13.197  17.416   4.062  1.00 24.72           C
ATOM    443  OD1 ASN A 131      14.022  16.510   4.053  1.00 26.89           O
ATOM    444  ND2 ASN A 131      12.965  18.127   2.965  1.00 26.08           N
ATOM    445  H   ASN A 131      10.188  16.850   4.178  1.00  0.00           H
ATOM    446  HA  ASN A 131      12.205  15.627   5.833  1.00  0.00           H
ATOM    447  HB2 ASN A 131      11.721  18.574   5.151  1.00  0.00           H
ATOM    448  HB3 ASN A 131      13.087  18.021   6.081  1.00  0.00           H
ATOM    449 HD21 ASN A 131      12.233  18.851   2.927  1.00  0.00           H
ATOM    450 HD22 ASN A 131      13.595  18.041   2.164  1.00  0.00           H
ATOM    451  N   LYS A 132       9.819  17.125   7.418  1.00 21.47           N
ATOM    452  CA  LYS A 132       9.035  17.266   8.641  1.00 21.50           C
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ATOM    453  C   LYS A 132       8.783  15.915   9.334  1.00 20.13           C
ATOM    454  O   LYS A 132       8.645  15.856  10.554  1.00 20.64           O
ATOM    455  CB  LYS A 132       7.661  17.860   8.250  1.00 18.17           C
ATOM    456  CG  LYS A 132       7.724  19.271   7.637  1.00 -1.00          C
ATOM    457  CD  LYS A 132       7.703  19.268   6.105  1.00 -1.00          C
ATOM    458  CE  LYS A 132       7.953  20.642   5.478  1.00 -1.00          C
ATOM    459  NZ  LYS A 132       7.939  20.539   4.011  1.00 -1.00          N1+
ATOM    460  H   LYS A 132       9.332  17.287   6.551  1.00  0.00           H
ATOM    461  HA  LYS A 132       9.553  17.929   9.338  1.00  0.00           H
ATOM    462  HB2 LYS A 132       7.120  17.184   7.586  1.00  0.00           H
ATOM    463  HB3 LYS A 132       7.037  17.908   9.141  1.00  0.00           H
ATOM    464  HG2 LYS A 132       6.872  19.853   7.991  1.00 -1.00          H
ATOM    465  HG3 LYS A 132       8.615  19.779   8.003  1.00 -1.00          H
ATOM    466  HD2 LYS A 132       8.480  18.599   5.745  1.00 -1.00          H
ATOM    467  HD3 LYS A 132       6.748  18.871   5.759  1.00 -1.00          H
ATOM    468  HE2 LYS A 132       7.204  21.357   5.817  1.00 -1.00          H
ATOM    469  HE3 LYS A 132       8.928  21.024   5.786  1.00 -1.00          H
ATOM    470  HZ1 LYS A 132       7.035  20.701   3.585  1.00 -1.00          H
ATOM    471  HZ2 LYS A 132       8.583  21.210   3.576  1.00 -1.00          H
ATOM    472  HZ3 LYS A 132       8.289  19.631   3.716  1.00 -1.00          H
ATOM    473  N   GLU A 133       8.721  14.821   8.565  1.00 20.07           N
ATOM    474  CA  GLU A 133       8.339  13.496   9.034  1.00 17.67           C
ATOM    475  C   GLU A 133       9.558  12.615   9.321  1.00 18.46           C
ATOM    476  O   GLU A 133       9.356  11.475   9.732  1.00 15.28           O
ATOM    477  CB  GLU A 133       7.441  12.830   7.982  1.00 17.59           C
ATOM    478  CG  GLU A 133       5.975  13.233   8.179  1.00 20.24           C
ATOM    479  CD  GLU A 133       5.120  12.858   6.991  1.00 23.42           C
ATOM    480  OE1 GLU A 133       3.997  12.350   7.181  1.00 24.54           O
ATOM    481  OE2 GLU A 133       5.512  13.153   5.843  1.00 22.56           O1-
ATOM    482  H   GLU A 133       8.941  14.900   7.577  1.00  0.00           H
ATOM    483  HA  GLU A 133       7.781  13.554   9.968  1.00  0.00           H
ATOM    484  HB2 GLU A 133       7.784  13.078   6.979  1.00  0.00           H
ATOM    485  HB3 GLU A 133       7.486  11.743   8.051  1.00  0.00           H
ATOM    486  HG2 GLU A 133       5.568  12.776   9.082  1.00  0.00           H
ATOM    487  HG3 GLU A 133       5.898  14.311   8.312  1.00  0.00           H
ATOM    488  N   LEU A 134      10.798  13.133   9.250  1.00 18.65           N
ATOM    489  CA  LEU A 134      12.012  12.488   9.786  1.00 19.98           C
ATOM    490  C   LEU A 134      11.790  12.048  11.240  1.00 18.99           C
ATOM    491  O   LEU A 134      11.998  10.899  11.616  1.00 19.26           O
ATOM    492  CB  LEU A 134      13.209  13.467   9.715  1.00 19.11           C
ATOM    493  CG  LEU A 134      14.539  12.969  10.333  1.00 23.22           C
ATOM    494  CD1 LEU A 134      15.118  11.764   9.574  1.00 21.36           C
ATOM    495  CD2 LEU A 134      15.545  14.125  10.436  1.00 21.65           C
ATOM    496  H   LEU A 134      10.883  14.058   8.850  1.00  0.00           H
ATOM    497  HA  LEU A 134      12.223  11.608   9.177  1.00  0.00           H
ATOM    498  HB2 LEU A 134      13.380  13.762   8.688  1.00  0.00           H
ATOM    499  HB3 LEU A 134      12.937  14.392  10.216  1.00  0.00           H
ATOM    500  HG  LEU A 134      14.373  12.643  11.359  1.00  0.00           H
ATOM    501 HD11 LEU A 134      16.044  11.413  10.026  1.00  0.00           H
ATOM    502 HD12 LEU A 134      14.430  10.918   9.573  1.00  0.00           H
ATOM    503 HD13 LEU A 134      15.333  12.010   8.537  1.00  0.00           H
ATOM    504 HD21 LEU A 134      16.559  13.775  10.615  1.00  0.00           H
ATOM    505 HD22 LEU A 134      15.552  14.737   9.534  1.00  0.00           H
ATOM    506 HD23 LEU A 134      15.311  14.785  11.267  1.00  0.00           H
ATOM    507  N   LYS A 135      11.279  13.004  12.015  1.00 17.87           N
ATOM    508  CA  LYS A 135      11.000  12.979  13.436  1.00 18.77           C
ATOM    509  C   LYS A 135       9.943  11.924  13.835  1.00 18.88           C
ATOM    510  O   LYS A 135       9.871  11.544  15.005  1.00 18.40           O
ATOM    511  CB  LYS A 135      10.574  14.413  13.817  1.00 18.36           C
ATOM    512  CG  LYS A 135      11.638  15.497  13.515  1.00 19.77           C
ATOM    513  CD  LYS A 135      11.594  16.181  12.124  1.00 16.28           C
ATOM    514  CE  LYS A 135      12.949  16.844  11.802  1.00 18.85           C
ATOM    515  NZ  LYS A 135      13.033  17.506  10.488  1.00 18.17           N1+
ATOM    516  H   LYS A 135      11.076  13.875  11.554  1.00  0.00           H
ATOM    517  HA  LYS A 135      11.922  12.726  13.959  1.00  0.00           H
ATOM    518  HB2 LYS A 135       9.643  14.688  13.333  1.00  0.00           H
ATOM    519  HB3 LYS A 135      10.366  14.422  14.889  1.00  0.00           H
ATOM    520  HG2 LYS A 135      11.515  16.290  14.250  1.00  0.00           H
ATOM    521  HG3 LYS A 135      12.628  15.079  13.708  1.00  0.00           H
ATOM    522  HD2 LYS A 135      11.335  15.481  11.335  1.00  0.00           H
ATOM    523  HD3 LYS A 135      10.797  16.928  12.119  1.00  0.00           H
ATOM    524  HE2 LYS A 135      13.180  17.583  12.565  1.00  0.00           H
ATOM    525  HE3 LYS A 135      13.741  16.103  11.854  1.00  0.00           H
ATOM    526  HZ1 LYS A 135      14.033  17.688  10.293  1.00  0.00           H
ATOM    527  HZ2 LYS A 135      12.665  16.968   9.711  1.00  0.00           H
ATOM    528  HZ3 LYS A 135      12.547  18.403  10.525  1.00  0.00           H
ATOM    529  N   GLY A 136       9.188  11.394  12.864  1.00 19.43           N
ATOM    530  CA  GLY A 136       8.250  10.291  13.017  1.00 17.22           C
ATOM    531  C   GLY A 136       8.745   9.034  12.291  1.00 19.59           C
ATOM    532  O   GLY A 136       8.515   7.924  12.759  1.00 18.34           O
ATOM    533  H   GLY A 136       9.322  11.762  11.932  1.00  0.00           H
ATOM    534  HA2 GLY A 136       8.063  10.055  14.066  1.00  0.00           H
ATOM    535  HA3 GLY A 136       7.292  10.587  12.588  1.00  0.00           H
ATOM    536  N   LEU A 137       9.467   9.167  11.172  1.00 18.36           N
ATOM    537  CA  LEU A 137      10.078   8.076  10.411  1.00 21.19           C
ATOM    538  C   LEU A 137      11.155   7.329  11.202  1.00 22.14           C
ATOM    539  O   LEU A 137      11.323   6.123  11.030  1.00 24.02           O
ATOM    540  CB  LEU A 137      10.667   8.641   9.103  1.00 21.04           C
ATOM    541  CG  LEU A 137      11.270   7.599   8.142  1.00 21.35           C
ATOM    542  CD1 LEU A 137      10.212   6.622   7.599  1.00 23.22           C
ATOM    543  CD2 LEU A 137      12.025   8.313   7.019  1.00 20.28           C
ATOM    544  H   LEU A 137       9.580  10.101  10.780  1.00  0.00           H
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ATOM    545  HA  LEU A 137       9.311   7.343  10.196  1.00  0.00           H
ATOM    546  HB2 LEU A 137       9.903   9.201   8.566  1.00  0.00           H
ATOM    547  HB3 LEU A 137      11.438   9.369   9.360  1.00  0.00           H
ATOM    548  HG  LEU A 137      12.016   7.011   8.669  1.00  0.00           H
ATOM    549 HD11 LEU A 137      10.672   5.858   6.971  1.00  0.00           H
ATOM    550 HD12 LEU A 137       9.699   6.088   8.395  1.00  0.00           H
ATOM    551 HD13 LEU A 137       9.454   7.139   7.009  1.00  0.00           H
ATOM    552 HD21 LEU A 137      12.530   7.605   6.374  1.00  0.00           H
ATOM    553 HD22 LEU A 137      11.353   8.895   6.394  1.00  0.00           H
ATOM    554 HD23 LEU A 137      12.790   8.983   7.414  1.00  0.00           H
ATOM    555  N   LEU A 138     11.845   8.020  12.111  1.00 21.78           N
ATOM    556  CA  LEU A 138     12.806   7.425  13.027  1.00 22.46           C
ATOM    557  C   LEU A 138     12.180   6.363  13.957  1.00 21.43           C
ATOM    558  O   LEU A 138     12.895   5.433  14.324  1.00 22.46           O
ATOM    559  CB  LEU A 138     13.520   8.541  13.808  1.00 19.96           C
ATOM    560  CG  LEU A 138     14.476   9.395  12.938  1.00 22.18           C
ATOM    561 CD1 LEU A 138     14.703  10.771  13.576  1.00 21.53           C
ATOM    562 CD2 LEU A 138     15.815   8.699  12.666  1.00 21.97           C
ATOM    563  H   LEU A 138     11.724   9.031  12.127  1.00  0.00           H
ATOM    564  HA  LEU A 138     13.545   6.897  12.424  1.00  0.00           H
ATOM    565  HB2 LEU A 138     12.760   9.181  14.258  1.00  0.00           H
ATOM    566  HB3 LEU A 138     14.073   8.115  14.645  1.00  0.00           H
ATOM    567  HG  LEU A 138     14.024   9.564  11.962  1.00  0.00           H
ATOM    568 HD11 LEU A 138     15.463  11.346  13.047  1.00  0.00           H
ATOM    569 HD12 LEU A 138     13.787  11.360  13.572  1.00  0.00           H
ATOM    570 HD13 LEU A 138     15.007  10.676  14.615  1.00  0.00           H
ATOM    571 HD21 LEU A 138     16.427   9.289  11.981  1.00  0.00           H
ATOM    572 HD22 LEU A 138     16.378   8.583  13.587  1.00  0.00           H
ATOM    573 HD23 LEU A 138     15.677   7.720  12.209  1.00  0.00           H
ATOM    574  N   SER A 139     10.857   6.417  14.225  1.00 20.82           N
ATOM    575  CA  SER A 139     10.089   5.344  14.875  1.00 20.60           C
ATOM    576  C   SER A 139     10.120   4.078  14.013  1.00 21.37           C
ATOM    577  O   SER A 139     10.496   3.006  14.495  1.00 21.68           O
ATOM    578  CB  SER A 139      8.620   5.775  15.140  1.00 19.65           C
ATOM    579  OG  SER A 139      7.788   4.752  15.679  1.00 22.99           O
ATOM    580  H   SER A 139     10.330   7.184  13.830  1.00  0.00           H
ATOM    581  HA  SER A 139     10.561   5.124  15.825  1.00  0.00           H
ATOM    582  HB2 SER A 139      8.597   6.637  15.808  1.00  0.00           H
ATOM    583  HB3 SER A 139      8.144   6.073  14.212  1.00  0.00           H
ATOM    584  HG  SER A 139      7.688   4.051  15.030  1.00  0.00           H
ATOM    585  N   SER A 140      9.760   4.237  12.732  1.00 20.33           N
ATOM    586  CA  SER A 140      9.646   3.187  11.736  1.00 20.38           C
ATOM    587  C   SER A 140     11.012   2.529  11.520  1.00 20.79           C
ATOM    588  O   SER A 140     11.116   1.309  11.623  1.00 19.68           O
ATOM    589  CB  SER A 140      9.134   3.802  10.416  1.00 18.81           C
ATOM    590  OG  SER A 140      8.108   4.766  10.626  1.00 20.17           O
ATOM    591  H   SER A 140      9.494   5.154  12.403  1.00  0.00           H
ATOM    592  HA  SER A 140      8.940   2.440  12.101  1.00  0.00           H
ATOM    593  HB2 SER A 140      9.935   4.271   9.845  1.00  0.00           H
ATOM    594  HB3 SER A 140      8.745   3.003   9.783  1.00  0.00           H
ATOM    595  HG  SER A 140      7.635   4.828   9.790  1.00  0.00           H
ATOM    596  N   ILE A 141     12.059   3.342  11.300  1.00 20.52           N
ATOM    597  CA  ILE A 141     13.436   2.893  11.119  1.00 22.74           C
ATOM    598  C   ILE A 141     13.925   2.111  12.348  1.00 22.91           C
ATOM    599  O   ILE A 141     14.281   0.949  12.184  1.00 25.89           O
ATOM    600  CB  ILE A 141     14.386   4.059  10.730  1.00 21.78           C
ATOM    601 CG1 ILE A 141     13.979   4.722   9.391  1.00 21.69           C
ATOM    602 CG2 ILE A 141     15.846   3.564  10.633  1.00 19.44           C
ATOM    603 CD1 ILE A 141     14.631   6.094   9.146  1.00 20.88           C
ATOM    604  H   ILE A 141     11.876   4.342  11.259  1.00  0.00           H
ATOM    605  HA  ILE A 141     13.435   2.184  10.291  1.00  0.00           H
ATOM    606  HB  ILE A 141     14.333   4.815  11.515  1.00  0.00           H
ATOM    607 HG12 ILE A 141     14.222   4.056   8.561  1.00  0.00           H
ATOM    608 HG13 ILE A 141     12.899   4.855   9.341  1.00  0.00           H
ATOM    609 HG21 ILE A 141     16.511   4.328  10.244  1.00  0.00           H
ATOM    610 HG22 ILE A 141     16.251   3.260  11.598  1.00  0.00           H
ATOM    611 HG23 ILE A 141     15.921   2.701   9.970  1.00  0.00           H
ATOM    612 HD11 ILE A 141     14.301   6.508   8.193  1.00  0.00           H
ATOM    613 HD12 ILE A 141     14.363   6.807   9.926  1.00  0.00           H
ATOM    614 HD13 ILE A 141     15.718   6.036   9.098  1.00  0.00           H
ATOM    615  N   LYS A 142     13.916   2.701  13.559  1.00 22.93           N
ATOM    616  CA  LYS A 142     14.431   2.052  14.773  1.00 24.30           C
ATOM    617  C   LYS A 142     13.710   0.737  15.134  1.00 23.46           C
ATOM    618  O   LYS A 142     14.328  -0.134  15.747  1.00 20.35           O
ATOM    619  CB  LYS A 142     14.439   3.020  15.987  1.00 26.67           C
ATOM    620  CG  LYS A 142     15.791   3.713  16.270  1.00 31.03           C
ATOM    621  CD  LYS A 142     16.051   5.016  15.493  1.00 35.34           C
ATOM    622  CE  LYS A 142     17.415   5.638  15.866  1.00 39.87           C
ATOM    623  NZ  LYS A 142     17.620   6.965  15.264  1.00 41.29          N1+
ATOM    624  H   LYS A 142     13.515   3.629  13.655  1.00  0.00           H
ATOM    625  HA  LYS A 142     15.460   1.758  14.556  1.00  0.00           H
ATOM    626  HB2 LYS A 142     13.623   3.737  15.941  1.00  0.00           H
ATOM    627  HB3 LYS A 142     14.216   2.444  16.888  1.00  0.00           H
ATOM    628  HG2 LYS A 142     15.816   3.953  17.335  1.00  0.00           H
ATOM    629  HG3 LYS A 142     16.609   3.007  16.114  1.00  0.00           H
ATOM    630  HD2 LYS A 142     16.000   4.820  14.421  1.00  0.00           H
ATOM    631  HD3 LYS A 142     15.249   5.723  15.717  1.00  0.00           H
ATOM    632  HE2 LYS A 142     17.496   5.749  16.948  1.00  0.00           H
ATOM    633  HE3 LYS A 142     18.226   4.976  15.560  1.00  0.00           H
ATOM    634  HZ1 LYS A 142     18.576   7.288  15.360  1.00  0.00           H
ATOM    635  HZ2 LYS A 142     17.406   6.974  14.282  1.00  0.00           H
ATOM    636  HZ3 LYS A 142     17.002   7.650  15.730  1.00  0.00           H
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ATOM    637  N   TYR A 143      12.443   0.568  14.730  1.00 22.06           N
ATOM    638  CA  TYR A 143      11.740  -0.704  14.842  1.00 22.59           C
ATOM    639  C   TYR A 143      12.170  -1.669  13.717  1.00 21.72           C
ATOM    640  O   TYR A 143      12.742  -2.715  14.024  1.00 22.10           O
ATOM    641  CB  TYR A 143      10.205  -0.486  14.848  1.00 20.02           C
ATOM    642  CG  TYR A 143       9.563  -0.634  16.223  1.00 21.94           C
ATOM    643  CD1 TYR A 143       9.766  -1.826  16.946  1.00 23.77           C
ATOM    644  CD2 TYR A 143       8.739   0.371  16.778  1.00 22.49           C
ATOM    645  CE1 TYR A 143       9.116  -2.043  18.171  1.00 22.37           C
ATOM    646  CE2 TYR A 143       8.068   0.142  18.002  1.00 23.21           C
ATOM    647  CZ  TYR A 143       8.236  -1.079  18.688  1.00 22.87           C
ATOM    648  OH  TYR A 143       7.549  -1.350  19.838  1.00 21.97           O
ATOM    649  H   TYR A 143      11.984   1.333  14.250  1.00  0.00           H
ATOM    650  HA  TYR A 143      12.036  -1.178  15.779  1.00  0.00           H
ATOM    651  HB2 TYR A 143       9.938   0.475  14.408  1.00  0.00           H
ATOM    652  HB3 TYR A 143       9.714  -1.228  14.216  1.00  0.00           H
ATOM    653  HD1 TYR A 143      10.394  -2.611  16.558  1.00  0.00           H
ATOM    654  HD2 TYR A 143       8.587   1.306  16.256  1.00  0.00           H
ATOM    655  HE1 TYR A 143       9.271  -2.973  18.697  1.00  0.00           H
ATOM    656  HE2 TYR A 143       7.411   0.896  18.411  1.00  0.00           H
ATOM    657  HH  TYR A 143       7.749  -2.260  20.155  1.00  0.00           H
ATOM    658  N   VAL A 144      11.954  -1.323  12.433  1.00 22.79           N
ATOM    659  CA  VAL A 144      12.252  -2.142  11.240  1.00 22.01           C
ATOM    660  C   VAL A 144      13.708  -2.650  11.201  1.00 23.35           C
ATOM    661  O   VAL A 144      13.964  -3.789  10.808  1.00 21.03           O
ATOM    662  CB  VAL A 144      11.852  -1.358   9.952  1.00 21.23           C
ATOM    663  CG1 VAL A 144      12.311  -2.003   8.627  1.00 23.80           C
ATOM    664  CG2 VAL A 144      10.333  -1.101   9.864  1.00 17.15           C
ATOM    665  H   VAL A 144      11.587  -0.392  12.246  1.00  0.00           H
ATOM    666  HA  VAL A 144      11.640  -3.040  11.305  1.00  0.00           H
ATOM    667  HB  VAL A 144      12.349  -0.390  10.011  1.00  0.00           H
ATOM    668 HG11 VAL A 144      11.957  -1.433   7.767  1.00  0.00           H
ATOM    669 HG12 VAL A 144      13.398  -2.046   8.536  1.00  0.00           H
ATOM    670 HG13 VAL A 144      11.932  -3.020   8.522  1.00  0.00           H
ATOM    671 HG21 VAL A 144      10.121  -0.311   9.144  1.00  0.00           H
ATOM    672 HG22 VAL A 144       9.799  -1.986   9.523  1.00  0.00           H
ATOM    673 HG23 VAL A 144       9.895  -0.800  10.815  1.00  0.00           H
ATOM    674  N   GLU A 145      14.648  -1.825  11.672  1.00 23.20           N
ATOM    675  CA  GLU A 145      16.073  -2.110  11.737  1.00 23.64           C
ATOM    676  C   GLU A 145      16.399  -3.375  12.530  1.00 24.71           C
ATOM    677  O   GLU A 145      17.225  -4.188  12.125  1.00 23.64           O
ATOM    678  CB  GLU A 145      16.779  -0.908  12.388  1.00 25.26           C
ATOM    679  CG  GLU A 145      17.447  -0.033  11.325  1.00 25.70           C
ATOM    680  CD  GLU A 145      18.729  -0.677  10.821  1.00 24.54           C
ATOM    681  OE1 GLU A 145      19.511  -1.153  11.670  1.00 27.65           O
ATOM    682  OE2 GLU A 145      18.947  -0.706   9.597  1.00 28.24           O1-
ATOM    683  H   GLU A 145      14.359  -0.883  11.930  1.00  0.00           H
ATOM    684  HA  GLU A 145      16.412  -2.241  10.717  1.00  0.00           H
ATOM    685  HB2 GLU A 145      16.106  -0.329  13.012  1.00  0.00           H
ATOM    686  HB3 GLU A 145      17.530  -1.236  13.106  1.00  0.00           H
ATOM    687  HG2 GLU A 145      16.770   0.159  10.491  1.00  0.00           H
ATOM    688  HG3 GLU A 145      17.679   0.933  11.753  1.00  0.00           H
ATOM    689  N   ASN A 146      15.761  -3.508  13.689  1.00 25.05           N
ATOM    690  CA  ASN A 146      16.083  -4.543  14.662  1.00 28.02           C
ATOM    691  C   ASN A 146      15.066  -5.682  14.536  1.00 26.91           C
ATOM    692  O   ASN A 146      15.436  -6.839  14.710  1.00 26.71           O
ATOM    693  CB  ASN A 146      16.067  -3.928  16.078  1.00 31.59           C
ATOM    694  CG  ASN A 146      17.064  -2.766  16.226  1.00 35.43           C
ATOM    695  OD1 ASN A 146      18.250  -2.881  15.917  1.00 38.91           O
ATOM    696  ND2 ASN A 146      16.596  -1.583  16.605  1.00 38.29           N
ATOM    697  H   ASN A 146      15.019  -2.850  13.895  1.00  0.00           H
ATOM    698  HA  ASN A 146      17.076  -4.962  14.480  1.00  0.00           H
ATOM    699  HB2 ASN A 146      15.060  -3.594  16.335  1.00  0.00           H
ATOM    700  HB3 ASN A 146      16.329  -4.694  16.810  1.00  0.00           H
ATOM    701 HD21 ASN A 146      15.595  -1.409  16.671  1.00  0.00           H
ATOM    702 HD22 ASN A 146      17.227  -0.813  16.729  1.00  0.00           H
ATOM    703  N   LYS A 147      13.817  -5.374  14.149  1.00 25.17           N
ATOM    704  CA  LYS A 147      12.756  -6.355  13.929  1.00 25.56           C
ATOM    705  C   LYS A 147      12.952  -7.160  12.634  1.00 23.80           C
ATOM    706  O   LYS A 147      12.423  -8.271  12.550  1.00 24.25           O
ATOM    707  CB  LYS A 147      11.389  -5.634  13.877  1.00 26.51           C
ATOM    708  CG  LYS A 147      10.947  -5.074  15.244  1.00 27.65           C
ATOM    709  CD  LYS A 147      10.379  -6.162  16.169  1.00 29.92           C
ATOM    710  CE  LYS A 147      10.235  -5.759  17.641  1.00 29.66           C
ATOM    711  NZ  LYS A 147       9.909  -6.908  18.499  1.00 34.14           N1+
ATOM    712  H   LYS A 147      13.568  -4.397  14.029  1.00  0.00           H
ATOM    713  HA  LYS A 147      12.769  -7.069  14.752  1.00  0.00           H
ATOM    714  HB2 LYS A 147      11.429  -4.829  13.142  1.00  0.00           H
ATOM    715  HB3 LYS A 147      10.614  -6.313  13.514  1.00  0.00           H
ATOM    716  HG2 LYS A 147      11.780  -4.567  15.731  1.00  0.00           H
ATOM    717  HG3 LYS A 147      10.186  -4.315  15.080  1.00  0.00           H
ATOM    718  HD2 LYS A 147       9.411  -6.476  15.788  1.00  0.00           H
ATOM    719  HD3 LYS A 147      11.032  -7.024  16.123  1.00  0.00           H
ATOM    720  HE2 LYS A 147      11.160  -5.318  18.013  1.00  0.00           H
ATOM    721  HE3 LYS A 147       9.451  -5.012  17.759  1.00  0.00           H
ATOM    722  HZ1 LYS A 147       9.839  -6.512  19.455  1.00  0.00           H
ATOM    723  HZ2 LYS A 147       8.976  -7.252  18.305  1.00  0.00           H
ATOM    724  HZ3 LYS A 147      10.610  -7.654  18.427  1.00  0.00           H
ATOM    725  N   ILE A 148      13.739  -6.658  11.667  1.00 24.02           N
ATOM    726  CA  ILE A 148      14.163  -7.394  10.477  1.00 21.98           C
ATOM    727  C   ILE A 148      15.587  -7.064   9.993  1.00 23.64           C
ATOM    728  O   ILE A 148      16.382  -7.990   9.846  1.00 24.28           O
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ATOM    729  CB  ILE A 148      13.073  -7.444   9.372  1.00 21.36           C
ATOM    730  CG1 ILE A 148      13.513  -8.328   8.179  1.00 23.00           C
ATOM    731  CG2 ILE A 148      12.633  -6.042   8.909  1.00 19.78           C
ATOM    732  CD1 ILE A 148      12.367  -9.034   7.447  1.00 19.41           C
ATOM    733  H   ILE A 148      14.105  -5.722  11.786  1.00  0.00           H
ATOM    734  HA  ILE A 148      14.258  -8.431  10.803  1.00  0.00           H
ATOM    735  HB  ILE A 148      12.202  -7.921   9.819  1.00  0.00           H
ATOM    736 HG12 ILE A 148      14.108  -7.746   7.472  1.00  0.00           H
ATOM    737 HG13 ILE A 148      14.170  -9.116   8.544  1.00  0.00           H
ATOM    738 HG21 ILE A 148      11.881  -6.104   8.131  1.00  0.00           H
ATOM    739 HG22 ILE A 148      12.199  -5.468   9.727  1.00  0.00           H
ATOM    740 HG23 ILE A 148      13.461  -5.467   8.494  1.00  0.00           H
ATOM    741 HD11 ILE A 148      12.746  -9.602   6.598  1.00  0.00           H
ATOM    742 HD12 ILE A 148      11.863  -9.740   8.105  1.00  0.00           H
ATOM    743 HD13 ILE A 148      11.625  -8.336   7.075  1.00  0.00           H
ATOM    744  N   ASN A 149      15.904  -5.793   9.698  1.00 22.03           N
ATOM    745  CA  ASN A 149      17.017  -5.388   8.808  1.00 24.97           C
ATOM    746  C   ASN A 149      18.403  -5.946   9.189  1.00 27.08           C
ATOM    747  O   ASN A 149      19.138  -6.409   8.324  1.00 26.94           O
ATOM    748  CB  ASN A 149      17.084  -3.848   8.692  1.00 24.58           C
ATOM    749  CG  ASN A 149      17.750  -3.337   7.411  1.00 26.06           C
ATOM    750  OD1 ASN A 149      17.539  -3.889   6.332  1.00 24.50           O
ATOM    751  ND2 ASN A 149      18.536  -2.273   7.499  1.00 25.60           N
ATOM    752  H   ASN A 149      15.195  -5.092   9.887  1.00  0.00           H
ATOM    753  HA  ASN A 149      16.761  -5.807   7.833  1.00  0.00           H
ATOM    754  HB2 ASN A 149      16.083  -3.418   8.724  1.00  0.00           H
ATOM    755  HB3 ASN A 149      17.647  -3.452   9.536  1.00  0.00           H
ATOM    756 HD21 ASN A 149      18.685  -1.753   8.385  1.00  0.00           H
ATOM    757 HD22 ASN A 149      18.962  -1.875   6.660  1.00  0.00           H
ATOM    758  N   LYS A 150      18.742  -5.965  10.483  1.00 30.35           N
ATOM    759  CA  LYS A 150      20.015  -6.498  10.978  1.00 31.86           C
ATOM    760  C   LYS A 150      20.091  -8.039  10.953  1.00 30.69           C
ATOM    761  O   LYS A 150      21.176  -8.591  11.124  1.00 31.66           O
ATOM    762  CB  LYS A 150      20.220  -6.037  12.434  1.00 34.31           C
ATOM    763  CG  LYS A 150      20.603  -4.556  12.554  1.00 37.03           C
ATOM    764  CD  LYS A 150      20.939  -4.189  14.006  1.00 39.82           C
ATOM    765  CE  LYS A 150      21.274  -2.706  14.196  1.00 41.88           C
ATOM    766  NZ  LYS A 150      20.083  -1.865  14.029  1.00 43.28           N1+
ATOM    767  H   LYS A 150      18.117  -5.504  11.139  1.00  0.00           H
ATOM    768  HA  LYS A 150      20.833  -6.125  10.357  1.00  0.00           H
ATOM    769  HB2 LYS A 150      19.326  -6.249  13.024  1.00  0.00           H
ATOM    770  HB3 LYS A 150      21.022  -6.624  12.888  1.00  0.00           H
ATOM    771  HG2 LYS A 150      21.464  -4.346  11.917  1.00  0.00           H
ATOM    772  HG3 LYS A 150      19.794  -3.932  12.173  1.00  0.00           H
ATOM    773  HD2 LYS A 150      20.117  -4.475  14.664  1.00  0.00           H
ATOM    774  HD3 LYS A 150      21.797  -4.783  14.324  1.00  0.00           H
ATOM    775  HE2 LYS A 150      21.658  -2.554  15.205  1.00  0.00           H
ATOM    776  HE3 LYS A 150      22.057  -2.387  13.507  1.00  0.00           H
ATOM    777  HZ1 LYS A 150      20.263  -0.924  14.326  1.00  0.00           H
ATOM    778  HZ2 LYS A 150      19.843  -1.767  13.019  1.00  0.00           H
ATOM    779  HZ3 LYS A 150      19.296  -2.258  14.538  1.00  0.00           H
ATOM    780  N   LYS A 151      18.960  -8.729  10.770  1.00 29.61           N
ATOM    781  CA  LYS A 151      18.890 -10.179  10.613  1.00 28.95           C
ATOM    782  C   LYS A 151      18.804 -10.513   9.110  1.00 28.12           C
ATOM    783  O   LYS A 151      19.463 -11.444   8.652  1.00 26.36           O
ATOM    784  CB  LYS A 151      17.618 -10.706  11.328  1.00 30.41           C
ATOM    785  CG  LYS A 151      17.571 -10.385  12.843  1.00 32.64           C
ATOM    786  CD  LYS A 151      16.290 -10.847  13.571  1.00 35.44           C
ATOM    787  CE  LYS A 151      15.039 -10.068  13.133  1.00 35.31           C
ATOM    788  NZ  LYS A 151      13.836 -10.395  13.914  1.00 36.53           N1+
ATOM    789  H   LYS A 151      18.119  -8.199  10.569  1.00  0.00           H
ATOM    790  HA  LYS A 151      19.771 -10.669  11.032  1.00  0.00           H
ATOM    791  HB2 LYS A 151      16.731 -10.310  10.837  1.00  0.00           H
ATOM    792  HB3 LYS A 151      17.567 -11.788  11.195  1.00  0.00           H
ATOM    793  HG2 LYS A 151      18.435 -10.849  13.320  1.00  0.00           H
ATOM    794  HG3 LYS A 151      17.690  -9.312  13.003  1.00  0.00           H
ATOM    795  HD2 LYS A 151      16.141 -11.918  13.420  1.00  0.00           H
ATOM    796  HD3 LYS A 151      16.435 -10.707  14.643  1.00  0.00           H
ATOM    797  HE2 LYS A 151      15.214  -8.995  13.199  1.00  0.00           H
ATOM    798  HE3 LYS A 151      14.818 -10.292  12.090  1.00  0.00           H
ATOM    799  HZ1 LYS A 151      13.046 -10.052  13.383  1.00  0.00           H
ATOM    800  HZ2 LYS A 151      13.718 -11.396  14.061  1.00  0.00           H
ATOM    801  HZ3 LYS A 151      13.787  -9.914  14.830  1.00  0.00           H
ATOM    802  N   PHE A 152      18.009  -9.752   8.342  1.00 26.10           N
ATOM    803  CA  PHE A 152      17.722  -9.969   6.923  1.00 27.49           C
ATOM    804  C   PHE A 152      17.728  -8.609   6.198  1.00 27.68           C
ATOM    805  O   PHE A 152      16.684  -7.955   6.164  1.00 27.95           O
ATOM    806  CB  PHE A 152      16.393 -10.743   6.767  1.00 28.65           C
ATOM    807  CG  PHE A 152      16.329 -12.058   7.528  1.00 30.27           C
ATOM    808  CD1 PHE A 152      17.032 -13.189   7.061  1.00 29.39           C
ATOM    809  CD2 PHE A 152      15.618 -12.132   8.744  1.00 29.26           C
ATOM    810  CE1 PHE A 152      17.019 -14.387   7.801  1.00 29.40           C
ATOM    811  CE2 PHE A 152      15.635 -13.320   9.497  1.00 30.84           C
ATOM    812  CZ  PHE A 152      16.323 -14.452   9.023  1.00 29.38           C
ATOM    813  H   PHE A 152      17.507  -8.991   8.791  1.00  0.00           H
ATOM    814  HA  PHE A 152      18.493 -10.604   6.489  1.00  0.00           H
ATOM    815  HB2 PHE A 152      15.556 -10.119   7.077  1.00  0.00           H
ATOM    816  HB3 PHE A 152      16.224 -10.939   5.709  1.00  0.00           H
ATOM    817  HD1 PHE A 152      17.602 -13.133   6.146  1.00  0.00           H
ATOM    818  HD2 PHE A 152      15.082 -11.272   9.118  1.00  0.00           H
ATOM    819  HE1 PHE A 152      17.565 -15.247   7.444  1.00  0.00           H
ATOM    820  HE2 PHE A 152      15.122 -13.361  10.444  1.00  0.00           H
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ATOM    821  HZ  PHE A 152      16.324 -15.364   9.603  1.00  0.00           H
ATOM    822  N   PRO A 153      18.879  -8.141   5.664  1.00 27.92           N
ATOM    823  CA  PRO A 153      19.027  -6.762   5.176  1.00 26.86           C
ATOM    824  C   PRO A 153      18.448  -6.506   3.775  1.00 25.61           C
ATOM    825  O   PRO A 153      18.447  -7.397   2.914  1.00 23.81           O
ATOM    826  CB  PRO A 153      20.543  -6.514   5.188  1.00 28.24           C
ATOM    827  CG  PRO A 153      21.159  -7.889   4.982  1.00 29.29           C
ATOM    828  CD  PRO A 153      20.167  -8.842   5.652  1.00 28.25           C
ATOM    829  HA  PRO A 153      18.545  -6.086   5.878  1.00  0.00           H
ATOM    830  HB2 PRO A 153      20.878  -5.786   4.447  1.00  0.00           H
ATOM    831  HB3 PRO A 153      20.832  -6.129   6.167  1.00  0.00           H
ATOM    832  HG2 PRO A 153      21.217  -8.106   3.915  1.00  0.00           H
ATOM    833  HG3 PRO A 153      22.165  -7.969   5.395  1.00  0.00           H
ATOM    834  HD2 PRO A 153      20.114  -9.792   5.121  1.00  0.00           H
ATOM    835  HD3 PRO A 153      20.472  -9.040   6.682  1.00  0.00           H
ATOM    836  N   TYR A 154      18.029  -5.250   3.561  1.00 23.90           N
ATOM    837  CA  TYR A 154      17.598  -4.628   2.305  1.00 25.51           C
ATOM    838  C   TYR A 154      18.030  -3.147   2.264  1.00 24.53           C
ATOM    839  O   TYR A 154      18.243  -2.565   3.331  1.00 23.72           O
ATOM    840  CB  TYR A 154      16.078  -4.817   2.083  1.00 24.29           C
ATOM    841  CG  TYR A 154      15.711  -6.197   1.577  1.00 25.02           C
ATOM    842  CD1 TYR A 154      16.018  -6.558   0.249  1.00 24.50           C
ATOM    843  CD2 TYR A 154      15.120  -7.140   2.442  1.00 23.16           C
ATOM    844  CE1 TYR A 154      15.781  -7.866  -0.204  1.00 26.82           C
ATOM    845  CE2 TYR A 154      14.885  -8.450   1.991  1.00 25.35           C
ATOM    846  CZ  TYR A 154      15.238  -8.815   0.676  1.00 26.98           C
ATOM    847  OH  TYR A 154      15.177 -10.113   0.278  1.00 26.94           O
ATOM    848  H   TYR A 154      18.063  -4.611   4.352  1.00  0.00           H
ATOM    849  HA  TYR A 154      18.137  -5.132   1.502  1.00  0.00           H
ATOM    850  HB2 TYR A 154      15.534  -4.601   3.003  1.00  0.00           H
ATOM    851  HB3 TYR A 154      15.703  -4.094   1.357  1.00  0.00           H
ATOM    852  HD1 TYR A 154      16.469  -5.845  -0.423  1.00  0.00           H
ATOM    853  HD2 TYR A 154      14.890  -6.875   3.466  1.00  0.00           H
ATOM    854  HE1 TYR A 154      16.045  -8.142  -1.216  1.00  0.00           H
ATOM    855  HE2 TYR A 154      14.474  -9.175   2.679  1.00  0.00           H
ATOM    856  HH  TYR A 154      14.831 -10.712   0.975  1.00  0.00           H
ATOM    857  N   PRO A 155      18.166  -2.520   1.072  1.00 24.68           N
ATOM    858  CA  PRO A 155      18.414  -1.076   0.933  1.00 23.85           C
ATOM    859  C   PRO A 155      17.123  -0.264   1.162  1.00 24.27           C
ATOM    860  O   PRO A 155      16.019  -0.796   1.002  1.00 23.44           O
ATOM    861  CB  PRO A 155      18.910  -0.910  -0.510  1.00 23.62           C
ATOM    862  CG  PRO A 155      18.260  -2.052  -1.273  1.00 23.92           C
ATOM    863  CD  PRO A 155      18.115  -3.168  -0.241  1.00 24.00           C
ATOM    864  HA  PRO A 155      19.180  -0.754   1.637  1.00  0.00           H
ATOM    865  HB2 PRO A 155      18.687   0.066  -0.947  1.00  0.00           H
ATOM    866  HB3 PRO A 155      19.993  -1.024  -0.548  1.00  0.00           H
ATOM    867  HG2 PRO A 155      17.277  -1.741  -1.626  1.00  0.00           H
ATOM    868  HG3 PRO A 155      18.839  -2.357  -2.145  1.00  0.00           H
ATOM    869  HD2 PRO A 155      17.181  -3.703  -0.392  1.00  0.00           H
ATOM    870  HD3 PRO A 155      18.940  -3.875  -0.336  1.00  0.00           H
ATOM    871  N   TRP A 156      17.253   1.017   1.531  1.00 23.62           N
ATOM    872  CA  TRP A 156      16.136   1.912   1.836  1.00 24.34           C
ATOM    873  C   TRP A 156      16.153   3.117   0.886  1.00 24.58           C
ATOM    874  O   TRP A 156      17.054   3.953   0.941  1.00 24.78           O
ATOM    875  CB  TRP A 156      16.197   2.325   3.324  1.00 22.47           C
ATOM    876  CG  TRP A 156      14.881   2.629   3.983  1.00 23.60           C
ATOM    877  CD1 TRP A 156      13.861   3.339   3.443  1.00 23.21           C
ATOM    878  CD2 TRP A 156      14.401   2.181   5.291  1.00 24.20           C
ATOM    879  NE1 TRP A 156      12.793   3.354   4.316  1.00 23.02           N
ATOM    880  CE3 TRP A 156      14.943   1.400   6.341  1.00 22.06           C
ATOM    881  CE2 TRP A 156      13.070   2.663   5.470  1.00 24.32           C
ATOM    882  CZ3 TRP A 156      14.189   1.103   7.497  1.00 23.14           C
ATOM    883  CZ2 TRP A 156      12.320   2.397   6.624  1.00 23.17           C
ATOM    884  CH2 TRP A 156      12.876   1.597   7.636  1.00 23.12           C
ATOM    885  H   TRP A 156      18.194   1.394   1.627  1.00  0.00           H
ATOM    886  HA  TRP A 156      15.199   1.381   1.681  1.00  0.00           H
ATOM    887  HB2 TRP A 156      16.639   1.510   3.897  1.00  0.00           H
ATOM    888  HB3 TRP A 156      16.864   3.174   3.469  1.00  0.00           H
ATOM    889  HD1 TRP A 156      13.878   3.812   2.471  1.00  0.00           H
ATOM    890  HE1 TRP A 156      11.894   3.815   4.105  1.00  0.00           H
ATOM    891  HE3 TRP A 156      15.943   1.004   6.241  1.00  0.00           H
ATOM    892  HZ3 TRP A 156      14.621   0.483   8.270  1.00  0.00           H
ATOM    893  HZ2 TRP A 156      11.321   2.794   6.712  1.00  0.00           H
ATOM    894  HH2 TRP A 156      12.291   1.359   8.510  1.00  0.00           H
ATOM    895  N   VAL A 157      15.139   3.211   0.023  1.00 24.62           N
ATOM    896  CA  VAL A 157      14.929   4.307  -0.910  1.00 22.16           C
ATOM    897  C   VAL A 157      13.975   5.307  -0.232  1.00 21.82           C
ATOM    898  O   VAL A 157      12.789   5.031  -0.027  1.00 22.52           O
ATOM    899  CB  VAL A 157      14.306   3.730  -2.210  1.00 20.88           C
ATOM    900  CG1 VAL A 157      13.894   4.831  -3.203  1.00 19.19           C
ATOM    901  CG2 VAL A 157      15.268   2.743  -2.900  1.00 20.83           C
ATOM    902  H   VAL A 157      14.396   2.515   0.068  1.00  0.00           H
ATOM    903  HA  VAL A 157      15.873   4.800  -1.153  1.00  0.00           H
ATOM    904  HB  VAL A 157      13.404   3.171  -1.954  1.00  0.00           H
ATOM    905 HG11 VAL A 157      13.670   4.422  -4.187  1.00  0.00           H
ATOM    906 HG12 VAL A 157      13.002   5.355  -2.867  1.00  0.00           H
ATOM    907 HG13 VAL A 157      14.685   5.570  -3.325  1.00  0.00           H
ATOM    908 HG21 VAL A 157      14.799   2.283  -3.770  1.00  0.00           H
ATOM    909 HG22 VAL A 157      16.176   3.240  -3.242  1.00  0.00           H
ATOM    910 HG23 VAL A 157      15.568   1.928  -2.242  1.00  0.00           H
ATOM    911  N   PHE A 158      14.499   6.480   0.114  1.00 22.60           N
ATOM    912  CA  PHE A 158      13.750   7.599   0.656  1.00 21.72           C
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ATOM    913  C   PHE A 158      13.434   8.539  -0.519  1.00 21.85           C
ATOM    914  O   PHE A 158      14.324   8.916  -1.285  1.00 21.79           O
ATOM    915  CB  PHE A 158      14.632   8.318   1.696  1.00 22.82           C
ATOM    916  CG  PHE A 158      15.016   7.443   2.877  1.00 22.97           C
ATOM    917  CD1 PHE A 158      14.066   7.136   3.874  1.00 20.44           C
ATOM    918  CD2 PHE A 158      16.309   6.886   2.950  1.00 23.38           C
ATOM    919  CE1 PHE A 158      14.409   6.266   4.928  1.00 23.63           C
ATOM    920  CE2 PHE A 158      16.645   6.023   4.007  1.00 22.41           C
ATOM    921  CZ  PHE A 158      15.701   5.720   5.002  1.00 21.10           C
ATOM    922  H   PHE A 158      15.484   6.656  -0.090  1.00  0.00           H
ATOM    923  HA  PHE A 158      12.838   7.256   1.141  1.00  0.00           H
ATOM    924  HB2 PHE A 158      15.532   8.718   1.228  1.00  0.00           H
ATOM    925  HB3 PHE A 158      14.094   9.171   2.102  1.00  0.00           H
ATOM    926  HD1 PHE A 158      13.066   7.536   3.810  1.00  0.00           H
ATOM    927  HD2 PHE A 158      17.041   7.097   2.183  1.00  0.00           H
ATOM    928  HE1 PHE A 158      13.675   5.964   5.658  1.00  0.00           H
ATOM    929  HE2 PHE A 158      17.626   5.580   4.043  1.00  0.00           H
ATOM    930  HZ  PHE A 158      15.946   5.030   5.795  1.00  0.00           H
ATOM    931  N   LEU A 159      12.157   8.900  -0.667  1.00 22.19           N
ATOM    932  CA  LEU A 159      11.599   9.754  -1.711  1.00 20.94           C
ATOM    933  C   LEU A 159      10.961  10.988  -1.048  1.00 21.28           C
ATOM    934  O   LEU A 159      10.447  10.893   0.067  1.00 22.09           O
ATOM    935  CB  LEU A 159      10.566   8.957  -2.543  1.00 22.79           C
ATOM    936  CG  LEU A 159      11.097   7.657  -3.189  1.00 22.80           C
ATOM    937  CD1 LEU A 159       9.967   6.836  -3.828  1.00 23.75           C
ATOM    938  CD2 LEU A 159      12.198   7.939  -4.218  1.00 19.61           C
ATOM    939  H   LEU A 159      11.484   8.541   0.011  1.00  0.00           H
ATOM    940  HA  LEU A 159      12.390  10.084  -2.376  1.00  0.00           H
ATOM    941  HB2 LEU A 159       9.719   8.694  -1.917  1.00  0.00           H
ATOM    942  HB3 LEU A 159      10.165   9.611  -3.316  1.00  0.00           H
ATOM    943  HG  LEU A 159      11.520   7.033  -2.401  1.00  0.00           H
ATOM    944 HD11 LEU A 159      10.342   5.878  -4.190  1.00  0.00           H
ATOM    945 HD12 LEU A 159       9.171   6.627  -3.112  1.00  0.00           H
ATOM    946 HD13 LEU A 159       9.526   7.347  -4.681  1.00  0.00           H
ATOM    947 HD21 LEU A 159      12.518   7.026  -4.722  1.00  0.00           H
ATOM    948 HD22 LEU A 159      11.848   8.631  -4.982  1.00  0.00           H
ATOM    949 HD23 LEU A 159      13.082   8.374  -3.753  1.00  0.00           H
ATOM    950  N   ASN A 160      10.997  12.148  -1.709  1.00 21.67           N
ATOM    951  CA  ASN A 160      10.561  13.448  -1.181  1.00 21.59           C
ATOM    952  C   ASN A 160      10.025  14.316  -2.329  1.00 22.22           C
ATOM    953  O   ASN A 160      10.124  13.939  -3.494  1.00 22.40           O
ATOM    954  CB  ASN A 160      11.740  14.086  -0.411  1.00 21.73           C
ATOM    955  CG  ASN A 160      11.411  15.169   0.623  1.00 20.70           C
ATOM    956  OD1 ASN A 160      10.427  15.902   0.520  1.00 17.56           O
ATOM    957  ND2 ASN A 160      12.253  15.282   1.642  1.00 20.24           N
ATOM    958  H   ASN A 160      11.462  12.171  -2.609  1.00  0.00           H
ATOM    959  HA  ASN A 160       9.728  13.280  -0.497  1.00  0.00           H
ATOM    960  HB2 ASN A 160      12.212  13.295   0.155  1.00  0.00           H
ATOM    961  HB3 ASN A 160      12.499  14.449  -1.103  1.00  0.00           H
ATOM    962 HD21 ASN A 160      13.048  14.659   1.706  1.00  0.00           H
ATOM    963 HD22 ASN A 160      12.154  16.031   2.310  1.00  0.00           H
ATOM    964  N   ASP A 161       9.477  15.490  -2.013  1.00 22.62           N
ATOM    965  CA  ASP A 161       8.982  16.495  -2.962  1.00 21.64           C
ATOM    966  C   ASP A 161       9.674  17.855  -2.729  1.00 24.09           C
ATOM    967  O   ASP A 161       9.663  18.720  -3.606  1.00 24.64           O
ATOM    968  CB  ASP A 161       7.434  16.519  -2.954  1.00 22.24           C
ATOM    969  CG  ASP A 161       6.758  17.497  -1.995  1.00 22.54           C
ATOM    970  OD1 ASP A 161       6.877  17.307  -0.765  1.00 19.79           O
ATOM    971  OD2 ASP A 161       6.055  18.401  -2.509  1.00 25.86           O1-
ATOM    972  H   ASP A 161       9.524  15.747  -1.030  1.00  0.00           H
ATOM    973  HA  ASP A 161       9.284  16.199  -3.969  1.00  0.00           H
ATOM    974  HB2 ASP A 161       7.094  16.746  -3.963  1.00  0.00           H
ATOM    975  HB3 ASP A 161       7.043  15.521  -2.753  1.00  0.00           H
ATOM    976  N   GLU A 162      10.349  18.017  -1.592  1.00 25.03           N
ATOM    977  CA  GLU A 162      11.469  18.927  -1.400  1.00 25.78           C
ATOM    978  C   GLU A 162      12.757  18.123  -1.676  1.00 26.36           C
ATOM    979  O   GLU A 162      12.701  16.891  -1.736  1.00 26.47           O
ATOM    980  CB  GLU A 162      11.481  19.300   0.094  1.00 28.39           C
ATOM    981  CG  GLU A 162      10.373  20.296   0.460  1.00 34.38           C
ATOM    982  CD  GLU A 162      10.344  20.611   1.940  1.00 38.51           C
ATOM    983  OE1 GLU A 162      10.909  19.859   2.767  1.00 40.07           O
ATOM    984  OE2 GLU A 162       9.678  21.596   2.324  1.00 39.26           O1-
ATOM    985  H   GLU A 162      10.347  17.236  -0.947  1.00  0.00           H
ATOM    986  HA  GLU A 162      11.412  19.809  -2.038  1.00  0.00           H
ATOM    987  HB2 GLU A 162      11.387  18.395   0.696  1.00  0.00           H
ATOM    988  HB3 GLU A 162      12.436  19.739   0.385  1.00  0.00           H
ATOM    989  HG2 GLU A 162      10.508  21.224  -0.097  1.00  0.00           H
ATOM    990  HG3 GLU A 162       9.397  19.900   0.176  1.00  0.00           H
ATOM    991  N   PRO A 163      13.938  18.766  -1.754  1.00 25.77           N
ATOM    992  CA  PRO A 163      15.206  18.052  -1.593  1.00 25.31           C
ATOM    993  C   PRO A 163      15.362  17.609  -0.123  1.00 24.48           C
ATOM    994  O   PRO A 163      14.795  18.222   0.787  1.00 23.95           O
ATOM    995  CB  PRO A 163      16.277  19.061  -2.033  1.00 25.46           C
ATOM    996  CG  PRO A 163      15.656  20.426  -1.769  1.00 26.93           C
ATOM    997  CD  PRO A 163      14.146  20.206  -1.912  1.00 25.47           C
ATOM    998  HA  PRO A 163      15.230  17.173  -2.241  1.00  0.00           H
ATOM    999  HB2 PRO A 163      17.230  18.932  -1.519  1.00  0.00           H
ATOM   1000  HB3 PRO A 163      16.460  18.945  -3.102  1.00  0.00           H
ATOM   1001  HG2 PRO A 163      15.882  20.726  -0.745  1.00  0.00           H
ATOM   1002  HG3 PRO A 163      16.033  21.205  -2.433  1.00  0.00           H
ATOM   1003  HD2 PRO A 163      13.597  20.806  -1.187  1.00  0.00           H
ATOM   1004  HD3 PRO A 163      13.809  20.497  -2.906  1.00  0.00           H
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ATOM   1005  N   PHE A 164      16.120  16.538   0.123  1.00 23.91           N
ATOM   1006  CA  PHE A 164      16.354  16.029   1.472  1.00 22.65           C
ATOM   1007  C   PHE A 164      17.361  16.925   2.192  1.00 22.61           C
ATOM   1008  O   PHE A 164      18.474  17.123   1.690  1.00 20.34           O
ATOM   1009  CB  PHE A 164      16.912  14.597   1.407  1.00 21.23           C
ATOM   1010  CG  PHE A 164      15.817  13.557   1.340  1.00 21.71           C
ATOM   1011  CD1 PHE A 164      15.054  13.288   2.495  1.00 21.29           C
ATOM   1012  CD2 PHE A 164      15.537  12.881   0.137  1.00 20.13           C
ATOM   1013  CE1 PHE A 164      14.020  12.339   2.451  1.00 22.86           C
ATOM   1014  CE2 PHE A 164      14.516  11.915   0.105  1.00 22.82           C
ATOM   1015  CZ  PHE A 164      13.757  11.646   1.259  1.00 20.54           C
ATOM   1016  H   PHE A 164      16.594  16.094  -0.660  1.00  0.00           H
ATOM   1017  HA  PHE A 164      15.416  16.027   2.027  1.00  0.00           H
ATOM   1018  HB2 PHE A 164      17.606  14.479   0.574  1.00  0.00           H
ATOM   1019  HB3 PHE A 164      17.490  14.374   2.306  1.00  0.00           H
ATOM   1020  HD1 PHE A 164      15.247  13.822   3.415  1.00  0.00           H
ATOM   1021  HD2 PHE A 164      16.095  13.097  -0.763  1.00  0.00           H
ATOM   1022  HE1 PHE A 164      13.423  12.151   3.329  1.00  0.00           H
ATOM   1023  HE2 PHE A 164      14.294  11.402  -0.816  1.00  0.00           H
ATOM   1024  HZ  PHE A 164      12.945  10.936   1.219  1.00  0.00           H
ATOM   1025  N   THR A 165      16.968  17.454   3.356  1.00 23.48           N
ATOM   1026  CA  THR A 165      17.783  18.272   4.244  1.00 23.94           C
ATOM   1027  C   THR A 165      18.919  17.426   4.845  1.00 26.62           C
ATOM   1028  O   THR A 165      18.755  16.232   5.105  1.00 21.92           O
ATOM   1029  CB  THR A 165      16.852  18.877   5.330  1.00 25.32           C
ATOM   1030  OG1 THR A 165      16.070  17.888   5.981  1.00 27.19           O
ATOM   1031  CG2 THR A 165      15.901  19.943   4.766  1.00 25.62           C
ATOM   1032  H   THR A 165      16.055  17.213   3.734  1.00  0.00           H
ATOM   1033  HA  THR A 165      18.229  19.083   3.668  1.00  0.00           H
ATOM   1034  HB  THR A 165      17.469  19.356   6.093  1.00  0.00           H
ATOM   1035  HG1 THR A 165      16.375  17.794   6.898  1.00  0.00           H
ATOM   1036 HG21 THR A 165      15.268  20.360   5.549  1.00  0.00           H
ATOM   1037 HG22 THR A 165      16.459  20.769   4.322  1.00  0.00           H
ATOM   1038 HG23 THR A 165      15.251  19.539   3.992  1.00  0.00           H
ATOM   1039  N   GLU A 166      20.102  18.027   5.019  1.00 27.49           N
ATOM   1040  CA  GLU A 166      21.334  17.353   5.436  1.00 30.60           C
ATOM   1041  C   GLU A 166      21.195  16.617   6.778  1.00 29.25           C
ATOM   1042  O   GLU A 166      21.665  15.489   6.908  1.00 31.53           O
ATOM   1043  CB  GLU A 166      22.534  18.330   5.406  1.00 34.11           C
ATOM   1044  CG  GLU A 166      22.601  19.298   4.193  1.00 40.02           C
ATOM   1045  CD  GLU A 166      22.209  18.659   2.864  1.00 44.19           C
ATOM   1046  OE1 GLU A 166      21.122  19.012   2.365  1.00 48.52           O
ATOM   1047  OE2 GLU A 166      22.863  17.686   2.439  1.00 46.29           O1-
ATOM   1048  H   GLU A 166      20.228  18.918   4.554  1.00  0.00           H
ATOM   1049  HA  GLU A 166      21.545  16.580   4.703  1.00  0.00           H
ATOM   1050  HB2 GLU A 166      22.545  18.927   6.318  1.00  0.00           H
ATOM   1051  HB3 GLU A 166      23.453  17.741   5.430  1.00  0.00           H
ATOM   1052  HG2 GLU A 166      21.948  20.153   4.365  1.00  0.00           H
ATOM   1053  HG3 GLU A 166      23.608  19.703   4.094  1.00  0.00           H
ATOM   1054  N   GLU A 167      20.454  17.217   7.722  1.00 29.61           N
ATOM   1055  CA  GLU A 167      20.034  16.635   8.996  1.00 30.74           C
ATOM   1056  C   GLU A 167      19.254  15.312   8.840  1.00 29.24           C
ATOM   1057  O   GLU A 167      19.477  14.393   9.625  1.00 26.20           O
ATOM   1058  CB  GLU A 167      19.342  17.735   9.855  1.00 33.76           C
ATOM   1059  CG  GLU A 167      18.014  17.408  10.582  1.00 39.85           C
ATOM   1060  CD  GLU A 167      16.765  17.534   9.714  1.00 43.67           C
ATOM   1061  OE1 GLU A 167      16.900  17.748   8.487  1.00 45.84           O
ATOM   1062  OE2 GLU A 167      15.659  17.507  10.301  1.00 45.11           O1-
ATOM   1063  H   GLU A 167      20.034  18.096   7.465  1.00  0.00           H
ATOM   1064  HA  GLU A 167      20.955  16.359   9.514  1.00  0.00           H
ATOM   1065  HB2 GLU A 167      20.058  18.045  10.616  1.00  0.00           H
ATOM   1066  HB3 GLU A 167      19.184  18.636   9.261  1.00  0.00           H
ATOM   1067  HG2 GLU A 167      18.037  16.425  11.053  1.00  0.00           H
ATOM   1068  HG3 GLU A 167      17.897  18.122  11.396  1.00  0.00           H
ATOM   1069  N   PHE A 168      18.399  15.189   7.813  1.00 26.92           N
ATOM   1070  CA  PHE A 168      17.641  13.984   7.470  1.00 25.65           C
ATOM   1071  C   PHE A 168      18.597  12.835   7.162  1.00 24.16           C
ATOM   1072  O   PHE A 168      18.518  11.765   7.762  1.00 21.85           O
ATOM   1073  CB  PHE A 168      16.705  14.253   6.262  1.00 25.88           C
ATOM   1074  CG  PHE A 168      15.539  13.291   6.100  1.00 25.83           C
ATOM   1075  CD1 PHE A 168      15.736  11.931   5.769  1.00 27.41           C
ATOM   1076  CD2 PHE A 168      14.230  13.774   6.276  1.00 26.00           C
ATOM   1077  CE1 PHE A 168      14.637  11.053   5.696  1.00 27.73           C
ATOM   1078  CE2 PHE A 168      13.128  12.902   6.190  1.00 24.69           C
ATOM   1079  CZ  PHE A 168      13.337  11.537   5.931  1.00 24.72           C
ATOM   1080  H   PHE A 168      18.252  16.007   7.234  1.00  0.00           H
ATOM   1081  HA  PHE A 168      17.048  13.697   8.330  1.00  0.00           H
ATOM   1082  HB2 PHE A 168      16.301  15.262   6.347  1.00  0.00           H
ATOM   1083  HB3 PHE A 168      17.255  14.246   5.322  1.00  0.00           H
ATOM   1084  HD1 PHE A 168      16.728  11.545   5.583  1.00  0.00           H
ATOM   1085  HD2 PHE A 168      14.081  14.820   6.504  1.00  0.00           H
ATOM   1086  HE1 PHE A 168      14.790  10.011   5.454  1.00  0.00           H
ATOM   1087  HE2 PHE A 168      12.125  13.272   6.339  1.00  0.00           H
ATOM   1088  HZ  PHE A 168      12.492  10.871   5.888  1.00  0.00           H
ATOM   1089  N   LYS A 169      19.530  13.092   6.246  1.00 24.01           N
ATOM   1090  CA  LYS A 169      20.486  12.123   5.738  1.00 26.45           C
ATOM   1091  C   LYS A 169      21.488  11.726   6.840  1.00 26.84           C
ATOM   1092  O   LYS A 169      21.759  10.537   7.009  1.00 27.09           O
ATOM   1093  CB  LYS A 169      21.160  12.731   4.491  1.00 29.03           C
ATOM   1094  CG  LYS A 169      20.132  13.006   3.365  1.00 31.88           C
ATOM   1095  CD  LYS A 169      20.668  13.734   2.124  1.00 35.09           C
ATOM   1096  CE  LYS A 169      21.102  15.171   2.441  1.00 37.28           C
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ATOM   1097  NZ  LYS A 169      21.218  16.044   1.268  1.00 38.69          N1+
ATOM   1098  H   LYS A 169      19.559  14.033   5.875  1.00  0.00           H
ATOM   1099  HA  LYS A 169      19.944  11.223   5.442  1.00  0.00           H
ATOM   1100  HB2 LYS A 169      21.693  13.642   4.767  1.00  0.00           H
ATOM   1101  HB3 LYS A 169      21.911  12.035   4.118  1.00  0.00           H
ATOM   1102  HG2 LYS A 169      19.716  12.054   3.047  1.00  0.00           H
ATOM   1103  HG3 LYS A 169      19.284  13.576   3.746  1.00  0.00           H
ATOM   1104  HD2 LYS A 169      21.495  13.172   1.687  1.00  0.00           H
ATOM   1105  HD3 LYS A 169      19.879  13.744   1.371  1.00  0.00           H
ATOM   1106  HE2 LYS A 169      20.378  15.639   3.103  1.00  0.00           H
ATOM   1107  HE3 LYS A 169      22.063  15.158   2.955  1.00  0.00           H
ATOM   1108  HZ1 LYS A 169      21.899  16.777   1.542  1.00  0.00           H
ATOM   1109  HZ2 LYS A 169      21.537  15.529   0.444  1.00  0.00           H
ATOM   1110  HZ3 LYS A 169      20.340  16.514   1.097  1.00  0.00           H
ATOM   1111  N   GLU A 170      21.933  12.685   7.669  1.00 26.50           N
ATOM   1112  CA  GLU A 170      22.778  12.467   8.848  1.00 27.91           C
ATOM   1113  C   GLU A 170      22.041  11.602   9.899  1.00 26.70           C
ATOM   1114  O   GLU A 170      22.600  10.626  10.405  1.00 25.68           O
ATOM   1115  CB  GLU A 170      23.186  13.842   9.453  1.00 30.74           C
ATOM   1116  CG  GLU A 170      24.670  13.971   9.853  1.00 38.58           C
ATOM   1117  CD  GLU A 170      25.104  12.920  10.857  1.00 44.74           C
ATOM   1118  OE1 GLU A 170      24.401  12.728  11.874  1.00 47.54           O
ATOM   1119  OE2 GLU A 170      26.040  12.147  10.556  1.00 48.23          O1-
ATOM   1120  H   GLU A 170      21.676  13.645   7.454  1.00  0.00           H
ATOM   1121  HA  GLU A 170      23.669  11.931   8.514  1.00  0.00           H
ATOM   1122  HB2 GLU A 170      23.004  14.640   8.740  1.00  0.00           H
ATOM   1123  HB3 GLU A 170      22.561  14.090  10.313  1.00  0.00           H
ATOM   1124  HG2 GLU A 170      25.303  13.894   8.968  1.00  0.00           H
ATOM   1125  HG3 GLU A 170      24.858  14.952  10.288  1.00  0.00           H
ATOM   1126  N   ALA A 171      20.769  11.916  10.191  1.00 23.76           N
ATOM   1127  CA  ALA A 171      19.955  11.236  11.194  1.00 23.64           C
ATOM   1128  C   ALA A 171      19.524   9.830  10.752  1.00 23.90           C
ATOM   1129  O   ALA A 171      19.416   8.945  11.604  1.00 22.94           O
ATOM   1130  CB  ALA A 171      18.689  12.056  11.465  1.00 23.80           C
ATOM   1131  H   ALA A 171      20.374  12.748   9.755  1.00  0.00           H
ATOM   1132  HA  ALA A 171      20.535  11.152  12.115  1.00  0.00           H
ATOM   1133  HB1 ALA A 171      18.029  11.563  12.180  1.00  0.00           H
ATOM   1134  HB2 ALA A 171      18.935  13.038  11.869  1.00  0.00           H
ATOM   1135  HB3 ALA A 171      18.131  12.206  10.542  1.00  0.00           H
ATOM   1136  N   VAL A 172      19.303   9.612   9.448  1.00 24.62           N
ATOM   1137  CA  VAL A 172      19.115   8.301   8.825  1.00 25.76           C
ATOM   1138  C   VAL A 172      20.413   7.474   8.928  1.00 26.15           C
ATOM   1139  O   VAL A 172      20.355   6.310   9.326  1.00 25.46           O
ATOM   1140  CB  VAL A 172      18.610   8.484   7.368  1.00 25.40           C
ATOM   1141  CG1 VAL A 172      18.772   7.246   6.471  1.00 25.21           C
ATOM   1142  CG2 VAL A 172      17.128   8.903   7.359  1.00 22.74           C
ATOM   1143  H   VAL A 172      19.301  10.423   8.830  1.00  0.00           H
ATOM   1144  HA  VAL A 172      18.349   7.763   9.385  1.00  0.00           H
ATOM   1145  HB  VAL A 172      19.191   9.281   6.900  1.00  0.00           H
ATOM   1146 HG11 VAL A 172      18.353   7.432   5.484  1.00  0.00           H
ATOM   1147 HG12 VAL A 172      19.817   6.974   6.316  1.00  0.00           H
ATOM   1148 HG13 VAL A 172      18.251   6.385   6.884  1.00  0.00           H
ATOM   1149 HG21 VAL A 172      16.794   9.121   6.346  1.00  0.00           H
ATOM   1150 HG22 VAL A 172      16.488   8.110   7.745  1.00  0.00           H
ATOM   1151 HG23 VAL A 172      16.944   9.791   7.962  1.00  0.00           H
ATOM   1152  N   THR A 173      21.584   8.098   8.726  1.00 26.81           N
ATOM   1153  CA  THR A 173      22.924   7.520   8.932  1.00 28.03           C
ATOM   1154  C   THR A 173      23.288   7.541  10.450  1.00 27.32           C
ATOM   1155  O   THR A 173      24.442   7.683  10.858  1.00 26.39           O
ATOM   1156  CB  THR A 173      23.950   8.323   8.072  1.00 27.81           C
ATOM   1157  OG1 THR A 173      23.452   8.507   6.755  1.00 30.64           O
ATOM   1158  CG2 THR A 173      25.302   7.618   7.871  1.00 27.52           C
ATOM   1159  H   THR A 173      21.553   9.065   8.423  1.00  0.00           H
ATOM   1160  HA  THR A 173      22.915   6.481   8.596  1.00  0.00           H
ATOM   1161  HB  THR A 173      24.120   9.310   8.509  1.00  0.00           H
ATOM   1162  HG1 THR A 173      22.761   9.174   6.797  1.00  0.00           H
ATOM   1163 HG21 THR A 173      25.951   8.201   7.217  1.00  0.00           H
ATOM   1164 HG22 THR A 173      25.844   7.475   8.804  1.00  0.00           H
ATOM   1165 HG23 THR A 173      25.171   6.637   7.412  1.00  0.00           H
ATOM   1166  N   LYS A 174      22.276   7.442  11.316  1.00 27.78           N
ATOM   1167  CA  LYS A 174      22.301   7.227  12.757  1.00 31.22           C
ATOM   1168  C   LYS A 174      20.983   6.553  13.181  1.00 30.61           C
ATOM   1169  O   LYS A 174      20.435   6.789  14.264  1.00 30.04           O
ATOM   1170  CB  LYS A 174      22.712   8.516  13.513  1.00 32.27           C
ATOM   1171  CG  LYS A 174      24.095   8.397  14.189  1.00 36.69           C
ATOM   1172  CD  LYS A 174      24.815   9.746  14.364  1.00 39.08           C
ATOM   1173  CE  LYS A 174      25.793  10.075  13.221  1.00 41.57           C
ATOM   1174  NZ  LYS A 174      25.123  10.156  11.921  1.00 43.16          N1+
ATOM   1175  H   LYS A 174      21.358   7.416  10.887  1.00  0.00           H
ATOM   1176  HA  LYS A 174      23.051   6.456  12.941  1.00  0.00           H
ATOM   1177  HB2 LYS A 174      22.694   9.360  12.823  1.00  0.00           H
ATOM   1178  HB3 LYS A 174      21.979   8.780  14.275  1.00  0.00           H
ATOM   1179  HG2 LYS A 174      23.959   7.925  15.163  1.00  0.00           H
ATOM   1180  HG3 LYS A 174      24.748   7.723  13.631  1.00  0.00           H
ATOM   1181  HD2 LYS A 174      24.095  10.556  14.494  1.00  0.00           H
ATOM   1182  HD3 LYS A 174      25.390   9.716  15.291  1.00  0.00           H
ATOM   1183  HE2 LYS A 174      26.260  11.043  13.408  1.00  0.00           H
ATOM   1184  HE3 LYS A 174      26.597   9.341  13.161  1.00  0.00           H
ATOM   1185  HZ1 LYS A 174      25.711  10.703  11.271  1.00  0.00           H
ATOM   1186  HZ2 LYS A 174      24.828   9.279  11.507  1.00  0.00           H
ATOM   1187  HZ3 LYS A 174      24.362  10.835  11.968  1.00  0.00           H
ATOM   1188  N   ALA A 175      20.438   5.738  12.274  1.00 28.23           N
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ATOM   1189  CA  ALA A 175      19.192   5.016  12.404  1.00 26.89           C
ATOM   1190  C   ALA A 175      19.296   3.698  11.646  1.00 26.79           C
ATOM   1191  O   ALA A 175      19.230   2.653  12.282  1.00 27.40           O
ATOM   1192  CB  ALA A 175      18.002   5.903  12.006  1.00 24.63           C
ATOM   1193  H   ALA A 175      20.962   5.556  11.423  1.00  0.00           H
ATOM   1194  HA  ALA A 175      19.074   4.745  13.452  1.00  0.00           H
ATOM   1195  HB1 ALA A 175      17.055   5.442  12.283  1.00  0.00           H
ATOM   1196  HB2 ALA A 175      18.052   6.877  12.486  1.00  0.00           H
ATOM   1197  HB3 ALA A 175      17.982   6.080  10.930  1.00  0.00           H
ATOM   1198  N   VAL A 176      19.483   3.766  10.321  1.00 27.12           N
ATOM   1199  CA  VAL A 176      19.617   2.621   9.420  1.00 25.91           C
ATOM   1200  C   VAL A 176      21.057   2.065   9.520  1.00 26.78           C
ATOM   1201  O   VAL A 176      21.994   2.813   9.815  1.00 26.76           O
ATOM   1202  CB  VAL A 176      19.315   3.087   7.960  1.00 24.16           C
ATOM   1203  CG1 VAL A 176      19.367   1.939   6.932  1.00 25.45           C
ATOM   1204  CG2 VAL A 176      17.949   3.781   7.823  1.00 19.93           C
ATOM   1205  H   VAL A 176      19.664   4.671   9.897  1.00  0.00           H
ATOM   1206  HA  VAL A 176      18.896   1.861   9.709  1.00  0.00           H
ATOM   1207  HB  VAL A 176      20.073   3.816   7.666  1.00  0.00           H
ATOM   1208 HG11 VAL A 176      18.919   2.217   5.978  1.00  0.00           H
ATOM   1209 HG12 VAL A 176      20.394   1.665   6.708  1.00  0.00           H
ATOM   1210 HG13 VAL A 176      18.841   1.050   7.285  1.00  0.00           H
ATOM   1211 HG21 VAL A 176      17.784   4.097   6.794  1.00  0.00           H
ATOM   1212 HG22 VAL A 176      17.135   3.104   8.080  1.00  0.00           H
ATOM   1213 HG23 VAL A 176      17.874   4.672   8.445  1.00  0.00           H
ATOM   1214  N   SER A 177      21.229   0.767   9.250  1.00 24.88           N
ATOM   1215  CA  SER A 177      22.504   0.055   9.195  1.00 26.57           C
ATOM   1216  C   SER A 177      22.647  -0.829   7.939  1.00 27.23           C
ATOM   1217  O   SER A 177      23.406  -1.796   7.919  1.00 28.95           O
ATOM   1218  CB  SER A 177      22.868  -0.542  10.573  1.00 24.99           C
ATOM   1219  OG  SER A 177      22.035  -1.607  11.006  1.00 23.21           O
ATOM   1220  H   SER A 177      20.384   0.185   9.170  1.00  0.00           H
ATOM   1221  HA  SER A 177      23.273   0.808   9.012  1.00  0.00           H
ATOM   1222  HB2 SER A 177      23.891  -0.918  10.539  1.00  0.00           H
ATOM   1223  HB3 SER A 177      22.854   0.244  11.328  1.00  0.00           H
ATOM   1224  HG  SER A 177      21.108  -1.329  10.983  1.00  0.00           H
ATOM   1225  N   SER A 178      21.970  -0.430   6.857  1.00 26.97           N
ATOM   1226  CA  SER A 178      22.102  -0.925   5.493  1.00 26.31           C
ATOM   1227  C   SER A 178      22.302   0.274   4.540  1.00 26.98           C
ATOM   1228  O   SER A 178      22.576   1.387   4.996  1.00 27.69           O
ATOM   1229  CB  SER A 178      20.923  -1.872   5.178  1.00 26.87           C
ATOM   1230  OG  SER A 178      19.674  -1.200   5.197  1.00 26.69           O
ATOM   1231  H   SER A 178      21.410   0.404   6.943  1.00  0.00           H
ATOM   1232  HA  SER A 178      23.022  -1.507   5.420  1.00  0.00           H
ATOM   1233  HB2 SER A 178      21.057  -2.317   4.192  1.00  0.00           H
ATOM   1234  HB3 SER A 178      20.899  -2.704   5.884  1.00  0.00           H
ATOM   1235  HG  SER A 178      19.104  -1.596   4.531  1.00  0.00           H
ATOM   1236  N   GLU A 179      22.224   0.048   3.221  1.00 28.23           N
ATOM   1237  CA  GLU A 179      22.407   1.065   2.184  1.00 30.32           C
ATOM   1238  C   GLU A 179      21.141   1.941   2.079  1.00 29.86           C
ATOM   1239  O   GLU A 179      20.032   1.481   2.370  1.00 29.62           O
ATOM   1240  CB  GLU A 179      22.706   0.331   0.857  1.00 30.92           C
ATOM   1241  CG  GLU A 179      23.308   1.214  -0.261  1.00 36.26           C
ATOM   1242  CD  GLU A 179      22.435   1.307  -1.505  1.00 40.60           C
ATOM   1243  OE1 GLU A 179      21.226   1.590  -1.380  1.00 42.26           O
ATOM   1244  OE2 GLU A 179      22.966   1.114  -2.619  1.00 41.15           O1-
ATOM   1245  H   GLU A 179      21.884  -0.844   2.908  1.00  0.00           H
ATOM   1246  HA  GLU A 179      23.259   1.690   2.457  1.00  0.00           H
ATOM   1247  HB2 GLU A 179      23.420  -0.470   1.046  1.00  0.00           H
ATOM   1248  HB3 GLU A 179      21.803  -0.170   0.507  1.00  0.00           H
ATOM   1249  HG2 GLU A 179      23.496   2.229   0.087  1.00  0.00           H
ATOM   1250  HG3 GLU A 179      24.277   0.816  -0.560  1.00  0.00           H
ATOM   1251  N   VAL A 180      21.321   3.215   1.722  1.00 28.50           N
ATOM   1252  CA  VAL A 180      20.302   4.255   1.722  1.00 27.87           C
ATOM   1253  C   VAL A 180      20.422   5.095   0.444  1.00 27.26           C
ATOM   1254  O   VAL A 180      21.541   5.410   0.029  1.00 25.36           O
ATOM   1255  CB  VAL A 180      20.362   5.082   3.040  1.00 28.46           C
ATOM   1256  CG1 VAL A 180      19.975   4.243   4.271  1.00 25.72           C
ATOM   1257  CG2 VAL A 180      21.720   5.769   3.292  1.00 29.12           C
ATOM   1258  H   VAL A 180      22.213   3.494   1.344  1.00  0.00           H
ATOM   1259  HA  VAL A 180      19.331   3.768   1.680  1.00  0.00           H
ATOM   1260  HB  VAL A 180      19.619   5.876   2.942  1.00  0.00           H
ATOM   1261 HG11 VAL A 180      19.850   4.864   5.156  1.00  0.00           H
ATOM   1262 HG12 VAL A 180      19.042   3.707   4.104  1.00  0.00           H
ATOM   1263 HG13 VAL A 180      20.737   3.498   4.504  1.00  0.00           H
ATOM   1264 HG21 VAL A 180      21.686   6.390   4.188  1.00  0.00           H
ATOM   1265 HG22 VAL A 180      22.518   5.039   3.430  1.00  0.00           H
ATOM   1266 HG23 VAL A 180      22.006   6.418   2.465  1.00  0.00           H
ATOM   1267  N   LYS A 181      19.290   5.498  -0.145  1.00 26.75           N
ATOM   1268  CA  LYS A 181      19.197   6.401  -1.293  1.00 27.00           C
ATOM   1269  C   LYS A 181      18.133   7.470  -1.021  1.00 26.79           C
ATOM   1270  O   LYS A 181      17.125   7.186  -0.376  1.00 26.53           O
ATOM   1271  CB  LYS A 181      18.961   5.629  -2.608  1.00 28.69           C
ATOM   1272  CG  LYS A 181      20.078   4.621  -2.926  1.00 31.19           C
ATOM   1273  CD  LYS A 181      20.086   4.140  -4.385  1.00 35.82           C
ATOM   1274  CE  LYS A 181      21.226   3.151  -4.661  1.00 35.27           C
ATOM   1275  NZ  LYS A 181      20.931   1.825  -4.119  1.00 36.42           N1+
ATOM   1276  H   LYS A 181      18.407   5.186   0.253  1.00  0.00           H
ATOM   1277  HA  LYS A 181      20.143   6.937  -1.390  1.00  0.00           H
ATOM   1278  HB2 LYS A 181      17.997   5.120  -2.584  1.00  0.00           H
ATOM   1279  HB3 LYS A 181      18.900   6.358  -3.418  1.00  0.00           H
ATOM   1280  HG2 LYS A 181      21.044   5.078  -2.707  1.00  0.00           H
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ATOM   1281  HG3 LYS A 181      19.991   3.768  -2.251  1.00  0.00           H
ATOM   1282  HD2 LYS A 181      19.127   3.696  -4.662  1.00  0.00           H
ATOM   1283  HD3 LYS A 181      20.226   5.002  -5.038  1.00  0.00           H
ATOM   1284  HE2 LYS A 181      21.384   3.044  -5.735  1.00  0.00           H
ATOM   1285  HE3 LYS A 181      22.161   3.510  -4.230  1.00  0.00           H
ATOM   1286  HZ1 LYS A 181      21.805   1.363  -3.843  1.00  0.00           H
ATOM   1287  HZ2 LYS A 181      20.462   1.863  -3.220  1.00  0.00           H
ATOM   1288  HZ3 LYS A 181      20.412   1.281  -4.826  1.00  0.00           H
ATOM   1289  N   PHE A 182      18.371   8.694  -1.498  1.00 25.47           N
ATOM   1290  CA  PHE A 182      17.633   9.910  -1.178  1.00 24.54           C
ATOM   1291  C   PHE A 182      17.293  10.634  -2.488  1.00 23.94           C
ATOM   1292  O   PHE A 182      18.158  11.303  -3.059  1.00 25.57           O
ATOM   1293  CB  PHE A 182      18.506  10.793  -0.258  1.00 24.23           C
ATOM   1294  CG  PHE A 182      18.901  10.185   1.074  1.00 25.85           C
ATOM   1295  CD1 PHE A 182      17.977  10.127   2.138  1.00 25.40           C
ATOM   1296  CD2 PHE A 182      20.212   9.695   1.254  1.00 27.19           C
ATOM   1297  CE1 PHE A 182      18.369   9.588   3.379  1.00 27.01           C
ATOM   1298  CE2 PHE A 182      20.604   9.165   2.496  1.00 25.63           C
ATOM   1299  CZ  PHE A 182      19.684   9.113   3.558  1.00 26.56           C
ATOM   1300  H   PHE A 182      19.189   8.805  -2.107  1.00  0.00           H
ATOM   1301  HA  PHE A 182      16.706   9.676  -0.655  1.00  0.00           H
ATOM   1302  HB2 PHE A 182      19.421  11.078  -0.781  1.00  0.00           H
ATOM   1303  HB3 PHE A 182      17.993  11.731  -0.051  1.00  0.00           H
ATOM   1304  HD1 PHE A 182      16.971  10.502   2.008  1.00  0.00           H
ATOM   1305  HD2 PHE A 182      20.924   9.729   0.442  1.00  0.00           H
ATOM   1306  HE1 PHE A 182      17.658   9.538   4.190  1.00  0.00           H
ATOM   1307  HE2 PHE A 182      21.612   8.801   2.632  1.00  0.00           H
ATOM   1308  HZ  PHE A 182      20.001   8.709   4.506  1.00  0.00           H
ATOM   1309  N   GLY A 183      16.055  10.518  -2.976  1.00 24.28           N
ATOM   1310  CA  GLY A 183      15.612  11.099  -4.244  1.00 21.73           C
ATOM   1311  C   GLY A 183      14.455  12.079  -4.071  1.00 22.11           C
ATOM   1312  O   GLY A 183      13.662  11.950  -3.141  1.00 22.30           O
ATOM   1313  H   GLY A 183      15.373   9.972  -2.449  1.00  0.00           H
ATOM   1314  HA2 GLY A 183      16.429  11.583  -4.777  1.00  0.00           H
ATOM   1315  HA3 GLY A 183      15.257  10.299  -4.891  1.00  0.00           H
ATOM   1316  N   ILE A 184      14.313  13.033  -4.996  1.00 24.31           N
ATOM   1317  CA  ILE A 184      13.095  13.827  -5.140  1.00 25.05           C
ATOM   1318  C   ILE A 184      12.201  13.105  -6.167  1.00 27.69           C
ATOM   1319  O   ILE A 184      12.693  12.414  -7.065  1.00 27.87           O
ATOM   1320  CB  ILE A 184      13.456  15.268  -5.612  1.00 25.38           C
ATOM   1321  CG1 ILE A 184      12.336  16.268  -5.250  1.00 25.06           C
ATOM   1322  CG2 ILE A 184      13.835  15.393  -7.106  1.00 20.90           C
ATOM   1323  CD1 ILE A 184      12.748  17.738  -5.394  1.00 26.79           C
ATOM   1324  H   ILE A 184      14.985  13.068  -5.760  1.00  0.00           H
ATOM   1325  HA  ILE A 184      12.583  13.888  -4.180  1.00  0.00           H
ATOM   1326  HB  ILE A 184      14.325  15.573  -5.030  1.00  0.00           H
ATOM   1327 HG12 ILE A 184      11.449  16.083  -5.856  1.00  0.00           H
ATOM   1328 HG13 ILE A 184      12.029  16.107  -4.216  1.00  0.00           H
ATOM   1329 HG21 ILE A 184      14.266  16.369  -7.320  1.00  0.00           H
ATOM   1330 HG22 ILE A 184      14.568  14.648  -7.407  1.00  0.00           H
ATOM   1331 HG23 ILE A 184      12.969  15.282  -7.760  1.00  0.00           H
ATOM   1332 HD11 ILE A 184      11.944  18.379  -5.042  1.00  0.00           H
ATOM   1333 HD12 ILE A 184      13.638  17.964  -4.806  1.00  0.00           H
ATOM   1334 HD13 ILE A 184      12.946  18.009  -6.431  1.00  0.00           H
ATOM   1335  N   LEU A 185      10.887  13.278  -6.054  1.00 28.44           N
ATOM   1336  CA  LEU A 185       9.912  12.896  -7.065  1.00 29.84           C
ATOM   1337  C   LEU A 185       9.722  14.073  -8.046  1.00 29.59           C
ATOM   1338  O   LEU A 185       9.655  15.214  -7.575  1.00 31.09           O
ATOM   1339  CB  LEU A 185       8.553  12.666  -6.376  1.00 30.35           C
ATOM   1340  CG  LEU A 185       8.527  11.535  -5.328  1.00 31.80           C
ATOM   1341  CD1 LEU A 185       7.089  11.337  -4.846  1.00 29.02           C
ATOM   1342  CD2 LEU A 185       9.143  10.228  -5.844  1.00 32.61           C
ATOM   1343  H   LEU A 185      10.541  13.794  -5.248  1.00  0.00           H
ATOM   1344  HA  LEU A 185      10.234  11.985  -7.563  1.00  0.00           H
ATOM   1345  HB2 LEU A 185       8.209  13.589  -5.905  1.00  0.00           H
ATOM   1346  HB3 LEU A 185       7.817  12.441  -7.151  1.00  0.00           H
ATOM   1347  HG  LEU A 185       9.114  11.832  -4.460  1.00  0.00           H
ATOM   1348 HD11 LEU A 185       6.977  10.429  -4.258  1.00  0.00           H
ATOM   1349 HD12 LEU A 185       6.778  12.183  -4.234  1.00  0.00           H
ATOM   1350 HD13 LEU A 185       6.396  11.274  -5.681  1.00  0.00           H
ATOM   1351 HD21 LEU A 185       8.845   9.379  -5.232  1.00  0.00           H
ATOM   1352 HD22 LEU A 185       8.853  10.017  -6.868  1.00  0.00           H
ATOM   1353 HD23 LEU A 185      10.232  10.277  -5.826  1.00  0.00           H
ATOM   1354  N   PRO A 186       9.601  13.822  -9.373  1.00 28.92           N
ATOM   1355  CA  PRO A 186       9.267  14.825 -10.398  1.00 29.13           C
ATOM   1356  C   PRO A 186       8.076  15.728 -10.023  1.00 28.44           C
ATOM   1357  O   PRO A 186       6.951  15.255  -9.826  1.00 28.12           O
ATOM   1358  CB  PRO A 186       8.986  14.019 -11.676  1.00 30.26           C
ATOM   1359  CG  PRO A 186       9.740  12.715 -11.499  1.00 28.14           C
ATOM   1360  CD  PRO A 186       9.827  12.513  -9.990  1.00 28.20           C
ATOM   1361  HA  PRO A 186      10.161  15.433 -10.546  1.00  0.00           H
ATOM   1362  HB2 PRO A 186       7.922  13.803 -11.787  1.00  0.00           H
ATOM   1363  HB3 PRO A 186       9.313  14.548 -12.571  1.00  0.00           H
ATOM   1364  HG2 PRO A 186       9.261  11.876 -12.003  1.00  0.00           H
ATOM   1365  HG3 PRO A 186      10.746  12.816 -11.911  1.00  0.00           H
ATOM   1366  HD2 PRO A 186       9.051  11.828  -9.658  1.00  0.00           H
ATOM   1367  HD3 PRO A 186      10.799  12.093  -9.726  1.00  0.00           H
ATOM   1368  N   LYS A 187       8.331  17.037  -9.942  1.00 28.27           N
ATOM   1369  CA  LYS A 187       7.395  18.073  -9.514  1.00 28.97           C
ATOM   1370  C   LYS A 187       6.282  18.322 -10.549  1.00 26.32           C
ATOM   1371  O   LYS A 187       5.213  18.822 -10.195  1.00 25.20           O
ATOM   1372  CB  LYS A 187       8.173  19.375  -9.265  1.00 32.18           C
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ATOM   1373  CG  LYS A 187       9.053  19.349  -7.997  1.00 34.77           C
ATOM   1374  CD  LYS A 187       8.402  19.957  -6.737  1.00 38.08           C
ATOM   1375  CE  LYS A 187       7.616  18.959  -5.871  1.00 37.86           C
ATOM   1376  NZ  LYS A 187       7.041  19.629  -4.689  1.00 39.41           N1+
ATOM   1377  H   LYS A 187       9.215  17.347 -10.327  1.00  0.00           H
ATOM   1378  HA  LYS A 187       6.943  17.751  -8.582  1.00  0.00           H
ATOM   1379  HB2 LYS A 187       8.804  19.574 -10.135  1.00  0.00           H
ATOM   1380  HB3 LYS A 187       7.493  20.228  -9.217  1.00  0.00           H
ATOM   1381  HG2 LYS A 187       9.450  18.351  -7.798  1.00  0.00           H
ATOM   1382  HG3 LYS A 187       9.927  19.954  -8.224  1.00  0.00           H
ATOM   1383  HD2 LYS A 187       9.198  20.375  -6.122  1.00  0.00           H
ATOM   1384  HD3 LYS A 187       7.775  20.807  -7.013  1.00  0.00           H
ATOM   1385  HE2 LYS A 187       6.802  18.518  -6.443  1.00  0.00           H
ATOM   1386  HE3 LYS A 187       8.259  18.134  -5.569  1.00  0.00           H
ATOM   1387  HZ1 LYS A 187       6.698  19.004  -3.954  1.00  0.00           H
ATOM   1388  HZ2 LYS A 187       7.692  20.282  -4.246  1.00  0.00           H
ATOM   1389  HZ3 LYS A 187       6.242  20.185  -5.015  1.00  0.00           H
ATOM   1390  N   GLU A 188       6.524  17.913 -11.798  1.00 26.19           N
ATOM   1391  CA  GLU A 188       5.620  17.890 -12.945  1.00 25.89           C
ATOM   1392  C   GLU A 188       4.412  16.993 -12.653  1.00 25.60           C
ATOM   1393  O   GLU A 188       3.263  17.439 -12.645  1.00 25.35           O
ATOM   1394  CB  GLU A 188       6.345  17.361 -14.220  1.00 28.34           C
ATOM   1395  CG  GLU A 188       7.676  16.607 -14.024  1.00 32.78           C
ATOM   1396  CD  GLU A 188       8.835  17.534 -13.710  1.00 33.60           C
ATOM   1397  OE1 GLU A 188       9.346  17.471 -12.577  1.00 31.32           O
ATOM   1398  OE2 GLU A 188       9.180  18.361 -14.582  1.00 35.45           O1-
ATOM   1399  H   GLU A 188       7.482  17.603 -11.963  1.00  0.00           H
ATOM   1400  HA  GLU A 188       5.255  18.903 -13.127  1.00  0.00           H
ATOM   1401  HB2 GLU A 188       5.685  16.723 -14.808  1.00  0.00           H
ATOM   1402  HB3 GLU A 188       6.531  18.205 -14.877  1.00  0.00           H
ATOM   1403  HG2 GLU A 188       7.572  15.842 -13.257  1.00  0.00           H
ATOM   1404  HG3 GLU A 188       7.928  16.073 -14.939  1.00  0.00           H
ATOM   1405  N   HIS A 189       4.697  15.717 -12.372  1.00 23.36           N
ATOM   1406  CA  HIS A 189       3.707  14.668 -12.136  1.00 23.70           C
ATOM   1407  C   HIS A 189       3.067  14.823 -10.745  1.00 22.66           C
ATOM   1408  O   HIS A 189       1.923  14.419 -10.532  1.00 23.19           O
ATOM   1409  CB  HIS A 189       4.379  13.287 -12.264  1.00 22.55           C
ATOM   1410  CG  HIS A 189       5.195  13.074 -13.524  1.00 24.25           C
ATOM   1411  ND1 HIS A 189       4.927  13.693 -14.740  1.00 24.12           N
ATOM   1412  CD2 HIS A 189       6.288  12.268 -13.764  1.00 22.85           C
ATOM   1413  CE1 HIS A 189       5.847  13.285 -15.615  1.00 22.58           C
ATOM   1414  NE2 HIS A 189       6.690  12.401 -15.095  1.00 24.93           N
ATOM   1415  H   HIS A 189       5.670  15.446 -12.405  1.00  0.00           H
ATOM   1416  HA  HIS A 189       2.930  14.754 -12.895  1.00  0.00           H
ATOM   1417  HB2 HIS A 189       5.035  13.101 -11.411  1.00  0.00           H
ATOM   1418  HB3 HIS A 189       3.612  12.512 -12.225  1.00  0.00           H
ATOM   1419  HD1 HIS A 189       4.205  14.397 -14.959  1.00  0.00           H
ATOM   1420  HD2 HIS A 189       6.811  11.604 -13.088  1.00  0.00           H
ATOM   1421  HE1 HIS A 189       5.902  13.636 -16.638  1.00  0.00           H
ATOM   1422  N   TRP A 190       3.761  15.528  -9.846  1.00 21.90           N
ATOM   1423  CA  TRP A 190       3.288  16.040  -8.565  1.00 22.07           C
ATOM   1424  C   TRP A 190       2.537  17.387  -8.739  1.00 22.09           C
ATOM   1425  O   TRP A 190       2.414  18.165  -7.792  1.00 23.25           O
ATOM   1426  CB  TRP A 190       4.537  16.259  -7.697  1.00 20.63           C
ATOM   1427  CG  TRP A 190       4.357  16.314  -6.217  1.00 20.86           C
ATOM   1428  CD1 TRP A 190       4.383  17.439  -5.472  1.00 20.30           C
ATOM   1429  CD2 TRP A 190       4.236  15.210  -5.274  1.00 20.57           C
ATOM   1430  NE1 TRP A 190       4.331  17.106  -4.137  1.00 22.97           N
ATOM   1431  CE3 TRP A 190       4.200  13.803  -5.391  1.00 20.34           C
ATOM   1432  CE2 TRP A 190       4.194  15.750  -3.956  1.00 21.62           C
ATOM   1433  CZ3 TRP A 190       4.139  12.982  -4.248  1.00 20.80           C
ATOM   1434  CZ2 TRP A 190       4.115  14.945  -2.812  1.00 20.94           C
ATOM   1435  CH2 TRP A 190       4.093  13.550  -2.958  1.00 23.55           C
ATOM   1436  H   TRP A 190       4.695  15.808 -10.124  1.00  0.00           H
ATOM   1437  HA  TRP A 190       2.630  15.301  -8.106  1.00  0.00           H
ATOM   1438  HB2 TRP A 190       5.267  15.469  -7.872  1.00  0.00           H
ATOM   1439  HB3 TRP A 190       5.012  17.187  -7.998  1.00  0.00           H
ATOM   1440  HD1 TRP A 190       4.505  18.431  -5.884  1.00  0.00           H
ATOM   1441  HE1 TRP A 190       4.707  17.723  -3.398  1.00  0.00           H
ATOM   1442  HE3 TRP A 190       4.251  13.353  -6.371  1.00  0.00           H
ATOM   1443  HZ3 TRP A 190       4.144  11.910  -4.368  1.00  0.00           H
ATOM   1444  HZ2 TRP A 190       4.101  15.395  -1.833  1.00  0.00           H
ATOM   1445  HH2 TRP A 190       4.057  12.928  -2.076  1.00  0.00           H
ATOM   1446  N   SER A 191       2.010  17.668  -9.935  1.00 23.12           N
ATOM   1447  CA  SER A 191       1.139  18.786 -10.268  1.00 23.81           C
ATOM   1448  C   SER A 191      -0.045  18.261 -11.097  1.00 24.41           C
ATOM   1449  O   SER A 191      -0.263  17.048 -11.162  1.00 24.90           O
ATOM   1450  CB  SER A 191       1.963  19.974 -10.822  1.00 25.10           C
ATOM   1451  OG  SER A 191       2.195  19.937 -12.222  1.00 24.23           O
ATOM   1452  H   SER A 191       2.141  16.993 -10.676  1.00  0.00           H
ATOM   1453  HA  SER A 191       0.685  19.138  -9.342  1.00  0.00           H
ATOM   1454  HB2 SER A 191       1.447  20.905 -10.588  1.00  0.00           H
ATOM   1455  HB3 SER A 191       2.920  20.036 -10.310  1.00  0.00           H
ATOM   1456  HG  SER A 191       2.565  19.072 -12.435  1.00  0.00           H
ATOM   1457  N   TYR A 192      -0.843  19.162 -11.675  1.00 24.18           N
ATOM   1458  CA  TYR A 192      -2.061  18.856 -12.419  1.00 22.22           C
ATOM   1459  C   TYR A 192      -1.716  18.975 -13.913  1.00 21.91           C
ATOM   1460  O   TYR A 192      -1.460  20.095 -14.352  1.00 20.67           O
ATOM   1461  CB  TYR A 192      -3.117  19.946 -12.087  1.00 22.43           C
ATOM   1462  CG  TYR A 192      -3.401  20.121 -10.606  1.00 24.33           C
ATOM   1463  CD1 TYR A 192      -4.480  19.454  -9.994  1.00 24.83           C
ATOM   1464  CD2 TYR A 192      -2.559  20.943  -9.830  1.00 24.09           C
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ATOM   1465  CE1 TYR A 192      -4.671  19.560  -8.603  1.00 24.93           C
ATOM   1466  CE2 TYR A 192      -2.746  21.040  -8.443  1.00 24.35           C
ATOM   1467  CZ  TYR A 192      -3.783  20.318  -7.824  1.00 24.98           C
ATOM   1468  OH  TYR A 192      -3.908  20.319  -6.470  1.00 28.04           O
ATOM   1469  H   TYR A 192      -0.547  20.130 -11.703  1.00  0.00           H
ATOM   1470  HA  TYR A 192      -2.462  17.877 -12.159  1.00  0.00           H
ATOM   1471  HB2 TYR A 192      -2.810  20.924 -12.460  1.00  0.00           H
ATOM   1472  HB3 TYR A 192      -4.050  19.717 -12.605  1.00  0.00           H
ATOM   1473  HD1 TYR A 192      -5.141  18.835 -10.581  1.00  0.00           H
ATOM   1474  HD2 TYR A 192      -1.742  21.479 -10.290  1.00  0.00           H
ATOM   1475  HE1 TYR A 192      -5.476  19.033  -8.118  1.00  0.00           H
ATOM   1476  HE2 TYR A 192      -2.069  21.648  -7.864  1.00  0.00           H
ATOM   1477  HH  TYR A 192      -3.342  20.985  -6.055  1.00  0.00           H
ATOM   1478  N   PRO A 193      -1.684  17.885 -14.709  1.00 22.36           N
ATOM   1479  CA  PRO A 193      -1.561  17.959 -16.173  1.00 24.02           C
ATOM   1480  C   PRO A 193      -2.614  18.860 -16.844  1.00 24.39           C
ATOM   1481  O   PRO A 193      -3.712  19.068 -16.327  1.00 24.70           O
ATOM   1482  CB  PRO A 193      -1.737  16.516 -16.659  1.00 24.46           C
ATOM   1483  CG  PRO A 193      -1.370  15.642 -15.476  1.00 25.42           C
ATOM   1484  CD  PRO A 193      -1.640  16.501 -14.243  1.00 24.13           C
ATOM   1485  HA  PRO A 193      -0.558  18.322 -16.411  1.00  0.00           H
ATOM   1486  HB2 PRO A 193      -2.777  16.320 -16.924  1.00  0.00           H
ATOM   1487  HB3 PRO A 193      -1.135  16.299 -17.542  1.00  0.00           H
ATOM   1488  HG2 PRO A 193      -1.936  14.710 -15.463  1.00  0.00           H
ATOM   1489  HG3 PRO A 193      -0.310  15.398 -15.532  1.00  0.00           H
ATOM   1490  HD2 PRO A 193      -2.586  16.214 -13.791  1.00  0.00           H
ATOM   1491  HD3 PRO A 193      -0.858  16.366 -13.501  1.00  0.00           H
ATOM   1492  N   GLU A 194      -2.298  19.358 -18.035  1.00 22.73           N
ATOM   1493  CA  GLU A 194      -3.110  20.288 -18.812  1.00 23.46           C
ATOM   1494  C   GLU A 194      -4.346  19.606 -19.447  1.00 23.36           C
ATOM   1495  O   GLU A 194      -5.183  20.298 -20.021  1.00 21.68           O
ATOM   1496  CB  GLU A 194      -2.200  20.906 -19.903  1.00 25.61           C
ATOM   1497  CG  GLU A 194      -1.191  21.969 -19.387  1.00 28.09           C
ATOM   1498  CD  GLU A 194      -0.187  21.472 -18.348  1.00 32.73           C
ATOM   1499  OE1 GLU A 194       0.083  22.220 -17.385  1.00 31.59           O
ATOM   1500  OE2 GLU A 194       0.240  20.298 -18.450  1.00 33.69           O1-
ATOM   1501  H   GLU A 194      -1.307  19.341 -18.296  1.00  0.00           H
ATOM   1502  HA  GLU A 194      -3.479  21.081 -18.159  1.00  0.00           H
ATOM   1503  HB2 GLU A 194      -1.664  20.119 -20.435  1.00  0.00           H
ATOM   1504  HB3 GLU A 194      -2.821  21.393 -20.656  1.00  0.00           H
ATOM   1505  HG2 GLU A 194      -0.619  22.366 -20.225  1.00  0.00           H
ATOM   1506  HG3 GLU A 194      -1.735  22.812 -18.961  1.00  0.00           H
ATOM   1507  N   TRP A 195      -4.495  18.277 -19.311  1.00 22.03           N
ATOM   1508  CA  TRP A 195      -5.710  17.541 -19.675  1.00 22.35           C
ATOM   1509  C   TRP A 195      -6.742  17.522 -18.528  1.00 22.75           C
ATOM   1510  O   TRP A 195      -7.893  17.153 -18.756  1.00 21.13           O
ATOM   1511  CB  TRP A 195      -5.359  16.077 -20.045  1.00 22.81           C
ATOM   1512  CG  TRP A 195      -4.746  15.157 -19.019  1.00 23.84           C
ATOM   1513  CD1 TRP A 195      -5.396  14.606 -17.967  1.00 25.41           C
ATOM   1514  CD2 TRP A 195      -3.403  14.580 -18.994  1.00 23.39           C
ATOM   1515  NE1 TRP A 195      -4.549  13.759 -17.284  1.00 26.41           N
ATOM   1516  CE3 TRP A 195      -2.253  14.701 -19.809  1.00 23.41           C
ATOM   1517  CE2 TRP A 195      -3.329  13.651 -17.910  1.00 24.13           C
ATOM   1518  CZ3 TRP A 195      -1.100  13.924 -19.569  1.00 26.61           C
ATOM   1519  CZ2 TRP A 195      -2.195  12.857 -17.672  1.00 24.83           C
ATOM   1520  CH2 TRP A 195      -1.073  12.997 -18.508  1.00 23.38           C
ATOM   1521  H   TRP A 195      -3.765  17.779 -18.826  1.00  0.00           H
ATOM   1522  HA  TRP A 195      -6.183  18.010 -20.539  1.00  0.00           H
ATOM   1523  HB2 TRP A 195      -6.270  15.584 -20.387  1.00  0.00           H
ATOM   1524  HB3 TRP A 195      -4.705  16.077 -20.917  1.00  0.00           H
ATOM   1525  HD1 TRP A 195      -6.438  14.778 -17.733  1.00  0.00           H
ATOM   1526  HE1 TRP A 195      -4.866  13.147 -16.523  1.00  0.00           H
ATOM   1527  HE3 TRP A 195      -2.273  15.372 -20.654  1.00  0.00           H
ATOM   1528  HZ3 TRP A 195      -0.248  14.010 -20.227  1.00  0.00           H
ATOM   1529  HZ2 TRP A 195      -2.196  12.130 -16.873  1.00  0.00           H
ATOM   1530  HH2 TRP A 195      -0.209  12.366 -18.357  1.00  0.00           H
ATOM   1531  N   ILE A 196      -6.349  17.884 -17.298  1.00 22.64           N
ATOM   1532  CA  ILE A 196      -7.208  17.860 -16.117  1.00 24.40           C
ATOM   1533  C   ILE A 196      -8.156  19.070 -16.193  1.00 23.38           C
ATOM   1534  O   ILE A 196      -7.722  20.191 -16.469  1.00 23.92           O
ATOM   1535  CB  ILE A 196      -6.321  17.960 -14.834  1.00 23.65           C
ATOM   1536  CG1 ILE A 196      -5.249  16.850 -14.739  1.00 23.75           C
ATOM   1537  CG2 ILE A 196      -7.101  18.038 -13.504  1.00 25.15           C
ATOM   1538  CD1 ILE A 196      -5.782  15.432 -14.517  1.00 22.43           C
ATOM   1539  H   ILE A 196      -5.415  18.257 -17.184  1.00  0.00           H
ATOM   1540  HA  ILE A 196      -7.785  16.934 -16.106  1.00  0.00           H
ATOM   1541  HB  ILE A 196      -5.780  18.905 -14.901  1.00  0.00           H
ATOM   1542 HG12 ILE A 196      -4.635  16.832 -15.636  1.00  0.00           H
ATOM   1543 HG13 ILE A 196      -4.576  17.103 -13.924  1.00  0.00           H
ATOM   1544 HG21 ILE A 196      -6.421  18.093 -12.655  1.00  0.00           H
ATOM   1545 HG22 ILE A 196      -7.734  18.923 -13.451  1.00  0.00           H
ATOM   1546 HG23 ILE A 196      -7.731  17.161 -13.366  1.00  0.00           H
ATOM   1547 HD11 ILE A 196      -4.964  14.710 -14.507  1.00  0.00           H
ATOM   1548 HD12 ILE A 196      -6.299  15.351 -13.567  1.00  0.00           H
ATOM   1549 HD13 ILE A 196      -6.470  15.129 -15.306  1.00  0.00           H
ATOM   1550  N   ASN A 197      -9.440  18.869 -15.874  1.00 22.81           N
ATOM   1551  CA  ASN A 197     -10.405  19.940 -15.632  1.00 22.80           C
ATOM   1552  C   ASN A 197     -10.016  20.654 -14.319  1.00 21.04           C
ATOM   1553  O   ASN A 197     -10.473  20.321 -13.224  1.00 21.74           O
ATOM   1554  CB  ASN A 197     -11.843  19.357 -15.597  1.00  0.00           C
ATOM   1555  CG  ASN A 197     -12.910  20.344 -15.109  1.00  0.00           C
ATOM   1556  OD1 ASN A 197     -13.463  20.155 -14.036  1.00  0.00           O
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ATOM   1557  ND2 ASN A 197     -13.205  21.417 -15.830  1.00  0.00           N
ATOM   1558  H   ASN A 197      -9.732  17.910 -15.680  1.00  0.00           H
ATOM   1559  HA  ASN A 197     -10.350  20.660 -16.451  1.00  0.00           H
ATOM   1560  HB2 ASN A 197     -12.123  18.991 -16.585  1.00  0.00           H
ATOM   1561  HB3 ASN A 197     -11.879  18.492 -14.937  1.00  0.00           H
ATOM   1562 HD22 ASN A 197     -13.830  22.090 -15.380  1.00  0.00           H
ATOM   1563 HD21 ASN A 197     -12.809  21.596 -16.737  1.00  0.00           H
ATOM   1564  N   GLN A 198      -9.168  21.679 -14.440  1.00 20.33           N
ATOM   1565  CA  GLN A 198      -8.754  22.589 -13.373  1.00 20.78           C
ATOM   1566  C   GLN A 198      -9.863  23.622 -13.054  1.00 22.61           C
ATOM   1567  O   GLN A 198      -9.575  24.777 -12.754  1.00 19.79           O
ATOM   1568  CB  GLN A 198      -7.393  23.230 -13.742  1.00 22.47           C
ATOM   1569  CG  GLN A 198      -6.281  22.164 -13.935  1.00 22.31           C
ATOM   1570  CD  GLN A 198      -4.853  22.703 -13.833  1.00 23.01           C
ATOM   1571  OE1 GLN A 198      -4.508  23.398 -12.878  1.00 21.95           O
ATOM   1572  NE2 GLN A 198      -3.994  22.351 -14.784  1.00 23.94           N
ATOM   1573  H   GLN A 198      -8.737  21.797 -15.351  1.00  0.00           H
ATOM   1574  HA  GLN A 198      -8.607  22.034 -12.452  1.00  0.00           H
ATOM   1575  HB2 GLN A 198      -7.485  23.840 -14.642  1.00  0.00           H
ATOM   1576  HB3 GLN A 198      -7.103  23.916 -12.944  1.00  0.00           H
ATOM   1577  HG2 GLN A 198      -6.376  21.392 -13.170  1.00  0.00           H
ATOM   1578  HG3 GLN A 198      -6.412  21.660 -14.891  1.00  0.00           H
ATOM   1579 HE21 GLN A 198      -4.281  21.734 -15.532  1.00  0.00           H
ATOM   1580 HE22 GLN A 198      -3.031  22.688 -14.785  1.00  0.00           H
ATOM   1581  N   THR A 199     -11.128  23.173 -13.064  1.00 22.32           N
ATOM   1582  CA  THR A 199     -12.265  23.812 -12.418  1.00 22.52           C
ATOM   1583  C   THR A 199     -12.670  22.847 -11.293  1.00 21.34           C
ATOM   1584  O   THR A 199     -12.448  23.197 -10.141  1.00 21.66           O
ATOM   1585  CB  THR A 199     -13.382  24.242 -13.414  1.00 21.15           C
ATOM   1586  OG1 THR A 199     -14.305  23.226 -13.754  1.00 24.02           O
ATOM   1587  CG2 THR A 199     -12.850  24.882 -14.706  1.00 20.12           C
ATOM   1588  H   THR A 199     -11.260  22.194 -13.281  1.00  0.00           H
ATOM   1589  HA  THR A 199     -11.926  24.730 -11.932  1.00  0.00           H
ATOM   1590  HB  THR A 199     -13.977  25.001 -12.903  1.00  0.00           H
ATOM   1591  HG1 THR A 199     -14.905  23.183 -12.996  1.00  0.00           H
ATOM   1592 HG21 THR A 199     -13.666  25.283 -15.308  1.00  0.00           H
ATOM   1593 HG22 THR A 199     -12.172  25.705 -14.478  1.00  0.00           H
ATOM   1594 HG23 THR A 199     -12.305  24.164 -15.318  1.00  0.00           H
ATOM   1595  N   LYS A 200     -13.094  21.596 -11.558  1.00 21.45           N
ATOM   1596  CA  LYS A 200     -13.471  20.623 -10.516  1.00 22.36           C
ATOM   1597  C   LYS A 200     -12.267  20.272  -9.620  1.00 21.80           C
ATOM   1598  O   LYS A 200     -12.408  20.136  -8.405  1.00 21.82           O
ATOM   1599  CB  LYS A 200     -14.075  19.353 -11.160  1.00 23.43           C
ATOM   1600  CG  LYS A 200     -14.745  18.374 -10.170  1.00 27.52           C
ATOM   1601  CD  LYS A 200     -15.258  17.095 -10.859  1.00 27.63           C
ATOM   1602  CE  LYS A 200     -15.767  16.029  -9.865  1.00 27.92           C
ATOM   1603  NZ  LYS A 200     -15.792  14.684 -10.472  1.00 31.29           N1+
ATOM   1604  H   LYS A 200     -13.313  21.348 -12.521  1.00  0.00           H
ATOM   1605  HA  LYS A 200     -14.236  21.083  -9.890  1.00  0.00           H
ATOM   1606  HB2 LYS A 200     -14.832  19.662 -11.882  1.00  0.00           H
ATOM   1607  HB3 LYS A 200     -13.302  18.834 -11.730  1.00  0.00           H
ATOM   1608  HG2 LYS A 200     -14.033  18.102  -9.391  1.00  0.00           H
ATOM   1609  HG3 LYS A 200     -15.566  18.884  -9.661  1.00  0.00           H
ATOM   1610  HD2 LYS A 200     -16.044  17.354 -11.570  1.00  0.00           H
ATOM   1611  HD3 LYS A 200     -14.440  16.689 -11.456  1.00  0.00           H
ATOM   1612  HE2 LYS A 200     -15.121  15.983  -8.989  1.00  0.00           H
ATOM   1613  HE3 LYS A 200     -16.757  16.289  -9.488  1.00  0.00           H
ATOM   1614  HZ1 LYS A 200     -15.755  13.948  -9.728  1.00  0.00           H
ATOM   1615  HZ2 LYS A 200     -16.617  14.530 -11.025  1.00  0.00           H
ATOM   1616  HZ3 LYS A 200     -14.968  14.523 -11.027  1.00  0.00           H
ATOM   1617  N   ALA A 201     -11.058  20.224 -10.200  1.00 21.18           N
ATOM   1618  CA  ALA A 201      -9.804  20.098  -9.460  1.00 21.35           C
ATOM   1619  C   ALA A 201      -9.387  21.390  -8.725  1.00 21.94           C
ATOM   1620  O   ALA A 201      -8.380  21.365  -8.021  1.00 19.69           O
ATOM   1621  CB  ALA A 201      -8.676  19.678 -10.421  1.00 16.72           C
ATOM   1622  H   ALA A 201     -11.022  20.358 -11.206  1.00  0.00           H
ATOM   1623  HA  ALA A 201      -9.921  19.331  -8.697  1.00  0.00           H
ATOM   1624  HB1 ALA A 201      -7.693  19.757  -9.956  1.00  0.00           H
ATOM   1625  HB2 ALA A 201      -8.792  18.647 -10.749  1.00  0.00           H
ATOM   1626  HB3 ALA A 201      -8.650  20.292 -11.312  1.00  0.00           H
ATOM   1627  N   ALA A 202     -10.122  22.503  -8.863  1.00 20.87           N
ATOM   1628  CA  ALA A 202      -9.953  23.755  -8.123  1.00 22.47           C
ATOM   1629  C   ALA A 202     -11.096  23.929  -7.103  1.00 22.33           C
ATOM   1630  O   ALA A 202     -10.827  24.210  -5.937  1.00 22.37           O
ATOM   1631  CB  ALA A 202      -9.938  24.943  -9.101  1.00 19.99           C
ATOM   1632  H   ALA A 202     -10.964  22.446  -9.431  1.00  0.00           H
ATOM   1633  HA  ALA A 202      -9.002  23.761  -7.595  1.00  0.00           H
ATOM   1634  HB1 ALA A 202      -9.720  25.871  -8.573  1.00  0.00           H
ATOM   1635  HB2 ALA A 202      -9.169  24.815  -9.864  1.00  0.00           H
ATOM   1636  HB3 ALA A 202     -10.889  25.085  -9.613  1.00  0.00           H
ATOM   1637  N   GLU A 203     -12.356  23.708  -7.511  1.00 22.02           N
ATOM   1638  CA  GLU A 203     -13.592  23.812  -6.726  1.00 23.59           C
ATOM   1639  C   GLU A 203     -13.525  22.946  -5.453  1.00 23.77           C
ATOM   1640  O   GLU A 203     -13.721  23.418  -4.330  1.00 22.97           O
ATOM   1641  CB  GLU A 203     -14.791  23.364  -7.601  1.00 24.19           C
ATOM   1642  CG  GLU A 203     -15.134  24.257  -8.824  1.00 28.14           C
ATOM   1643  CD  GLU A 203     -15.779  23.474  -9.978  1.00 30.24           C
ATOM   1644  OE1 GLU A 203     -16.450  22.463  -9.684  1.00 31.20           O
ATOM   1645  OE2 GLU A 203     -15.538  23.851 -11.148  1.00 32.85           O1-
ATOM   1646  H   GLU A 203     -12.488  23.505  -8.505  1.00  0.00           H
ATOM   1647  HA  GLU A 203     -13.729  24.852  -6.425  1.00  0.00           H
ATOM   1648  HB2 GLU A 203     -14.601  22.346  -7.943  1.00  0.00           H
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ATOM   1649  HB3 GLU A 203     -15.690  23.287  -6.988  1.00  0.00           H
ATOM   1650  HG2 GLU A 203     -15.815  25.054  -8.529  1.00  0.00           H
ATOM   1651  HG3 GLU A 203     -14.244  24.750  -9.211  1.00  0.00           H
ATOM   1652  N   ILE A 204     -13.167  21.671  -5.635  1.00 23.93           N
ATOM   1653  CA  ILE A 204     -13.163  20.647  -4.596  1.00 24.60           C
ATOM   1654  C   ILE A 204     -11.824  20.672  -3.809  1.00 24.13           C
ATOM   1655  O   ILE A 204     -11.618  19.847  -2.918  1.00 26.89           O
ATOM   1656  CB  ILE A 204     -13.496  19.275  -5.270  1.00 24.83           C
ATOM   1657  CG1 ILE A 204     -14.747  19.351  -6.195  1.00 27.64           C
ATOM   1658  CG2 ILE A 204     -13.690  18.110  -4.275  1.00 22.97           C
ATOM   1659  CD1 ILE A 204     -16.052  19.781  -5.506  1.00 28.38           C
ATOM   1660  H   ILE A 204     -13.001  21.360  -6.587  1.00  0.00           H
ATOM   1661  HA  ILE A 204     -13.949  20.866  -3.871  1.00  0.00           H
ATOM   1662  HB  ILE A 204     -12.655  19.003  -5.910  1.00  0.00           H
ATOM   1663 HG12 ILE A 204     -14.568  20.023  -7.034  1.00  0.00           H
ATOM   1664 HG13 ILE A 204     -14.915  18.383  -6.663  1.00  0.00           H
ATOM   1665 HG21 ILE A 204     -14.097  17.233  -4.775  1.00  0.00           H
ATOM   1666 HG22 ILE A 204     -12.756  17.797  -3.816  1.00  0.00           H
ATOM   1667 HG23 ILE A 204     -14.381  18.383  -3.479  1.00  0.00           H
ATOM   1668 HD11 ILE A 204     -16.872  19.806  -6.224  1.00  0.00           H
ATOM   1669 HD12 ILE A 204     -16.332  19.096  -4.707  1.00  0.00           H
ATOM   1670 HD13 ILE A 204     -15.974  20.780  -5.078  1.00  0.00           H
ATOM   1671  N   ARG A 205     -10.941  21.664  -4.037  1.00 23.13           N
ATOM   1672  CA  ARG A 205      -9.832  21.993  -3.126  1.00 25.14           C
ATOM   1673  C   ARG A 205     -10.380  22.749  -1.900  1.00 25.07           C
ATOM   1674  O   ARG A 205      -9.792  22.670  -0.822  1.00 22.75           O
ATOM   1675  CB  ARG A 205      -8.806  22.958  -3.778  1.00 25.21           C
ATOM   1676  CG  ARG A 205      -8.214  22.534  -5.131  1.00 29.73           C
ATOM   1677  CD  ARG A 205      -6.921  21.702  -5.082  1.00 29.20           C
ATOM   1678  NE  ARG A 205      -5.733  22.489  -5.458  1.00 29.90           N
ATOM   1679  CZ  ARG A 205      -5.370  22.915  -6.678  1.00 28.96           C
ATOM   1680  NH1 ARG A 205      -6.158  22.804  -7.745  1.00 29.65           N
ATOM   1681  NH2 ARG A 205      -4.171  23.464  -6.824  1.00 28.01           N1+
ATOM   1682  H   ARG A 205     -11.170  22.335  -4.762  1.00  0.00           H
ATOM   1683  HA  ARG A 205      -9.327  21.083  -2.799  1.00  0.00           H
ATOM   1684  HB2 ARG A 205      -9.282  23.929  -3.925  1.00  0.00           H
ATOM   1685  HB3 ARG A 205      -7.990  23.158  -3.082  1.00  0.00           H
ATOM   1686  HG2 ARG A 205      -8.973  22.010  -5.708  1.00  0.00           H
ATOM   1687  HG3 ARG A 205      -8.005  23.451  -5.681  1.00  0.00           H
ATOM   1688  HD2 ARG A 205      -6.768  21.270  -4.093  1.00  0.00           H
ATOM   1689  HD3 ARG A 205      -6.990  20.859  -5.771  1.00  0.00           H
ATOM   1690  HE  ARG A 205      -5.021  22.634  -4.708  1.00  0.00           H
ATOM   1691 HH11 ARG A 205      -7.027  22.259  -7.726  1.00  0.00           H
ATOM   1692 HH12 ARG A 205      -5.836  23.104  -8.682  1.00  0.00           H
ATOM   1693 HH21 ARG A 205      -3.449  23.205  -6.126  1.00  0.00           H
ATOM   1694 HH22 ARG A 205      -3.811  23.827  -7.706  1.00  0.00           H
ATOM   1695  N   ALA A 206     -11.469  23.512  -2.085  1.00 24.01           N
ATOM   1696  CA  ALA A 206     -12.087  24.346  -1.064  1.00 24.47           C
ATOM   1697  C   ALA A 206     -13.229  23.579  -0.387  1.00 24.30           C
ATOM   1698  O   ALA A 206     -13.193  23.406   0.828  1.00 25.49           O
ATOM   1699  CB  ALA A 206     -12.663  25.606  -1.735  1.00 23.88           C
ATOM   1700  H   ALA A 206     -11.902  23.505  -3.001  1.00  0.00           H
ATOM   1701  HA  ALA A 206     -11.358  24.644  -0.306  1.00  0.00           H
ATOM   1702  HB1 ALA A 206     -13.155  26.247  -1.002  1.00  0.00           H
ATOM   1703  HB2 ALA A 206     -11.871  26.194  -2.198  1.00  0.00           H
ATOM   1704  HB3 ALA A 206     -13.393  25.373  -2.511  1.00  0.00           H
ATOM   1705  N   ASP A 207     -14.221  23.102  -1.162  1.00 23.97           N
ATOM   1706  CA  ASP A 207     -15.451  22.437  -0.679  1.00 24.82           C
ATOM   1707  C   ASP A 207     -15.154  21.277   0.296  1.00 24.07           C
ATOM   1708  O   ASP A 207     -15.762  21.150   1.361  1.00 24.77           O
ATOM   1709  CB  ASP A 207     -16.364  22.047  -1.890  1.00 25.95           C
ATOM   1710  CG  ASP A 207     -16.939  20.626  -1.909  1.00 28.75           C
ATOM   1711  OD1 ASP A 207     -18.158  20.441  -1.706  1.00 30.03           O
ATOM   1712  OD2 ASP A 207     -16.174  19.647  -2.075  1.00 31.14           O1-
ATOM   1713  H   ASP A 207     -14.156  23.283  -2.157  1.00  0.00           H
ATOM   1714  HA  ASP A 207     -15.994  23.178  -0.090  1.00  0.00           H
ATOM   1715  HB2 ASP A 207     -17.197  22.746  -1.950  1.00  0.00           H
ATOM   1716  HB3 ASP A 207     -15.823  22.163  -2.828  1.00  0.00           H
ATOM   1717  N   ALA A 208     -14.175  20.447  -0.078  1.00 23.20           N
ATOM   1718  CA  ALA A 208     -13.840  19.206   0.595  1.00 22.76           C
ATOM   1719  C   ALA A 208     -13.120  19.427   1.934  1.00 22.38           C
ATOM   1720  O   ALA A 208     -13.093  18.511   2.759  1.00 24.01           O
ATOM   1721  CB  ALA A 208     -12.962  18.381  -0.343  1.00 19.96           C
ATOM   1722  H   ALA A 208     -13.786  20.607  -0.995  1.00  0.00           H
ATOM   1723  HA  ALA A 208     -14.761  18.660   0.783  1.00  0.00           H
ATOM   1724  HB1 ALA A 208     -12.666  17.448   0.124  1.00  0.00           H
ATOM   1725  HB2 ALA A 208     -13.494  18.132  -1.260  1.00  0.00           H
ATOM   1726  HB3 ALA A 208     -12.061  18.922  -0.618  1.00  0.00           H
ATOM   1727  N   ALA A 209     -12.621  20.647   2.196  1.00 22.75           N
ATOM   1728  CA  ALA A 209     -12.071  21.080   3.484  1.00 22.99           C
ATOM   1729  C   ALA A 209     -13.149  21.122   4.581  1.00 24.29           C
ATOM   1730  O   ALA A 209     -12.831  21.049   5.768  1.00 25.18           O
ATOM   1731  CB  ALA A 209     -11.464  22.482   3.333  1.00 23.91           C
ATOM   1732  H   ALA A 209     -12.760  21.368   1.494  1.00  0.00           H
ATOM   1733  HA  ALA A 209     -11.294  20.378   3.785  1.00  0.00           H
ATOM   1734  HB1 ALA A 209     -10.870  22.747   4.208  1.00  0.00           H
ATOM   1735  HB2 ALA A 209     -10.814  22.548   2.462  1.00  0.00           H
ATOM   1736  HB3 ALA A 209     -12.233  23.247   3.221  1.00  0.00           H
ATOM   1737  N   THR A 210     -14.416  21.187   4.170  1.00 22.25           N
ATOM   1738  CA  THR A 210     -15.615  21.131   4.987  1.00 22.42           C
ATOM   1739  C   THR A 210     -16.449  19.875   4.654  1.00 21.18           C
ATOM   1740  O   THR A 210     -17.646  19.855   4.933  1.00 19.00           O
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ATOM   1741  CB  THR A 210     -16.372  22.481   4.847  1.00 24.82           C
ATOM   1742  OG1 THR A 210     -16.483  22.903   3.496  1.00 24.17           O
ATOM   1743  CG2 THR A 210     -15.681  23.624   5.606  1.00 24.26           C
ATOM   1744  H   THR A 210     -14.580  21.339   3.180  1.00  0.00           H
ATOM   1745  HA  THR A 210     -15.346  21.007   6.038  1.00  0.00           H
ATOM   1746  HB  THR A 210     -17.381  22.375   5.249  1.00  0.00           H
ATOM   1747  HG1 THR A 210     -16.722  22.170   2.938  1.00  0.00           H
ATOM   1748 HG21 THR A 210     -16.252  24.549   5.523  1.00  0.00           H
ATOM   1749 HG22 THR A 210     -15.583  23.389   6.666  1.00  0.00           H
ATOM   1750 HG23 THR A 210     -14.682  23.816   5.213  1.00  0.00           H
ATOM   1751  N   LYS A 211     -15.830  18.814   4.100  1.00 20.79           N
ATOM   1752  CA  LYS A 211     -16.470  17.513   3.886  1.00 22.47           C
ATOM   1753  C   LYS A 211     -15.683  16.350   4.505  1.00 22.13           C
ATOM   1754  O   LYS A 211     -16.306  15.466   5.091  1.00 22.26           O
ATOM   1755  CB  LYS A 211     -16.785  17.230   2.396  1.00 24.94           C
ATOM   1756  CG  LYS A 211     -17.692  18.268   1.697  1.00 30.95           C
ATOM   1757  CD  LYS A 211     -18.776  17.655   0.792  1.00 35.72           C
ATOM   1758  CE  LYS A 211     -18.269  16.928  -0.467  1.00 40.53           C
ATOM   1759  NZ  LYS A 211     -17.975  17.845  -1.578  1.00 39.99           N1+
ATOM   1760  H   LYS A 211     -14.840  18.896   3.902  1.00  0.00           H
ATOM   1761  HA  LYS A 211     -17.429  17.497   4.410  1.00  0.00           H
ATOM   1762  HB2 LYS A 211     -15.861  17.097   1.836  1.00  0.00           H
ATOM   1763  HB3 LYS A 211     -17.275  16.256   2.359  1.00  0.00           H
ATOM   1764  HG2 LYS A 211     -18.206  18.860   2.456  1.00  0.00           H
ATOM   1765  HG3 LYS A 211     -17.092  18.982   1.134  1.00  0.00           H
ATOM   1766  HD2 LYS A 211     -19.358  16.953   1.393  1.00  0.00           H
ATOM   1767  HD3 LYS A 211     -19.483  18.436   0.504  1.00  0.00           H
ATOM   1768  HE2 LYS A 211     -17.399  16.307  -0.253  1.00  0.00           H
ATOM   1769  HE3 LYS A 211     -19.054  16.253  -0.812  1.00  0.00           H
ATOM   1770  HZ1 LYS A 211     -18.036  17.441  -2.494  1.00  0.00           H
ATOM   1771  HZ2 LYS A 211     -18.524  18.713  -1.564  1.00  0.00           H
ATOM   1772  HZ3 LYS A 211     -17.061  18.321  -1.532  1.00  0.00           H
ATOM   1773  N   TYR A 212     -14.351  16.283   4.346  1.00 21.51           N
ATOM   1774  CA  TYR A 212     -13.591  15.083   4.713  1.00 22.30           C
ATOM   1775  C   TYR A 212     -12.098  15.320   4.967  1.00 19.69           C
ATOM   1776  O   TYR A 212     -11.515  16.285   4.472  1.00 19.22           O
ATOM   1777  CB  TYR A 212     -13.855  13.939   3.704  1.00 22.78           C
ATOM   1778  CG  TYR A 212     -13.684  14.298   2.235  1.00 23.36           C
ATOM   1779  CD1 TYR A 212     -12.406  14.554   1.699  1.00 23.83           C
ATOM   1780  CD2 TYR A 212     -14.813  14.360   1.394  1.00 26.25           C
ATOM   1781  CE1 TYR A 212     -12.264  14.833   0.328  1.00 23.80           C
ATOM   1782  CE2 TYR A 212     -14.665  14.627   0.020  1.00 24.56           C
ATOM   1783  CZ  TYR A 212     -13.386  14.847  -0.518  1.00 23.94           C
ATOM   1784  OH  TYR A 212     -13.229  15.074  -1.853  1.00 25.44           O
ATOM   1785  H   TYR A 212     -13.844  17.012   3.852  1.00  0.00           H
ATOM   1786  HA  TYR A 212     -13.975  14.757   5.680  1.00  0.00           H
ATOM   1787  HB2 TYR A 212     -13.202  13.091   3.920  1.00  0.00           H
ATOM   1788  HB3 TYR A 212     -14.863  13.550   3.858  1.00  0.00           H
ATOM   1789  HD1 TYR A 212     -11.527  14.520   2.326  1.00  0.00           H
ATOM   1790  HD2 TYR A 212     -15.797  14.186   1.802  1.00  0.00           H
ATOM   1791  HE1 TYR A 212     -11.286  15.034  -0.071  1.00  0.00           H
ATOM   1792  HE2 TYR A 212     -15.535  14.642  -0.618  1.00  0.00           H
ATOM   1793  HH  TYR A 212     -14.023  14.916  -2.342  1.00  0.00           H
ATOM   1794  N   ILE A 213     -11.488  14.389   5.712  1.00 19.76           N
ATOM   1795  CA  ILE A 213     -10.061  14.181   5.973  1.00 18.38           C
ATOM   1796  C   ILE A 213      -9.198  14.223   4.687  1.00 19.12           C
ATOM   1797  O   ILE A 213      -9.407  13.435   3.758  1.00 20.73           O
ATOM   1798  CB  ILE A 213      -9.912  12.899   6.851  1.00 18.18           C
ATOM   1799  CG1 ILE A 213      -8.474  12.474   7.219  1.00 16.52           C
ATOM   1800  CG2 ILE A 213     -10.639  11.674   6.272  1.00 15.90           C
ATOM   1801  CD1 ILE A 213      -7.622  13.546   7.902  1.00 15.33           C
ATOM   1802  H   ILE A 213     -12.097  13.705   6.147  1.00  0.00           H
ATOM   1803  HA  ILE A 213      -9.757  15.020   6.595  1.00  0.00           H
ATOM   1804  HB  ILE A 213     -10.405  13.125   7.798  1.00  0.00           H
ATOM   1805 HG12 ILE A 213      -8.523  11.619   7.895  1.00  0.00           H
ATOM   1806 HG13 ILE A 213      -7.959  12.108   6.335  1.00  0.00           H
ATOM   1807 HG21 ILE A 213     -10.542  10.836   6.959  1.00  0.00           H
ATOM   1808 HG22 ILE A 213     -11.707  11.835   6.125  1.00  0.00           H
ATOM   1809 HG23 ILE A 213     -10.213  11.365   5.317  1.00  0.00           H
ATOM   1810 HD11 ILE A 213      -6.705  13.111   8.299  1.00  0.00           H
ATOM   1811 HD12 ILE A 213      -7.318  14.313   7.195  1.00  0.00           H
ATOM   1812 HD13 ILE A 213      -8.151  14.017   8.731  1.00  0.00           H
ATOM   1813  N   TYR A 214      -8.267  15.188   4.631  1.00 17.70           N
ATOM   1814  CA  TYR A 214      -7.326  15.503   3.549  1.00 17.21           C
ATOM   1815  C   TYR A 214      -8.036  16.049   2.291  1.00 16.96           C
ATOM   1816  O   TYR A 214      -7.548  15.923   1.168  1.00 18.78           O
ATOM   1817  CB  TYR A 214      -6.325  14.362   3.231  1.00 16.51           C
ATOM   1818  CG  TYR A 214      -5.488  13.811   4.359  1.00 22.99           C
ATOM   1819  CD1 TYR A 214      -4.404  14.495   4.917  1.00 22.50           C
ATOM   1820  CD2 TYR A 214      -5.714  12.499   4.769  1.00 22.11           C
ATOM   1821  CE1 TYR A 214      -3.556  13.870   5.829  1.00 25.16           C
ATOM   1822  CE2 TYR A 214      -4.884  11.861   5.679  1.00 24.75           C
ATOM   1823  CZ  TYR A 214      -3.778  12.538   6.191  1.00 24.22           C
ATOM   1824  OH  TYR A 214      -2.912  11.950   7.058  1.00 26.19           O
ATOM   1825  H   TYR A 214      -8.177  15.774   5.462  1.00  0.00           H
ATOM   1826  HA  TYR A 214      -6.739  16.341   3.927  1.00  0.00           H
ATOM   1827  HB2 TYR A 214      -6.887  13.533   2.806  1.00  0.00           H
ATOM   1828  HB3 TYR A 214      -5.646  14.699   2.440  1.00  0.00           H
ATOM   1829  HD1 TYR A 214      -4.208  15.527   4.630  1.00  0.00           H
ATOM   1830  HD2 TYR A 214      -6.551  11.942   4.361  1.00  0.00           H
ATOM   1831  HE1 TYR A 214      -2.721  14.400   6.279  1.00  0.00           H
ATOM   1832  HE2 TYR A 214      -5.092  10.837   5.973  1.00  0.00           H
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ATOM   1833 HH  TYR A 214      -3.024  10.983   6.986  1.00  0.00          H
ATOM   1834 N   GLY A 215      -9.182  16.707   2.471  1.00 19.32          N
ATOM   1835 CA  GLY A 215     -10.002  17.264   1.403  1.00 20.66          C
ATOM   1836 C   GLY A 215      -9.661  18.736   1.178  1.00 20.07          C
ATOM   1837 O   GLY A 215      -9.677  19.202   0.040  1.00 23.01          O
ATOM   1838 H   GLY A 215      -9.515  16.825   3.422  1.00  0.00          H
ATOM   1839 HA2 GLY A 215      -9.882  16.714   0.469  1.00  0.00          H
ATOM   1840 HA3 GLY A 215     -11.044  17.182   1.701  1.00  0.00          H
ATOM   1841 N   GLY A 216      -9.176  19.418   2.218  1.00 20.86          N
ATOM   1842 CA  GLY A 216      -8.572  20.742   2.141  1.00 19.87          C
ATOM   1843 C   GLY A 216      -7.049  20.615   2.046  1.00 20.78          C
ATOM   1844 O   GLY A 216      -6.312  21.504   2.471  1.00 20.29          O
ATOM   1845 H   GLY A 216      -9.238  18.985   3.142  1.00  0.00          H
ATOM   1846 HA2 GLY A 216      -8.951  21.315   1.295  1.00  0.00          H
ATOM   1847 HA3 GLY A 216      -8.820  21.299   3.044  1.00  0.00          H
ATOM   1848 N   SER A 217      -6.559  19.486   1.522  1.00 19.48          N
ATOM   1849 CA  SER A 217      -5.162  19.249   1.221  1.00 20.05          C
ATOM   1850 C   SER A 217      -4.955  19.469  -0.280  1.00 20.74          C
ATOM   1851 O   SER A 217      -5.777  19.064  -1.112  1.00 20.42          O
ATOM   1852 CB  SER A 217      -4.809  17.784   1.533  1.00 20.42          C
ATOM   1853 OG  SER A 217      -3.404  17.607   1.511  1.00 20.14          O
ATOM   1854 H   SER A 217      -7.225  18.816   1.166  1.00  0.00          H
ATOM   1855 HA  SER A 217      -4.520  19.916   1.800  1.00  0.00          H
ATOM   1856 HB2 SER A 217      -5.175  17.490   2.516  1.00  0.00          H
ATOM   1857 HB3 SER A 217      -5.271  17.109   0.811  1.00  0.00          H
ATOM   1858 HG  SER A 217      -3.070  17.908   2.357  1.00  0.00          H
ATOM   1859 N   GLU A 218      -3.811  20.068  -0.597  1.00 21.33          N
ATOM   1860 CA  GLU A 218      -3.240  20.150  -1.923  1.00 22.53          C
ATOM   1861 C   GLU A 218      -2.475  18.835  -2.186  1.00 21.12          C
ATOM   1862 O   GLU A 218      -2.899  18.008  -2.994  1.00 21.10          O
ATOM   1863 CB  GLU A 218      -2.289  21.369  -1.888  1.00 25.65          C
ATOM   1864 CG  GLU A 218      -1.631  21.762  -3.207  1.00 26.70          C
ATOM   1865 CD  GLU A 218      -2.606  22.321  -4.225  1.00 27.03          C
ATOM   1866 OE1 GLU A 218      -3.643  22.922  -3.872  1.00 26.49          O
ATOM   1867 OE2 GLU A 218      -2.337  22.160  -5.430  1.00 26.09          O1-
ATOM   1868 H   GLU A 218      -3.239  20.426   0.161  1.00  0.00          H
ATOM   1869 HA  GLU A 218      -4.020  20.287  -2.675  1.00  0.00          H
ATOM   1870 HB2 GLU A 218      -2.844  22.234  -1.532  1.00  0.00          H
ATOM   1871 HB3 GLU A 218      -1.495  21.225  -1.156  1.00  0.00          H
ATOM   1872 HG2 GLU A 218      -0.912  22.548  -3.000  1.00  0.00          H
ATOM   1873 HG3 GLU A 218      -1.070  20.930  -3.632  1.00  0.00          H
ATOM   1874 N   SER A 219      -1.372  18.620  -1.455  1.00 19.74          N
ATOM   1875 CA  SER A 219      -0.344  17.639  -1.782  1.00 18.94          C
ATOM   1876 C   SER A 219      -0.751  16.173  -1.562  1.00 18.73          C
ATOM   1877 O   SER A 219      -0.157  15.299  -2.191  1.00 18.43          O
ATOM   1878 CB  SER A 219       0.933  17.989  -0.995  1.00 17.41          C
ATOM   1879 OG  SER A 219       0.821  17.788   0.405  1.00 21.92          O
ATOM   1880 H   SER A 219      -1.120  19.300  -0.756  1.00  0.00          H
ATOM   1881 HA  SER A 219      -0.117  17.743  -2.841  1.00  0.00          H
ATOM   1882 HB2 SER A 219       1.752  17.365  -1.360  1.00  0.00          H
ATOM   1883 HB3 SER A 219       1.240  19.018  -1.190  1.00  0.00          H
ATOM   1884 HG  SER A 219       1.693  17.461   0.653  1.00  0.00          H
ATOM   1885 N   TYR A 220      -1.787  15.879  -0.755  1.00 20.35          N
ATOM   1886 CA  TYR A 220      -2.286  14.515  -0.550  1.00 20.31          C
ATOM   1887 C   TYR A 220      -2.824  13.908  -1.863  1.00 21.43          C
ATOM   1888 O   TYR A 220      -2.697  12.709  -2.094  1.00 21.25          O
ATOM   1889 CB  TYR A 220      -3.385  14.499   0.540  1.00 18.66          C
ATOM   1890 CG  TYR A 220      -3.818  13.150   1.081  1.00 19.79          C
ATOM   1891 CD1 TYR A 220      -3.088  12.582   2.130  1.00 20.92          C
ATOM   1892 CD2 TYR A 220      -4.991  12.512   0.675  1.00 19.71          C
ATOM   1893 CE1 TYR A 220      -3.500  11.409   2.746  1.00 21.76          C
ATOM   1894 CE2 TYR A 220      -5.433  11.346   1.294  1.00 20.40          C
ATOM   1895 CZ  TYR A 220      -4.689  10.802   2.338  1.00 22.36          C
ATOM   1896 OH  TYR A 220      -5.172   9.688   2.962  1.00 20.26          O
ATOM   1897 H   TYR A 220      -2.245  16.635  -0.258  1.00  0.00          H
ATOM   1898 HA  TYR A 220      -1.450  13.904  -0.202  1.00  0.00          H
ATOM   1899 HB2 TYR A 220      -2.968  15.067   1.373  1.00  0.00          H
ATOM   1900 HB3 TYR A 220      -4.249  15.052   0.160  1.00  0.00          H
ATOM   1901 HD1 TYR A 220      -2.190  13.080   2.488  1.00  0.00          H
ATOM   1902 HD2 TYR A 220      -5.578  12.939  -0.134  1.00  0.00          H
ATOM   1903 HE1 TYR A 220      -2.931  11.000   3.574  1.00  0.00          H
ATOM   1904 HE2 TYR A 220      -6.341  10.844   0.977  1.00  0.00          H
ATOM   1905 HH  TYR A 220      -4.494   9.314   3.551  1.00  0.00          H
ATOM   1906 N   ARG A 221      -3.348  14.750  -2.764  1.00 19.98          N
ATOM   1907 CA  ARG A 221      -3.896  14.353  -4.058  1.00 19.09          C
ATOM   1908 C   ARG A 221      -2.773  14.037  -5.060  1.00 20.19          C
ATOM   1909 O   ARG A 221      -2.888  13.093  -5.841  1.00 18.27          O
ATOM   1910 CB  ARG A 221      -4.720  15.529  -4.605  1.00 19.12          C
ATOM   1911 CG  ARG A 221      -5.897  15.923  -3.697  1.00 16.39          C
ATOM   1912 CD  ARG A 221      -6.581  17.215  -4.156  1.00 17.18          C
ATOM   1913 NE  ARG A 221      -8.036  17.116  -3.992  1.00 19.14          N
ATOM   1914 CZ  ARG A 221      -8.804  17.782  -3.126  1.00 18.73          C
ATOM   1915 NH1 ARG A 221      -8.296  18.605  -2.207  1.00 18.23          N
ATOM   1916 NH2 ARG A 221     -10.115  17.600  -3.189  1.00 17.55          N1+
ATOM   1917 H   ARG A 221      -3.324  15.738  -2.543  1.00  0.00          H
ATOM   1918 HA  ARG A 221      -4.531  13.471  -3.943  1.00  0.00          H
ATOM   1919 HB2 ARG A 221      -4.078  16.396  -4.772  1.00  0.00          H
ATOM   1920 HB3 ARG A 221      -5.116  15.250  -5.581  1.00  0.00          H
ATOM   1921 HG2 ARG A 221      -6.605  15.094  -3.652  1.00  0.00          H
ATOM   1922 HG3 ARG A 221      -5.557  16.079  -2.673  1.00  0.00          H
ATOM   1923 HD2 ARG A 221      -6.164  18.080  -3.637  1.00  0.00          H
ATOM   1924 HD3 ARG A 221      -6.389  17.396  -5.213  1.00  0.00          H
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ATOM   1925  HE  ARG A 221      -8.498  16.508  -4.667  1.00  0.00           H
ATOM   1926 HH11 ARG A 221      -7.291  18.718  -2.051  1.00  0.00           H
ATOM   1927 HH12 ARG A 221      -8.897  18.992  -1.468  1.00  0.00           H
ATOM   1928 HH21 ARG A 221     -10.500  16.860  -3.788  1.00  0.00           H
ATOM   1929 HH22 ARG A 221     -10.768  18.312  -2.842  1.00  0.00           H
ATOM   1930  N   HIS A 222      -1.668  14.796  -5.006  1.00 19.92           N
ATOM   1931  CA  HIS A 222      -0.463  14.580  -5.812  1.00 20.24           C
ATOM   1932  C   HIS A 222       0.260  13.323  -5.331  1.00 19.44           C
ATOM   1933  O   HIS A 222       0.649  12.484  -6.139  1.00 21.15           O
ATOM   1934  CB  HIS A 222       0.491  15.780  -5.668  1.00 18.79           C
ATOM   1935  CG  HIS A 222      -0.079  17.065  -6.181  1.00 19.64           C
ATOM   1936  ND1 HIS A 222      -0.199  18.196  -5.370  1.00 22.12           N
ATOM   1937  CD2 HIS A 222      -0.592  17.349  -7.426  1.00 20.71           C
ATOM   1938  CE1 HIS A 222      -0.827  19.084  -6.126  1.00 20.00           C
ATOM   1939  NE2 HIS A 222      -1.093  18.633  -7.349  1.00 22.40           N
ATOM   1940  H   HIS A 222      -1.637  15.518  -4.300  1.00  0.00           H
ATOM   1941  HA  HIS A 222      -0.741  14.447  -6.860  1.00  0.00           H
ATOM   1942  HB2 HIS A 222       0.795  15.920  -4.630  1.00  0.00           H
ATOM   1943  HB3 HIS A 222       1.413  15.591  -6.216  1.00  0.00           H
ATOM   1944  HD2 HIS A 222      -0.668  16.748  -8.321  1.00  0.00           H
ATOM   1945  HE1 HIS A 222      -1.112  20.063  -5.780  1.00  0.00           H
ATOM   1946  HE2 HIS A 222      -1.630  19.131  -8.051  1.00  0.00           H
ATOM   1947  N   MET A 223       0.363  13.171  -4.007  1.00 20.38           N
ATOM   1948  CA  MET A 223       0.861  11.996  -3.309  1.00 21.04           C
ATOM   1949  C   MET A 223       0.057  10.741  -3.680  1.00 21.36           C
ATOM   1950  O   MET A 223       0.661   9.772  -4.132  1.00 20.45           O
ATOM   1951  CB  MET A 223       0.882  12.305  -1.801  1.00 20.16           C
ATOM   1952  CG  MET A 223       1.558  11.250  -0.917  1.00 21.68           C
ATOM   1953  SD  MET A 223       0.512   9.863  -0.407  1.00 24.24           S
ATOM   1954  CE  MET A 223      -0.751  10.738   0.546  1.00 23.61           C
ATOM   1955  H   MET A 223       0.061  13.951  -3.429  1.00  0.00           H
ATOM   1956  HA  MET A 223       1.881  11.820  -3.641  1.00  0.00           H
ATOM   1957  HB2 MET A 223       1.445  13.230  -1.664  1.00  0.00           H
ATOM   1958  HB3 MET A 223      -0.118  12.526  -1.442  1.00  0.00           H
ATOM   1959  HG2 MET A 223       2.443  10.859  -1.413  1.00  0.00           H
ATOM   1960  HG3 MET A 223       1.915  11.730  -0.008  1.00  0.00           H
ATOM   1961  HE1 MET A 223      -1.364  10.029   1.094  1.00  0.00           H
ATOM   1962  HE2 MET A 223      -0.296  11.420   1.264  1.00  0.00           H
ATOM   1963  HE3 MET A 223      -1.415  11.301  -0.108  1.00  0.00           H
ATOM   1964  N   CYS A 224      -1.280  10.769  -3.586  1.00 20.63           N
ATOM   1965  CA  CYS A 224      -2.138   9.633  -3.939  1.00 20.63           C
ATOM   1966  C   CYS A 224      -2.099   9.294  -5.440  1.00 19.25           C
ATOM   1967  O   CYS A 224      -2.141   8.113  -5.782  1.00 18.72           O
ATOM   1968  CB  CYS A 224      -3.592   9.877  -3.500  1.00 18.88           C
ATOM   1969  SG  CYS A 224      -3.702   9.754  -1.692  1.00 21.25           S
ATOM   1970  H   CYS A 224      -1.725  11.576  -3.157  1.00  0.00           H
ATOM   1971  HA  CYS A 224      -1.765   8.752  -3.410  1.00  0.00           H
ATOM   1972  HB2 CYS A 224      -3.968  10.843  -3.841  1.00  0.00           H
ATOM   1973  HB3 CYS A 224      -4.245   9.113  -3.923  1.00  0.00           H
ATOM   1974  HG  CYS A 224      -3.106  10.933  -1.459  1.00  0.00           H
ATOM   1975  N   ARG A 225      -1.930  10.285  -6.333  1.00 20.13           N
ATOM   1976  CA  ARG A 225      -1.670  10.053  -7.758  1.00 18.90           C
ATOM   1977  C   ARG A 225      -0.299   9.374  -7.941  1.00 18.94           C
ATOM   1978  O   ARG A 225      -0.191   8.370  -8.645  1.00 18.24           O
ATOM   1979  CB  ARG A 225      -1.718  11.388  -8.544  1.00 19.79           C
ATOM   1980  CG  ARG A 225      -1.454  11.238 -10.060  1.00 22.48           C
ATOM   1981  CD  ARG A 225      -1.383  12.574 -10.811  1.00 21.79           C
ATOM   1982  NE  ARG A 225      -1.189  12.349 -12.246  1.00 21.49           N
ATOM   1983  CZ  ARG A 225      -0.464  13.015 -13.148  1.00 23.17           C
ATOM   1984 NH1 ARG A 225       0.292  14.057 -12.800  1.00 23.34           N
ATOM   1985 NH2 ARG A 225      -0.503  12.621 -14.417  1.00 25.08           N1+
ATOM   1986  H   ARG A 225      -1.949  11.243  -6.002  1.00  0.00           H
ATOM   1987  HA  ARG A 225      -2.443   9.387  -8.150  1.00  0.00           H
ATOM   1988  HB2 ARG A 225      -2.697  11.849  -8.403  1.00  0.00           H
ATOM   1989  HB3 ARG A 225      -0.995  12.089  -8.128  1.00  0.00           H
ATOM   1990  HG2 ARG A 225      -0.516  10.714 -10.241  1.00  0.00           H
ATOM   1991  HG3 ARG A 225      -2.238  10.616 -10.497  1.00  0.00           H
ATOM   1992  HD2 ARG A 225      -2.325  13.103 -10.687  1.00  0.00           H
ATOM   1993  HD3 ARG A 225      -0.586  13.197 -10.407  1.00  0.00           H
ATOM   1994  HE  ARG A 225      -1.833  11.596 -12.640  1.00  0.00           H
ATOM   1995 HH11 ARG A 225       0.464  14.274 -11.820  1.00  0.00           H
ATOM   1996 HH12 ARG A 225       0.783  14.613 -13.481  1.00  0.00           H
ATOM   1997 HH21 ARG A 225      -0.997  11.714 -14.661  1.00  0.00           H
ATOM   1998 HH22 ARG A 225      -0.042  13.062 -15.192  1.00  0.00           H
ATOM   1999  N   TYR A 226       0.749   9.897  -7.291  1.00 16.90           N
ATOM   2000  CA  TYR A 226       2.116   9.405  -7.429  1.00 18.14           C
ATOM   2001  C   TYR A 226       2.274   7.990  -6.841  1.00 17.98           C
ATOM   2002  O   TYR A 226       2.851   7.114  -7.489  1.00 18.92           O
ATOM   2003  CB  TYR A 226       3.115  10.392  -6.783  1.00 15.96           C
ATOM   2004  CG  TYR A 226       4.507  10.271  -7.375  1.00 20.33           C
ATOM   2005  CD1 TYR A 226       4.942  11.187  -8.360  1.00 18.06           C
ATOM   2006  CD2 TYR A 226       5.337   9.190  -7.012  1.00 19.81           C
ATOM   2007  CE1 TYR A 226       6.158  10.970  -9.037  1.00 20.94           C
ATOM   2008  CE2 TYR A 226       6.542   8.972  -7.697  1.00 22.35           C
ATOM   2009  CZ  TYR A 226       6.929   9.831  -8.740  1.00 20.61           C
ATOM   2010  OH  TYR A 226       8.023   9.527  -9.492  1.00 24.39           O
ATOM   2011  H   TYR A 226       0.601  10.738  -6.735  1.00  0.00           H
ATOM   2012  HA  TYR A 226       2.316   9.362  -8.498  1.00  0.00           H
ATOM   2013  HB2 TYR A 226       2.784  11.416  -6.946  1.00  0.00           H
ATOM   2014  HB3 TYR A 226       3.156  10.257  -5.702  1.00  0.00           H
ATOM   2015  HD1 TYR A 226       4.324  12.027  -8.644  1.00  0.00           H
ATOM   2016  HD2 TYR A 226       5.036   8.493  -6.243  1.00  0.00           H
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ATOM   2017  HE1 TYR A 226       6.469  11.643  -9.825  1.00  0.00           H
ATOM   2018  HE2 TYR A 226       7.161   8.128  -7.438  1.00  0.00           H
ATOM   2019  HH  TYR A 226       8.035   8.614  -9.765  1.00  0.00           H
ATOM   2020  N   GLN A 227       1.690   7.746  -5.659  1.00 19.29           N
ATOM   2021  CA  GLN A 227       1.658   6.454  -4.978  1.00 19.24           C
ATOM   2022  C   GLN A 227       0.691   5.472  -5.657  1.00 21.01           C
ATOM   2023  O   GLN A 227       0.731   4.284  -5.353  1.00 21.37           O
ATOM   2024  CB  GLN A 227       1.184   6.642  -3.520  1.00 19.57           C
ATOM   2025  CG  GLN A 227       2.162   7.393  -2.597  1.00 16.42           C
ATOM   2026  CD  GLN A 227       3.330   6.551  -2.083  1.00 20.53           C
ATOM   2027  OE1 GLN A 227       3.909   5.747  -2.807  1.00 21.69           O
ATOM   2028  NE2 GLN A 227       3.680   6.710  -0.813  1.00 19.47           N
ATOM   2029  H   GLN A 227       1.234   8.526  -5.181  1.00  0.00           H
ATOM   2030  HA  GLN A 227       2.652   6.005  -5.004  1.00  0.00           H
ATOM   2031  HB2 GLN A 227       0.227   7.164  -3.516  1.00  0.00           H
ATOM   2032  HB3 GLN A 227       0.973   5.670  -3.071  1.00  0.00           H
ATOM   2033  HG2 GLN A 227       2.552   8.286  -3.084  1.00  0.00           H
ATOM   2034  HG3 GLN A 227       1.594   7.732  -1.734  1.00  0.00           H
ATOM   2035 HE21 GLN A 227       3.180   7.365  -0.232  1.00  0.00           H
ATOM   2036 HE22 GLN A 227       4.446   6.173  -0.434  1.00  0.00           H
ATOM   2037  N   SER A 228      -0.160   5.915  -6.586  1.00 19.57           N
ATOM   2038  CA  SER A 228      -0.874   5.013  -7.478  1.00 20.36           C
ATOM   2039  C   SER A 228       0.023   4.702  -8.687  1.00 20.27           C
ATOM   2040  O   SER A 228       0.229   3.531  -9.000  1.00 23.07           O
ATOM   2041  CB  SER A 228      -2.164   5.676  -7.990  1.00 16.62           C
ATOM   2042  OG  SER A 228      -3.073   5.860  -6.931  1.00 18.44           O
ATOM   2043  H   SER A 228      -0.206   6.908  -6.771  1.00  0.00           H
ATOM   2044  HA  SER A 228      -1.141   4.078  -6.981  1.00  0.00           H
ATOM   2045  HB2 SER A 228      -1.975   6.638  -8.459  1.00  0.00           H
ATOM   2046  HB3 SER A 228      -2.639   5.038  -8.735  1.00  0.00           H
ATOM   2047  HG  SER A 228      -2.770   6.613  -6.419  1.00  0.00           H
ATOM   2048  N   GLY A 229       0.548   5.726  -9.368  1.00 19.50           N
ATOM   2049  CA  GLY A 229       0.912   5.615 -10.774  1.00 20.20           C
ATOM   2050  C   GLY A 229       2.346   5.918 -11.178  1.00 19.94           C
ATOM   2051  O   GLY A 229       2.661   5.750 -12.357  1.00 17.43           O
ATOM   2052  H   GLY A 229       0.349   6.670  -9.041  1.00  0.00           H
ATOM   2053  HA2 GLY A 229       0.587   4.676 -11.218  1.00  0.00           H
ATOM   2054  HA3 GLY A 229       0.339   6.384 -11.269  1.00  0.00           H
ATOM   2055  N   PHE A 230       3.194   6.423 -10.273  1.00 19.02           N
ATOM   2056  CA  PHE A 230       4.475   7.028 -10.652  1.00 20.56           C
ATOM   2057  C   PHE A 230       5.674   6.528  -9.841  1.00 21.40           C
ATOM   2058  O   PHE A 230       6.812   6.819 -10.208  1.00 24.25           O
ATOM   2059  CB  PHE A 230       4.376   8.565 -10.686  1.00 21.77           C
ATOM   2060  CG  PHE A 230       3.477   9.169 -11.751  1.00 22.64           C
ATOM   2061  CD1 PHE A 230       4.047   9.635 -12.953  1.00 24.17           C
ATOM   2062  CD2 PHE A 230       2.083   9.283 -11.550  1.00 24.47           C
ATOM   2063  CE1 PHE A 230       3.232  10.203 -13.948  1.00 25.11           C
ATOM   2064  CE2 PHE A 230       1.267   9.829 -12.559  1.00 23.94           C
ATOM   2065  CZ  PHE A 230       1.841  10.282 -13.760  1.00 26.08           C
ATOM   2066  H   PHE A 230       2.867   6.562  -9.322  1.00  0.00           H
ATOM   2067  HA  PHE A 230       4.728   6.739 -11.667  1.00  0.00           H
ATOM   2068  HB2 PHE A 230       4.068   8.927  -9.712  1.00  0.00           H
ATOM   2069  HB3 PHE A 230       5.373   8.976 -10.850  1.00  0.00           H
ATOM   2070  HD1 PHE A 230       5.112   9.555 -13.126  1.00  0.00           H
ATOM   2071  HD2 PHE A 230       1.626   8.929 -10.639  1.00  0.00           H
ATOM   2072  HE1 PHE A 230       3.674  10.558 -14.867  1.00  0.00           H
ATOM   2073  HE2 PHE A 230       0.196   9.893 -12.431  1.00  0.00           H
ATOM   2074  HZ  PHE A 230       1.211  10.668 -14.546  1.00  0.00           H
ATOM   2075  N   PHE A 231       5.460   5.780  -8.750  1.00 19.26           N
ATOM   2076  CA  PHE A 231       6.556   5.242  -7.934  1.00 21.27           C
ATOM   2077  C   PHE A 231       7.205   4.008  -8.589  1.00 20.88           C
ATOM   2078  O   PHE A 231       8.396   3.791  -8.411  1.00 21.71           O
ATOM   2079  CB  PHE A 231       6.066   4.956  -6.495  1.00 18.61           C
ATOM   2080  CG  PHE A 231       5.166   3.753  -6.259  1.00 18.09           C
ATOM   2081  CD1 PHE A 231       5.678   2.630  -5.574  1.00 16.51           C
ATOM   2082  CD2 PHE A 231       3.822   3.751  -6.688  1.00 15.34           C
ATOM   2083  CE1 PHE A 231       4.856   1.521  -5.314  1.00 15.19           C
ATOM   2084  CE2 PHE A 231       3.004   2.633  -6.434  1.00 15.58           C
ATOM   2085  CZ  PHE A 231       3.514   1.528  -5.732  1.00 17.00           C
ATOM   2086  H   PHE A 231       4.510   5.596  -8.466  1.00  0.00           H
ATOM   2087  HA  PHE A 231       7.344   5.993  -7.860  1.00  0.00           H
ATOM   2088  HB2 PHE A 231       6.949   4.842  -5.863  1.00  0.00           H
ATOM   2089  HB3 PHE A 231       5.558   5.837  -6.103  1.00  0.00           H
ATOM   2090  HD1 PHE A 231       6.703   2.612  -5.239  1.00  0.00           H
ATOM   2091  HD2 PHE A 231       3.404   4.598  -7.209  1.00  0.00           H
ATOM   2092  HE1 PHE A 231       5.260   0.662  -4.800  1.00  0.00           H
ATOM   2093  HE2 PHE A 231       1.983   2.617  -6.786  1.00  0.00           H
ATOM   2094  HZ  PHE A 231       2.878   0.680  -5.526  1.00  0.00           H
ATOM   2095  N   TRP A 232       6.463   3.280  -9.434  1.00 20.84           N
ATOM   2096  CA  TRP A 232       6.940   2.201 -10.311  1.00 21.29           C
ATOM   2097  C   TRP A 232       7.376   2.760 -11.684  1.00 22.43           C
ATOM   2098  O   TRP A 232       7.319   2.066 -12.697  1.00 24.91           O
ATOM   2099  CB  TRP A 232       5.791   1.184 -10.507  1.00 20.84           C
ATOM   2100  CG  TRP A 232       4.440   1.744 -10.850  1.00 22.17           C
ATOM   2101  CD1 TRP A 232       3.519   2.104  -9.932  1.00 22.45           C
ATOM   2102  CD2 TRP A 232       3.823   1.993 -12.153  1.00 25.05           C
ATOM   2103  NE1 TRP A 232       2.384   2.558 -10.564  1.00 24.51           N
ATOM   2104  CE3 TRP A 232       4.232   1.842 -13.500  1.00 25.82           C
ATOM   2105  CE2 TRP A 232       2.497   2.479 -11.938  1.00 26.33           C
ATOM   2106  CZ3 TRP A 232       3.377   2.164 -14.573  1.00 27.28           C
ATOM   2107  CZ2 TRP A 232       1.622   2.771 -13.002  1.00 26.19           C
ATOM   2108  CH2 TRP A 232       2.071   2.624 -14.326  1.00 25.91           C
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ATOM   2109  H   TRP A 232       5.500   3.551  -9.557  1.00  0.00           H
ATOM   2110  HA  TRP A 232       7.805   1.697  -9.876  1.00  0.00           H
ATOM   2111  HB2 TRP A 232       6.054   0.427 -11.245  1.00  0.00           H
ATOM   2112  HB3 TRP A 232       5.680   0.628  -9.576  1.00  0.00           H
ATOM   2113  HD1 TRP A 232       3.668   2.009  -8.868  1.00  0.00           H
ATOM   2114  HE1 TRP A 232       1.556   2.850 -10.039  1.00  0.00           H
ATOM   2115  HE3 TRP A 232       5.218   1.462 -13.714  1.00  0.00           H
ATOM   2116  HZ3 TRP A 232       3.723   2.041 -15.588  1.00  0.00           H
ATOM   2117  HZ2 TRP A 232       0.615   3.112 -12.817  1.00  0.00           H
ATOM   2118  HH2 TRP A 232       1.412   2.859 -15.148  1.00  0.00           H
ATOM   2119  N   ARG A 233       7.784   4.030 -11.721  1.00 22.95           N
ATOM   2120  CA  ARG A 233       8.485   4.676 -12.819  1.00 23.34           C
ATOM   2121  C   ARG A 233       9.380   5.796 -12.270  1.00 23.57           C
ATOM   2122  O   ARG A 233       9.441   6.880 -12.854  1.00 24.36           O
ATOM   2123  CB  ARG A 233       7.559   5.029 -14.009  1.00 23.72           C
ATOM   2124  CG  ARG A 233       6.273   5.785 -13.645  1.00 23.64           C
ATOM   2125  CD  ARG A 233       5.482   6.214 -14.889  1.00 22.56           C
ATOM   2126  NE  ARG A 233       4.065   6.481 -14.591  1.00 23.96           N
ATOM   2127  CZ  ARG A 233       3.213   7.232 -15.302  1.00 23.37           C
ATOM   2128  NH1 ARG A 233       3.633   8.042 -16.275  1.00 24.58           N
ATOM   2129  NH2 ARG A 233       1.913   7.140 -15.030  1.00 27.02           N1+
ATOM   2130  H   ARG A 233       7.836   4.508 -10.832  1.00  0.00           H
ATOM   2131  HA  ARG A 233       9.198   3.955 -13.217  1.00  0.00           H
ATOM   2132  HB2 ARG A 233       8.126   5.604 -14.742  1.00  0.00           H
ATOM   2133  HB3 ARG A 233       7.287   4.103 -14.517  1.00  0.00           H
ATOM   2134  HG2 ARG A 233       5.657   5.148 -13.008  1.00  0.00           H
ATOM   2135  HG3 ARG A 233       6.534   6.671 -13.065  1.00  0.00           H
ATOM   2136  HD2 ARG A 233       5.962   7.074 -15.348  1.00  0.00           H
ATOM   2137  HD3 ARG A 233       5.500   5.418 -15.635  1.00  0.00           H
ATOM   2138  HE  ARG A 233       3.678   5.979 -13.784  1.00  0.00           H
ATOM   2139 HH11 ARG A 233       4.592   8.421 -16.250  1.00  0.00           H
ATOM   2140 HH12 ARG A 233       2.960   8.535 -16.846  1.00  0.00           H
ATOM   2141 HH21 ARG A 233       1.590   6.596 -14.244  1.00  0.00           H
ATOM   2142 HH22 ARG A 233       1.174   7.668 -15.551  1.00  0.00           H
ATOM   2143  N   HIS A 234      10.042   5.549 -11.131  1.00 23.15           N
ATOM   2144  CA  HIS A 234      11.025   6.437 -10.508  1.00 24.03           C
ATOM   2145  C   HIS A 234      12.383   5.729 -10.540  1.00 25.68           C
ATOM   2146  O   HIS A 234      12.463   4.532 -10.263  1.00 24.39           O
ATOM   2147  CB  HIS A 234      10.622   6.737  -9.051  1.00 21.56           C
ATOM   2148  CG  HIS A 234      11.510   7.766  -8.398  1.00 23.59           C
ATOM   2149  ND1 HIS A 234      12.702   7.437  -7.738  1.00 24.32           N
ATOM   2150  CD2 HIS A 234      11.345   9.133  -8.363  1.00 21.93           C
ATOM   2151  CE1 HIS A 234      13.214   8.606  -7.366  1.00 24.17           C
ATOM   2152  NE2 HIS A 234      12.443   9.641  -7.690  1.00 23.23           N
ATOM   2153  H   HIS A 234      10.053   4.586 -10.805  1.00  0.00           H
ATOM   2154  HA  HIS A 234      11.102   7.381 -11.054  1.00  0.00           H
ATOM   2155  HB2 HIS A 234       9.602   7.118  -9.031  1.00  0.00           H
ATOM   2156  HB3 HIS A 234      10.623   5.829  -8.446  1.00  0.00           H
ATOM   2157  HD2 HIS A 234      10.575   9.760  -8.786  1.00  0.00           H
ATOM   2158  HE1 HIS A 234      14.157   8.714  -6.851  1.00  0.00           H
ATOM   2159  HE2 HIS A 234      12.664  10.623  -7.530  1.00  0.00           H
ATOM   2160  N   GLU A 235      13.450   6.463 -10.850  1.00 26.94           N
ATOM   2161  CA  GLU A 235      14.813   5.998 -11.079  1.00 29.85           C
ATOM   2162  C   GLU A 235      15.430   5.193  -9.919  1.00 27.43           C
ATOM   2163  O   GLU A 235      16.222   4.281 -10.165  1.00 27.58           O
ATOM   2164  CB  GLU A 235      15.689   7.212 -11.455  1.00 32.61           C
ATOM   2165  CG  GLU A 235      15.820   8.335 -10.395  1.00 40.85           C
ATOM   2166  CD  GLU A 235      14.710   9.379 -10.404  1.00 45.22           C
ATOM   2167  OE1 GLU A 235      13.624   9.141 -10.971  1.00 46.95           O
ATOM   2168  OE2 GLU A 235      14.972  10.470  -9.850  1.00 48.79           O1-
ATOM   2169  H   GLU A 235      13.327   7.478 -10.966  1.00  0.00           H
ATOM   2170  HA  GLU A 235      14.776   5.328 -11.939  1.00  0.00           H
ATOM   2171  HB2 GLU A 235      16.687   6.840 -11.684  1.00  0.00           H
ATOM   2172  HB3 GLU A 235      15.330   7.641 -12.391  1.00  0.00           H
ATOM   2173  HG2 GLU A 235      15.915   7.934  -9.388  1.00  0.00           H
ATOM   2174  HG3 GLU A 235      16.750   8.870 -10.578  1.00  0.00           H
ATOM   2175  N   LEU A 236      15.054   5.489  -8.666  1.00 26.47           N
ATOM   2176  CA  LEU A 236      15.521   4.750  -7.492  1.00 26.49           C
ATOM   2177  C   LEU A 236      14.667   3.497  -7.236  1.00 26.64           C
ATOM   2178  O   LEU A 236      15.019   2.709  -6.364  1.00 25.30           O
ATOM   2179  CB  LEU A 236      15.442   5.639  -6.229  1.00 24.84           C
ATOM   2180  CG  LEU A 236      16.385   6.860  -6.190  1.00 24.56           C
ATOM   2181  CD1 LEU A 236      16.196   7.638  -4.882  1.00 23.65           C
ATOM   2182  CD2 LEU A 236      17.857   6.459  -6.322  1.00 22.45           C
ATOM   2183  H   LEU A 236      14.360   6.217  -8.533  1.00  0.00           H
ATOM   2184  HA  LEU A 236      16.547   4.405  -7.631  1.00  0.00           H
ATOM   2185  HB2 LEU A 236      14.412   5.965  -6.078  1.00  0.00           H
ATOM   2186  HB3 LEU A 236      15.688   5.020  -5.365  1.00  0.00           H
ATOM   2187  HG  LEU A 236      16.140   7.524  -7.019  1.00  0.00           H
ATOM   2188 HD11 LEU A 236      16.830   8.524  -4.868  1.00  0.00           H
ATOM   2189 HD12 LEU A 236      15.163   7.959  -4.757  1.00  0.00           H
ATOM   2190 HD13 LEU A 236      16.461   7.036  -4.013  1.00  0.00           H
ATOM   2191 HD21 LEU A 236      18.525   7.305  -6.160  1.00  0.00           H
ATOM   2192 HD22 LEU A 236      18.109   5.686  -5.600  1.00  0.00           H
ATOM   2193 HD23 LEU A 236      18.071   6.066  -7.311  1.00  0.00           H
ATOM   2194  N   LEU A 237      13.572   3.286  -7.980  1.00 25.05           N
ATOM   2195  CA  LEU A 237      12.680   2.139  -7.842  1.00 27.46           C
ATOM   2196  C   LEU A 237      12.693   1.242  -9.082  1.00 27.75           C
ATOM   2197  O   LEU A 237      12.444   0.047  -8.931  1.00 28.17           O
ATOM   2198  CB  LEU A 237      11.256   2.584  -7.438  1.00 25.77           C
ATOM   2199  CG  LEU A 237      10.829   2.027  -6.062  1.00 26.56           C
ATOM   2200  CD1 LEU A 237      11.644   2.634  -4.913  1.00 26.59           C
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ATOM   2201  CD2 LEU A 237       9.332   2.228  -5.812  1.00 27.15           C
ATOM   2202  H   LEU A 237      13.339   3.965  -8.700  1.00  0.00           H
ATOM   2203  HA  LEU A 237      13.058   1.483  -7.060  1.00  0.00           H
ATOM   2204  HB2 LEU A 237      11.169   3.671  -7.443  1.00  0.00           H
ATOM   2205  HB3 LEU A 237      10.542   2.244  -8.191  1.00  0.00           H
ATOM   2206  HG  LEU A 237      11.014   0.953  -6.065  1.00  0.00           H
ATOM   2207 HD11 LEU A 237      11.361   2.198  -3.958  1.00  0.00           H
ATOM   2208 HD12 LEU A 237      12.710   2.444  -5.029  1.00  0.00           H
ATOM   2209 HD13 LEU A 237      11.502   3.712  -4.852  1.00  0.00           H
ATOM   2210 HD21 LEU A 237       9.018   1.748  -4.885  1.00  0.00           H
ATOM   2211 HD22 LEU A 237       9.083   3.288  -5.751  1.00  0.00           H
ATOM   2212 HD23 LEU A 237       8.743   1.800  -6.623  1.00  0.00           H
ATOM   2213  N   GLU A 238      13.079   1.733 -10.270  1.00 28.09           N
ATOM   2214  CA  GLU A 238      13.345   0.903 -11.462  1.00 29.19           C
ATOM   2215  C   GLU A 238      14.637   0.076 -11.304  1.00 29.11           C
ATOM   2216  O   GLU A 238      14.847  -0.921 -11.996  1.00 28.86           O
ATOM   2217  CB  GLU A 238      13.392   1.773 -12.742  1.00 32.53           C
ATOM   2218  CG  GLU A 238      12.108   2.586 -13.055  1.00 39.05           C
ATOM   2219  CD  GLU A 238      10.819   1.840 -12.743  1.00 42.35           C
ATOM   2220  OE1 GLU A 238      10.334   1.076 -13.600  1.00 44.53           O
ATOM   2221  OE2 GLU A 238      10.356   1.929 -11.585  1.00 42.36           O1-
ATOM   2222  H   GLU A 238      13.076   2.744 -10.382  1.00  0.00           H
ATOM   2223  HA  GLU A 238      12.564   0.157 -11.578  1.00  0.00           H
ATOM   2224  HB2 GLU A 238      14.239   2.458 -12.691  1.00  0.00           H
ATOM   2225  HB3 GLU A 238      13.587   1.117 -13.591  1.00  0.00           H
ATOM   2226  HG2 GLU A 238      12.100   3.514 -12.492  1.00  0.00           H
ATOM   2227  HG3 GLU A 238      12.085   2.880 -14.103  1.00  0.00           H
ATOM   2228  N   GLU A 239      15.446   0.429 -10.299  1.00 30.17           N
ATOM   2229  CA  GLU A 239      16.503  -0.371  -9.699  1.00 30.22           C
ATOM   2230  C   GLU A 239      15.948  -1.696  -9.098  1.00 30.36           C
ATOM   2231  O   GLU A 239      16.638  -2.719  -9.100  1.00 29.89           O
ATOM   2232  CB  GLU A 239      17.195   0.550  -8.663  1.00 31.52           C
ATOM   2233  CG  GLU A 239      18.510   0.035  -8.046  1.00 34.59           C
ATOM   2234  CD  GLU A 239      19.201   1.084  -7.170  1.00 35.31           C
ATOM   2235  OE1 GLU A 239      19.266   2.265  -7.573  1.00 38.54           O
ATOM   2236  OE2 GLU A 239      19.674   0.703  -6.074  1.00 36.01           O1-
ATOM   2237  H   GLU A 239      15.201   1.287  -9.825  1.00  0.00           H
ATOM   2238  HA  GLU A 239      17.218  -0.625 -10.482  1.00  0.00           H
ATOM   2239  HB2 GLU A 239      17.408   1.506  -9.146  1.00  0.00           H
ATOM   2240  HB3 GLU A 239      16.500   0.788  -7.856  1.00  0.00           H
ATOM   2241  HG2 GLU A 239      18.325  -0.862  -7.453  1.00  0.00           H
ATOM   2242  HG3 GLU A 239      19.208  -0.245  -8.834  1.00  0.00           H
ATOM   2243  N   TYR A 240      14.671  -1.736  -8.683  1.00 29.40           N
ATOM   2244  CA  TYR A 240      14.045  -2.802  -7.900  1.00 26.76           C
ATOM   2245  C   TYR A 240      12.812  -3.399  -8.597  1.00 26.94           C
ATOM   2246  O   TYR A 240      12.148  -2.762  -9.414  1.00 26.38           O
ATOM   2247  CB  TYR A 240      13.731  -2.280  -6.482  1.00 25.17           C
ATOM   2248  CG  TYR A 240      14.980  -1.828  -5.748  1.00 22.76           C
ATOM   2249  CD1 TYR A 240      15.920  -2.773  -5.294  1.00 23.97           C
ATOM   2250  CD2 TYR A 240      15.251  -0.455  -5.590  1.00 23.51           C
ATOM   2251  CE1 TYR A 240      17.129  -2.358  -4.714  1.00 21.82           C
ATOM   2252  CE2 TYR A 240      16.469  -0.033  -5.029  1.00 21.33           C
ATOM   2253  CZ  TYR A 240      17.412  -0.987  -4.608  1.00 21.91           C
ATOM   2254  OH  TYR A 240      18.631  -0.589  -4.167  1.00 23.59           O
ATOM   2255  H   TYR A 240      14.085  -0.923  -8.846  1.00  0.00           H
ATOM   2256  HA  TYR A 240      14.752  -3.621  -7.785  1.00  0.00           H
ATOM   2257  HB2 TYR A 240      13.012  -1.460  -6.529  1.00  0.00           H
ATOM   2258  HB3 TYR A 240      13.254  -3.060  -5.888  1.00  0.00           H
ATOM   2259  HD1 TYR A 240      15.739  -3.822  -5.418  1.00  0.00           H
ATOM   2260  HD2 TYR A 240      14.544   0.285  -5.927  1.00  0.00           H
ATOM   2261  HE1 TYR A 240      17.858  -3.086  -4.392  1.00  0.00           H
ATOM   2262  HE2 TYR A 240      16.689   1.023  -4.961  1.00  0.00           H
ATOM   2263  HH  TYR A 240      19.047  -0.090  -4.895  1.00  0.00           H
ATOM   2264  N   ASP A 241      12.518  -4.661  -8.287  1.00 27.29           N
ATOM   2265  CA  ASP A 241      11.395  -5.453  -8.796  1.00 26.93           C
ATOM   2266  C   ASP A 241      10.295  -5.564  -7.736  1.00 26.42           C
ATOM   2267  O   ASP A 241       9.158  -5.882  -8.073  1.00 27.05           O
ATOM   2268  CB  ASP A 241      11.869  -6.891  -9.109  1.00 27.77           C
ATOM   2269  CG  ASP A 241      12.766  -6.954 -10.328  1.00 27.65           C
ATOM   2270  OD1 ASP A 241      12.243  -7.311 -11.401  1.00 25.77           O
ATOM   2271  OD2 ASP A 241      13.962  -6.611 -10.185  1.00 26.65           O1-
ATOM   2272  H   ASP A 241      13.086  -5.132  -7.585  1.00  0.00           H
ATOM   2273  HA  ASP A 241      10.964  -5.012  -9.697  1.00  0.00           H
ATOM   2274  HB2 ASP A 241      12.419  -7.314  -8.270  1.00  0.00           H
ATOM   2275  HB3 ASP A 241      11.016  -7.549  -9.285  1.00  0.00           H
ATOM   2276  N   TRP A 242      10.612  -5.310  -6.462  1.00 24.04           N
ATOM   2277  CA  TRP A 242       9.704  -5.333  -5.320  1.00 24.23           C
ATOM   2278  C   TRP A 242       9.950  -4.108  -4.437  1.00 23.82           C
ATOM   2279  O   TRP A 242      11.017  -3.495  -4.498  1.00 22.71           O
ATOM   2280  CB  TRP A 242       9.836  -6.631  -4.496  1.00 23.96           C
ATOM   2281  CG  TRP A 242       9.635  -7.983  -5.116  1.00 23.75           C
ATOM   2282  CD1 TRP A 242      10.376  -8.521  -6.110  1.00 26.08           C
ATOM   2283  CD2 TRP A 242       8.720  -9.041  -4.698  1.00 25.48           C
ATOM   2284  NE1 TRP A 242       9.993  -9.828  -6.332  1.00 23.93           N
ATOM   2285  CE3 TRP A 242       7.686  -9.140  -3.737  1.00 25.82           C
ATOM   2286  CE2 TRP A 242       9.046 -10.230  -5.419  1.00 25.93           C
ATOM   2287  CZ3 TRP A 242       7.068 -10.373  -3.455  1.00 26.34           C
ATOM   2288  CZ2 TRP A 242       8.452 -11.467  -5.137  1.00 26.43           C
ATOM   2289  CH2 TRP A 242       7.474 -11.538  -4.132  1.00 24.99           C
ATOM   2290  H   TRP A 242      11.561  -5.025  -6.259  1.00  0.00           H
ATOM   2291  HA  TRP A 242       8.684  -5.230  -5.681  1.00  0.00           H
ATOM   2292  HB2 TRP A 242      10.825  -6.650  -4.047  1.00  0.00           H
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ATOM   2293  HB3 TRP A 242       9.150  -6.575  -3.653  1.00  0.00           H
ATOM   2294  HD1 TRP A 242      11.186  -8.005  -6.599  1.00  0.00           H
ATOM   2295  HE1 TRP A 242      10.464 -10.435  -6.994  1.00  0.00           H
ATOM   2296  HE3 TRP A 242       7.393  -8.263  -3.182  1.00  0.00           H
ATOM   2297  HZ3 TRP A 242       6.287 -10.428  -2.710  1.00  0.00           H
ATOM   2298  HZ2 TRP A 242       8.731 -12.352  -5.690  1.00  0.00           H
ATOM   2299  HH2 TRP A 242       7.010 -12.487  -3.909  1.00  0.00           H
ATOM   2300  N   TYR A 243       8.975  -3.788  -3.587  1.00 22.84           N
ATOM   2301  CA  TYR A 243       8.993  -2.693  -2.632  1.00 21.90           C
ATOM   2302  C   TYR A 243       8.381  -3.151  -1.309  1.00 22.39           C
ATOM   2303  O   TYR A 243       7.406  -3.905  -1.301  1.00 22.11           O
ATOM   2304  CB  TYR A 243       8.291  -1.451  -3.218  1.00 22.85           C
ATOM   2305  CG  TYR A 243       6.765  -1.499  -3.309  1.00 20.92           C
ATOM   2306  CD1 TYR A 243       6.132  -2.298  -4.283  1.00 18.97           C
ATOM   2307  CD2 TYR A 243       5.966  -0.753  -2.415  1.00 20.38           C
ATOM   2308  CE1 TYR A 243       4.734  -2.301  -4.412  1.00 18.11           C
ATOM   2309  CE2 TYR A 243       4.562  -0.770  -2.527  1.00 20.28           C
ATOM   2310  CZ  TYR A 243       3.947  -1.528  -3.539  1.00 19.55           C
ATOM   2311  OH  TYR A 243       2.594  -1.509  -3.688  1.00 19.44           O
ATOM   2312  H   TYR A 243       8.131  -4.365  -3.569  1.00  0.00           H
ATOM   2313  HA  TYR A 243      10.033  -2.424  -2.439  1.00  0.00           H
ATOM   2314  HB2 TYR A 243       8.573  -0.592  -2.613  1.00  0.00           H
ATOM   2315  HB3 TYR A 243       8.695  -1.237  -4.206  1.00  0.00           H
ATOM   2316  HD1 TYR A 243       6.705  -2.926  -4.942  1.00  0.00           H
ATOM   2317  HD2 TYR A 243       6.420  -0.164  -1.635  1.00  0.00           H
ATOM   2318  HE1 TYR A 243       4.274  -2.915  -5.175  1.00  0.00           H
ATOM   2319  HE2 TYR A 243       3.954  -0.189  -1.849  1.00  0.00           H
ATOM   2320  HH  TYR A 243       2.135  -1.128  -2.910  1.00  0.00           H
ATOM   2321  N   TRP A 244       8.935  -2.675  -0.191  1.00 20.85           N
ATOM   2322  CA  TRP A 244       8.267  -2.630   1.099  1.00 20.48           C
ATOM   2323  C   TRP A 244       7.922  -1.154   1.315  1.00 21.37           C
ATOM   2324  O   TRP A 244       8.828  -0.353   1.545  1.00 18.99           O
ATOM   2325  CB  TRP A 244       9.223  -3.111   2.208  1.00 20.36           C
ATOM   2326  CG  TRP A 244       8.615  -3.519   3.512  1.00 22.78           C
ATOM   2327  CD1 TRP A 244       7.418  -3.145   4.026  1.00 24.36           C
ATOM   2328  CD2 TRP A 244       9.182  -4.456   4.467  1.00 23.95           C
ATOM   2329  NE1 TRP A 244       7.217  -3.784   5.232  1.00 23.22           N
ATOM   2330  CE3 TRP A 244      10.373  -5.215   4.502  1.00 24.80           C
ATOM   2331  CE2 TRP A 244       8.273  -4.609   5.555  1.00 24.71           C
ATOM   2332  CZ3 TRP A 244      10.642  -6.095   5.565  1.00 26.03           C
ATOM   2333  CZ2 TRP A 244       8.533  -5.480   6.626  1.00 26.18           C
ATOM   2334  CH2 TRP A 244       9.715  -6.238   6.614  1.00 24.87           C
ATOM   2335  H   TRP A 244       9.826  -2.192  -0.268  1.00  0.00           H
ATOM   2336  HA  TRP A 244       7.395  -3.272   1.112  1.00  0.00           H
ATOM   2337  HB2 TRP A 244       9.764  -3.981   1.850  1.00  0.00           H
ATOM   2338  HB3 TRP A 244       9.995  -2.388   2.445  1.00  0.00           H
ATOM   2339  HD1 TRP A 244       6.718  -2.471   3.551  1.00  0.00           H
ATOM   2340  HE1 TRP A 244       6.338  -3.729   5.736  1.00  0.00           H
ATOM   2341  HE3 TRP A 244      11.087  -5.119   3.699  1.00  0.00           H
ATOM   2342  HZ3 TRP A 244      11.562  -6.662   5.563  1.00  0.00           H
ATOM   2343  HZ2 TRP A 244       7.825  -5.596   7.431  1.00  0.00           H
ATOM   2344  HH2 TRP A 244       9.916  -6.931   7.412  1.00  0.00           H
ATOM   2345  N   ARG A 245       6.645  -0.764   1.225  1.00 21.39           N
ATOM   2346  CA  ARG A 245       6.226   0.588   1.600  1.00 21.27           C
ATOM   2347  C   ARG A 245       6.250   0.687   3.130  1.00 18.90           C
ATOM   2348  O   ARG A 245       5.453   0.036   3.805  1.00 20.72           O
ATOM   2349  CB  ARG A 245       4.827   0.931   1.041  1.00 22.80           C
ATOM   2350  CG  ARG A 245       4.282   2.308   1.503  1.00 24.05           C
ATOM   2351  CD  ARG A 245       3.311   2.923   0.503  1.00 22.81           C
ATOM   2352  NE  ARG A 245       2.496   3.945   1.150  1.00 24.70           N
ATOM   2353  CZ  ARG A 245       1.350   4.370   0.592  1.00 24.50           C
ATOM   2354  NH1 ARG A 245       1.101   4.066  -0.674  1.00 21.87           N
ATOM   2355  NH2 ARG A 245       0.515   5.131   1.302  1.00 25.57           N1+
ATOM   2356  H   ARG A 245       5.945  -1.479   1.032  1.00  0.00           H
ATOM   2357  HA  ARG A 245       6.927   1.309   1.182  1.00  0.00           H
ATOM   2358  HB2 ARG A 245       4.902   0.924  -0.046  1.00  0.00           H
ATOM   2359  HB3 ARG A 245       4.105   0.154   1.298  1.00  0.00           H
ATOM   2360  HG2 ARG A 245       3.814   2.197   2.484  1.00  0.00           H
ATOM   2361  HG3 ARG A 245       5.114   3.006   1.635  1.00  0.00           H
ATOM   2362  HD2 ARG A 245       3.894   3.349  -0.319  1.00  0.00           H
ATOM   2363  HD3 ARG A 245       2.676   2.124   0.114  1.00  0.00           H
ATOM   2364  HE  ARG A 245       2.624   4.165   2.127  1.00  0.00           H
ATOM   2365 HH11 ARG A 245       1.788   3.621  -1.279  1.00  0.00           H
ATOM   2366 HH12 ARG A 245       0.145   4.234  -1.060  1.00  0.00           H
ATOM   2367 HH21 ARG A 245       0.613   5.199   2.315  1.00  0.00           H
ATOM   2368 HH22 ARG A 245      -0.353   5.471   0.900  1.00  0.00           H
ATOM   2369  N   VAL A 246       7.173   1.499   3.652  1.00 18.37           N
ATOM   2370  CA  VAL A 246       7.284   1.841   5.058  1.00 17.88           C
ATOM   2371  C   VAL A 246       6.997   3.347   5.143  1.00 17.66           C
ATOM   2372  O   VAL A 246       7.641   4.164   4.481  1.00 16.95           O
ATOM   2373  CB  VAL A 246       8.688   1.469   5.612  1.00 20.27           C
ATOM   2374  CG1 VAL A 246       8.775   1.723   7.130  1.00 18.44           C
ATOM   2375  CG2 VAL A 246       9.075   0.007   5.314  1.00 22.05           C
ATOM   2376  H   VAL A 246       7.800   1.982   3.009  1.00  0.00           H
ATOM   2377  HA  VAL A 246       6.533   1.299   5.638  1.00  0.00           H
ATOM   2378  HB  VAL A 246       9.434   2.098   5.122  1.00  0.00           H
ATOM   2379 HG11 VAL A 246       9.733   1.395   7.531  1.00  0.00           H
ATOM   2380 HG12 VAL A 246       8.670   2.783   7.364  1.00  0.00           H
ATOM   2381 HG13 VAL A 246       7.997   1.181   7.667  1.00  0.00           H
ATOM   2382 HG21 VAL A 246      10.044  -0.242   5.749  1.00  0.00           H
ATOM   2383 HG22 VAL A 246       8.340  -0.694   5.712  1.00  0.00           H
ATOM   2384 HG23 VAL A 246       9.157  -0.179   4.243  1.00  0.00           H
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ATOM   2385  N   GLU A 247      6.000   3.706   5.948  1.00 18.37           N
ATOM   2386  CA  GLU A 247      5.553   5.074   6.189  1.00 17.71           C
ATOM   2387  C   GLU A 247      6.166   5.604   7.505  1.00 18.77           C
ATOM   2388  O   GLU A 247      6.715   4.818   8.288  1.00 19.80           O
ATOM   2389  CB  GLU A 247      4.010   5.013   6.309  1.00 17.17           C
ATOM   2390  CG  GLU A 247      3.335   5.189   4.946  1.00 16.44           C
ATOM   2391  CD  GLU A 247      1.929   5.771   4.978  1.00 20.59           C
ATOM   2392  OE1 GLU A 247      1.742   6.723   5.803  1.00 21.32           O
ATOM   2393  OE2 GLU A 247      1.112   5.357   4.140  1.00 23.91           O1-
ATOM   2394  H   GLU A 247      5.525   2.974   6.453  1.00  0.00           H
ATOM   2395  HA  GLU A 247      5.876   5.738   5.387  1.00  0.00           H
ATOM   2396  HB2 GLU A 247      3.686   4.065   6.742  1.00  0.00           H
ATOM   2397  HB3 GLU A 247      3.670   5.764   7.026  1.00  0.00           H
ATOM   2398  HG2 GLU A 247      3.909   5.907   4.356  1.00  0.00           H
ATOM   2399  HG3 GLU A 247      3.360   4.230   4.430  1.00  0.00           H
ATOM   2400  N   PRO A 248      6.082   6.924   7.785  1.00 19.92           N
ATOM   2401  CA  PRO A 248      6.518   7.499   9.059  1.00 20.59           C
ATOM   2402  C   PRO A 248      5.528   7.197  10.197  1.00 20.76           C
ATOM   2403  O   PRO A 248      4.323   7.084   9.966  1.00 20.31           O
ATOM   2404  CB  PRO A 248      6.638   9.006   8.797  1.00 22.82           C
ATOM   2405  CG  PRO A 248      5.651   9.275   7.676  1.00 21.16           C
ATOM   2406  CD  PRO A 248      5.598   7.970   6.884  1.00 20.35           C
ATOM   2407  HA  PRO A 248      7.485   7.083   9.309  1.00  0.00           H
ATOM   2408  HB2 PRO A 248      6.452   9.627   9.675  1.00  0.00           H
ATOM   2409  HB3 PRO A 248      7.643   9.237   8.446  1.00  0.00           H
ATOM   2410  HG2 PRO A 248      4.669   9.494   8.094  1.00  0.00           H
ATOM   2411  HG3 PRO A 248      5.937  10.122   7.053  1.00  0.00           H
ATOM   2412  HD2 PRO A 248      4.584   7.781   6.530  1.00  0.00           H
ATOM   2413  HD3 PRO A 248      6.260   8.034   6.019  1.00  0.00           H
ATOM   2414  N   ASP A 249      6.060   7.055  11.419  1.00 20.20           N
ATOM   2415  CA  ASP A 249      5.355   6.801  12.682  1.00 19.81           C
ATOM   2416  C   ASP A 249      4.905   5.337  12.820  1.00 20.04           C
ATOM   2417  O   ASP A 249      3.951   5.048  13.537  1.00 20.11           O
ATOM   2418  CB  ASP A 249      4.274   7.868  13.035  1.00  0.00           C
ATOM   2419  CG  ASP A 249      4.834   9.080  13.781  1.00  0.00           C
ATOM   2420  OD1 ASP A 249      5.606   9.007  14.736  1.00  0.00           O
ATOM   2421  OD2 ASP A 249      4.371  10.257  13.279  1.00  0.00           O
ATOM   2422  H   ASP A 249      7.066   7.135  11.509  1.00  0.00           H
ATOM   2423  HA  ASP A 249      6.129   6.866  13.445  1.00  0.00           H
ATOM   2424  HB2 ASP A 249      3.706   8.186  12.162  1.00  0.00           H
ATOM   2425  HB3 ASP A 249      3.534   7.455  13.719  1.00  0.00           H
ATOM   2426  HD2 ASP A 249      4.648  11.011  13.815  1.00  0.00           H
ATOM   2427  N   ILE A 250      5.578   4.404  12.135  1.00 19.14           N
ATOM   2428  CA  ILE A 250      5.253   2.979  12.137  1.00 20.37           C
ATOM   2429  C   ILE A 250      5.933   2.281  13.325  1.00 19.83           C
ATOM   2430  O   ILE A 250      6.976   2.716  13.827  1.00 20.11           O
ATOM   2431  CB  ILE A 250      5.644   2.371  10.745  1.00 21.38           C
ATOM   2432  CG1 ILE A 250      4.411   2.300   9.826  1.00 23.63           C
ATOM   2433  CG2 ILE A 250      6.337   0.987  10.743  1.00 22.17           C
ATOM   2434  CD1 ILE A 250      3.697   3.633   9.596  1.00 20.80           C
ATOM   2435  H   ILE A 250      6.412   4.683  11.630  1.00  0.00           H
ATOM   2436  HA  ILE A 250      4.179   2.868  12.284  1.00  0.00           H
ATOM   2437  HB  ILE A 250      6.347   3.036  10.255  1.00  0.00           H
ATOM   2438 HG12 ILE A 250      4.702   1.897   8.856  1.00  0.00           H
ATOM   2439 HG13 ILE A 250      3.693   1.601  10.253  1.00  0.00           H
ATOM   2440 HG21 ILE A 250      6.569   0.667   9.727  1.00  0.00           H
ATOM   2441 HG22 ILE A 250      7.283   0.998  11.284  1.00  0.00           H
ATOM   2442 HG23 ILE A 250      5.706   0.218  11.189  1.00  0.00           H
ATOM   2443 HD11 ILE A 250      2.932   3.519   8.830  1.00  0.00           H
ATOM   2444 HD12 ILE A 250      3.207   3.991  10.501  1.00  0.00           H
ATOM   2445 HD13 ILE A 250      4.380   4.411   9.272  1.00  0.00           H
ATOM   2446  N   LYS A 251      5.312   1.179  13.749  1.00 20.52           N
ATOM   2447  CA  LYS A 251      5.791   0.214  14.725  1.00 20.36           C
ATOM   2448  C   LYS A 251      5.697  -1.161  14.049  1.00 21.67           C
ATOM   2449  O   LYS A 251      4.674  -1.452  13.427  1.00 19.23           O
ATOM   2450  CB  LYS A 251      4.897   0.263  15.988  1.00 20.47           C
ATOM   2451  CG  LYS A 251      4.707   1.671  16.596  1.00 20.09           C
ATOM   2452  CD  LYS A 251      3.551   1.757  17.605  1.00 22.23           C
ATOM   2453  CE  LYS A 251      3.944   1.498  19.060  1.00 20.07           C
ATOM   2454  NZ  LYS A 251      2.745   1.262  19.884  1.00 21.10           N1+
ATOM   2455  H   LYS A 251      4.449   0.922  13.277  1.00  0.00           H
ATOM   2456  HA  LYS A 251      6.827   0.425  14.980  1.00  0.00           H
ATOM   2457  HB2 LYS A 251      3.921  -0.149  15.733  1.00  0.00           H
ATOM   2458  HB3 LYS A 251      5.304  -0.409  16.747  1.00  0.00           H
ATOM   2459  HG2 LYS A 251      5.640   2.024  17.036  1.00  0.00           H
ATOM   2460  HG3 LYS A 251      4.468   2.383  15.808  1.00  0.00           H
ATOM   2461  HD2 LYS A 251      3.118   2.755  17.559  1.00  0.00           H
ATOM   2462  HD3 LYS A 251      2.755   1.081  17.310  1.00  0.00           H
ATOM   2463  HE2 LYS A 251      4.619   0.647  19.120  1.00  0.00           H
ATOM   2464  HE3 LYS A 251      4.488   2.360  19.446  1.00  0.00           H
ATOM   2465  HZ1 LYS A 251      2.073   2.022  19.727  1.00  0.00           H
ATOM   2466  HZ2 LYS A 251      2.269   0.402  19.621  1.00  0.00           H
ATOM   2467  HZ3 LYS A 251      2.959   1.249  20.878  1.00  0.00           H
ATOM   2468  N   LEU A 252      6.728  -2.002  14.182  1.00 19.01           N
ATOM   2469  CA  LEU A 252      6.650  -3.443  13.949  1.00 20.86           C
ATOM   2470  C   LEU A 252      6.798  -4.052  15.338  1.00 19.45           C
ATOM   2471  O   LEU A 252      7.846  -3.895  15.955  1.00 21.96           O
ATOM   2472  CB  LEU A 252      7.825  -3.940  13.069  1.00 21.87           C
ATOM   2473  CG  LEU A 252      7.513  -4.046  11.564  1.00 22.64           C
ATOM   2474  CD1 LEU A 252      8.793  -4.382  10.788  1.00 23.58           C
ATOM   2475  CD2 LEU A 252      6.455  -5.122  11.272  1.00 23.00           C
ATOM   2476  H   LEU A 252      7.479  -1.728  14.803  1.00  0.00           H
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ATOM   2477  HA  LEU A 252       5.687  -3.743  13.537  1.00  0.00           H
ATOM   2478  HB2 LEU A 252       8.695  -3.302  13.228  1.00  0.00           H
ATOM   2479  HB3 LEU A 252       8.145  -4.933  13.398  1.00  0.00           H
ATOM   2480  HG  LEU A 252       7.143  -3.081  11.215  1.00  0.00           H
ATOM   2481 HD11 LEU A 252       8.622  -4.389   9.711  1.00  0.00           H
ATOM   2482 HD12 LEU A 252       9.569  -3.653  10.996  1.00  0.00           H
ATOM   2483 HD13 LEU A 252       9.185  -5.359  11.070  1.00  0.00           H
ATOM   2484 HD21 LEU A 252       6.294  -5.245  10.201  1.00  0.00           H
ATOM   2485 HD22 LEU A 252       6.761  -6.089  11.673  1.00  0.00           H
ATOM   2486 HD23 LEU A 252       5.489  -4.885  11.708  1.00  0.00           H
ATOM   2487  N   TYR A 253      5.756  -4.705  15.840  1.00 20.60           N
ATOM   2488  CA  TYR A 253      5.734  -5.247  17.190  1.00 20.37           C
ATOM   2489  C   TYR A 253      6.345  -6.649  17.198  1.00 19.45           C
ATOM   2490  O   TYR A 253      7.143  -6.967  18.073  1.00 22.46           O
ATOM   2491  CB  TYR A 253      4.270  -5.383  17.630  1.00 19.57           C
ATOM   2492  CG  TYR A 253      3.515  -4.075  17.761  1.00 20.14           C
ATOM   2493  CD1 TYR A 253      4.006  -3.066  18.611  1.00 20.07           C
ATOM   2494  CD2 TYR A 253      2.271  -3.899  17.121  1.00 19.83           C
ATOM   2495  CE1 TYR A 253      3.230  -1.925  18.863  1.00 20.33           C
ATOM   2496  CE2 TYR A 253      1.496  -2.757  17.378  1.00 19.82           C
ATOM   2497  CZ  TYR A 253      1.969  -1.770  18.260  1.00 18.82           C
ATOM   2498  OH  TYR A 253      1.199  -0.681  18.548  1.00 18.72           O
ATOM   2499  H   TYR A 253      4.957  -4.889  15.242  1.00  0.00           H
ATOM   2500  HA  TYR A 253      6.290  -4.613  17.886  1.00  0.00           H
ATOM   2501  HB2 TYR A 253      3.724  -6.053  16.965  1.00  0.00           H
ATOM   2502  HB3 TYR A 253      4.239  -5.864  18.607  1.00  0.00           H
ATOM   2503  HD1 TYR A 253      4.946  -3.184  19.133  1.00  0.00           H
ATOM   2504  HD2 TYR A 253      1.856  -4.672  16.496  1.00  0.00           H
ATOM   2505  HE1 TYR A 253      3.599  -1.218  19.583  1.00  0.00           H
ATOM   2506  HE2 TYR A 253      0.521  -2.676  16.921  1.00  0.00           H
ATOM   2507  HH  TYR A 253      0.258  -0.876  18.361  1.00  0.00           H
ATOM   2508  N   CYS A 254      5.998  -7.486  16.215  1.00 22.80           N
ATOM   2509  CA  CYS A 254      6.555  -8.828  16.091  1.00 23.68           C
ATOM   2510  C   CYS A 254      7.866  -8.730  15.313  1.00 22.63           C
ATOM   2511  O   CYS A 254      7.959  -8.017  14.311  1.00 23.04           O
ATOM   2512  CB  CYS A 254      5.596  -9.729  15.303  1.00 23.53           C
ATOM   2513  SG  CYS A 254      3.954  -9.921  16.052  1.00 25.59           S
ATOM   2514  H   CYS A 254      5.436  -7.132  15.454  1.00  0.00           H
ATOM   2515  HA  CYS A 254      6.734  -9.266  17.073  1.00  0.00           H
ATOM   2516  HB2 CYS A 254      5.463  -9.340  14.294  1.00  0.00           H
ATOM   2517  HB3 CYS A 254      6.026 -10.726  15.182  1.00  0.00           H
ATOM   2518  N   ASP A 255      8.873  -9.456  15.794  1.00 22.72           N
ATOM   2519  CA  ASP A 255     10.134  -9.717  15.123  1.00 23.70           C
ATOM   2520  C   ASP A 255      9.847 -10.659  13.964  1.00 24.37           C
ATOM   2521  O   ASP A 255      9.388 -11.779  14.171  1.00 24.71           O
ATOM   2522  CB  ASP A 255     11.112 -10.417  16.095  1.00 25.02           C
ATOM   2523  CG  ASP A 255     12.052  -9.435  16.752  1.00 25.86           C
ATOM   2524  OD1 ASP A 255     11.686  -8.887  17.819  1.00 25.31           O
ATOM   2525  OD2 ASP A 255     13.127  -9.241  16.144  1.00 30.23           O1-
ATOM   2526  H   ASP A 255      8.638 -10.100  16.552  1.00  0.00           H
ATOM   2527  HA  ASP A 255     10.559  -8.790  14.735  1.00  0.00           H
ATOM   2528  HB2 ASP A 255     10.584 -10.983  16.861  1.00  0.00           H
ATOM   2529  HB3 ASP A 255     11.729 -11.150  15.577  1.00  0.00           H
ATOM   2530  N   ILE A 256     10.127 -10.204  12.746  1.00 23.24           N
ATOM   2531  CA  ILE A 256      9.973 -10.994  11.540  1.00 25.08           C
ATOM   2532  C   ILE A 256     11.308 -11.747  11.435  1.00 24.17           C
ATOM   2533  O   ILE A 256     12.379 -11.136  11.377  1.00 23.01           O
ATOM   2534  CB  ILE A 256      9.745 -10.054  10.327  1.00 24.13           C
ATOM   2535  CG1 ILE A 256      8.619  -9.018  10.585  1.00 24.74           C
ATOM   2536  CG2 ILE A 256      9.422 -10.881   9.066  1.00 23.47           C
ATOM   2537  CD1 ILE A 256      8.568  -7.889   9.552  1.00 24.32           C
ATOM   2538  H   ILE A 256     10.563  -9.296  12.645  1.00  0.00           H
ATOM   2539  HA  ILE A 256      9.131 -11.685  11.634  1.00  0.00           H
ATOM   2540  HB  ILE A 256     10.667  -9.502  10.148  1.00  0.00           H
ATOM   2541 HG12 ILE A 256      7.659  -9.528  10.628  1.00  0.00           H
ATOM   2542 HG13 ILE A 256      8.733  -8.535  11.556  1.00  0.00           H
ATOM   2543 HG21 ILE A 256      9.316 -10.246   8.192  1.00  0.00           H
ATOM   2544 HG22 ILE A 256     10.204 -11.604   8.833  1.00  0.00           H
ATOM   2545 HG23 ILE A 256      8.489 -11.436   9.177  1.00  0.00           H
ATOM   2546 HD11 ILE A 256      7.763  -7.194   9.782  1.00  0.00           H
ATOM   2547 HD12 ILE A 256      9.502  -7.327   9.555  1.00  0.00           H
ATOM   2548 HD13 ILE A 256      8.388  -8.264   8.546  1.00  0.00           H
ATOM   2549  N   ASN A 257     11.246 -13.075  11.530  1.00 25.64           N
ATOM   2550  CA  ASN A 257     12.405 -13.952  11.714  1.00 27.73           C
ATOM   2551  C   ASN A 257     12.638 -14.809  10.467  1.00 27.85           C
ATOM   2552  O   ASN A 257     13.107 -15.942  10.539  1.00 27.48           O
ATOM   2553  CB  ASN A 257     12.282 -14.762  13.025  1.00 29.60           C
ATOM   2554  CG  ASN A 257     12.385 -13.871  14.267  1.00 31.61           C
ATOM   2555  OD1 ASN A 257     13.312 -13.066  14.388  1.00 33.94           O
ATOM   2556  ND2 ASN A 257     11.413 -13.938  15.166  1.00 33.79           N
ATOM   2557  H   ASN A 257     10.329 -13.493  11.617  1.00  0.00           H
ATOM   2558  HA  ASN A 257     13.316 -13.358  11.798  1.00  0.00           H
ATOM   2559  HB2 ASN A 257     11.349 -15.328  13.036  1.00  0.00           H
ATOM   2560  HB3 ASN A 257     13.086 -15.496  13.093  1.00  0.00           H
ATOM   2561 HD21 ASN A 257     10.562 -14.476  14.979  1.00  0.00           H
ATOM   2562 HD22 ASN A 257     11.443 -13.360  15.988  1.00  0.00           H
ATOM   2563  N   TYR A 258     12.344 -14.221   9.308  1.00 29.16           N
ATOM   2564  CA  TYR A 258     12.632 -14.700   7.970  1.00 29.16           C
ATOM   2565  C   TYR A 258     12.795 -13.473   7.065  1.00 28.34           C
ATOM   2566  O   TYR A 258     12.319 -12.383   7.394  1.00 28.39           O
ATOM   2567  CB  TYR A 258     11.570 -15.718   7.503  1.00 29.46           C
ATOM   2568  CG  TYR A 258     10.160 -15.166   7.380  1.00 30.02           C
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ATOM   2569  CD1 TYR A 258       9.308 -15.143   8.505  1.00 31.04          C
ATOM   2570  CD2 TYR A 258       9.701 -14.658   6.147  1.00 30.30          C
ATOM   2571  CE1 TYR A 258       8.013 -14.603   8.400  1.00 29.83          C
ATOM   2572  CE2 TYR A 258       8.401 -14.131   6.040  1.00 30.49          C
ATOM   2573  CZ  TYR A 258       7.561 -14.097   7.167  1.00 31.23          C
ATOM   2574  OH  TYR A 258       6.315 -13.568   7.052  1.00 30.56          O
ATOM   2575  H   TYR A 258      11.993 -13.271   9.329  1.00  0.00          H
ATOM   2576  HA  TYR A 258      13.600 -15.204   8.000  1.00  0.00          H
ATOM   2577  HB2 TYR A 258      11.862 -16.128   6.535  1.00  0.00          H
ATOM   2578  HB3 TYR A 258      11.553 -16.570   8.184  1.00  0.00          H
ATOM   2579  HD1 TYR A 258       9.645 -15.531   9.455  1.00  0.00          H
ATOM   2580  HD2 TYR A 258      10.341 -14.664   5.279  1.00  0.00          H
ATOM   2581  HE1 TYR A 258       7.363 -14.579   9.263  1.00  0.00          H
ATOM   2582  HE2 TYR A 258       8.039 -13.751   5.097  1.00  0.00          H
ATOM   2583  HH  TYR A 258       5.797 -13.598   7.887  1.00  0.00          H
ATOM   2584  N   ASP A 259      13.462 -13.642   5.921  1.00 26.74          N
ATOM   2585  CA  ASP A 259      13.605 -12.610   4.900  1.00 25.98          C
ATOM   2586  C   ASP A 259      12.339 -12.658   4.030  1.00 26.85          C
ATOM   2587  O   ASP A 259      12.099 -13.657   3.349  1.00 26.32          O
ATOM   2588  CB  ASP A 259      14.863 -12.936   4.067  1.00 24.33          C
ATOM   2589  CG  ASP A 259      15.175 -11.928   2.965  1.00 23.76          C
ATOM   2590  OD1 ASP A 259      14.329 -11.672   2.079  1.00 24.79          O
ATOM   2591  OD2 ASP A 259      16.304 -11.398   2.978  1.00 24.27          O1-
ATOM   2592  H   ASP A 259      13.803 -14.561   5.696  1.00  0.00          H
ATOM   2593  HA  ASP A 259      13.720 -11.625   5.357  1.00  0.00          H
ATOM   2594  HB2 ASP A 259      15.726 -12.980   4.723  1.00  0.00          H
ATOM   2595  HB3 ASP A 259      14.793 -13.931   3.637  1.00  0.00          H
ATOM   2596  N   VAL A 260      11.507 -11.612   4.105  1.00 27.13          N
ATOM   2597  CA  VAL A 260      10.179 -11.558   3.496  1.00 26.80          C
ATOM   2598  C   VAL A 260      10.200 -11.723   1.965  1.00 26.31          C
ATOM   2599  O   VAL A 260       9.430 -12.520   1.436  1.00 25.15          O
ATOM   2600  CB  VAL A 260       9.425 -10.276   3.945  1.00 27.92          C
ATOM   2601  CG1 VAL A 260       9.162 -10.289   5.459  1.00 27.39          C
ATOM   2602  CG2 VAL A 260      10.095  -8.949   3.536  1.00 30.01          C
ATOM   2603  H   VAL A 260      11.741 -10.876   4.752  1.00  0.00          H
ATOM   2604  HA  VAL A 260       9.625 -12.415   3.882  1.00  0.00          H
ATOM   2605  HB  VAL A 260       8.445 -10.298   3.464  1.00  0.00          H
ATOM   2606 HG11 VAL A 260       8.572  -9.426   5.769  1.00  0.00          H
ATOM   2607 HG12 VAL A 260       8.606 -11.179   5.759  1.00  0.00          H
ATOM   2608 HG13 VAL A 260      10.092 -10.275   6.027  1.00  0.00          H
ATOM   2609 HG21 VAL A 260       9.511  -8.099   3.893  1.00  0.00          H
ATOM   2610 HG22 VAL A 260      11.101  -8.850   3.941  1.00  0.00          H
ATOM   2611 HG23 VAL A 260      10.150  -8.840   2.454  1.00  0.00          H
ATOM   2612  N   PHE A 261      11.098 -11.040   1.245  1.00 25.12          N
ATOM   2613  CA  PHE A 261      11.119 -11.069  -0.220  1.00 24.42          C
ATOM   2614  C   PHE A 261      11.807 -12.335  -0.745  1.00 26.37          C
ATOM   2615  O   PHE A 261      11.428 -12.831  -1.803  1.00 26.96          O
ATOM   2616  CB  PHE A 261      11.850  -9.834  -0.766  1.00 24.90          C
ATOM   2617  CG  PHE A 261      11.118  -8.536  -0.506  1.00 24.87          C
ATOM   2618  CD1 PHE A 261       9.905  -8.282  -1.175  1.00 23.69          C
ATOM   2619  CD2 PHE A 261      11.631  -7.589   0.404  1.00 24.07          C
ATOM   2620  CE1 PHE A 261       9.193  -7.098  -0.921  1.00 23.05          C
ATOM   2621  CE2 PHE A 261      10.919  -6.405   0.660  1.00 26.09          C
ATOM   2622  CZ  PHE A 261       9.695  -6.171   0.007  1.00 24.79          C
ATOM   2623  H   PHE A 261      11.777 -10.473   1.730  1.00  0.00          H
ATOM   2624  HA  PHE A 261      10.097 -11.069  -0.604  1.00  0.00          H
ATOM   2625  HB2 PHE A 261      12.854  -9.774  -0.364  1.00  0.00          H
ATOM   2626  HB3 PHE A 261      11.965  -9.925  -1.846  1.00  0.00          H
ATOM   2627  HD1 PHE A 261       9.518  -9.006  -1.875  1.00  0.00          H
ATOM   2628  HD2 PHE A 261      12.565  -7.763   0.913  1.00  0.00          H
ATOM   2629  HE1 PHE A 261       8.253  -6.901  -1.418  1.00  0.00          H
ATOM   2630  HE2 PHE A 261      11.311  -5.681   1.359  1.00  0.00          H
ATOM   2631  HZ  PHE A 261       9.124  -5.285   0.221  1.00  0.00          H
ATOM   2632  N   LYS A 262      12.742 -12.923   0.017  1.00 25.29          N
ATOM   2633  CA  LYS A 262      13.279 -14.254  -0.253  1.00 27.76          C
ATOM   2634  C   LYS A 262      12.204 -15.337  -0.044  1.00 27.08          C
ATOM   2635  O   LYS A 262      12.302 -16.369  -0.697  1.00 27.65          O
ATOM   2636  CB  LYS A 262      14.471 -14.507   0.695  1.00 27.98          C
ATOM   2637  CG  LYS A 262      15.161 -15.891   0.674  1.00 31.68          C
ATOM   2638  CD  LYS A 262      16.029 -16.179  -0.566  1.00 35.77          C
ATOM   2639  CE  LYS A 262      15.555 -17.385  -1.400  1.00 38.98          C
ATOM   2640  NZ  LYS A 262      14.427 -17.040  -2.269  1.00 38.71          N1+
ATOM   2641  H   LYS A 262      13.062 -12.451   0.867  1.00  0.00          H
ATOM   2642  HA  LYS A 262      13.621 -14.289  -1.289  1.00  0.00          H
ATOM   2643  HB2 LYS A 262      15.222 -13.729   0.552  1.00  0.00          H
ATOM   2644  HB3 LYS A 262      14.086 -14.372   1.701  1.00  0.00          H
ATOM   2645  HG2 LYS A 262      15.817 -15.925   1.545  1.00  0.00          H
ATOM   2646  HG3 LYS A 262      14.445 -16.693   0.854  1.00  0.00          H
ATOM   2647  HD2 LYS A 262      16.133 -15.286  -1.181  1.00  0.00          H
ATOM   2648  HD3 LYS A 262      17.040 -16.401  -0.219  1.00  0.00          H
ATOM   2649  HE2 LYS A 262      16.365 -17.737  -2.038  1.00  0.00          H
ATOM   2650  HE3 LYS A 262      15.277 -18.226  -0.763  1.00  0.00          H
ATOM   2651  HZ1 LYS A 262      14.065 -17.902  -2.731  1.00  0.00          H
ATOM   2652  HZ2 LYS A 262      13.623 -16.710  -1.739  1.00  0.00          H
ATOM   2653  HZ3 LYS A 262      14.690 -16.374  -2.988  1.00  0.00          H
ATOM   2654  N   TRP A 263      11.227 -15.125   0.849  1.00 26.32          N
ATOM   2655  CA  TRP A 263      10.182 -16.084   1.210  1.00 26.06          C
ATOM   2656  C   TRP A 263       8.945 -15.943   0.302  1.00 28.00          C
ATOM   2657  O   TRP A 263       8.449 -16.952  -0.205  1.00 26.85          O
ATOM   2658  CB  TRP A 263       9.784 -15.806   2.677  1.00 25.69          C
ATOM   2659  CG  TRP A 263       8.737 -16.683   3.296  1.00 24.08          C
ATOM   2660  CD1 TRP A 263       8.966 -17.859   3.925  1.00 24.32          C
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ATOM   2661  CD2 TRP A 263       7.299 -16.447   3.400  1.00 24.24           C
ATOM   2662  NE1 TRP A 263       7.771 -18.371   4.391  1.00 24.75           N
ATOM   2663  CE3 TRP A 263       6.429 -15.415   2.978  1.00 25.60           C
ATOM   2664  CE2 TRP A 263       6.709 -17.538   4.105  1.00 24.89           C
ATOM   2665  CZ3 TRP A 263       5.044 -15.468   3.231  1.00 24.08           C
ATOM   2666  CZ2 TRP A 263       5.329 -17.606   4.365  1.00 24.80           C
ATOM   2667  CH2 TRP A 263       4.493 -16.564   3.922  1.00 25.33           C
ATOM   2668  H   TRP A 263      11.277 -14.268   1.387  1.00  0.00           H
ATOM   2669  HA  TRP A 263      10.565 -17.104   1.129  1.00  0.00           H
ATOM   2670  HB2 TRP A 263      10.677 -15.911   3.294  1.00  0.00           H
ATOM   2671  HB3 TRP A 263       9.461 -14.774   2.806  1.00  0.00           H
ATOM   2672  HD1 TRP A 263       9.943 -18.305   4.046  1.00  0.00           H
ATOM   2673  HE1 TRP A 263       7.701 -19.214   4.946  1.00  0.00           H
ATOM   2674  HE3 TRP A 263       6.839 -14.566   2.460  1.00  0.00           H
ATOM   2675  HZ3 TRP A 263       4.404 -14.660   2.905  1.00  0.00           H
ATOM   2676  HZ2 TRP A 263       4.910 -18.446   4.898  1.00  0.00           H
ATOM   2677  HH2 TRP A 263       3.431 -16.599   4.119  1.00  0.00           H
ATOM   2678  N   MET A 264       8.454 -14.714   0.070  1.00 26.69           N
ATOM   2679  CA  MET A 264       7.235 -14.391  -0.694  1.00 27.66           C
ATOM   2680  C   MET A 264       7.308 -14.897  -2.147  1.00 28.61           C
ATOM   2681  O   MET A 264       6.322 -15.373  -2.710  1.00 28.17           O
ATOM   2682  CB  MET A 264       7.026 -12.857  -0.713  1.00 26.75           C
ATOM   2683  CG  MET A 264       6.461 -12.244   0.580  1.00 27.80           C
ATOM   2684  SD  MET A 264       4.675 -12.423   0.810  1.00 32.27           S
ATOM   2685  CE  MET A 264       4.088 -11.114  -0.298  1.00 29.89           C
ATOM   2686  H   MET A 264       8.910 -13.935   0.546  1.00  0.00           H
ATOM   2687  HA  MET A 264       6.377 -14.871  -0.219  1.00  0.00           H
ATOM   2688  HB2 MET A 264       7.973 -12.372  -0.954  1.00  0.00           H
ATOM   2689  HB3 MET A 264       6.356 -12.587  -1.528  1.00  0.00           H
ATOM   2690  HG2 MET A 264       6.952 -12.665   1.453  1.00  0.00           H
ATOM   2691  HG3 MET A 264       6.692 -11.178   0.603  1.00  0.00           H
ATOM   2692  HE1 MET A 264       3.001 -11.136  -0.360  1.00  0.00           H
ATOM   2693  HE2 MET A 264       4.402 -10.138   0.071  1.00  0.00           H
ATOM   2694  HE3 MET A 264       4.483 -11.236  -1.304  1.00  0.00           H
ATOM   2695  N   GLN A 265       8.512 -14.819  -2.723  1.00 28.33           N
ATOM   2696  CA  GLN A 265       8.865 -15.211  -4.080  1.00 30.41           C
ATOM   2697  C   GLN A 265       8.705 -16.728  -4.320  1.00 30.83           C
ATOM   2698  O   GLN A 265       8.326 -17.137  -5.420  1.00 30.37           O
ATOM   2699  CB  GLN A 265      10.320 -14.749  -4.285  1.00 27.86           C
ATOM   2700  CG  GLN A 265      10.887 -14.894  -5.708  1.00 30.57           C
ATOM   2701  CD  GLN A 265      12.407 -14.796  -5.686  1.00 32.16           C
ATOM   2702  OE1 GLN A 265      12.998 -13.840  -6.179  1.00 31.72           O
ATOM   2703  NE2 GLN A 265      13.065 -15.793  -5.117  1.00 32.89           N
ATOM   2704  H   GLN A 265       9.251 -14.418  -2.163  1.00  0.00           H
ATOM   2705  HA  GLN A 265       8.214 -14.679  -4.775  1.00  0.00           H
ATOM   2706  HB2 GLN A 265      10.401 -13.694  -4.019  1.00  0.00           H
ATOM   2707  HB3 GLN A 265      10.951 -15.281  -3.570  1.00  0.00           H
ATOM   2708  HG2 GLN A 265      10.631 -15.860  -6.144  1.00  0.00           H
ATOM   2709  HG3 GLN A 265      10.472 -14.133  -6.370  1.00  0.00           H
ATOM   2710 HE21 GLN A 265      12.531 -16.605  -4.736  1.00  0.00           H
ATOM   2711 HE22 GLN A 265      14.064 -15.847  -5.252  1.00  0.00           H
ATOM   2712  N   GLU A 266       8.957 -17.566  -3.302  1.00 31.44           N
ATOM   2713  CA  GLU A 266       8.888 -19.026  -3.419  1.00 33.01           C
ATOM   2714  C   GLU A 266       7.469 -19.500  -3.094  1.00 32.66           C
ATOM   2715  O   GLU A 266       6.952 -20.400  -3.750  1.00 32.48           O
ATOM   2716  CB  GLU A 266       9.847 -19.747  -2.436  1.00 34.36           C
ATOM   2717  CG  GLU A 266      11.149 -19.027  -2.058  1.00 44.11           C
ATOM   2718  CD  GLU A 266      12.095 -18.702  -3.207  1.00 48.33           C
ATOM   2719  OE1 GLU A 266      13.266 -19.131  -3.151  1.00 49.69           O
ATOM   2720  OE2 GLU A 266      11.779 -17.811  -4.017  1.00 50.67           O1-
ATOM   2721  H   GLU A 266       9.314 -17.175  -2.443  1.00  0.00           H
ATOM   2722  HA  GLU A 266       9.145 -19.328  -4.431  1.00  0.00           H
ATOM   2723  HB2 GLU A 266       9.340 -19.962  -1.493  1.00  0.00           H
ATOM   2724  HB3 GLU A 266      10.094 -20.725  -2.851  1.00  0.00           H
ATOM   2725  HG2 GLU A 266      10.889 -18.108  -1.544  1.00  0.00           H
ATOM   2726  HG3 GLU A 266      11.692 -19.632  -1.332  1.00  0.00           H
ATOM   2727  N   ASN A 267       6.841 -18.860  -2.098  1.00 29.70           N
ATOM   2728  CA  ASN A 267       5.494 -19.161  -1.602  1.00 28.37           C
ATOM   2729  C   ASN A 267       4.396 -18.642  -2.540  1.00 26.52           C
ATOM   2730  O   ASN A 267       3.215 -18.883  -2.283  1.00 27.70           O
ATOM   2731  CB  ASN A 267       5.287 -18.516  -0.212  1.00 29.57           C
ATOM   2732  CG  ASN A 267       5.960 -19.306   0.906  1.00 30.12           C
ATOM   2733  OD1 ASN A 267       5.365 -20.205   1.488  1.00 32.14           O
ATOM   2734  ND2 ASN A 267       7.197 -18.971   1.239  1.00 27.84           N
ATOM   2735  H   ASN A 267       7.356 -18.118  -1.640  1.00  0.00           H
ATOM   2736  HA  ASN A 267       5.366 -20.244  -1.529  1.00  0.00           H
ATOM   2737  HB2 ASN A 267       5.624 -17.478  -0.203  1.00  0.00           H
ATOM   2738  HB3 ASN A 267       4.227 -18.480   0.047  1.00  0.00           H
ATOM   2739 HD21 ASN A 267       7.667 -18.205   0.763  1.00  0.00           H
ATOM   2740 HD22 ASN A 267       7.586 -19.361   2.084  1.00  0.00           H
ATOM   2741  N   GLU A 268       4.772 -17.928  -3.612  1.00 28.56           N
ATOM   2742  CA  GLU A 268       3.932 -17.476  -4.717  1.00 29.03           C
ATOM   2743  C   GLU A 268       3.000 -16.351  -4.252  1.00 27.53           C
ATOM   2744  O   GLU A 268       1.785 -16.459  -4.381  1.00 29.81           O
ATOM   2745  CB  GLU A 268       3.209 -18.675  -5.393  1.00 31.12           C
ATOM   2746  CG  GLU A 268       4.100 -19.442  -6.387  1.00 34.99           C
ATOM   2747  CD  GLU A 268       4.370 -18.621  -7.637  1.00 36.24           C
ATOM   2748  OE1 GLU A 268       3.374 -18.100  -8.186  1.00 38.70           O
ATOM   2749  OE2 GLU A 268       5.562 -18.479  -7.983  1.00 37.35           O1-
ATOM   2750  H   GLU A 268       5.761 -17.743  -3.691  1.00  0.00           H
ATOM   2751  HA  GLU A 268       4.594 -17.004  -5.443  1.00  0.00           H
ATOM   2752  HB2 GLU A 268       2.799 -19.377  -4.671  1.00  0.00           H
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ATOM   2753  HB3 GLU A 268       2.328 -18.315  -5.918  1.00  0.00           H
ATOM   2754  HG2 GLU A 268       5.038 -19.734  -5.914  1.00  0.00           H
ATOM   2755  HG3 GLU A 268       3.605 -20.362  -6.695  1.00  0.00           H
ATOM   2756  N   LYS A 269       3.542 -15.310  -3.618  1.00 25.71           N
ATOM   2757  CA  LYS A 269       2.786 -14.200  -3.052  1.00 25.50           C
ATOM   2758  C   LYS A 269       3.393 -12.909  -3.615  1.00 24.82           C
ATOM   2759  O   LYS A 269       4.583 -12.668  -3.436  1.00 25.11           O
ATOM   2760  CB  LYS A 269       2.804 -14.308  -1.510  1.00 23.34           C
ATOM   2761  CG  LYS A 269       2.276 -15.645  -0.924  1.00 24.75           C
ATOM   2762  CD  LYS A 269       0.768 -15.904  -1.132  1.00 23.23           C
ATOM   2763  CE  LYS A 269       0.354 -17.391  -1.174  1.00 22.16           C
ATOM   2764  NZ  LYS A 269       0.651 -18.011  -2.475  1.00 22.20           N1+
ATOM   2765  H   LYS A 269       4.550 -15.280  -3.482  1.00  0.00           H
ATOM   2766  HA  LYS A 269       1.750 -14.228  -3.380  1.00  0.00           H
ATOM   2767  HB2 LYS A 269       3.836 -14.189  -1.182  1.00  0.00           H
ATOM   2768  HB3 LYS A 269       2.254 -13.469  -1.084  1.00  0.00           H
ATOM   2769  HG2 LYS A 269       2.858 -16.466  -1.333  1.00  0.00           H
ATOM   2770  HG3 LYS A 269       2.484 -15.665   0.147  1.00  0.00           H
ATOM   2771  HD2 LYS A 269       0.211 -15.435  -0.322  1.00  0.00           H
ATOM   2772  HD3 LYS A 269       0.416 -15.405  -2.032  1.00  0.00           H
ATOM   2773  HE2 LYS A 269       0.829 -17.960  -0.374  1.00  0.00           H
ATOM   2774  HE3 LYS A 269      -0.721 -17.472  -1.009  1.00  0.00           H
ATOM   2775  HZ1 LYS A 269      -0.128 -18.586  -2.854  1.00  0.00           H
ATOM   2776  HZ2 LYS A 269       0.777 -17.299  -3.187  1.00  0.00           H
ATOM   2777  HZ3 LYS A 269       1.508 -18.555  -2.448  1.00  0.00           H
ATOM   2778  N   VAL A 270       2.597 -12.124  -4.350  1.00 24.36           N
ATOM   2779  CA  VAL A 270       3.023 -10.981  -5.166  1.00 23.54           C
ATOM   2780  C   VAL A 270       2.604  -9.656  -4.498  1.00 22.50           C
ATOM   2781  O   VAL A 270       3.219  -8.620  -4.757  1.00 23.72           O
ATOM   2782  CB  VAL A 270       2.389 -11.118  -6.588  1.00 23.18           C
ATOM   2783  CG1 VAL A 270       2.875 -10.046  -7.583  1.00 22.05           C
ATOM   2784  CG2 VAL A 270       2.621 -12.492  -7.253  1.00 23.42           C
ATOM   2785  H   VAL A 270       1.605 -12.346  -4.367  1.00  0.00           H
ATOM   2786  HA  VAL A 270       4.107 -10.947  -5.252  1.00  0.00           H
ATOM   2787  HB  VAL A 270       1.310 -10.997  -6.472  1.00  0.00           H
ATOM   2788 HG11 VAL A 270       2.445 -10.194  -8.574  1.00  0.00           H
ATOM   2789 HG12 VAL A 270       2.612  -9.036  -7.269  1.00  0.00           H
ATOM   2790 HG13 VAL A 270       3.956 -10.094  -7.701  1.00  0.00           H
ATOM   2791 HG21 VAL A 270       1.904 -12.646  -8.058  1.00  0.00           H
ATOM   2792 HG22 VAL A 270       3.604 -12.555  -7.714  1.00  0.00           H
ATOM   2793 HG23 VAL A 270       2.530 -13.341  -6.578  1.00  0.00           H
ATOM   2794  N   TYR A 271       1.595  -9.683  -3.620  1.00 21.55           N
ATOM   2795  CA  TYR A 271       1.123  -8.548  -2.841  1.00 22.01           C
ATOM   2796  C   TYR A 271       0.871  -9.052  -1.420  1.00 20.85           C
ATOM   2797  O   TYR A 271      -0.021  -9.874  -1.214  1.00 21.84           O
ATOM   2798  CB  TYR A 271      -0.109  -7.916  -3.526  1.00 19.56           C
ATOM   2799  CG  TYR A 271      -0.661  -6.674  -2.846  1.00 18.54           C
ATOM   2800  CD1 TYR A 271      -0.215  -5.392  -3.232  1.00 18.88           C
ATOM   2801  CD2 TYR A 271      -1.622  -6.794  -1.819  1.00 19.17           C
ATOM   2802  CE1 TYR A 271      -0.726  -4.245  -2.595  1.00 16.85           C
ATOM   2803  CE2 TYR A 271      -2.130  -5.645  -1.186  1.00 18.66           C
ATOM   2804  CZ  TYR A 271      -1.690  -4.368  -1.577  1.00 18.55           C
ATOM   2805  OH  TYR A 271      -2.197  -3.257  -0.968  1.00 19.00           O
ATOM   2806  H   TYR A 271       1.132 -10.566  -3.440  1.00  0.00           H
ATOM   2807  HA  TYR A 271       1.904  -7.788  -2.788  1.00  0.00           H
ATOM   2808  HB2 TYR A 271       0.146  -7.650  -4.553  1.00  0.00           H
ATOM   2809  HB3 TYR A 271      -0.910  -8.653  -3.601  1.00  0.00           H
ATOM   2810  HD1 TYR A 271       0.519  -5.279  -4.017  1.00  0.00           H
ATOM   2811  HD2 TYR A 271      -1.971  -7.767  -1.505  1.00  0.00           H
ATOM   2812  HE1 TYR A 271      -0.373  -3.269  -2.888  1.00  0.00           H
ATOM   2813  HE2 TYR A 271      -2.859  -5.747  -0.395  1.00  0.00           H
ATOM   2814  HH  TYR A 271      -1.668  -2.456  -1.118  1.00  0.00           H
ATOM   2815  N   GLY A 272       1.668  -8.600  -0.453  1.00 20.02           N
ATOM   2816  CA  GLY A 272       1.565  -8.955   0.951  1.00 19.98           C
ATOM   2817  C   GLY A 272       1.298  -7.705   1.776  1.00 19.55           C
ATOM   2818  O   GLY A 272       2.038  -6.728   1.653  1.00 20.95           O
ATOM   2819  H   GLY A 272       2.426  -7.959  -0.676  1.00  0.00           H
ATOM   2820  HA2 GLY A 272       0.813  -9.713   1.123  1.00  0.00           H
ATOM   2821  HA3 GLY A 272       2.511  -9.387   1.265  1.00  0.00           H
ATOM   2822  N   PHE A 273       0.267  -7.736   2.621  1.00 19.12           N
ATOM   2823  CA  PHE A 273      -0.208  -6.602   3.411  1.00 19.96           C
ATOM   2824  C   PHE A 273      -0.533  -7.031   4.855  1.00 20.73           C
ATOM   2825  O   PHE A 273      -0.334  -8.186   5.238  1.00 21.45           O
ATOM   2826  CB  PHE A 273      -1.359  -5.879   2.659  1.00 20.09           C
ATOM   2827  CG  PHE A 273      -2.682  -6.628   2.697  1.00 21.22           C
ATOM   2828  CD1 PHE A 273      -2.905  -7.724   1.839  1.00 20.84           C
ATOM   2829  CD2 PHE A 273      -3.653  -6.293   3.663  1.00 20.08           C
ATOM   2830  CE1 PHE A 273      -4.051  -8.524   2.001  1.00 20.71           C
ATOM   2831  CE2 PHE A 273      -4.784  -7.108   3.840  1.00 20.46           C
ATOM   2832  CZ  PHE A 273      -4.979  -8.227   3.014  1.00 22.49           C
ATOM   2833  H   PHE A 273      -0.296  -8.582   2.673  1.00  0.00           H
ATOM   2834  HA  PHE A 273       0.614  -5.895   3.507  1.00  0.00           H
ATOM   2835  HB2 PHE A 273      -1.505  -4.886   3.086  1.00  0.00           H
ATOM   2836  HB3 PHE A 273      -1.076  -5.699   1.621  1.00  0.00           H
ATOM   2837  HD1 PHE A 273      -2.174  -7.988   1.088  1.00  0.00           H
ATOM   2838  HD2 PHE A 273      -3.509  -5.444   4.315  1.00  0.00           H
ATOM   2839  HE1 PHE A 273      -4.208  -9.381   1.365  1.00  0.00           H
ATOM   2840  HE2 PHE A 273      -5.493  -6.889   4.622  1.00  0.00           H
ATOM   2841  HZ  PHE A 273      -5.848  -8.846   3.151  1.00  0.00           H
ATOM   2842  N   THR A 274      -1.038  -6.091   5.660  1.00 20.67           N
ATOM   2843  CA  THR A 274      -1.546  -6.307   7.011  1.00 19.86           C
ATOM   2844  C   THR A 274      -2.934  -5.657   7.140  1.00 23.58           C
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ATOM   2845  O   THR A 274      -3.955  -6.274   6.838  1.00 27.01           O
ATOM   2846  CB  THR A 274      -0.496  -5.880   8.071  1.00 23.05           C
ATOM   2847  OG1 THR A 274       0.010  -4.578   7.814  1.00 20.98           O
ATOM   2848  CG2 THR A 274       0.669  -6.863   8.242  1.00 20.44           C
ATOM   2849  H   THR A 274      -1.211  -5.178   5.267  1.00  0.00           H
ATOM   2850  HA  THR A 274      -1.737  -7.372   7.164  1.00  0.00           H
ATOM   2851  HB  THR A 274      -0.999  -5.808   9.028  1.00  0.00           H
ATOM   2852  HG1 THR A 274       0.685  -4.661   7.152  1.00  0.00           H
ATOM   2853 HG21 THR A 274       1.376  -6.519   8.998  1.00  0.00           H
ATOM   2854 HG22 THR A 274       0.299  -7.837   8.567  1.00  0.00           H
ATOM   2855 HG23 THR A 274       1.215  -7.017   7.313  1.00  0.00           H
ATOM   2856  N   VAL A 275      -2.983  -4.394   7.567  1.00 21.17           N
ATOM   2857  CA  VAL A 275      -4.214  -3.681   7.891  1.00 19.25           C
ATOM   2858  C   VAL A 275      -5.049  -3.423   6.610  1.00 18.02           C
ATOM   2859  O   VAL A 275      -4.511  -3.123   5.542  1.00 19.67           O
ATOM   2860  CB  VAL A 275      -3.855  -2.360   8.625  1.00 17.62           C
ATOM   2861  CG1 VAL A 275      -5.094  -1.722   9.281  1.00 17.33           C
ATOM   2862  CG2 VAL A 275      -2.769  -2.536   9.710  1.00 17.17           C
ATOM   2863  H   VAL A 275      -2.097  -3.945   7.756  1.00  0.00           H
ATOM   2864  HA  VAL A 275      -4.786  -4.321   8.568  1.00  0.00           H
ATOM   2865  HB  VAL A 275      -3.459  -1.675   7.876  1.00  0.00           H
ATOM   2866 HG11 VAL A 275      -4.844  -0.818   9.835  1.00  0.00           H
ATOM   2867 HG12 VAL A 275      -5.859  -1.450   8.553  1.00  0.00           H
ATOM   2868 HG13 VAL A 275      -5.533  -2.415   9.997  1.00  0.00           H
ATOM   2869 HG21 VAL A 275      -2.588  -1.603  10.246  1.00  0.00           H
ATOM   2870 HG22 VAL A 275      -3.073  -3.282  10.447  1.00  0.00           H
ATOM   2871 HG23 VAL A 275      -1.812  -2.850   9.294  1.00  0.00           H
ATOM   2872  N   SER A 276      -6.372  -3.549   6.718  1.00 18.71           N
ATOM   2873  CA  SER A 276      -7.349  -3.387   5.647  1.00 19.95           C
ATOM   2874  C   SER A 276      -8.625  -2.779   6.241  1.00 18.73           C
ATOM   2875  O   SER A 276      -8.971  -3.073   7.385  1.00 22.68           O
ATOM   2876  CB  SER A 276      -7.497  -4.713   4.876  1.00 18.49           C
ATOM   2877  OG  SER A 276      -7.648  -5.808   5.759  1.00 20.03           O
ATOM   2878  H   SER A 276      -6.784  -3.754   7.619  1.00  0.00           H
ATOM   2879  HA  SER A 276      -6.966  -2.640   4.948  1.00  0.00           H
ATOM   2880  HB2 SER A 276      -8.349  -4.672   4.195  1.00  0.00           H
ATOM   2881  HB3 SER A 276      -6.613  -4.891   4.269  1.00  0.00           H
ATOM   2882  HG  SER A 276      -6.837  -5.891   6.248  1.00  0.00           H
ATOM   2883  N   ILE A 277      -9.276  -1.868   5.515  1.00 19.56           N
ATOM   2884  CA  ILE A 277     -10.179  -0.863   6.065  1.00 18.81           C
ATOM   2885  C   ILE A 277     -11.272  -0.489   5.050  1.00 17.40           C
ATOM   2886  O   ILE A 277     -11.158  -0.793   3.860  1.00 17.52           O
ATOM   2887  CB  ILE A 277      -9.313   0.314   6.615  1.00 16.88           C
ATOM   2888  CG1 ILE A 277     -10.076   1.256   7.566  1.00 21.77           C
ATOM   2889  CG2 ILE A 277      -8.647   1.116   5.490  1.00 21.13           C
ATOM   2890  CD1 ILE A 277      -9.169   2.166   8.410  1.00 19.17           C
ATOM   2891  H   ILE A 277      -9.039  -1.757   4.529  1.00  0.00           H
ATOM   2892  HA  ILE A 277     -10.714  -1.314   6.897  1.00  0.00           H
ATOM   2893  HB  ILE A 277      -8.509  -0.123   7.209  1.00  0.00           H
ATOM   2894 HG12 ILE A 277     -10.778   1.873   7.008  1.00  0.00           H
ATOM   2895 HG13 ILE A 277     -10.677   0.649   8.237  1.00  0.00           H
ATOM   2896 HG21 ILE A 277      -7.969   1.862   5.892  1.00  0.00           H
ATOM   2897 HG22 ILE A 277      -8.075   0.485   4.810  1.00  0.00           H
ATOM   2898 HG23 ILE A 277      -9.394   1.650   4.908  1.00  0.00           H
ATOM   2899 HD11 ILE A 277      -9.760   2.751   9.114  1.00  0.00           H
ATOM   2900 HD12 ILE A 277      -8.449   1.585   8.988  1.00  0.00           H
ATOM   2901 HD13 ILE A 277      -8.612   2.872   7.795  1.00  0.00           H
ATOM   2902  N   HIS A 278     -12.315   0.190   5.534  1.00 17.40           N
ATOM   2903  CA  HIS A 278     -13.327   0.901   4.756  1.00 18.62           C
ATOM   2904  C   HIS A 278     -12.751   2.235   4.259  1.00 20.19           C
ATOM   2905  O   HIS A 278     -11.980   2.877   4.978  1.00 22.16           O
ATOM   2906  CB  HIS A 278     -14.495   1.269   5.700  1.00 19.60           C
ATOM   2907  CG  HIS A 278     -15.691   0.377   5.601  1.00 19.20           C
ATOM   2908  ND1 HIS A 278     -16.726   0.634   4.696  1.00 19.72           N
ATOM   2909  CD2 HIS A 278     -16.003  -0.743   6.336  1.00 19.63           C
ATOM   2910  CE1 HIS A 278     -17.622  -0.317   4.927  1.00 18.30           C
ATOM   2911  NE2 HIS A 278     -17.253  -1.146   5.900  1.00 20.42           N
ATOM   2912  H   HIS A 278     -12.344   0.340   6.535  1.00  0.00           H
ATOM   2913  HA  HIS A 278     -13.671   0.295   3.917  1.00  0.00           H
ATOM   2914  HB2 HIS A 278     -14.168   1.292   6.739  1.00  0.00           H
ATOM   2915  HB3 HIS A 278     -14.864   2.279   5.516  1.00  0.00           H
ATOM   2916  HD2 HIS A 278     -15.466  -1.250   7.123  1.00  0.00           H
ATOM   2917  HE1 HIS A 278     -18.561  -0.396   4.396  1.00  0.00           H
ATOM   2918  HE2 HIS A 278     -17.807  -1.905   6.290  1.00  0.00           H
ATOM   2919  N   GLU A 279     -13.171   2.699   3.077  1.00 18.56           N
ATOM   2920  CA  GLU A 279     -12.987   4.082   2.639  1.00 20.35           C
ATOM   2921  C   GLU A 279     -14.292   4.871   2.844  1.00 20.15           C
ATOM   2922  O   GLU A 279     -15.379   4.290   2.900  1.00 21.21           O
ATOM   2923  CB  GLU A 279     -12.546   4.149   1.154  1.00 18.12           C
ATOM   2924  CG  GLU A 279     -12.097   5.539   0.623  1.00 19.55           C
ATOM   2925  CD  GLU A 279     -11.095   6.295   1.503  1.00 21.45           C
ATOM   2926  OE1 GLU A 279     -11.413   6.604   2.672  1.00 21.73           O
ATOM   2927  OE2 GLU A 279      -9.996   6.623   1.020  1.00 20.95           O1-
ATOM   2928  H   GLU A 279     -13.784   2.108   2.525  1.00  0.00           H
ATOM   2929  HA  GLU A 279     -12.211   4.510   3.254  1.00  0.00           H
ATOM   2930  HB2 GLU A 279     -11.726   3.462   0.978  1.00  0.00           H
ATOM   2931  HB3 GLU A 279     -13.357   3.783   0.522  1.00  0.00           H
ATOM   2932  HG2 GLU A 279     -11.662   5.417  -0.369  1.00  0.00           H
ATOM   2933  HG3 GLU A 279     -12.962   6.183   0.477  1.00  0.00           H
ATOM   2934  N   TYR A 280     -14.184   6.200   2.919  1.00 20.93           N
ATOM   2935  CA  TYR A 280     -15.316   7.120   2.918  1.00 21.95           C
ATOM   2936  C   TYR A 280     -15.749   7.291   1.452  1.00 20.59           C
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ATOM   2937  O   TYR A 280     -15.002   7.842   0.635  1.00 20.61           O
ATOM   2938  CB  TYR A 280     -14.892   8.513   3.434  1.00 23.30           C
ATOM   2939  CG  TYR A 280     -14.079   8.555   4.708  1.00 26.62           C
ATOM   2940  CD1 TYR A 280     -14.695   8.455   5.971  1.00 30.13           C
ATOM   2941  CD2 TYR A 280     -12.684   8.718   4.620  1.00 30.20           C
ATOM   2942  CE1 TYR A 280     -13.913   8.516   7.141  1.00 31.13           C
ATOM   2943  CE2 TYR A 280     -11.909   8.751   5.787  1.00 32.21           C
ATOM   2944  CZ  TYR A 280     -12.516   8.655   7.047  1.00 32.49           C
ATOM   2945  OH  TYR A 280     -11.746   8.717   8.171  1.00 34.99           O
ATOM   2946  H   TYR A 280     -13.240   6.586   2.843  1.00  0.00           H
ATOM   2947  HA  TYR A 280     -16.128   6.729   3.535  1.00  0.00           H
ATOM   2948  HB2 TYR A 280     -14.314   9.046   2.682  1.00  0.00           H
ATOM   2949  HB3 TYR A 280     -15.787   9.112   3.595  1.00  0.00           H
ATOM   2950  HD1 TYR A 280     -15.763   8.323   6.051  1.00  0.00           H
ATOM   2951  HD2 TYR A 280     -12.197   8.797   3.658  1.00  0.00           H
ATOM   2952  HE1 TYR A 280     -14.397   8.426   8.101  1.00  0.00           H
ATOM   2953  HE2 TYR A 280     -10.845   8.857   5.696  1.00  0.00           H
ATOM   2954  HH  TYR A 280     -10.817   8.703   7.957  1.00  0.00           H
ATOM   2955  N   GLU A 281     -16.963   6.845   1.130  1.00 22.29           N
ATOM   2956  CA  GLU A 281     -17.705   7.017  -0.120  1.00 20.70           C
ATOM   2957  C   GLU A 281     -17.585   8.425  -0.741  1.00 20.87           C
ATOM   2958  O   GLU A 281     -17.315   8.555  -1.936  1.00 18.87           O
ATOM   2959  CB  GLU A 281     -19.164   6.534   0.108  1.00 21.60           C
ATOM   2960  CG  GLU A 281     -20.087   7.438   0.969  1.00 27.54           C
ATOM   2961  CD  GLU A 281     -19.483   7.756   2.330  1.00 30.84           C
ATOM   2962  OE1 GLU A 281     -19.163   6.797   3.062  1.00 32.62           O
ATOM   2963  OE2 GLU A 281     -19.098   8.923   2.544  1.00 35.66           O1-
ATOM   2964  H   GLU A 281     -17.533   6.517   1.910  1.00  0.00           H
ATOM   2965  HA  GLU A 281     -17.245   6.327  -0.828  1.00  0.00           H
ATOM   2966  HB2 GLU A 281     -19.636   6.406  -0.865  1.00  0.00           H
ATOM   2967  HB3 GLU A 281     -19.144   5.538   0.551  1.00  0.00           H
ATOM   2968  HG2 GLU A 281     -20.310   8.371   0.451  1.00  0.00           H
ATOM   2969  HG3 GLU A 281     -21.043   6.942   1.133  1.00  0.00           H
ATOM   2970  N   VAL A 282     -17.713   9.474   0.083  1.00 20.46           N
ATOM   2971  CA  VAL A 282     -17.636  10.886  -0.285  1.00 20.98           C
ATOM   2972  C   VAL A 282     -16.271  11.322  -0.881  1.00 20.93           C
ATOM   2973  O   VAL A 282     -16.220  12.343  -1.570  1.00 18.59           O
ATOM   2974  CB  VAL A 282     -18.061  11.730   0.953  1.00 21.34           C
ATOM   2975  CG1 VAL A 282     -17.097  11.609   2.149  1.00 22.74           C
ATOM   2976  CG2 VAL A 282     -18.371  13.201   0.620  1.00 22.47           C
ATOM   2977  H   VAL A 282     -18.031   9.269   1.036  1.00  0.00           H
ATOM   2978  HA  VAL A 282     -18.378  11.037  -1.071  1.00  0.00           H
ATOM   2979  HB  VAL A 282     -19.012  11.315   1.295  1.00  0.00           H
ATOM   2980 HG11 VAL A 282     -17.428  12.220   2.990  1.00  0.00           H
ATOM   2981 HG12 VAL A 282     -17.060  10.583   2.509  1.00  0.00           H
ATOM   2982 HG13 VAL A 282     -16.079  11.903   1.900  1.00  0.00           H
ATOM   2983 HG21 VAL A 282     -18.761  13.724   1.494  1.00  0.00           H
ATOM   2984 HG22 VAL A 282     -17.488  13.737   0.281  1.00  0.00           H
ATOM   2985 HG23 VAL A 282     -19.123  13.270  -0.166  1.00  0.00           H
ATOM   2986  N   THR A 283     -15.181  10.565  -0.671  1.00 19.91           N
ATOM   2987  CA  THR A 283     -13.866  10.868  -1.252  1.00 18.39           C
ATOM   2988  C   THR A 283     -13.702  10.262  -2.665  1.00 19.45           C
ATOM   2989  O   THR A 283     -12.799  10.676  -3.393  1.00 20.36           O
ATOM   2990  CB  THR A 283     -12.736  10.342  -0.320  1.00 20.55           C
ATOM   2991  OG1 THR A 283     -12.678   8.934  -0.201  1.00 18.62           O
ATOM   2992  CG2 THR A 283     -12.749  10.958   1.082  1.00 17.56           C
ATOM   2993  H   THR A 283     -15.286   9.703  -0.146  1.00  0.00           H
ATOM   2994  HA  THR A 283     -13.742  11.949  -1.346  1.00  0.00           H
ATOM   2995  HB  THR A 283     -11.787  10.628  -0.773  1.00  0.00           H
ATOM   2996  HG1 THR A 283     -13.490   8.594   0.182  1.00  0.00           H
ATOM   2997 HG21 THR A 283     -11.984  10.515   1.720  1.00  0.00           H
ATOM   2998 HG22 THR A 283     -12.536  12.020   1.015  1.00  0.00           H
ATOM   2999 HG23 THR A 283     -13.712  10.851   1.578  1.00  0.00           H
ATOM   3000  N   ILE A 284     -14.576   9.321  -3.061  1.00 16.54           N
ATOM   3001  CA  ILE A 284     -14.465   8.478  -4.254  1.00 16.06           C
ATOM   3002  C   ILE A 284     -15.675   8.448  -5.240  1.00 16.32           C
ATOM   3003  O   ILE A 284     -15.772   7.435  -5.942  1.00 18.94           O
ATOM   3004  CB  ILE A 284     -13.995   7.057  -3.806  1.00 14.12           C
ATOM   3005  CG1 ILE A 284     -15.014   6.337  -2.893  1.00 16.19           C
ATOM   3006  CG2 ILE A 284     -12.613   7.084  -3.142  1.00 14.01           C
ATOM   3007  CD1 ILE A 284     -14.665   4.868  -2.622  1.00 12.12           C
ATOM   3008  H   ILE A 284     -15.340   9.096  -2.434  1.00  0.00           H
ATOM   3009  HA  ILE A 284     -13.671   8.884  -4.883  1.00  0.00           H
ATOM   3010  HB  ILE A 284     -13.880   6.452  -4.699  1.00  0.00           H
ATOM   3011 HG12 ILE A 284     -15.094   6.860  -1.939  1.00  0.00           H
ATOM   3012 HG13 ILE A 284     -16.008   6.374  -3.340  1.00  0.00           H
ATOM   3013 HG21 ILE A 284     -12.145   6.101  -3.131  1.00  0.00           H
ATOM   3014 HG22 ILE A 284     -11.937   7.772  -3.645  1.00  0.00           H
ATOM   3015 HG23 ILE A 284     -12.696   7.396  -2.107  1.00  0.00           H
ATOM   3016 HD11 ILE A 284     -15.451   4.393  -2.039  1.00  0.00           H
ATOM   3017 HD12 ILE A 284     -14.549   4.309  -3.550  1.00  0.00           H
ATOM   3018 HD13 ILE A 284     -13.742   4.772  -2.050  1.00  0.00           H
ATOM   3019  N   PRO A 285     -16.576   9.466  -5.368  1.00 17.10           N
ATOM   3020  CA  PRO A 285     -17.740   9.468  -6.285  1.00 18.10           C
ATOM   3021  C   PRO A 285     -17.576   8.906  -7.708  1.00 18.61           C
ATOM   3022  O   PRO A 285     -18.520   8.305  -8.226  1.00 21.16           O
ATOM   3023  CB  PRO A 285     -18.221  10.922  -6.353  1.00 19.30           C
ATOM   3024  CG  PRO A 285     -17.839  11.501  -5.010  1.00 19.72           C
ATOM   3025  CD  PRO A 285     -16.593  10.716  -4.600  1.00 17.67           C
ATOM   3026  HA  PRO A 285     -18.505   8.869  -5.789  1.00  0.00           H
ATOM   3027  HB2 PRO A 285     -17.697  11.465  -7.142  1.00  0.00           H
ATOM   3028  HB3 PRO A 285     -19.290  10.998  -6.555  1.00  0.00           H
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ATOM   3029  HG2 PRO A 285     -17.672  12.578  -5.037  1.00  0.00           H
ATOM   3030  HG3 PRO A 285     -18.638  11.308  -4.292  1.00  0.00           H
ATOM   3031  HD2 PRO A 285     -15.677  11.274  -4.789  1.00  0.00           H
ATOM   3032  HD3 PRO A 285     -16.672  10.524  -3.536  1.00  0.00           H
ATOM   3033  N   THR A 286     -16.407   9.070  -8.344  1.00 19.69           N
ATOM   3034  CA  THR A 286     -16.158   8.574  -9.690  1.00 19.30           C
ATOM   3035  C   THR A 286     -14.997   7.561  -9.778  1.00 20.60           C
ATOM   3036  O   THR A 286     -14.749   7.063 -10.875  1.00 18.78           O
ATOM   3037  CB  THR A 286     -16.194   9.733 -10.733  1.00 21.39           C
ATOM   3038  OG1 THR A 286     -15.152  10.682 -10.596  1.00 21.34           O
ATOM   3039  CG2 THR A 286     -17.517  10.514 -10.755  1.00 19.97           C
ATOM   3040  H   THR A 286     -15.713   9.717  -7.950  1.00  0.00           H
ATOM   3041  HA  THR A 286     -16.992   7.939  -9.984  1.00  0.00           H
ATOM   3042  HB  THR A 286     -16.068   9.285 -11.720  1.00  0.00           H
ATOM   3043  HG1 THR A 286     -15.221  11.116  -9.735  1.00  0.00           H
ATOM   3044 HG21 THR A 286     -17.540  11.220 -11.584  1.00  0.00           H
ATOM   3045 HG22 THR A 286     -18.367   9.844 -10.872  1.00  0.00           H
ATOM   3046 HG23 THR A 286     -17.665  11.078  -9.833  1.00  0.00           H
ATOM   3047  N   LEU A 287     -14.348   7.161  -8.665  1.00 19.85           N
ATOM   3048  CA  LEU A 287     -13.190   6.239  -8.646  1.00 20.60           C
ATOM   3049  C   LEU A 287     -13.610   4.849  -9.137  1.00 20.95           C
ATOM   3050  O   LEU A 287     -13.094   4.348 -10.139  1.00 18.74           O
ATOM   3051  CB  LEU A 287     -12.597   6.135  -7.214  1.00 19.84           C
ATOM   3052  CG  LEU A 287     -11.157   5.560  -7.082  1.00 24.19           C
ATOM   3053  CD1 LEU A 287     -10.652   5.718  -5.642  1.00 17.69           C
ATOM   3054  CD2 LEU A 287     -10.996   4.085  -7.493  1.00 20.76           C
ATOM   3055  H   LEU A 287     -14.646   7.567  -7.786  1.00  0.00           H
ATOM   3056  HA  LEU A 287     -12.424   6.619  -9.321  1.00  0.00           H
ATOM   3057  HB2 LEU A 287     -12.586   7.139  -6.789  1.00  0.00           H
ATOM   3058  HB3 LEU A 287     -13.263   5.558  -6.574  1.00  0.00           H
ATOM   3059  HG  LEU A 287     -10.497   6.149  -7.718  1.00  0.00           H
ATOM   3060 HD11 LEU A 287      -9.597   5.458  -5.556  1.00  0.00           H
ATOM   3061 HD12 LEU A 287     -10.755   6.745  -5.297  1.00  0.00           H
ATOM   3062 HD13 LEU A 287     -11.204   5.074  -4.957  1.00  0.00           H
ATOM   3063 HD21 LEU A 287     -10.030   3.689  -7.179  1.00  0.00           H
ATOM   3064 HD22 LEU A 287     -11.763   3.452  -7.045  1.00  0.00           H
ATOM   3065 HD23 LEU A 287     -11.029   3.960  -8.574  1.00  0.00           H
ATOM   3066  N   TRP A 288     -14.594   4.248  -8.455  1.00 18.96           N
ATOM   3067  CA  TRP A 288     -15.121   2.926  -8.786  1.00 20.78           C
ATOM   3068  C   TRP A 288     -15.817   2.943 -10.155  1.00 21.73           C
ATOM   3069  O   TRP A 288     -15.716   1.979 -10.903  1.00 21.01           O
ATOM   3070  CB  TRP A 288     -16.110   2.465  -7.701  1.00 16.55           C
ATOM   3071  CG  TRP A 288     -16.785   1.159  -7.999  1.00 19.20           C
ATOM   3072  CD1 TRP A 288     -18.072   1.022  -8.391  1.00 17.19           C
ATOM   3073  CD2 TRP A 288     -16.227  -0.190  -7.964  1.00 18.61           C
ATOM   3074  NE1 TRP A 288     -18.339  -0.309  -8.622  1.00 18.83           N
ATOM   3075  CE3 TRP A 288     -14.964  -0.738  -7.633  1.00 16.92           C
ATOM   3076  CE2 TRP A 288     -17.248  -1.109  -8.355  1.00 18.36           C
ATOM   3077  CZ3 TRP A 288     -14.735  -2.129  -7.679  1.00 21.22           C
ATOM   3078  CZ2 TRP A 288     -17.031  -2.496  -8.402  1.00 20.24           C
ATOM   3079  CH2 TRP A 288     -15.767  -3.008  -8.059  1.00 22.41           C
ATOM   3080  H   TRP A 288     -14.956   4.728  -7.644  1.00  0.00           H
ATOM   3081  HA  TRP A 288     -14.291   2.218  -8.826  1.00  0.00           H
ATOM   3082  HB2 TRP A 288     -15.595   2.361  -6.745  1.00  0.00           H
ATOM   3083  HB3 TRP A 288     -16.882   3.222  -7.554  1.00  0.00           H
ATOM   3084  HD1 TRP A 288     -18.761   1.842  -8.537  1.00  0.00           H
ATOM   3085  HE1 TRP A 288     -19.239  -0.628  -9.003  1.00  0.00           H
ATOM   3086  HE3 TRP A 288     -14.164  -0.081  -7.326  1.00  0.00           H
ATOM   3087  HZ3 TRP A 288     -13.763  -2.522  -7.420  1.00  0.00           H
ATOM   3088  HZ2 TRP A 288     -17.829  -3.162  -8.690  1.00  0.00           H
ATOM   3089  HH2 TRP A 288     -15.584  -4.073  -8.090  1.00  0.00           H
ATOM   3090  N   GLN A 289     -16.470   4.059 -10.504  1.00 23.21           N
ATOM   3091  CA  GLN A 289     -17.132   4.265 -11.788  1.00 24.00           C
ATOM   3092  C   GLN A 289     -16.105   4.238 -12.937  1.00 23.78           C
ATOM   3093  O   GLN A 289     -16.274   3.479 -13.884  1.00 21.70           O
ATOM   3094  CB  GLN A 289     -17.921   5.587 -11.713  1.00 26.05           C
ATOM   3095  CG  GLN A 289     -18.863   5.838 -12.906  1.00 30.79           C
ATOM   3096  CD  GLN A 289     -19.871   6.975 -12.700  1.00 32.56           C
ATOM   3097  OE1 GLN A 289     -20.649   7.271 -13.596  1.00 33.91           O
ATOM   3098  NE2 GLN A 289     -19.910   7.630 -11.542  1.00 33.71           N
ATOM   3099  H   GLN A 289     -16.439   4.823  -9.849  1.00  0.00           H
ATOM   3100  HA  GLN A 289     -17.833   3.442 -11.940  1.00  0.00           H
ATOM   3101  HB2 GLN A 289     -18.505   5.569 -10.792  1.00  0.00           H
ATOM   3102  HB3 GLN A 289     -17.231   6.426 -11.637  1.00  0.00           H
ATOM   3103  HG2 GLN A 289     -18.287   6.047 -13.809  1.00  0.00           H
ATOM   3104  HG3 GLN A 289     -19.437   4.935 -13.119  1.00  0.00           H
ATOM   3105 HE21 GLN A 289     -19.319   7.390 -10.761  1.00  0.00           H
ATOM   3106 HE22 GLN A 289     -20.602   8.356 -11.450  1.00  0.00           H
ATOM   3107  N   THR A 290     -14.987   4.960 -12.795  1.00 23.31           N
ATOM   3108  CA  THR A 290     -13.902   4.997 -13.779  1.00 22.84           C
ATOM   3109  C   THR A 290     -13.123   3.657 -13.800  1.00 22.38           C
ATOM   3110  O   THR A 290     -12.598   3.272 -14.843  1.00 22.84           O
ATOM   3111  CB  THR A 290     -12.973   6.189 -13.433  1.00 24.30           C
ATOM   3112  OG1 THR A 290     -13.749   7.374 -13.329  1.00 25.09           O
ATOM   3113  CG2 THR A 290     -11.898   6.478 -14.484  1.00 22.40           C
ATOM   3114  H   THR A 290     -14.879   5.540 -11.972  1.00  0.00           H
ATOM   3115  HA  THR A 290     -14.334   5.155 -14.770  1.00  0.00           H
ATOM   3116  HB  THR A 290     -12.485   6.015 -12.471  1.00  0.00           H
ATOM   3117  HG1 THR A 290     -14.194   7.326 -12.482  1.00  0.00           H
ATOM   3118 HG21 THR A 290     -11.312   7.360 -14.225  1.00  0.00           H
ATOM   3119 HG22 THR A 290     -11.196   5.652 -14.566  1.00  0.00           H
ATOM   3120 HG23 THR A 290     -12.329   6.644 -15.472  1.00  0.00           H
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ATOM   3121  N   SER A 291     -13.113   2.901 -12.689  1.00 19.88           N
ATOM   3122  CA  SER A 291     -12.575   1.540 -12.635  1.00 20.14           C
ATOM   3123  C   SER A 291     -13.522   0.544 -13.339  1.00 20.06           C
ATOM   3124  O   SER A 291     -13.066  -0.403 -13.978  1.00 19.13           O
ATOM   3125  CB  SER A 291     -12.403   1.111 -11.162  1.00 19.42           C
ATOM   3126  OG  SER A 291     -11.491   1.964 -10.484  1.00 19.96           O
ATOM   3127  H   SER A 291     -13.531   3.284 -11.852  1.00  0.00           H
ATOM   3128  HA  SER A 291     -11.613   1.517 -13.150  1.00  0.00           H
ATOM   3129  HB2 SER A 291     -13.353   1.092 -10.632  1.00  0.00           H
ATOM   3130  HB3 SER A 291     -12.017   0.091 -11.120  1.00  0.00           H
ATOM   3131  HG  SER A 291     -11.866   2.843 -10.459  1.00  0.00           H
ATOM   3132  N   MET A 292     -14.841   0.786 -13.299  1.00 22.05           N
ATOM   3133  CA  MET A 292     -15.852   0.066 -14.071  1.00 23.75           C
ATOM   3134  C   MET A 292     -15.614   0.313 -15.572  1.00 23.08           C
ATOM   3135  O   MET A 292     -15.577  -0.639 -16.339  1.00 23.18           O
ATOM   3136  CB  MET A 292     -17.275   0.495 -13.632  1.00 23.46           C
ATOM   3137  CG  MET A 292     -18.209  -0.663 -13.233  1.00 23.79           C
ATOM   3138  SD  MET A 292     -19.033  -1.543 -14.595  1.00 24.01           S
ATOM   3139  CE  MET A 292     -17.886  -2.925 -14.858  1.00 23.71           C
ATOM   3140  H   MET A 292     -15.164   1.549 -12.714  1.00  0.00           H
ATOM   3141  HA  MET A 292     -15.714  -0.998 -13.870  1.00  0.00           H
ATOM   3142  HB2 MET A 292     -17.200   1.136 -12.756  1.00  0.00           H
ATOM   3143  HB3 MET A 292     -17.754   1.125 -14.382  1.00  0.00           H
ATOM   3144  HG2 MET A 292     -17.701  -1.373 -12.578  1.00  0.00           H
ATOM   3145  HG3 MET A 292     -19.011  -0.243 -12.625  1.00  0.00           H
ATOM   3146  HE1 MET A 292     -18.280  -3.603 -15.616  1.00  0.00           H
ATOM   3147  HE2 MET A 292     -16.918  -2.570 -15.203  1.00  0.00           H
ATOM   3148  HE3 MET A 292     -17.741  -3.489 -13.936  1.00  0.00           H
ATOM   3149  N   ASP A 293     -15.306   1.548 -15.988  1.00 25.20           N
ATOM   3150  CA  ASP A 293     -14.884   1.919 -17.355  1.00 24.42           C
ATOM   3151  C   ASP A 293     -13.406   1.577 -17.665  1.00 24.19           C
ATOM   3152  O   ASP A 293     -12.824   2.046 -18.652  1.00 22.66           O
ATOM   3153  CB  ASP A 293     -15.220   3.402 -17.644  1.00 25.99           C
ATOM   3154  CG  ASP A 293     -16.729   3.600 -17.725  1.00 25.87           C
ATOM   3155  OD1 ASP A 293     -17.411   3.635 -16.678  1.00 25.88           O
ATOM   3156  OD2 ASP A 293     -17.305   3.481 -18.826  1.00 26.97           O1-
ATOM   3157  H   ASP A 293     -15.443   2.310 -15.327  1.00  0.00           H
ATOM   3158  HA  ASP A 293     -15.445   1.314 -18.065  1.00  0.00           H
ATOM   3159  HB2 ASP A 293     -14.807   4.055 -16.877  1.00  0.00           H
ATOM   3160  HB3 ASP A 293     -14.795   3.725 -18.595  1.00  0.00           H
ATOM   3161  N   PHE A 294     -12.816   0.675 -16.873  1.00 22.53           N
ATOM   3162  CA  PHE A 294     -11.728  -0.208 -17.270  1.00 21.67           C
ATOM   3163  C   PHE A 294     -12.305  -1.626 -17.436  1.00 22.37           C
ATOM   3164  O   PHE A 294     -12.182  -2.197 -18.511  1.00 23.42           O
ATOM   3165  CB  PHE A 294     -10.595  -0.175 -16.229  1.00 21.57           C
ATOM   3166  CG  PHE A 294      -9.430  -1.085 -16.560  1.00 21.32           C
ATOM   3167  CD1 PHE A 294      -8.478  -0.700 -17.528  1.00 23.19           C
ATOM   3168  CD2 PHE A 294      -9.311  -2.334 -15.916  1.00 21.72           C
ATOM   3169  CE1 PHE A 294      -7.390  -1.545 -17.816  1.00 21.37           C
ATOM   3170  CE2 PHE A 294      -8.232  -3.181 -16.221  1.00 24.26           C
ATOM   3171  CZ  PHE A 294      -7.257  -2.773 -17.144  1.00 21.92           C
ATOM   3172  H   PHE A 294     -13.351   0.389 -16.066  1.00  0.00           H
ATOM   3173  HA  PHE A 294     -11.313   0.093 -18.231  1.00  0.00           H
ATOM   3174  HB2 PHE A 294     -10.214   0.842 -16.132  1.00  0.00           H
ATOM   3175  HB3 PHE A 294     -10.961  -0.443 -15.240  1.00  0.00           H
ATOM   3176  HD1 PHE A 294      -8.559   0.245 -18.044  1.00  0.00           H
ATOM   3177  HD2 PHE A 294     -10.044  -2.654 -15.190  1.00  0.00           H
ATOM   3178  HE1 PHE A 294      -6.650  -1.252 -18.546  1.00  0.00           H
ATOM   3179  HE2 PHE A 294      -8.137  -4.144 -15.746  1.00  0.00           H
ATOM   3180  HZ  PHE A 294      -6.404  -3.407 -17.330  1.00  0.00           H
ATOM   3181  N   ILE A 295     -12.993  -2.185 -16.431  1.00 24.85           N
ATOM   3182  CA  ILE A 295     -13.549  -3.550 -16.445  1.00 26.88           C
ATOM   3183  C   ILE A 295     -14.639  -3.792 -17.533  1.00 27.94           C
ATOM   3184  O   ILE A 295     -14.855  -4.933 -17.933  1.00 27.36           O
ATOM   3185  CB  ILE A 295     -14.009  -3.903 -14.994  1.00 28.74           C
ATOM   3186  CG1 ILE A 295     -12.841  -3.867 -13.971  1.00 30.86           C
ATOM   3187  CG2 ILE A 295     -14.784  -5.232 -14.856  1.00 29.65           C
ATOM   3188  CD1 ILE A 295     -11.757  -4.942 -14.171  1.00 31.32           C
ATOM   3189  H   ILE A 295     -13.066  -1.670 -15.561  1.00  0.00           H
ATOM   3190  HA  ILE A 295     -12.737  -4.224 -16.722  1.00  0.00           H
ATOM   3191  HB  ILE A 295     -14.703  -3.120 -14.687  1.00  0.00           H
ATOM   3192 HG12 ILE A 295     -12.358  -2.891 -13.978  1.00  0.00           H
ATOM   3193 HG13 ILE A 295     -13.247  -3.971 -12.964  1.00  0.00           H
ATOM   3194 HG21 ILE A 295     -14.992  -5.464 -13.811  1.00  0.00           H
ATOM   3195 HG22 ILE A 295     -15.744  -5.197 -15.371  1.00  0.00           H
ATOM   3196 HG23 ILE A 295     -14.220  -6.065 -15.277  1.00  0.00           H
ATOM   3197 HD11 ILE A 295     -10.978  -4.848 -13.413  1.00  0.00           H
ATOM   3198 HD12 ILE A 295     -12.164  -5.950 -14.093  1.00  0.00           H
ATOM   3199 HD13 ILE A 295     -11.265  -4.857 -15.140  1.00  0.00           H
ATOM   3200  N   LYS A 296     -15.286  -2.743 -18.064  1.00 27.30           N
ATOM   3201  CA  LYS A 296     -16.183  -2.800 -19.229  1.00 29.16           C
ATOM   3202  C   LYS A 296     -15.401  -2.887 -20.559  1.00 29.60           C
ATOM   3203  O   LYS A 296     -15.983  -3.229 -21.586  1.00 30.49           O
ATOM   3204  CB  LYS A 296     -16.946  -1.455 -19.350  1.00 30.80           C
ATOM   3205  CG  LYS A 296     -18.053  -1.139 -18.328  1.00 35.46           C
ATOM   3206  CD  LYS A 296     -18.466   0.338 -18.485  1.00 37.53           C
ATOM   3207  CE  LYS A 296     -19.360   0.916 -17.380  1.00 39.57           C
ATOM   3208  NZ  LYS A 296     -19.473   2.380 -17.517  1.00 42.84           N1+
ATOM   3209  H   LYS A 296     -15.162  -1.848 -17.598  1.00  0.00           H
ATOM   3210  HA  LYS A 296     -16.872  -3.643 -19.157  1.00  0.00           H
ATOM   3211  HB2 LYS A 296     -16.205  -0.653 -19.338  1.00  0.00           H
ATOM   3212  HB3 LYS A 296     -17.415  -1.389 -20.335  1.00  0.00           H
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ATOM   3213  HG2 LYS A 296     -18.908  -1.799 -18.478  1.00  0.00          H
ATOM   3214  HG3 LYS A 296     -17.702  -1.329 -17.317  1.00  0.00          H
ATOM   3215  HD2 LYS A 296     -17.558   0.935 -18.516  1.00  0.00          H
ATOM   3216  HD3 LYS A 296     -18.938   0.480 -19.457  1.00  0.00          H
ATOM   3217  HE2 LYS A 296     -20.349   0.460 -17.419  1.00  0.00          H
ATOM   3218  HE3 LYS A 296     -18.938   0.705 -16.398  1.00  0.00          H
ATOM   3219  HZ1 LYS A 296     -20.238   2.799 -17.024  1.00  0.00          H
ATOM   3220  HZ2 LYS A 296     -18.605   2.832 -17.146  1.00  0.00          H
ATOM   3221  HZ3 LYS A 296     -19.411   2.684 -18.479  1.00  0.00          H
ATOM   3222  N   LYS A 297     -14.140  -2.447 -20.552  1.00 28.79          N
ATOM   3223  CA  LYS A 297     -13.346  -2.071 -21.718  1.00 30.07          C
ATOM   3224  C   LYS A 297     -12.179  -3.044 -21.926  1.00 29.13          C
ATOM   3225  O   LYS A 297     -11.815  -3.306 -23.068  1.00 30.10          O
ATOM   3226  CB  LYS A 297     -12.830  -0.641 -21.426  1.00 31.69          C
ATOM   3227  CG  LYS A 297     -11.911   0.010 -22.478  1.00 36.08          C
ATOM   3228  CD  LYS A 297     -11.456   1.410 -22.030  1.00 40.63          C
ATOM   3229  CE  LYS A 297     -10.353   1.388 -20.950  1.00 42.81          C
ATOM   3230  NZ  LYS A 297     -10.443   2.571 -20.079  1.00 42.47          N1+
ATOM   3231  H   LYS A 297     -13.701  -2.315 -19.649  1.00  0.00          H
ATOM   3232  HA  LYS A 297     -13.955  -2.066 -22.624  1.00  0.00          H
ATOM   3233  HB2 LYS A 297     -13.695   0.007 -21.276  1.00  0.00          H
ATOM   3234  HB3 LYS A 297     -12.305  -0.651 -20.474  1.00  0.00          H
ATOM   3235  HG2 LYS A 297     -11.037  -0.611 -22.680  1.00  0.00          H
ATOM   3236  HG3 LYS A 297     -12.453   0.083 -23.422  1.00  0.00          H
ATOM   3237  HD2 LYS A 297     -11.088   1.961 -22.897  1.00  0.00          H
ATOM   3238  HD3 LYS A 297     -12.333   1.958 -21.679  1.00  0.00          H
ATOM   3239  HE2 LYS A 297     -10.429   0.508 -20.314  1.00  0.00          H
ATOM   3240  HE3 LYS A 297      -9.367   1.338 -21.416  1.00  0.00          H
ATOM   3241  HZ1 LYS A 297      -9.629   2.643 -19.458  1.00  0.00          H
ATOM   3242  HZ2 LYS A 297     -10.471   3.415 -20.625  1.00  0.00          H
ATOM   3243  HZ3 LYS A 297     -11.285   2.501 -19.508  1.00  0.00          H
ATOM   3244  N   ASN A 298     -11.609  -3.558 -20.831  1.00 28.47          N
ATOM   3245  CA  ASN A 298     -10.421  -4.408 -20.785  1.00 26.71          C
ATOM   3246  C   ASN A 298     -10.703  -5.692 -19.982  1.00 25.72          C
ATOM   3247  O   ASN A 298     -10.201  -5.828 -18.860  1.00 23.38          O
ATOM   3248  CB  ASN A 298      -9.225  -3.609 -20.207  1.00 27.91          C
ATOM   3249  CG  ASN A 298      -8.628  -2.597 -21.180  1.00 28.07          C
ATOM   3250  OD1 ASN A 298      -8.896  -1.396 -21.100  1.00 30.60          O
ATOM   3251  ND2 ASN A 298      -7.778  -3.075 -22.076  1.00 28.22          N
ATOM   3252  H   ASN A 298     -11.944  -3.236 -19.929  1.00  0.00          H
ATOM   3253  HA  ASN A 298     -10.148  -4.726 -21.792  1.00  0.00          H
ATOM   3254  HB2 ASN A 298      -9.512  -3.103 -19.284  1.00  0.00          H
ATOM   3255  HB3 ASN A 298      -8.426  -4.296 -19.932  1.00  0.00          H
ATOM   3256 HD21 ASN A 298      -7.624  -4.111 -22.095  1.00  0.00          H
ATOM   3257 HD22 ASN A 298      -7.318  -2.494 -22.750  1.00  0.00          H
ATOM   3258  N   PRO A 299     -11.525  -6.639 -20.494  1.00 25.00          N
ATOM   3259  CA  PRO A 299     -11.796  -7.909 -19.808  1.00 25.78          C
ATOM   3260  C   PRO A 299     -10.637  -8.925 -19.879  1.00 25.64          C
ATOM   3261  O   PRO A 299     -10.604  -9.843 -19.064  1.00 25.28          O
ATOM   3262  CB  PRO A 299     -13.053  -8.459 -20.500  1.00 26.77          C
ATOM   3263  CG  PRO A 299     -12.978  -7.901 -21.914  1.00 25.54          C
ATOM   3264  CD  PRO A 299     -12.291  -6.546 -21.742  1.00 25.40          C
ATOM   3265  HA  PRO A 299     -12.012  -7.727 -18.754  1.00  0.00          H
ATOM   3266  HB2 PRO A 299     -13.119  -9.548 -20.481  1.00  0.00          H
ATOM   3267  HB3 PRO A 299     -13.938  -8.068 -19.998  1.00  0.00          H
ATOM   3268  HG2 PRO A 299     -12.347  -8.546 -22.528  1.00  0.00          H
ATOM   3269  HG3 PRO A 299     -13.951  -7.824 -22.400  1.00  0.00          H
ATOM   3270  HD2 PRO A 299     -11.675  -6.294 -22.605  1.00  0.00          H
ATOM   3271  HD3 PRO A 299     -13.048  -5.769 -21.635  1.00  0.00          H
ATOM   3272  N   GLU A 300      -9.685  -8.782 -20.810  1.00 27.36          N
ATOM   3273  CA  GLU A 300      -8.491  -9.613 -20.948  1.00 30.62          C
ATOM   3274  C   GLU A 300      -7.489  -9.354 -19.807  1.00 31.01          C
ATOM   3275  O   GLU A 300      -6.848 -10.290 -19.327  1.00 30.85          O
ATOM   3276  CB  GLU A 300      -7.852  -9.344 -22.341  1.00 33.91          C
ATOM   3277  CG  GLU A 300      -7.129  -7.988 -22.583  1.00 38.15          C
ATOM   3278  CD  GLU A 300      -8.040  -6.771 -22.463  1.00 41.20          C
ATOM   3279  OE1 GLU A 300      -9.253  -6.934 -22.700  1.00 42.55          O
ATOM   3280  OE2 GLU A 300      -7.559  -5.712 -22.019  1.00 42.55          O1-
ATOM   3281  H   GLU A 300      -9.745  -8.008 -21.490  1.00  0.00          H
ATOM   3282  HA  GLU A 300      -8.800 -10.659 -20.899  1.00  0.00          H
ATOM   3283  HB2 GLU A 300      -7.124 -10.134 -22.527  1.00  0.00          H
ATOM   3284  HB3 GLU A 300      -8.614  -9.478 -23.110  1.00  0.00          H
ATOM   3285  HG2 GLU A 300      -6.280  -7.864 -21.911  1.00  0.00          H
ATOM   3286  HG3 GLU A 300      -6.715  -7.973 -23.591  1.00  0.00          H
ATOM   3287  N   TYR A 301      -7.369  -8.102 -19.349  1.00 29.28          N
ATOM   3288  CA  TYR A 301      -6.459  -7.682 -18.283  1.00 27.29          C
ATOM   3289  C   TYR A 301      -6.984  -8.036 -16.876  1.00 26.08          C
ATOM   3290  O   TYR A 301      -6.213  -8.027 -15.915  1.00 25.20          O
ATOM   3291  CB  TYR A 301      -6.254  -6.154 -18.384  1.00 25.45          C
ATOM   3292  CG  TYR A 301      -5.335  -5.622 -19.486  1.00 24.93          C
ATOM   3293  CD1 TYR A 301      -4.344  -6.420 -20.105  1.00 25.31          C
ATOM   3294  CD2 TYR A 301      -5.442  -4.267 -19.870  1.00 23.92          C
ATOM   3295  CE1 TYR A 301      -3.477  -5.864 -21.067  1.00 25.27          C
ATOM   3296  CE2 TYR A 301      -4.554  -3.703 -20.803  1.00 26.82          C
ATOM   3297  CZ  TYR A 301      -3.563  -4.499 -21.397  1.00 25.82          C
ATOM   3298  OH  TYR A 301      -2.672  -3.943 -22.267  1.00 26.18          O
ATOM   3299  H   TYR A 301      -7.873  -7.379 -19.851  1.00  0.00          H
ATOM   3300  HA  TYR A 301      -5.508  -8.207 -18.373  1.00  0.00          H
ATOM   3301  HB2 TYR A 301      -7.226  -5.668 -18.475  1.00  0.00          H
ATOM   3302  HB3 TYR A 301      -5.843  -5.785 -17.445  1.00  0.00          H
ATOM   3303  HD1 TYR A 301      -4.221  -7.463 -19.865  1.00  0.00          H
ATOM   3304  HD2 TYR A 301      -6.209  -3.636 -19.457  1.00  0.00          H
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ATOM   3305  HE1 TYR A 301      -2.722  -6.478 -21.531  1.00  0.00           H
ATOM   3306  HE2 TYR A 301      -4.637  -2.661 -21.069  1.00  0.00           H
ATOM   3307  HH  TYR A 301      -2.389  -3.053 -21.974  1.00  0.00           H
ATOM   3308  N   LEU A 302      -8.257  -8.426 -16.747  1.00 26.08           N
ATOM   3309  CA  LEU A 302      -8.828  -9.034 -15.547  1.00 25.64           C
ATOM   3310  C   LEU A 302      -8.319 -10.488 -15.445  1.00 26.50           C
ATOM   3311  O   LEU A 302      -8.142 -11.165 -16.461  1.00 26.41           O
ATOM   3312  CB  LEU A 302     -10.371  -8.982 -15.695  1.00 26.41           C
ATOM   3313  CG  LEU A 302     -11.233  -9.657 -14.603  1.00 28.11           C
ATOM   3314  CD1 LEU A 302     -10.985  -9.089 -13.200  1.00 26.19           C
ATOM   3315  CD2 LEU A 302     -12.723  -9.554 -14.961  1.00 28.85           C
ATOM   3316  H   LEU A 302      -8.786  -8.524 -17.604  1.00  0.00           H
ATOM   3317  HA  LEU A 302      -8.516  -8.469 -14.667  1.00  0.00           H
ATOM   3318  HB2 LEU A 302     -10.674  -7.939 -15.793  1.00  0.00           H
ATOM   3319  HB3 LEU A 302     -10.636  -9.453 -16.640  1.00  0.00           H
ATOM   3320  HG  LEU A 302     -10.990 -10.719 -14.584  1.00  0.00           H
ATOM   3321 HD11 LEU A 302     -11.622  -9.582 -12.466  1.00  0.00           H
ATOM   3322 HD12 LEU A 302      -9.958  -9.256 -12.884  1.00  0.00           H
ATOM   3323 HD13 LEU A 302     -11.185  -8.019 -13.158  1.00  0.00           H
ATOM   3324 HD21 LEU A 302     -13.341 -10.076 -14.230  1.00  0.00           H
ATOM   3325 HD22 LEU A 302     -13.053  -8.516 -15.002  1.00  0.00           H
ATOM   3326 HD23 LEU A 302     -12.921 -10.003 -15.936  1.00  0.00           H
ATOM   3327  N   ASP A 303      -8.049 -10.959 -14.224  1.00 26.14           N
ATOM   3328  CA  ASP A 303      -7.738 -12.358 -13.935  1.00 26.40           C
ATOM   3329  C   ASP A 303      -9.054 -13.108 -13.689  1.00 26.12           C
ATOM   3330  O   ASP A 303      -9.970 -12.577 -13.054  1.00 26.00           O
ATOM   3331  CB  ASP A 303      -6.893 -12.445 -12.648  1.00 24.91           C
ATOM   3332  CG  ASP A 303      -6.096 -13.739 -12.599  1.00 24.80           C
ATOM   3333  OD1 ASP A 303      -6.703 -14.819 -12.412  1.00 24.92           O
ATOM   3334  OD2 ASP A 303      -4.867 -13.632 -12.783  1.00 22.64           O1-
ATOM   3335  H   ASP A 303      -8.151 -10.349 -13.419  1.00  0.00           H
ATOM   3336  HA  ASP A 303      -7.192 -12.801 -14.772  1.00  0.00           H
ATOM   3337  HB2 ASP A 303      -6.181 -11.621 -12.611  1.00  0.00           H
ATOM   3338  HB3 ASP A 303      -7.497 -12.361 -11.744  1.00  0.00           H
ATOM   3339  N   GLU A 304      -9.150 -14.348 -14.164  1.00 27.08           N
ATOM   3340  CA  GLU A 304     -10.296 -15.233 -13.979  1.00 27.05           C
ATOM   3341  C   GLU A 304     -10.372 -15.786 -12.537  1.00 26.35           C
ATOM   3342  O   GLU A 304     -11.461 -16.110 -12.065  1.00 25.01           O
ATOM   3343  CB  GLU A 304     -10.169 -16.375 -15.011  1.00 29.55           C
ATOM   3344  CG  GLU A 304      -8.888 -17.234 -14.900  1.00 34.94           C
ATOM   3345  CD  GLU A 304      -8.425 -17.798 -16.236  1.00 38.80           C
ATOM   3346  OE1 GLU A 304      -9.294 -18.220 -17.026  1.00 40.86           O
ATOM   3347  OE2 GLU A 304      -7.195 -17.781 -16.457  1.00 37.70           O1-
ATOM   3348  H   GLU A 304      -8.337 -14.752 -14.612  1.00  0.00           H
ATOM   3349  HA  GLU A 304     -11.214 -14.678 -14.180  1.00  0.00           H
ATOM   3350  HB2 GLU A 304     -11.034 -17.035 -14.943  1.00  0.00           H
ATOM   3351  HB3 GLU A 304     -10.226 -15.938 -16.009  1.00  0.00           H
ATOM   3352  HG2 GLU A 304      -8.058 -16.642 -14.521  1.00  0.00           H
ATOM   3353  HG3 GLU A 304      -9.034 -18.057 -14.201  1.00  0.00           H
ATOM   3354  N   ASN A 305      -9.249 -15.836 -11.806  1.00 25.29           N
ATOM   3355  CA  ASN A 305      -9.116 -16.440 -10.471  1.00 24.94           C
ATOM   3356  C   ASN A 305      -9.148 -15.336  -9.388  1.00 25.14           C
ATOM   3357  O   ASN A 305      -8.557 -15.486  -8.315  1.00 24.32           O
ATOM   3358  CB  ASN A 305      -7.749 -17.161 -10.346  1.00 26.38           C
ATOM   3359  CG  ASN A 305      -7.376 -18.107 -11.482  1.00 26.41           C
ATOM   3360  OD1 ASN A 305      -7.674 -19.295 -11.425  1.00 28.64           O
ATOM   3361  ND2 ASN A 305      -6.690 -17.586 -12.494  1.00 27.76           N
ATOM   3362  H   ASN A 305      -8.385 -15.468 -12.221  1.00  0.00           H
ATOM   3363  HA  ASN A 305      -9.921 -17.154 -10.290  1.00  0.00           H
ATOM   3364  HB2 ASN A 305      -6.963 -16.423 -10.279  1.00  0.00           H
ATOM   3365  HB3 ASN A 305      -7.711 -17.727  -9.414  1.00  0.00           H
ATOM   3366 HD21 ASN A 305      -6.542 -16.564 -12.526  1.00  0.00           H
ATOM   3367 HD22 ASN A 305      -6.513 -18.136 -13.323  1.00  0.00           H
ATOM   3368  N   ASN A 306      -9.777 -14.197  -9.697  1.00 24.92           N
ATOM   3369  CA  ASN A 306      -9.796 -12.949  -8.928  1.00 24.17           C
ATOM   3370  C   ASN A 306     -10.485 -13.031  -7.546  1.00 23.07           C
ATOM   3371  O   ASN A 306     -11.121 -14.021  -7.175  1.00 22.07           O
ATOM   3372  CB  ASN A 306     -10.440 -11.821  -9.778  1.00 24.78           C
ATOM   3373  CG  ASN A 306     -11.901 -12.053 -10.171  1.00 23.30           C
ATOM   3374  OD1 ASN A 306     -12.799 -11.915  -9.345  1.00 23.64           O
ATOM   3375  ND2 ASN A 306     -12.156 -12.396 -11.426  1.00 30.14           N
ATOM   3376  H   ASN A 306     -10.226 -14.201 -10.602  1.00  0.00           H
ATOM   3377  HA  ASN A 306      -8.754 -12.677  -8.746  1.00  0.00           H
ATOM   3378  HB2 ASN A 306     -10.414 -10.884  -9.232  1.00  0.00           H
ATOM   3379  HB3 ASN A 306      -9.834 -11.642 -10.667  1.00  0.00           H
ATOM   3380 HD21 ASN A 306     -11.382 -12.474 -12.098  1.00  0.00           H
ATOM   3381 HD22 ASN A 306     -13.094 -12.620 -11.709  1.00  0.00           H
ATOM   3382  N   LEU A 307     -10.376 -11.934  -6.790  1.00 22.52           N
ATOM   3383  CA  LEU A 307     -10.951 -11.690  -5.477  1.00 20.85           C
ATOM   3384  C   LEU A 307     -11.939 -10.504  -5.568  1.00 21.65           C
ATOM   3385  O   LEU A 307     -11.977  -9.648  -4.682  1.00 22.08           O
ATOM   3386  CB  LEU A 307      -9.783 -11.432  -4.490  1.00 21.68           C
ATOM   3387  CG  LEU A 307     -10.145 -11.456  -2.987  1.00 24.57           C
ATOM   3388  CD1 LEU A 307     -10.301 -12.875  -2.442  1.00 25.54           C
ATOM   3389  CD2 LEU A 307      -9.107 -10.685  -2.164  1.00 24.54           C
ATOM   3390  H   LEU A 307      -9.838 -11.155  -7.177  1.00  0.00           H
ATOM   3391  HA  LEU A 307     -11.516 -12.563  -5.148  1.00  0.00           H
ATOM   3392  HB2 LEU A 307      -8.983 -12.152  -4.666  1.00  0.00           H
ATOM   3393  HB3 LEU A 307      -9.343 -10.466  -4.736  1.00  0.00           H
ATOM   3394  HG  LEU A 307     -11.102 -10.963  -2.837  1.00  0.00           H
ATOM   3395 HD11 LEU A 307     -10.518 -12.851  -1.376  1.00  0.00           H
ATOM   3396 HD12 LEU A 307     -11.117 -13.402  -2.934  1.00  0.00           H
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ATOM   3397 HD13 LEU A 307      -9.383 -13.446  -2.575  1.00  0.00           H
ATOM   3398 HD21 LEU A 307      -9.383 -10.672  -1.111  1.00  0.00           H
ATOM   3399 HD22 LEU A 307      -8.123 -11.142  -2.246  1.00  0.00           H
ATOM   3400 HD23 LEU A 307      -9.024  -9.648  -2.494  1.00  0.00           H
ATOM   3401  N   MET A 308     -12.780 -10.438  -6.616  1.00 20.81           N
ATOM   3402  CA  MET A 308     -13.833  -9.417  -6.785  1.00 22.78           C
ATOM   3403  C   MET A 308     -14.812  -9.355  -5.588  1.00 22.78           C
ATOM   3404  O   MET A 308     -15.337  -8.291  -5.261  1.00 22.72           O
ATOM   3405  CB  MET A 308     -14.577  -9.665  -8.119  1.00 21.26           C
ATOM   3406  CG  MET A 308     -15.710  -8.677  -8.450  1.00 20.59           C
ATOM   3407  SD  MET A 308     -15.207  -6.953  -8.710  1.00 23.31           S
ATOM   3408  CE  MET A 308     -14.781  -6.999 -10.475  1.00 20.96           C
ATOM   3409  H   MET A 308     -12.682 -11.136  -7.349  1.00  0.00           H
ATOM   3410  HA  MET A 308     -13.336  -8.447  -6.837  1.00  0.00           H
ATOM   3411  HB2 MET A 308     -13.861  -9.643  -8.939  1.00  0.00           H
ATOM   3412  HB3 MET A 308     -14.993 -10.674  -8.110  1.00  0.00           H
ATOM   3413  HG2 MET A 308     -16.236  -9.017  -9.343  1.00  0.00           H
ATOM   3414  HG3 MET A 308     -16.453  -8.692  -7.657  1.00  0.00           H
ATOM   3415  HE1 MET A 308     -14.371  -6.040 -10.790  1.00  0.00           H
ATOM   3416  HE2 MET A 308     -14.042  -7.772 -10.682  1.00  0.00           H
ATOM   3417  HE3 MET A 308     -15.664  -7.208 -11.079  1.00  0.00           H
ATOM   3418  N   SER A 309     -14.991 -10.478  -4.886  1.00 22.41           N
ATOM   3419  CA  SER A 309     -15.783 -10.637  -3.674  1.00 23.60           C
ATOM   3420  C   SER A 309     -15.231  -9.872  -2.452  1.00 22.97           C
ATOM   3421  O   SER A 309     -15.958  -9.697  -1.475  1.00 22.64           O
ATOM   3422  CB  SER A 309     -15.857 -12.153  -3.394  1.00 24.95           C
ATOM   3423  OG  SER A 309     -14.563 -12.752  -3.373  1.00 30.97           O
ATOM   3424  H   SER A 309     -14.482 -11.303  -5.170  1.00  0.00           H
ATOM   3425  HA  SER A 309     -16.791 -10.259  -3.862  1.00  0.00           H
ATOM   3426  HB2 SER A 309     -16.354 -12.331  -2.439  1.00  0.00           H
ATOM   3427  HB3 SER A 309     -16.465 -12.642  -4.157  1.00  0.00           H
ATOM   3428  HG  SER A 309     -14.638 -13.619  -3.002  1.00  0.00           H
ATOM   3429  N   PHE A 310     -13.979  -9.389  -2.492  1.00 22.04           N
ATOM   3430  CA  PHE A 310     -13.435  -8.488  -1.475  1.00 21.22           C
ATOM   3431  C   PHE A 310     -13.865  -7.041  -1.763  1.00 21.27           C
ATOM   3432  O   PHE A 310     -14.049  -6.275  -0.821  1.00 20.91           O
ATOM   3433  CB  PHE A 310     -11.891  -8.561  -1.488  1.00 20.01           C
ATOM   3434  CG  PHE A 310     -11.169  -7.575  -0.581  1.00 20.57           C
ATOM   3435  CD1 PHE A 310     -11.380  -7.612   0.812  1.00 21.24           C
ATOM   3436  CD2 PHE A 310     -10.320  -6.591  -1.132  1.00 21.25           C
ATOM   3437  CE1 PHE A 310     -10.746  -6.674   1.646  1.00 21.69           C
ATOM   3438  CE2 PHE A 310      -9.695  -5.648  -0.295  1.00 21.89           C
ATOM   3439  CZ  PHE A 310      -9.905  -5.690   1.096  1.00 21.34           C
ATOM   3440  H   PHE A 310     -13.414  -9.577  -3.315  1.00  0.00           H
ATOM   3441  HA  PHE A 310     -13.798  -8.768  -0.484  1.00  0.00           H
ATOM   3442  HB2 PHE A 310     -11.590  -9.557  -1.170  1.00  0.00           H
ATOM   3443  HB3 PHE A 310     -11.514  -8.430  -2.502  1.00  0.00           H
ATOM   3444  HD1 PHE A 310     -12.043  -8.348   1.243  1.00  0.00           H
ATOM   3445  HD2 PHE A 310     -10.146  -6.548  -2.198  1.00  0.00           H
ATOM   3446  HE1 PHE A 310     -10.903  -6.711   2.710  1.00  0.00           H
ATOM   3447  HE2 PHE A 310      -9.030  -4.908  -0.715  1.00  0.00           H
ATOM   3448  HZ  PHE A 310      -9.409  -4.979   1.740  1.00  0.00           H
ATOM   3449  N   LEU A 311     -14.041  -6.666  -3.037  1.00 20.63           N
ATOM   3450  CA  LEU A 311     -14.292  -5.288  -3.454  1.00 22.79           C
ATOM   3451  C   LEU A 311     -15.788  -4.979  -3.568  1.00 24.02           C
ATOM   3452  O   LEU A 311     -16.173  -3.813  -3.527  1.00 26.14           O
ATOM   3453  CB  LEU A 311     -13.759  -5.096  -4.892  1.00 23.27           C
ATOM   3454  CG  LEU A 311     -12.274  -5.422  -5.115  1.00 24.44           C
ATOM   3455  CD1 LEU A 311     -11.965  -5.303  -6.612  1.00 21.83           C
ATOM   3456  CD2 LEU A 311     -11.346  -4.527  -4.278  1.00 24.33           C
ATOM   3457  H   LEU A 311     -13.961  -7.367  -3.760  1.00  0.00           H
ATOM   3458  HA  LEU A 311     -13.832  -4.573  -2.768  1.00  0.00           H
ATOM   3459  HB2 LEU A 311     -14.345  -5.710  -5.581  1.00  0.00           H
ATOM   3460  HB3 LEU A 311     -13.936  -4.064  -5.202  1.00  0.00           H
ATOM   3461  HG  LEU A 311     -12.087  -6.459  -4.829  1.00  0.00           H
ATOM   3462 HD11 LEU A 311     -10.926  -5.535  -6.821  1.00  0.00           H
ATOM   3463 HD12 LEU A 311     -12.572  -5.992  -7.198  1.00  0.00           H
ATOM   3464 HD13 LEU A 311     -12.155  -4.297  -6.986  1.00  0.00           H
ATOM   3465 HD21 LEU A 311     -10.305  -4.804  -4.432  1.00  0.00           H
ATOM   3466 HD22 LEU A 311     -11.453  -3.474  -4.542  1.00  0.00           H
ATOM   3467 HD23 LEU A 311     -11.542  -4.624  -3.210  1.00  0.00           H
ATOM   3468  N   SER A 312     -16.633  -5.987  -3.787  1.00 24.95           N
ATOM   3469  CA  SER A 312     -17.960  -5.800  -4.345  1.00 24.03           C
ATOM   3470  C   SER A 312     -19.014  -6.592  -3.574  1.00 25.46           C
ATOM   3471  O   SER A 312     -18.743  -7.674  -3.057  1.00 23.59           O
ATOM   3472  CB  SER A 312     -17.889  -6.099  -5.854  1.00 22.48           C
ATOM   3473  OG  SER A 312     -19.127  -5.876  -6.502  1.00 23.27           O
ATOM   3474  H   SER A 312     -16.269  -6.932  -3.786  1.00  0.00           H
ATOM   3475  HA  SER A 312     -18.252  -4.755  -4.233  1.00  0.00           H
ATOM   3476  HB2 SER A 312     -17.135  -5.468  -6.329  1.00  0.00           H
ATOM   3477  HB3 SER A 312     -17.577  -7.130  -6.010  1.00  0.00           H
ATOM   3478  HG  SER A 312     -19.321  -4.933  -6.415  1.00  0.00           H
ATOM   3479  N   ASN A 313     -20.228  -6.031  -3.517  1.00 27.59           N
ATOM   3480  CA  ASN A 313     -21.388  -6.600  -2.826  1.00 30.50           C
ATOM   3481  C   ASN A 313     -22.099  -7.583  -3.771  1.00 30.83           C
ATOM   3482  O   ASN A 313     -22.600  -8.614  -3.334  1.00 32.14           O
ATOM   3483  CB  ASN A 313     -22.428  -5.490  -2.499  1.00 29.50           C
ATOM   3484  CG  ASN A 313     -21.843  -4.227  -1.866  1.00 31.80           C
ATOM   3485  OD1 ASN A 313     -21.502  -4.206  -0.689  1.00 30.49           O
ATOM   3486  ND2 ASN A 313     -21.692  -3.171  -2.658  1.00 31.11           N
ATOM   3487  H   ASN A 313     -20.348  -5.139  -3.974  1.00  0.00           H
ATOM   3488  HA  ASN A 313     -21.075  -7.108  -1.911  1.00  0.00           H
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ATOM   3489  HB2 ASN A 313     -22.993  -5.199  -3.385  1.00  0.00          H
ATOM   3490  HB3 ASN A 313     -23.168  -5.895  -1.807  1.00  0.00          H
ATOM   3491 HD21 ASN A 313     -21.998  -3.223  -3.634  1.00  0.00          H
ATOM   3492 HD22 ASN A 313     -21.266  -2.322  -2.303  1.00  0.00          H
ATOM   3493  N   ASP A 314     -22.167  -7.240  -5.066  1.00 32.03          N
ATOM   3494  CA  ASP A 314     -22.873  -7.987  -6.111  1.00 31.57          C
ATOM   3495  C   ASP A 314     -21.887  -8.824  -6.950  1.00 32.42          C
ATOM   3496  O   ASP A 314     -22.301  -9.805  -7.564  1.00 29.58          O
ATOM   3497  CB  ASP A 314     -23.578  -6.971  -7.051  1.00 33.24          C
ATOM   3498  CG  ASP A 314     -22.636  -6.106  -7.880  1.00 33.93          C
ATOM   3499  OD1 ASP A 314     -22.066  -5.149  -7.322  1.00 33.28          O
ATOM   3500  OD2 ASP A 314     -22.407  -6.434  -9.060  1.00 35.28          O1-
ATOM   3501  H   ASP A 314     -21.732  -6.373  -5.353  1.00  0.00          H
ATOM   3502  HA  ASP A 314     -23.618  -8.652  -5.672  1.00  0.00          H
ATOM   3503  HB2 ASP A 314     -24.232  -7.512  -7.736  1.00  0.00          H
ATOM   3504  HB3 ASP A 314     -24.230  -6.317  -6.472  1.00  0.00          H
ATOM   3505  N   ASN A 315     -20.608  -8.425  -7.000  1.00 31.75          N
ATOM   3506  CA  ASN A 315     -19.519  -8.945  -7.828  1.00 32.79          C
ATOM   3507  C   ASN A 315     -19.385  -8.165  -9.142  1.00 31.79          C
ATOM   3508  O   ASN A 315     -19.592  -8.703 -10.232  1.00 30.01          O
ATOM   3509  CB  ASN A 315     -19.404 -10.487  -7.958  1.00 34.98          C
ATOM   3510  CG  ASN A 315     -19.151 -11.180  -6.621  1.00 39.86          C
ATOM   3511  OD1 ASN A 315     -18.014 -11.307  -6.181  1.00 41.48          O
ATOM   3512  ND2 ASN A 315     -20.208 -11.630  -5.957  1.00 39.98          N
ATOM   3513  H   ASN A 315     -20.392  -7.567  -6.503  1.00  0.00          H
ATOM   3514  HA  ASN A 315     -18.633  -8.661  -7.266  1.00  0.00          H
ATOM   3515  HB2 ASN A 315     -20.269 -10.919  -8.459  1.00  0.00          H
ATOM   3516  HB3 ASN A 315     -18.557 -10.725  -8.602  1.00  0.00          H
ATOM   3517 HD21 ASN A 315     -21.134 -11.441  -6.320  1.00  0.00          H
ATOM   3518 HD22 ASN A 315     -20.076 -12.046  -5.050  1.00  0.00          H
ATOM   3519  N   GLY A 316     -19.068  -6.873  -9.045  1.00 29.91          N
ATOM   3520  CA  GLY A 316     -18.457  -6.075 -10.100  1.00 28.90          C
ATOM   3521  C   GLY A 316     -19.211  -4.824 -10.543  1.00 29.49          C
ATOM   3522  O   GLY A 316     -18.662  -4.096 -11.365  1.00 31.30          O
ATOM   3523  H   GLY A 316     -19.056  -6.471  -8.102  1.00  0.00          H
ATOM   3524  HA2 GLY A 316     -17.496  -5.726  -9.728  1.00  0.00          H
ATOM   3525  HA3 GLY A 316     -18.235  -6.675 -10.984  1.00  0.00          H
ATOM   3526  N   LYS A 317     -20.435  -4.552 -10.063  1.00 28.46          N
ATOM   3527  CA  LYS A 317     -21.146  -3.318 -10.409  1.00 29.26          C
ATOM   3528  C   LYS A 317     -21.058  -2.300  -9.258  1.00 28.45          C
ATOM   3529  O   LYS A 317     -20.817  -1.121  -9.516  1.00 29.61          O
ATOM   3530  CB  LYS A 317     -22.626  -3.606 -10.756  1.00 30.65          C
ATOM   3531  CG  LYS A 317     -22.861  -4.233 -12.155  1.00 32.56          C
ATOM   3532  CD  LYS A 317     -23.169  -5.747 -12.175  1.00 33.46          C
ATOM   3533  CE  LYS A 317     -21.931  -6.665 -12.257  1.00 35.75          C
ATOM   3534  NZ  LYS A 317     -21.931  -7.673 -11.187  1.00 33.98          N1+
ATOM   3535  H   LYS A 317     -20.879  -5.173  -9.383  1.00  0.00          H
ATOM   3536  HA  LYS A 317     -20.701  -2.827 -11.278  1.00  0.00          H
ATOM   3537  HB2 LYS A 317     -23.122  -4.173  -9.969  1.00  0.00          H
ATOM   3538  HB3 LYS A 317     -23.146  -2.646 -10.759  1.00  0.00          H
ATOM   3539  HG2 LYS A 317     -23.736  -3.734 -12.575  1.00  0.00          H
ATOM   3540  HG3 LYS A 317     -22.048  -3.986 -12.840  1.00  0.00          H
ATOM   3541  HD2 LYS A 317     -23.802  -5.997 -11.322  1.00  0.00          H
ATOM   3542  HD3 LYS A 317     -23.788  -5.952 -13.050  1.00  0.00          H
ATOM   3543  HE2 LYS A 317     -21.893  -7.172 -13.222  1.00  0.00          H
ATOM   3544  HE3 LYS A 317     -21.013  -6.085 -12.194  1.00  0.00          H
ATOM   3545  HZ1 LYS A 317     -21.023  -8.120 -11.061  1.00  0.00          H
ATOM   3546  HZ2 LYS A 317     -22.116  -7.169 -10.288  1.00  0.00          H
ATOM   3547  HZ3 LYS A 317     -22.650  -8.367 -11.288  1.00  0.00          H
ATOM   3548  N   THR A 318     -21.212  -2.720  -7.998  1.00 28.25          N
ATOM   3549  CA  THR A 318     -21.150  -1.869  -6.809  1.00 25.97          C
ATOM   3550  C   THR A 318     -19.845  -2.145  -6.039  1.00 24.96          C
ATOM   3551  O   THR A 318     -19.376  -3.284  -6.003  1.00 24.07          O
ATOM   3552  CB  THR A 318     -22.393  -2.161  -5.922  1.00 27.38          C
ATOM   3553  OG1 THR A 318     -22.397  -3.471  -5.376  1.00 30.36          O
ATOM   3554  CG2 THR A 318     -23.730  -1.940  -6.646  1.00 28.55          C
ATOM   3555  H   THR A 318     -21.430  -3.711  -7.828  1.00  0.00          H
ATOM   3556  HA  THR A 318     -21.167  -0.814  -7.090  1.00  0.00          H
ATOM   3557  HB  THR A 318     -22.363  -1.471  -5.076  1.00  0.00          H
ATOM   3558  HG1 THR A 318     -22.323  -4.098  -6.120  1.00  0.00          H
ATOM   3559 HG21 THR A 318     -24.569  -2.051  -5.959  1.00  0.00          H
ATOM   3560 HG22 THR A 318     -23.783  -0.938  -7.072  1.00  0.00          H
ATOM   3561 HG23 THR A 318     -23.874  -2.654  -7.458  1.00  0.00          H
ATOM   3562  N   TYR A 319     -19.275  -1.118  -5.400  1.00 22.19          N
ATOM   3563  CA  TYR A 319     -18.142  -1.231  -4.481  1.00 21.55          C
ATOM   3564  C   TYR A 319     -18.721  -1.392  -3.064  1.00 20.73          C
ATOM   3565  O   TYR A 319     -19.760  -0.798  -2.763  1.00 22.78          O
ATOM   3566  CB  TYR A 319     -17.340   0.096  -4.546  1.00 17.02          C
ATOM   3567  CG  TYR A 319     -15.928   0.109  -3.971  1.00 18.70          C
ATOM   3568  CD1 TYR A 319     -15.068  -1.001  -4.116  1.00 15.33          C
ATOM   3569  CD2 TYR A 319     -15.445   1.264  -3.322  1.00 16.65          C
ATOM   3570  CE1 TYR A 319     -13.796  -1.007  -3.515  1.00 16.26          C
ATOM   3571  CE2 TYR A 319     -14.153   1.278  -2.758  1.00 16.78          C
ATOM   3572  CZ  TYR A 319     -13.346   0.128  -2.820  1.00 15.64          C
ATOM   3573  OH  TYR A 319     -12.141   0.110  -2.190  1.00 14.07          O
ATOM   3574  H   TYR A 319     -19.730  -0.221  -5.429  1.00  0.00          H
ATOM   3575  HA  TYR A 319     -17.528  -2.083  -4.766  1.00  0.00          H
ATOM   3576  HB2 TYR A 319     -17.241   0.394  -5.581  1.00  0.00          H
ATOM   3577  HB3 TYR A 319     -17.915   0.897  -4.077  1.00  0.00          H
ATOM   3578  HD1 TYR A 319     -15.369  -1.865  -4.685  1.00  0.00          H
ATOM   3579  HD2 TYR A 319     -16.063   2.146  -3.248  1.00  0.00          H
ATOM   3580  HE1 TYR A 319     -13.170  -1.884  -3.594  1.00  0.00          H
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ATOM   3581  HE2 TYR A 319     -13.793   2.154  -2.239  1.00  0.00           H
ATOM   3582  HH  TYR A 319     -11.986  -0.737  -1.765  1.00  0.00           H
ATOM   3583  N   ASN A 320     -18.086  -2.192  -2.200  1.00 18.73           N
ATOM   3584  CA  ASN A 320     -18.492  -2.367  -0.794  1.00 19.06           C
ATOM   3585  C   ASN A 320     -17.745  -1.406   0.158  1.00 16.51           C
ATOM   3586  O   ASN A 320     -18.073  -1.364   1.343  1.00 16.08           O
ATOM   3587  CB  ASN A 320     -18.273  -3.830  -0.318  1.00 19.10           C
ATOM   3588  CG  ASN A 320     -16.836  -4.351  -0.334  1.00 19.82           C
ATOM   3589  OD1 ASN A 320     -15.883  -3.596  -0.496  1.00 21.01           O
ATOM   3590  ND2 ASN A 320     -16.651  -5.657  -0.218  1.00 17.92           N
ATOM   3591  H   ASN A 320     -17.258  -2.697  -2.519  1.00  0.00           H
ATOM   3592  HA  ASN A 320     -19.555  -2.151  -0.681  1.00  0.00           H
ATOM   3593  HB2 ASN A 320     -18.661  -3.949   0.694  1.00  0.00           H
ATOM   3594  HB3 ASN A 320     -18.873  -4.491  -0.943  1.00  0.00           H
ATOM   3595 HD21 ASN A 320     -17.411  -6.312  -0.133  1.00  0.00           H
ATOM   3596 HD22 ASN A 320     -15.684  -5.984  -0.291  1.00  0.00           H
ATOM   3597  N   LEU A 321     -16.747  -0.672  -0.361  1.00 16.54           N
ATOM   3598  CA  LEU A 321     -15.886   0.321   0.293  1.00 16.81           C
ATOM   3599  C   LEU A 321     -14.562  -0.236   0.851  1.00 19.47           C
ATOM   3600  O   LEU A 321     -13.738   0.548   1.324  1.00 17.04           O
ATOM   3601  CB  LEU A 321     -16.624   1.302   1.244  1.00 17.52           C
ATOM   3602  CG  LEU A 321     -17.814   2.084   0.637  1.00 19.03           C
ATOM   3603  CD1 LEU A 321     -18.646   2.756   1.738  1.00 18.92           C
ATOM   3604  CD2 LEU A 321     -17.359   3.136  -0.383  1.00 19.85           C
ATOM   3605  H   LEU A 321     -16.527  -0.869  -1.326  1.00  0.00           H
ATOM   3606  HA  LEU A 321     -15.541   0.939  -0.530  1.00  0.00           H
ATOM   3607  HB2 LEU A 321     -16.970   0.741   2.107  1.00  0.00           H
ATOM   3608  HB3 LEU A 321     -15.910   2.018   1.652  1.00  0.00           H
ATOM   3609  HG  LEU A 321     -18.474   1.380   0.130  1.00  0.00           H
ATOM   3610 HD11 LEU A 321     -19.551   3.209   1.332  1.00  0.00           H
ATOM   3611 HD12 LEU A 321     -18.955   2.039   2.499  1.00  0.00           H
ATOM   3612 HD13 LEU A 321     -18.083   3.547   2.235  1.00  0.00           H
ATOM   3613 HD21 LEU A 321     -18.210   3.680  -0.792  1.00  0.00           H
ATOM   3614 HD22 LEU A 321     -16.687   3.864   0.075  1.00  0.00           H
ATOM   3615 HD23 LEU A 321     -16.841   2.675  -1.218  1.00  0.00           H
ATOM   3616  N   CYS A 322     -14.323  -1.553   0.795  1.00 19.78           N
ATOM   3617  CA  CYS A 322     -13.158  -2.195   1.409  1.00 21.80           C
ATOM   3618  C   CYS A 322     -11.881  -2.028   0.572  1.00 21.81           C
ATOM   3619  O   CYS A 322     -11.916  -2.089  -0.661  1.00 21.18           O
ATOM   3620  CB  CYS A 322     -13.400  -3.710   1.547  1.00 20.40           C
ATOM   3621  SG  CYS A 322     -14.542  -4.200   2.869  1.00 21.81           S
ATOM   3622  H   CYS A 322     -14.998  -2.164   0.340  1.00  0.00           H
ATOM   3623  HA  CYS A 322     -12.994  -1.759   2.393  1.00  0.00           H
ATOM   3624  HB2 CYS A 322     -13.728  -4.135   0.601  1.00  0.00           H
ATOM   3625  HB3 CYS A 322     -12.458  -4.216   1.763  1.00  0.00           H
ATOM   3626  N   HIS A 323     -10.742  -1.849   1.246  1.00 21.47           N
ATOM   3627  CA  HIS A 323      -9.412  -1.782   0.655  1.00 21.03           C
ATOM   3628  C   HIS A 323      -8.332  -2.265   1.635  1.00 21.77           C
ATOM   3629  O   HIS A 323      -8.561  -2.352   2.843  1.00 21.97           O
ATOM   3630  CB  HIS A 323      -9.146  -0.382   0.073  1.00 19.56           C
ATOM   3631  CG  HIS A 323      -9.070   0.747   1.062  1.00 20.31           C
ATOM   3632  ND1 HIS A 323     -10.176   1.410   1.556  1.00 18.55           N
ATOM   3633  CD2 HIS A 323      -7.987   1.325   1.678  1.00 19.48           C
ATOM   3634  CE1 HIS A 323      -9.724   2.374   2.359  1.00 19.82           C
ATOM   3635  NE2 HIS A 323      -8.402   2.391   2.469  1.00 17.55           N
ATOM   3636  H   HIS A 323     -10.782  -1.687   2.253  1.00  0.00           H
ATOM   3637  HA  HIS A 323      -9.391  -2.491  -0.175  1.00  0.00           H
ATOM   3638  HB2 HIS A 323      -8.190  -0.378  -0.441  1.00  0.00           H
ATOM   3639  HB3 HIS A 323      -9.890  -0.135  -0.682  1.00  0.00           H
ATOM   3640  HD1 HIS A 323     -11.152   1.193   1.379  1.00  0.00           H
ATOM   3641  HD2 HIS A 323      -6.947   1.060   1.601  1.00  0.00           H
ATOM   3642  HE1 HIS A 323     -10.363   3.065   2.885  1.00  0.00           H
ATOM   3643  N   PHE A 324      -7.148  -2.574   1.106  1.00 20.35           N
ATOM   3644  CA  PHE A 324      -5.903  -2.852   1.813  1.00 21.54           C
ATOM   3645  C   PHE A 324      -5.258  -1.489   2.110  1.00 21.67           C
ATOM   3646  O   PHE A 324      -5.159  -0.657   1.208  1.00 19.86           O
ATOM   3647  CB  PHE A 324      -4.974  -3.641   0.859  1.00 21.99           C
ATOM   3648  CG  PHE A 324      -5.572  -4.897   0.231  1.00 23.32           C
ATOM   3649  CD1 PHE A 324      -6.276  -5.831   1.016  1.00 23.40           C
ATOM   3650  CD2 PHE A 324      -5.417  -5.139  -1.150  1.00 21.47           C
ATOM   3651  CE1 PHE A 324      -6.811  -6.992   0.430  1.00 23.76           C
ATOM   3652  CE2 PHE A 324      -5.960  -6.297  -1.741  1.00 21.69           C
ATOM   3653  CZ  PHE A 324      -6.657  -7.228  -0.949  1.00 21.06           C
ATOM   3654  H   PHE A 324      -7.036  -2.458   0.095  1.00  0.00           H
ATOM   3655  HA  PHE A 324      -6.083  -3.406   2.731  1.00  0.00           H
ATOM   3656  HB2 PHE A 324      -4.638  -2.990   0.049  1.00  0.00           H
ATOM   3657  HB3 PHE A 324      -4.066  -3.934   1.389  1.00  0.00           H
ATOM   3658  HD1 PHE A 324      -6.400  -5.673   2.075  1.00  0.00           H
ATOM   3659  HD2 PHE A 324      -4.860  -4.438  -1.757  1.00  0.00           H
ATOM   3660  HE1 PHE A 324      -7.346  -7.694   1.048  1.00  0.00           H
ATOM   3661  HE2 PHE A 324      -5.838  -6.480  -2.798  1.00  0.00           H
ATOM   3662  HZ  PHE A 324      -7.073  -8.119  -1.397  1.00  0.00           H
ATOM   3663  N   TRP A 325      -4.867  -1.228   3.364  1.00 22.91           N
ATOM   3664  CA  TRP A 325      -4.328   0.057   3.815  1.00 25.28           C
ATOM   3665  C   TRP A 325      -2.828   0.043   3.442  1.00 26.42           C
ATOM   3666  O   TRP A 325      -2.050  -0.740   3.990  1.00 30.29           O
ATOM   3667  CB  TRP A 325      -4.559   0.149   5.353  1.00 24.63           C
ATOM   3668  CG  TRP A 325      -4.876   1.484   5.981  1.00 24.92           C
ATOM   3669  CD1 TRP A 325      -5.522   2.518   5.397  1.00 22.73           C
ATOM   3670  CD2 TRP A 325      -4.582   1.938   7.343  1.00 22.74           C
ATOM   3671  NE1 TRP A 325      -5.670   3.554   6.299  1.00 25.68           N
ATOM   3672  CE3 TRP A 325      -3.898   1.379   8.447  1.00 22.84           C
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ATOM   3673  CE2 TRP A 325      -5.102   3.256   7.517  1.00 24.25           C
ATOM   3674  CZ3 TRP A 325      -3.747   2.076   9.660  1.00 20.89           C
ATOM   3675  CZ2 TRP A 325      -4.970   3.961   8.727  1.00 22.79           C
ATOM   3676  CH2 TRP A 325      -4.288   3.366   9.803  1.00 24.61           C
ATOM   3677  H   TRP A 325      -4.818  -1.990   4.035  1.00  0.00           H
ATOM   3678  HA  TRP A 325      -4.845   0.865   3.296  1.00  0.00           H
ATOM   3679  HB2 TRP A 325      -5.405  -0.478   5.633  1.00  0.00           H
ATOM   3680  HB3 TRP A 325      -3.709  -0.276   5.887  1.00  0.00           H
ATOM   3681  HD1 TRP A 325      -5.903   2.512   4.385  1.00  0.00           H
ATOM   3682  HE1 TRP A 325      -6.169   4.411   6.061  1.00  0.00           H
ATOM   3683  HE3 TRP A 325      -3.457   0.406   8.339  1.00  0.00           H
ATOM   3684  HZ3 TRP A 325      -3.210   1.621  10.480  1.00  0.00           H
ATOM   3685  HZ2 TRP A 325      -5.374   4.953   8.832  1.00  0.00           H
ATOM   3686  HH2 TRP A 325      -4.158   3.900  10.731  1.00  0.00           H
ATOM   3687  N   SER A 326      -2.438   0.842   2.440  1.00 24.03           N
ATOM   3688  CA  SER A 326      -1.207   0.693   1.655  1.00 22.71           C
ATOM   3689  C   SER A 326       0.107   1.065   2.383  1.00 21.08           C
ATOM   3690  O   SER A 326       1.195   0.910   1.839  1.00 19.92           O
ATOM   3691  CB  SER A 326      -1.385   1.507   0.353  1.00 22.45           C
ATOM   3692  OG  SER A 326      -1.781   2.847   0.604  1.00 23.98           O
ATOM   3693  H   SER A 326      -3.103   1.493   2.047  1.00  0.00           H
ATOM   3694  HA  SER A 326      -1.128  -0.359   1.381  1.00  0.00           H
ATOM   3695  HB2 SER A 326      -0.459   1.511  -0.225  1.00  0.00           H
ATOM   3696  HB3 SER A 326      -2.132   1.030  -0.282  1.00  0.00           H
ATOM   3697  HG  SER A 326      -1.751   3.336  -0.229  1.00  0.00           H
ATOM   3698  N   ASN A 327       0.038   1.490   3.646  1.00 18.51           N
ATOM   3699  CA  ASN A 327       1.141   1.831   4.552  1.00 18.42           C
ATOM   3700  C   ASN A 327       2.023   0.633   4.979  1.00 19.32           C
ATOM   3701  O   ASN A 327       3.025   0.814   5.677  1.00 18.72           O
ATOM   3702  CB  ASN A 327       0.524   2.509   5.806  1.00 18.64           C
ATOM   3703  CG  ASN A 327      -0.642   1.779   6.457  1.00 18.91           C
ATOM   3704  OD1 ASN A 327      -1.787   1.867   6.055  1.00 17.18           O
ATOM   3705  ND2 ASN A 327      -0.365   1.049   7.578  1.00 16.88           N
ATOM   3706  H   ASN A 327      -0.903   1.538   4.021  1.00  0.00           H
ATOM   3707  HA  ASN A 327       1.790   2.539   4.036  1.00  0.00           H
ATOM   3708  HB2 ASN A 327       1.302   2.719   6.547  1.00  0.00           H
ATOM   3709  HB3 ASN A 327       0.111   3.458   5.465  1.00  0.00           H
ATOM   3710 HD21 ASN A 327       0.595   0.788   7.803  1.00  0.00           H
ATOM   3711 HD22 ASN A 327      -1.093   0.396   7.835  1.00  0.00           H
ATOM   3712  N   PHE A 328       1.638  -0.584   4.585  1.00 18.00           N
ATOM   3713  CA  PHE A 328       2.398  -1.814   4.713  1.00 19.94           C
ATOM   3714  C   PHE A 328       2.048  -2.680   3.510  1.00 20.27           C
ATOM   3715  O   PHE A 328       1.087  -3.447   3.561  1.00 20.85           O
ATOM   3716  CB  PHE A 328       2.129  -2.496   6.063  1.00 20.17           C
ATOM   3717  CG  PHE A 328       3.076  -3.634   6.406  1.00 21.71           C
ATOM   3718  CD1 PHE A 328       2.802  -4.954   5.987  1.00 20.89           C
ATOM   3719  CD2 PHE A 328       4.242  -3.371   7.154  1.00 21.40           C
ATOM   3720  CE1 PHE A 328       3.675  -6.001   6.336  1.00 23.81           C
ATOM   3721  CE2 PHE A 328       5.101  -4.421   7.523  1.00 23.59           C
ATOM   3722  CZ  PHE A 328       4.819  -5.737   7.112  1.00 20.62           C
ATOM   3723  H   PHE A 328       0.803  -0.642   4.014  1.00  0.00           H
ATOM   3724  HA  PHE A 328       3.463  -1.574   4.661  1.00  0.00           H
ATOM   3725  HB2 PHE A 328       2.202  -1.757   6.850  1.00  0.00           H
ATOM   3726  HB3 PHE A 328       1.099  -2.851   6.102  1.00  0.00           H
ATOM   3727  HD1 PHE A 328       1.930  -5.170   5.388  1.00  0.00           H
ATOM   3728  HD2 PHE A 328       4.475  -2.361   7.454  1.00  0.00           H
ATOM   3729  HE1 PHE A 328       3.467  -7.012   6.012  1.00  0.00           H
ATOM   3730  HE2 PHE A 328       5.983  -4.213   8.111  1.00  0.00           H
ATOM   3731  HZ  PHE A 328       5.482  -6.546   7.379  1.00  0.00           H
ATOM   3732  N   GLU A 329       2.812  -2.526   2.432  1.00 21.96           N
ATOM   3733  CA  GLU A 329       2.769  -3.370   1.251  1.00 21.09           C
ATOM   3734  C   GLU A 329       4.184  -3.905   1.084  1.00 20.76           C
ATOM   3735  O   GLU A 329       5.088  -3.113   0.827  1.00 20.35           O
ATOM   3736  CB  GLU A 329       2.362  -2.527   0.033  1.00 20.27           C
ATOM   3737  CG  GLU A 329       0.895  -2.091   0.108  1.00 21.97           C
ATOM   3738  CD  GLU A 329       0.478  -1.199  -1.045  1.00 23.07           C
ATOM   3739  OE1 GLU A 329       1.331  -0.563  -1.695  1.00 20.27           O
ATOM   3740  OE2 GLU A 329      -0.737  -1.142  -1.337  1.00 25.60           O1-
ATOM   3741  H   GLU A 329       3.571  -1.861   2.470  1.00  0.00           H
ATOM   3742  HA  GLU A 329       2.069  -4.199   1.366  1.00  0.00           H
ATOM   3743  HB2 GLU A 329       3.009  -1.653  -0.054  1.00  0.00           H
ATOM   3744  HB3 GLU A 329       2.511  -3.104  -0.883  1.00  0.00           H
ATOM   3745  HG2 GLU A 329       0.251  -2.969   0.138  1.00  0.00           H
ATOM   3746  HG3 GLU A 329       0.720  -1.550   1.033  1.00  0.00           H
ATOM   3747  N   ILE A 330       4.366  -5.216   1.247  1.00 20.01           N
ATOM   3748  CA  ILE A 330       5.525  -5.985   0.809  1.00 21.19           C
ATOM   3749  C   ILE A 330       5.022  -6.579  -0.514  1.00 21.93           C
ATOM   3750  O   ILE A 330       4.287  -7.567  -0.516  1.00 20.27           O
ATOM   3751  CB  ILE A 330       5.826  -7.096   1.863  1.00 20.93           C
ATOM   3752  CG1 ILE A 330       6.293  -6.474   3.199  1.00 21.73           C
ATOM   3753  CG2 ILE A 330       6.862  -8.145   1.394  1.00 18.92           C
ATOM   3754  CD1 ILE A 330       6.362  -7.455   4.377  1.00 23.49           C
ATOM   3755  H   ILE A 330       3.529  -5.767   1.441  1.00  0.00           H
ATOM   3756  HA  ILE A 330       6.404  -5.361   0.645  1.00  0.00           H
ATOM   3757  HB  ILE A 330       4.893  -7.624   2.043  1.00  0.00           H
ATOM   3758 HG12 ILE A 330       7.273  -6.021   3.053  1.00  0.00           H
ATOM   3759 HG13 ILE A 330       5.631  -5.657   3.490  1.00  0.00           H
ATOM   3760 HG21 ILE A 330       6.884  -9.004   2.062  1.00  0.00           H
ATOM   3761 HG22 ILE A 330       6.650  -8.542   0.403  1.00  0.00           H
ATOM   3762 HG23 ILE A 330       7.866  -7.727   1.380  1.00  0.00           H
ATOM   3763 HD11 ILE A 330       6.749  -6.964   5.265  1.00  0.00           H
ATOM   3764 HD12 ILE A 330       5.375  -7.828   4.637  1.00  0.00           H
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ATOM   3765 HD13 ILE A 330       7.009  -8.307   4.180  1.00  0.00           H
ATOM   3766  N   ALA A 331       5.325  -5.922  -1.634  1.00 21.39           N
ATOM   3767  CA  ALA A 331       4.711  -6.204  -2.922  1.00 22.41           C
ATOM   3768  C   ALA A 331       5.716  -6.077  -4.062  1.00 21.44           C
ATOM   3769  O   ALA A 331       6.766  -5.451  -3.924  1.00 20.66           O
ATOM   3770  CB  ALA A 331       3.438  -5.362  -3.099  1.00 21.06           C
ATOM   3771  H   ALA A 331       5.963  -5.127  -1.590  1.00  0.00           H
ATOM   3772  HA  ALA A 331       4.412  -7.253  -2.938  1.00  0.00           H
ATOM   3773  HB1 ALA A 331       2.990  -5.514  -4.082  1.00  0.00           H
ATOM   3774  HB2 ALA A 331       2.689  -5.614  -2.349  1.00  0.00           H
ATOM   3775  HB3 ALA A 331       3.649  -4.301  -2.990  1.00  0.00           H
ATOM   3776  N   ASN A 332       5.398  -6.713  -5.186  1.00 22.89           N
ATOM   3777  CA  ASN A 332       6.169  -6.687  -6.422  1.00 20.34           C
ATOM   3778  C   ASN A 332       5.774  -5.415  -7.201  1.00 21.01           C
ATOM   3779  O   ASN A 332       4.589  -5.121  -7.349  1.00 20.20           O
ATOM   3780  CB  ASN A 332       5.779  -7.951  -7.208  1.00 21.25           C
ATOM   3781  CG  ASN A 332       6.619  -8.167  -8.461  1.00 19.39           C
ATOM   3782  OD1 ASN A 332       6.286  -7.624  -9.504  1.00 19.86           O
ATOM   3783  ND2 ASN A 332       7.685  -8.957  -8.401  1.00 20.38           N
ATOM   3784  H   ASN A 332       4.507  -7.202  -5.206  1.00  0.00           H
ATOM   3785  HA  ASN A 332       7.234  -6.717  -6.207  1.00  0.00           H
ATOM   3786  HB2 ASN A 332       5.866  -8.834  -6.573  1.00  0.00           H
ATOM   3787  HB3 ASN A 332       4.733  -7.890  -7.509  1.00  0.00           H
ATOM   3788 HD21 ASN A 332       8.030  -9.317  -7.520  1.00  0.00           H
ATOM   3789 HD22 ASN A 332       8.186  -9.163  -9.255  1.00  0.00           H
ATOM   3790  N   LEU A 333       6.761  -4.667  -7.708  1.00 20.23           N
ATOM   3791  CA  LEU A 333       6.577  -3.437  -8.483  1.00 22.19           C
ATOM   3792  C   LEU A 333       6.239  -3.754  -9.943  1.00 22.56           C
ATOM   3793  O   LEU A 333       5.571  -2.957 -10.599  1.00 23.16           O
ATOM   3794  CB  LEU A 333       7.899  -2.628  -8.518  1.00 20.41           C
ATOM   3795  CG  LEU A 333       8.265  -1.923  -7.201  1.00 19.24           C
ATOM   3796 CD1 LEU A 333       9.737  -1.495  -7.178  1.00 21.42           C
ATOM   3797 CD2 LEU A 333       7.351  -0.712  -6.942  1.00 20.07           C
ATOM   3798  H   LEU A 333       7.705  -5.050  -7.672  1.00  0.00           H
ATOM   3799  HA  LEU A 333       5.763  -2.843  -8.065  1.00  0.00           H
ATOM   3800  HB2 LEU A 333       8.710  -3.292  -8.814  1.00  0.00           H
ATOM   3801  HB3 LEU A 333       7.856  -1.868  -9.302  1.00  0.00           H
ATOM   3802  HG  LEU A 333       8.155  -2.645  -6.399  1.00  0.00           H
ATOM   3803 HD11 LEU A 333      10.013  -1.097  -6.203  1.00  0.00           H
ATOM   3804 HD12 LEU A 333      10.397  -2.339  -7.369  1.00  0.00           H
ATOM   3805 HD13 LEU A 333       9.946  -0.726  -7.922  1.00  0.00           H
ATOM   3806 HD21 LEU A 333       7.600  -0.220  -6.003  1.00  0.00           H
ATOM   3807 HD22 LEU A 333       7.441   0.031  -7.734  1.00  0.00           H
ATOM   3808 HD23 LEU A 333       6.301  -0.996  -6.878  1.00  0.00           H
ATOM   3809  N   ASN A 334       6.665  -4.914 -10.465  1.00 22.33           N
ATOM   3810  CA  ASN A 334       6.434  -5.311 -11.859  1.00 23.39           C
ATOM   3811  C   ASN A 334       4.950  -5.638 -12.111  1.00 23.98           C
ATOM   3812  O   ASN A 334       4.499  -5.557 -13.251  1.00 23.96           O
ATOM   3813  CB  ASN A 334       7.325  -6.495 -12.311  1.00 25.18           C
ATOM   3814  CG  ASN A 334       8.829  -6.251 -12.143  1.00 27.49           C
ATOM   3815  OD1 ASN A 334       9.300  -5.120 -12.262  1.00 28.65           O
ATOM   3816  ND2 ASN A 334       9.586  -7.296 -11.826  1.00 26.16           N
ATOM   3817  H   ASN A 334       7.130  -5.578  -9.857  1.00  0.00           H
ATOM   3818  HA  ASN A 334       6.692  -4.455 -12.477  1.00  0.00           H
ATOM   3819  HB2 ASN A 334       7.039  -7.416 -11.809  1.00  0.00           H
ATOM   3820  HB3 ASN A 334       7.149  -6.682 -13.372  1.00  0.00           H
ATOM   3821 HD21 ASN A 334       9.181  -8.210 -11.707  1.00  0.00           H
ATOM   3822 HD22 ASN A 334      10.617  -7.197 -11.732  1.00  0.00           H
ATOM   3823  N   LEU A 335       4.170  -5.893 -11.048  1.00 23.74           N
ATOM   3824  CA  LEU A 335       2.706  -5.933 -11.047  1.00 22.83           C
ATOM   3825  C   LEU A 335       2.109  -4.568 -11.422  1.00 23.38           C
ATOM   3826  O   LEU A 335       1.141  -4.504 -12.176  1.00 20.24           O
ATOM   3827  CB  LEU A 335       2.211  -6.387  -9.652  1.00 22.39           C
ATOM   3828  CG  LEU A 335       0.675  -6.478  -9.464  1.00 22.32           C
ATOM   3829 CD1 LEU A 335       0.025  -7.504 -10.406  1.00 21.69           C
ATOM   3830 CD2 LEU A 335       0.324  -6.771  -7.998  1.00 20.81           C
ATOM   3831  H   LEU A 335       4.645  -5.994 -10.160  1.00  0.00           H
ATOM   3832  HA  LEU A 335       2.380  -6.644 -11.803  1.00  0.00           H
ATOM   3833  HB2 LEU A 335       2.654  -7.355  -9.415  1.00  0.00           H
ATOM   3834  HB3 LEU A 335       2.599  -5.693  -8.905  1.00  0.00           H
ATOM   3835  HG  LEU A 335       0.230  -5.508  -9.688  1.00  0.00           H
ATOM   3836 HD11 LEU A 335      -1.039  -7.622 -10.196  1.00  0.00           H
ATOM   3837 HD12 LEU A 335       0.104  -7.198 -11.450  1.00  0.00           H
ATOM   3838 HD13 LEU A 335       0.491  -8.483 -10.316  1.00  0.00           H
ATOM   3839 HD21 LEU A 335      -0.755  -6.807  -7.849  1.00  0.00           H
ATOM   3840 HD22 LEU A 335       0.739  -7.723  -7.673  1.00  0.00           H
ATOM   3841 HD23 LEU A 335       0.717  -5.996  -7.338  1.00  0.00           H
ATOM   3842  N   TRP A 336       2.701  -3.471 -10.944  1.00 20.71           N
ATOM   3843  CA  TRP A 336       2.247  -2.122 -11.257  1.00 21.14           C
ATOM   3844  C   TRP A 336       2.827  -1.640 -12.599  1.00 20.82           C
ATOM   3845  O   TRP A 336       2.186  -0.864 -13.300  1.00 21.72           O
ATOM   3846  CB  TRP A 336       2.649  -1.169 -10.125  1.00 19.56           C
ATOM   3847  CG  TRP A 336       2.231  -1.522  -8.721  1.00 21.10           C
ATOM   3848  CD1 TRP A 336       2.965  -1.245  -7.619  1.00 20.91           C
ATOM   3849  CD2 TRP A 336       1.018  -2.188  -8.228  1.00 20.60           C
ATOM   3850  NE1 TRP A 336       2.274  -1.638  -6.490  1.00 21.76           N
ATOM   3851  CE3 TRP A 336      -0.120  -2.791  -8.817  1.00 21.74           C
ATOM   3852  CE2 TRP A 336       1.063  -2.198  -6.801  1.00 18.03           C
ATOM   3853  CZ3 TRP A 336      -1.159  -3.333  -8.032  1.00 18.29           C
ATOM   3854  CZ2 TRP A 336       0.025  -2.708  -6.008  1.00 20.48           C
ATOM   3855  CH2 TRP A 336      -1.101  -3.273  -6.628  1.00 21.36           C
ATOM   3856  H   TRP A 336       3.525  -3.569 -10.365  1.00  0.00           H
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ATOM   3857  HA  TRP A 336       1.165  -2.107 -11.350  1.00  0.00           H
ATOM   3858  HB2 TRP A 336       3.727  -1.004 -10.134  1.00  0.00           H
ATOM   3859  HB3 TRP A 336       2.191  -0.205 -10.341  1.00  0.00           H
ATOM   3860  HD1 TRP A 336       3.928  -0.753  -7.635  1.00  0.00           H
ATOM   3861  HE1 TRP A 336       2.608  -1.539  -5.524  1.00  0.00           H
ATOM   3862  HE3 TRP A 336      -0.204  -2.847  -9.889  1.00  0.00           H
ATOM   3863  HZ3 TRP A 336      -2.004  -3.800  -8.513  1.00  0.00           H
ATOM   3864  HZ2 TRP A 336       0.105  -2.670  -4.933  1.00  0.00           H
ATOM   3865  HH2 TRP A 336      -1.906  -3.670  -6.031  1.00  0.00           H
ATOM   3866  N   ARG A 337       3.981  -2.170 -13.028  1.00 21.65           N
ATOM   3867  CA  ARG A 337       4.523  -1.928 -14.369  1.00 20.04           C
ATOM   3868  C   ARG A 337       3.821  -2.780 -15.449  1.00 18.23           C
ATOM   3869  O   ARG A 337       4.124  -2.590 -16.632  1.00 17.77           O
ATOM   3870  CB  ARG A 337       6.027  -2.275 -14.415  1.00 21.14           C
ATOM   3871  CG  ARG A 337       6.898  -1.438 -13.467  1.00 20.85           C
ATOM   3872  CD  ARG A 337       8.376  -1.849 -13.491  1.00 23.87           C
ATOM   3873  NE  ARG A 337       9.136  -1.034 -12.546  1.00 23.95           N
ATOM   3874  CZ  ARG A 337       9.825  -1.413 -11.469  1.00 25.49           C
ATOM   3875  NH1 ARG A 337      10.047  -2.691 -11.161  1.00 26.97           N
ATOM   3876  NH2 ARG A 337      10.304  -0.470 -10.671  1.00 26.66           N1+
ATOM   3877  H   ARG A 337       4.486  -2.767 -12.385  1.00  0.00           H
ATOM   3878  HA  ARG A 337       4.391  -0.876 -14.632  1.00  0.00           H
ATOM   3879  HB2 ARG A 337       6.162  -3.337 -14.223  1.00  0.00           H
ATOM   3880  HB3 ARG A 337       6.403  -2.120 -15.427  1.00  0.00           H
ATOM   3881  HG2 ARG A 337       6.812  -0.382 -13.728  1.00  0.00           H
ATOM   3882  HG3 ARG A 337       6.531  -1.523 -12.447  1.00  0.00           H
ATOM   3883  HD2 ARG A 337       8.481  -2.906 -13.259  1.00  0.00           H
ATOM   3884  HD3 ARG A 337       8.799  -1.697 -14.485  1.00  0.00           H
ATOM   3885  HE  ARG A 337       9.395  -0.084 -12.919  1.00  0.00           H
ATOM   3886 HH11 ARG A 337       9.725  -3.482 -11.728  1.00  0.00           H
ATOM   3887 HH12 ARG A 337      10.760  -2.883 -10.454  1.00  0.00           H
ATOM   3888 HH21 ARG A 337      10.245   0.535 -10.998  1.00  0.00           H
ATOM   3889 HH22 ARG A 337      10.968  -0.627  -9.915  1.00  0.00           H
ATOM   3890  N   SER A 338       2.920  -3.705 -15.078  1.00 17.15           N
ATOM   3891  CA  SER A 338       2.208  -4.592 -15.999  1.00 19.46           C
ATOM   3892  C   SER A 338       1.162  -3.804 -16.821  1.00 20.12           C
ATOM   3893  O   SER A 338       0.590  -2.850 -16.284  1.00 21.09           O
ATOM   3894  CB  SER A 338       1.516  -5.740 -15.218  1.00 20.32           C
ATOM   3895  OG  SER A 338       0.328  -5.373 -14.535  1.00 21.76           O
ATOM   3896  H   SER A 338       2.708  -3.788 -14.095  1.00  0.00           H
ATOM   3897  HA  SER A 338       2.971  -5.032 -16.638  1.00  0.00           H
ATOM   3898  HB2 SER A 338       1.224  -6.510 -15.930  1.00  0.00           H
ATOM   3899  HB3 SER A 338       2.209  -6.218 -14.524  1.00  0.00           H
ATOM   3900  HG  SER A 338       0.570  -4.994 -13.685  1.00  0.00           H
ATOM   3901  N   PRO A 339       0.891  -4.185 -18.094  1.00 22.35           N
ATOM   3902  CA  PRO A 339      -0.152  -3.583 -18.951  1.00 21.08           C
ATOM   3903  C   PRO A 339      -1.515  -3.393 -18.255  1.00 19.47           C
ATOM   3904  O   PRO A 339      -2.075  -2.298 -18.255  1.00 20.76           O
ATOM   3905  CB  PRO A 339      -0.251  -4.518 -20.161  1.00 20.47           C
ATOM   3906  CG  PRO A 339       1.088  -5.224 -20.246  1.00 21.32           C
ATOM   3907  CD  PRO A 339       1.613  -5.239 -18.814  1.00 19.67           C
ATOM   3908  HA  PRO A 339       0.193  -2.607 -19.295  1.00  0.00           H
ATOM   3909  HB2 PRO A 339      -1.038  -5.258 -20.026  1.00  0.00           H
ATOM   3910  HB3 PRO A 339      -0.466  -3.964 -21.074  1.00  0.00           H
ATOM   3911  HG2 PRO A 339       1.011  -6.221 -20.683  1.00  0.00           H
ATOM   3912  HG3 PRO A 339       1.758  -4.637 -20.876  1.00  0.00           H
ATOM   3913  HD2 PRO A 339       1.403  -6.203 -18.351  1.00  0.00           H
ATOM   3914  HD3 PRO A 339       2.692  -5.079 -18.814  1.00  0.00           H
ATOM   3915  N   ALA A 340      -1.975  -4.437 -17.548  1.00 19.58           N
ATOM   3916  CA  ALA A 340      -3.201  -4.454 -16.757  1.00 19.57           C
ATOM   3917  C   ALA A 340      -3.309  -3.315 -15.735  1.00 19.42           C
ATOM   3918  O   ALA A 340      -4.363  -2.693 -15.635  1.00 17.04           O
ATOM   3919  CB  ALA A 340      -3.347  -5.820 -16.072  1.00 20.76           C
ATOM   3920  H   ALA A 340      -1.456  -5.297 -17.608  1.00  0.00           H
ATOM   3921  HA  ALA A 340      -4.025  -4.318 -17.455  1.00  0.00           H
ATOM   3922  HB1 ALA A 340      -4.256  -5.858 -15.469  1.00  0.00           H
ATOM   3923  HB2 ALA A 340      -3.413  -6.621 -16.808  1.00  0.00           H
ATOM   3924  HB3 ALA A 340      -2.506  -6.031 -15.411  1.00  0.00           H
ATOM   3925  N   TYR A 341      -2.225  -3.000 -15.012  1.00 18.41           N
ATOM   3926  CA  TYR A 341      -2.233  -1.886 -14.067  1.00 20.02           C
ATOM   3927  C   TYR A 341      -1.933  -0.549 -14.764  1.00 20.29           C
ATOM   3928  O   TYR A 341      -2.472   0.473 -14.342  1.00 20.54           O
ATOM   3929  CB  TYR A 341      -1.195  -2.100 -12.957  1.00 19.15           C
ATOM   3930  CG  TYR A 341      -1.345  -1.092 -11.824  1.00 19.29           C
ATOM   3931  CD1 TYR A 341      -2.333  -1.273 -10.839  1.00 18.41           C
ATOM   3932  CD2 TYR A 341      -0.544   0.065 -11.787  1.00 17.75           C
ATOM   3933  CE1 TYR A 341      -2.479  -0.346  -9.785  1.00 19.60           C
ATOM   3934  CE2 TYR A 341      -0.699   0.996 -10.750  1.00 19.82           C
ATOM   3935  CZ  TYR A 341      -1.643   0.782  -9.731  1.00 19.34           C
ATOM   3936  OH  TYR A 341      -1.734   1.672  -8.703  1.00 19.62           O
ATOM   3937  H   TYR A 341      -1.361  -3.498 -15.188  1.00  0.00           H
ATOM   3938  HA  TYR A 341      -3.211  -1.824 -13.591  1.00  0.00           H
ATOM   3939  HB2 TYR A 341      -1.304  -3.100 -12.536  1.00  0.00           H
ATOM   3940  HB3 TYR A 341      -0.186  -2.058 -13.368  1.00  0.00           H
ATOM   3941  HD1 TYR A 341      -2.975  -2.133 -10.905  1.00  0.00           H
ATOM   3942  HD2 TYR A 341       0.178   0.259 -12.565  1.00  0.00           H
ATOM   3943  HE1 TYR A 341      -3.224  -0.499  -9.018  1.00  0.00           H
ATOM   3944  HE2 TYR A 341      -0.083   1.875 -10.762  1.00  0.00           H
ATOM   3945  HH  TYR A 341      -1.019   2.301  -8.782  1.00  0.00           H
ATOM   3946  N   ARG A 342      -1.116  -0.531 -15.825  1.00 20.95           N
ATOM   3947  CA  ARG A 342      -0.757   0.675 -16.576  1.00 21.79           C
ATOM   3948  C   ARG A 342      -1.992   1.337 -17.192  1.00 22.81           C
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ATOM   3949  O   ARG A 342      -2.298   2.491 -16.886  1.00 22.78           O
ATOM   3950  CB  ARG A 342       0.205   0.323 -17.717  1.00 23.26           C
ATOM   3951  CG  ARG A 342       1.642   0.011 -17.320  1.00 23.00           C
ATOM   3952  CD  ARG A 342       2.347  -0.701 -18.482  1.00 25.52           C
ATOM   3953  NE  ARG A 342       3.790  -0.465 -18.445  1.00 27.12           N
ATOM   3954  CZ  ARG A 342       4.448   0.474 -19.134  1.00 24.20           C
ATOM   3955  NH1 ARG A 342       3.810   1.303 -19.968  1.00 21.44           N
ATOM   3956  NH2 ARG A 342       5.766   0.585 -18.966  1.00 25.12           N1+
ATOM   3957  H   ARG A 342      -0.724  -1.415 -16.136  1.00  0.00           H
ATOM   3958  HA  ARG A 342      -0.288   1.389 -15.899  1.00  0.00           H
ATOM   3959  HB2 ARG A 342      -0.204  -0.519 -18.274  1.00  0.00           H
ATOM   3960  HB3 ARG A 342       0.234   1.151 -18.427  1.00  0.00           H
ATOM   3961  HG2 ARG A 342       2.149   0.940 -17.062  1.00  0.00           H
ATOM   3962  HG3 ARG A 342       1.672  -0.606 -16.423  1.00  0.00           H
ATOM   3963  HD2 ARG A 342       2.181  -1.772 -18.417  1.00  0.00           H
ATOM   3964  HD3 ARG A 342       1.939  -0.416 -19.449  1.00  0.00           H
ATOM   3965  HE  ARG A 342       4.237  -1.150 -17.827  1.00  0.00           H
ATOM   3966 HH11 ARG A 342       2.786   1.239 -20.150  1.00  0.00           H
ATOM   3967 HH12 ARG A 342       4.258   2.025 -20.505  1.00  0.00           H
ATOM   3968 HH21 ARG A 342       6.256  -0.025 -18.326  1.00  0.00           H
ATOM   3969 HH22 ARG A 342       6.313   1.285 -19.444  1.00  0.00           H
ATOM   3970  N   GLU A 343      -2.720   0.579 -18.017  1.00 24.14           N
ATOM   3971  CA  GLU A 343      -3.886   1.047 -18.745  1.00 24.75           C
ATOM   3972  C   GLU A 343      -5.084   1.228 -17.785  1.00 24.10           C
ATOM   3973  O   GLU A 343      -5.960   2.053 -18.057  1.00 24.31           O
ATOM   3974  CB  GLU A 343      -4.211   0.032 -19.864  1.00 25.68           C
ATOM   3975  CG  GLU A 343      -3.318   0.170 -21.124  1.00 30.62           C
ATOM   3976  CD  GLU A 343      -1.934  -0.473 -21.026  1.00 30.71           C
ATOM   3977  OE1 GLU A 343      -1.838  -1.666 -21.380  1.00 32.63           O
ATOM   3978  OE2 GLU A 343      -0.974   0.232 -20.636  1.00 29.45           O1-
ATOM   3979  H   GLU A 343      -2.374  -0.351 -18.249  1.00  0.00           H
ATOM   3980  HA  GLU A 343      -3.670   2.022 -19.188  1.00  0.00           H
ATOM   3981  HB2 GLU A 343      -4.164  -0.988 -19.479  1.00  0.00           H
ATOM   3982  HB3 GLU A 343      -5.244   0.173 -20.186  1.00  0.00           H
ATOM   3983  HG2 GLU A 343      -3.822  -0.305 -21.965  1.00  0.00           H
ATOM   3984  HG3 GLU A 343      -3.200   1.218 -21.400  1.00  0.00           H
ATOM   3985  N   TYR A 344      -5.095   0.540 -16.629  1.00 22.33           N
ATOM   3986  CA  TYR A 344      -6.009   0.807 -15.515  1.00 19.95           C
ATOM   3987  C   TYR A 344      -5.680   2.160 -14.877  1.00 21.16           C
ATOM   3988  O   TYR A 344      -6.569   3.003 -14.768  1.00 19.78           O
ATOM   3989  CB  TYR A 344      -5.943  -0.306 -14.445  1.00 17.99           C
ATOM   3990  CG  TYR A 344      -6.732  -0.034 -13.170  1.00 21.67           C
ATOM   3991  CD1 TYR A 344      -8.132   0.091 -13.231  1.00 21.18           C
ATOM   3992  CD2 TYR A 344      -6.074   0.133 -11.930  1.00 21.43           C
ATOM   3993  CE1 TYR A 344      -8.864   0.425 -12.079  1.00 20.99           C
ATOM   3994  CE2 TYR A 344      -6.815   0.445 -10.772  1.00 21.57           C
ATOM   3995  CZ  TYR A 344      -8.209   0.626 -10.852  1.00 21.53           C
ATOM   3996  OH  TYR A 344      -8.922   1.020  -9.756  1.00 19.87           O
ATOM   3997  H   TYR A 344      -4.359  -0.141 -16.492  1.00  0.00           H
ATOM   3998  HA  TYR A 344      -7.028   0.864 -15.897  1.00  0.00           H
ATOM   3999  HB2 TYR A 344      -6.319  -1.233 -14.876  1.00  0.00           H
ATOM   4000  HB3 TYR A 344      -4.908  -0.497 -14.176  1.00  0.00           H
ATOM   4001  HD1 TYR A 344      -8.643  -0.040 -14.171  1.00  0.00           H
ATOM   4002  HD2 TYR A 344      -4.999   0.039 -11.863  1.00  0.00           H
ATOM   4003  HE1 TYR A 344      -9.930   0.534 -12.151  1.00  0.00           H
ATOM   4004  HE2 TYR A 344      -6.307   0.568  -9.828  1.00  0.00           H
ATOM   4005  HH  TYR A 344      -9.811   1.300  -9.975  1.00  0.00           H
ATOM   4006  N   PHE A 345      -4.417   2.397 -14.495  1.00 20.71           N
ATOM   4007  CA  PHE A 345      -3.981   3.648 -13.889  1.00 20.36           C
ATOM   4008  C   PHE A 345      -4.210   4.834 -14.836  1.00 21.44           C
ATOM   4009  O   PHE A 345      -4.774   5.838 -14.410  1.00 22.30           O
ATOM   4010  CB  PHE A 345      -2.509   3.599 -13.416  1.00 18.78           C
ATOM   4011  CG  PHE A 345      -2.079   4.939 -12.836  1.00 18.84           C
ATOM   4012  CD1 PHE A 345      -2.661   5.391 -11.632  1.00 19.24           C
ATOM   4013  CD2 PHE A 345      -1.287   5.818 -13.607  1.00 17.98           C
ATOM   4014  CE1 PHE A 345      -2.510   6.734 -11.240  1.00 17.82           C
ATOM   4015  CE2 PHE A 345      -1.133   7.158 -13.203  1.00 18.95           C
ATOM   4016  CZ  PHE A 345      -1.757   7.620 -12.029  1.00 18.47           C
ATOM   4017  H   PHE A 345      -3.717   1.664 -14.610  1.00  0.00           H
ATOM   4018  HA  PHE A 345      -4.612   3.810 -13.014  1.00  0.00           H
ATOM   4019  HB2 PHE A 345      -2.384   2.824 -12.658  1.00  0.00           H
ATOM   4020  HB3 PHE A 345      -1.853   3.326 -14.244  1.00  0.00           H
ATOM   4021  HD1 PHE A 345      -3.300   4.734 -11.059  1.00  0.00           H
ATOM   4022  HD2 PHE A 345      -0.880   5.502 -14.558  1.00  0.00           H
ATOM   4023  HE1 PHE A 345      -3.008   7.108 -10.361  1.00  0.00           H
ATOM   4024  HE2 PHE A 345      -0.583   7.855 -13.817  1.00  0.00           H
ATOM   4025  HZ  PHE A 345      -1.677   8.660 -11.750  1.00  0.00           H
ATOM   4026  N   ASP A 346      -3.838   4.728 -16.116  1.00 21.25           N
ATOM   4027  CA  ASP A 346      -4.007   5.840 -17.054  1.00 20.54           C
ATOM   4028  C   ASP A 346      -5.492   6.120 -17.367  1.00 20.57           C
ATOM   4029  O   ASP A 346      -5.862   7.276 -17.553  1.00 18.80           O
ATOM   4030  CB  ASP A 346      -3.170   5.635 -18.331  1.00 21.13           C
ATOM   4031  CG  ASP A 346      -2.584   6.967 -18.786  1.00 21.90           C
ATOM   4032  OD1 ASP A 346      -1.555   7.393 -18.211  1.00 20.23           O
ATOM   4033  OD2 ASP A 346      -3.198   7.606 -19.662  1.00 24.56           O1-
ATOM   4034  H   ASP A 346      -3.341   3.892 -16.426  1.00  0.00           H
ATOM   4035  HA  ASP A 346      -3.622   6.721 -16.536  1.00  0.00           H
ATOM   4036  HB2 ASP A 346      -2.331   4.964 -18.146  1.00  0.00           H
ATOM   4037  HB3 ASP A 346      -3.754   5.189 -19.137  1.00  0.00           H
ATOM   4038  N   THR A 347      -6.381   5.112 -17.259  1.00 20.11           N
ATOM   4039  CA  THR A 347      -7.840   5.300 -17.246  1.00 20.50           C
ATOM   4040  C   THR A 347      -8.305   6.172 -16.046  1.00 19.74           C
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ATOM   4041  O   THR A 347      -9.312   6.867 -16.166  1.00 19.02           O
ATOM   4042  CB  THR A 347      -8.572   3.918 -17.283  1.00 17.98           C
ATOM   4043  OG1 THR A 347      -8.326   3.245 -18.512  1.00 21.15           O
ATOM   4044  CG2 THR A 347     -10.104   3.978 -17.162  1.00 18.73           C
ATOM   4045  H   THR A 347      -6.013   4.195 -17.044  1.00  0.00           H
ATOM   4046  HA  THR A 347      -8.107   5.856 -18.147  1.00  0.00           H
ATOM   4047  HB  THR A 347      -8.214   3.280 -16.480  1.00  0.00           H
ATOM   4048  HG1 THR A 347      -7.406   2.950 -18.473  1.00  0.00           H
ATOM   4049 HG21 THR A 347     -10.557   2.992 -17.261  1.00  0.00           H
ATOM   4050 HG22 THR A 347     -10.404   4.339 -16.180  1.00  0.00           H
ATOM   4051 HG23 THR A 347     -10.547   4.645 -17.902  1.00  0.00           H
ATOM   4052  N   LEU A 348      -7.582   6.179 -14.915  1.00 20.95           N
ATOM   4053  CA  LEU A 348      -7.841   7.051 -13.767  1.00 20.70           C
ATOM   4054  C   LEU A 348      -7.143   8.416 -13.956  1.00 20.77           C
ATOM   4055  O   LEU A 348      -7.699   9.451 -13.583  1.00 22.33           O
ATOM   4056  CB  LEU A 348      -7.269   6.402 -12.474  1.00 19.16           C
ATOM   4057  CG  LEU A 348      -7.798   4.989 -12.125  1.00 19.34           C
ATOM   4058  CD1 LEU A 348      -7.012   4.405 -10.946  1.00 18.78           C
ATOM   4059  CD2 LEU A 348      -9.305   4.927 -11.829  1.00 16.55           C
ATOM   4060  H   LEU A 348      -6.733   5.624 -14.887  1.00  0.00           H
ATOM   4061  HA  LEU A 348      -8.912   7.223 -13.657  1.00  0.00           H
ATOM   4062  HB2 LEU A 348      -6.185   6.345 -12.544  1.00  0.00           H
ATOM   4063  HB3 LEU A 348      -7.416   7.063 -11.623  1.00  0.00           H
ATOM   4064  HG  LEU A 348      -7.616   4.341 -12.979  1.00  0.00           H
ATOM   4065 HD11 LEU A 348      -7.357   3.399 -10.708  1.00  0.00           H
ATOM   4066 HD12 LEU A 348      -5.947   4.339 -11.168  1.00  0.00           H
ATOM   4067 HD13 LEU A 348      -7.125   5.018 -10.053  1.00  0.00           H
ATOM   4068 HD21 LEU A 348      -9.629   3.891 -11.727  1.00  0.00           H
ATOM   4069 HD22 LEU A 348      -9.556   5.432 -10.897  1.00  0.00           H
ATOM   4070 HD23 LEU A 348      -9.894   5.368 -12.630  1.00  0.00           H
ATOM   4071  N   ASP A 349      -5.931   8.423 -14.526  1.00 21.51           N
ATOM   4072  CA  ASP A 349      -5.045   9.590 -14.615  1.00 21.24           C
ATOM   4073  C   ASP A 349      -5.458  10.567 -15.726  1.00 21.96           C
ATOM   4074  O   ASP A 349      -5.492  11.778 -15.498  1.00 19.94           O
ATOM   4075  CB  ASP A 349      -3.599   9.119 -14.884  1.00 18.89           C
ATOM   4076  CG  ASP A 349      -2.562  10.103 -14.366  1.00 19.84           C
ATOM   4077  OD1 ASP A 349      -2.708  10.591 -13.226  1.00 20.50           O
ATOM   4078  OD2 ASP A 349      -1.558  10.373 -15.061  1.00 19.99           O1-
ATOM   4079  H   ASP A 349      -5.523   7.520 -14.753  1.00  0.00           H
ATOM   4080  HA  ASP A 349      -5.103  10.111 -13.657  1.00  0.00           H
ATOM   4081  HB2 ASP A 349      -3.412   8.175 -14.376  1.00  0.00           H
ATOM   4082  HB3 ASP A 349      -3.420   8.936 -15.945  1.00  0.00           H
ATOM   4083  N   HIS A 350      -5.848  10.047 -16.901  1.00 22.62           N
ATOM   4084  CA  HIS A 350      -6.421  10.829 -18.005  1.00 23.51           C
ATOM   4085  C   HIS A 350      -7.904  11.173 -17.759  1.00 22.85           C
ATOM   4086  O   HIS A 350      -8.493  11.920 -18.539  1.00 22.01           O
ATOM   4087  CB  HIS A 350      -6.260  10.098 -19.361  1.00  0.00           C
ATOM   4088  CG  HIS A 350      -5.129  10.628 -20.211  1.00  0.00           C
ATOM   4089  ND1 HIS A 350      -3.955   9.933 -20.447  1.00  0.00           N
ATOM   4090  CD2 HIS A 350      -4.990  11.817 -20.893  1.00  0.00           C
ATOM   4091  CE1 HIS A 350      -3.200  10.681 -21.252  1.00  0.00           C
ATOM   4092  NE2 HIS A 350      -3.764  11.842 -21.564  1.00  0.00           N
ATOM   4093  H   HIS A 350      -5.759   9.042 -17.047  1.00  0.00           H
ATOM   4094  HA  HIS A 350      -5.907  11.782 -18.082  1.00  0.00           H
ATOM   4095  HB2 HIS A 350      -6.145   9.024 -19.243  1.00  0.00           H
ATOM   4096  HB3 HIS A 350      -7.154  10.216 -19.976  1.00  0.00           H
ATOM   4097  HD1 HIS A 350      -3.687   8.966 -20.112  1.00  0.00           H
ATOM   4098  HD2 HIS A 350      -5.678  12.648 -20.955  1.00  0.00           H
ATOM   4099  HE1 HIS A 350      -2.228  10.368 -21.609  1.00  0.00           H
ATOM   4100  N   GLN A 351      -8.507  10.679 -16.665  1.00 22.30           N
ATOM   4101  CA  GLN A 351      -9.774  11.181 -16.143  1.00 23.00           C
ATOM   4102  C   GLN A 351      -9.434  12.402 -15.268  1.00 22.67           C
ATOM   4103  O   GLN A 351      -9.802  13.520 -15.626  1.00 19.82           O
ATOM   4104  CB  GLN A 351     -10.498  10.057 -15.354  1.00 23.52           C
ATOM   4105  CG  GLN A 351     -12.021  10.242 -15.161  1.00 26.12           C
ATOM   4106  CD  GLN A 351     -12.432  10.787 -13.794  1.00 28.38           C
ATOM   4107  OE1 GLN A 351     -11.819  11.702 -13.262  1.00 27.29           O
ATOM   4108  NE2 GLN A 351     -13.471  10.221 -13.193  1.00 27.43           N
ATOM   4109  H   GLN A 351      -7.939  10.094 -16.070  1.00  0.00           H
ATOM   4110  HA  GLN A 351     -10.409  11.501 -16.972  1.00  0.00           H
ATOM   4111  HB2 GLN A 351     -10.375   9.138 -15.924  1.00  0.00           H
ATOM   4112  HB3 GLN A 351     -10.022   9.858 -14.396  1.00  0.00           H
ATOM   4113  HG2 GLN A 351     -12.429  10.891 -15.936  1.00  0.00           H
ATOM   4114  HG3 GLN A 351     -12.505   9.275 -15.304  1.00  0.00           H
ATOM   4115 HE21 GLN A 351     -13.815   9.335 -13.557  1.00  0.00           H
ATOM   4116 HE22 GLN A 351     -13.796  10.559 -12.293  1.00  0.00           H
ATOM   4117  N   GLY A 352      -8.667  12.209 -14.184  1.00 21.90           N
ATOM   4118  CA  GLY A 352      -8.117  13.273 -13.337  1.00 22.88           C
ATOM   4119  C   GLY A 352      -8.572  13.212 -11.873  1.00 23.50           C
ATOM   4120  O   GLY A 352      -8.024  13.910 -11.017  1.00 20.98           O
ATOM   4121  H   GLY A 352      -8.343  11.263 -13.999  1.00  0.00           H
ATOM   4122  HA2 GLY A 352      -7.032  13.169 -13.358  1.00  0.00           H
ATOM   4123  HA3 GLY A 352      -8.353  14.263 -13.727  1.00  0.00           H
ATOM   4124  N   GLY A 353      -9.564  12.359 -11.599  1.00 21.49           N
ATOM   4125  CA  GLY A 353     -10.146  11.876 -10.348  1.00 20.56           C
ATOM   4126  C   GLY A 353      -9.525  12.275  -9.008  1.00 21.34           C
ATOM   4127  O   GLY A 353     -10.198  12.886  -8.177  1.00 20.96           O
ATOM   4128  H   GLY A 353     -10.009  11.976 -12.429  1.00  0.00           H
ATOM   4129  HA2 GLY A 353     -11.215  12.089 -10.342  1.00  0.00           H
ATOM   4130  HA3 GLY A 353     -10.044  10.803 -10.413  1.00  0.00           H
ATOM   4131  N   PHE A 354      -8.236  11.952  -8.815  1.00 21.51           N
ATOM   4132  CA  PHE A 354      -7.396  12.252  -7.646  1.00 21.68           C
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ATOM   4133  C   PHE A 354      -7.496  13.712  -7.183  1.00 22.65           C
ATOM   4134  O   PHE A 354      -7.483  14.003  -5.987  1.00 23.57           O
ATOM   4135  CB  PHE A 354      -5.927  11.888  -7.959  1.00 20.06           C
ATOM   4136  CG  PHE A 354      -5.703  10.450  -8.394  1.00 22.30           C
ATOM   4137  CD1 PHE A 354      -5.611   9.429  -7.427  1.00 22.41           C
ATOM   4138  CD2 PHE A 354      -5.592  10.126  -9.765  1.00 19.69           C
ATOM   4139  CE1 PHE A 354      -5.450   8.089  -7.823  1.00 22.82           C
ATOM   4140  CE2 PHE A 354      -5.422   8.786 -10.161  1.00 19.35           C
ATOM   4141  CZ  PHE A 354      -5.366   7.765  -9.191  1.00 19.73           C
ATOM   4142  H   PHE A 354      -7.784  11.448  -9.564  1.00  0.00           H
ATOM   4143  HA  PHE A 354      -7.741  11.633  -6.819  1.00  0.00           H
ATOM   4144  HB2 PHE A 354      -5.533  12.553  -8.731  1.00  0.00           H
ATOM   4145  HB3 PHE A 354      -5.310  12.074  -7.077  1.00  0.00           H
ATOM   4146  HD1 PHE A 354      -5.672   9.666  -6.375  1.00  0.00           H
ATOM   4147  HD2 PHE A 354      -5.634  10.896 -10.523  1.00  0.00           H
ATOM   4148  HE1 PHE A 354      -5.387   7.309  -7.077  1.00  0.00           H
ATOM   4149  HE2 PHE A 354      -5.329   8.543 -11.211  1.00  0.00           H
ATOM   4150  HZ  PHE A 354      -5.241   6.735  -9.493  1.00  0.00           H
ATOM   4151  N   PHE A 355      -7.624  14.621  -8.151  1.00 22.12           N
ATOM   4152  CA  PHE A 355      -7.725  16.054  -7.944  1.00 21.19           C
ATOM   4153  C   PHE A 355      -9.187  16.508  -7.873  1.00 20.42           C
ATOM   4154  O   PHE A 355      -9.495  17.424  -7.116  1.00 20.48           O
ATOM   4155  CB  PHE A 355      -7.071  16.728  -9.161  1.00 22.36           C
ATOM   4156  CG  PHE A 355      -5.629  16.314  -9.399  1.00 24.02           C
ATOM   4157  CD1 PHE A 355      -4.708  16.300  -8.332  1.00 22.48           C
ATOM   4158  CD2 PHE A 355      -5.205  15.930 -10.687  1.00 24.49           C
ATOM   4159  CE1 PHE A 355      -3.380  15.901  -8.548  1.00 22.98           C
ATOM   4160  CE2 PHE A 355      -3.865  15.562 -10.911  1.00 25.14           C
ATOM   4161  CZ  PHE A 355      -2.949  15.562  -9.842  1.00 26.02           C
ATOM   4162  H   PHE A 355      -7.629  14.286  -9.112  1.00  0.00           H
ATOM   4163  HA  PHE A 355      -7.222  16.350  -7.026  1.00  0.00           H
ATOM   4164  HB2 PHE A 355      -7.651  16.530 -10.065  1.00  0.00           H
ATOM   4165  HB3 PHE A 355      -7.092  17.806  -9.021  1.00  0.00           H
ATOM   4166  HD1 PHE A 355      -5.005  16.607  -7.343  1.00  0.00           H
ATOM   4167  HD2 PHE A 355      -5.907  15.918 -11.506  1.00  0.00           H
ATOM   4168  HE1 PHE A 355      -2.700  15.869  -7.713  1.00  0.00           H
ATOM   4169  HE2 PHE A 355      -3.544  15.271 -11.901  1.00  0.00           H
ATOM   4170  HZ  PHE A 355      -1.917  15.295 -10.016  1.00  0.00           H
ATOM   4171  N   TYR A 356     -10.077  15.865  -8.638  1.00 19.12           N
ATOM   4172  CA  TYR A 356     -11.488  16.226  -8.793  1.00 18.71           C
ATOM   4173  C   TYR A 356     -12.328  15.873  -7.569  1.00 20.13           C
ATOM   4174  O   TYR A 356     -13.313  16.543  -7.279  1.00 17.47           O
ATOM   4175  CB  TYR A 356     -12.084  15.381  -9.932  1.00 17.74           C
ATOM   4176  CG  TYR A 356     -11.649  15.667 -11.349  1.00 21.18           C
ATOM   4177  CD1 TYR A 356     -10.930  16.828 -11.696  1.00 20.84           C
ATOM   4178  CD2 TYR A 356     -11.992  14.738 -12.347  1.00 21.61           C
ATOM   4179  CE1 TYR A 356     -10.491  17.013 -13.017  1.00 22.87           C
ATOM   4180  CE2 TYR A 356     -11.574  14.938 -13.671  1.00 22.71           C
ATOM   4181  CZ  TYR A 356     -10.785  16.054 -14.000  1.00 24.04           C
ATOM   4182  OH  TYR A 356     -10.278  16.189 -15.256  1.00 25.85           O
ATOM   4183  H   TYR A 356      -9.742  15.074  -9.171  1.00  0.00           H
ATOM   4184  HA  TYR A 356     -11.599  17.296  -8.977  1.00  0.00           H
ATOM   4185  HB2 TYR A 356     -11.904  14.323  -9.735  1.00  0.00           H
ATOM   4186  HB3 TYR A 356     -13.161  15.486  -9.931  1.00  0.00           H
ATOM   4187  HD1 TYR A 356     -10.688  17.577 -10.961  1.00  0.00           H
ATOM   4188  HD2 TYR A 356     -12.547  13.843 -12.103  1.00  0.00           H
ATOM   4189  HE1 TYR A 356      -9.911  17.885 -13.266  1.00  0.00           H
ATOM   4190  HE2 TYR A 356     -11.832  14.200 -14.418  1.00  0.00           H
ATOM   4191  HH  TYR A 356     -10.159  15.321 -15.654  1.00  0.00           H
ATOM   4192  N   GLU A 357     -11.974  14.783  -6.897  1.00 19.72           N
ATOM   4193  CA  GLU A 357     -12.537  14.347  -5.639  1.00 19.69           C
ATOM   4194  C   GLU A 357     -11.322  14.289  -4.710  1.00 21.19           C
ATOM   4195  O   GLU A 357     -10.613  15.294  -4.578  1.00 22.16           O
ATOM   4196  CB  GLU A 357     -13.334  13.039  -5.861  1.00 19.32           C
ATOM   4197  CG  GLU A 357     -14.673  13.274  -6.604  1.00 20.09           C
ATOM   4198  CD  GLU A 357     -14.948  12.325  -7.765  1.00 23.06           C
ATOM   4199  OE1 GLU A 357     -14.674  11.109  -7.663  1.00 20.05           O
ATOM   4200  OE2 GLU A 357     -15.477  12.814  -8.788  1.00 23.66           O1-
ATOM   4201  H   GLU A 357     -11.169  14.262  -7.238  1.00  0.00           H
ATOM   4202  HA  GLU A 357     -13.203  15.100  -5.215  1.00  0.00           H
ATOM   4203  HB2 GLU A 357     -12.709  12.323  -6.394  1.00  0.00           H
ATOM   4204  HB3 GLU A 357     -13.570  12.580  -4.903  1.00  0.00           H
ATOM   4205  HG2 GLU A 357     -15.505  13.222  -5.906  1.00  0.00           H
ATOM   4206  HG3 GLU A 357     -14.710  14.286  -7.003  1.00  0.00           H
ATOM   4207  N   ARG A 358     -11.052  13.151  -4.077  1.00 19.68           N
ATOM   4208  CA  ARG A 358      -9.853  12.931  -3.288  1.00 19.97           C
ATOM   4209  C   ARG A 358      -9.589  11.430  -3.286  1.00 20.10           C
ATOM   4210  O   ARG A 358      -9.613  10.805  -2.229  1.00 19.00           O
ATOM   4211  CB  ARG A 358      -9.997  13.591  -1.898  1.00 19.86           C
ATOM   4212  CG  ARG A 358      -8.730  13.571  -1.018  1.00 19.86           C
ATOM   4213  CD  ARG A 358      -8.969  12.962   0.373  1.00 19.26           C
ATOM   4214  NE  ARG A 358      -9.173  11.518   0.257  1.00 20.24           N
ATOM   4215  CZ  ARG A 358      -9.222  10.595   1.216  1.00 19.04           C
ATOM   4216  NH1 ARG A 358      -9.181  10.929   2.503  1.00 17.28           N
ATOM   4217  NH2 ARG A 358      -9.306   9.323   0.846  1.00 18.85           N1+
ATOM   4218  H   ARG A 358     -11.671  12.353  -4.188  1.00  0.00           H
ATOM   4219  HA  ARG A 358      -9.004  13.392  -3.799  1.00  0.00           H
ATOM   4220  HB2 ARG A 358     -10.294  14.632  -2.027  1.00  0.00           H
ATOM   4221  HB3 ARG A 358     -10.827  13.111  -1.378  1.00  0.00           H
ATOM   4222  HG2 ARG A 358      -7.920  13.034  -1.515  1.00  0.00           H
ATOM   4223  HG3 ARG A 358      -8.360  14.591  -0.907  1.00  0.00           H
ATOM   4224  HD2 ARG A 358      -8.086  13.126   0.982  1.00  0.00           H
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ATOM   4225  HD3 ARG A 358      -9.806  13.427   0.890  1.00  0.00           H
ATOM   4226  HE  ARG A 358      -9.295  11.186  -0.715  1.00  0.00           H
ATOM   4227 HH11 ARG A 358      -9.197  11.893   2.845  1.00  0.00           H
ATOM   4228 HH12 ARG A 358      -9.095  10.196   3.208  1.00  0.00           H
ATOM   4229 HH21 ARG A 358      -9.420   9.020  -0.127  1.00  0.00           H
ATOM   4230 HH22 ARG A 358      -9.396   8.525   1.481  1.00  0.00           H
ATOM   4231  N   TRP A 359      -9.399  10.837  -4.469  1.00 19.26           N
ATOM   4232  CA  TRP A 359      -9.170   9.401  -4.611  1.00 19.61           C
ATOM   4233  C   TRP A 359      -7.838   9.015  -3.959  1.00 18.49           C
ATOM   4234  O   TRP A 359      -6.828   9.692  -4.163  1.00 21.29           O
ATOM   4235  CB  TRP A 359      -9.117   8.995  -6.096  1.00 19.93           C
ATOM   4236  CG  TRP A 359     -10.316   9.233  -6.963  1.00 23.18           C
ATOM   4237  CD1 TRP A 359     -11.493   9.799  -6.606  1.00 23.43           C
ATOM   4238  CD2 TRP A 359     -10.447   8.907  -8.376  1.00 22.00           C
ATOM   4239  NE1 TRP A 359     -12.325   9.879  -7.704  1.00 26.12           N
ATOM   4240  CE3 TRP A 359      -9.601   8.301  -9.335  1.00 22.65           C
ATOM   4241  CE2 TRP A 359     -11.730   9.343  -8.824  1.00 24.16           C
ATOM   4242  CZ3 TRP A 359     -10.020   8.140 -10.671  1.00 21.38           C
ATOM   4243  CZ2 TRP A 359     -12.139   9.196 -10.159  1.00 24.29           C
ATOM   4244  CH2 TRP A 359     -11.286   8.578 -11.085  1.00 23.99           C
ATOM   4245  H   TRP A 359      -9.398  11.403  -5.303  1.00  0.00           H
ATOM   4246  HA  TRP A 359      -9.984   8.869  -4.117  1.00  0.00           H
ATOM   4247  HB2 TRP A 359      -8.276   9.483  -6.583  1.00  0.00           H
ATOM   4248  HB3 TRP A 359      -8.890   7.930  -6.163  1.00  0.00           H
ATOM   4249  HD1 TRP A 359     -11.728  10.158  -5.616  1.00  0.00           H
ATOM   4250  HE1 TRP A 359     -13.256  10.356  -7.681  1.00  0.00           H
ATOM   4251  HE3 TRP A 359      -8.616   7.968  -9.040  1.00  0.00           H
ATOM   4252  HZ3 TRP A 359      -9.371   7.698 -11.401  1.00  0.00           H
ATOM   4253  HZ2 TRP A 359     -13.097   9.550 -10.479  1.00  0.00           H
ATOM   4254  HH2 TRP A 359     -11.588   8.465 -12.114  1.00  0.00           H
ATOM   4255  N   GLY A 360      -7.849   7.918  -3.207  1.00 20.56           N
ATOM   4256  CA  GLY A 360      -6.690   7.389  -2.520  1.00 19.56           C
ATOM   4257  C   GLY A 360      -6.075   6.265  -3.349  1.00 19.97           C
ATOM   4258  O   GLY A 360      -6.757   5.572  -4.106  1.00 19.92           O
ATOM   4259  H   GLY A 360      -8.740   7.488  -2.989  1.00  0.00           H
ATOM   4260  HA2 GLY A 360      -5.959   8.166  -2.303  1.00  0.00           H
ATOM   4261  HA3 GLY A 360      -7.009   6.982  -1.560  1.00  0.00           H
ATOM   4262  N   ASP A 361      -4.771   6.065  -3.176  1.00 18.87           N
ATOM   4263  CA  ASP A 361      -3.956   5.032  -3.812  1.00 20.81           C
ATOM   4264  C   ASP A 361      -4.311   3.632  -3.286  1.00 20.03           C
ATOM   4265  O   ASP A 361      -4.208   2.652  -4.018  1.00 22.19           O
ATOM   4266  CB  ASP A 361      -2.464   5.314  -3.492  1.00 21.93           C
ATOM   4267  CG  ASP A 361      -2.143   5.291  -2.000  1.00 21.87           C
ATOM   4268  OD1 ASP A 361      -2.758   6.090  -1.261  1.00 25.70           O
ATOM   4269  OD2 ASP A 361      -1.374   4.415  -1.561  1.00 23.34           O1-
ATOM   4270  H   ASP A 361      -4.282   6.624  -2.483  1.00  0.00           H
ATOM   4271  HA  ASP A 361      -4.136   5.048  -4.883  1.00  0.00           H
ATOM   4272  HB2 ASP A 361      -1.836   4.581  -3.999  1.00  0.00           H
ATOM   4273  HB3 ASP A 361      -2.172   6.284  -3.889  1.00  0.00           H
ATOM   4274  N   ALA A 362      -4.718   3.532  -2.019  1.00 20.12           N
ATOM   4275  CA  ALA A 362      -5.028   2.296  -1.319  1.00 19.36           C
ATOM   4276  C   ALA A 362      -6.237   1.542  -1.918  1.00 19.28           C
ATOM   4277  O   ALA A 362      -6.054   0.373  -2.268  1.00 17.72           O
ATOM   4278  CB  ALA A 362      -5.184   2.622   0.162  1.00 20.36           C
ATOM   4279  H   ALA A 362      -4.728   4.389  -1.486  1.00  0.00           H
ATOM   4280  HA  ALA A 362      -4.156   1.648  -1.421  1.00  0.00           H
ATOM   4281  HB1 ALA A 362      -5.142   1.725   0.767  1.00  0.00           H
ATOM   4282  HB2 ALA A 362      -4.345   3.228   0.486  1.00  0.00           H
ATOM   4283  HB3 ALA A 362      -6.092   3.170   0.404  1.00  0.00           H
ATOM   4284  N   PRO A 363      -7.417   2.166  -2.171  1.00 17.22           N
ATOM   4285  CA  PRO A 363      -8.462   1.552  -3.002  1.00 17.69           C
ATOM   4286  C   PRO A 363      -8.028   1.233  -4.445  1.00 17.56           C
ATOM   4287  O   PRO A 363      -8.306   0.126  -4.896  1.00 18.84           O
ATOM   4288  CB  PRO A 363      -9.692   2.465  -2.900  1.00 18.18           C
ATOM   4289  CG  PRO A 363      -9.160   3.805  -2.422  1.00 20.02           C
ATOM   4290  CD  PRO A 363      -7.858   3.479  -1.686  1.00 17.04           C
ATOM   4291  HA  PRO A 363      -8.730   0.597  -2.553  1.00  0.00           H
ATOM   4292  HB2 PRO A 363     -10.256   2.543  -3.832  1.00  0.00           H
ATOM   4293  HB3 PRO A 363     -10.373   2.068  -2.147  1.00  0.00           H
ATOM   4294  HG2 PRO A 363      -8.945   4.432  -3.287  1.00  0.00           H
ATOM   4295  HG3 PRO A 363      -9.870   4.348  -1.797  1.00  0.00           H
ATOM   4296  HD2 PRO A 363      -7.129   4.272  -1.797  1.00  0.00           H
ATOM   4297  HD3 PRO A 363      -8.076   3.390  -0.621  1.00  0.00           H
ATOM   4298  N   VAL A 364      -7.281   2.111  -5.133  1.00 15.81           N
ATOM   4299  CA  VAL A 364      -6.709   1.862  -6.469  1.00 13.67           C
ATOM   4300  C   VAL A 364      -5.788   0.616  -6.486  1.00 15.13           C
ATOM   4301  O   VAL A 364      -5.923  -0.246  -7.354  1.00 12.77           O
ATOM   4302  CB  VAL A 364      -6.011   3.160  -6.972  1.00 16.16           C
ATOM   4303  CG1 VAL A 364      -5.181   2.990  -8.259  1.00 13.85           C
ATOM   4304  CG2 VAL A 364      -7.035   4.290  -7.180  1.00 15.04           C
ATOM   4305  H   VAL A 364      -7.084   3.010  -4.713  1.00  0.00           H
ATOM   4306  HA  VAL A 364      -7.537   1.637  -7.146  1.00  0.00           H
ATOM   4307  HB  VAL A 364      -5.314   3.494  -6.205  1.00  0.00           H
ATOM   4308 HG11 VAL A 364      -4.762   3.942  -8.581  1.00  0.00           H
ATOM   4309 HG12 VAL A 364      -4.343   2.306  -8.124  1.00  0.00           H
ATOM   4310 HG13 VAL A 364      -5.793   2.609  -9.074  1.00  0.00           H
ATOM   4311 HG21 VAL A 364      -6.543   5.219  -7.469  1.00  0.00           H
ATOM   4312 HG22 VAL A 364      -7.749   4.033  -7.963  1.00  0.00           H
ATOM   4313 HG23 VAL A 364      -7.603   4.498  -6.276  1.00  0.00           H
ATOM   4314  N   HIS A 365      -4.912   0.467  -5.480  1.00 14.05           N
ATOM   4315  CA  HIS A 365      -4.052  -0.708  -5.298  1.00 17.18           C
ATOM   4316  C   HIS A 365      -4.874  -1.964  -4.992  1.00 16.98           C
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ATOM   4317  O   HIS A 365     -4.497  -3.046  -5.426  1.00 19.79          O
ATOM   4318  CB  HIS A 365     -3.081  -0.537  -4.111  1.00 16.11          C
ATOM   4319  CG  HIS A 365     -1.945   0.440  -4.252  1.00 19.71          C
ATOM   4320  ND1 HIS A 365     -0.935   0.461  -3.312  1.00 19.57          N1+
ATOM   4321  CD2 HIS A 365     -1.655   1.435  -5.171  1.00 18.63          C
ATOM   4322  CE1 HIS A 365     -0.084   1.417  -3.641  1.00 21.02          C
ATOM   4323  NE2 HIS A 365     -0.481   2.040  -4.743  1.00 20.54          N
ATOM   4324  H   HIS A 365     -4.825   1.240  -4.821  1.00  0.00          H
ATOM   4325  HA  HIS A 365     -3.484  -0.884  -6.214  1.00  0.00          H
ATOM   4326  HB2 HIS A 365     -3.630  -0.278  -3.206  1.00  0.00          H
ATOM   4327  HB3 HIS A 365     -2.609  -1.500  -3.898  1.00  0.00          H
ATOM   4328  HD1 HIS A 365     -0.800  -0.192  -2.490  1.00  0.00          H
ATOM   4329  HD2 HIS A 365     -2.184   1.774  -6.050  1.00  0.00          H
ATOM   4330  HE1 HIS A 365      0.805   1.656  -3.071  1.00  0.00          H
ATOM   4331  HE2 HIS A 365     -0.008   2.878  -5.117  1.00  0.00          H
ATOM   4332  N   SER A 366     -5.984  -1.835  -4.256  1.00 18.87          N
ATOM   4333  CA  SER A 366     -6.800  -2.965  -3.823  1.00 18.88          C
ATOM   4334  C   SER A 366     -7.701  -3.460  -4.954  1.00 19.48          C
ATOM   4335  O   SER A 366     -7.787  -4.668  -5.162  1.00 17.62          O
ATOM   4336  CB  SER A 366     -7.696  -2.523  -2.662  1.00 18.94          C
ATOM   4337  OG  SER A 366     -6.882  -2.130  -1.577  1.00 19.20          O
ATOM   4338  H   SER A 366     -6.252  -0.907  -3.954  1.00  0.00          H
ATOM   4339  HA  SER A 366     -6.160  -3.790  -3.508  1.00  0.00          H
ATOM   4340  HB2 SER A 366     -8.361  -1.706  -2.945  1.00  0.00          H
ATOM   4341  HB3 SER A 366     -8.329  -3.352  -2.342  1.00  0.00          H
ATOM   4342  HG  SER A 366     -6.377  -1.357  -1.839  1.00  0.00          H
ATOM   4343  N   ILE A 367     -8.326  -2.544  -5.712  1.00 19.28          N
ATOM   4344  CA  ILE A 367     -9.104  -2.847  -6.915  1.00 18.73          C
ATOM   4345  C   ILE A 367     -8.208  -3.536  -7.961  1.00 19.02          C
ATOM   4346  O   ILE A 367     -8.645  -4.484  -8.605  1.00 20.14          O
ATOM   4347  CB  ILE A 367     -9.819  -1.564  -7.437  1.00 16.72          C
ATOM   4348  CG1 ILE A 367    -10.868  -1.048  -6.417  1.00 15.35          C
ATOM   4349  CG2 ILE A 367    -10.497  -1.768  -8.811  1.00 14.85          C
ATOM   4350  CD1 ILE A 367    -11.275   0.419  -6.628  1.00 15.61          C
ATOM   4351  H   ILE A 367     -8.209  -1.558  -5.484  1.00  0.00          H
ATOM   4352  HA  ILE A 367     -9.866  -3.568  -6.633  1.00  0.00          H
ATOM   4353  HB  ILE A 367     -9.055  -0.794  -7.564  1.00  0.00          H
ATOM   4354 HG12 ILE A 367    -11.753  -1.684  -6.440  1.00  0.00          H
ATOM   4355 HG13 ILE A 367    -10.487  -1.134  -5.400  1.00  0.00          H
ATOM   4356 HG21 ILE A 367    -11.028  -0.875  -9.134  1.00  0.00          H
ATOM   4357 HG22 ILE A 367     -9.769  -1.984  -9.594  1.00  0.00          H
ATOM   4358 HG23 ILE A 367    -11.211  -2.592  -8.786  1.00  0.00          H
ATOM   4359 HD11 ILE A 367    -11.957   0.745  -5.842  1.00  0.00          H
ATOM   4360 HD12 ILE A 367    -10.402   1.072  -6.598  1.00  0.00          H
ATOM   4361 HD13 ILE A 367    -11.772   0.577  -7.584  1.00  0.00          H
ATOM   4362  N   ALA A 368     -6.937  -3.129  -8.058  1.00 17.53          N
ATOM   4363  CA  ALA A 368     -5.941  -3.795  -8.878  1.00 16.44          C
ATOM   4364  C   ALA A 368     -5.504  -5.149  -8.292  1.00 18.86          C
ATOM   4365  O   ALA A 368     -5.647  -6.166  -8.960  1.00 20.08          O
ATOM   4366  CB  ALA A 368     -4.724  -2.882  -8.995  1.00 16.29          C
ATOM   4367  H   ALA A 368     -6.660  -2.300  -7.546  1.00  0.00          H
ATOM   4368  HA  ALA A 368     -6.358  -3.968  -9.872  1.00  0.00          H
ATOM   4369  HB1 ALA A 368     -3.932  -3.403  -9.525  1.00  0.00          H
ATOM   4370  HB2 ALA A 368     -4.980  -1.982  -9.554  1.00  0.00          H
ATOM   4371  HB3 ALA A 368     -4.331  -2.578  -8.026  1.00  0.00          H
ATOM   4372  N   ALA A 369     -4.992  -5.200  -7.053  1.00 18.52          N
ATOM   4373  CA  ALA A 369     -4.424  -6.407  -6.436  1.00 20.68          C
ATOM   4374  C   ALA A 369     -5.440  -7.541  -6.235  1.00 20.05          C
ATOM   4375  O   ALA A 369     -5.047  -8.700  -6.167  1.00 18.61          O
ATOM   4376  CB  ALA A 369     -3.795  -6.060  -5.077  1.00 20.85          C
ATOM   4377  H   ALA A 369     -4.911  -4.332  -6.526  1.00  0.00          H
ATOM   4378  HA  ALA A 369     -3.641  -6.790  -7.094  1.00  0.00          H
ATOM   4379  HB1 ALA A 369     -3.435  -6.954  -4.565  1.00  0.00          H
ATOM   4380  HB2 ALA A 369     -2.940  -5.399  -5.189  1.00  0.00          H
ATOM   4381  HB3 ALA A 369     -4.509  -5.568  -4.417  1.00  0.00          H
ATOM   4382  N   ALA A 370     -6.737  -7.223  -6.158  1.00 20.81          N
ATOM   4383  CA  ALA A 370     -7.805  -8.208  -6.068  1.00 23.03          C
ATOM   4384  C   ALA A 370     -8.277  -8.700  -7.449  1.00 24.19          C
ATOM   4385  O   ALA A 370     -8.980  -9.707  -7.493  1.00 25.96          O
ATOM   4386  CB  ALA A 370     -9.002  -7.545  -5.371  1.00 24.55          C
ATOM   4387  H   ALA A 370     -6.991  -6.240  -6.155  1.00  0.00          H
ATOM   4388  HA  ALA A 370     -7.484  -9.070  -5.484  1.00  0.00          H
ATOM   4389  HB1 ALA A 370     -9.859  -8.214  -5.310  1.00  0.00          H
ATOM   4390  HB2 ALA A 370     -8.747  -7.245  -4.354  1.00  0.00          H
ATOM   4391  HB3 ALA A 370     -9.318  -6.655  -5.909  1.00  0.00          H
ATOM   4392  N   LEU A 371     -7.936  -8.022  -8.556  1.00 24.56          N
ATOM   4393  CA  LEU A 371     -8.431  -8.333  -9.905  1.00 24.21          C
ATOM   4394  C   LEU A 371     -7.321  -8.679 -10.901  1.00 24.41          C
ATOM   4395  O   LEU A 371     -7.581  -9.401 -11.861  1.00 21.31          O
ATOM   4396  CB  LEU A 371     -9.274  -7.162 -10.458  1.00 24.83          C
ATOM   4397  CG  LEU A 371    -10.539  -6.808  -9.649  1.00 27.38          C
ATOM   4398  CD1 LEU A 371    -11.290  -5.636 -10.300  1.00 25.79          C
ATOM   4399  CD2 LEU A 371    -11.484  -7.996  -9.433  1.00 27.66          C
ATOM   4400  H   LEU A 371     -7.334  -7.213  -8.453  1.00  0.00          H
ATOM   4401  HA  LEU A 371     -9.060  -9.220  -9.887  1.00  0.00          H
ATOM   4402  HB2 LEU A 371     -8.638  -6.278 -10.533  1.00  0.00          H
ATOM   4403  HB3 LEU A 371     -9.565  -7.383 -11.484  1.00  0.00          H
ATOM   4404  HG  LEU A 371    -10.209  -6.482  -8.665  1.00  0.00          H
ATOM   4405 HD11 LEU A 371    -12.124  -5.308  -9.680  1.00  0.00          H
ATOM   4406 HD12 LEU A 371    -10.632  -4.777 -10.438  1.00  0.00          H
ATOM   4407 HD13 LEU A 371    -11.685  -5.912 -11.277  1.00  0.00          H
ATOM   4408 HD21 LEU A 371    -12.393  -7.672  -8.934  1.00  0.00          H
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ATOM   4409 HD22 LEU A 371     -11.761  -8.472 -10.372  1.00  0.00           H
ATOM   4410 HD23 LEU A 371     -11.041  -8.751  -8.788  1.00  0.00           H
ATOM   4411  N   PHE A 372      -6.108  -8.154 -10.712  1.00 22.29           N
ATOM   4412  CA  PHE A 372      -4.959  -8.321 -11.605  1.00 20.76           C
ATOM   4413  C   PHE A 372      -3.951  -9.312 -11.005  1.00 22.10           C
ATOM   4414  O   PHE A 372      -2.838  -9.448 -11.507  1.00 20.77           O
ATOM   4415  CB  PHE A 372      -4.257  -6.958 -11.819  1.00 20.58           C
ATOM   4416  CG  PHE A 372      -5.116  -5.815 -12.343  1.00 20.46           C
ATOM   4417  CD1 PHE A 372      -6.357  -6.041 -12.982  1.00 19.24           C
ATOM   4418  CD2 PHE A 372      -4.670  -4.492 -12.154  1.00 17.33           C
ATOM   4419  CE1 PHE A 372      -7.182  -4.960 -13.332  1.00 21.85           C
ATOM   4420  CE2 PHE A 372      -5.485  -3.409 -12.530  1.00 20.11           C
ATOM   4421  CZ  PHE A 372      -6.750  -3.642 -13.100  1.00 20.51           C
ATOM   4422  H   PHE A 372      -5.984  -7.482  -9.955  1.00  0.00           H
ATOM   4423  HA  PHE A 372      -5.277  -8.722 -12.567  1.00  0.00           H
ATOM   4424  HB2 PHE A 372      -3.808  -6.636 -10.878  1.00  0.00           H
ATOM   4425  HB3 PHE A 372      -3.422  -7.072 -12.509  1.00  0.00           H
ATOM   4426  HD1 PHE A 372      -6.710  -7.041 -13.186  1.00  0.00           H
ATOM   4427  HD2 PHE A 372      -3.706  -4.307 -11.703  1.00  0.00           H
ATOM   4428  HE1 PHE A 372      -8.147  -5.148 -13.778  1.00  0.00           H
ATOM   4429  HE2 PHE A 372      -5.146  -2.399 -12.371  1.00  0.00           H
ATOM   4430  HZ  PHE A 372      -7.382  -2.810 -13.374  1.00  0.00           H
ATOM   4431  N   LEU A 373      -4.339 -10.019  -9.943  1.00 21.49           N
ATOM   4432  CA  LEU A 373      -3.668 -11.203  -9.444  1.00 22.37           C
ATOM   4433  C   LEU A 373      -4.698 -12.333  -9.385  1.00 22.61           C
ATOM   4434  O   LEU A 373      -5.851 -12.065  -9.024  1.00 21.20           O
ATOM   4435  CB  LEU A 373      -3.121 -10.955  -8.022  1.00 21.57           C
ATOM   4436  CG  LEU A 373      -1.906 -10.013  -7.922  1.00 21.65           C
ATOM   4437  CD1 LEU A 373      -1.567  -9.729  -6.450  1.00 25.02           C
ATOM   4438  CD2 LEU A 373      -0.679 -10.577  -8.654  1.00 24.25           C
ATOM   4439  H   LEU A 373      -5.292  -9.897  -9.629  1.00  0.00           H
ATOM   4440  HA  LEU A 373      -2.864 -11.482 -10.122  1.00  0.00           H
ATOM   4441  HB2 LEU A 373      -3.931 -10.575  -7.400  1.00  0.00           H
ATOM   4442  HB3 LEU A 373      -2.861 -11.912  -7.576  1.00  0.00           H
ATOM   4443  HG  LEU A 373      -2.170  -9.062  -8.387  1.00  0.00           H
ATOM   4444 HD11 LEU A 373      -0.708  -9.066  -6.361  1.00  0.00           H
ATOM   4445 HD12 LEU A 373      -2.402  -9.245  -5.942  1.00  0.00           H
ATOM   4446 HD13 LEU A 373      -1.336 -10.644  -5.905  1.00  0.00           H
ATOM   4447 HD21 LEU A 373       0.182  -9.930  -8.505  1.00  0.00           H
ATOM   4448 HD22 LEU A 373      -0.415 -11.571  -8.297  1.00  0.00           H
ATOM   4449 HD23 LEU A 373      -0.840 -10.635  -9.731  1.00  0.00           H
ATOM   4450  N   PRO A 374      -4.282 -13.597  -9.611  1.00 23.37           N
ATOM   4451  CA  PRO A 374      -5.075 -14.756  -9.216  1.00 23.61           C
ATOM   4452  C   PRO A 374      -4.985 -14.864  -7.683  1.00 24.19           C
ATOM   4453  O   PRO A 374      -3.901 -14.690  -7.123  1.00 25.28           O
ATOM   4454  CB  PRO A 374      -4.418 -15.936  -9.952  1.00 21.86           C
ATOM   4455  CG  PRO A 374      -2.971 -15.530 -10.170  1.00 25.99           C
ATOM   4456  CD  PRO A 374      -3.002 -14.000 -10.202  1.00 23.76           C
ATOM   4457  HA  PRO A 374      -6.111 -14.613  -9.527  1.00  0.00           H
ATOM   4458  HB2 PRO A 374      -4.523 -16.890  -9.435  1.00  0.00           H
ATOM   4459  HB3 PRO A 374      -4.875 -16.046 -10.936  1.00  0.00           H
ATOM   4460  HG2 PRO A 374      -2.380 -15.888  -9.339  1.00  0.00           H
ATOM   4461  HG3 PRO A 374      -2.544 -15.963 -11.074  1.00  0.00           H
ATOM   4462  HD2 PRO A 374      -2.158 -13.582  -9.656  1.00  0.00           H
ATOM   4463  HD3 PRO A 374      -2.947 -13.637 -11.228  1.00  0.00           H
ATOM   4464  N   LYS A 375      -6.107 -15.068  -6.980  1.00 23.78           N
ATOM   4465  CA  LYS A 375      -6.233 -14.753  -5.550  1.00 23.97           C
ATOM   4466  C   LYS A 375      -5.310 -15.529  -4.581  1.00 22.75           C
ATOM   4467  O   LYS A 375      -5.206 -15.146  -3.417  1.00 21.14           O
ATOM   4468  CB  LYS A 375      -7.713 -14.806  -5.118  1.00 23.67           C
ATOM   4469  CG  LYS A 375      -8.353 -16.198  -4.954  1.00 25.99           C
ATOM   4470  CD  LYS A 375      -9.827 -16.082  -4.522  1.00 27.02           C
ATOM   4471  CE  LYS A 375     -10.292 -17.225  -3.608  1.00 27.83           C
ATOM   4472  NZ  LYS A 375     -11.599 -16.933  -2.989  1.00 29.10           N1+
ATOM   4473  H   LYS A 375      -6.976 -15.201  -7.499  1.00  0.00           H
ATOM   4474  HA  LYS A 375      -5.923 -13.711  -5.461  1.00  0.00           H
ATOM   4475  HB2 LYS A 375      -7.786 -14.283  -4.163  1.00  0.00           H
ATOM   4476  HB3 LYS A 375      -8.305 -14.216  -5.819  1.00  0.00           H
ATOM   4477  HG2 LYS A 375      -8.276 -16.768  -5.881  1.00  0.00           H
ATOM   4478  HG3 LYS A 375      -7.791 -16.754  -4.202  1.00  0.00           H
ATOM   4479  HD2 LYS A 375      -9.953 -15.146  -3.983  1.00  0.00           H
ATOM   4480  HD3 LYS A 375     -10.460 -15.999  -5.407  1.00  0.00           H
ATOM   4481  HE2 LYS A 375     -10.345 -18.163  -4.163  1.00  0.00           H
ATOM   4482  HE3 LYS A 375      -9.574 -17.385  -2.803  1.00  0.00           H
ATOM   4483  HZ1 LYS A 375     -11.743 -17.564  -2.203  1.00  0.00           H
ATOM   4484  HZ2 LYS A 375     -11.622 -15.998  -2.599  1.00  0.00           H
ATOM   4485  HZ3 LYS A 375     -12.346 -17.022  -3.658  1.00  0.00           H
ATOM   4486  N   ASP A 376      -4.594 -16.559  -5.061  1.00 22.97           N
ATOM   4487  CA  ASP A 376      -3.453 -17.204  -4.390  1.00 23.49           C
ATOM   4488  C   ASP A 376      -2.340 -16.189  -4.056  1.00 24.05           C
ATOM   4489  O   ASP A 376      -1.712 -16.278  -3.007  1.00 23.37           O
ATOM   4490  CB  ASP A 376      -2.924 -18.396  -5.253  1.00 26.21           C
ATOM   4491  CG  ASP A 376      -1.483 -18.861  -4.979  1.00 25.03           C
ATOM   4492  OD1 ASP A 376      -0.661 -18.843  -5.925  1.00 24.00           O
ATOM   4493  OD2 ASP A 376      -1.180 -19.198  -3.814  1.00 25.73           O1-
ATOM   4494  H   ASP A 376      -4.711 -16.735  -6.048  1.00  0.00           H
ATOM   4495  HA  ASP A 376      -3.798 -17.606  -3.436  1.00  0.00           H
ATOM   4496  HB2 ASP A 376      -3.581 -19.257  -5.132  1.00  0.00           H
ATOM   4497  HB3 ASP A 376      -2.970 -18.125  -6.308  1.00  0.00           H
ATOM   4498  N   LYS A 377      -2.094 -15.213  -4.936  1.00 23.50           N
ATOM   4499  CA  LYS A 377      -0.909 -14.359  -4.888  1.00 22.56           C
ATOM   4500  C   LYS A 377      -1.049 -13.157  -3.938  1.00 21.29           C
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ATOM   4501  O   LYS A 377      -0.125 -12.344  -3.847  1.00 20.97          O
ATOM   4502  CB  LYS A 377      -0.622 -13.814  -6.298  1.00 21.84          C
ATOM   4503  CG  LYS A 377      -0.608 -14.856  -7.428  1.00 23.25          C
ATOM   4504  CD  LYS A 377       0.383 -16.018  -7.284  1.00 21.18          C
ATOM   4505  CE  LYS A 377       0.181 -17.094  -8.370  1.00 22.85          C
ATOM   4506  NZ  LYS A 377       0.822 -18.358  -8.004  1.00 23.32          N1+
ATOM   4507  H   LYS A 377      -2.710 -15.126  -5.742  1.00  0.00          H
ATOM   4508  HA  LYS A 377      -0.063 -14.945  -4.548  1.00  0.00          H
ATOM   4509  HB2 LYS A 377      -1.373 -13.067  -6.543  1.00  0.00          H
ATOM   4510  HB3 LYS A 377       0.320 -13.277  -6.286  1.00  0.00          H
ATOM   4511  HG2 LYS A 377      -1.598 -15.287  -7.489  1.00  0.00          H
ATOM   4512  HG3 LYS A 377      -0.449 -14.336  -8.366  1.00  0.00          H
ATOM   4513  HD2 LYS A 377       1.413 -15.659  -7.278  1.00  0.00          H
ATOM   4514  HD3 LYS A 377       0.211 -16.480  -6.315  1.00  0.00          H
ATOM   4515  HE2 LYS A 377      -0.880 -17.316  -8.484  1.00  0.00          H
ATOM   4516  HE3 LYS A 377       0.554 -16.764  -9.339  1.00  0.00          H
ATOM   4517  HZ1 LYS A 377       0.419 -18.640  -7.092  1.00  0.00          H
ATOM   4518  HZ2 LYS A 377       0.625 -19.076  -8.675  1.00  0.00          H
ATOM   4519  HZ3 LYS A 377       1.853 -18.238  -7.961  1.00  0.00          H
ATOM   4520  N   ILE A 378      -2.183 -13.038  -3.247  1.00 20.46          N
ATOM   4521  CA  ILE A 378      -2.477 -11.989  -2.284  1.00 19.71          C
ATOM   4522  C   ILE A 378      -2.239 -12.633  -0.902  1.00 21.20          C
ATOM   4523  O   ILE A 378      -2.773 -13.709  -0.623  1.00 23.96          O
ATOM   4524  CB  ILE A 378      -3.962 -11.541  -2.447  1.00 19.96          C
ATOM   4525  CG1 ILE A 378      -4.379 -11.304  -3.926  1.00 16.92          C
ATOM   4526  CG2 ILE A 378      -4.221 -10.264  -1.622  1.00 15.66          C
ATOM   4527  CD1 ILE A 378      -5.891 -11.136  -4.128  1.00 19.39          C
ATOM   4528  H   ILE A 378      -2.832 -13.813  -3.280  1.00  0.00          H
ATOM   4529  HA  ILE A 378      -1.821 -11.133  -2.438  1.00  0.00          H
ATOM   4530  HB  ILE A 378      -4.602 -12.334  -2.057  1.00  0.00          H
ATOM   4531 HG12 ILE A 378      -3.854 -10.437  -4.329  1.00  0.00          H
ATOM   4532 HG13 ILE A 378      -4.085 -12.143  -4.556  1.00  0.00          H
ATOM   4533 HG21 ILE A 378      -5.259  -9.944  -1.671  1.00  0.00          H
ATOM   4534 HG22 ILE A 378      -3.984 -10.419  -0.572  1.00  0.00          H
ATOM   4535 HG23 ILE A 378      -3.611  -9.434  -1.978  1.00  0.00          H
ATOM   4536 HD11 ILE A 378      -6.126 -11.088  -5.193  1.00  0.00          H
ATOM   4537 HD12 ILE A 378      -6.442 -11.976  -3.706  1.00  0.00          H
ATOM   4538 HD13 ILE A 378      -6.261 -10.216  -3.677  1.00  0.00          H
ATOM   4539  N   HIS A 379      -1.436 -12.000  -0.041  1.00 20.04          N
ATOM   4540  CA  HIS A 379      -1.078 -12.488   1.290  1.00 20.47          C
ATOM   4541  C   HIS A 379      -1.460 -11.455   2.354  1.00 21.04          C
ATOM   4542  O   HIS A 379      -1.230 -10.263   2.175  1.00 19.94          O
ATOM   4543  CB  HIS A 379       0.427 -12.819   1.336  1.00 21.51          C
ATOM   4544  CG  HIS A 379       0.900 -13.396   2.643  1.00 21.45          C
ATOM   4545  ND1 HIS A 379       0.337 -14.549   3.199  1.00 20.38          N
ATOM   4546  CD2 HIS A 379       1.897 -12.946   3.476  1.00 22.37          C
ATOM   4547  CE1 HIS A 379       0.990 -14.730   4.343  1.00 22.41          C
ATOM   4548  NE2 HIS A 379       1.932 -13.812   4.555  1.00 22.62          N
ATOM   4549  H   HIS A 379      -1.024 -11.114  -0.334  1.00  0.00          H
ATOM   4550  HA  HIS A 379      -1.622 -13.409   1.511  1.00  0.00          H
ATOM   4551  HB2 HIS A 379       0.669 -13.534   0.558  1.00  0.00          H
ATOM   4552  HB3 HIS A 379       1.022 -11.935   1.118  1.00  0.00          H
ATOM   4553  HD2 HIS A 379       2.557 -12.098   3.393  1.00  0.00          H
ATOM   4554  HE1 HIS A 379       0.773 -15.530   5.037  1.00  0.00          H
ATOM   4555  HE2 HIS A 379       2.535 -13.740   5.370  1.00  0.00          H
ATOM   4556  N   TYR A 380      -1.998 -11.920   3.481  1.00 21.37          N
ATOM   4557  CA  TYR A 380      -2.132 -11.150   4.711  1.00 21.69          C
ATOM   4558  C   TYR A 380      -1.126 -11.792   5.669  1.00 20.30          C
ATOM   4559  O   TYR A 380      -1.210 -12.998   5.915  1.00 21.92          O
ATOM   4560  CB  TYR A 380      -3.572 -11.292   5.257  1.00 19.97          C
ATOM   4561  CG  TYR A 380      -3.765 -10.842   6.697  1.00 21.86          C
ATOM   4562  CD1 TYR A 380      -3.875  -9.475   7.019  1.00 18.74          C
ATOM   4563  CD2 TYR A 380      -3.781 -11.801   7.729  1.00 19.94          C
ATOM   4564  CE1 TYR A 380      -3.964  -9.074   8.368  1.00 21.73          C
ATOM   4565  CE2 TYR A 380      -3.870 -11.395   9.072  1.00 22.01          C
ATOM   4566  CZ  TYR A 380      -3.934 -10.032   9.396  1.00 22.98          C
ATOM   4567  OH  TYR A 380      -3.976  -9.666  10.708  1.00 22.49          O
ATOM   4568  H   TYR A 380      -1.965 -12.922   3.621  1.00  0.00          H
ATOM   4569  HA  TYR A 380      -1.904 -10.093   4.570  1.00  0.00          H
ATOM   4570  HB2 TYR A 380      -4.249 -10.716   4.626  1.00  0.00          H
ATOM   4571  HB3 TYR A 380      -3.896 -12.331   5.184  1.00  0.00          H
ATOM   4572  HD1 TYR A 380      -3.868  -8.732   6.235  1.00  0.00          H
ATOM   4573  HD2 TYR A 380      -3.699 -12.852   7.494  1.00  0.00          H
ATOM   4574  HE1 TYR A 380      -4.044  -8.026   8.614  1.00  0.00          H
ATOM   4575  HE2 TYR A 380      -3.891 -12.129   9.862  1.00  0.00          H
ATOM   4576  HH  TYR A 380      -4.392  -8.812  10.871  1.00  0.00          H
ATOM   4577  N   PHE A 381      -0.189 -11.006   6.201  1.00 21.02          N
ATOM   4578  CA  PHE A 381       0.799 -11.469   7.170  1.00 22.01          C
ATOM   4579  C   PHE A 381       0.147 -11.531   8.562  1.00 21.75          C
ATOM   4580  O   PHE A 381       0.164 -10.563   9.324  1.00 21.88          O
ATOM   4581  CB  PHE A 381       1.980 -10.486   7.203  1.00 21.96          C
ATOM   4582  CG  PHE A 381       2.917 -10.551   6.013  1.00 23.44          C
ATOM   4583  CD1 PHE A 381       3.963 -11.496   6.000  1.00 24.95          C
ATOM   4584  CD2 PHE A 381       2.786  -9.642   4.946  1.00 24.30          C
ATOM   4585  CE1 PHE A 381       4.880 -11.527   4.932  1.00 24.65          C
ATOM   4586  CE2 PHE A 381       3.701  -9.676   3.880  1.00 24.16          C
ATOM   4587  CZ  PHE A 381       4.753 -10.611   3.872  1.00 22.13          C
ATOM   4588  H   PHE A 381      -0.189 -10.019   5.960  1.00  0.00          H
ATOM   4589  HA  PHE A 381       1.171 -12.461   6.908  1.00  0.00          H
ATOM   4590  HB2 PHE A 381       1.634  -9.462   7.341  1.00  0.00          H
ATOM   4591  HB3 PHE A 381       2.581 -10.718   8.078  1.00  0.00          H
ATOM   4592  HD1 PHE A 381       4.080 -12.189   6.825  1.00  0.00          H
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ATOM   4593  HD2 PHE A 381       2.001  -8.903   4.949  1.00  0.00           H
ATOM   4594  HE1 PHE A 381       5.683 -12.250   4.937  1.00  0.00           H
ATOM   4595  HE2 PHE A 381       3.609  -8.960   3.084  1.00  0.00           H
ATOM   4596  HZ  PHE A 381       5.460 -10.627   3.057  1.00  0.00           H
ATOM   4597  N   SER A 382      -0.430 -12.690   8.892  1.00 22.55           N
ATOM   4598  CA  SER A 382      -1.053 -13.000  10.177  1.00 23.85           C
ATOM   4599  C   SER A 382      -0.037 -13.279  11.296  1.00 23.18           C
ATOM   4600  O   SER A 382      -0.424 -13.429  12.451  1.00 24.66           O
ATOM   4601  CB  SER A 382      -1.931 -14.250   9.957  1.00 23.74           C
ATOM   4602  OG  SER A 382      -1.220 -15.348   9.398  1.00 23.95           O
ATOM   4603  H   SER A 382      -0.428 -13.429   8.200  1.00  0.00           H
ATOM   4604  HA  SER A 382      -1.664 -12.158  10.504  1.00  0.00           H
ATOM   4605  HB2 SER A 382      -2.400 -14.556  10.893  1.00  0.00           H
ATOM   4606  HB3 SER A 382      -2.737 -14.006   9.272  1.00  0.00           H
ATOM   4607  HG  SER A 382      -0.439 -15.498   9.915  1.00  0.00           H
ATOM   4608  N   ASP A 383       1.241 -13.389  10.934  1.00 25.17           N
ATOM   4609  CA  ASP A 383       2.427 -13.592  11.753  1.00 23.87           C
ATOM   4610  C   ASP A 383       3.062 -12.239  12.130  1.00 23.92           C
ATOM   4611  O   ASP A 383       3.847 -12.187  13.078  1.00 24.24           O
ATOM   4612  CB  ASP A 383       3.461 -14.375  10.892  1.00 23.64           C
ATOM   4613  CG  ASP A 383       3.799 -13.767   9.522  1.00 23.19           C
ATOM   4614  OD1 ASP A 383       2.847 -13.422   8.783  1.00 22.50           O
ATOM   4615  OD2 ASP A 383       5.002 -13.655   9.215  1.00 22.18           O1-
ATOM   4616  H   ASP A 383       1.477 -13.283   9.941  1.00  0.00           H
ATOM   4617  HA  ASP A 383       2.183 -14.143  12.662  1.00  0.00           H
ATOM   4618  HB2 ASP A 383       4.389 -14.494  11.453  1.00  0.00           H
ATOM   4619  HB3 ASP A 383       3.094 -15.384  10.712  1.00  0.00           H
ATOM   4620  N   ILE A 384       2.727 -11.145  11.429  1.00 22.55           N
ATOM   4621  CA  ILE A 384       3.281  -9.821  11.671  1.00 22.33           C
ATOM   4622  C   ILE A 384       2.247  -8.995  12.451  1.00 23.48           C
ATOM   4623  O   ILE A 384       1.097  -8.818  12.046  1.00 25.39           O
ATOM   4624  CB  ILE A 384       3.680  -9.138  10.329  1.00 22.93           C
ATOM   4625  CG1 ILE A 384       4.769  -9.981   9.614  1.00 21.02           C
ATOM   4626  CG2 ILE A 384       4.166  -7.683  10.528  1.00 18.69           C
ATOM   4627  CD1 ILE A 384       5.355  -9.366   8.334  1.00 22.41           C
ATOM   4628  H   ILE A 384       2.035 -11.242  10.698  1.00  0.00           H
ATOM   4629  HA  ILE A 384       4.189  -9.902  12.272  1.00  0.00           H
ATOM   4630  HB  ILE A 384       2.796  -9.094   9.691  1.00  0.00           H
ATOM   4631 HG12 ILE A 384       5.579 -10.201  10.307  1.00  0.00           H
ATOM   4632 HG13 ILE A 384       4.365 -10.959   9.356  1.00  0.00           H
ATOM   4633 HG21 ILE A 384       4.404  -7.203   9.580  1.00  0.00           H
ATOM   4634 HG22 ILE A 384       3.407  -7.054  10.990  1.00  0.00           H
ATOM   4635 HG23 ILE A 384       5.056  -7.655  11.155  1.00  0.00           H
ATOM   4636 HD11 ILE A 384       5.969 -10.099   7.809  1.00  0.00           H
ATOM   4637 HD12 ILE A 384       4.572  -9.041   7.651  1.00  0.00           H
ATOM   4638 HD13 ILE A 384       5.990  -8.512   8.553  1.00  0.00           H
ATOM   4639  N   GLY A 385       2.713  -8.413  13.553  1.00 22.88           N
ATOM   4640  CA  GLY A 385       2.013  -7.454  14.384  1.00 21.82           C
ATOM   4641  C   GLY A 385       2.713  -6.120  14.176  1.00 20.82           C
ATOM   4642  O   GLY A 385       3.945  -6.048  14.169  1.00 19.73           O
ATOM   4643  H   GLY A 385       3.662  -8.623  13.814  1.00  0.00           H
ATOM   4644  HA2 GLY A 385       0.962  -7.401  14.110  1.00  0.00           H
ATOM   4645  HA3 GLY A 385       2.068  -7.744  15.433  1.00  0.00           H
ATOM   4646  N   TYR A 386       1.927  -5.076  13.943  1.00 21.09           N
ATOM   4647  CA  TYR A 386       2.331  -3.829  13.312  1.00 20.61           C
ATOM   4648  C   TYR A 386       1.351  -2.725  13.734  1.00 20.86           C
ATOM   4649  O   TYR A 386       0.238  -3.036  14.149  1.00 21.94           O
ATOM   4650  CB  TYR A 386       2.405  -4.098  11.789  1.00 21.65           C
ATOM   4651  CG  TYR A 386       2.417  -2.890  10.881  1.00 21.23           C
ATOM   4652  CD1 TYR A 386       3.627  -2.271  10.509  1.00 20.92           C
ATOM   4653  CD2 TYR A 386       1.191  -2.387  10.407  1.00 17.77           C
ATOM   4654  CE1 TYR A 386       3.605  -1.156   9.651  1.00 20.13           C
ATOM   4655  CE2 TYR A 386       1.171  -1.262   9.574  1.00 19.71           C
ATOM   4656  CZ  TYR A 386       2.377  -0.654   9.180  1.00 19.65           C
ATOM   4657  OH  TYR A 386       2.343   0.401   8.319  1.00 20.30           O
ATOM   4658  H   TYR A 386       0.928  -5.171  14.128  1.00  0.00           H
ATOM   4659  HA  TYR A 386       3.315  -3.546  13.683  1.00  0.00           H
ATOM   4660  HB2 TYR A 386       3.278  -4.706  11.564  1.00  0.00           H
ATOM   4661  HB3 TYR A 386       1.554  -4.711  11.485  1.00  0.00           H
ATOM   4662  HD1 TYR A 386       4.571  -2.652  10.871  1.00  0.00           H
ATOM   4663  HD2 TYR A 386       0.260  -2.864  10.680  1.00  0.00           H
ATOM   4664  HE1 TYR A 386       4.534  -0.700   9.347  1.00  0.00           H
ATOM   4665  HE2 TYR A 386       0.217  -0.907   9.225  1.00  0.00           H
ATOM   4666  HH  TYR A 386       2.982   0.377   7.605  1.00  0.00           H
ATOM   4667  N   HIS A 387       1.719  -1.445  13.613  1.00 19.49           N
ATOM   4668  CA  HIS A 387       0.825  -0.303  13.811  1.00 20.54           C
ATOM   4669  C   HIS A 387       1.242   0.868  12.925  1.00 18.80           C
ATOM   4670  O   HIS A 387       2.417   1.232  12.911  1.00 18.62           O
ATOM   4671  CB  HIS A 387       0.688   0.044  15.314  1.00 20.00           C
ATOM   4672  CG  HIS A 387       0.077   1.380  15.710  1.00 25.81           C
ATOM   4673  ND1 HIS A 387      -1.208   1.513  16.220  1.00 22.90           N1+
ATOM   4674  CD2 HIS A 387       0.635   2.649  15.739  1.00 23.86           C
ATOM   4675  CE1 HIS A 387      -1.378   2.781  16.565  1.00 24.18           C
ATOM   4676  NE2 HIS A 387      -0.317   3.514  16.254  1.00 25.10           N
ATOM   4677  H   HIS A 387       2.653  -1.250  13.261  1.00  0.00           H
ATOM   4678  HA  HIS A 387      -0.156  -0.604  13.447  1.00  0.00           H
ATOM   4679  HB2 HIS A 387       0.125  -0.744  15.805  1.00  0.00           H
ATOM   4680  HB3 HIS A 387       1.677   0.007  15.761  1.00  0.00           H
ATOM   4681  HD1 HIS A 387      -1.874   0.773  16.544  1.00  0.00           H
ATOM   4682  HD2 HIS A 387       1.622   3.000  15.472  1.00  0.00           H
ATOM   4683  HE1 HIS A 387      -2.253   3.145  17.085  1.00  0.00           H
ATOM   4684  HE2 HIS A 387      -0.185   4.507  16.548  1.00  0.00           H
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ATOM   4685  N   HIS A 388       0.262   1.498  12.269  1.00 18.98           N
ATOM   4686  CA  HIS A 388       0.331   2.813  11.643  1.00 18.64           C
ATOM   4687  C   HIS A 388      -0.807   3.629  12.281  1.00 20.19           C
ATOM   4688  O   HIS A 388      -1.934   3.133  12.273  1.00 20.72           O
ATOM   4689  CB  HIS A 388       0.142   2.685  10.113  1.00  0.00           C
ATOM   4690  CG  HIS A 388      -0.096   3.938   9.313  1.00  0.00           C
ATOM   4691  ND1 HIS A 388      -1.219   4.061   8.517  1.00  0.00           N
ATOM   4692  CD2 HIS A 388       0.551   5.139   9.172  1.00  0.00           C
ATOM   4693  CE1 HIS A 388      -1.225   5.278   7.954  1.00  0.00           C
ATOM   4694  NE2 HIS A 388      -0.159   5.966   8.328  1.00  0.00           N
ATOM   4695  H   HIS A 388      -0.689   1.153  12.403  1.00  0.00           H
ATOM   4696  HA  HIS A 388       1.308   3.261  11.823  1.00  0.00           H
ATOM   4697  HB2 HIS A 388       1.029   2.159   9.757  1.00  0.00           H
ATOM   4698  HB3 HIS A 388      -0.697   2.009   9.950  1.00  0.00           H
ATOM   4699  HD1 HIS A 388      -1.901   3.337   8.313  1.00  0.00           H
ATOM   4700  HD2 HIS A 388       1.471   5.478   9.623  1.00  0.00           H
ATOM   4701  HE1 HIS A 388      -1.959   5.600   7.232  1.00  0.00           H
ATOM   4702  N   PRO A 389      -0.554   4.821  12.867  1.00 19.60           N
ATOM   4703  CA  PRO A 389      -1.562   5.623  13.577  1.00 19.62           C
ATOM   4704  C   PRO A 389      -2.894   5.809  12.807  1.00 19.23           C
ATOM   4705  O   PRO A 389      -2.839   6.264  11.660  1.00 20.06           O
ATOM   4706  CB  PRO A 389      -0.874   6.976  13.835  1.00 19.61           C
ATOM   4707  CG  PRO A 389       0.619   6.708  13.774  1.00 19.36           C
ATOM   4708  CD  PRO A 389       0.767   5.444  12.941  1.00 19.21           C
ATOM   4709  HA  PRO A 389      -1.718   5.118  14.526  1.00  0.00           H
ATOM   4710  HB2 PRO A 389      -1.129   7.709  13.067  1.00  0.00           H
ATOM   4711  HB3 PRO A 389      -1.155   7.408  14.794  1.00  0.00           H
ATOM   4712  HG2 PRO A 389       1.168   7.547  13.348  1.00  0.00           H
ATOM   4713  HG3 PRO A 389       1.017   6.538  14.772  1.00  0.00           H
ATOM   4714  HD2 PRO A 389       1.131   5.693  11.945  1.00  0.00           H
ATOM   4715  HD3 PRO A 389       1.481   4.772  13.415  1.00  0.00           H
ATOM   4716  N   PRO A 390      -4.080   5.526  13.392  1.00 19.23           N
ATOM   4717  CA  PRO A 390      -4.320   5.046  14.765  1.00 19.78           C
ATOM   4718  C   PRO A 390      -4.404   3.507  14.942  1.00 19.82           C
ATOM   4719  O   PRO A 390      -4.761   3.083  16.040  1.00 20.50           O
ATOM   4720  CB  PRO A 390      -5.701   5.642  15.090  1.00 16.45           C
ATOM   4721  CG  PRO A 390      -6.445   5.592  13.766  1.00 19.09           C
ATOM   4722  CD  PRO A 390      -5.348   5.894  12.747  1.00 19.54           C
ATOM   4723  HA  PRO A 390      -3.602   5.447  15.481  1.00  0.00           H
ATOM   4724  HB2 PRO A 390      -6.241   5.135  15.888  1.00  0.00           H
ATOM   4725  HB3 PRO A 390      -5.580   6.675  15.414  1.00  0.00           H
ATOM   4726  HG2 PRO A 390      -6.844   4.591  13.611  1.00  0.00           H
ATOM   4727  HG3 PRO A 390      -7.279   6.293  13.717  1.00  0.00           H
ATOM   4728  HD2 PRO A 390      -5.512   5.343  11.821  1.00  0.00           H
ATOM   4729  HD3 PRO A 390      -5.339   6.956  12.500  1.00  0.00           H
ATOM   4730  N   TYR A 391      -4.149   2.660  13.930  1.00 21.44           N
ATOM   4731  CA  TYR A 391      -4.590   1.254  13.918  1.00 22.01           C
ATOM   4732  C   TYR A 391      -3.449   0.232  13.881  1.00 21.91           C
ATOM   4733  O   TYR A 391      -2.406   0.447  13.258  1.00 21.23           O
ATOM   4734  CB  TYR A 391      -5.579   1.017  12.756  1.00 25.04           C
ATOM   4735  CG  TYR A 391      -6.917   1.715  12.921  1.00 26.98           C
ATOM   4736  CD1 TYR A 391      -7.619   1.581  14.134  1.00 27.76           C
ATOM   4737  CD2 TYR A 391      -7.474   2.481  11.874  1.00 28.12           C
ATOM   4738  CE1 TYR A 391      -8.846   2.229  14.319  1.00 29.80           C
ATOM   4739  CE2 TYR A 391      -8.717   3.125  12.056  1.00 28.51           C
ATOM   4740  CZ  TYR A 391      -9.395   3.002  13.284  1.00 30.11           C
ATOM   4741  OH  TYR A 391     -10.588   3.619  13.503  1.00 29.73           O
ATOM   4742  H   TYR A 391      -3.662   2.986  13.102  1.00  0.00           H
ATOM   4743  HA  TYR A 391      -5.108   1.034  14.850  1.00  0.00           H
ATOM   4744  HB2 TYR A 391      -5.127   1.313  11.813  1.00  0.00           H
ATOM   4745  HB3 TYR A 391      -5.790  -0.048  12.657  1.00  0.00           H
ATOM   4746  HD1 TYR A 391      -7.237   0.967  14.934  1.00  0.00           H
ATOM   4747  HD2 TYR A 391      -6.959   2.576  10.928  1.00  0.00           H
ATOM   4748  HE1 TYR A 391      -9.361   2.117  15.258  1.00  0.00           H
ATOM   4749  HE2 TYR A 391      -9.141   3.710  11.253  1.00  0.00           H
ATOM   4750  HH  TYR A 391     -10.955   4.041  12.708  1.00  0.00           H
ATOM   4751  N   ASP A 392      -3.675  -0.886  14.582  1.00 20.65           N
ATOM   4752  CA  ASP A 392      -2.740  -1.976  14.847  1.00 21.18           C
ATOM   4753  C   ASP A 392      -3.209  -3.232  14.114  1.00 20.89           C
ATOM   4754  O   ASP A 392      -4.405  -3.504  14.047  1.00 20.18           O
ATOM   4755  CB  ASP A 392      -2.650  -2.327  16.363  1.00 22.25           C
ATOM   4756  CG  ASP A 392      -2.301  -1.166  17.283  1.00 21.58           C
ATOM   4757  OD1 ASP A 392      -3.000  -0.128  17.239  1.00 20.66           O
ATOM   4758  OD2 ASP A 392      -1.258  -1.202  17.966  1.00 21.72           O1-
ATOM   4759  H   ASP A 392      -4.566  -0.969  15.063  1.00  0.00           H
ATOM   4760  HA  ASP A 392      -1.756  -1.687  14.496  1.00  0.00           H
ATOM   4761  HB2 ASP A 392      -3.592  -2.751  16.712  1.00  0.00           H
ATOM   4762  HB3 ASP A 392      -1.906  -3.112  16.510  1.00  0.00           H
ATOM   4763  N   ASN A 393      -2.255  -4.021  13.625  1.00 20.94           N
ATOM   4764  CA  ASN A 393      -2.416  -5.425  13.257  1.00 20.94           C
ATOM   4765  C   ASN A 393      -1.809  -6.204  14.429  1.00 23.33           C
ATOM   4766  O   ASN A 393      -0.734  -5.816  14.904  1.00 20.26           O
ATOM   4767  CB  ASN A 393      -1.526  -5.720  12.019  1.00 21.01           C
ATOM   4768  CG  ASN A 393      -2.081  -6.874  11.191  1.00 21.80           C
ATOM   4769  OD1 ASN A 393      -3.039  -6.667  10.459  1.00 21.19           O
ATOM   4770  ND2 ASN A 393      -1.489  -8.062  11.225  1.00 18.99           N
ATOM   4771  H   ASN A 393      -1.299  -3.736  13.835  1.00  0.00           H
ATOM   4772  HA  ASN A 393      -3.464  -5.684  13.086  1.00  0.00           H
ATOM   4773  HB2 ASN A 393      -1.512  -4.851  11.361  1.00  0.00           H
ATOM   4774  HB3 ASN A 393      -0.483  -5.909  12.273  1.00  0.00           H
ATOM   4775 HD21 ASN A 393      -0.600  -8.256  11.688  1.00  0.00           H
ATOM   4776 HD22 ASN A 393      -1.935  -8.821  10.720  1.00  0.00           H
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ATOM   4777  N   CYS A 394     -2.424  -7.297  14.888  1.00 21.34           N
ATOM   4778  CA  CYS A 394     -1.815  -8.175  15.892  1.00 23.77           C
ATOM   4779  C   CYS A 394     -2.218  -9.643  15.676  1.00 23.91           C
ATOM   4780  O   CYS A 394     -3.420  -9.905  15.652  1.00 23.61           O
ATOM   4781  CB  CYS A 394     -2.090  -7.656  17.317  1.00 24.76           C
ATOM   4782  SG  CYS A 394     -1.181  -8.499  18.642  1.00 21.89           S
ATOM   4783  H   CYS A 394     -3.353  -7.540  14.532  1.00  0.00           H
ATOM   4784  HA  CYS A 394     -0.739  -8.098  15.769  1.00  0.00           H
ATOM   4785  HB2 CYS A 394     -1.865  -6.592  17.385  1.00  0.00           H
ATOM   4786  HB3 CYS A 394     -3.146  -7.755  17.551  1.00  0.00           H
ATOM   4787  N   PRO A 395     -1.265 -10.605  15.558  1.00 24.08           N
ATOM   4788  CA  PRO A 395     -1.536 -12.053  15.556  1.00 23.62           C
ATOM   4789  C   PRO A 395     -2.375 -12.479  16.772  1.00 23.97           C
ATOM   4790  O   PRO A 395     -2.005 -12.187  17.910  1.00 22.43           O
ATOM   4791  CB  PRO A 395     -0.153 -12.723  15.608  1.00 22.83           C
ATOM   4792  CG  PRO A 395      0.809 -11.700  15.047  1.00 22.60           C
ATOM   4793  CD  PRO A 395      0.163 -10.354  15.347  1.00 24.08           C
ATOM   4794  HA  PRO A 395     -2.039 -12.304  14.621  1.00  0.00           H
ATOM   4795  HB2 PRO A 395      0.146 -12.955  16.631  1.00  0.00           H
ATOM   4796  HB3 PRO A 395     -0.124 -13.661  15.053  1.00  0.00           H
ATOM   4797  HG2 PRO A 395      1.817 -11.802  15.450  1.00  0.00           H
ATOM   4798  HG3 PRO A 395      0.880 -11.822  13.968  1.00  0.00           H
ATOM   4799  HD2 PRO A 395      0.602  -9.929  16.249  1.00  0.00           H
ATOM   4800  HD3 PRO A 395      0.319  -9.669  14.517  1.00  0.00           H
ATOM   4801  N   LEU A 396     -3.518 -13.135  16.539  1.00 23.38           N
ATOM   4802  CA  LEU A 396     -4.490 -13.498  17.575  1.00 25.21           C
ATOM   4803  C   LEU A 396     -4.416 -14.987  17.945  1.00 27.18           C
ATOM   4804  O   LEU A 396     -5.280 -15.493  18.665  1.00 29.80           O
ATOM   4805  CB  LEU A 396     -5.918 -13.162  17.098  1.00 24.81           C
ATOM   4806  CG  LEU A 396     -6.148 -11.682  16.743  1.00 23.79           C
ATOM   4807  CD1 LEU A 396     -7.590 -11.478  16.278  1.00 23.36           C
ATOM   4808  CD2 LEU A 396     -5.805 -10.739  17.908  1.00 21.88           C
ATOM   4809  H   LEU A 396     -3.760 -13.291  15.573  1.00  0.00           H
ATOM   4810  HA  LEU A 396     -4.294 -12.948  18.496  1.00  0.00           H
ATOM   4811  HB2 LEU A 396     -6.176 -13.779  16.240  1.00  0.00           H
ATOM   4812  HB3 LEU A 396     -6.627 -13.436  17.879  1.00  0.00           H
ATOM   4813  HG  LEU A 396     -5.509 -11.411  15.901  1.00  0.00           H
ATOM   4814 HD11 LEU A 396     -7.772 -10.429  16.038  1.00  0.00           H
ATOM   4815 HD12 LEU A 396     -7.795 -12.061  15.381  1.00  0.00           H
ATOM   4816 HD13 LEU A 396     -8.301 -11.776  17.045  1.00  0.00           H
ATOM   4817 HD21 LEU A 396     -6.114  -9.720  17.689  1.00  0.00           H
ATOM   4818 HD22 LEU A 396     -6.293 -11.041  18.831  1.00  0.00           H
ATOM   4819 HD23 LEU A 396     -4.730 -10.704  18.089  1.00  0.00           H
ATOM   4820  N   ASP A 397     -3.368 -15.694  17.511  1.00 26.31           N
ATOM   4821  CA  ASP A 397     -2.986 -17.048  17.923  1.00 26.97           C
ATOM   4822  C   ASP A 397     -2.437 -17.000  19.372  1.00 27.26           C
ATOM   4823  O   ASP A 397     -2.597 -16.000  20.077  1.00 24.89           O
ATOM   4824  CB  ASP A 397     -1.902 -17.552  16.939  1.00 27.87           C
ATOM   4825  CG  ASP A 397     -0.588 -16.805  17.095  1.00 31.48           C
ATOM   4826  OD1 ASP A 397     -0.560 -15.632  16.695  1.00 33.62           O
ATOM   4827  OD2 ASP A 397      0.319 -17.360  17.746  1.00 32.96           O1-
ATOM   4828  H   ASP A 397     -2.618 -15.182  17.042  1.00  0.00           H
ATOM   4829  HA  ASP A 397     -3.853 -17.704  17.881  1.00  0.00           H
ATOM   4830  HB2 ASP A 397     -1.716 -18.616  17.085  1.00  0.00           H
ATOM   4831  HB3 ASP A 397     -2.236 -17.446  15.907  1.00  0.00           H
ATOM   4832  N   LYS A 398     -1.837 -18.087  19.859  1.00 27.55           N
ATOM   4833  CA  LYS A 398     -1.194 -18.170  21.165  1.00 28.98           C
ATOM   4834  C   LYS A 398      0.147 -18.927  21.065  1.00 28.03           C
ATOM   4835  O   LYS A 398      0.573 -19.527  22.053  1.00 27.56           O
ATOM   4836  CB  LYS A 398     -2.177 -18.742  22.228  1.00 32.65           C
ATOM   4837  CG  LYS A 398     -3.576 -18.077  22.327  1.00 38.44           C
ATOM   4838  CD  LYS A 398     -3.590 -16.678  22.981  1.00 40.86           C
ATOM   4839  CE  LYS A 398     -4.881 -15.878  22.690  1.00 42.41           C
ATOM   4840  NZ  LYS A 398     -4.750 -15.023  21.500  1.00 44.87           N1+
ATOM   4841  H   LYS A 398     -1.696 -18.910  19.257  1.00  0.00           H
ATOM   4842  HA  LYS A 398     -0.902 -17.167  21.483  1.00  0.00           H
ATOM   4843  HB2 LYS A 398     -2.320 -19.800  22.004  1.00  0.00           H
ATOM   4844  HB3 LYS A 398     -1.699 -18.720  23.209  1.00  0.00           H
ATOM   4845  HG2 LYS A 398     -4.045 -18.046  21.345  1.00  0.00           H
ATOM   4846  HG3 LYS A 398     -4.221 -18.728  22.919  1.00  0.00           H
ATOM   4847  HD2 LYS A 398     -3.489 -16.810  24.060  1.00  0.00           H
ATOM   4848  HD3 LYS A 398     -2.715 -16.094  22.689  1.00  0.00           H
ATOM   4849  HE2 LYS A 398     -5.737 -16.543  22.576  1.00  0.00           H
ATOM   4850  HE3 LYS A 398     -5.103 -15.219  23.531  1.00  0.00           H
ATOM   4851  HZ1 LYS A 398     -5.633 -14.606  21.198  1.00  0.00           H
ATOM   4852  HZ2 LYS A 398     -4.112 -14.258  21.739  1.00  0.00           H
ATOM   4853  HZ3 LYS A 398     -4.325 -15.509  20.716  1.00  0.00           H
ATOM   4854  N   GLU A 399      0.818 -18.917  19.903  1.00 29.00           N
ATOM   4855  CA  GLU A 399      1.982 -19.750  19.596  1.00 29.56           C
ATOM   4856  C   GLU A 399      3.039 -19.002  18.767  1.00 27.81           C
ATOM   4857  O   GLU A 399      4.165 -18.811  19.227  1.00 26.43           O
ATOM   4858  CB  GLU A 399      1.565 -21.110  18.985  1.00 34.33           C
ATOM   4859  CG  GLU A 399      0.492 -21.057  17.869  1.00 42.27           C
ATOM   4860  CD  GLU A 399     -0.889 -21.459  18.353  1.00 46.74           C
ATOM   4861  OE1 GLU A 399     -1.680 -20.604  18.820  1.00 49.38           O
ATOM   4862  OE2 GLU A 399     -1.234 -22.659  18.293  1.00 48.28           O1-
ATOM   4863  H   GLU A 399      0.473 -18.331  19.130  1.00  0.00           H
ATOM   4864  HA  GLU A 399      2.497 -19.981  20.531  1.00  0.00           H
ATOM   4865  HB2 GLU A 399      2.453 -21.607  18.593  1.00  0.00           H
ATOM   4866  HB3 GLU A 399      1.220 -21.761  19.791  1.00  0.00           H
ATOM   4867  HG2 GLU A 399      0.432 -20.075  17.404  1.00  0.00           H
ATOM   4868  HG3 GLU A 399      0.769 -21.748  17.072  1.00  0.00           H
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ATOM   4869  N   VAL A 400      2.669 -18.543  17.568  1.00 26.01           N
ATOM   4870  CA  VAL A 400      3.479 -17.775  16.624  1.00 24.53           C
ATOM   4871  C   VAL A 400      3.726 -16.375  17.211  1.00 24.42           C
ATOM   4872  O   VAL A 400      4.854 -15.886  17.145  1.00 22.04           O
ATOM   4873  CB  VAL A 400      2.741 -17.681  15.255  1.00 24.87           C
ATOM   4874  CG1 VAL A 400      3.544 -16.920  14.179  1.00 22.22           C
ATOM   4875  CG2 VAL A 400      2.347 -19.069  14.710  1.00 22.82           C
ATOM   4876  H   VAL A 400      1.659 -18.448  17.434  1.00  0.00           H
ATOM   4877  HA  VAL A 400      4.437 -18.281  16.492  1.00  0.00           H
ATOM   4878  HB  VAL A 400      1.815 -17.121  15.404  1.00  0.00           H
ATOM   4879 HG11 VAL A 400      2.997 -16.879  13.237  1.00  0.00           H
ATOM   4880 HG12 VAL A 400      3.738 -15.885  14.465  1.00  0.00           H
ATOM   4881 HG13 VAL A 400      4.503 -17.399  13.982  1.00  0.00           H
ATOM   4882 HG21 VAL A 400      1.854 -18.984  13.742  1.00  0.00           H
ATOM   4883 HG22 VAL A 400      3.222 -19.707  14.584  1.00  0.00           H
ATOM   4884 HG23 VAL A 400      1.652 -19.584  15.372  1.00  0.00           H
ATOM   4885  N   TYR A 401      2.708 -15.803  17.870  1.00 25.28           N
ATOM   4886  CA  TYR A 401      2.748 -14.581  18.673  1.00 27.50           C
ATOM   4887  C   TYR A 401      3.872 -14.625  19.729  1.00 27.74           C
ATOM   4888  O   TYR A 401      4.703 -13.719  19.827  1.00 28.01           O
ATOM   4889  CB  TYR A 401      1.350 -14.386  19.305  1.00 26.68           C
ATOM   4890  CG  TYR A 401      1.194 -13.242  20.294  1.00 28.89           C
ATOM   4891  CD1 TYR A 401      1.337 -13.479  21.679  1.00 27.82           C
ATOM   4892  CD2 TYR A 401      0.878 -11.945  19.840  1.00 27.03           C
ATOM   4893  CE1 TYR A 401      1.154 -12.431  22.602  1.00 26.44           C
ATOM   4894  CE2 TYR A 401      0.706 -10.898  20.766  1.00 26.20           C
ATOM   4895  CZ  TYR A 401      0.828 -11.141  22.147  1.00 27.15           C
ATOM   4896  OH  TYR A 401      0.602 -10.141  23.046  1.00 23.75           O
ATOM   4897  H   TYR A 401      1.796 -16.264  17.781  1.00  0.00           H
ATOM   4898  HA  TYR A 401      2.941 -13.754  17.995  1.00  0.00           H
ATOM   4899  HB2 TYR A 401      0.619 -14.234  18.511  1.00  0.00           H
ATOM   4900  HB3 TYR A 401      1.038 -15.306  19.802  1.00  0.00           H
ATOM   4901  HD1 TYR A 401      1.590 -14.462  22.047  1.00  0.00           H
ATOM   4902  HD2 TYR A 401      0.761 -11.746  18.783  1.00  0.00           H
ATOM   4903  HE1 TYR A 401      1.262 -12.618  23.660  1.00  0.00           H
ATOM   4904  HE2 TYR A 401      0.464  -9.909  20.416  1.00  0.00           H
ATOM   4905  HH  TYR A 401      0.459  -9.285  22.639  1.00  0.00           H
ATOM   4906  N   ASN A 402      3.932 -15.733  20.479  1.00 27.33           N
ATOM   4907  CA  ASN A 402      4.887 -15.944  21.571  1.00 29.34           C
ATOM   4908  C   ASN A 402      6.287 -16.315  21.057  1.00 27.72           C
ATOM   4909  O   ASN A 402      7.260 -16.164  21.789  1.00 27.54           O
ATOM   4910  CB  ASN A 402      4.404 -17.092  22.494  1.00 30.12           C
ATOM   4911  CG  ASN A 402      3.219 -16.701  23.377  1.00 33.27           C
ATOM   4912  OD1 ASN A 402      3.261 -15.702  24.082  1.00 33.60           O
ATOM   4913  ND2 ASN A 402      2.124 -17.450  23.360  1.00 34.63           N
ATOM   4914  H   ASN A 402      3.275 -16.467  20.264  1.00  0.00           H
ATOM   4915  HA  ASN A 402      4.987 -15.023  22.151  1.00  0.00           H
ATOM   4916  HB2 ASN A 402      4.173 -17.984  21.910  1.00  0.00           H
ATOM   4917  HB3 ASN A 402      5.207 -17.378  23.176  1.00  0.00           H
ATOM   4918 HD21 ASN A 402      2.037 -18.301  22.814  1.00  0.00           H
ATOM   4919 HD22 ASN A 402      1.378 -17.170  23.975  1.00  0.00           H
ATOM   4920  N   SER A 403      6.403 -16.784  19.808  1.00 27.84           N
ATOM   4921  CA  SER A 403      7.671 -17.188  19.200  1.00 28.74           C
ATOM   4922  C   SER A 403      8.366 -16.012  18.482  1.00 28.13           C
ATOM   4923  O   SER A 403      9.492 -16.172  18.016  1.00 27.53           O
ATOM   4924  CB  SER A 403      7.371 -18.257  18.129  1.00 28.94           C
ATOM   4925  OG  SER A 403      6.789 -19.413  18.709  1.00 35.87           O
ATOM   4926  H   SER A 403      5.567 -16.865  19.249  1.00  0.00           H
ATOM   4927  HA  SER A 403      8.356 -17.595  19.947  1.00  0.00           H
ATOM   4928  HB2 SER A 403      6.714 -17.868  17.350  1.00  0.00           H
ATOM   4929  HB3 SER A 403      8.295 -18.561  17.633  1.00  0.00           H
ATOM   4930  HG  SER A 403      5.913 -19.187  19.022  1.00  0.00           H
ATOM   4931  N   ASN A 404      7.706 -14.850  18.356  1.00 25.90           N
ATOM   4932  CA  ASN A 404      8.125 -13.744  17.486  1.00 25.37           C
ATOM   4933  C   ASN A 404      8.119 -12.392  18.201  1.00 25.69           C
ATOM   4934  O   ASN A 404      8.067 -11.356  17.545  1.00 25.02           O
ATOM   4935  CB  ASN A 404      7.361 -13.745  16.138  1.00 26.10           C
ATOM   4936  CG  ASN A 404      7.736 -14.910  15.221  1.00 26.26           C
ATOM   4937  OD1 ASN A 404      8.833 -14.968  14.669  1.00 29.36           O
ATOM   4938  ND2 ASN A 404      6.841 -15.877  15.075  1.00 28.99           N
ATOM   4939  H   ASN A 404      6.783 -14.787  18.767  1.00  0.00           H
ATOM   4940  HA  ASN A 404      9.181 -13.867  17.240  1.00  0.00           H
ATOM   4941  HB2 ASN A 404      6.285 -13.726  16.315  1.00  0.00           H
ATOM   4942  HB3 ASN A 404      7.572 -12.836  15.576  1.00  0.00           H
ATOM   4943 HD21 ASN A 404      5.976 -15.825  15.609  1.00  0.00           H
ATOM   4944 HD22 ASN A 404      7.042 -16.641  14.453  1.00  0.00           H
ATOM   4945  N   ASN A 405      8.197 -12.376  19.540  1.00 25.25           N
ATOM   4946  CA  ASN A 405      8.405 -11.188  20.392  1.00 26.77           C
ATOM   4947  C   ASN A 405      7.294 -10.134  20.211  1.00 26.11           C
ATOM   4948  O   ASN A 405      7.582  -8.940  20.162  1.00 25.19           O
ATOM   4949  CB  ASN A 405      9.783 -10.503  20.154  1.00 28.88           C
ATOM   4950  CG  ASN A 405     11.023 -11.375  20.307  1.00 29.98           C
ATOM   4951  OD1 ASN A 405     11.037 -12.348  21.051  1.00 31.34           O
ATOM   4952  ND2 ASN A 405     12.080 -11.035  19.580  1.00 32.27           N
ATOM   4953  H   ASN A 405      8.270 -13.276  19.995  1.00  0.00           H
ATOM   4954  HA  ASN A 405      8.363 -11.524  21.428  1.00  0.00           H
ATOM   4955  HB2 ASN A 405      9.794 -10.056  19.160  1.00  0.00           H
ATOM   4956  HB3 ASN A 405      9.908  -9.677  20.856  1.00  0.00           H
ATOM   4957 HD21 ASN A 405     12.033 -10.203  18.975  1.00  0.00           H
ATOM   4958 HD22 ASN A 405     12.925 -11.574  19.652  1.00  0.00           H
ATOM   4959  N   CYS A 406      6.043 -10.552  20.003  1.00 25.69           N
ATOM   4960  CA  CYS A 406      4.963  -9.676  19.558  1.00 25.23           C
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ATOM   4961  C   CYS A 406      4.466  -8.731  20.666  1.00 26.10           C
ATOM   4962  O   CYS A 406      3.545  -9.055  21.413  1.00 26.16           O
ATOM   4963  CB  CYS A 406      3.817 -10.553  19.043  1.00 27.05           C
ATOM   4964  SG  CYS A 406      4.155 -11.372  17.459  1.00 25.91           S
ATOM   4965  H   CYS A 406      5.856 -11.547  20.019  1.00  0.00           H
ATOM   4966  HA  CYS A 406      5.306  -9.054  18.735  1.00  0.00           H
ATOM   4967  HB2 CYS A 406      3.572 -11.312  19.787  1.00  0.00           H
ATOM   4968  HB3 CYS A 406      2.912  -9.960  18.908  1.00  0.00           H
ATOM   4969  N   GLU A 407      5.048  -7.526  20.723  1.00 25.27           N
ATOM   4970  CA  GLU A 407      4.741  -6.409  21.625  1.00 25.75           C
ATOM   4971  C   GLU A 407      3.356  -5.766  21.336  1.00 24.42           C
ATOM   4972  O   GLU A 407      3.251  -4.540  21.269  1.00 22.09           O
ATOM   4973  CB  GLU A 407      5.840  -5.331  21.429  1.00 29.18           C
ATOM   4974  CG  GLU A 407      7.297  -5.760  21.706  1.00 35.84           C
ATOM   4975  CD  GLU A 407      8.305  -4.929  20.915  1.00 38.75           C
ATOM   4976  OE1 GLU A 407      9.369  -5.490  20.570  1.00 41.17           O
ATOM   4977  OE2 GLU A 407      7.992  -3.758  20.601  1.00 43.63           O1-
ATOM   4978  H   GLU A 407      5.893  -7.422  20.170  1.00  0.00           H
ATOM   4979  HA  GLU A 407      4.749  -6.764  22.656  1.00  0.00           H
ATOM   4980  HB2 GLU A 407      5.767  -4.963  20.405  1.00  0.00           H
ATOM   4981  HB3 GLU A 407      5.637  -4.465  22.061  1.00  0.00           H
ATOM   4982  HG2 GLU A 407      7.524  -5.672  22.768  1.00  0.00           H
ATOM   4983  HG3 GLU A 407      7.460  -6.803  21.448  1.00  0.00           H
ATOM   4984  N   CYS A 408      2.301  -6.558  21.108  1.00 23.64           N
ATOM   4985  CA  CYS A 408      1.007  -6.091  20.614  1.00 21.06           C
ATOM   4986  C   CYS A 408     -0.176  -6.631  21.408  1.00 21.00           C
ATOM   4987  O   CYS A 408     -0.148  -7.735  21.959  1.00 19.91           O
ATOM   4988  CB  CYS A 408      0.884  -6.276  19.093  1.00 20.88           C
ATOM   4989  SG  CYS A 408      0.771  -7.948  18.392  1.00 22.25           S
ATOM   4990  H   CYS A 408      2.423  -7.558  21.258  1.00  0.00           H
ATOM   4991  HA  CYS A 408      0.962  -5.010  20.773  1.00  0.00           H
ATOM   4992  HB2 CYS A 408      0.047  -5.689  18.714  1.00  0.00           H
ATOM   4993  HB3 CYS A 408      1.772  -5.847  18.656  1.00  0.00           H
ATOM   4994  N   ASP A 409     -1.224  -5.809  21.443  1.00 17.35           N
ATOM   4995  CA  ASP A 409     -2.428  -5.947  22.239  1.00 19.95           C
ATOM   4996  C   ASP A 409     -3.420  -6.826  21.460  1.00 21.68           C
ATOM   4997  O   ASP A 409     -4.129  -6.354  20.570  1.00 21.54           O
ATOM   4998  CB  ASP A 409     -3.046  -4.534  22.452  1.00 20.43           C
ATOM   4999  CG  ASP A 409     -2.034  -3.472  22.872  1.00 23.66           C
ATOM   5000  OD1 ASP A 409     -1.765  -3.344  24.079  1.00 21.49           O
ATOM   5001  OD2 ASP A 409     -1.440  -2.841  21.963  1.00 21.32           O1-
ATOM   5002  H   ASP A 409     -1.108  -4.884  21.042  1.00  0.00           H
ATOM   5003  HA  ASP A 409     -2.183  -6.385  23.208  1.00  0.00           H
ATOM   5004  HB2 ASP A 409     -3.499  -4.162  21.534  1.00  0.00           H
ATOM   5005  HB3 ASP A 409     -3.843  -4.571  23.195  1.00  0.00           H
ATOM   5006  N   GLN A 410     -3.526  -8.114  21.818  1.00 19.59           N
ATOM   5007  CA  GLN A 410     -4.430  -9.100  21.197  1.00 20.13           C
ATOM   5008  C   GLN A 410     -5.936  -8.840  21.457  1.00 21.87           C
ATOM   5009  O   GLN A 410     -6.781  -9.657  21.082  1.00 20.41           O
ATOM   5010  CB  GLN A 410     -4.086 -10.514  21.708  1.00 20.31           C
ATOM   5011  CG  GLN A 410     -2.712 -11.028  21.250  1.00 21.69           C
ATOM   5012  CD  GLN A 410     -2.614 -12.545  21.401  1.00 20.78           C
ATOM   5013  OE1 GLN A 410     -3.104 -13.125  22.368  1.00 24.03           O
ATOM   5014  NE2 GLN A 410     -2.097 -13.237  20.400  1.00 20.56           N
ATOM   5015  H   GLN A 410     -2.850  -8.449  22.490  1.00  0.00           H
ATOM   5016  HA  GLN A 410     -4.286  -9.064  20.114  1.00  0.00           H
ATOM   5017  HB2 GLN A 410     -4.151 -10.552  22.796  1.00  0.00           H
ATOM   5018  HB3 GLN A 410     -4.838 -11.215  21.340  1.00  0.00           H
ATOM   5019  HG2 GLN A 410     -2.539 -10.759  20.207  1.00  0.00           H
ATOM   5020  HG3 GLN A 410     -1.921 -10.554  21.830  1.00  0.00           H
ATOM   5021 HE21 GLN A 410     -1.781 -12.738  19.560  1.00  0.00           H
ATOM   5022 HE22 GLN A 410     -1.955 -14.240  20.430  1.00  0.00           H
ATOM   5023  N   GLY A 411     -6.269  -7.712  22.090  1.00 24.50           N
ATOM   5024  CA  GLY A 411     -7.611  -7.201  22.325  1.00 26.96           C
ATOM   5025  C   GLY A 411     -7.856  -5.869  21.608  1.00 27.55           C
ATOM   5026  O   GLY A 411     -8.961  -5.347  21.714  1.00 30.46           O
ATOM   5027  H   GLY A 411     -5.504  -7.096  22.328  1.00  0.00           H
ATOM   5028  HA2 GLY A 411     -8.379  -7.910  22.013  1.00  0.00           H
ATOM   5029  HA3 GLY A 411     -7.744  -7.041  23.395  1.00  0.00           H
ATOM   5030  N   ASN A 412     -6.873  -5.345  20.854  1.00 27.68           N
ATOM   5031  CA  ASN A 412     -6.939  -4.080  20.107  1.00 25.90           C
ATOM   5032  C   ASN A 412     -6.320  -4.211  18.707  1.00 24.16           C
ATOM   5033  O   ASN A 412     -5.818  -3.236  18.143  1.00 24.85           O
ATOM   5034  CB  ASN A 412     -6.438  -2.856  20.919  1.00 26.56           C
ATOM   5035  CG  ASN A 412     -7.339  -2.476  22.092  1.00 27.79           C
ATOM   5036  OD1 ASN A 412     -7.078  -2.840  23.234  1.00 32.66           O
ATOM   5037  ND2 ASN A 412     -8.405  -1.726  21.839  1.00 25.88           N
ATOM   5038  H   ASN A 412     -5.986  -5.834  20.780  1.00  0.00           H
ATOM   5039  HA  ASN A 412     -7.989  -3.882  19.879  1.00  0.00           H
ATOM   5040  HB2 ASN A 412     -5.433  -3.039  21.295  1.00  0.00           H
ATOM   5041  HB3 ASN A 412     -6.355  -1.979  20.277  1.00  0.00           H
ATOM   5042 HD21 ASN A 412     -8.657  -1.494  20.868  1.00  0.00           H
ATOM   5043 HD22 ASN A 412     -9.018  -1.494  22.598  1.00  0.00           H
ATOM   5044  N   ASP A 413     -6.386  -5.419  18.126  1.00 22.31           N
ATOM   5045  CA  ASP A 413     -6.119  -5.679  16.708  1.00 22.05           C
ATOM   5046  C   ASP A 413     -7.256  -5.049  15.889  1.00 21.82           C
ATOM   5047  O   ASP A 413     -8.421  -5.164  16.268  1.00 21.38           O
ATOM   5048  CB  ASP A 413     -6.069  -7.209  16.445  1.00 20.91           C
ATOM   5049  CG  ASP A 413     -6.209  -7.602  14.974  1.00 19.89           C
ATOM   5050  OD1 ASP A 413     -5.319  -7.215  14.180  1.00 19.55           O
ATOM   5051  OD2 ASP A 413     -7.268  -8.156  14.616  1.00 19.62           O1-
ATOM   5052  H   ASP A 413     -6.909  -6.123  18.618  1.00  0.00           H
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ATOM   5053  HA  ASP A 413      -5.168  -5.230  16.415  1.00  0.00           H
ATOM   5054  HB2 ASP A 413      -5.156  -7.646  16.833  1.00  0.00           H
ATOM   5055  HB3 ASP A 413      -6.893  -7.688  16.972  1.00  0.00           H
ATOM   5056  N   PHE A 414      -6.928  -4.403  14.771  1.00 21.02           N
ATOM   5057  CA  PHE A 414      -7.920  -3.820  13.890  1.00 18.26           C
ATOM   5058  C   PHE A 414      -8.446  -4.841  12.869  1.00 19.44           C
ATOM   5059  O   PHE A 414      -9.555  -4.635  12.382  1.00 21.11           O
ATOM   5060  CB  PHE A 414      -7.295  -2.634  13.129  1.00 18.35           C
ATOM   5061  CG  PHE A 414      -8.307  -1.796  12.368  1.00 17.60           C
ATOM   5062  CD1 PHE A 414      -9.257  -1.032  13.076  1.00 19.23           C
ATOM   5063  CD2 PHE A 414      -8.342  -1.814  10.959  1.00 17.55           C
ATOM   5064  CE1 PHE A 414     -10.228  -0.286  12.383  1.00 20.54           C
ATOM   5065  CE2 PHE A 414      -9.297  -1.051  10.267  1.00 16.66           C
ATOM   5066  CZ  PHE A 414     -10.241  -0.287  10.978  1.00 18.35           C
ATOM   5067  H   PHE A 414      -5.947  -4.331  14.507  1.00  0.00           H
ATOM   5068  HA  PHE A 414      -8.759  -3.446  14.479  1.00  0.00           H
ATOM   5069  HB2 PHE A 414      -6.795  -1.975  13.840  1.00  0.00           H
ATOM   5070  HB3 PHE A 414      -6.517  -2.984  12.447  1.00  0.00           H
ATOM   5071  HD1 PHE A 414      -9.239  -1.013  14.157  1.00  0.00           H
ATOM   5072  HD2 PHE A 414      -7.661  -2.433  10.397  1.00  0.00           H
ATOM   5073  HE1 PHE A 414     -10.951   0.302  12.928  1.00  0.00           H
ATOM   5074  HE2 PHE A 414      -9.315  -1.077   9.189  1.00  0.00           H
ATOM   5075  HZ  PHE A 414     -10.980   0.293  10.449  1.00  0.00           H
ATOM   5076  N   THR A 415      -7.719  -5.924  12.533  1.00 20.19           N
ATOM   5077  CA  THR A 415      -7.990  -6.845  11.411  1.00 20.23           C
ATOM   5078  C   THR A 415      -9.450  -7.336  11.344  1.00 22.22           C
ATOM   5079  O   THR A 415     -10.021  -7.470  10.261  1.00 22.79           O
ATOM   5080  CB  THR A 415      -7.017  -8.054  11.429  1.00 21.37           C
ATOM   5081  OG1 THR A 415      -5.676  -7.633  11.593  1.00 17.64           O
ATOM   5082  CG2 THR A 415      -7.078  -8.909  10.149  1.00 20.76           C
ATOM   5083  H   THR A 415      -6.894  -6.147  13.086  1.00  0.00           H
ATOM   5084  HA  THR A 415      -7.802  -6.276  10.500  1.00  0.00           H
ATOM   5085  HB  THR A 415      -7.257  -8.707  12.264  1.00  0.00           H
ATOM   5086  HG1 THR A 415      -5.535  -7.488  12.547  1.00  0.00           H
ATOM   5087 HG21 THR A 415      -6.484  -9.813  10.258  1.00  0.00           H
ATOM   5088 HG22 THR A 415      -8.087  -9.254   9.930  1.00  0.00           H
ATOM   5089 HG23 THR A 415      -6.713  -8.359   9.281  1.00  0.00           H
ATOM   5090  N   PHE A 416     -10.077  -7.559  12.500  1.00 22.70           N
ATOM   5091  CA  PHE A 416     -11.406  -8.145  12.583  1.00 23.45           C
ATOM   5092  C   PHE A 416     -12.443  -7.180  13.169  1.00 22.80           C
ATOM   5093  O   PHE A 416     -13.538  -7.628  13.504  1.00 25.25           O
ATOM   5094  CB  PHE A 416     -11.307  -9.487  13.334  1.00 20.24           C
ATOM   5095  CG  PHE A 416     -10.361 -10.468  12.663  1.00 20.62           C
ATOM   5096  CD1 PHE A 416     -10.747 -11.141  11.488  1.00 20.38           C
ATOM   5097  CD2 PHE A 416      -9.053 -10.629  13.158  1.00 18.91           C
ATOM   5098  CE1 PHE A 416      -9.816 -11.926  10.784  1.00 19.44           C
ATOM   5099  CE2 PHE A 416      -8.126 -11.430  12.469  1.00 18.21           C
ATOM   5100  CZ  PHE A 416      -8.505 -12.067  11.274  1.00 20.50           C
ATOM   5101  H   PHE A 416      -9.518  -7.463  13.344  1.00  0.00           H
ATOM   5102  HA  PHE A 416     -11.792  -8.374  11.590  1.00  0.00           H
ATOM   5103  HB2 PHE A 416     -10.972  -9.320  14.358  1.00  0.00           H
ATOM   5104  HB3 PHE A 416     -12.293  -9.947  13.396  1.00  0.00           H
ATOM   5105  HD1 PHE A 416     -11.741 -11.017  11.100  1.00  0.00           H
ATOM   5106  HD2 PHE A 416      -8.730 -10.080  14.032  1.00  0.00           H
ATOM   5107  HE1 PHE A 416     -10.094 -12.384   9.849  1.00  0.00           H
ATOM   5108  HE2 PHE A 416      -7.109 -11.502  12.831  1.00  0.00           H
ATOM   5109  HZ  PHE A 416      -7.775 -12.639  10.722  1.00  0.00           H
ATOM   5110  N   GLN A 417     -12.144  -5.876  13.290  1.00 23.60           N
ATOM   5111  CA  GLN A 417     -13.073  -4.848  13.782  1.00 22.99           C
ATOM   5112  C   GLN A 417     -14.130  -4.452  12.726  1.00 22.57           C
ATOM   5113  O   GLN A 417     -14.252  -5.096  11.682  1.00 22.49           O
ATOM   5114  CB  GLN A 417     -12.276  -3.613  14.248  1.00 22.97           C
ATOM   5115  CG  GLN A 417     -11.528  -3.867  15.570  1.00 23.29           C
ATOM   5116  CD  GLN A 417     -11.066  -2.606  16.305  1.00 26.35           C
ATOM   5117  OE1 GLN A 417     -10.463  -2.696  17.368  1.00 25.95           O
ATOM   5118  NE2 GLN A 417     -11.364  -1.416  15.797  1.00 24.11           N
ATOM   5119  H   GLN A 417     -11.226  -5.573  12.972  1.00  0.00           H
ATOM   5120  HA  GLN A 417     -13.632  -5.243  14.628  1.00  0.00           H
ATOM   5121  HB2 GLN A 417     -11.588  -3.265  13.476  1.00  0.00           H
ATOM   5122  HB3 GLN A 417     -12.973  -2.800  14.426  1.00  0.00           H
ATOM   5123  HG2 GLN A 417     -12.188  -4.389  16.262  1.00  0.00           H
ATOM   5124  HG3 GLN A 417     -10.680  -4.527  15.402  1.00  0.00           H
ATOM   5125 HE21 GLN A 417     -11.921  -1.318  14.956  1.00  0.00           H
ATOM   5126 HE22 GLN A 417     -11.079  -0.579  16.308  1.00  0.00           H
ATOM   5127  N   GLY A 418     -14.929  -3.412  12.998  1.00 22.92           N
ATOM   5128  CA  GLY A 418     -16.181  -3.136  12.300  1.00 21.05           C
ATOM   5129  C   GLY A 418     -16.024  -2.117  11.175  1.00 21.18           C
ATOM   5130  O   GLY A 418     -16.706  -2.250  10.165  1.00 21.14           O
ATOM   5131  H   GLY A 418     -14.739  -2.854  13.820  1.00  0.00           H
ATOM   5132  HA2 GLY A 418     -16.625  -4.050  11.903  1.00  0.00           H
ATOM   5133  HA3 GLY A 418     -16.896  -2.729  13.017  1.00  0.00           H
ATOM   5134  N   TYR A 419     -15.072  -1.182  11.282  1.00 20.25           N
ATOM   5135  CA  TYR A 419     -14.674  -0.298  10.179  1.00 21.27           C
ATOM   5136  C   TYR A 419     -13.542  -0.961   9.359  1.00 20.92           C
ATOM   5137  O   TYR A 419     -13.062  -0.417   8.366  1.00 19.73           O
ATOM   5138  CB  TYR A 419     -14.174   1.034  10.782  1.00 21.11           C
ATOM   5139  CG  TYR A 419     -14.131   2.196   9.803  1.00 22.25           C
ATOM   5140  CD1 TYR A 419     -15.303   2.927   9.528  1.00 23.37           C
ATOM   5141  CD2 TYR A 419     -12.926   2.553   9.168  1.00 21.83           C
ATOM   5142  CE1 TYR A 419     -15.262   4.023   8.649  1.00 23.61           C
ATOM   5143  CE2 TYR A 419     -12.891   3.619   8.250  1.00 24.89           C
ATOM   5144  CZ  TYR A 419     -14.061   4.359   8.004  1.00 22.99           C
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ATOM   5145  OH  TYR A 419     -14.030   5.451   7.196  1.00 26.03           O
ATOM   5146  H   TYR A 419     -14.569  -1.083  12.157  1.00  0.00           H
ATOM   5147  HA  TYR A 419     -15.524  -0.099   9.523  1.00  0.00           H
ATOM   5148  HB2 TYR A 419     -14.834   1.337  11.596  1.00  0.00           H
ATOM   5149  HB3 TYR A 419     -13.193   0.909  11.242  1.00  0.00           H
ATOM   5150  HD1 TYR A 419     -16.234   2.662  10.007  1.00  0.00           H
ATOM   5151  HD2 TYR A 419     -12.022   2.010   9.385  1.00  0.00           H
ATOM   5152  HE1 TYR A 419     -16.151   4.614   8.472  1.00  0.00           H
ATOM   5153  HE2 TYR A 419     -11.961   3.880   7.768  1.00  0.00           H
ATOM   5154  HH  TYR A 419     -13.277   5.501   6.589  1.00  0.00           H
ATOM   5155  N   SER A 420     -13.107  -2.154   9.775  1.00 19.72           N
ATOM   5156  CA  SER A 420     -12.069  -2.939   9.137  1.00 19.12           C
ATOM   5157  C   SER A 420     -12.676  -3.837   8.053  1.00 19.14           C
ATOM   5158  O   SER A 420     -13.887  -4.090   8.023  1.00 18.72           O
ATOM   5159  CB  SER A 420     -11.421  -3.814  10.215  1.00 20.59           C
ATOM   5160  OG  SER A 420     -10.271  -4.492   9.754  1.00 18.07           O
ATOM   5161  H   SER A 420     -13.627  -2.588  10.519  1.00  0.00           H
ATOM   5162  HA  SER A 420     -11.315  -2.282   8.710  1.00  0.00           H
ATOM   5163  HB2 SER A 420     -11.131  -3.183  11.055  1.00  0.00           H
ATOM   5164  HB3 SER A 420     -12.110  -4.562  10.596  1.00  0.00           H
ATOM   5165  HG  SER A 420      -9.750  -4.655  10.539  1.00  0.00           H
ATOM   5166  N   CYS A 421     -11.789  -4.347   7.199  1.00 20.98           N
ATOM   5167  CA  CYS A 421     -12.076  -5.259   6.104  1.00 19.83           C
ATOM   5168  C   CYS A 421     -11.126  -6.465   6.093  1.00 21.04           C
ATOM   5169  O   CYS A 421     -11.029  -7.166   5.085  1.00 23.25           O
ATOM   5170  CB  CYS A 421     -12.176  -4.502   4.768  1.00 20.05           C
ATOM   5171  SG  CYS A 421     -13.665  -3.480   4.564  1.00 22.53           S
ATOM   5172  H   CYS A 421     -10.813  -4.117   7.375  1.00  0.00           H
ATOM   5173  HA  CYS A 421     -13.055  -5.708   6.274  1.00  0.00           H
ATOM   5174  HB2 CYS A 421     -11.296  -3.875   4.618  1.00  0.00           H
ATOM   5175  HB3 CYS A 421     -12.175  -5.214   3.945  1.00  0.00           H
ATOM   5176  N   GLY A 422     -10.465  -6.783   7.214  1.00 20.19           N
ATOM   5177  CA  GLY A 422      -9.499  -7.882   7.253  1.00 22.14           C
ATOM   5178  C   GLY A 422     -10.204  -9.223   7.454  1.00 22.26           C
ATOM   5179  O   GLY A 422      -9.801 -10.220   6.853  1.00 19.11           O
ATOM   5180  H   GLY A 422     -10.536  -6.184   8.030  1.00  0.00           H
ATOM   5181  HA2 GLY A 422      -8.916  -7.931   6.332  1.00  0.00           H
ATOM   5182  HA3 GLY A 422      -8.782  -7.713   8.054  1.00  0.00           H
ATOM   5183  N   LYS A 423     -11.346  -9.240   8.164  1.00 24.00           N
ATOM   5184  CA  LYS A 423     -12.272 -10.371   8.158  1.00 25.44           C
ATOM   5185  C   LYS A 423     -12.822 -10.589   6.737  1.00 25.53           C
ATOM   5186  O   LYS A 423     -12.828 -11.716   6.255  1.00 26.66           O
ATOM   5187  CB  LYS A 423     -13.447 -10.162   9.143  1.00 26.73           C
ATOM   5188  CG  LYS A 423     -14.187 -11.492   9.425  1.00 31.23           C
ATOM   5189  CD  LYS A 423     -15.595 -11.386  10.037  1.00 34.49           C
ATOM   5190  CE  LYS A 423     -16.591 -10.471   9.301  1.00 36.84           C
ATOM   5191  NZ  LYS A 423     -16.771 -10.795   7.875  1.00 39.84           N1+
ATOM   5192  H   LYS A 423     -11.600  -8.374   8.618  1.00  0.00           H
ATOM   5193  HA  LYS A 423     -11.710 -11.257   8.454  1.00  0.00           H
ATOM   5194  HB2 LYS A 423     -13.105  -9.718  10.077  1.00  0.00           H
ATOM   5195  HB3 LYS A 423     -14.128  -9.427   8.722  1.00  0.00           H
ATOM   5196  HG2 LYS A 423     -14.271 -12.066   8.505  1.00  0.00           H
ATOM   5197  HG3 LYS A 423     -13.566 -12.113  10.070  1.00  0.00           H
ATOM   5198  HD2 LYS A 423     -16.020 -12.389  10.074  1.00  0.00           H
ATOM   5199  HD3 LYS A 423     -15.504 -11.051  11.071  1.00  0.00           H
ATOM   5200  HE2 LYS A 423     -17.565 -10.526   9.786  1.00  0.00           H
ATOM   5201  HE3 LYS A 423     -16.278  -9.432   9.389  1.00  0.00           H
ATOM   5202  HZ1 LYS A 423     -16.502  -9.951   7.347  1.00  0.00           H
ATOM   5203  HZ2 LYS A 423     -16.260 -11.636   7.537  1.00  0.00           H
ATOM   5204  HZ3 LYS A 423     -17.734 -10.952   7.647  1.00  0.00           H
ATOM   5205  N   GLU A 424     -13.245  -9.508   6.073  1.00 23.69           N
ATOM   5206  CA  GLU A 424     -13.833  -9.478   4.736  1.00 23.47           C
ATOM   5207  C   GLU A 424     -12.851 -10.029   3.691  1.00 23.14           C
ATOM   5208  O   GLU A 424     -13.262 -10.823   2.850  1.00 18.61           O
ATOM   5209  CB  GLU A 424     -14.262  -8.032   4.391  1.00 24.63           C
ATOM   5210  CG  GLU A 424     -15.530  -7.505   5.101  1.00 25.57           C
ATOM   5211  CD  GLU A 424     -15.599  -7.740   6.602  1.00 28.25           C
ATOM   5212  OE1 GLU A 424     -14.660  -7.394   7.352  1.00 27.71           O
ATOM   5213  OE2 GLU A 424     -16.588  -8.354   7.060  1.00 33.30           O1-
ATOM   5214  H   GLU A 424     -13.295  -8.632   6.589  1.00  0.00           H
ATOM   5215  HA  GLU A 424     -14.714 -10.123   4.730  1.00  0.00           H
ATOM   5216  HB2 GLU A 424     -13.446  -7.340   4.566  1.00  0.00           H
ATOM   5217  HB3 GLU A 424     -14.450  -7.967   3.318  1.00  0.00           H
ATOM   5218  HG2 GLU A 424     -15.623  -6.434   4.923  1.00  0.00           H
ATOM   5219  HG3 GLU A 424     -16.409  -7.960   4.645  1.00  0.00           H
ATOM   5220  N   TYR A 425     -11.554  -9.702   3.798  1.00 21.56           N
ATOM   5221  CA  TYR A 425     -10.473 -10.325   3.030  1.00 21.96           C
ATOM   5222  C   TYR A 425     -10.423 -11.847   3.265  1.00 23.23           C
ATOM   5223  O   TYR A 425     -10.527 -12.628   2.317  1.00 21.80           O
ATOM   5224  CB  TYR A 425      -9.112  -9.671   3.365  1.00 21.92           C
ATOM   5225  CG  TYR A 425      -7.947 -10.389   2.706  1.00 20.41           C
ATOM   5226  CD1 TYR A 425      -7.808 -10.328   1.307  1.00 20.32           C
ATOM   5227  CD2 TYR A 425      -7.081 -11.209   3.465  1.00 20.40           C
ATOM   5228  CE1 TYR A 425      -6.838 -11.113   0.663  1.00 17.64           C
ATOM   5229  CE2 TYR A 425      -6.103 -11.988   2.816  1.00 18.10           C
ATOM   5230  CZ  TYR A 425      -5.995 -11.948   1.414  1.00 19.87           C
ATOM   5231  OH  TYR A 425      -5.118 -12.748   0.753  1.00 16.52           O
ATOM   5232  H   TYR A 425     -11.307  -8.980   4.470  1.00  0.00           H
ATOM   5233  HA  TYR A 425     -10.679 -10.172   1.970  1.00  0.00           H
ATOM   5234  HB2 TYR A 425      -9.106  -8.629   3.041  1.00  0.00           H
ATOM   5235  HB3 TYR A 425      -8.950  -9.647   4.442  1.00  0.00           H
ATOM   5236  HD1 TYR A 425      -8.469  -9.706   0.721  1.00  0.00           H
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ATOM   5237  HD2 TYR A 425      -7.185 -11.271   4.539  1.00  0.00           H
ATOM   5238  HE1 TYR A 425      -6.754 -11.091  -0.412  1.00  0.00           H
ATOM   5239  HE2 TYR A 425      -5.466 -12.638   3.397  1.00  0.00           H
ATOM   5240  HH  TYR A 425      -4.323 -12.987   1.212  1.00  0.00           H
ATOM   5241  N   TYR A 426     -10.310 -12.265   4.533  1.00 21.99           N
ATOM   5242  CA  TYR A 426     -10.269 -13.666   4.954  1.00 23.50           C
ATOM   5243  C   TYR A 426     -11.486 -14.476   4.470  1.00 23.34           C
ATOM   5244  O   TYR A 426     -11.335 -15.624   4.053  1.00 24.05           O
ATOM   5245  CB  TYR A 426     -10.151 -13.749   6.492  1.00 22.73           C
ATOM   5246  CG  TYR A 426      -8.759 -13.985   7.048  1.00 23.27           C
ATOM   5247  CD1 TYR A 426      -8.046 -12.950   7.684  1.00 22.47           C
ATOM   5248  CD2 TYR A 426      -8.205 -15.280   7.013  1.00 22.87           C
ATOM   5249  CE1 TYR A 426      -6.813 -13.218   8.304  1.00 21.19           C
ATOM   5250  CE2 TYR A 426      -6.953 -15.540   7.598  1.00 22.99           C
ATOM   5251  CZ  TYR A 426      -6.269 -14.514   8.271  1.00 22.86           C
ATOM   5252  OH  TYR A 426      -5.101 -14.779   8.918  1.00 23.29           O
ATOM   5253  H   TYR A 426     -10.241 -11.554   5.253  1.00  0.00           H
ATOM   5254  HA  TYR A 426      -9.386 -14.121   4.501  1.00  0.00           H
ATOM   5255  HB2 TYR A 426     -10.577 -12.862   6.961  1.00  0.00           H
ATOM   5256  HB3 TYR A 426     -10.758 -14.575   6.861  1.00  0.00           H
ATOM   5257  HD1 TYR A 426      -8.442 -11.950   7.746  1.00  0.00           H
ATOM   5258  HD2 TYR A 426      -8.760 -16.091   6.578  1.00  0.00           H
ATOM   5259  HE1 TYR A 426      -6.297 -12.420   8.817  1.00  0.00           H
ATOM   5260  HE2 TYR A 426      -6.543 -16.538   7.563  1.00  0.00           H
ATOM   5261  HH  TYR A 426      -4.632 -15.529   8.578  1.00  0.00           H
ATOM   5262  N   ASP A 427     -12.682 -13.880   4.520  1.00 22.93           N
ATOM   5263  CA  ASP A 427     -13.957 -14.490   4.137  1.00 24.60           C
ATOM   5264  C   ASP A 427     -14.144 -14.493   2.611  1.00 23.59           C
ATOM   5265  O   ASP A 427     -14.677 -15.467   2.083  1.00 22.45           O
ATOM   5266  CB  ASP A 427     -15.145 -13.738   4.794  1.00 25.71           C
ATOM   5267  CG  ASP A 427     -15.205 -13.818   6.321  1.00 25.52           C
ATOM   5268  OD1 ASP A 427     -14.519 -14.681   6.915  1.00 30.54           O
ATOM   5269  OD2 ASP A 427     -15.945 -13.007   6.923  1.00 26.99          O1-
ATOM   5270  H   ASP A 427     -12.718 -12.950   4.936  1.00  0.00           H
ATOM   5271  HA  ASP A 427     -13.971 -15.529   4.472  1.00  0.00           H
ATOM   5272  HB2 ASP A 427     -15.123 -12.686   4.506  1.00  0.00           H
ATOM   5273  HB3 ASP A 427     -16.087 -14.137   4.417  1.00  0.00           H
ATOM   5274  N   ALA A 428     -13.657 -13.470   1.889  1.00 23.60           N
ATOM   5275  CA  ALA A 428     -13.656 -13.406   0.421  1.00 22.71           C
ATOM   5276  C   ALA A 428     -12.650 -14.400  -0.187  1.00 22.99           C
ATOM   5277  O   ALA A 428     -12.876 -14.952  -1.271  1.00 21.89           O
ATOM   5278  CB  ALA A 428     -13.268 -11.989  -0.031  1.00 22.18           C
ATOM   5279  H   ALA A 428     -13.287 -12.661   2.383  1.00  0.00           H
ATOM   5280  HA  ALA A 428     -14.654 -13.645   0.049  1.00  0.00           H
ATOM   5281  HB1 ALA A 428     -13.209 -11.921  -1.118  1.00  0.00           H
ATOM   5282  HB2 ALA A 428     -14.008 -11.258   0.295  1.00  0.00           H
ATOM   5283  HB3 ALA A 428     -12.299 -11.684   0.366  1.00  0.00           H
ATOM   5284  N   GLN A 429     -11.543 -14.660   0.522  1.00 21.48           N
ATOM   5285  CA  GLN A 429     -10.626 -15.751   0.225  1.00 23.47           C
ATOM   5286  C   GLN A 429     -11.304 -17.097   0.538  1.00 23.16           C
ATOM   5287  O   GLN A 429     -11.422 -17.938  -0.357  1.00 24.44           O
ATOM   5288  CB  GLN A 429      -9.314 -15.599   1.028  1.00 24.04           C
ATOM   5289  CG  GLN A 429      -8.344 -14.524   0.487  1.00 23.93           C
ATOM   5290  CD  GLN A 429      -7.635 -14.935  -0.809  1.00 27.30           C
ATOM   5291  OE1 GLN A 429      -8.155 -15.729  -1.588  1.00 28.29           O
ATOM   5292  NE2 GLN A 429      -6.442 -14.420  -1.057  1.00 21.69           N
ATOM   5293  H   GLN A 429     -11.355 -14.071   1.330  1.00  0.00           H
ATOM   5294  HA  GLN A 429     -10.419 -15.730  -0.841  1.00  0.00           H
ATOM   5295  HB2 GLN A 429      -9.535 -15.382   2.073  1.00  0.00           H
ATOM   5296  HB3 GLN A 429      -8.782 -16.551   1.032  1.00  0.00           H
ATOM   5297  HG2 GLN A 429      -8.861 -13.578   0.327  1.00  0.00           H
ATOM   5298  HG3 GLN A 429      -7.584 -14.332   1.244  1.00  0.00           H
ATOM   5299 HE21 GLN A 429      -5.982 -13.776  -0.409  1.00  0.00           H
ATOM   5300 HE22 GLN A 429      -5.938 -14.709  -1.900  1.00  0.00           H
ATOM   5301  N   GLY A 430     -11.803 -17.251   1.771  1.00 24.56           N
ATOM   5302  CA  GLY A 430     -12.497 -18.431   2.289  1.00 25.89           C
ATOM   5303  C   GLY A 430     -11.731 -19.092   3.444  1.00 27.73           C
ATOM   5304  O   GLY A 430     -11.993 -20.243   3.785  1.00 27.40           O
ATOM   5305  H   GLY A 430     -11.714 -16.466   2.408  1.00  0.00           H
ATOM   5306  HA2 GLY A 430     -13.480 -18.125   2.650  1.00  0.00           H
ATOM   5307  HA3 GLY A 430     -12.667 -19.173   1.507  1.00  0.00           H
ATOM   5308  N   LEU A 431     -10.750 -18.390   4.020  1.00 26.14           N
ATOM   5309  CA  LEU A 431      -9.733 -18.920   4.918  1.00 27.26           C
ATOM   5310  C   LEU A 431     -10.149 -18.807   6.398  1.00 25.34           C
ATOM   5311  O   LEU A 431     -10.917 -17.924   6.805  1.00 25.57           O
ATOM   5312  CB  LEU A 431      -8.446 -18.091   4.696  1.00 26.32           C
ATOM   5313  CG  LEU A 431      -7.724 -18.358   3.357  1.00 26.85           C
ATOM   5314  CD1 LEU A 431      -6.701 -17.248   3.066  1.00 28.01           C
ATOM   5315  CD2 LEU A 431      -7.039 -19.734   3.325  1.00 26.82           C
ATOM   5316  H   LEU A 431     -10.703 -17.402   3.800  1.00  0.00           H
ATOM   5317  HA  LEU A 431      -9.551 -19.972   4.688  1.00  0.00           H
ATOM   5318  HB2 LEU A 431      -8.714 -17.036   4.715  1.00  0.00           H
ATOM   5319  HB3 LEU A 431      -7.740 -18.240   5.515  1.00  0.00           H
ATOM   5320  HG  LEU A 431      -8.461 -18.336   2.553  1.00  0.00           H
ATOM   5321 HD11 LEU A 431      -6.229 -17.391   2.093  1.00  0.00           H
ATOM   5322 HD12 LEU A 431      -7.169 -16.263   3.053  1.00  0.00           H
ATOM   5323 HD13 LEU A 431      -5.910 -17.225   3.816  1.00  0.00           H
ATOM   5324 HD21 LEU A 431      -6.515 -19.883   2.380  1.00  0.00           H
ATOM   5325 HD22 LEU A 431      -6.303 -19.834   4.124  1.00  0.00           H
ATOM   5326 HD23 LEU A 431      -7.754 -20.550   3.420  1.00  0.00           H
ATOM   5327  N   VAL A 432      -9.591 -19.715   7.211  1.00 24.67           N
ATOM   5328  CA  VAL A 432      -9.702 -19.793   8.667  1.00 24.91           C
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ATOM   5329  C   VAL A 432      -8.851 -18.666   9.285  1.00 24.65          C
ATOM   5330  O   VAL A 432      -7.806 -18.313   8.747  1.00 23.35          O
ATOM   5331  CB  VAL A 432      -9.199 -21.190   9.136  1.00 26.40          C
ATOM   5332  CG1 VAL A 432      -9.336 -21.406  10.657  1.00 27.65          C
ATOM   5333  CG2 VAL A 432      -9.910 -22.344   8.397  1.00 27.01          C
ATOM   5334  H   VAL A 432      -8.920 -20.340   6.791  1.00  0.00          H
ATOM   5335  HA  VAL A 432     -10.749 -19.660   8.944  1.00  0.00          H
ATOM   5336  HB  VAL A 432      -8.135 -21.264   8.899  1.00  0.00          H
ATOM   5337 HG11 VAL A 432      -8.999 -22.404  10.941  1.00  0.00          H
ATOM   5338 HG12 VAL A 432      -8.729 -20.703  11.230  1.00  0.00          H
ATOM   5339 HG13 VAL A 432     -10.371 -21.303  10.985  1.00  0.00          H
ATOM   5340 HG21 VAL A 432      -9.562 -23.314   8.755  1.00  0.00          H
ATOM   5341 HG22 VAL A 432     -10.990 -22.306   8.545  1.00  0.00          H
ATOM   5342 HG23 VAL A 432      -9.724 -22.326   7.323  1.00  0.00          H
ATOM   5343  N   LYS A 433      -9.326 -18.089  10.393  1.00 25.23          N
ATOM   5344  CA  LYS A 433      -8.820 -16.862  11.011  1.00 27.01          C
ATOM   5345  C   LYS A 433      -8.241 -17.172  12.414  1.00 28.68          C
ATOM   5346  O   LYS A 433      -8.669 -18.159  13.022  1.00 29.12          O
ATOM   5347  CB  LYS A 433     -10.024 -15.899  11.080  1.00 26.07          C
ATOM   5348  CG  LYS A 433     -10.431 -15.354   9.696  1.00 25.95          C
ATOM   5349  CD  LYS A 433     -11.884 -14.856   9.612  1.00 27.29          C
ATOM   5350  CE  LYS A 433     -12.894 -15.987   9.337  1.00 27.92          C
ATOM   5351  NZ  LYS A 433     -12.951 -16.366   7.913  1.00 27.82          N1+
ATOM   5352  H   LYS A 433     -10.067 -18.555  10.890  1.00  0.00          H
ATOM   5353  HA  LYS A 433      -8.038 -16.423  10.390  1.00  0.00          H
ATOM   5354  HB2 LYS A 433     -10.865 -16.413  11.546  1.00  0.00          H
ATOM   5355  HB3 LYS A 433      -9.799 -15.053  11.729  1.00  0.00          H
ATOM   5356  HG2 LYS A 433      -9.749 -14.538   9.468  1.00  0.00          H
ATOM   5357  HG3 LYS A 433     -10.257 -16.091   8.912  1.00  0.00          H
ATOM   5358  HD2 LYS A 433     -12.134 -14.353  10.545  1.00  0.00          H
ATOM   5359  HD3 LYS A 433     -11.981 -14.088   8.843  1.00  0.00          H
ATOM   5360  HE2 LYS A 433     -12.667 -16.862   9.946  1.00  0.00          H
ATOM   5361  HE3 LYS A 433     -13.894 -15.655   9.620  1.00  0.00          H
ATOM   5362  HZ1 LYS A 433     -13.524 -17.178   7.773  1.00  0.00          H
ATOM   5363  HZ2 LYS A 433     -13.467 -15.605   7.413  1.00  0.00          H
ATOM   5364  HZ3 LYS A 433     -12.048 -16.543   7.483  1.00  0.00          H
ATOM   5365  N   PRO A 434      -7.284 -16.368  12.939  1.00 29.99          N
ATOM   5366  CA  PRO A 434      -6.544 -16.666  14.177  1.00 31.36          C
ATOM   5367  C   PRO A 434      -7.379 -16.516  15.468  1.00 32.47          C
ATOM   5368  O   PRO A 434      -8.295 -15.700  15.546  1.00 33.32          O
ATOM   5369  CB  PRO A 434      -5.334 -15.719  14.145  1.00 31.69          C
ATOM   5370  CG  PRO A 434      -5.791 -14.530  13.314  1.00 29.64          C
ATOM   5371  CD  PRO A 434      -6.798 -15.127  12.331  1.00 30.38          C
ATOM   5372  HA  PRO A 434      -6.186 -17.696  14.120  1.00  0.00          H
ATOM   5373  HB2 PRO A 434      -4.969 -15.432  15.129  1.00  0.00          H
ATOM   5374  HB3 PRO A 434      -4.504 -16.210  13.635  1.00  0.00          H
ATOM   5375  HG2 PRO A 434      -6.296 -13.799  13.947  1.00  0.00          H
ATOM   5376  HG3 PRO A 434      -4.968 -14.015  12.814  1.00  0.00          H
ATOM   5377  HD2 PRO A 434      -7.612 -14.433  12.140  1.00  0.00          H
ATOM   5378  HD3 PRO A 434      -6.301 -15.343  11.384  1.00  0.00          H
ATOM   5379  N   LYS A 435      -7.035 -17.343  16.465  1.00 34.56          N
ATOM   5380  CA  LYS A 435      -7.741 -17.785  17.680  1.00 36.88          C
ATOM   5381  C   LYS A 435      -8.724 -16.885  18.465  1.00 37.85          C
ATOM   5382  O   LYS A 435      -9.457 -17.426  19.292  1.00 39.08          O
ATOM   5383  CB  LYS A 435      -6.769 -18.534  18.621  1.00 38.28          C
ATOM   5384  CG  LYS A 435      -6.194 -19.840  18.044  1.00 40.34          C
ATOM   5385  CD  LYS A 435      -5.212 -20.503  19.021  1.00 42.32          C
ATOM   5386  CE  LYS A 435      -4.641 -21.829  18.497  1.00 43.22          C
ATOM   5387  NZ  LYS A 435      -3.559 -22.303  19.364  1.00 42.23          N1+
ATOM   5388  H   LYS A 435      -6.186 -17.854  16.284  1.00  0.00          H
ATOM   5389  HA  LYS A 435      -8.418 -18.549  17.292  1.00  0.00          H
ATOM   5390  HB2 LYS A 435      -5.959 -17.870  18.913  1.00  0.00          H
ATOM   5391  HB3 LYS A 435      -7.281 -18.780  19.554  1.00  0.00          H
ATOM   5392  HG2 LYS A 435      -7.010 -20.527  17.813  1.00  0.00          H
ATOM   5393  HG3 LYS A 435      -5.680 -19.640  17.103  1.00  0.00          H
ATOM   5394  HD2 LYS A 435      -4.390 -19.810  19.212  1.00  0.00          H
ATOM   5395  HD3 LYS A 435      -5.703 -20.669  19.982  1.00  0.00          H
ATOM   5396  HE2 LYS A 435      -5.415 -22.593  18.414  1.00  0.00          H
ATOM   5397  HE3 LYS A 435      -4.216 -21.685  17.501  1.00  0.00          H
ATOM   5398  HZ1 LYS A 435      -2.977 -23.011  18.912  1.00  0.00          H
ATOM   5399  HZ2 LYS A 435      -2.826 -21.568  19.334  1.00  0.00          H
ATOM   5400  HZ3 LYS A 435      -3.781 -22.538  20.312  1.00  0.00          H
ATOM   5401  N   ASN A 436      -8.794 -15.568  18.246  1.00 38.38          N
ATOM   5402  CA  ASN A 436      -9.775 -14.683  18.893  1.00 38.54          C
ATOM   5403  C   ASN A 436     -10.428 -13.645  17.972  1.00 36.60          C
ATOM   5404  O   ASN A 436     -11.054 -12.706  18.465  1.00 35.38          O
ATOM   5405  CB  ASN A 436      -9.392 -14.205  20.319  1.00 41.89          C
ATOM   5406  CG  ASN A 436      -8.154 -13.313  20.433  1.00 46.16          C
ATOM   5407  OD1 ASN A 436      -7.060 -13.797  20.724  1.00 46.58          O
ATOM   5408  ND2 ASN A 436      -8.331 -12.003  20.298  1.00 48.00          N
ATOM   5409  H   ASN A 436      -8.193 -15.189  17.522  1.00  0.00          H
ATOM   5410  HA  ASN A 436     -10.650 -15.308  19.077  1.00  0.00          H
ATOM   5411  HB2 ASN A 436     -10.235 -13.681  20.772  1.00  0.00          H
ATOM   5412  HB3 ASN A 436      -9.231 -15.078  20.952  1.00  0.00          H
ATOM   5413 HD21 ASN A 436      -9.230 -11.623  20.039  1.00  0.00          H
ATOM   5414 HD22 ASN A 436      -7.570 -11.345  20.472  1.00  0.00          H
ATOM   5415  N   TRP A 437     -10.337 -13.853  16.648  1.00 33.69          N
ATOM   5416  CA  TRP A 437     -10.862 -13.016  15.560  1.00 32.40          C
ATOM   5417  C   TRP A 437     -12.303 -12.506  15.750  1.00 31.88          C
ATOM   5418  O   TRP A 437     -12.604 -11.340  15.509  1.00 31.51          O
ATOM   5419  CB  TRP A 437     -10.713 -13.769  14.217  1.00 31.53          C
ATOM   5420  CG  TRP A 437     -11.596 -14.969  13.992  1.00 29.81          C
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ATOM   5421  CD1 TRP A 437     -11.314 -16.246  14.335  1.00 30.15          C
ATOM   5422  CD2 TRP A 437     -12.917 -15.016  13.364  1.00 29.74          C
ATOM   5423  NE1 TRP A 437     -12.357 -17.071  13.968  1.00 29.97          N
ATOM   5424  CE3 TRP A 437     -13.782 -14.047  12.802  1.00 28.47          C
ATOM   5425  CE2 TRP A 437     -13.377 -16.368  13.367  1.00 28.86          C
ATOM   5426  CZ3 TRP A 437     -15.039 -14.408  12.278  1.00 29.95          C
ATOM   5427  CZ2 TRP A 437     -14.623 -16.742  12.835  1.00 30.78          C
ATOM   5428  CH2 TRP A 437     -15.459 -15.752  12.288  1.00 28.37          C
ATOM   5429  H   TRP A 437      -9.757 -14.633  16.349  1.00  0.00          H
ATOM   5430  HA  TRP A 437     -10.229 -12.129  15.514  1.00  0.00          H
ATOM   5431  HB2 TRP A 437     -10.914 -13.079  13.401  1.00  0.00          H
ATOM   5432  HB3 TRP A 437      -9.672 -14.063  14.077  1.00  0.00          H
ATOM   5433  HD1 TRP A 437     -10.405 -16.572  14.814  1.00  0.00          H
ATOM   5434  HE1 TRP A 437     -12.332 -18.069  14.134  1.00  0.00          H
ATOM   5435  HE3 TRP A 437     -13.471 -13.012  12.787  1.00  0.00          H
ATOM   5436  HZ3 TRP A 437     -15.687 -13.649  11.869  1.00  0.00          H
ATOM   5437  HZ2 TRP A 437     -14.940 -17.774  12.853  1.00  0.00          H
ATOM   5438  HH2 TRP A 437     -16.422 -16.023  11.878  1.00  0.00          H
ATOM   5439  N   LYS A 438     -13.211 -13.392  16.182  1.00 30.82          N
ATOM   5440  CA  LYS A 438     -14.653 -13.147  16.202  1.00 31.39          C
ATOM   5441  C   LYS A 438     -15.031 -12.057  17.228  1.00 29.84          C
ATOM   5442  O   LYS A 438     -15.995 -11.329  17.006  1.00 28.51          O
ATOM   5443  CB  LYS A 438     -15.376 -14.487  16.506  1.00 33.89          C
ATOM   5444  CG  LYS A 438     -16.812 -14.643  15.944  1.00 35.72          C
ATOM   5445  CD  LYS A 438     -17.840 -13.665  16.540  1.00 37.55          C
ATOM   5446  CE  LYS A 438     -19.311 -14.071  16.395  1.00 37.38          C
ATOM   5447  NZ  LYS A 438     -20.170 -13.112  17.107  1.00 33.68          N1+
ATOM   5448  H   LYS A 438     -12.877 -14.330  16.338  1.00  0.00          H
ATOM   5449  HA  LYS A 438     -14.943 -12.797  15.210  1.00  0.00          H
ATOM   5450  HB2 LYS A 438     -14.793 -15.301  16.073  1.00  0.00          H
ATOM   5451  HB3 LYS A 438     -15.377 -14.677  17.581  1.00  0.00          H
ATOM   5452  HG2 LYS A 438     -16.799 -14.551  14.857  1.00  0.00          H
ATOM   5453  HG3 LYS A 438     -17.135 -15.664  16.153  1.00  0.00          H
ATOM   5454  HD2 LYS A 438     -17.615 -13.532  17.600  1.00  0.00          H
ATOM   5455  HD3 LYS A 438     -17.722 -12.694  16.061  1.00  0.00          H
ATOM   5456  HE2 LYS A 438     -19.596 -14.113  15.343  1.00  0.00          H
ATOM   5457  HE3 LYS A 438     -19.474 -15.062  16.821  1.00  0.00          H
ATOM   5458  HZ1 LYS A 438     -21.147 -13.342  17.050  1.00  0.00          H
ATOM   5459  HZ2 LYS A 438     -19.899 -13.163  18.117  1.00  0.00          H
ATOM   5460  HZ3 LYS A 438     -20.002 -12.159  16.814  1.00  0.00          H
ATOM   5461  N   LYS A 439     -14.259 -11.895  18.313  1.00 29.46          N
ATOM   5462  CA  LYS A 439     -14.548 -10.957  19.404  1.00 32.01          C
ATOM   5463  C   LYS A 439     -14.590  -9.480  18.976  1.00 31.47          C
ATOM   5464  O   LYS A 439     -15.247  -8.671  19.629  1.00 31.96          O
ATOM   5465  CB  LYS A 439     -13.511 -11.138  20.535  1.00 33.79          C
ATOM   5466  CG  LYS A 439     -13.619 -12.466  21.315  1.00 37.29          C
ATOM   5467  CD  LYS A 439     -15.009 -12.773  21.911  1.00 37.29          C
ATOM   5468  CE  LYS A 439     -15.583 -11.661  22.812  1.00 40.03          C
ATOM   5469  NZ  LYS A 439     -16.957 -11.971  23.236  1.00 40.12          N1+
ATOM   5470  H   LYS A 439     -13.386 -12.407  18.349  1.00  0.00          H
ATOM   5471  HA  LYS A 439     -15.551 -11.176  19.771  1.00  0.00          H
ATOM   5472  HB2 LYS A 439     -12.505 -11.042  20.121  1.00  0.00          H
ATOM   5473  HB3 LYS A 439     -13.592 -10.309  21.241  1.00  0.00          H
ATOM   5474  HG2 LYS A 439     -13.327 -13.287  20.658  1.00  0.00          H
ATOM   5475  HG3 LYS A 439     -12.877 -12.456  22.115  1.00  0.00          H
ATOM   5476  HD2 LYS A 439     -15.704 -12.985  21.097  1.00  0.00          H
ATOM   5477  HD3 LYS A 439     -14.942 -13.703  22.478  1.00  0.00          H
ATOM   5478  HE2 LYS A 439     -14.950 -11.509  23.687  1.00  0.00          H
ATOM   5479  HE3 LYS A 439     -15.622 -10.712  22.275  1.00  0.00          H
ATOM   5480  HZ1 LYS A 439     -17.369 -11.216  23.759  1.00  0.00          H
ATOM   5481  HZ2 LYS A 439     -17.534 -12.075  22.362  1.00  0.00          H
ATOM   5482  HZ3 LYS A 439     -17.025 -12.841  23.734  1.00  0.00          H
ATOM   5483  N   PHE A 440     -13.937  -9.147  17.864  1.00 29.67          N
ATOM   5484  CA  PHE A 440     -13.874  -7.803  17.306  1.00 30.46          C
ATOM   5485  C   PHE A 440     -15.097  -7.494  16.413  1.00 32.12          C
ATOM   5486  O   PHE A 440     -15.369  -6.328  16.144  1.00 32.41          O
ATOM   5487  CB  PHE A 440     -12.582  -7.726  16.487  1.00 27.41          C
ATOM   5488  CG  PHE A 440     -11.322  -7.836  17.322  1.00 25.90          C
ATOM   5489  CD1 PHE A 440     -10.830  -6.691  17.977  1.00 25.42          C
ATOM   5490  CD2 PHE A 440     -10.634  -9.063  17.446  1.00 24.33          C
ATOM   5491  CE1 PHE A 440      -9.655  -6.766  18.741  1.00 23.50          C
ATOM   5492  CE2 PHE A 440      -9.463  -9.136  18.225  1.00 24.72          C
ATOM   5493  CZ  PHE A 440      -8.970  -7.987  18.869  1.00 23.12          C
ATOM   5494  H   PHE A 440     -13.407  -9.862  17.384  1.00  0.00          H
ATOM   5495  HA  PHE A 440     -13.837  -7.058  18.103  1.00  0.00          H
ATOM   5496  HB2 PHE A 440     -12.578  -8.507  15.729  1.00  0.00          H
ATOM   5497  HB3 PHE A 440     -12.536  -6.774  15.964  1.00  0.00          H
ATOM   5498  HD1 PHE A 440     -11.326  -5.737  17.885  1.00  0.00          H
ATOM   5499  HD2 PHE A 440     -10.984  -9.946  16.935  1.00  0.00          H
ATOM   5500  HE1 PHE A 440      -9.279  -5.864  19.198  1.00  0.00          H
ATOM   5501  HE2 PHE A 440      -8.919 -10.061  18.310  1.00  0.00          H
ATOM   5502  HZ  PHE A 440      -8.054  -8.039  19.436  1.00  0.00          H
ATOM   5503  N   ARG A 441     -15.909  -8.501  16.048  1.00 33.77          N
ATOM   5504  CA  ARG A 441     -17.281  -8.328  15.556  1.00 36.52          C
ATOM   5505  C   ARG A 441     -18.241  -8.790  16.675  1.00 38.32          C
ATOM   5506  O   ARG A 441     -19.179  -9.560  16.441  1.00 39.68          O
ATOM   5507  CB  ARG A 441     -17.522  -9.109  14.235  1.00 36.16          C
ATOM   5508  CG  ARG A 441     -16.619  -8.741  13.035  1.00 36.35          C
ATOM   5509  CD  ARG A 441     -16.671  -7.272  12.550  1.00 37.85          C
ATOM   5510  NE  ARG A 441     -17.282  -7.118  11.212  1.00 37.46          N
ATOM   5511  CZ  ARG A 441     -16.676  -6.927  10.028  1.00 38.15          C
ATOM   5512  NH1 ARG A 441     -15.355  -6.864   9.879  1.00 39.40          N
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ATOM   5513  NH2 ARG A 441     -17.457  -6.832   8.963  1.00 37.27          N1+
ATOM   5514  H   ARG A 441     -15.665  -9.429  16.378  1.00  0.00           H
ATOM   5515  HA  ARG A 441     -17.506  -7.275  15.386  1.00  0.00           H
ATOM   5516  HB2 ARG A 441     -17.411 -10.176  14.432  1.00  0.00           H
ATOM   5517  HB3 ARG A 441     -18.561  -8.969  13.930  1.00  0.00           H
ATOM   5518  HG2 ARG A 441     -15.592  -8.997  13.292  1.00  0.00           H
ATOM   5519  HG3 ARG A 441     -16.869  -9.401  12.205  1.00  0.00           H
ATOM   5520  HD2 ARG A 441     -17.207  -6.633  13.251  1.00  0.00           H
ATOM   5521  HD3 ARG A 441     -15.664  -6.879  12.522  1.00  0.00           H
ATOM   5522  HE  ARG A 441     -18.290  -7.041  11.193  1.00  0.00           H
ATOM   5523 HH11 ARG A 441     -14.778  -6.409  10.595  1.00  0.00           H
ATOM   5524 HH12 ARG A 441     -14.955  -6.908   8.912  1.00  0.00           H
ATOM   5525 HH21 ARG A 441     -17.361  -5.911   8.491  1.00  0.00           H
ATOM   5526 HH22 ARG A 441     -17.175  -7.464   8.174  1.00  0.00           H
ATOM   5527  N   GLU A 442     -17.962  -8.323  17.900  1.00 40.76           N
ATOM   5528  CA  GLU A 442     -18.780  -8.385  19.111  1.00 41.35           C
ATOM   5529  C   GLU A 442     -18.548  -7.113  19.935  1.00 40.88           C
ATOM   5530  O   GLU A 442     -19.505  -6.490  20.385  1.00 41.44           O
ATOM   5531  CB  GLU A 442     -18.544  -9.665  19.941  1.00 43.85           C
ATOM   5532  CG  GLU A 442     -18.884 -10.956  19.187  1.00 47.68           C
ATOM   5533  CD  GLU A 442     -18.866 -12.211  20.037  1.00 49.70           C
ATOM   5534  OE1 GLU A 442     -18.277 -12.194  21.138  1.00 49.65           O
ATOM   5535  OE2 GLU A 442     -19.412 -13.208  19.520  1.00 50.39          O1-
ATOM   5536  H   GLU A 442     -17.171  -7.697  17.954  1.00  0.00           H
ATOM   5537  HA  GLU A 442     -19.829  -8.362  18.807  1.00  0.00           H
ATOM   5538  HB2 GLU A 442     -17.514  -9.707  20.290  1.00  0.00           H
ATOM   5539  HB3 GLU A 442     -19.160  -9.611  20.841  1.00  0.00           H
ATOM   5540  HG2 GLU A 442     -19.879 -10.853  18.754  1.00  0.00           H
ATOM   5541  HG3 GLU A 442     -18.182 -11.104  18.370  1.00  0.00           H
ATOM   5542  N   NMA A 442A    -17.279  -6.723  20.113  1.00  0.00           N
ATOM   5543  CA  NMA A 442A    -16.895  -5.494  20.793  1.00  0.00           C
ATOM   5544  H   NMA A 442A    -16.531  -7.348  19.819  1.00  0.00           H
ATOM   5545 1HA  NMA A 442A    -15.809  -5.398  20.815  1.00  0.00           H
ATOM   5546 2HA  NMA A 442A    -17.303  -4.624  20.275  1.00  0.00           H
ATOM   5547 3HA  NMA A 442A    -17.263  -5.484  21.819  1.00  0.00           H
TER    5548      NMA A 442A
HETATM 5549  O   SPC     5     -1.631  -0.635  20.555  1.00  0.00           O
HETATM 5550  H1  SPC     5     -1.622  -1.478  21.125  1.00  0.00           H
HETATM 5551  H2  SPC     5     -1.507  -0.906  19.586  1.00  0.00           H
HETATM 5552  O   SPC     9     -3.463   8.620  14.882  1.00  0.00           O
HETATM 5553  H1  SPC     9     -2.830   9.382  14.691  1.00  0.00           H
HETATM 5554  H2  SPC     9     -3.175   8.176  15.737  1.00  0.00           H
HETATM 5555  O   SPC    12     -7.806   6.538  17.742  1.00  0.00           O
HETATM 5556  H1  SPC    12     -8.444   6.009  17.167  1.00  0.00           H
HETATM 5557  H2  SPC    12     -7.726   7.471  17.364  1.00  0.00           H
HETATM 5558  O   SPC    13     -2.946   5.272  18.286  1.00  0.00           O
HETATM 5559  H1  SPC    13     -2.630   6.183  17.993  1.00  0.00           H
HETATM 5560  H2  SPC    13     -3.933   5.331  18.505  1.00  0.00           H
HETATM 5561  O   SPC    14      5.197   2.394  21.967  1.00  0.00           O
HETATM 5562  H1  SPC    14      4.304   2.318  22.432  1.00  0.00           H
HETATM 5563  H2  SPC    14      5.544   1.459  21.805  1.00  0.00           H
HETATM 5564  O   SPC    15      2.432   7.288  17.194  1.00  0.00           O
HETATM 5565  H1  SPC    15      3.390   7.554  17.402  1.00  0.00           H
HETATM 5566  H2  SPC    15      2.013   8.039  16.652  1.00  0.00           H
HETATM 5567  O   SPC    17      4.987   7.967  17.581  1.00  0.00           O
HETATM 5568  H1  SPC    17      5.537   8.355  16.835  1.00  0.00           H
HETATM 5569  H2  SPC    17      5.599   7.504  18.237  1.00  0.00           H
HETATM 5570  O   SPC    19     -5.653   2.879  19.714  1.00  0.00           O
HETATM 5571  H1  SPC    19     -6.013   2.601  20.608  1.00  0.00           H
HETATM 5572  H2  SPC    19     -4.828   2.327  19.519  1.00  0.00           H
HETATM 5573  O   SPC    21     -4.933   8.186  18.078  1.00  0.00           O
HETATM 5574  H1  SPC    21     -5.148   7.332  18.572  1.00  0.00           H
HETATM 5575  H2  SPC    21     -5.769   8.489  17.594  1.00  0.00           H
HETATM 5576  O   SPC    22     -7.146   3.073  17.360  1.00  0.00           O
HETATM 5577  H1  SPC    22     -6.350   3.106  16.740  1.00  0.00           H
HETATM 5578  H2  SPC    22     -6.800   3.070  18.308  1.00  0.00           H
HETATM 5579  O   SPC    26      6.448   6.332  19.369  1.00  0.00           O
HETATM 5580  H1  SPC    26      5.987   6.062  20.225  1.00  0.00           H
HETATM 5581  H2  SPC    26      6.218   5.642  18.661  1.00  0.00           H
HETATM 5582  O   SPC    31     -0.099   6.052  17.047  1.00  0.00           O
HETATM 5583  H1  SPC    31      0.778   6.526  17.204  1.00  0.00           H
HETATM 5584  H2  SPC    31     -0.850   6.707  17.201  1.00  0.00           H
HETATM 5585  O   SPC    32      5.688   4.682  17.438  1.00  0.00           O
HETATM 5586  H1  SPC    32      6.444   4.673  16.768  1.00  0.00           H
HETATM 5587  H2  SPC    32      4.808   4.671  16.942  1.00  0.00           H
HETATM 5588  O   SPC    34      1.881   4.788  22.081  1.00  0.00           O
HETATM 5589  H1  SPC    34      1.883   5.213  21.167  1.00  0.00           H
HETATM 5590  H2  SPC    34      0.962   4.399  22.252  1.00  0.00           H
HETATM 5591  O   SPC    35      0.666  -1.893  23.301  1.00  0.00           O
HETATM 5592  H1  SPC    35     -0.087  -2.262  22.726  1.00  0.00           H
HETATM 5593  H2  SPC    35      0.480  -2.177  24.246  1.00  0.00           H
HETATM 5594  O   SPC    37     -1.670   3.392  19.742  1.00  0.00           O
HETATM 5595  H1  SPC    37     -2.285   2.590  19.693  1.00  0.00           H
HETATM 5596  H2  SPC    37     -2.122   4.169  19.274  1.00  0.00           H
HETATM 5597  O   SPC    38      2.441   5.572  19.457  1.00  0.00           O
HETATM 5598  H1  SPC    38      3.385   5.446  19.789  1.00  0.00           H
HETATM 5599  H2  SPC    38      2.446   6.251  18.711  1.00  0.00           H
HETATM 5600  O   SPC    39      4.640   4.990  21.178  1.00  0.00           O
HETATM 5601  H1  SPC    39      3.847   5.112  21.787  1.00  0.00           H
HETATM 5602  H2  SPC    39      5.069   4.099  21.396  1.00  0.00           H
HETATM 5603  O   SPC    41     -5.569   5.569  18.908  1.00  0.00           O
HETATM 5604  H1  SPC    41     -6.469   5.844  18.529  1.00  0.00           H
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HETATM 5605  H2  SPC    41      -5.652   4.639  19.292  1.00  0.00           H
HETATM 5606  O   SPC    44       3.197  -1.908  22.092  1.00  0.00           O
HETATM 5607  H1  SPC    44       3.286  -2.855  21.755  1.00  0.00           H
HETATM 5608  H2  SPC    44       2.321  -1.832  22.589  1.00  0.00           H
HETATM 5609  O   SPC    46       3.286   4.907  16.106  1.00  0.00           O
HETATM 5610  H1  SPC    46       2.911   5.781  16.445  1.00  0.00           H
HETATM 5611  H2  SPC    46       3.473   4.993  15.117  1.00  0.00           H
HETATM 5612  O   SPC    52       2.544   2.109  22.536  1.00  0.00           O
HETATM 5613  H1  SPC    52       1.717   1.540  22.650  1.00  0.00           H
HETATM 5614  H2  SPC    52       2.274   3.081  22.572  1.00  0.00           H
HETATM 5615  O   SPC    53      -7.117   8.984  16.640  1.00  0.00           O
HETATM 5616  H1  SPC    53      -7.531   9.906  16.662  1.00  0.00           H
HETATM 5617  H2  SPC    53      -6.759   8.824  15.708  1.00  0.00           H
HETATM 5618  O   SPC    55      -2.348   7.813  17.388  1.00  0.00           O
HETATM 5619  H1  SPC    55      -1.861   8.702  17.399  1.00  0.00           H
HETATM 5620  H2  SPC    55      -3.293   7.969  17.725  1.00  0.00           H
HETATM 5621  O   SPC    57       5.372  -0.283  21.371  1.00  0.00           O
HETATM 5622  H1  SPC    57       6.152  -0.787  20.976  1.00  0.00           H
HETATM 5623  H2  SPC    57       4.708  -0.948  21.745  1.00  0.00           H
HETATM 5624  O   SPC    59       0.247   0.553  22.163  1.00  0.00           O
HETATM 5625  H1  SPC    59      -0.468   0.263  21.508  1.00  0.00           H
HETATM 5626  H2  SPC    59       0.479  -0.250  22.733  1.00  0.00           H
HETATM 5627  O   SPC    61      -0.382   3.284  22.175  1.00  0.00           O
HETATM 5628  H1  SPC    61      -0.282   2.294  22.343  1.00  0.00           H
HETATM 5629  H2  SPC    61      -0.975   3.411  21.368  1.00  0.00           H
HETATM 5630  O   SPC    62       1.027   3.225  19.224  1.00  0.00           O
HETATM 5631  H1  SPC    62       1.426   4.153  19.245  1.00  0.00           H
HETATM 5632  H2  SPC    62       0.037   3.293  19.424  1.00  0.00           H
HETATM 5633  O   SPC    65      -3.359   1.255  19.453  1.00  0.00           O
HETATM 5634  H1  SPC    65      -3.325   0.789  18.552  1.00  0.00           H
HETATM 5635  H2  SPC    65      -2.908   0.648  20.125  1.00  0.00           H
HETATM 5636  O   SPC   384       1.215   1.601 -20.806  1.00  0.00           O
HETATM 5637  H1  SPC   384       0.423   0.958 -20.733  1.00  0.00           H
HETATM 5638  H2  SPC   384       0.869   2.462 -21.184  1.00  0.00           H
HETATM 5639  O   SPC   406       5.994   9.546 -15.895  1.00  0.00           O
HETATM 5640  H1  SPC   406       6.064  10.548 -15.847  1.00  0.00           H
HETATM 5641  H2  SPC   406       6.763   9.156 -15.363  1.00  0.00           H
HETATM 5642  O   SPC   447      -0.083   8.429 -16.266  1.00  0.00           O
HETATM 5643  H1  SPC   447      -0.602   8.018 -17.039  1.00  0.00           H
HETATM 5644  H2  SPC   447      -0.632   9.195 -15.894  1.00  0.00           H
HETATM 5645  O   SPC   454      -7.234  21.943   5.506  1.00  0.00           O
HETATM 5646  H1  SPC   454      -7.397  20.987   5.779  1.00  0.00           H
HETATM 5647  H2  SPC   454      -7.639  22.551   6.202  1.00  0.00           H
HETATM 5648  O   SPC   455       5.515  27.063  -7.186  1.00  0.00           O
HETATM 5649  H1  SPC   455       6.396  27.301  -7.617  1.00  0.00           H
HETATM 5650  H2  SPC   455       5.638  26.191  -6.685  1.00  0.00           H
HETATM 5651  O   SPC   457       4.545  21.760  -0.151  1.00  0.00           O
HETATM 5652  H1  SPC   457       4.170  21.054  -0.777  1.00  0.00           H
HETATM 5653  H2  SPC   457       3.792  22.361   0.156  1.00  0.00           H
HETATM 5654  O   SPC   458      -0.508  17.282   2.764  1.00  0.00           O
HETATM 5655  H1  SPC   458      -0.635  16.289   2.878  1.00  0.00           H
HETATM 5656  H2  SPC   458      -0.237  17.461   1.806  1.00  0.00           H
HETATM 5657  O   SPC   459       5.939  23.396  -8.456  1.00  0.00           O
HETATM 5658  H1  SPC   459       5.566  22.467  -8.599  1.00  0.00           H
HETATM 5659  H2  SPC   459       5.276  24.067  -8.827  1.00  0.00           H
HETATM 5660  O   SPC   460      -0.241  25.847  -5.134  1.00  0.00           O
HETATM 5661  H1  SPC   460       0.162  25.036  -4.682  1.00  0.00           H
HETATM 5662  H2  SPC   460      -1.232  25.868  -4.921  1.00  0.00           H
HETATM 5663  O   SPC   461      -3.161  18.115   6.767  1.00  0.00           O
HETATM 5664  H1  SPC   461      -3.082  18.144   5.761  1.00  0.00           H
HETATM 5665  H2  SPC   461      -3.842  18.804   7.061  1.00  0.00           H
HETATM 5666  O   SPC   462      -8.233  23.190   7.762  1.00  0.00           O
HETATM 5667  H1  SPC   462      -8.935  23.876   7.966  1.00  0.00           H
HETATM 5668  H2  SPC   462      -8.557  22.284   8.076  1.00  0.00           H
HETATM 5669  O   SPC   463       8.169  23.186   0.983  1.00  0.00           O
HETATM 5670  H1  SPC   463       8.819  22.597   1.495  1.00  0.00           H
HETATM 5671  H2  SPC   463       8.614  23.476   0.121  1.00  0.00           H
HETATM 5672  O   SPC   464       4.823  23.131  -4.236  1.00  0.00           O
HETATM 5673  H1  SPC   464       4.153  23.827  -3.932  1.00  0.00           H
HETATM 5674  H2  SPC   464       5.413  22.900  -3.449  1.00  0.00           H
HETATM 5675  O   SPC   466      -3.548  23.214   7.318  1.00  0.00           O
HETATM 5676  H1  SPC   466      -4.098  23.065   6.483  1.00  0.00           H
HETATM 5677  H2  SPC   466      -2.754  23.788   7.065  1.00  0.00           H
HETATM 5678  O   SPC   467      -0.850  19.582   7.028  1.00  0.00           O
HETATM 5679  H1  SPC   467      -0.988  20.298   7.729  1.00  0.00           H
HETATM 5680  H2  SPC   467      -1.674  18.997   7.006  1.00  0.00           H
HETATM 5681  O   SPC   468       7.780  28.430  -0.974  1.00  0.00           O
HETATM 5682  H1  SPC   468       8.482  27.763  -0.678  1.00  0.00           H
HETATM 5683  H2  SPC   468       7.713  28.403  -1.983  1.00  0.00           H
HETATM 5684  O   SPC   469       7.834  28.284  -3.688  1.00  0.00           O
HETATM 5685  H1  SPC   469       7.882  27.388  -4.159  1.00  0.00           H
HETATM 5686  H2  SPC   469       8.756  28.698  -3.701  1.00  0.00           H
HETATM 5687  O   SPC   470      -3.880  23.904   0.113  1.00  0.00           O
HETATM 5688  H1  SPC   470      -4.071  23.990  -0.869  1.00  0.00           H
HETATM 5689  H2  SPC   470      -4.744  24.032   0.627  1.00  0.00           H
HETATM 5690  O   SPC   471       3.391  26.293   0.744  1.00  0.00           O
HETATM 5691  H1  SPC   471       4.262  26.805   0.725  1.00  0.00           H
HETATM 5692  H2  SPC   471       2.842  26.549  -0.068  1.00  0.00           H
HETATM 5693  O   SPC   472      -5.338  19.337   4.505  1.00  0.00           O
HETATM 5694  H1  SPC   472      -4.401  19.003   4.353  1.00  0.00           H
HETATM 5695  H2  SPC   472      -5.470  20.183   3.977  1.00  0.00           H
HETATM 5696  O   SPC   473       5.917  27.351   0.679  1.00  0.00           O
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HETATM 5697  H1  SPC   473       6.470  27.922   0.051  1.00  0.00           H
HETATM 5698  H2  SPC   473       6.544  26.733   1.180  1.00  0.00           H
HETATM 5699  O   SPC   475       3.287  25.052  -3.218  1.00  0.00           O
HETATM 5700  H1  SPC   475       2.781  25.907  -3.404  1.00  0.00           H
HETATM 5701  H2  SPC   475       3.984  25.242  -2.511  1.00  0.00           H
HETATM 5702  O   SPC   476      -3.626  26.473  -7.182  1.00  0.00           O
HETATM 5703  H1  SPC   476      -3.282  25.926  -7.954  1.00  0.00           H
HETATM 5704  H2  SPC   476      -4.200  27.212  -7.536  1.00  0.00           H
HETATM 5705  O   SPC   477      -1.950  25.188   1.567  1.00  0.00           O
HETATM 5706  H1  SPC   477      -2.641  24.800   0.939  1.00  0.00           H
HETATM 5707  H2  SPC   477      -2.333  25.173   2.506  1.00  0.00           H
HETATM 5708  O   SPC   478       6.700  24.026   7.010  1.00  0.00           O
HETATM 5709  H1  SPC   478       7.539  24.407   7.428  1.00  0.00           H
HETATM 5710  H2  SPC   478       5.906  24.369   7.526  1.00  0.00           H
HETATM 5711  O   SPC   479       6.073  24.658  -6.069  1.00  0.00           O
HETATM 5712  H1  SPC   479       6.085  24.131  -6.934  1.00  0.00           H
HETATM 5713  H2  SPC   479       5.618  24.095  -5.362  1.00  0.00           H
HETATM 5714  O   SPC   480      -4.786  22.900   4.883  1.00  0.00           O
HETATM 5715  H1  SPC   480      -4.240  22.180   4.431  1.00  0.00           H
HETATM 5716  H2  SPC   480      -5.736  22.566   4.998  1.00  0.00           H
HETATM 5717  O   SPC   481       7.651  25.685   1.934  1.00  0.00           O
HETATM 5718  H1  SPC   481       7.134  25.704   2.800  1.00  0.00           H
HETATM 5719  H2  SPC   481       7.795  24.719   1.664  1.00  0.00           H
HETATM 5720  O   SPC   483       0.934  25.125   7.012  1.00  0.00           O
HETATM 5721  H1  SPC   483       1.507  24.574   7.636  1.00  0.00           H
HETATM 5722  H2  SPC   483       1.357  25.118   6.095  1.00  0.00           H
HETATM 5723  O   SPC   484       3.998  26.361   6.018  1.00  0.00           O
HETATM 5724  H1  SPC   484       3.915  27.348   6.179  1.00  0.00           H
HETATM 5725  H2  SPC   484       4.200  25.910   6.898  1.00  0.00           H
HETATM 5726  O   SPC   485       2.921  23.645   1.121  1.00  0.00           O
HETATM 5727  H1  SPC   485       3.123  24.615   0.916  1.00  0.00           H
HETATM 5728  H2  SPC   485       1.921  23.522   1.132  1.00  0.00           H
HETATM 5729  O   SPC   486       6.392  21.284   1.702  1.00  0.00           O
HETATM 5730  H1  SPC   486       7.101  21.936   1.383  1.00  0.00           H
HETATM 5731  H2  SPC   486       5.642  21.286   1.018  1.00  0.00           H
HETATM 5732  O   SPC   487       2.138  24.986   4.554  1.00  0.00           O
HETATM 5733  H1  SPC   487       2.890  25.485   5.009  1.00  0.00           H
HETATM 5734  H2  SPC   487       1.769  25.569   3.809  1.00  0.00           H
HETATM 5735  O   SPC   488       1.392  22.488   3.731  1.00  0.00           O
HETATM 5736  H1  SPC   488       1.751  23.373   4.071  1.00  0.00           H
HETATM 5737  H2  SPC   488       1.009  22.636   2.811  1.00  0.00           H
HETATM 5738  O   SPC   490      -2.351  21.913   1.262  1.00  0.00           O
HETATM 5739  H1  SPC   490      -2.948  22.607   0.830  1.00  0.00           H
HETATM 5740  H2  SPC   490      -1.401  22.254   1.237  1.00  0.00           H
HETATM 5741  O   SPC   491       5.100  23.478   2.789  1.00  0.00           O
HETATM 5742  H1  SPC   491       5.556  22.654   2.428  1.00  0.00           H
HETATM 5743  H2  SPC   491       4.214  23.577   2.311  1.00  0.00           H
HETATM 5744  O   SPC   492      -2.656  18.516   4.047  1.00  0.00           O
HETATM 5745  H1  SPC   492      -1.776  18.119   3.744  1.00  0.00           H
HETATM 5746  H2  SPC   492      -2.602  19.525   3.964  1.00  0.00           H
HETATM 5747  O   SPC   493      -0.308  24.749  -7.693  1.00  0.00           O
HETATM 5748  H1  SPC   493      -0.221  25.331  -6.870  1.00  0.00           H
HETATM 5749  H2  SPC   493       0.428  24.984  -8.344  1.00  0.00           H
HETATM 5750  O   SPC   494      -1.413  24.284   6.081  1.00  0.00           O
HETATM 5751  H1  SPC   494      -0.611  24.742   6.500  1.00  0.00           H
HETATM 5752  H2  SPC   494      -1.132  23.360   5.782  1.00  0.00           H
HETATM 5753  O   SPC   495      -2.889  25.540  -4.621  1.00  0.00           O
HETATM 5754  H1  SPC   495      -3.287  24.662  -4.321  1.00  0.00           H
HETATM 5755  H2  SPC   495      -3.329  25.827  -5.483  1.00  0.00           H
HETATM 5756  O   SPC   497       6.264  23.016  -1.913  1.00  0.00           O
HETATM 5757  H1  SPC   497       6.113  24.004  -1.761  1.00  0.00           H
HETATM 5758  H2  SPC   497       5.732  22.502  -1.224  1.00  0.00           H
HETATM 5759  O   SPC   498      -7.232  19.298   6.379  1.00  0.00           O
HETATM 5760  H1  SPC   498      -6.567  19.262   5.613  1.00  0.00           H
HETATM 5761  H2  SPC   498      -7.578  18.358   6.538  1.00  0.00           H
HETATM 5762  O   SPC   499      -3.081  24.868   3.995  1.00  0.00           O
HETATM 5763  H1  SPC   499      -3.844  24.265   4.263  1.00  0.00           H
HETATM 5764  H2  SPC   499      -2.406  24.876   4.747  1.00  0.00           H
HETATM 5765  O   SPC   500      -8.695  20.577   8.381  1.00  0.00           O
HETATM 5766  H1  SPC   500      -8.188  20.048   7.685  1.00  0.00           H
HETATM 5767  H2  SPC   500      -8.188  20.519   9.256  1.00  0.00           H
HETATM 5768  O   SPC   502      -2.667  24.509  -9.016  1.00  0.00           O
HETATM 5769  H1  SPC   502      -2.403  24.284  -9.971  1.00  0.00           H
HETATM 5770  H2  SPC   502      -1.817  24.575  -8.467  1.00  0.00           H
HETATM 5771  O   SPC   503       2.802  20.416   4.966  1.00  0.00           O
HETATM 5772  H1  SPC   503       2.587  19.585   4.438  1.00  0.00           H
HETATM 5773  H2  SPC   503       2.396  21.211   4.493  1.00  0.00           H
HETATM 5774  O   SPC   504      -8.844  24.098   1.329  1.00  0.00           O
HETATM 5775  H1  SPC   504      -9.203  23.605   0.527  1.00  0.00           H
HETATM 5776  H2  SPC   504      -7.844  24.172   1.251  1.00  0.00           H
HETATM 5777  O   SPC   505       0.697  24.072  -1.273  1.00  0.00           O
HETATM 5778  H1  SPC   505       1.057  25.014  -1.226  1.00  0.00           H
HETATM 5779  H2  SPC   505       0.691  23.784  -2.240  1.00  0.00           H
HETATM 5780  O   SPC   506       1.331  26.498   2.480  1.00  0.00           O
HETATM 5781  H1  SPC   506       0.586  26.893   1.930  1.00  0.00           H
HETATM 5782  H2  SPC   506       2.165  26.464   1.909  1.00  0.00           H
HETATM 5783  O   SPC   507       3.515  21.074   7.571  1.00  0.00           O
HETATM 5784  H1  SPC   507       2.915  20.481   8.131  1.00  0.00           H
HETATM 5785  H2  SPC   507       3.353  20.857   6.595  1.00  0.00           H
HETATM 5786  O   SPC   508      -5.120  23.629 -10.118  1.00  0.00           O
HETATM 5787  H1  SPC   508      -5.103  23.517 -11.119  1.00  0.00           H
HETATM 5788  H2  SPC   508      -4.235  24.012  -9.827  1.00  0.00           H
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HETATM 5789  O   SPC   509     -0.726  21.747   5.259  1.00  0.00          O
HETATM 5790  H1  SPC   509      0.133  21.940   4.759  1.00  0.00          H
HETATM 5791  H2  SPC   509     -0.575  20.963   5.878  1.00  0.00          H
HETATM 5792  O   SPC   510      2.622  23.537   8.440  1.00  0.00          O
HETATM 5793  H1  SPC   510      2.975  22.661   8.076  1.00  0.00          H
HETATM 5794  H2  SPC   510      3.393  24.182   8.529  1.00  0.00          H
HETATM 5795  O   SPC   511      1.042  23.720  -4.039  1.00  0.00          O
HETATM 5796  H1  SPC   511      1.995  24.000  -3.855  1.00  0.00          H
HETATM 5797  H2  SPC   511      1.031  23.045  -4.787  1.00  0.00          H
HETATM 5798  O   SPC   512     -2.909  21.183   3.780  1.00  0.00          O
HETATM 5799  H1  SPC   512     -2.143  21.504   4.361  1.00  0.00          H
HETATM 5800  H2  SPC   512     -2.741  21.493   2.829  1.00  0.00          H
HETATM 5801  O   SPC   513      8.186  25.910  -4.925  1.00  0.00          O
HETATM 5802  H1  SPC   513      8.717  25.190  -4.456  1.00  0.00          H
HETATM 5803  H2  SPC   513      7.398  25.472  -5.387  1.00  0.00          H
HETATM 5804  O   SPC   514      7.349  23.509   4.457  1.00  0.00          O
HETATM 5805  H1  SPC   514      7.077  23.713   5.413  1.00  0.00          H
HETATM 5806  H2  SPC   514      6.532  23.595   3.871  1.00  0.00          H
HETATM 5807  O   SPC   515     -6.044  24.093   1.738  1.00  0.00          O
HETATM 5808  H1  SPC   515     -6.134  23.155   2.102  1.00  0.00          H
HETATM 5809  H2  SPC   515     -6.032  24.736   2.508  1.00  0.00          H
HETATM 5810  O   SPC   516      0.096  23.330   1.229  1.00  0.00          O
HETATM 5811  H1  SPC   516      0.289  23.476   0.242  1.00  0.00          H
HETATM 5812  H2  SPC   516     -0.501  24.084   1.543  1.00  0.00          H
HETATM 5813  O   SPC   520     -4.934  19.813  12.164  1.00  0.00          O
HETATM 5814  H1  SPC   520     -4.334  20.374  12.756  1.00  0.00          H
HETATM 5815  H2  SPC   520     -4.869  18.848  12.469  1.00  0.00          H
HETATM 5816  O   SPC   522      4.791  25.365   8.549  1.00  0.00          O
HETATM 5817  H1  SPC   522      5.356  26.197   8.413  1.00  0.00          H
HETATM 5818  H2  SPC   522      4.844  25.099   9.525  1.00  0.00          H
HETATM 5819  O   SPC   523      5.089  20.751  12.074  1.00  0.00          O
HETATM 5820  H1  SPC   523      4.116  20.853  12.319  1.00  0.00          H
HETATM 5821  H2  SPC   523      5.222  21.173  11.165  1.00  0.00          H
HETATM 5822  O   SPC   525     -0.457  12.581  18.500  1.00  0.00          O
HETATM 5823  H1  SPC   525     -0.977  12.796  19.330  1.00  0.00          H
HETATM 5824  H2  SPC   525     -0.471  13.397  17.893  1.00  0.00          H
HETATM 5825  O   SPC   531      5.237  21.897   9.598  1.00  0.00          O
HETATM 5826  H1  SPC   531      6.210  21.641   9.516  1.00  0.00          H
HETATM 5827  H2  SPC   531      4.736  21.556   8.788  1.00  0.00          H
HETATM 5828  O   SPC   534     -6.447  16.262   9.389  1.00  0.00          O
HETATM 5829  H1  SPC   534     -7.368  16.510   9.723  1.00  0.00          H
HETATM 5830  H2  SPC   534     -5.961  15.804  10.150  1.00  0.00          H
HETATM 5831  O   SPC   542      3.513  23.658  13.395  1.00  0.00          O
HETATM 5832  H1  SPC   542      3.156  24.448  13.898  1.00  0.00          H
HETATM 5833  H2  SPC   542      3.920  23.009  14.061  1.00  0.00          H
HETATM 5834  O   SPC   543      0.899  18.595  15.386  1.00  0.00          O
HETATM 5835  H1  SPC   543      0.948  17.610  15.586  1.00  0.00          H
HETATM 5836  H2  SPC   543      1.836  18.968  15.374  1.00  0.00          H
HETATM 5837  O   SPC   546      4.098  18.139   9.945  1.00  0.00          O
HETATM 5838  H1  SPC   546      3.334  18.724   9.629  1.00  0.00          H
HETATM 5839  H2  SPC   546      4.395  17.570   9.163  1.00  0.00          H
HETATM 5840  O   SPC   547      6.778  20.188  14.195  1.00  0.00          O
HETATM 5841  H1  SPC   547      6.214  20.534  13.429  1.00  0.00          H
HETATM 5842  H2  SPC   547      6.517  19.227  14.361  1.00  0.00          H
HETATM 5843  O   SPC   551      6.934  18.793  11.475  1.00  0.00          O
HETATM 5844  H1  SPC   551      6.607  17.843  11.533  1.00  0.00          H
HETATM 5845  H2  SPC   551      6.163  19.410  11.685  1.00  0.00          H
HETATM 5846  O   SPC   557      4.117  15.764  15.750  1.00  0.00          O
HETATM 5847  H1  SPC   557      4.678  16.458  15.282  1.00  0.00          H
HETATM 5848  H2  SPC   557      4.727  15.064  16.138  1.00  0.00          H
HETATM 5849  O   SPC   559     -0.475  14.651  16.816  1.00  0.00          O
HETATM 5850  H1  SPC   559      0.246  15.178  16.347  1.00  0.00          H
HETATM 5851  H2  SPC   559     -1.280  14.602  16.208  1.00  0.00          H
HETATM 5852  O   SPC   560     -6.927  20.626  10.443  1.00  0.00          O
HETATM 5853  H1  SPC   560     -6.324  20.270  11.172  1.00  0.00          H
HETATM 5854  H2  SPC   560     -6.430  21.353   9.948  1.00  0.00          H
HETATM 5855  O   SPC   562      0.034  19.800  10.976  1.00  0.00          O
HETATM 5856  H1  SPC   562     -0.367  19.612  11.884  1.00  0.00          H
HETATM 5857  H2  SPC   562      0.035  20.795  10.821  1.00  0.00          H
HETATM 5858  O   SPC   565     -2.990  21.057  13.594  1.00  0.00          O
HETATM 5859  H1  SPC   565     -2.683  21.870  14.091  1.00  0.00          H
HETATM 5860  H2  SPC   565     -2.235  20.384  13.573  1.00  0.00          H
HETATM 5861  O   SPC   566     -6.216  11.628  13.976  1.00  0.00          O
HETATM 5862  H1  SPC   566     -6.328  12.576  13.650  1.00  0.00          H
HETATM 5863  H2  SPC   566     -6.770  11.519  14.815  1.00  0.00          H
HETATM 5864  O   SPC   568      4.712  13.801  12.147  1.00  0.00          O
HETATM 5865  H1  SPC   568      4.719  13.357  13.054  1.00  0.00          H
HETATM 5866  H2  SPC   568      3.937  13.426  11.615  1.00  0.00          H
HETATM 5867  O   SPC   572      5.751  17.557  14.360  1.00  0.00          O
HETATM 5868  H1  SPC   572      5.460  17.312  13.420  1.00  0.00          H
HETATM 5869  H2  SPC   572      6.484  16.914  14.633  1.00  0.00          H
HETATM 5870  O   SPC   575      4.773  12.497  14.606  1.00  0.00          O
HETATM 5871  H1  SPC   575      5.351  12.890  15.335  1.00  0.00          H
HETATM 5872  H2  SPC   575      3.803  12.696  14.828  1.00  0.00          H
HETATM 5873  O   SPC   577     -3.770  11.228  12.841  1.00  0.00          O
HETATM 5874  H1  SPC   577     -4.677  11.323  13.282  1.00  0.00          H
HETATM 5875  H2  SPC   577     -3.717  10.325  12.387  1.00  0.00          H
HETATM 5876  O   SPC   583     -3.308  19.724   9.964  1.00  0.00          O
HETATM 5877  H1  SPC   583     -3.932  19.664   9.172  1.00  0.00          H
HETATM 5878  H2  SPC   583     -3.867  19.800  10.804  1.00  0.00          H
HETATM 5879  O   SPC   587     -2.185  13.901   9.284  1.00  0.00          O
HETATM 5880  H1  SPC   587     -2.159  13.277   8.494  1.00  0.00          H
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HETATM 5881  H2  SPC   587      -2.697  14.733   9.018  1.00  0.00           H
HETATM 5882  O   SPC   591      -1.753  10.861  14.559  1.00  0.00           O
HETATM 5883  H1  SPC   591      -0.991  11.480  14.319  1.00  0.00           H
HETATM 5884  H2  SPC   591      -2.538  11.090  13.961  1.00  0.00           H
HETATM 5885  O   SPC   593      -4.258  12.772  10.676  1.00  0.00           O
HETATM 5886  H1  SPC   593      -3.447  13.134  10.193  1.00  0.00           H
HETATM 5887  H2  SPC   593      -3.948  12.262  11.493  1.00  0.00           H
HETATM 5888  O   SPC   596       2.665  18.786  12.304  1.00  0.00           O
HETATM 5889  H1  SPC   596       3.227  18.514  11.511  1.00  0.00           H
HETATM 5890  H2  SPC   596       2.271  19.698  12.118  1.00  0.00           H
HETATM 5891  O   SPC   597       4.497  21.803  15.097  1.00  0.00           O
HETATM 5892  H1  SPC   597       3.969  20.942  15.119  1.00  0.00           H
HETATM 5893  H2  SPC   597       5.474  21.575  15.140  1.00  0.00           H
HETATM 5894  O   SPC   598       4.895  24.177  11.038  1.00  0.00           O
HETATM 5895  H1  SPC   598       4.942  23.308  10.521  1.00  0.00           H
HETATM 5896  H2  SPC   598       4.340  24.028  11.869  1.00  0.00           H
HETATM 5897  O   SPC   599       7.497  15.553  14.795  1.00  0.00           O
HETATM 5898  H1  SPC   599       8.377  15.963  15.075  1.00  0.00           H
HETATM 5899  H2  SPC   599       7.613  15.091  13.900  1.00  0.00           H
HETATM 5900  O   SPC   600      -7.144  14.145  16.278  1.00  0.00           O
HETATM 5901  H1  SPC   600      -6.160  13.887  16.282  1.00  0.00           H
HETATM 5902  H2  SPC   600      -7.283  14.876  16.949  1.00  0.00           H
HETATM 5903  O   SPC   601      -6.145  10.878   9.921  1.00  0.00           O
HETATM 5904  H1  SPC   601      -5.534  11.661  10.105  1.00  0.00           H
HETATM 5905  H2  SPC   601      -5.588  10.105   9.592  1.00  0.00           H
HETATM 5906  O   SPC   607       7.394  14.297  12.397  1.00  0.00           O
HETATM 5907  H1  SPC   607       6.421  14.097  12.209  1.00  0.00           H
HETATM 5908  H2  SPC   607       7.735  14.935  11.693  1.00  0.00           H
HETATM 5909  O   SPC   612       2.220  13.056  15.230  1.00  0.00           O
HETATM 5910  H1  SPC   612       2.043  12.522  16.071  1.00  0.00           H
HETATM 5911  H2  SPC   612       1.910  14.005  15.376  1.00  0.00           H
HETATM 5912  O   SPC   614      -4.956  19.927   7.785  1.00  0.00           O
HETATM 5913  H1  SPC   614      -5.143  20.861   8.126  1.00  0.00           H
HETATM 5914  H2  SPC   614      -5.799  19.580   7.350  1.00  0.00           H
HETATM 5915  O   SPC   617       0.906  17.514   7.377  1.00  0.00           O
HETATM 5916  H1  SPC   617       0.265  18.247   7.101  1.00  0.00           H
HETATM 5917  H2  SPC   617       1.210  17.019   6.558  1.00  0.00           H
HETATM 5918  O   SPC   625       8.467  12.305  17.220  1.00  0.00           O
HETATM 5919  H1  SPC   625       7.562  12.645  16.942  1.00  0.00           H
HETATM 5920  H2  SPC   625       8.936  11.928  16.412  1.00  0.00           H
HETATM 5921  O   SPC   626       6.230  13.995  16.543  1.00  0.00           O
HETATM 5922  H1  SPC   626       6.723  14.521  15.829  1.00  0.00           H
HETATM 5923  H2  SPC   626       6.459  14.399  17.437  1.00  0.00           H
HETATM 5924  O   SPC   628      -1.695  16.525  13.002  1.00  0.00           O
HETATM 5925  H1  SPC   628      -0.696  16.390  13.065  1.00  0.00           H
HETATM 5926  H2  SPC   628      -1.926  16.712  12.032  1.00  0.00           H
HETATM 5927  O   SPC   630       1.486  15.791  15.243  1.00  0.00           O
HETATM 5928  H1  SPC   630       1.355  15.981  14.257  1.00  0.00           H
HETATM 5929  H2  SPC   630       2.476  15.857  15.457  1.00  0.00           H
HETATM 5930  O   SPC   631      -8.959  16.776  10.360  1.00  0.00           O
HETATM 5931  H1  SPC   631      -8.966  17.551  10.997  1.00  0.00           H
HETATM 5932  H2  SPC   631      -9.528  17.009   9.554  1.00  0.00           H
HETATM 5933  O   SPC   633      -3.714  16.114   8.582  1.00  0.00           O
HETATM 5934  H1  SPC   633      -4.711  16.135   8.740  1.00  0.00           H
HETATM 5935  H2  SPC   633      -3.492  16.772   7.846  1.00  0.00           H
HETATM 5936  O   SPC   634       1.526   9.362  15.787  1.00  0.00           O
HETATM 5937  H1  SPC   634       1.418   9.637  14.818  1.00  0.00           H
HETATM 5938  H2  SPC   634       1.562  10.195  16.354  1.00  0.00           H
HETATM 5939  O   SPC   639       7.660  16.125  17.999  1.00  0.00           O
HETATM 5940  H1  SPC   639       7.276  16.910  18.488  1.00  0.00           H
HETATM 5941  H2  SPC   639       8.259  16.463  17.258  1.00  0.00           H
HETATM 5942  O   SPC   641      -0.186  13.072  11.060  1.00  0.00           O
HETATM 5943  H1  SPC   641      -0.393  12.087  10.981  1.00  0.00           H
HETATM 5944  H2  SPC   641      -0.813  13.579  10.449  1.00  0.00           H
HETATM 5945  O   SPC   642      -7.086  14.222  13.515  1.00  0.00           O
HETATM 5946  H1  SPC   642      -7.131  14.373  14.513  1.00  0.00           H
HETATM 5947  H2  SPC   642      -7.959  13.809  13.212  1.00  0.00           H
HETATM 5948  O   SPC   643      -2.297  14.355  14.776  1.00  0.00           O
HETATM 5949  H1  SPC   643      -2.327  15.174  14.188  1.00  0.00           H
HETATM 5950  H2  SPC   643      -1.597  13.726  14.405  1.00  0.00           H
HETATM 5951  O   SPC   646      -4.567  13.453  16.238  1.00  0.00           O
HETATM 5952  H1  SPC   646      -3.755  13.736  15.709  1.00  0.00           H
HETATM 5953  H2  SPC   646      -4.388  12.548  16.654  1.00  0.00           H
HETATM 5954  O   SPC   647      -0.163  12.948  13.786  1.00  0.00           O
HETATM 5955  H1  SPC   647       0.779  12.867  14.140  1.00  0.00           H
HETATM 5956  H2  SPC   647      -0.124  13.082  12.784  1.00  0.00           H
HETATM 5957  O   SPC   648       2.877  15.167   9.579  1.00  0.00           O
HETATM 5958  H1  SPC   648       1.982  15.612   9.727  1.00  0.00           H
HETATM 5959  H2  SPC   648       2.838  14.236   9.965  1.00  0.00           H
HETATM 5960  O   SPC   649      -4.127  10.990  17.416  1.00  0.00           O
HETATM 5961  H1  SPC   649      -3.144  10.769  17.375  1.00  0.00           H
HETATM 5962  H2  SPC   649      -4.621  10.187  17.764  1.00  0.00           H
HETATM 5963  O   SPC   651       3.548  19.214  14.814  1.00  0.00           O
HETATM 5964  H1  SPC   651       3.160  19.086  13.887  1.00  0.00           H
HETATM 5965  H2  SPC   651       4.372  18.638  14.892  1.00  0.00           H
HETATM 5966  O   SPC   658       0.641  22.374  10.040  1.00  0.00           O
HETATM 5967  H1  SPC   658      -0.209  22.245   9.507  1.00  0.00           H
HETATM 5968  H2  SPC   658       1.298  22.894   9.476  1.00  0.00           H
HETATM 5969  O   SPC   666      -7.894  16.798   7.035  1.00  0.00           O
HETATM 5970  H1  SPC   666      -8.825  16.892   7.422  1.00  0.00           H
HETATM 5971  H2  SPC   666      -7.268  16.496   7.768  1.00  0.00           H
HETATM 5972  O   SPC   670      -1.702  21.588   8.746  1.00  0.00           O
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HETATM 5973  H1  SPC   670      -2.364  22.195   8.287  1.00  0.00          H
HETATM 5974  H2  SPC   670      -2.213  20.945   9.338  1.00  0.00          H
HETATM 5975  O   SPC   676      -6.066   8.948  14.126  1.00  0.00          O
HETATM 5976  H1  SPC   676      -5.103   8.711  14.332  1.00  0.00          H
HETATM 5977  H2  SPC   676      -6.115   9.939  13.931  1.00  0.00          H
HETATM 5978  O   SPC   679      -4.429  17.252  12.848  1.00  0.00          O
HETATM 5979  H1  SPC   679      -4.849  16.470  12.364  1.00  0.00          H
HETATM 5980  H2  SPC   679      -3.507  16.985  13.147  1.00  0.00          H
HETATM 5981  O   SPC   686       1.920  19.415   9.047  1.00  0.00          O
HETATM 5982  H1  SPC   686       1.582  18.699   8.419  1.00  0.00          H
HETATM 5983  H2  SPC   686       1.217  19.566   9.763  1.00  0.00          H
HETATM 5984  O   SPC   687       1.828  11.555  17.472  1.00  0.00          O
HETATM 5985  H1  SPC   687       2.458  11.223  18.179  1.00  0.00          H
HETATM 5986  H2  SPC   687       0.998  11.921  17.923  1.00  0.00          H
HETATM 5987  O   SPC   688      -5.728  22.398   8.713  1.00  0.00          O
HETATM 5988  H1  SPC   688      -6.545  22.883   8.371  1.00  0.00          H
HETATM 5989  H2  SPC   688      -4.903  22.867   8.360  1.00  0.00          H
HETATM 5990  O   SPC   691       0.465  16.435   9.873  1.00  0.00          O
HETATM 5991  H1  SPC   691      -0.470  16.722  10.130  1.00  0.00          H
HETATM 5992  H2  SPC   691       0.647  16.768   8.936  1.00  0.00          H
HETATM 5993  O   SPC   692      -1.466  10.362  17.206  1.00  0.00          O
HETATM 5994  H1  SPC   692      -1.449  10.549  16.211  1.00  0.00          H
HETATM 5995  H2  SPC   692      -1.032  11.137  17.688  1.00  0.00          H
HETATM 5996  O   SPC   693      -8.057  11.518  16.043  1.00  0.00          O
HETATM 5997  H1  SPC   693      -7.889  12.489  16.266  1.00  0.00          H
HETATM 5998  H2  SPC   693      -8.984  11.427  15.654  1.00  0.00          H
HETATM 5999  O   SPC   697       7.469  24.596  11.941  1.00  0.00          O
HETATM 6000  H1  SPC   697       7.735  23.707  12.339  1.00  0.00          H
HETATM 6001  H2  SPC   697       6.509  24.538  11.633  1.00  0.00          H
HETATM 6002  O   SPC   698      -5.422  15.045  11.571  1.00  0.00          O
HETATM 6003  H1  SPC   698      -6.064  14.792  12.314  1.00  0.00          H
HETATM 6004  H2  SPC   698      -4.996  14.198  11.216  1.00  0.00          H
HETATM 6005  O   SPC   703       5.193  16.570  11.892  1.00  0.00          O
HETATM 6006  H1  SPC   703       4.907  15.601  11.900  1.00  0.00          H
HETATM 6007  H2  SPC   703       4.714  17.040  11.135  1.00  0.00          H
HETATM 6008  O   SPC   706      -2.086  17.263  10.434  1.00  0.00          O
HETATM 6009  H1  SPC   706      -2.305  18.246  10.352  1.00  0.00          H
HETATM 6010  H2  SPC   706      -2.709  16.751   9.824  1.00  0.00          H
HETATM 6011  O   SPC   707      -0.984  19.205  13.516  1.00  0.00          O
HETATM 6012  H1  SPC   707      -0.284  19.127  14.245  1.00  0.00          H
HETATM 6013  H2  SPC   707      -1.400  18.297  13.381  1.00  0.00          H
HETATM 6014  O   SPC   709       2.391  21.555  12.028  1.00  0.00          O
HETATM 6015  H1  SPC   709       2.675  22.377  12.541  1.00  0.00          H
HETATM 6016  H2  SPC   709       1.756  21.840  11.294  1.00  0.00          H
HETATM 6017  O   SPC   712       1.074  16.550  12.616  1.00  0.00          O
HETATM 6018  H1  SPC   712       0.903  16.300  11.653  1.00  0.00          H
HETATM 6019  H2  SPC   712       1.608  17.410  12.623  1.00  0.00          H
HETATM 6020  O   SPC  1025       7.502  20.562 -14.078  1.00  0.00          O
HETATM 6021  H1  SPC  1025       8.214  19.848 -14.127  1.00  0.00          H
HETATM 6022  H2  SPC  1025       6.930  20.502 -14.905  1.00  0.00          H
HETATM 6023  O   SPC  1030       1.488  24.959  -9.808  1.00  0.00          O
HETATM 6024  H1  SPC  1030       0.975  25.265 -10.614  1.00  0.00          H
HETATM 6025  H2  SPC  1030       1.893  24.061 -10.007  1.00  0.00          H
HETATM 6026  O   SPC  1049       3.872  18.277 -16.052  1.00  0.00          O
HETATM 6027  H1  SPC  1049       4.661  18.897 -16.139  1.00  0.00          H
HETATM 6028  H2  SPC  1049       3.025  18.824 -16.171  1.00  0.00          H
HETATM 6029  O   SPC  1052       4.453  21.618 -12.305  1.00  0.00          O
HETATM 6030  H1  SPC  1052       3.631  21.036 -12.280  1.00  0.00          H
HETATM 6031  H2  SPC  1052       4.773  21.687 -13.252  1.00  0.00          H
HETATM 6032  O   SPC  1058       6.022  20.122 -16.498  1.00  0.00          O
HETATM 6033  H1  SPC  1058       5.659  20.751 -17.190  1.00  0.00          H
HETATM 6034  H2  SPC  1058       6.928  19.788 -16.803  1.00  0.00          H
HETATM 6035  O   SPC  1061       3.103  15.634 -15.627  1.00  0.00          O
HETATM 6036  H1  SPC  1061       3.397  16.603 -15.611  1.00  0.00          H
HETATM 6037  H2  SPC  1061       2.622  15.467 -16.489  1.00  0.00          H
HETATM 6038  O   SPC  1083       8.079   8.783 -14.310  1.00  0.00          O
HETATM 6039  H1  SPC  1083       8.490   8.050 -13.755  1.00  0.00          H
HETATM 6040  H2  SPC  1083       8.750   9.540 -14.373  1.00  0.00          H
HETATM 6041  O   SPC  1095       0.033  22.121 -12.560  1.00  0.00          O
HETATM 6042  H1  SPC  1095       0.853  21.547 -12.665  1.00  0.00          H
HETATM 6043  H2  SPC  1095      -0.286  22.392 -13.482  1.00  0.00          H
HETATM 6044  O   SPC  1096       9.189  15.088 -17.120  1.00  0.00          O
HETATM 6045  H1  SPC  1096       8.355  15.586 -17.397  1.00  0.00          H
HETATM 6046  H2  SPC  1096       9.902  15.761 -16.882  1.00  0.00          H
HETATM 6047  O   SPC  1097       7.058  16.786 -17.594  1.00  0.00          O
HETATM 6048  H1  SPC  1097       6.083  17.012 -17.563  1.00  0.00          H
HETATM 6049  H2  SPC  1097       7.594  17.632 -17.463  1.00  0.00          H
HETATM 6050  O   SPC  1101      -0.862   9.790 -19.147  1.00  0.00          O
HETATM 6051  H1  SPC  1101      -1.071   8.832 -18.889  1.00  0.00          H
HETATM 6052  H2  SPC  1101      -1.728  10.285 -19.236  1.00  0.00          H
HETATM 6053  O   SPC  1102       8.498  19.075 -16.989  1.00  0.00          O
HETATM 6054  H1  SPC  1102       8.691  18.780 -16.036  1.00  0.00          H
HETATM 6055  H2  SPC  1102       9.372  19.352 -17.408  1.00  0.00          H
HETATM 6056  O   SPC  1109       7.175  21.694 -11.601  1.00  0.00          O
HETATM 6057  H1  SPC  1109       7.448  21.297 -12.490  1.00  0.00          H
HETATM 6058  H2  SPC  1109       6.169  21.755 -11.580  1.00  0.00          H
HETATM 6059  O   SPC  1111       1.779  19.950 -16.368  1.00  0.00          O
HETATM 6060  H1  SPC  1111       1.611  20.834 -15.930  1.00  0.00          H
HETATM 6061  H2  SPC  1111       1.254  19.945 -17.240  1.00  0.00          H
HETATM 6062  O   SPC  1113      -2.015  23.785 -11.538  1.00  0.00          O
HETATM 6063  H1  SPC  1113      -1.251  23.233 -11.901  1.00  0.00          H
HETATM 6064  H2  SPC  1113      -2.786  23.732 -12.184  1.00  0.00          H
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HETATM 6065  O   SPC  1128      4.158  25.357  -9.000  1.00  0.00           O
HETATM 6066  H1  SPC  1128      3.183  25.467  -9.228  1.00  0.00           H
HETATM 6067  H2  SPC  1128      4.462  26.149  -8.457  1.00  0.00           H
HETATM 6068  O   SPC  1147     -0.593  27.320   0.583  1.00  0.00           O
HETATM 6069  H1  SPC  1147     -1.106  26.505   0.900  1.00  0.00           H
HETATM 6070  H2  SPC  1147     -1.225  28.096   0.533  1.00  0.00           H
HETATM 6071  O   SPC  1155      5.488  25.666  -1.617  1.00  0.00           O
HETATM 6072  H1  SPC  1155      5.611  26.085  -0.710  1.00  0.00           H
HETATM 6073  H2  SPC  1155      5.444  26.410  -2.306  1.00  0.00           H
HETATM 6074  O   SPC  1178      3.685  28.340  -5.598  1.00  0.00           O
HETATM 6075  H1  SPC  1178      4.327  27.847  -6.208  1.00  0.00           H
HETATM 6076  H2  SPC  1178      3.498  29.241  -5.995  1.00  0.00           H
HETATM 6077  O   SPC  1184      5.656  25.916   3.893  1.00  0.00           O
HETATM 6078  H1  SPC  1184      5.326  25.090   3.411  1.00  0.00           H
HETATM 6079  H2  SPC  1184      5.038  26.092   4.674  1.00  0.00           H
HETATM 6080  O   SPC  1190      6.335  27.484   7.891  1.00  0.00           O
HETATM 6081  H1  SPC  1190      6.514  27.730   6.927  1.00  0.00           H
HETATM 6082  H2  SPC  1190      7.105  27.814   8.454  1.00  0.00           H
HETATM 6083  O   SPC  1196      1.760  27.261  -3.881  1.00  0.00           O
HETATM 6084  H1  SPC  1196      2.394  27.716  -4.523  1.00  0.00           H
HETATM 6085  H2  SPC  1196      0.974  26.898  -4.405  1.00  0.00           H
HETATM 6086  O   SPC  1211      9.157  30.628  -0.133  1.00  0.00           O
HETATM 6087  H1  SPC  1211      8.590  29.871  -0.490  1.00  0.00           H
HETATM 6088  H2  SPC  1211      8.669  31.052   0.642  1.00  0.00           H
HETATM 6089  O   SPC  1220      7.733  31.450   2.102  1.00  0.00           O
HETATM 6090  H1  SPC  1220      7.152  32.267   2.103  1.00  0.00           H
HETATM 6091  H2  SPC  1220      7.161  30.648   2.351  1.00  0.00           H
HETATM 6092  O   SPC  1223      5.200  27.691  -3.350  1.00  0.00           O
HETATM 6093  H1  SPC  1223      4.594  27.966  -4.108  1.00  0.00           H
HETATM 6094  H2  SPC  1223      6.118  28.079  -3.514  1.00  0.00           H
HETATM 6095  O   SPC  1228      6.256  29.324   2.798  1.00  0.00           O
HETATM 6096  H1  SPC  1228      5.927  28.621   2.157  1.00  0.00           H
HETATM 6097  H2  SPC  1228      6.339  28.916   3.716  1.00  0.00           H
HETATM 6098  O   SPC  1230      1.507  26.740  -1.161  1.00  0.00           O
HETATM 6099  H1  SPC  1230      1.501  27.107  -2.103  1.00  0.00           H
HETATM 6100  H2  SPC  1230      0.697  27.086  -0.666  1.00  0.00           H
HETATM 6101  O   SPC  1254      6.921  27.978   5.220  1.00  0.00           O
HETATM 6102  H1  SPC  1254      6.663  27.136   4.726  1.00  0.00           H
HETATM 6103  H2  SPC  1254      7.914  28.136   5.103  1.00  0.00           H
HETATM 6104  O   SPC  1358      8.539  28.282   9.380  1.00  0.00           O
HETATM 6105  H1  SPC  1358      8.822  27.485   9.940  1.00  0.00           H
HETATM 6106  H2  SPC  1358      8.584  29.105   9.950  1.00  0.00           H
HETATM 6107  O   SPC  3122     23.196   9.286  -2.752  1.00  0.00           O
HETATM 6108  H1  SPC  3122     23.872   8.904  -3.384  1.00  0.00           H
HETATM 6109  H2  SPC  3122     23.070   8.634  -1.981  1.00  0.00           H
HETATM 6110  O   SPC  3135     23.456  11.288   0.813  1.00  0.00           O
HETATM 6111  H1  SPC  3135     23.065  11.497  -0.093  1.00  0.00           H
HETATM 6112  H2  SPC  3135     23.644  10.298   0.865  1.00  0.00           H
HETATM 6113  O   SPC  3137     20.497   8.897  -3.277  1.00  0.00           O
HETATM 6114  H1  SPC  3137     20.210   9.341  -4.137  1.00  0.00           H
HETATM 6115  H2  SPC  3137     21.481   9.065  -3.137  1.00  0.00           H
HETATM 6116  O   SPC  3144     24.227   8.636   1.412  1.00  0.00           O
HETATM 6117  H1  SPC  3144     24.050   8.706   2.409  1.00  0.00           H
HETATM 6118  H2  SPC  3144     25.155   8.282   1.281  1.00  0.00           H
HETATM 6119  O   SPC  3156     22.907   7.609  -0.726  1.00  0.00           O
HETATM 6120  H1  SPC  3156     23.316   7.946   0.134  1.00  0.00           H
HETATM 6121  H2  SPC  3156     22.402   6.756  -0.529  1.00  0.00           H
HETATM 6122  O   SPC  3162     24.005   9.004   4.060  1.00  0.00           O
HETATM 6123  H1  SPC  3162     24.140  10.004   4.000  1.00  0.00           H
HETATM 6124  H2  SPC  3162     23.892   8.746   5.028  1.00  0.00           H
HETATM 6125  O   SPC  3189     11.569   6.444  17.792  1.00  0.00           O
HETATM 6126  H1  SPC  3189     11.624   5.437  17.743  1.00  0.00           H
HETATM 6127  H2  SPC  3189     10.641   6.697  18.108  1.00  0.00           H
HETATM 6128  O   SPC  3194     13.272   8.565  17.412  1.00  0.00           O
HETATM 6129  H1  SPC  3194     12.682   7.739  17.410  1.00  0.00           H
HETATM 6130  H2  SPC  3194     13.298   8.928  18.346  1.00  0.00           H
HETATM 6131  O   SPC  3212     11.375   3.577  17.597  1.00  0.00           O
HETATM 6132  H1  SPC  3212     11.085   3.146  16.738  1.00  0.00           H
HETATM 6133  H2  SPC  3212     10.983   3.066  18.366  1.00  0.00           H
HETATM 6134  O   SPC  3266      9.034   7.208  18.639  1.00  0.00           O
HETATM 6135  H1  SPC  3266      8.178   6.735  18.892  1.00  0.00           H
HETATM 6136  H2  SPC  3266      8.985   8.150  18.976  1.00  0.00           H
HETATM 6137  O   SPC  3271     15.951   8.651  16.478  1.00  0.00           O
HETATM 6138  H1  SPC  3271     16.271   9.611  16.424  1.00  0.00           H
HETATM 6139  H2  SPC  3271     14.990   8.650  16.790  1.00  0.00           H
HETATM 6140  O   SPC  3671     16.143   8.349 -15.270  1.00  0.00           O
HETATM 6141  H1  SPC  3671     15.359   7.772 -14.994  1.00  0.00           H
HETATM 6142  H2  SPC  3671     16.455   8.883 -14.470  1.00  0.00           H
HETATM 6143  O   SPC  3690     12.476  10.253 -13.006  1.00  0.00           O
HETATM 6144  H1  SPC  3690     13.252  10.657 -13.508  1.00  0.00           H
HETATM 6145  H2  SPC  3690     12.831   9.881 -12.127  1.00  0.00           H
HETATM 6146  O   SPC  3693     18.956   8.212 -12.050  1.00  0.00           O
HETATM 6147  H1  SPC  3693     18.999   7.903 -11.091  1.00  0.00           H
HETATM 6148  H2  SPC  3693     19.078   7.407 -12.651  1.00  0.00           H
HETATM 6149  O   SPC  3704     19.000   6.017 -13.649  1.00  0.00           O
HETATM 6150  H1  SPC  3704     18.807   6.273 -14.605  1.00  0.00           H
HETATM 6151  H2  SPC  3704     18.411   5.243 -13.400  1.00  0.00           H
HETATM 6152  O   SPC  3725     16.435   4.847 -14.672  1.00  0.00           O
HETATM 6153  H1  SPC  3725     15.705   5.495 -14.414  1.00  0.00           H
HETATM 6154  H2  SPC  3725     17.063   5.312 -15.309  1.00  0.00           H
HETATM 6155  O   SPC  3734     14.200   6.490 -14.653  1.00  0.00           O
HETATM 6156  H1  SPC  3734     13.373   6.932 -14.265  1.00  0.00           H
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HETATM 6157  H2  SPC  3734      13.908   5.672 -15.169  1.00  0.00           H
HETATM 6158  O   SPC  3757      18.844   4.385  -9.116  1.00  0.00           O
HETATM 6159  H1  SPC  3757      19.086   3.604  -8.510  1.00  0.00           H
HETATM 6160  H2  SPC  3757      17.959   4.183  -9.551  1.00  0.00           H
HETATM 6161  O   SPC  3761      19.283   7.132  -9.448  1.00  0.00           O
HETATM 6162  H1  SPC  3761      19.005   6.165  -9.328  1.00  0.00           H
HETATM 6163  H2  SPC  3761      20.280   7.183  -9.366  1.00  0.00           H
HETATM 6164  O   SPC  3778      14.038   3.916 -15.708  1.00  0.00           O
HETATM 6165  H1  SPC  3778      13.614   3.084 -15.345  1.00  0.00           H
HETATM 6166  H2  SPC  3778      14.997   3.960 -15.398  1.00  0.00           H
HETATM 6167  O   SPC  3781      11.967   7.656 -13.733  1.00  0.00           O
HETATM 6168  H1  SPC  3781      12.137   8.618 -13.475  1.00  0.00           H
HETATM 6169  H2  SPC  3781      11.023   7.417 -13.482  1.00  0.00           H
HETATM 6170  O   SPC  3783      17.991   6.616 -16.161  1.00  0.00           O
HETATM 6171  H1  SPC  3783      18.317   6.827 -17.084  1.00  0.00           H
HETATM 6172  H2  SPC  3783      17.322   7.327 -15.884  1.00  0.00           H
HETATM 6173  O   SPC  3785      18.630   9.559  -7.917  1.00  0.00           O
HETATM 6174  H1  SPC  3785      17.650   9.768  -7.772  1.00  0.00           H
HETATM 6175  H2  SPC  3785      18.706   8.694  -8.430  1.00  0.00           H
HETATM 6176  O   SPC  3790      17.744  22.406   1.288  1.00  0.00           O
HETATM 6177  H1  SPC  3790      18.222  21.511   1.253  1.00  0.00           H
HETATM 6178  H2  SPC  3790      17.959  22.850   2.170  1.00  0.00           H
HETATM 6179  O   SPC  3794       9.248  22.259   8.293  1.00  0.00           O
HETATM 6180  H1  SPC  3794       9.098  23.251   8.172  1.00  0.00           H
HETATM 6181  H2  SPC  3794       8.572  21.900   8.952  1.00  0.00           H
HETATM 6182  O   SPC  3796      22.461  11.772  -1.838  1.00  0.00           O
HETATM 6183  H1  SPC  3796      22.814  10.860  -2.094  1.00  0.00           H
HETATM 6184  H2  SPC  3796      21.889  12.106  -2.600  1.00  0.00           H
HETATM 6185  O   SPC  3798      18.967  19.975   1.299  1.00  0.00           O
HETATM 6186  H1  SPC  3798      19.884  19.736   1.670  1.00  0.00           H
HETATM 6187  H2  SPC  3798      18.455  19.121   1.179  1.00  0.00           H
HETATM 6188  O   SPC  3799      15.408  28.643  -0.624  1.00  0.00           O
HETATM 6189  H1  SPC  3799      14.778  29.093   0.022  1.00  0.00           H
HETATM 6190  H2  SPC  3799      15.898  27.905  -0.142  1.00  0.00           H
HETATM 6191  O   SPC  3800      13.314  22.628   8.628  1.00  0.00           O
HETATM 6192  H1  SPC  3800      12.796  22.960   7.824  1.00  0.00           H
HETATM 6193  H2  SPC  3800      14.287  22.873   8.499  1.00  0.00           H
HETATM 6194  O   SPC  3803      16.149  20.277   8.424  1.00  0.00           O
HETATM 6195  H1  SPC  3803      15.290  20.203   8.950  1.00  0.00           H
HETATM 6196  H2  SPC  3803      16.538  19.344   8.342  1.00  0.00           H
HETATM 6197  O   SPC  3808      11.275  23.591   2.602  1.00  0.00           O
HETATM 6198  H1  SPC  3808      10.617  22.829   2.465  1.00  0.00           H
HETATM 6199  H2  SPC  3808      11.723  23.779   1.715  1.00  0.00           H
HETATM 6200  O   SPC  3810      14.992  22.554   1.127  1.00  0.00           O
HETATM 6201  H1  SPC  3810      14.701  22.809   0.197  1.00  0.00           H
HETATM 6202  H2  SPC  3810      15.988  22.386   1.122  1.00  0.00           H
HETATM 6203  O   SPC  3811       8.175  21.799  -3.486  1.00  0.00           O
HETATM 6204  H1  SPC  3811       7.526  22.197  -2.821  1.00  0.00           H
HETATM 6205  H2  SPC  3811       8.945  22.438  -3.600  1.00  0.00           H
HETATM 6206  O   SPC  3812      13.719  25.625   3.211  1.00  0.00           O
HETATM 6207  H1  SPC  3812      13.642  25.780   2.214  1.00  0.00           H
HETATM 6208  H2  SPC  3812      13.965  24.657   3.370  1.00  0.00           H
HETATM 6209  O   SPC  3813      13.879  24.290  -4.082  1.00  0.00           O
HETATM 6210  H1  SPC  3813      13.944  23.361  -4.483  1.00  0.00           H
HETATM 6211  H2  SPC  3813      13.471  24.902  -4.769  1.00  0.00           H
HETATM 6212  O   SPC  3814      14.449  23.635  -1.482  1.00  0.00           O
HETATM 6213  H1  SPC  3814      15.421  23.860  -1.329  1.00  0.00           H
HETATM 6214  H2  SPC  3814      14.210  23.889  -2.434  1.00  0.00           H
HETATM 6215  O   SPC  3815      16.125  10.603  -7.506  1.00  0.00           O
HETATM 6216  H1  SPC  3815      16.257  11.579  -7.295  1.00  0.00           H
HETATM 6217  H2  SPC  3815      15.632  10.527  -8.391  1.00  0.00           H
HETATM 6218  O   SPC  3818      19.627  10.347  -5.430  1.00  0.00           O
HETATM 6219  H1  SPC  3818      19.352  10.050  -6.358  1.00  0.00           H
HETATM 6220  H2  SPC  3818      18.831  10.760  -4.974  1.00  0.00           H
HETATM 6221  O   SPC  3822      21.574  14.343  -0.865  1.00  0.00           O
HETATM 6222  H1  SPC  3822      22.194  13.577  -1.074  1.00  0.00           H
HETATM 6223  H2  SPC  3822      20.663  14.121  -1.250  1.00  0.00           H
HETATM 6224  O   SPC  3823      13.462  26.037   0.551  1.00  0.00           O
HETATM 6225  H1  SPC  3823      13.251  26.687  -0.194  1.00  0.00           H
HETATM 6226  H2  SPC  3823      12.968  25.173   0.365  1.00  0.00           H
HETATM 6227  O   SPC  3825       9.952  27.607  -6.143  1.00  0.00           O
HETATM 6228  H1  SPC  3825      10.230  28.280  -5.446  1.00  0.00           H
HETATM 6229  H2  SPC  3825       9.337  26.931  -5.709  1.00  0.00           H
HETATM 6230  O   SPC  3826      12.102  25.697  -5.818  1.00  0.00           O
HETATM 6231  H1  SPC  3826      11.592  24.885  -6.140  1.00  0.00           H
HETATM 6232  H2  SPC  3826      11.665  26.516  -6.207  1.00  0.00           H
HETATM 6233  O   SPC  3827      11.387  20.818  -4.515  1.00  0.00           O
HETATM 6234  H1  SPC  3827      11.272  20.951  -5.508  1.00  0.00           H
HETATM 6235  H2  SPC  3827      10.720  20.135  -4.195  1.00  0.00           H
HETATM 6236  O   SPC  3829      11.444  26.221  -3.229  1.00  0.00           O
HETATM 6237  H1  SPC  3829      12.139  26.581  -2.585  1.00  0.00           H
HETATM 6238  H2  SPC  3829      11.890  26.045  -4.119  1.00  0.00           H
HETATM 6239  O   SPC  3831      16.655  13.274  -6.729  1.00  0.00           O
HETATM 6240  H1  SPC  3831      17.577  13.203  -6.315  1.00  0.00           H
HETATM 6241  H2  SPC  3831      16.747  13.693  -7.646  1.00  0.00           H
HETATM 6242  O   SPC  3832      15.135  27.309   4.716  1.00  0.00           O
HETATM 6243  H1  SPC  3832      14.581  26.713   4.111  1.00  0.00           H
HETATM 6244  H2  SPC  3832      14.970  27.023   5.666  1.00  0.00           H
HETATM 6245  O   SPC  3839      12.086  23.481   6.343  1.00  0.00           O
HETATM 6246  H1  SPC  3839      12.198  22.672   5.748  1.00  0.00           H
HETATM 6247  H2  SPC  3839      11.226  23.942   6.085  1.00  0.00           H
HETATM 6248  O   SPC  3843      11.329  26.616   4.029  1.00  0.00           O
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HETATM 6249  H1  SPC  3843      12.254  26.268   3.811  1.00  0.00          H
HETATM 6250  H2  SPC  3843      10.782  25.851   4.401  1.00  0.00          H
HETATM 6251  O   SPC  3845      19.153  13.651  -1.842  1.00  0.00          O
HETATM 6252  H1  SPC  3845      18.872  12.845  -2.379  1.00  0.00          H
HETATM 6253  H2  SPC  3845      18.498  14.401  -2.010  1.00  0.00          H
HETATM 6254  O   SPC  3847      11.746  21.521  -7.208  1.00  0.00          O
HETATM 6255  H1  SPC  3847      11.664  21.278  -8.187  1.00  0.00          H
HETATM 6256  H2  SPC  3847      12.719  21.659  -6.992  1.00  0.00          H
HETATM 6257  O   SPC  3848      12.129  23.762   0.003  1.00  0.00          O
HETATM 6258  H1  SPC  3848      12.866  23.548  -0.655  1.00  0.00          H
HETATM 6259  H2  SPC  3848      11.246  23.783  -0.489  1.00  0.00          H
HETATM 6260  O   SPC  3850      16.475  17.722  -6.334  1.00  0.00          O
HETATM 6261  H1  SPC  3850      16.025  18.624  -6.297  1.00  0.00          H
HETATM 6262  H2  SPC  3850      16.472  17.407  -7.297  1.00  0.00          H
HETATM 6263  O   SPC  3851      18.366  23.884   3.617  1.00  0.00          O
HETATM 6264  H1  SPC  3851      19.356  23.995   3.719  1.00  0.00          H
HETATM 6265  H2  SPC  3851      17.957  24.792   3.417  1.00  0.00          H
HETATM 6266  O   SPC  3853       9.887  24.060  -3.816  1.00  0.00          O
HETATM 6267  H1  SPC  3853      10.545  24.781  -3.545  1.00  0.00          H
HETATM 6268  H2  SPC  3853      10.108  23.767  -4.760  1.00  0.00          H
HETATM 6269  O   SPC  3855      16.265  23.745   5.511  1.00  0.00          O
HETATM 6270  H1  SPC  3855      17.139  23.801   5.011  1.00  0.00          H
HETATM 6271  H2  SPC  3855      15.555  23.428   4.862  1.00  0.00          H
HETATM 6272  O   SPC  3858      21.279  12.258  -4.362  1.00  0.00          O
HETATM 6273  H1  SPC  3858      20.721  11.492  -4.718  1.00  0.00          H
HETATM 6274  H2  SPC  3858      22.029  12.432  -5.003  1.00  0.00          H
HETATM 6275  O   SPC  3859      17.643  15.870  -2.290  1.00  0.00          O
HETATM 6276  H1  SPC  3859      17.263  15.696  -3.215  1.00  0.00          H
HETATM 6277  H2  SPC  3859      18.246  16.669  -2.341  1.00  0.00          H
HETATM 6278  O   SPC  3860      24.376  11.648   3.361  1.00  0.00          O
HETATM 6279  H1  SPC  3860      23.982  11.569   2.431  1.00  0.00          H
HETATM 6280  H2  SPC  3860      25.003  12.428   3.379  1.00  0.00          H
HETATM 6281  O   SPC  3862       9.640  24.185  -1.070  1.00  0.00          O
HETATM 6282  H1  SPC  3862       9.636  25.165  -0.821  1.00  0.00          H
HETATM 6283  H2  SPC  3862       9.604  24.103  -2.075  1.00  0.00          H
HETATM 6284  O   SPC  3863      14.436  22.992   3.690  1.00  0.00          O
HETATM 6285  H1  SPC  3863      13.754  22.317   4.004  1.00  0.00          H
HETATM 6286  H2  SPC  3863      14.659  22.791   2.720  1.00  0.00          H
HETATM 6287  O   SPC  3864      18.930  13.479  -5.283  1.00  0.00          O
HETATM 6288  H1  SPC  3864      19.785  13.199  -4.828  1.00  0.00          H
HETATM 6289  H2  SPC  3864      18.643  14.373  -4.925  1.00  0.00          H
HETATM 6290  O   SPC  3870      12.148  21.646   4.328  1.00  0.00          O
HETATM 6291  H1  SPC  3870      11.921  22.452   3.763  1.00  0.00          H
HETATM 6292  H2  SPC  3870      11.751  20.831   3.876  1.00  0.00          H
HETATM 6293  O   SPC  3872      15.999  22.923   8.118  1.00  0.00          O
HETATM 6294  H1  SPC  3872      16.200  23.269   7.190  1.00  0.00          H
HETATM 6295  H2  SPC  3872      16.172  21.923   8.131  1.00  0.00          H
HETATM 6296  O   SPC  3873      13.062  27.677  -1.623  1.00  0.00          O
HETATM 6297  H1  SPC  3873      14.021  27.985  -1.534  1.00  0.00          H
HETATM 6298  H2  SPC  3873      12.459  28.480  -1.505  1.00  0.00          H
HETATM 6299  O   SPC  3874      12.372  26.203   8.533  1.00  0.00          O
HETATM 6300  H1  SPC  3874      11.629  26.674   8.038  1.00  0.00          H
HETATM 6301  H2  SPC  3874      13.118  26.001   7.883  1.00  0.00          H
HETATM 6302  O   SPC  3876      14.164  25.313   6.588  1.00  0.00          O
HETATM 6303  H1  SPC  3876      13.394  24.680   6.421  1.00  0.00          H
HETATM 6304  H2  SPC  3876      15.018  24.857   6.305  1.00  0.00          H
HETATM 6305  O   SPC  3877       7.807  21.138  10.324  1.00  0.00          O
HETATM 6306  H1  SPC  3877       7.668  20.167  10.571  1.00  0.00          H
HETATM 6307  H2  SPC  3877       8.027  21.645  11.171  1.00  0.00          H
HETATM 6308  O   SPC  3879       8.946  24.982   8.218  1.00  0.00          O
HETATM 6309  H1  SPC  3879       8.996  25.314   9.171  1.00  0.00          H
HETATM 6310  H2  SPC  3879       9.430  25.647   7.632  1.00  0.00          H
HETATM 6311  O   SPC  3881       9.509  26.671   0.165  1.00  0.00          O
HETATM 6312  H1  SPC  3881       8.892  26.304   0.878  1.00  0.00          H
HETATM 6313  H2  SPC  3881      10.219  27.232   0.618  1.00  0.00          H
HETATM 6314  O   SPC  3883      16.174  26.256   0.633  1.00  0.00          O
HETATM 6315  H1  SPC  3883      16.585  25.513   0.086  1.00  0.00          H
HETATM 6316  H2  SPC  3883      15.170  26.133   0.634  1.00  0.00          H
HETATM 6317  O   SPC  3888      10.336  23.695  -6.483  1.00  0.00          O
HETATM 6318  H1  SPC  3888       9.638  23.934  -7.177  1.00  0.00          H
HETATM 6319  H2  SPC  3888      10.822  22.862  -6.792  1.00  0.00          H
HETATM 6320  O   SPC  3890      16.989  15.524  -4.872  1.00  0.00          O
HETATM 6321  H1  SPC  3890      16.642  14.767  -5.439  1.00  0.00          H
HETATM 6322  H2  SPC  3890      16.818  16.394  -5.367  1.00  0.00          H
HETATM 6323  O   SPC  3891      17.121  24.064  -0.786  1.00  0.00          O
HETATM 6324  H1  SPC  3891      17.828  24.049  -1.497  1.00  0.00          H
HETATM 6325  H2  SPC  3891      17.402  23.443  -0.036  1.00  0.00          H
HETATM 6326  O   SPC  3895      13.855  21.844  -5.178  1.00  0.00          O
HETATM 6327  H1  SPC  3895      13.038  21.378  -4.807  1.00  0.00          H
HETATM 6328  H2  SPC  3895      14.463  21.156  -5.602  1.00  0.00          H
HETATM 6329  O   SPC  3898       9.927  24.404   4.781  1.00  0.00          O
HETATM 6330  H1  SPC  3898      10.414  24.120   3.940  1.00  0.00          H
HETATM 6331  H2  SPC  3898       8.959  24.122   4.698  1.00  0.00          H
HETATM 6332  O   SPC  3899      17.244  26.275   3.160  1.00  0.00          O
HETATM 6333  H1  SPC  3899      16.893  26.351   2.214  1.00  0.00          H
HETATM 6334  H2  SPC  3899      16.590  26.721   3.784  1.00  0.00          H
HETATM 6335  O   SPC  3903      13.968  20.594  12.669  1.00  0.00          O
HETATM 6336  H1  SPC  3903      13.939  21.603  12.696  1.00  0.00          H
HETATM 6337  H2  SPC  3903      13.195  20.234  13.213  1.00  0.00          H
HETATM 6338  O   SPC  3911       9.367  19.577  15.185  1.00  0.00          O
HETATM 6339  H1  SPC  3911       8.437  19.722  14.822  1.00  0.00          H
HETATM 6340  H2  SPC  3911       9.739  20.477  15.469  1.00  0.00          H
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HETATM 6341  O   SPC  3923       9.477  16.961  16.067  1.00  0.00           O
HETATM 6342  H1  SPC  3923       9.543  17.930  15.785  1.00  0.00           H
HETATM 6343  H2  SPC  3923      10.398  16.629  16.317  1.00  0.00           H
HETATM 6344  O   SPC  3942       8.346  22.155  12.814  1.00  0.00           O
HETATM 6345  H1  SPC  3942       7.949  21.493  13.462  1.00  0.00           H
HETATM 6346  H2  SPC  3942       9.326  22.271  13.025  1.00  0.00           H
HETATM 6347  O   SPC  3960       9.323  26.087  10.725  1.00  0.00           O
HETATM 6348  H1  SPC  3960      10.246  25.744  10.951  1.00  0.00           H
HETATM 6349  H2  SPC  3960       8.642  25.581  11.283  1.00  0.00           H
HETATM 6350  O   SPC  3961      11.819  24.841  10.791  1.00  0.00           O
HETATM 6351  H1  SPC  3961      11.545  23.933  10.456  1.00  0.00           H
HETATM 6352  H2  SPC  3961      12.118  25.401   9.998  1.00  0.00           H
HETATM 6353  O   SPC  3963      13.869  20.269   9.922  1.00  0.00           O
HETATM 6354  H1  SPC  3963      13.638  21.131   9.447  1.00  0.00           H
HETATM 6355  H2  SPC  3963      13.969  20.457  10.909  1.00  0.00           H
HETATM 6356  O   SPC  3965      13.678  23.378  12.308  1.00  0.00           O
HETATM 6357  H1  SPC  3965      14.567  23.286  11.830  1.00  0.00           H
HETATM 6358  H2  SPC  3965      13.149  24.107  11.852  1.00  0.00           H
HETATM 6359  O   SPC  3970      18.892   9.467  14.260  1.00  0.00           O
HETATM 6360  H1  SPC  3970      19.758   9.801  14.640  1.00  0.00           H
HETATM 6361  H2  SPC  3970      19.027   9.266  13.280  1.00  0.00           H
HETATM 6362  O   SPC  3978      11.850  15.637  16.887  1.00  0.00           O
HETATM 6363  H1  SPC  3978      12.461  14.899  16.558  1.00  0.00           H
HETATM 6364  H2  SPC  3978      11.187  15.227  17.535  1.00  0.00           H
HETATM 6365  O   SPC  3991      11.208  19.472  11.188  1.00  0.00           O
HETATM 6366  H1  SPC  3991      11.154  20.396  10.787  1.00  0.00           H
HETATM 6367  H2  SPC  3991      11.294  19.555  12.189  1.00  0.00           H
HETATM 6368  O   SPC  3992      10.385  22.047  15.480  1.00  0.00           O
HETATM 6369  H1  SPC  3992      10.754  22.195  14.550  1.00  0.00           H
HETATM 6370  H2  SPC  3992      10.608  22.843  16.046  1.00  0.00           H
HETATM 6371  O   SPC  3996      11.140  22.437  12.882  1.00  0.00           O
HETATM 6372  H1  SPC  3996      12.051  22.862  12.975  1.00  0.00           H
HETATM 6373  H2  SPC  3996      10.982  22.268  11.898  1.00  0.00           H
HETATM 6374  O   SPC  4004      15.920  16.599  14.887  1.00  0.00           O
HETATM 6375  H1  SPC  4004      16.639  17.036  15.431  1.00  0.00           H
HETATM 6376  H2  SPC  4004      15.792  17.141  14.038  1.00  0.00           H
HETATM 6377  O   SPC  4008      17.140  11.079  15.937  1.00  0.00           O
HETATM 6378  H1  SPC  4008      17.725  10.728  15.197  1.00  0.00           H
HETATM 6379  H2  SPC  4008      16.827  12.007  15.698  1.00  0.00           H
HETATM 6380  O   SPC  4015      16.182  13.831  15.655  1.00  0.00           O
HETATM 6381  H1  SPC  4015      16.484  14.032  16.589  1.00  0.00           H
HETATM 6382  H2  SPC  4015      16.074  14.705  15.158  1.00  0.00           H
HETATM 6383  O   SPC  4018      13.415  13.573  16.031  1.00  0.00           O
HETATM 6384  H1  SPC  4018      14.401  13.542  15.826  1.00  0.00           H
HETATM 6385  H2  SPC  4018      13.081  12.626  16.160  1.00  0.00           H
HETATM 6386  O   SPC  4019      12.442  11.025  16.253  1.00  0.00           O
HETATM 6387  H1  SPC  4019      12.687  10.106  16.587  1.00  0.00           H
HETATM 6388  H2  SPC  4019      11.465  11.037  16.014  1.00  0.00           H
HETATM 6389  O   SPC  4040      15.923  22.848  10.874  1.00  0.00           O
HETATM 6390  H1  SPC  4040      15.982  23.079   9.892  1.00  0.00           H
HETATM 6391  H2  SPC  4040      16.568  22.106  11.066  1.00  0.00           H
HETATM 6392  O   SPC  4047      11.864  19.326  13.968  1.00  0.00           O
HETATM 6393  H1  SPC  4047      12.434  18.742  14.569  1.00  0.00           H
HETATM 6394  H2  SPC  4047      10.952  19.421  14.391  1.00  0.00           H
HETATM 6395  O   SPC  4049      13.309  17.600  15.545  1.00  0.00           O
HETATM 6396  H1  SPC  4049      12.810  16.954  16.141  1.00  0.00           H
HETATM 6397  H2  SPC  4049      14.232  17.233  15.375  1.00  0.00           H
HETATM 6398  O   SPC  4057      11.170  22.101  10.154  1.00  0.00           O
HETATM 6399  H1  SPC  4057      10.425  22.084   9.467  1.00  0.00           H
HETATM 6400  H2  SPC  4057      12.044  22.239   9.659  1.00  0.00           H
HETATM 6401  O   SPC  4065       9.842  14.435  18.289  1.00  0.00           O
HETATM 6402  H1  SPC  4065       9.494  13.524  18.024  1.00  0.00           H
HETATM 6403  H2  SPC  4065       9.054  15.051  18.408  1.00  0.00           H
HETATM 6404  O   SPC  4072      15.601  18.306  12.816  1.00  0.00           O
HETATM 6405  H1  SPC  4072      15.152  19.210  12.814  1.00  0.00           H
HETATM 6406  H2  SPC  4072      15.728  18.009  11.854  1.00  0.00           H
HETATM 6407  O   SPC  4392       9.369  22.432 -10.119  1.00  0.00           O
HETATM 6408  H1  SPC  4392       8.579  22.156 -10.689  1.00  0.00           H
HETATM 6409  H2  SPC  4392       9.093  23.212  -9.544  1.00  0.00           H
HETATM 6410  O   SPC  4394      11.823  16.771 -12.286  1.00  0.00           O
HETATM 6411  H1  SPC  4394      11.949  16.023 -12.952  1.00  0.00           H
HETATM 6412  H2  SPC  4394      10.851  17.069 -12.334  1.00  0.00           H
HETATM 6413  O   SPC  4398      18.576  12.025  -9.369  1.00  0.00           O
HETATM 6414  H1  SPC  4398      18.783  11.178  -8.864  1.00  0.00           H
HETATM 6415  H2  SPC  4398      18.038  11.788 -10.190  1.00  0.00           H
HETATM 6416  O   SPC  4400      14.753  11.048 -14.406  1.00  0.00           O
HETATM 6417  H1  SPC  4400      14.732  10.540 -15.271  1.00  0.00           H
HETATM 6418  H2  SPC  4400      15.562  10.748 -13.882  1.00  0.00           H
HETATM 6419  O   SPC  4410      14.218  20.474  -9.039  1.00  0.00           O
HETATM 6420  H1  SPC  4410      14.657  19.975  -9.800  1.00  0.00           H
HETATM 6421  H2  SPC  4410      13.293  20.751  -9.337  1.00  0.00           H
HETATM 6422  O   SPC  4411       8.451  24.417  -8.354  1.00  0.00           O
HETATM 6423  H1  SPC  4411       8.315  25.416  -8.342  1.00  0.00           H
HETATM 6424  H2  SPC  4411       7.547  23.970  -8.450  1.00  0.00           H
HETATM 6425  O   SPC  4416      16.305  16.901  -8.926  1.00  0.00           O
HETATM 6426  H1  SPC  4416      15.448  16.895  -9.457  1.00  0.00           H
HETATM 6427  H2  SPC  4416      16.735  15.990  -9.004  1.00  0.00           H
HETATM 6428  O   SPC  4423      15.497  20.279  -6.688  1.00  0.00           O
HETATM 6429  H1  SPC  4423      16.388  20.708  -6.852  1.00  0.00           H
HETATM 6430  H2  SPC  4423      14.975  20.281  -7.559  1.00  0.00           H
HETATM 6431  O   SPC  4433      13.566  12.644  -9.614  1.00  0.00           O
HETATM 6432  H1  SPC  4433      13.199  12.650  -8.676  1.00  0.00           H
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HETATM 6433  H2  SPC  4433      13.985  11.734  -9.787  1.00  0.00           H
HETATM 6434  O   SPC  4458      12.514  19.456 -12.046  1.00  0.00           O
HETATM 6435  H1  SPC  4458      13.507  19.456 -11.866  1.00  0.00           H
HETATM 6436  H2  SPC  4458      12.205  18.498 -12.141  1.00  0.00           H
HETATM 6437  O   SPC  4466      11.285  19.619 -17.202  1.00  0.00           O
HETATM 6438  H1  SPC  4466      11.320  19.808 -16.205  1.00  0.00           H
HETATM 6439  H2  SPC  4466      11.982  20.174 -17.657  1.00  0.00           H
HETATM 6440  O   SPC  4479      11.660  14.877 -14.409  1.00  0.00           O
HETATM 6441  H1  SPC  4479      11.538  15.614 -15.088  1.00  0.00           H
HETATM 6442  H2  SPC  4479      10.912  14.208 -14.528  1.00  0.00           H
HETATM 6443  O   SPC  4481      17.087   9.886 -13.192  1.00  0.00           O
HETATM 6444  H1  SPC  4481      16.994  10.644 -12.528  1.00  0.00           H
HETATM 6445  H2  SPC  4481      17.808   9.261 -12.851  1.00  0.00           H
HETATM 6446  O   SPC  4484      10.044  10.663 -14.269  1.00  0.00           O
HETATM 6447  H1  SPC  4484      10.915  10.540 -13.771  1.00  0.00           H
HETATM 6448  H2  SPC  4484      10.001  11.609 -14.615  1.00  0.00           H
HETATM 6449  O   SPC  4485      11.684  21.046  -9.928  1.00  0.00           O
HETATM 6450  H1  SPC  4485      11.850  20.493 -10.759  1.00  0.00           H
HETATM 6451  H2  SPC  4485      10.832  21.580 -10.066  1.00  0.00           H
HETATM 6452  O   SPC  4491      14.093  13.699 -13.661  1.00  0.00           O
HETATM 6453  H1  SPC  4491      14.247  12.778 -14.045  1.00  0.00           H
HETATM 6454  H2  SPC  4491      13.215  14.057 -14.008  1.00  0.00           H
HETATM 6455  O   SPC  4519      15.083  14.102 -11.222  1.00  0.00           O
HETATM 6456  H1  SPC  4519      14.752  14.017 -12.179  1.00  0.00           H
HETATM 6457  H2  SPC  4519      14.445  13.583 -10.621  1.00  0.00           H
HETATM 6458  O   SPC  4533      14.153  16.617 -10.768  1.00  0.00           O
HETATM 6459  H1  SPC  4533      13.234  16.664 -11.190  1.00  0.00           H
HETATM 6460  H2  SPC  4533      14.528  15.692 -10.932  1.00  0.00           H
HETATM 6461  O   SPC  4538      15.147  19.070 -11.216  1.00  0.00           O
HETATM 6462  H1  SPC  4538      14.803  18.132 -11.043  1.00  0.00           H
HETATM 6463  H2  SPC  4538      16.116  19.013 -11.464  1.00  0.00           H
HETATM 6464  O   SPC  4549       8.148  27.233  -8.210  1.00  0.00           O
HETATM 6465  H1  SPC  4549       8.841  27.450  -7.505  1.00  0.00           H
HETATM 6466  H2  SPC  4549       8.439  27.634  -9.081  1.00  0.00           H
HETATM 6467  O   SPC  4562      17.048  14.287  -9.238  1.00  0.00           O
HETATM 6468  H1  SPC  4562      17.750  13.561  -9.325  1.00  0.00           H
HETATM 6469  H2  SPC  4562      16.393  14.193 -10.000  1.00  0.00           H
HETATM 6470  O   SPC  4578       9.459  13.269 -15.131  1.00  0.00           O
HETATM 6471  H1  SPC  4578       9.415  13.857 -15.955  1.00  0.00           H
HETATM 6472  H2  SPC  4578       8.536  12.902 -14.959  1.00  0.00           H
HETATM 6473  O   SPC  4583      10.925  16.989 -16.123  1.00  0.00           O
HETATM 6474  H1  SPC  4583      10.316  17.435 -15.449  1.00  0.00           H
HETATM 6475  H2  SPC  4583      11.317  17.706 -16.711  1.00  0.00           H
HETATM 6476  O   SPC  4591      11.304  19.917 -14.522  1.00  0.00           O
HETATM 6477  H1  SPC  4591      11.787  19.934 -13.636  1.00  0.00           H
HETATM 6478  H2  SPC  4591      10.466  19.357 -14.416  1.00  0.00           H
HETATM 6479  O   SPC  4593      16.652  11.800 -11.331  1.00  0.00           O
HETATM 6480  H1  SPC  4593      16.010  11.253 -10.762  1.00  0.00           H
HETATM 6481  H2  SPC  4593      16.215  12.685 -11.534  1.00  0.00           H
HETATM 6482  O   SPC  4595       9.594  28.474   4.887  1.00  0.00           O
HETATM 6483  H1  SPC  4595      10.266  27.785   4.569  1.00  0.00           H
HETATM 6484  H2  SPC  4595       9.725  29.317   4.344  1.00  0.00           H
HETATM 6485  O   SPC  4603      14.995  29.570   3.169  1.00  0.00           O
HETATM 6486  H1  SPC  4603      14.990  28.774   3.794  1.00  0.00           H
HETATM 6487  H2  SPC  4603      15.892  30.012   3.221  1.00  0.00           H
HETATM 6488  O   SPC  4655      10.134  27.345   7.336  1.00  0.00           O
HETATM 6489  H1  SPC  4655       9.978  27.821   6.458  1.00  0.00           H
HETATM 6490  H2  SPC  4655       9.584  27.801   8.050  1.00  0.00           H
HETATM 6491  O   SPC  4664      11.074  28.220   1.830  1.00  0.00           O
HETATM 6492  H1  SPC  4664      11.211  27.569   2.591  1.00  0.00           H
HETATM 6493  H2  SPC  4664      10.627  29.049   2.194  1.00  0.00           H
HETATM 6494  O   SPC  4699      13.332  29.562   1.024  1.00  0.00           O
HETATM 6495  H1  SPC  4699      13.927  29.653   1.838  1.00  0.00           H
HETATM 6496  H2  SPC  4699      12.548  28.970   1.267  1.00  0.00           H
HETATM 6497  O   SPC  4716      10.507  28.793  -3.583  1.00  0.00           O
HETATM 6498  H1  SPC  4716      10.819  27.850  -3.396  1.00  0.00           H
HETATM 6499  H2  SPC  4716      10.906  29.404  -2.886  1.00  0.00           H
HETATM 6500  O   SPC  4729      11.573  29.934  -1.179  1.00  0.00           O
HETATM 6501  H1  SPC  4729      12.273  30.078  -0.467  1.00  0.00           H
HETATM 6502  H2  SPC  4729      10.684  30.264  -0.822  1.00  0.00           H
HETATM 6503  O   SPC  4733      10.091  30.492   3.090  1.00  0.00           O
HETATM 6504  H1  SPC  4733       9.222  30.875   2.739  1.00  0.00           H
HETATM 6505  H2  SPC  4733      10.810  31.184   2.992  1.00  0.00           H
HETATM 6506  O   SPC  A25J    -18.201   6.680   7.988  1.00  0.00           O
HETATM 6507  H1  SPC  A25J    -17.995   6.360   7.050  1.00  0.00           H
HETATM 6508  H2  SPC  A25J    -19.140   7.031   7.998  1.00  0.00           H
HETATM 6509  O   SPC  A25P    -18.410  -2.597   8.140  1.00  0.00           O
HETATM 6510  H1  SPC  A25P    -17.956  -3.434   7.811  1.00  0.00           H
HETATM 6511  H2  SPC  A25P    -17.920  -2.285   8.965  1.00  0.00           H
HETATM 6512  O   SPC  A25R    -17.659   2.496   7.366  1.00  0.00           O
HETATM 6513  H1  SPC  A25R    -16.781   2.771   7.765  1.00  0.00           H
HETATM 6514  H2  SPC  A25R    -17.723   2.887   6.438  1.00  0.00           H
HETATM 6515  O   SPC  A25S    -18.927  -2.997   3.336  1.00  0.00           O
HETATM 6516  H1  SPC  A25S    -19.896  -3.109   3.108  1.00  0.00           H
HETATM 6517  H2  SPC  A25S    -18.514  -2.345   2.684  1.00  0.00           H
HETATM 6518  O   SPC  A26K    -17.079  -4.138   4.975  1.00  0.00           O
HETATM 6519  H1  SPC  A26K    -16.209  -4.012   4.487  1.00  0.00           H
HETATM 6520  H2  SPC  A26K    -17.824  -3.764   4.400  1.00  0.00           H
HETATM 6521  O   SPC  A26V    -18.140   6.023   5.302  1.00  0.00           O
HETATM 6522  H1  SPC  A26V    -18.616   6.297   4.443  1.00  0.00           H
HETATM 6523  H2  SPC  A26V    -17.824   5.070   5.193  1.00  0.00           H
HETATM 6524  O   SPC  A278    -16.642  -4.655   7.563  1.00  0.00           O
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HETATM 6525  H1  SPC  A278     -15.674  -4.433   7.750  1.00  0.00          H
HETATM 6526  H2  SPC  A278     -16.808  -4.531   6.568  1.00  0.00          H
HETATM 6527  O   SPC  A27A     -17.184   3.444   4.775  1.00  0.00          O
HETATM 6528  H1  SPC  A27A     -16.562   3.863   4.099  1.00  0.00          H
HETATM 6529  H2  SPC  A27A     -17.154   2.443   4.649  1.00  0.00          H
HETATM 6530  O   SPC  A281    -14.410   4.599  12.570  1.00  0.00          O
HETATM 6531  H1  SPC  A281    -14.305   5.594  12.434  1.00  0.00          H
HETATM 6532  H2  SPC  A281    -14.190   4.381  13.534  1.00  0.00          H
HETATM 6533  O   SPC  A287     -8.729   8.911  13.319  1.00  0.00          O
HETATM 6534  H1  SPC  A287     -7.796   8.697  13.638  1.00  0.00          H
HETATM 6535  H2  SPC  A287     -8.655   9.472  12.479  1.00  0.00          H
HETATM 6536  O   SPC  A28N    -10.635   0.922  17.147  1.00  0.00          O
HETATM 6537  H1  SPC  A28N    -10.984   0.967  18.087  1.00  0.00          H
HETATM 6538  H2  SPC  A28N     -9.640   0.738  17.185  1.00  0.00          H
HETATM 6539  O   SPC  A291     -9.216   4.779  16.125  1.00  0.00          O
HETATM 6540  H1  SPC  A291     -9.476   4.394  15.233  1.00  0.00          H
HETATM 6541  H2  SPC  A291     -8.585   4.137  16.582  1.00  0.00          H
HETATM 6542  O   SPC  A298    -13.751   3.984  15.121  1.00  0.00          O
HETATM 6543  H1  SPC  A298    -13.238   3.115  15.163  1.00  0.00          H
HETATM 6544  H2  SPC  A298    -13.116   4.742  15.344  1.00  0.00          H
HETATM 6545  O   SPC  A29N    -18.284   0.492   9.109  1.00  0.00          O
HETATM 6546  H1  SPC  A29N    -18.150   1.246   8.447  1.00  0.00          H
HETATM 6547  H2  SPC  A29N    -18.536  -0.337   8.603  1.00  0.00          H
HETATM 6548  O   SPC  A2AC    -12.108   1.749  14.934  1.00  0.00          O
HETATM 6549  H1  SPC  A2AC    -11.523   2.356  14.377  1.00  0.00          H
HETATM 6550  H2  SPC  A2AC    -11.601   1.493  15.771  1.00  0.00          H
HETATM 6551  O   SPC  A2AJ    -17.684   5.812  10.595  1.00  0.00          O
HETATM 6552  H1  SPC  A2AJ    -17.317   6.680  10.936  1.00  0.00          H
HETATM 6553  H2  SPC  A2AJ    -17.903   5.918   9.616  1.00  0.00          H
HETATM 6554  O   SPC  A2AP    -11.815   5.904  15.424  1.00  0.00          O
HETATM 6555  H1  SPC  A2AP    -11.673   6.659  14.769  1.00  0.00          H
HETATM 6556  H2  SPC  A2AP    -10.932   5.670  15.847  1.00  0.00          H
HETATM 6557  O   SPC  A2BE    -17.630   0.970  11.759  1.00  0.00          O
HETATM 6558  H1  SPC  A2BE    -17.534   1.967  11.874  1.00  0.00          H
HETATM 6559  H2  SPC  A2BE    -17.923   0.778  10.809  1.00  0.00          H
HETATM 6560  O   SPC  A2BQ    -16.237   2.712  14.815  1.00  0.00          O
HETATM 6561  H1  SPC  A2BQ    -16.670   3.118  14.000  1.00  0.00          H
HETATM 6562  H2  SPC  A2BQ    -15.429   3.263  15.062  1.00  0.00          H
HETATM 6563  O   SPC  A2BS    -16.974   3.699  12.253  1.00  0.00          O
HETATM 6564  H1  SPC  A2BS    -15.989   3.931  12.272  1.00  0.00          H
HETATM 6565  H2  SPC  A2BS    -17.444   4.385  11.678  1.00  0.00          H
HETATM 6566  O   SPC  A2BV    -16.237   0.132  13.938  1.00  0.00          O
HETATM 6567  H1  SPC  A2BV    -16.800   0.272  13.108  1.00  0.00          H
HETATM 6568  H2  SPC  A2BV    -16.266   0.989  14.476  1.00  0.00          H
HETATM 6569  O   SPC  A2OW    -18.129   8.869   5.032  1.00  0.00          O
HETATM 6570  H1  SPC  A2OW    -18.533   8.993   4.107  1.00  0.00          H
HETATM 6571  H2  SPC  A2OW    -18.095   7.880   5.221  1.00  0.00          H
HETATM 6572  O   SPC  A2QF    -17.484  10.470   7.118  1.00  0.00          O
HETATM 6573  H1  SPC  A2QF    -17.674   9.848   6.340  1.00  0.00          H
HETATM 6574  H2  SPC  A2QF    -17.932  11.346   6.940  1.00  0.00          H
HETATM 6575  O   SPC  A2QT    -10.896  19.610   7.018  1.00  0.00          O
HETATM 6576  H1  SPC  A2QT    -10.273  20.143   7.608  1.00  0.00          H
HETATM 6577  H2  SPC  A2QT    -11.649  20.209   6.708  1.00  0.00          H
HETATM 6578  O   SPC  A2R4    -11.335   7.924  13.484  1.00  0.00          O
HETATM 6579  H1  SPC  A2R4    -10.330   8.013  13.449  1.00  0.00          H
HETATM 6580  H2  SPC  A2R4    -11.739   8.789  13.151  1.00  0.00          H
HETATM 6581  O   SPC  A2RI     -8.495  10.610  11.219  1.00  0.00          O
HETATM 6582  H1  SPC  A2RI     -9.287  10.858  10.642  1.00  0.00          H
HETATM 6583  H2  SPC  A2RI     -7.647  10.699  10.669  1.00  0.00          H
HETATM 6584  O   SPC  A2RJ    -10.857  11.623  10.260  1.00  0.00          O
HETATM 6585  H1  SPC  A2RJ    -10.689  12.619  10.294  1.00  0.00          H
HETATM 6586  H2  SPC  A2RJ    -11.719  11.456   9.757  1.00  0.00          H
HETATM 6587  O   SPC  A2RY    -16.751   8.784   9.168  1.00  0.00          O
HETATM 6588  H1  SPC  A2RY    -16.953   9.528   8.511  1.00  0.00          H
HETATM 6589  H2  SPC  A2RY    -17.132   7.929   8.793  1.00  0.00          H
HETATM 6590  O   SPC  A2S2    -14.686   9.462  10.895  1.00  0.00          O
HETATM 6591  H1  SPC  A2S2    -14.443   8.620  11.398  1.00  0.00          H
HETATM 6592  H2  SPC  A2S2    -15.507   9.271  10.333  1.00  0.00          H
HETATM 6593  O   SPC  A2S9    -10.249  14.305  10.715  1.00  0.00          O
HETATM 6594  H1  SPC  A2S9     -9.925  13.840  11.552  1.00  0.00          H
HETATM 6595  H2  SPC  A2S9     -9.721  15.158  10.600  1.00  0.00          H
HETATM 6596  O   SPC  A2T8    -12.071  15.222   8.801  1.00  0.00          O
HETATM 6597  H1  SPC  A2T8    -12.679  14.510   8.420  1.00  0.00          H
HETATM 6598  H2  SPC  A2T8    -11.551  14.827   9.570  1.00  0.00          H
HETATM 6599  O   SPC  A2TA    -10.295  10.916  14.468  1.00  0.00          O
HETATM 6600  H1  SPC  A2TA     -9.735  10.117  14.205  1.00  0.00          H
HETATM 6601  H2  SPC  A2TA    -11.214  10.801  14.071  1.00  0.00          H
HETATM 6602  O   SPC  A2TV    -12.230  10.291  12.392  1.00  0.00          O
HETATM 6603  H1  SPC  A2TV    -13.163  10.168  12.032  1.00  0.00          H
HETATM 6604  H2  SPC  A2TV    -11.673  10.754  11.689  1.00  0.00          H
HETATM 6605  O   SPC  A2UG    -13.578  13.186   7.687  1.00  0.00          O
HETATM 6606  H1  SPC  A2UG    -14.558  13.281   7.496  1.00  0.00          H
HETATM 6607  H2  SPC  A2UG    -13.435  12.328   8.207  1.00  0.00          H
HETATM 6608  O   SPC  A2UN     -9.227  12.769  12.755  1.00  0.00          O
HETATM 6609  H1  SPC  A2UN     -8.825  12.049  12.169  1.00  0.00          H
HETATM 6610  H2  SPC  A2UN     -9.734  12.314  13.500  1.00  0.00          H
HETATM 6611  O   SPC  A2V9    -10.359  17.179   8.104  1.00  0.00          O
HETATM 6612  H1  SPC  A2V9    -11.117  16.524   8.262  1.00  0.00          H
HETATM 6613  H2  SPC  A2V9    -10.738  18.027   7.703  1.00  0.00          H
HETATM 6614  O   SPC  A2W8    -13.204  10.924   9.131  1.00  0.00          O
HETATM 6615  H1  SPC  A2W8    -13.867  10.541   9.794  1.00  0.00          H
HETATM 6616  H2  SPC  A2W8    -12.811  10.157   8.607  1.00  0.00          H
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HETATM 6617  O   SPC  A4YB      2.523  12.737  10.804  1.00  0.00          O
HETATM 6618  H1  SPC  A4YB      1.556  12.956  11.010  1.00  0.00          H
HETATM 6619  H2  SPC  A4YB      2.538  12.023  10.095  1.00  0.00          H
HETATM 6620  O   SPC  A4YC     -9.892  18.355   4.794  1.00  0.00          O
HETATM 6621  H1  SPC  A4YC    -10.601  17.642   4.697  1.00  0.00          H
HETATM 6622  H2  SPC  A4YC    -10.110  18.905   5.611  1.00  0.00          H
HETATM 6623  O   SPC  A4YD    -10.169   7.795  -1.303  1.00  0.00          O
HETATM 6624  H1  SPC  A4YD    -10.000   7.191  -0.503  1.00  0.00          H
HETATM 6625  H2  SPC  A4YD    -11.099   8.170  -1.219  1.00  0.00          H
HETATM 6626  O   SPC  A4YE     -0.948   8.713   8.610  1.00  0.00          O
HETATM 6627  H1  SPC  A4YE     -1.761   8.948   8.130  1.00  0.00          H
HETATM 6628  H2  SPC  A4YE     -1.116   7.849   9.020  1.00  0.00          H
HETATM 6629  O   SPC  A4YF     -7.941   0.481  17.403  1.00  0.00          O
HETATM 6630  H1  SPC  A4YF     -7.118  -0.059  17.164  1.00  0.00          H
HETATM 6631  H2  SPC  A4YF     -7.688   1.461  17.394  1.00  0.00          H
HETATM 6632  O   SPC  A4YG      2.124  18.897  -3.844  1.00  0.00          O
HETATM 6633  H1  SPC  A4YG      2.779  18.225  -4.210  1.00  0.00          H
HETATM 6634  H2  SPC  A4YG      1.277  18.845  -4.388  1.00  0.00          H
HETATM 6635  O   SPC  A4YH      2.190  10.826   8.425  1.00  0.00          O
HETATM 6636  H1  SPC  A4YH      2.913  11.315   7.950  1.00  0.00          H
HETATM 6637  H2  SPC  A4YH      1.482  10.759   7.760  1.00  0.00          H
HETATM 6638  O   SPC  A4YJ      2.909   3.232  -2.964  1.00  0.00          O
HETATM 6639  H1  SPC  A4YJ      3.239   2.675  -3.731  1.00  0.00          H
HETATM 6640  H2  SPC  A4YJ      3.354   4.137  -3.009  1.00  0.00          H
HETATM 6641  O   SPC  A4YK    -13.593  -0.386  13.878  1.00  0.00          O
HETATM 6642  H1  SPC  A4YK    -13.081   0.419  14.210  1.00  0.00          H
HETATM 6643  H2  SPC  A4YK    -14.583  -0.195  13.973  1.00  0.00          H
HETATM 6644  O   SPC  A4YL      9.111  18.085   3.300  1.00  0.00          O
HETATM 6645  H1  SPC  A4YL      9.905  18.659   3.028  1.00  0.00          H
HETATM 6646  H2  SPC  A4YL      8.479  18.020   2.510  1.00  0.00          H
HETATM 6647  O   SPC  A4YM      4.428  16.436   7.827  1.00  0.00          O
HETATM 6648  H1  SPC  A4YM      4.302  16.034   6.916  1.00  0.00          H
HETATM 6649  H2  SPC  A4YM      3.870  15.906   8.490  1.00  0.00          H
HETATM 6650  O   SPC  A4YN    -11.957   5.532   5.529  1.00  0.00          O
HETATM 6651  H1  SPC  A4YN    -11.873   4.549   5.312  1.00  0.00          H
HETATM 6652  H2  SPC  A4YN    -11.844   6.064   4.681  1.00  0.00          H
HETATM 6653  O   SPC  A4YO      5.933   6.197   2.285  1.00  0.00          O
HETATM 6654  H1  SPC  A4YO      6.234   5.573   3.009  1.00  0.00          H
HETATM 6655  H2  SPC  A4YO      5.646   7.069   2.701  1.00  0.00          H
HETATM 6656  O   SPC  A4YP     -3.231   8.967  11.424  1.00  0.00          O
HETATM 6657  H1  SPC  A4YP     -3.062   8.004  11.669  1.00  0.00          H
HETATM 6658  H2  SPC  A4YP     -3.779   8.983  10.574  1.00  0.00          H
HETATM 6659  O   SPC  A4YQ      3.871  19.817  -1.870  1.00  0.00          O
HETATM 6660  H1  SPC  A4YQ      3.218  19.585  -2.605  1.00  0.00          H
HETATM 6661  H2  SPC  A4YQ      4.731  19.302  -2.019  1.00  0.00          H
HETATM 6662  O   SPC  A4YS      1.446  10.212  13.214  1.00  0.00          O
HETATM 6663  H1  SPC  A4YS      0.764  10.159  12.473  1.00  0.00          H
HETATM 6664  H2  SPC  A4YS      2.332  10.476  12.824  1.00  0.00          H
HETATM 6665  O   SPC  A4YT      4.633  20.992  -8.524  1.00  0.00          O
HETATM 6666  H1  SPC  A4YT      4.834  20.276  -9.207  1.00  0.00          H
HETATM 6667  H2  SPC  A4YT      3.635  21.001  -8.349  1.00  0.00          H
HETATM 6668  O   SPC  A4YU     -5.599  -0.808  16.865  1.00  0.00          O
HETATM 6669  H1  SPC  A4YU     -5.711  -1.718  17.289  1.00  0.00          H
HETATM 6670  H2  SPC  A4YU     -4.664  -0.474  17.066  1.00  0.00          H
HETATM 6671  O   SPC  A4YV     -1.049  22.576 -15.068  1.00  0.00          O
HETATM 6672  H1  SPC  A4YV     -1.243  21.598 -14.901  1.00  0.00          H
HETATM 6673  H2  SPC  A4YV     -0.595  22.648 -15.977  1.00  0.00          H
HETATM 6674  O   SPC  A4YY    -11.861   4.626  11.404  1.00  0.00          O
HETATM 6675  H1  SPC  A4YY    -11.952   5.274  10.638  1.00  0.00          H
HETATM 6676  H2  SPC  A4YY    -12.788   4.361  11.702  1.00  0.00          H
HETATM 6677  O   SPC  A4YZ      1.995   8.228   8.641  1.00  0.00          O
HETATM 6678  H1  SPC  A4YZ      2.761   7.725   8.958  1.00  0.00          H
HETATM 6679  H2  SPC  A4YZ      2.237   9.193   8.639  1.00  0.00          H
HETATM 6680  O   SPC  A4Z0      2.080  18.177   3.366  1.00  0.00          O
HETATM 6681  H1  SPC  A4Z0      1.100  18.105   3.135  1.00  0.00          H
HETATM 6682  H2  SPC  A4Z0      2.616  18.134   2.515  1.00  0.00          H
HETATM 6683  O   SPC  A4Z2     -4.589   8.707   9.120  1.00  0.00          O
HETATM 6684  H1  SPC  A4Z2     -4.157   8.867   8.222  1.00  0.00          H
HETATM 6685  H2  SPC  A4Z2     -5.113   7.853   9.075  1.00  0.00          H
HETATM 6686  O   SPC  A4Z3      7.195  18.585   1.478  1.00  0.00          O
HETATM 6687  H1  SPC  A4Z3      6.825  19.513   1.349  1.00  0.00          H
HETATM 6688  H2  SPC  A4Z3      7.111  18.083   0.596  1.00  0.00          H
HETATM 6689  O   SPC  A4Z5     -0.558  10.163  10.997  1.00  0.00          O
HETATM 6690  H1  SPC  A4Z5     -1.441   9.848  11.253  1.00  0.00          H
HETATM 6691  H2  SPC  A4Z5     -0.429   9.781  10.117  1.00  0.00          H
HETATM 6692  O   SPC  A4Z6    -13.626   7.195  12.048  1.00  0.00          O
HETATM 6693  H1  SPC  A4Z6    -13.288   6.938  11.128  1.00  0.00          H
HETATM 6694  H2  SPC  A4Z6    -12.831   7.299  12.662  1.00  0.00          H
HETATM 6695  O   SPC  A4Z7     -9.112  -1.219  19.205  1.00  0.00          O
HETATM 6696  H1  SPC  A4Z7     -9.620  -1.874  18.628  1.00  0.00          H
HETATM 6697  H2  SPC  A4Z7     -8.598  -0.595  18.599  1.00  0.00          H
HETATM 6698  O   SPC  A4Z8      5.050  20.953  -5.816  1.00  0.00          O
HETATM 6699  H1  SPC  A4Z8      4.784  21.798  -5.328  1.00  0.00          H
HETATM 6700  H2  SPC  A4Z8      4.845  21.063  -6.800  1.00  0.00          H
HETATM 6701  O   SPC  A4Z9      2.027  20.909  -7.749  1.00  0.00          O
HETATM 6702  H1  SPC  A4Z9      2.034  19.931  -7.505  1.00  0.00          H
HETATM 6703  H2  SPC  A4Z9      1.342  21.385  -7.177  1.00  0.00          H
HETATM 6704  O   SPC  A4ZA     -0.877  14.381   4.112  1.00  0.00          O
HETATM 6705  H1  SPC  A4ZA     -0.592  13.496   4.418  1.00  0.00          H
HETATM 6706  H2  SPC  A4ZA     -1.811  14.392   4.360  1.00  0.00          H
HETATM 6707  O   SPC  A4ZB      0.110  22.375  -6.387  1.00  0.00          O
HETATM 6708  H1  SPC  A4ZB     -0.795  22.214  -5.957  1.00  0.00          H
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HETATM 6709  H2  SPC  A4ZB       0.040  23.207  -6.955  1.00  0.00          H
HETATM 6710  O   SPC  A4ZC     -12.709   6.576   9.580  1.00  0.00          O
HETATM 6711  H1  SPC  A4ZC     -12.352   7.388   9.099  1.00  0.00          H
HETATM 6712  H2  SPC  A4ZC     -13.302   6.068   8.940  1.00  0.00          H
HETATM 6713  C1  MMA A 901      -7.246   7.074   7.178  1.00 38.63          C
HETATM 6714  C2  MMA A 901      -6.724   8.288   6.418  1.00 39.79          C
HETATM 6715  O1  MMA A 901      -8.362   7.471   7.925  1.00 38.68          O
HETATM 6716  C3  MMA A 901      -7.778   8.735   5.421  1.00 38.55          C
HETATM 6717  C7  MMA A 901      -8.914   6.408   8.687  1.00 39.29          C
HETATM 6718  O2  MMA A 901      -5.555   7.904   5.720  1.00 42.66          O
HETATM 6719  C4  MMA A 901      -8.181   7.585   4.502  1.00 38.26          C
HETATM 6720  O3  MMA A 901      -7.349   9.861   4.702  1.00 36.39          O
HETATM 6721  C5  MMA A 901      -8.537   6.340   5.327  1.00 38.04          C
HETATM 6722  O4  MMA A 901      -9.283   8.067   3.770  1.00 36.12          O
HETATM 6723  C6  MMA A 901      -8.673   5.094   4.482  1.00 39.02          C
HETATM 6724  O5  MMA A 901      -7.532   6.030   6.300  1.00 38.49          O
HETATM 6725  O6  MMA A 901      -7.485   4.915   3.741  1.00 37.72          O
HETATM 6726  H1  MMA A 901      -6.468   6.673   7.845  1.00  0.00          H
HETATM 6727  H2  MMA A 901      -6.531   9.111   7.119  1.00  0.00          H
HETATM 6728  H3  MMA A 901      -8.658   9.047   5.990  1.00  0.00          H
HETATM 6729  H71 MMA A 901      -9.645   6.844   9.369  1.00  0.00          H
HETATM 6730  H72 MMA A 901      -9.400   5.667   8.046  1.00  0.00          H
HETATM 6731  H73 MMA A 901      -8.135   5.907   9.277  1.00  0.00          H
HETATM 6732  HO2 MMA A 901      -4.811   8.474   5.966  1.00  0.00          H
HETATM 6733  H4  MMA A 901      -7.336   7.335   3.844  1.00  0.00          H
HETATM 6734  HO3 MMA A 901      -6.661   9.597   4.065  1.00  0.00          H
HETATM 6735  H5  MMA A 901      -9.487   6.534   5.841  1.00  0.00          H
HETATM 6736  HO4 MMA A 901      -9.803   7.368   3.315  1.00  0.00          H
HETATM 6737  H61 MMA A 901      -8.862   4.247   5.154  1.00  0.00          H
HETATM 6738  H62 MMA A 901      -9.537   5.203   3.821  1.00  0.00          H
HETATM 6739  HO6 MMA A 901      -7.604   4.129   3.181  1.00  0.00          H
HETATM 6740  PB  GDP A 904      -2.216   8.759   5.523  1.00 26.19          P
HETATM 6741  O1B GDP A 904      -3.058   8.368   4.199  1.00 27.84          O
HETATM 6742  O2B GDP A 904      -1.253   7.683   5.923  1.00 26.32          O1-
HETATM 6743  O3B GDP A 904      -3.196   9.241   6.578  1.00 26.19          O1-
HETATM 6744  O3A GDP A 904      -1.425  10.064   4.970  1.00 25.44          O
HETATM 6745  PA  GDP A 904       0.091  10.616   5.205  1.00 25.23          P
HETATM 6746  O1A GDP A 904       0.751   9.783   6.286  1.00 25.43          O
HETATM 6747  O2A GDP A 904       0.029  12.101   5.364  1.00 26.02          O1-
HETATM 6748  O5' GDP A 904       0.744  10.381   3.758  1.00 25.21          O
HETATM 6749  C5' GDP A 904       1.092   9.126   3.200  1.00 23.27          C
HETATM 6750  C4' GDP A 904       2.594   9.097   2.880  1.00 23.57          C
HETATM 6751  O4' GDP A 904       2.887  10.166   1.980  1.00 24.01          O
HETATM 6752  C3' GDP A 904       3.493   9.283   4.100  1.00 23.80          C
HETATM 6753  O3' GDP A 904       4.616   8.431   3.964  1.00 22.36          O
HETATM 6754  C2' GDP A 904       3.913  10.747   4.025  1.00 23.31          C
HETATM 6755  O2' GDP A 904       5.211  10.844   4.577  1.00 21.65          O
HETATM 6756  C1' GDP A 904       3.850  11.029   2.513  1.00 24.11          C
HETATM 6757  N9  GDP A 904       3.411  12.433   2.212  1.00 24.67          N
HETATM 6758  C8  GDP A 904       2.182  13.018   2.418  1.00 24.89          C
HETATM 6759  N7  GDP A 904       2.094  14.262   2.038  1.00 24.52          N
HETATM 6760  C5  GDP A 904       3.356  14.541   1.536  1.00 24.90          C
HETATM 6761  C6  GDP A 904       3.877  15.768   1.008  1.00 26.54          C
HETATM 6762  O6  GDP A 904       3.315  16.868   0.960  1.00 27.33          O
HETATM 6763  N1  GDP A 904       5.192  15.631   0.569  1.00 26.79          N
HETATM 6764  C2  GDP A 904       5.941  14.471   0.699  1.00 25.66          C
HETATM 6765  N2  GDP A 904       7.211  14.548   0.312  1.00 26.54          N
HETATM 6766  N3  GDP A 904       5.476  13.347   1.213  1.00 26.00          N
HETATM 6767  C4  GDP A 904       4.170  13.427   1.620  1.00 24.67          C
HETATM 6768 H5'1 GDP A 904       0.816   8.302   3.861  1.00  0.00          H
HETATM 6769 H5'2 GDP A 904       0.551   8.976   2.265  1.00  0.00          H
HETATM 6770  H4' GDP A 904       2.811   8.150   2.382  1.00  0.00          H
HETATM 6771  H3' GDP A 904       3.002   9.050   5.043  1.00  0.00          H
HETATM 6772  HO3 GDP A 904       5.356   9.046   3.937  1.00  0.00          H
HETATM 6773  H2' GDP A 904       3.200  11.376   4.558  1.00  0.00          H
HETATM 6774  HO2 GDP A 904       5.279  11.717   4.992  1.00  0.00          H
HETATM 6775  H1' GDP A 904       4.805  10.887   2.008  1.00  0.00          H
HETATM 6776  H8  GDP A 904       1.336  12.510   2.845  1.00  0.00          H
HETATM 6777  HN1 GDP A 904       5.643  16.448   0.136  1.00  0.00          H
HETATM 6778  HN2 GDP A 904       7.898  13.897   0.689  1.00  0.00          H
HETATM 6779  H1  GDP A 904       7.528  15.409  -0.128  1.00  0.00          H
HETATM 6780 MN1   MN A 909       0.549   7.751   7.092  1.00 24.77         Mn2+
HETATM 6781  C1  0MA   2      -2.288   7.746   3.122  0.00  0.00          C1+
HETATM 6782  C2  0MA   2      -3.035   7.693   1.791  0.00  0.00          C
HETATM 6783  O2  0MA   2      -1.977   7.280   0.950  0.00  0.00          O
HETATM 6784  C3  0MA   2      -4.210   6.709   1.833  0.00  0.00          C
HETATM 6785  O3  0MA   2      -4.779   6.546   0.556  0.00  0.00          O
HETATM 6786  C4  0MA   2      -3.796   5.375   2.455  0.00  0.00          C
HETATM 6787  O4  0MA   2      -4.895   4.552   2.749  0.00  0.00          O
HETATM 6788  C5  0MA   2      -2.971   5.584   3.719  0.00  0.00          C
HETATM 6789  O5  0MA   2      -1.886   6.492   3.490  0.00  0.00          O
HETATM 6790  C6  0MA   2      -2.280   4.338   4.224  0.00  0.00          C
HETATM 6791  O6  0MA   2      -1.468   4.704   5.318  0.00  0.00          O
HETATM 6792  H1  0MA   2      -1.403   8.358   2.976  0.00  0.00          H
HETATM 6793  H2  0MA   2      -3.405   8.683   1.495  0.00  0.00          H
HETATM 6794  H2O 0MA   2      -2.297   6.962   0.068  0.00  0.00          H
HETATM 6795  H3  0MA   2      -4.995   7.153   2.463  0.00  0.00          H
HETATM 6796  H3O 0MA   2      -4.066   6.287  -0.066  0.00  0.00          H
HETATM 6797  H4  0MA   2      -3.173   4.842   1.728  0.00  0.00          H
HETATM 6798  H4O 0MA   2      -5.554   5.044   3.266  0.00  0.00          H
HETATM 6799  H5  0MA   2      -3.615   5.989   4.516  0.00  0.00          H
HETATM 6800  H61 0MA   2      -1.681   3.907   3.406  0.00  0.00          H
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HETATM 6801  H62 0MA     2      -2.999   3.597   4.567  0.00  0.00           H
HETATM 6802  H6O 0MA     2      -0.864   5.398   4.994  0.00  0.00           H
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(b) The Cartesian coordinates (in the PDB format) of the M06-2X:OPLS2005 optimized Michaelis complex **1B** (**WT_Mn**).

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REMARK 888
REMARK 888 WRITTEN BY MAESTRO (A PRODUCT OF SCHRODINGER, LLC)
TITLE     1B (WT_Mn)
MODEL        1
ATOM      1  CH3 ACE A 103      -7.075 -19.234 -19.445  1.00  0.00          C
ATOM      2  C   ACE A 103      -5.988 -18.197 -19.678  1.00  0.00          C
ATOM      3  O   ACE A 103      -5.287 -18.254 -20.689  1.00  0.00          O
ATOM      4 1H   ACE A 103      -8.054 -18.755 -19.435  1.00  0.00          H
ATOM      5 2H   ACE A 103      -7.065 -19.995 -20.224  1.00  0.00          H
ATOM      6 3H   ACE A 103      -6.933 -19.719 -18.479  1.00  0.00          H
ATOM      7  N   LYS A 104      -5.849 -17.251 -18.747  1.00 36.95          N
ATOM      8  CA  LYS A 104      -4.837 -16.206 -18.725  1.00 37.33          C
ATOM      9  C   LYS A 104      -4.819 -15.603 -17.322  1.00 36.73          C
ATOM     10  O   LYS A 104      -5.650 -14.731 -17.034  1.00 37.03          O
ATOM     11  CB  LYS A 104      -5.120 -15.119 -19.799  1.00 38.20          C
ATOM     12  CG  LYS A 104      -4.010 -14.046 -19.923  1.00 40.08          C
ATOM     13  CD  LYS A 104      -4.497 -12.578 -19.894  1.00 40.86          C
ATOM     14  CE  LYS A 104      -4.389 -11.876 -18.523  1.00 41.37          C
ATOM     15  NZ  LYS A 104      -5.544 -12.117 -17.639  1.00 44.72          N1+
ATOM     16  HA  LYS A 104      -3.868 -16.667 -18.926  1.00  0.00          H
ATOM     17  HB2 LYS A 104      -5.242 -15.595 -20.772  1.00  0.00          H
ATOM     18  HB3 LYS A 104      -6.086 -14.654 -19.595  1.00  0.00          H
ATOM     19  HG2 LYS A 104      -3.225 -14.194 -19.180  1.00  0.00          H
ATOM     20  HG3 LYS A 104      -3.507 -14.218 -20.876  1.00  0.00          H
ATOM     21  HD2 LYS A 104      -3.846 -12.020 -20.569  1.00  0.00          H
ATOM     22  HD3 LYS A 104      -5.495 -12.475 -20.323  1.00  0.00          H
ATOM     23  HE2 LYS A 104      -3.467 -12.157 -18.019  1.00  0.00          H
ATOM     24  HE3 LYS A 104      -4.323 -10.797 -18.675  1.00  0.00          H
ATOM     25  HZ1 LYS A 104      -5.380 -11.642 -16.751  1.00  0.00          H
ATOM     26  HZ2 LYS A 104      -6.386 -11.715 -18.042  1.00  0.00          H
ATOM     27  HZ3 LYS A 104      -5.680 -13.112 -17.451  1.00  0.00          H
ATOM     28  H2  LYS A 104      -6.428 -17.357 -17.893  1.00  0.00          H
ATOM     29  N   THR A 105      -3.827 -15.944 -16.488  1.00 34.30          N
ATOM     30  CA  THR A 105      -3.621 -15.226 -15.236  1.00 33.23          C
ATOM     31  C   THR A 105      -2.981 -13.868 -15.583  1.00 32.56          C
ATOM     32  O   THR A 105      -2.177 -13.756 -16.512  1.00 32.13          O
ATOM     33  CB  THR A 105      -2.770 -16.039 -14.214  1.00 32.21          C
ATOM     34  OG1 THR A 105      -1.371 -15.782 -14.192  1.00 35.33          O
ATOM     35  CG2 THR A 105      -3.008 -17.556 -14.240  1.00 33.79          C
ATOM     36  H   THR A 105      -3.105 -16.587 -16.778  1.00  0.00          H
ATOM     37  HA  THR A 105      -4.604 -15.073 -14.788  1.00  0.00          H
ATOM     38  HB  THR A 105      -3.119 -15.690 -13.243  1.00  0.00          H
ATOM     39  HG1 THR A 105      -0.941 -16.167 -14.983  1.00  0.00          H
ATOM     40 HG21 THR A 105      -2.544 -18.040 -13.381  1.00  0.00          H
ATOM     41 HG22 THR A 105      -4.075 -17.782 -14.214  1.00  0.00          H
ATOM     42 HG23 THR A 105      -2.590 -18.010 -15.140  1.00  0.00          H
ATOM     43  N   THR A 106      -3.333 -12.815 -14.850  1.00 30.71          N
ATOM     44  CA  THR A 106      -2.704 -11.502 -14.979  1.00 29.71          C
ATOM     45  C   THR A 106      -1.386 -11.462 -14.159  1.00 28.38          C
ATOM     46  O   THR A 106      -0.632 -10.493 -14.246  1.00 26.84          O
ATOM     47  CB  THR A 106      -3.748 -10.430 -14.573  1.00 29.60          C
ATOM     48  OG1 THR A 106      -4.839 -10.502 -15.489  1.00 29.62          O
ATOM     49  CG2 THR A 106      -3.253  -8.979 -14.674  1.00 29.22          C
ATOM     50  H   THR A 106      -3.969 -12.994 -14.055  1.00  0.00          H
ATOM     51  HA  THR A 106      -2.419 -11.317 -16.016  1.00  0.00          H
ATOM     52  HB  THR A 106      -4.116 -10.633 -13.567  1.00  0.00          H
ATOM     53  HG1 THR A 106      -5.368  -9.713 -15.365  1.00  0.00          H
ATOM     54 HG21 THR A 106      -4.049  -8.264 -14.473  1.00  0.00          H
ATOM     55 HG22 THR A 106      -2.454  -8.766 -13.965  1.00  0.00          H
ATOM     56 HG23 THR A 106      -2.868  -8.759 -15.663  1.00  0.00          H
ATOM     57  N   MET A 107      -1.019 -12.564 -13.476  1.00 27.33          N
ATOM     58  CA  MET A 107       0.314 -12.772 -12.909  1.00 27.87          C
ATOM     59  C   MET A 107       1.346 -12.999 -14.024  1.00 27.83          C
ATOM     60  O   MET A 107       2.522 -12.722 -13.818  1.00 28.87          O
ATOM     61  CB  MET A 107       0.330 -14.010 -11.980  1.00 25.92          C
ATOM     62  CG  MET A 107       1.123 -13.808 -10.677  1.00 26.21          C
ATOM     63  SD  MET A 107       2.936 -13.707 -10.775  1.00 27.25          S
ATOM     64  CE  MET A 107       3.438 -15.151  -9.794  1.00 24.40          C
ATOM     65  H   MET A 107      -1.630 -13.370 -13.543  1.00  0.00          H
ATOM     66  HA  MET A 107       0.589 -11.881 -12.344  1.00  0.00          H
ATOM     67  HB2 MET A 107      -0.693 -14.260 -11.706  1.00  0.00          H
ATOM     68  HB3 MET A 107       0.693 -14.900 -12.499  1.00  0.00          H
ATOM     69  HG2 MET A 107       0.757 -12.921 -10.159  1.00  0.00          H
ATOM     70  HG3 MET A 107       0.904 -14.651 -10.032  1.00  0.00          H
ATOM     71  HE1 MET A 107       4.516 -15.291  -9.856  1.00  0.00          H
ATOM     72  HE2 MET A 107       3.180 -15.021  -8.744  1.00  0.00          H
ATOM     73  HE3 MET A 107       2.963 -16.061 -10.159  1.00  0.00          H
ATOM     74  N   ASP A 108       0.951 -13.470 -15.213  1.00 28.14          N
ATOM     75  CA  ASP A 108       1.880 -13.839 -16.293  1.00 28.57          C
ATOM     76  C   ASP A 108       2.488 -12.650 -17.054  1.00 28.39          C
ATOM     77  O   ASP A 108       3.257 -12.830 -17.996  1.00 28.31          O
ATOM     78  CB  ASP A 108       1.249 -14.884 -17.234  1.00 29.94          C
ATOM     79  CG  ASP A 108       1.156 -16.230 -16.527  1.00 31.66          C
ATOM     80  OD1 ASP A 108       2.244 -16.765 -16.204  1.00 31.67          O
ATOM     81  OD2 ASP A 108       0.013 -16.645 -16.225  1.00 33.98          O1-
ATOM     82  H   ASP A 108      -0.016 -13.752 -15.329  1.00  0.00          H
ATOM     83  HA  ASP A 108       2.741 -14.297 -15.820  1.00  0.00          H
ATOM     84  HB2 ASP A 108       0.264 -14.568 -17.576  1.00  0.00          H
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ATOM     85  HB3 ASP A 108       1.861 -15.033 -18.124  1.00  0.00           H
ATOM     86  N   TYR A 109       2.251 -11.425 -16.572  1.00 29.03           N
ATOM     87  CA  TYR A 109       3.062 -10.247 -16.882  1.00 29.95           C
ATOM     88  C   TYR A 109       4.200 -10.066 -15.845  1.00 29.37           C
ATOM     89  O   TYR A 109       4.985  -9.127 -15.968  1.00 30.93           O
ATOM     90  CB  TYR A 109       2.152  -9.000 -16.828  1.00 32.34           C
ATOM     91  CG  TYR A 109       0.964  -9.021 -17.781  1.00 34.77           C
ATOM     92  CD1 TYR A 109      -0.351  -8.913 -17.279  1.00 34.89           C
ATOM     93  CD2 TYR A 109       1.165  -9.168 -19.171  1.00 35.80           C
ATOM     94  CE1 TYR A 109      -1.451  -8.985 -18.156  1.00 34.99           C
ATOM     95  CE2 TYR A 109       0.063  -9.237 -20.046  1.00 35.75           C
ATOM     96  CZ  TYR A 109      -1.248  -9.158 -19.535  1.00 36.34           C
ATOM     97  OH  TYR A 109      -2.328  -9.260 -20.360  1.00 36.60           O
ATOM     98  H   TYR A 109       1.574 -11.360 -15.826  1.00  0.00           H
ATOM     99  HA  TYR A 109       3.513 -10.331 -17.872  1.00  0.00           H
ATOM    100  HB2 TYR A 109       1.787  -8.855 -15.810  1.00  0.00           H
ATOM    101  HB3 TYR A 109       2.744  -8.114 -17.062  1.00  0.00           H
ATOM    102  HD1 TYR A 109      -0.523  -8.797 -16.218  1.00  0.00           H
ATOM    103  HD2 TYR A 109       2.164  -9.254 -19.572  1.00  0.00           H
ATOM    104  HE1 TYR A 109      -2.460  -8.919 -17.780  1.00  0.00           H
ATOM    105  HE2 TYR A 109       0.235  -9.371 -21.104  1.00  0.00           H
ATOM    106  HH  TYR A 109      -2.108  -9.256 -21.279  1.00  0.00           H
ATOM    107  N   ILE A 110       4.284 -10.930 -14.821  1.00 28.23           N
ATOM    108  CA  ILE A 110       5.173 -10.861 -13.660  1.00 27.12           C
ATOM    109  C   ILE A 110       5.952 -12.179 -13.461  1.00 28.39           C
ATOM    110  O   ILE A 110       7.108 -12.112 -13.026  1.00 27.18           O
ATOM    111  CB  ILE A 110       4.385 -10.426 -12.383  1.00 26.29           C
ATOM    112  CG1 ILE A 110       3.599  -9.108 -12.568  1.00 26.10           C
ATOM    113  CG2 ILE A 110       5.275 -10.326 -11.127  1.00 24.77           C
ATOM    114  CD1 ILE A 110       2.116  -9.319 -12.903  1.00 26.96           C
ATOM    115  H   ILE A 110       3.570 -11.652 -14.766  1.00  0.00           H
ATOM    116  HA  ILE A 110       5.929 -10.097 -13.852  1.00  0.00           H
ATOM    117  HB  ILE A 110       3.661 -11.207 -12.150  1.00  0.00           H
ATOM    118 HG12 ILE A 110       3.640  -8.534 -11.645  1.00  0.00           H
ATOM    119 HG13 ILE A 110       4.075  -8.479 -13.321  1.00  0.00           H
ATOM    120 HG21 ILE A 110       4.705  -9.988 -10.262  1.00  0.00           H
ATOM    121 HG22 ILE A 110       5.700 -11.290 -10.850  1.00  0.00           H
ATOM    122 HG23 ILE A 110       6.095  -9.627 -11.282  1.00  0.00           H
ATOM    123 HD11 ILE A 110       1.615  -8.378 -13.130  1.00  0.00           H
ATOM    124 HD12 ILE A 110       1.982  -9.970 -13.764  1.00  0.00           H
ATOM    125 HD13 ILE A 110       1.588  -9.777 -12.067  1.00  0.00           H
ATOM    126  N   THR A 111       5.360 -13.352 -13.767  1.00 28.11           N
ATOM    127  CA  THR A 111       5.927 -14.708 -13.627  1.00 29.58           C
ATOM    128  C   THR A 111       7.446 -14.901 -13.882  1.00 30.49           C
ATOM    129  O   THR A 111       8.086 -15.520 -13.027  1.00 30.80           O
ATOM    130  CB  THR A 111       5.017 -15.831 -14.203  1.00 29.32           C
ATOM    131  OG1 THR A 111       4.718 -15.629 -15.566  1.00 32.94           O
ATOM    132  CG2 THR A 111       3.722 -16.045 -13.413  1.00 28.93           C
ATOM    133  H   THR A 111       4.391 -13.325 -14.068  1.00  0.00           H
ATOM    134  HA  THR A 111       5.861 -14.851 -12.548  1.00  0.00           H
ATOM    135  HB  THR A 111       5.564 -16.774 -14.152  1.00  0.00           H
ATOM    136  HG1 THR A 111       3.908 -16.117 -15.793  1.00  0.00           H
ATOM    137 HG21 THR A 111       3.155 -16.891 -13.802  1.00  0.00           H
ATOM    138 HG22 THR A 111       3.933 -16.260 -12.367  1.00  0.00           H
ATOM    139 HG23 THR A 111       3.072 -15.177 -13.452  1.00  0.00           H
ATOM    140  N   PRO A 112       8.076 -14.340 -14.947  1.00 32.29           N
ATOM    141  CA  PRO A 112       9.544 -14.280 -15.098  1.00 33.46           C
ATOM    142  C   PRO A 112      10.348 -13.820 -13.861  1.00 35.96           C
ATOM    143  O   PRO A 112      11.375 -14.420 -13.549  1.00 35.45           O
ATOM    144  CB  PRO A 112       9.787 -13.336 -16.283  1.00 33.51           C
ATOM    145  CG  PRO A 112       8.542 -13.481 -17.140  1.00 31.85           C
ATOM    146  CD  PRO A 112       7.423 -13.798 -16.146  1.00 31.36           C
ATOM    147  HA  PRO A 112       9.874 -15.286 -15.364  1.00  0.00           H
ATOM    148  HB2 PRO A 112       9.868 -12.300 -15.948  1.00  0.00           H
ATOM    149  HB3 PRO A 112      10.700 -13.578 -16.828  1.00  0.00           H
ATOM    150  HG2 PRO A 112       8.330 -12.597 -17.744  1.00  0.00           H
ATOM    151  HG3 PRO A 112       8.665 -14.323 -17.822  1.00  0.00           H
ATOM    152  HD2 PRO A 112       6.878 -12.884 -15.920  1.00  0.00           H
ATOM    153  HD3 PRO A 112       6.717 -14.503 -16.583  1.00  0.00           H
ATOM    154  N   SER A 113       9.880 -12.806 -13.115  1.00 36.66           N
ATOM    155  CA  SER A 113      10.554 -12.315 -11.905  1.00 35.89           C
ATOM    156  C   SER A 113      10.365 -13.267 -10.698  1.00 36.89           C
ATOM    157  O   SER A 113      11.104 -13.181  -9.718  1.00 37.22           O
ATOM    158  CB  SER A 113      10.076 -10.870 -11.605  1.00 35.80           C
ATOM    159  OG  SER A 113       8.717 -10.744 -11.203  1.00 33.01           O
ATOM    160  H   SER A 113       8.976 -12.409 -13.351  1.00  0.00           H
ATOM    161  HA  SER A 113      11.626 -12.266 -12.105  1.00  0.00           H
ATOM    162  HB2 SER A 113      10.698 -10.446 -10.813  1.00  0.00           H
ATOM    163  HB3 SER A 113      10.246 -10.239 -12.479  1.00  0.00           H
ATOM    164  HG  SER A 113       8.152 -11.155 -11.858  1.00  0.00           H
ATOM    165  N   PHE A 114       9.434 -14.226 -10.800  1.00 37.03           N
ATOM    166  CA  PHE A 114       9.169 -15.283  -9.828  1.00 38.15           C
ATOM    167  C   PHE A 114       9.860 -16.603 -10.219  1.00 40.29           C
ATOM    168  O   PHE A 114       9.685 -17.602  -9.519  1.00 41.86           O
ATOM    169  CB  PHE A 114       7.640 -15.499  -9.717  1.00 37.24           C
ATOM    170  CG  PHE A 114       7.009 -14.620  -8.660  1.00 37.59           C
ATOM    171  CD1 PHE A 114       6.923 -13.227  -8.860  1.00 37.08           C
ATOM    172  CD2 PHE A 114       6.535 -15.191  -7.460  1.00 36.59           C
ATOM    173  CE1 PHE A 114       6.390 -12.407  -7.851  1.00 37.47           C
ATOM    174  CE2 PHE A 114       6.007 -14.371  -6.451  1.00 35.73           C
ATOM    175  CZ  PHE A 114       5.946 -12.983  -6.647  1.00 36.89           C
ATOM    176  H   PHE A 114       8.915 -14.284 -11.669  1.00  0.00           H
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ATOM    177  HA  PHE A 114       9.562 -15.011  -8.846  1.00  0.00           H
ATOM    178  HB2 PHE A 114       7.141 -15.308 -10.665  1.00  0.00           H
ATOM    179  HB3 PHE A 114       7.387 -16.532  -9.479  1.00  0.00           H
ATOM    180  HD1 PHE A 114       7.273 -12.780  -9.779  1.00  0.00           H
ATOM    181  HD2 PHE A 114       6.574 -16.258  -7.303  1.00  0.00           H
ATOM    182  HE1 PHE A 114       6.322 -11.340  -8.002  1.00  0.00           H
ATOM    183  HE2 PHE A 114       5.658 -14.800  -5.523  1.00  0.00           H
ATOM    184  HZ  PHE A 114       5.554 -12.360  -5.865  1.00  0.00           H
ATOM    185  N   ALA A 115      10.680 -16.622 -11.281  1.00 -1.00           N
ATOM    186  CA  ALA A 115      11.509 -17.770 -11.661  1.00 -1.00           C
ATOM    187  C   ALA A 115      12.813 -17.821 -10.837  1.00 -1.00           C
ATOM    188  O   ALA A 115      13.479 -18.850 -10.793  1.00 -1.00           O
ATOM    189  CB  ALA A 115      11.893 -17.627 -13.141  1.00 -1.00           C
ATOM    190  H   ALA A 115      10.742 -15.788 -11.855  1.00 -1.00           H
ATOM    191  HA  ALA A 115      10.957 -18.701 -11.516  1.00 -1.00           H
ATOM    192  HB1 ALA A 115      12.442 -18.503 -13.487  1.00 -1.00           H
ATOM    193  HB2 ALA A 115      11.008 -17.527 -13.771  1.00 -1.00           H
ATOM    194  HB3 ALA A 115      12.527 -16.756 -13.317  1.00 -1.00           H
ATOM    195  N   ASN A 116      13.155 -16.726 -10.145  1.00 -1.00           N
ATOM    196  CA  ASN A 116      14.364 -16.476  -9.343  1.00 -1.00           C
ATOM    197  C   ASN A 116      14.365 -17.249  -7.991  1.00 -1.00           C
ATOM    198  O   ASN A 116      14.996 -16.835  -7.013  1.00 -1.00           O
ATOM    199  CB  ASN A 116      14.399 -14.940  -9.134  1.00 -1.00           C
ATOM    200  CG  ASN A 116      15.681 -14.381  -8.514  1.00 -1.00           C
ATOM    201  OD1 ASN A 116      16.775 -14.570  -9.034  1.00 -1.00           O
ATOM    202  ND2 ASN A 116      15.557 -13.703  -7.381  1.00 -1.00           N
ATOM    203  H   ASN A 116      12.507 -15.956 -10.225  1.00 -1.00           H
ATOM    204  HA  ASN A 116      15.240 -16.789  -9.914  1.00 -1.00           H
ATOM    205  HB2 ASN A 116      14.301 -14.445 -10.102  1.00 -1.00           H
ATOM    206  HB3 ASN A 116      13.530 -14.622  -8.559  1.00 -1.00           H
ATOM    207 HD21 ASN A 116      16.366 -13.267  -6.956  1.00 -1.00           H
ATOM    208 HD22 ASN A 116      14.634 -13.632  -6.945  1.00 -1.00           H
ATOM    209  N   LYS A 117      13.670 -18.393  -7.929  1.00 -1.00           N
ATOM    210  CA  LYS A 117      13.440 -19.276  -6.779  1.00 -1.00           C
ATOM    211  C   LYS A 117      14.717 -20.019  -6.323  1.00 -1.00           C
ATOM    212  O   LYS A 117      14.795 -21.246  -6.312  1.00 -1.00           O
ATOM    213  CB  LYS A 117      12.300 -20.257  -7.142  1.00 -1.00           C
ATOM    214  CG  LYS A 117      10.904 -19.614  -7.046  1.00 -1.00           C
ATOM    215  CD  LYS A 117       9.810 -20.493  -7.681  1.00 -1.00           C
ATOM    216  CE  LYS A 117       8.360 -20.103  -7.334  1.00 -1.00           C
ATOM    217  NZ  LYS A 117       8.062 -18.699  -7.636  1.00 -1.00          N1+
ATOM    218  H   LYS A 117      13.318 -18.719  -8.823  1.00 -1.00           H
ATOM    219  HA  LYS A 117      13.125 -18.666  -5.936  1.00 -1.00           H
ATOM    220  HB2 LYS A 117      12.472 -20.669  -8.138  1.00 -1.00           H
ATOM    221  HB3 LYS A 117      12.306 -21.110  -6.461  1.00 -1.00           H
ATOM    222  HG2 LYS A 117      10.691 -19.431  -5.994  1.00 -1.00           H
ATOM    223  HG3 LYS A 117      10.918 -18.633  -7.519  1.00 -1.00           H
ATOM    224  HD2 LYS A 117       9.940 -20.489  -8.765  1.00 -1.00           H
ATOM    225  HD3 LYS A 117       9.959 -21.529  -7.371  1.00 -1.00           H
ATOM    226  HE2 LYS A 117       7.673 -20.721  -7.913  1.00 -1.00           H
ATOM    227  HE3 LYS A 117       8.133 -20.297  -6.286  1.00 -1.00           H
ATOM    228  HZ1 LYS A 117       7.035 -18.605  -7.813  1.00 -1.00           H
ATOM    229  HZ2 LYS A 117       8.271 -18.102  -6.837  1.00 -1.00           H
ATOM    230  HZ3 LYS A 117       8.568 -18.368  -8.452  1.00 -1.00           H
ATOM    231  N   ALA A 118      15.733 -19.234  -5.967  1.00 -1.00           N
ATOM    232  CA  ALA A 118      16.999 -19.626  -5.369  1.00 -1.00           C
ATOM    233  C   ALA A 118      17.638 -18.451  -4.616  1.00 -1.00           C
ATOM    234  O   ALA A 118      18.326 -18.662  -3.619  1.00 -1.00           O
ATOM    235  CB  ALA A 118      17.942 -20.227  -6.425  1.00 -1.00           C
ATOM    236  H   ALA A 118      15.540 -18.245  -6.091  1.00 -1.00           H
ATOM    237  HA  ALA A 118      16.786 -20.396  -4.624  1.00 -1.00           H
ATOM    238  HB1 ALA A 118      18.894 -20.514  -5.978  1.00 -1.00           H
ATOM    239  HB2 ALA A 118      17.510 -21.121  -6.876  1.00 -1.00           H
ATOM    240  HB3 ALA A 118      18.150 -19.515  -7.225  1.00 -1.00           H
ATOM    241  N   GLY A 119      17.407 -17.208  -5.063  1.00 49.69           N
ATOM    242  CA  GLY A 119      18.042 -16.006  -4.530  1.00 48.49           C
ATOM    243  C   GLY A 119      17.028 -15.044  -3.911  1.00 47.46           C
ATOM    244  O   GLY A 119      15.835 -15.348  -3.822  1.00 48.38           O
ATOM    245  H   GLY A 119      16.803 -17.079  -5.867  1.00 -1.00           H
ATOM    246  HA2 GLY A 119      18.815 -16.236  -3.795  1.00  0.00           H
ATOM    247  HA3 GLY A 119      18.538 -15.499  -5.359  1.00  0.00           H
ATOM    248  N   LYS A 120      17.507 -13.868  -3.487  1.00 45.71           N
ATOM    249  CA  LYS A 120      16.671 -12.698  -3.208  1.00 42.69           C
ATOM    250  C   LYS A 120      16.305 -12.074  -4.572  1.00 40.13           C
ATOM    251  O   LYS A 120      17.147 -12.113  -5.477  1.00 39.70           O
ATOM    252  CB  LYS A 120      17.507 -11.618  -2.468  1.00 44.31           C
ATOM    253  CG  LYS A 120      17.854 -11.862  -0.985  1.00 45.11           C
ATOM    254  CD  LYS A 120      18.770 -10.731  -0.455  1.00 45.84           C
ATOM    255  CE  LYS A 120      18.924 -10.641   1.078  1.00 46.18           C
ATOM    256  NZ  LYS A 120      17.841  -9.866   1.700  1.00 44.91          N1+
ATOM    257  H   LYS A 120      18.475 -13.671  -3.688  1.00  0.00           H
ATOM    258  HA  LYS A 120      15.788 -12.978  -2.632  1.00  0.00           H
ATOM    259  HB2 LYS A 120      18.426 -11.429  -3.027  1.00  0.00           H
ATOM    260  HB3 LYS A 120      16.955 -10.675  -2.507  1.00  0.00           H
ATOM    261  HG2 LYS A 120      16.933 -11.917  -0.403  1.00  0.00           H
ATOM    262  HG3 LYS A 120      18.347 -12.827  -0.863  1.00  0.00           H
ATOM    263  HD2 LYS A 120      19.760 -10.878  -0.891  1.00  0.00           H
ATOM    264  HD3 LYS A 120      18.434  -9.765  -0.836  1.00  0.00           H
ATOM    265  HE2 LYS A 120      18.969 -11.633   1.530  1.00  0.00           H
ATOM    266  HE3 LYS A 120      19.860 -10.139   1.324  1.00  0.00           H
ATOM    267  HZ1 LYS A 120      17.277 -10.493   2.316  1.00  0.00           H
ATOM    268  HZ2 LYS A 120      18.147  -9.053   2.233  1.00  0.00           H
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ATOM    269  HZ3 LYS A 120      17.163  -9.566   1.012  1.00  0.00           H
ATOM    270  N   PRO A 121      15.120 -11.454  -4.736  1.00 37.16           N
ATOM    271  CA  PRO A 121      14.865 -10.555  -5.867  1.00 35.52           C
ATOM    272  C   PRO A 121      15.545  -9.194  -5.607  1.00 33.34           C
ATOM    273  O   PRO A 121      16.067  -8.951  -4.514  1.00 31.34           O
ATOM    274  CB  PRO A 121      13.339 -10.420  -5.890  1.00 35.26           C
ATOM    275  CG  PRO A 121      12.917 -10.584  -4.436  1.00 37.08           C
ATOM    276  CD  PRO A 121      13.965 -11.529  -3.838  1.00 36.33           C
ATOM    277  HA  PRO A 121      15.228 -10.968  -6.810  1.00  0.00           H
ATOM    278  HB2 PRO A 121      12.999  -9.480  -6.322  1.00  0.00           H
ATOM    279  HB3 PRO A 121      12.910 -11.224  -6.489  1.00  0.00           H
ATOM    280  HG2 PRO A 121      12.969  -9.614  -3.942  1.00  0.00           H
ATOM    281  HG3 PRO A 121      11.898 -10.959  -4.327  1.00  0.00           H
ATOM    282  HD2 PRO A 121      14.217 -11.232  -2.819  1.00  0.00           H
ATOM    283  HD3 PRO A 121      13.587 -12.553  -3.814  1.00  0.00           H
ATOM    284  N   LYS A 122      15.501  -8.273  -6.580  1.00 31.90           N
ATOM    285  CA  LYS A 122      15.876  -6.883  -6.337  1.00 31.10           C
ATOM    286  C   LYS A 122      14.684  -6.248  -5.595  1.00 29.95           C
ATOM    287  O   LYS A 122      13.650  -5.970  -6.201  1.00 31.41           O
ATOM    288  CB  LYS A 122      16.132  -6.138  -7.671  1.00 33.97           C
ATOM    289  CG  LYS A 122      17.141  -6.825  -8.615  1.00 35.41           C
ATOM    290  CD  LYS A 122      17.775  -5.888  -9.668  1.00 40.19           C
ATOM    291  CE  LYS A 122      16.954  -5.621 -10.949  1.00 42.24           C
ATOM    292  NZ  LYS A 122      15.736  -4.837 -10.707  1.00 43.94           N1+
ATOM    293  H   LYS A 122      15.022  -8.484  -7.443  1.00  0.00           H
ATOM    294  HA  LYS A 122      16.779  -6.829  -5.724  1.00  0.00           H
ATOM    295  HB2 LYS A 122      15.198  -5.981  -8.203  1.00  0.00           H
ATOM    296  HB3 LYS A 122      16.507  -5.145  -7.421  1.00  0.00           H
ATOM    297  HG2 LYS A 122      17.951  -7.225  -8.002  1.00  0.00           H
ATOM    298  HG3 LYS A 122      16.682  -7.687  -9.100  1.00  0.00           H
ATOM    299  HD2 LYS A 122      18.082  -4.949  -9.204  1.00  0.00           H
ATOM    300  HD3 LYS A 122      18.709  -6.353  -9.988  1.00  0.00           H
ATOM    301  HE2 LYS A 122      17.571  -5.063 -11.655  1.00  0.00           H
ATOM    302  HE3 LYS A 122      16.678  -6.556 -11.439  1.00  0.00           H
ATOM    303  HZ1 LYS A 122      15.379  -4.430 -11.556  1.00  0.00           H
ATOM    304  HZ2 LYS A 122      15.005  -5.514 -10.395  1.00  0.00           H
ATOM    305  HZ3 LYS A 122      15.905  -4.107 -10.021  1.00  0.00           H
ATOM    306  N   ALA A 123      14.819  -6.045  -4.285  1.00 25.55           N
ATOM    307  CA  ALA A 123      13.815  -5.458  -3.410  1.00 25.13           C
ATOM    308  C   ALA A 123      14.469  -4.384  -2.545  1.00 23.88           C
ATOM    309  O   ALA A 123      15.668  -4.460  -2.276  1.00 23.84           O
ATOM    310  CB  ALA A 123      13.156  -6.556  -2.567  1.00 23.35           C
ATOM    311  H   ALA A 123      15.703  -6.262  -3.846  1.00  0.00           H
ATOM    312  HA  ALA A 123      13.048  -4.973  -4.011  1.00  0.00           H
ATOM    313  HB1 ALA A 123      12.292  -6.163  -2.030  1.00  0.00           H
ATOM    314  HB2 ALA A 123      12.816  -7.387  -3.182  1.00  0.00           H
ATOM    315  HB3 ALA A 123      13.844  -6.963  -1.828  1.00  0.00           H
ATOM    316  N   CYS A 124      13.677  -3.414  -2.095  1.00 25.75           N
ATOM    317  CA  CYS A 124      14.079  -2.314  -1.229  1.00 23.52           C
ATOM    318  C   CYS A 124      12.965  -2.040  -0.218  1.00 23.67           C
ATOM    319  O   CYS A 124      11.814  -2.429  -0.438  1.00 24.40           O
ATOM    320  CB  CYS A 124      14.459  -1.080  -2.081  1.00 22.25           C
ATOM    321  SG  CYS A 124      13.025  -0.373  -2.965  1.00 23.91           S
ATOM    322  H   CYS A 124      12.701  -3.408  -2.361  1.00  0.00           H
ATOM    323  HA  CYS A 124      14.958  -2.617  -0.657  1.00  0.00           H
ATOM    324  HB2 CYS A 124      14.894  -0.302  -1.453  1.00  0.00           H
ATOM    325  HB3 CYS A 124      15.225  -1.350  -2.805  1.00  0.00           H
ATOM    326  HG  CYS A 124      12.493   0.220  -1.891  1.00  0.00           H
ATOM    327  N   TYR A 125      13.268  -1.277   0.834  1.00 21.36           N
ATOM    328  CA  TYR A 125      12.251  -0.494   1.529  1.00 22.40           C
ATOM    329  C   TYR A 125      12.066   0.789   0.706  1.00 21.88           C
ATOM    330  O   TYR A 125      13.053   1.350   0.225  1.00 20.40           O
ATOM    331  CB  TYR A 125      12.718  -0.092   2.940  1.00 21.32           C
ATOM    332  CG  TYR A 125      13.246  -1.209   3.820  1.00 22.30           C
ATOM    333  CD1 TYR A 125      12.373  -2.082   4.502  1.00 20.05           C
ATOM    334  CD2 TYR A 125      14.638  -1.354   3.975  1.00 18.10           C
ATOM    335  CE1 TYR A 125      12.899  -3.104   5.319  1.00 20.76           C
ATOM    336  CE2 TYR A 125      15.159  -2.372   4.787  1.00 18.47           C
ATOM    337  CZ  TYR A 125      14.291  -3.258   5.452  1.00 18.41           C
ATOM    338  OH  TYR A 125      14.801  -4.262   6.219  1.00 19.18           O
ATOM    339  H   TYR A 125      14.237  -0.983   0.945  1.00  0.00           H
ATOM    340  HA  TYR A 125      11.323  -1.045   1.591  1.00  0.00           H
ATOM    341  HB2 TYR A 125      13.498   0.658   2.862  1.00  0.00           H
ATOM    342  HB3 TYR A 125      11.900   0.403   3.467  1.00  0.00           H
ATOM    343  HD1 TYR A 125      11.303  -1.972   4.408  1.00  0.00           H
ATOM    344  HD2 TYR A 125      15.319  -0.679   3.478  1.00  0.00           H
ATOM    345  HE1 TYR A 125      12.233  -3.769   5.847  1.00  0.00           H
ATOM    346  HE2 TYR A 125      16.229  -2.454   4.885  1.00  0.00           H
ATOM    347  HH  TYR A 125      15.757  -4.263   6.193  1.00  0.00           H
ATOM    348  N   VAL A 126      10.825   1.244   0.532  1.00 22.88           N
ATOM    349  CA  VAL A 126      10.497   2.517  -0.089  1.00 20.05           C
ATOM    350  C   VAL A 126       9.730   3.354   0.936  1.00 20.90           C
ATOM    351  O   VAL A 126       8.845   2.860   1.642  1.00 19.39           O
ATOM    352  CB  VAL A 126       9.774   2.333  -1.448  1.00 21.97           C
ATOM    353  CG1 VAL A 126       8.367   1.726  -1.349  1.00 21.20           C
ATOM    354  CG2 VAL A 126       9.719   3.652  -2.239  1.00 17.14           C
ATOM    355  H   VAL A 126      10.056   0.743   0.978  1.00  0.00           H
ATOM    356  HA  VAL A 126      11.423   3.041  -0.312  1.00  0.00           H
ATOM    357  HB  VAL A 126      10.379   1.637  -2.031  1.00  0.00           H
ATOM    358 HG11 VAL A 126       7.953   1.550  -2.342  1.00  0.00           H
ATOM    359 HG12 VAL A 126       8.394   0.775  -0.822  1.00  0.00           H
ATOM    360 HG13 VAL A 126       7.674   2.385  -0.825  1.00  0.00           H
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ATOM    361 HG21 VAL A 126       9.299   3.502  -3.233  1.00  0.00          H
ATOM    362 HG22 VAL A 126       9.105   4.401  -1.738  1.00  0.00          H
ATOM    363 HG23 VAL A 126      10.716   4.075  -2.369  1.00  0.00          H
ATOM    364  N   THR A 127      10.084   4.632   1.007  1.00 20.50          N
ATOM    365  CA  THR A 127       9.525   5.602   1.917  1.00 20.93          C
ATOM    366  C   THR A 127       9.371   6.917   1.151  1.00 21.13          C
ATOM    367  O   THR A 127      10.360   7.612   0.939  1.00 23.81          O
ATOM    368  CB  THR A 127      10.444   5.672   3.163  1.00 22.06          C
ATOM    369  OG1 THR A 127      10.300   4.498   3.946  1.00 22.71          O
ATOM    370  CG2 THR A 127      10.158   6.848   4.094  1.00 19.49          C
ATOM    371  H   THR A 127      10.890   4.931   0.461  1.00  0.00          H
ATOM    372  HA  THR A 127       8.525   5.298   2.229  1.00  0.00          H
ATOM    373  HB  THR A 127      11.485   5.744   2.840  1.00  0.00          H
ATOM    374  HG1 THR A 127       9.362   4.324   4.040  1.00  0.00          H
ATOM    375 HG21 THR A 127      10.848   6.829   4.929  1.00  0.00          H
ATOM    376 HG22 THR A 127      10.330   7.792   3.584  1.00  0.00          H
ATOM    377 HG23 THR A 127       9.135   6.838   4.472  1.00  0.00          H
ATOM    378  N   LEU A 128       8.142   7.293   0.782  1.00 20.38          N
ATOM    379  CA  LEU A 128       7.823   8.667   0.408  1.00 18.73          C
ATOM    380  C   LEU A 128       7.540   9.403   1.717  1.00 18.52          C
ATOM    381  O   LEU A 128       6.765   8.911   2.539  1.00 17.90          O
ATOM    382  CB  LEU A 128       6.578   8.679  -0.498  1.00 18.41          C
ATOM    383  CG  LEU A 128       6.073  10.073  -0.941  1.00 18.76          C
ATOM    384  CD1 LEU A 128       7.184  11.020  -1.427  1.00 18.77          C
ATOM    385  CD2 LEU A 128       4.984   9.905  -2.004  1.00 14.06          C
ATOM    386  H   LEU A 128       7.358   6.717   1.075  1.00  0.00          H
ATOM    387  HA  LEU A 128       8.655   9.129  -0.108  1.00  0.00          H
ATOM    388  HB2 LEU A 128       6.807   8.088  -1.386  1.00  0.00          H
ATOM    389  HB3 LEU A 128       5.764   8.159   0.006  1.00  0.00          H
ATOM    390  HG  LEU A 128       5.608  10.563  -0.086  1.00  0.00          H
ATOM    391 HD11 LEU A 128       6.768  11.926  -1.868  1.00  0.00          H
ATOM    392 HD12 LEU A 128       7.815  11.356  -0.606  1.00  0.00          H
ATOM    393 HD13 LEU A 128       7.833  10.546  -2.162  1.00  0.00          H
ATOM    394 HD21 LEU A 128       4.628  10.864  -2.363  1.00  0.00          H
ATOM    395 HD22 LEU A 128       5.340   9.340  -2.866  1.00  0.00          H
ATOM    396 HD23 LEU A 128       4.128   9.379  -1.587  1.00  0.00          H
ATOM    397  N   VAL A 129       8.231  10.517   1.949  1.00 18.42          N
ATOM    398  CA  VAL A 129       8.248  11.214   3.220  1.00 18.44          C
ATOM    399  C   VAL A 129       8.457  12.718   3.009  1.00 18.85          C
ATOM    400  O   VAL A 129       9.031  13.137   2.003  1.00 19.12          O
ATOM    401  CB  VAL A 129       9.229  10.481   4.174  1.00 19.71          C
ATOM    402  CG1 VAL A 129      10.692  10.555   3.695  1.00 19.20          C
ATOM    403  CG2 VAL A 129       9.070  10.884   5.644  1.00 16.64          C
ATOM    404  H   VAL A 129       8.902  10.845   1.254  1.00  0.00          H
ATOM    405  HA  VAL A 129       7.257  11.129   3.646  1.00  0.00          H
ATOM    406  HB  VAL A 129       8.938   9.432   4.156  1.00  0.00          H
ATOM    407 HG11 VAL A 129      11.332   9.883   4.260  1.00  0.00          H
ATOM    408 HG12 VAL A 129      10.789  10.260   2.650  1.00  0.00          H
ATOM    409 HG13 VAL A 129      11.090  11.567   3.783  1.00  0.00          H
ATOM    410 HG21 VAL A 129       9.548  10.173   6.312  1.00  0.00          H
ATOM    411 HG22 VAL A 129       9.508  11.857   5.843  1.00  0.00          H
ATOM    412 HG23 VAL A 129       8.016  10.913   5.915  1.00  0.00          H
ATOM    413  N   ARG A 130       7.984  13.530   3.959  1.00 21.17          N
ATOM    414  CA  ARG A 130       8.316  14.945   4.083  1.00 21.51          C
ATOM    415  C   ARG A 130       9.523  15.073   5.027  1.00 21.74          C
ATOM    416  O   ARG A 130       9.673  14.277   5.954  1.00 18.71          O
ATOM    417  CB  ARG A 130       7.126  15.660   4.764  1.00 24.72          C
ATOM    418  CG  ARG A 130       5.889  15.728   3.861  1.00 26.46          C
ATOM    419  CD  ARG A 130       4.616  16.247   4.546  1.00 30.21          C
ATOM    420  NE  ARG A 130       3.885  15.142   5.185  1.00 33.85          N
ATOM    421  CZ  ARG A 130       2.564  14.928   5.282  1.00 35.23          C
ATOM    422  NH1 ARG A 130       1.669  15.808   4.831  1.00 35.12          N
ATOM    423  NH2 ARG A 130       2.142  13.811   5.865  1.00 31.29          N1+
ATOM    424  H   ARG A 130       7.452  13.118   4.715  1.00  0.00          H
ATOM    425  HA  ARG A 130       8.542  15.389   3.110  1.00  0.00          H
ATOM    426  HB2 ARG A 130       6.879  15.172   5.707  1.00  0.00          H
ATOM    427  HB3 ARG A 130       7.407  16.676   5.021  1.00  0.00          H
ATOM    428  HG2 ARG A 130       6.121  16.358   3.001  1.00  0.00          H
ATOM    429  HG3 ARG A 130       5.688  14.736   3.462  1.00  0.00          H
ATOM    430  HD2 ARG A 130       4.829  17.050   5.252  1.00  0.00          H
ATOM    431  HD3 ARG A 130       3.982  16.669   3.774  1.00  0.00          H
ATOM    432  HE  ARG A 130       4.509  14.327   5.426  1.00  0.00          H
ATOM    433 HH11 ARG A 130       1.955  16.649   4.316  1.00  0.00          H
ATOM    434 HH12 ARG A 130       0.702  15.500   4.690  1.00  0.00          H
ATOM    435 HH21 ARG A 130       2.824  13.178   6.346  1.00  0.00          H
ATOM    436 HH22 ARG A 130       1.177  13.472   5.863  1.00  0.00          H
ATOM    437  N   ASN A 131      10.327  16.137   4.897  1.00 21.83          N
ATOM    438  CA  ASN A 131      11.448  16.456   5.807  1.00 20.92          C
ATOM    439  C   ASN A 131      10.976  16.693   7.261  1.00 21.34          C
ATOM    440  O   ASN A 131      11.694  16.433   8.230  1.00 20.83          O
ATOM    441  CB  ASN A 131      12.267  17.670   5.304  1.00 24.29          C
ATOM    442  CG  ASN A 131      13.112  17.373   4.062  1.00 24.72          C
ATOM    443  OD1 ASN A 131      13.939  16.467   4.063  1.00 26.89          O
ATOM    444  ND2 ASN A 131      12.894  18.084   2.962  1.00 26.08          N
ATOM    445  H   ASN A 131      10.079  16.802   4.163  1.00  0.00          H
ATOM    446  HA  ASN A 131      12.098  15.585   5.829  1.00  0.00          H
ATOM    447  HB2 ASN A 131      11.618  18.528   5.128  1.00  0.00          H
ATOM    448  HB3 ASN A 131      12.974  17.983   6.075  1.00  0.00          H
ATOM    449 HD21 ASN A 131      12.161  18.808   2.918  1.00  0.00          H
ATOM    450 HD22 ASN A 131      13.532  17.999   2.168  1.00  0.00          H
ATOM    451  N   LYS A 132       9.704  17.088   7.396  1.00 21.47          N
ATOM    452  CA  LYS A 132       8.919  17.232   8.618  1.00 21.50          C
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ATOM    453  C   LYS A 132      8.670  15.881   9.311  1.00 20.13           C
ATOM    454  O   LYS A 132      8.572  15.816  10.535  1.00 20.64           O
ATOM    455  CB  LYS A 132      7.544  17.824   8.225  1.00 18.17           C
ATOM    456  CG  LYS A 132      7.606  19.235   7.613  1.00 -1.00          C
ATOM    457  CD  LYS A 132      7.594  19.235   6.081  1.00 -1.00          C
ATOM    458  CE  LYS A 132      7.858  20.609   5.459  1.00 -1.00          C
ATOM    459  NZ  LYS A 132      7.871  20.509   3.993  1.00 -1.00          N1+
ATOM    460  H   LYS A 132      9.218  17.243   6.527  1.00  0.00          H
ATOM    461  HA  LYS A 132      9.436  17.897   9.314  1.00  0.00          H
ATOM    462  HB2 LYS A 132      7.003  17.148   7.561  1.00  0.00          H
ATOM    463  HB3 LYS A 132      6.919  17.872   9.115  1.00  0.00          H
ATOM    464  HG2 LYS A 132      6.752  19.816   7.964  1.00 -1.00          H
ATOM    465  HG3 LYS A 132      8.495  19.745   7.983  1.00 -1.00          H
ATOM    466  HD2 LYS A 132      8.367  18.561   5.724  1.00 -1.00          H
ATOM    467  HD3 LYS A 132      6.637  18.845   5.727  1.00 -1.00          H
ATOM    468  HE2 LYS A 132      7.104  21.326   5.786  1.00 -1.00          H
ATOM    469  HE3 LYS A 132      8.828  20.988   5.785  1.00 -1.00          H
ATOM    470  HZ1 LYS A 132      6.975  20.672   3.550  1.00 -1.00          H
ATOM    471  HZ2 LYS A 132      8.522  21.181   3.571  1.00 -1.00          H
ATOM    472  HZ3 LYS A 132      8.224  19.601   3.701  1.00 -1.00          H
ATOM    473  N   GLU A 133      8.575  14.792   8.539  1.00 20.07           N
ATOM    474  CA  GLU A 133      8.204  13.465   9.011  1.00 17.67           C
ATOM    475  C   GLU A 133      9.434  12.594   9.295  1.00 18.46           C
ATOM    476  O   GLU A 133      9.244  11.457   9.719  1.00 15.28           O
ATOM    477  CB  GLU A 133      7.312  12.787   7.958  1.00 17.59           C
ATOM    478  CG  GLU A 133      5.830  13.119   8.188  1.00 20.24           C
ATOM    479  CD  GLU A 133      4.971  12.795   6.986  1.00 23.42           C
ATOM    480  OE1 GLU A 133      3.836  12.307   7.155  1.00 24.54           O
ATOM    481  OE2 GLU A 133      5.373  13.115   5.848  1.00 22.56           O1-
ATOM    482  H   GLU A 133      8.779  14.874   7.547  1.00  0.00          H
ATOM    483  HA  GLU A 133      7.647  13.522   9.946  1.00  0.00          H
ATOM    484  HB2 GLU A 133      7.631  13.067   6.955  1.00  0.00          H
ATOM    485  HB3 GLU A 133      7.401  11.703   8.002  1.00  0.00          H
ATOM    486  HG2 GLU A 133      5.451  12.591   9.063  1.00  0.00          H
ATOM    487  HG3 GLU A 133      5.715  14.182   8.393  1.00  0.00          H
ATOM    488  N   LEU A 134     10.671  13.119   9.205  1.00 18.65           N
ATOM    489  CA  LEU A 134     11.896  12.484   9.732  1.00 19.98           C
ATOM    490  C   LEU A 134     11.695  12.057  11.192  1.00 18.99           C
ATOM    491  O   LEU A 134     11.912  10.912  11.575  1.00 19.26           O
ATOM    492  CB  LEU A 134     13.092  13.464   9.641  1.00 19.11           C
ATOM    493  CG  LEU A 134     14.427  12.973  10.258  1.00 23.22           C
ATOM    494  CD1 LEU A 134     15.001  11.755   9.517  1.00 21.36           C
ATOM    495  CD2 LEU A 134     15.439  14.125  10.338  1.00 21.65           C
ATOM    496  H   LEU A 134     10.747  14.041   8.798  1.00  0.00          H
ATOM    497  HA  LEU A 134     12.103  11.599   9.129  1.00  0.00          H
ATOM    498  HB2 LEU A 134     13.255  13.746   8.608  1.00  0.00          H
ATOM    499  HB3 LEU A 134     12.824  14.396  10.132  1.00  0.00          H
ATOM    500  HG  LEU A 134     14.267  12.666  11.290  1.00  0.00          H
ATOM    501 HD11 LEU A 134     15.928  11.410   9.975  1.00  0.00          H
ATOM    502 HD12 LEU A 134     14.312  10.911   9.528  1.00  0.00          H
ATOM    503 HD13 LEU A 134     15.219  11.987   8.478  1.00  0.00          H
ATOM    504 HD21 LEU A 134     16.450  13.772  10.527  1.00  0.00          H
ATOM    505 HD22 LEU A 134     15.450  14.720   9.424  1.00  0.00          H
ATOM    506 HD23 LEU A 134     15.210  14.802  11.155  1.00  0.00          H
ATOM    507  N   LYS A 135     11.180  13.014  11.963  1.00 17.87           N
ATOM    508  CA  LYS A 135     10.919  12.997  13.387  1.00 18.77           C
ATOM    509  C   LYS A 135      9.857  11.955  13.804  1.00 18.88           C
ATOM    510  O   LYS A 135      9.750  11.636  14.989  1.00 18.40           O
ATOM    511  CB  LYS A 135     10.506  14.435  13.770  1.00 18.36           C
ATOM    512  CG  LYS A 135     11.578  15.510  13.470  1.00 19.77           C
ATOM    513  CD  LYS A 135     11.532  16.194  12.081  1.00 16.28           C
ATOM    514  CE  LYS A 135     12.890  16.851  11.759  1.00 18.85           C
ATOM    515  NZ  LYS A 135     12.977  17.506  10.442  1.00 18.17           N1+
ATOM    516  H   LYS A 135     10.960  13.879  11.496  1.00  0.00          H
ATOM    517  HA  LYS A 135     11.845  12.740  13.900  1.00  0.00          H
ATOM    518  HB2 LYS A 135      9.580  14.720  13.285  1.00  0.00          H
ATOM    519  HB3 LYS A 135     10.297  14.443  14.841  1.00  0.00          H
ATOM    520  HG2 LYS A 135     11.463  16.302  14.207  1.00  0.00          H
ATOM    521  HG3 LYS A 135     12.565  15.083  13.658  1.00  0.00          H
ATOM    522  HD2 LYS A 135     11.271  15.494  11.293  1.00  0.00          H
ATOM    523  HD3 LYS A 135     10.738  16.943  12.076  1.00  0.00          H
ATOM    524  HE2 LYS A 135     13.122  17.593  12.518  1.00  0.00          H
ATOM    525  HE3 LYS A 135     13.678  16.107  11.817  1.00  0.00          H
ATOM    526  HZ1 LYS A 135     13.978  17.677  10.246  1.00  0.00          H
ATOM    527  HZ2 LYS A 135     12.599  16.967   9.671  1.00  0.00          H
ATOM    528  HZ3 LYS A 135     12.501  18.408  10.479  1.00  0.00          H
ATOM    529  N   GLY A 136      9.130  11.376  12.841  1.00 19.43           N
ATOM    530  CA  GLY A 136      8.203  10.265  13.010  1.00 17.22           C
ATOM    531  C   GLY A 136      8.707   9.006  12.294  1.00 19.59           C
ATOM    532  O   GLY A 136      8.512   7.896  12.784  1.00 18.34           O
ATOM    533  H   GLY A 136      9.289  11.703  11.898  1.00  0.00          H
ATOM    534  HA2 GLY A 136      8.011  10.040  14.062  1.00  0.00          H
ATOM    535  HA3 GLY A 136      7.250  10.552  12.569  1.00  0.00          H
ATOM    536  N   LEU A 137      9.393   9.143  11.152  1.00 18.36           N
ATOM    537  CA  LEU A 137     10.005   8.061  10.379  1.00 21.19           C
ATOM    538  C   LEU A 137     11.110   7.334  11.150  1.00 22.14           C
ATOM    539  O   LEU A 137     11.295   6.132  10.970  1.00 24.02           O
ATOM    540  CB  LEU A 137     10.569   8.634   9.063  1.00 21.04           C
ATOM    541  CG  LEU A 137     11.166   7.596   8.090  1.00 21.35           C
ATOM    542  CD1 LEU A 137     10.095   6.647   7.525  1.00 23.22           C
ATOM    543  CD2 LEU A 137     11.950   8.307   6.986  1.00 20.28           C
ATOM    544  H   LEU A 137      9.475  10.076  10.751  1.00  0.00          H
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ATOM    545  HA  LEU A 137       9.238   7.322  10.176  1.00  0.00           H
ATOM    546  HB2 LEU A 137       9.797   9.193   8.539  1.00  0.00           H
ATOM    547  HB3 LEU A 137      11.340   9.364   9.312  1.00  0.00           H
ATOM    548  HG  LEU A 137      11.898   6.986   8.613  1.00  0.00           H
ATOM    549 HD11 LEU A 137      10.548   5.872   6.905  1.00  0.00           H
ATOM    550 HD12 LEU A 137       9.553   6.126   8.310  1.00  0.00           H
ATOM    551 HD13 LEU A 137       9.362   7.184   6.922  1.00  0.00           H
ATOM    552 HD21 LEU A 137      12.464   7.594   6.352  1.00  0.00           H
ATOM    553 HD22 LEU A 137      11.299   8.894   6.345  1.00  0.00           H
ATOM    554 HD23 LEU A 137      12.712   8.970   7.398  1.00  0.00           H
ATOM    555  N   LEU A 138     11.813   8.035  12.042  1.00 21.78           N
ATOM    556  CA  LEU A 138     12.805   7.452  12.934  1.00 22.46           C
ATOM    557  C   LEU A 138     12.222   6.360  13.857  1.00 21.43           C
ATOM    558  O   LEU A 138     12.958   5.431  14.182  1.00 22.46           O
ATOM    559  CB  LEU A 138     13.509   8.572  13.720  1.00 19.96           C
ATOM    560  CG  LEU A 138     14.446   9.446  12.850  1.00 22.18           C
ATOM    561 CD1 LEU A 138     14.664  10.818  13.499  1.00 21.53           C
ATOM    562 CD2 LEU A 138     15.791   8.769  12.557  1.00 21.97           C
ATOM    563  H   LEU A 138     11.675   9.043  12.067  1.00  0.00           H
ATOM    564  HA  LEU A 138     13.544   6.950  12.309  1.00  0.00           H
ATOM    565  HB2 LEU A 138     12.744   9.198  14.183  1.00  0.00           H
ATOM    566  HB3 LEU A 138     14.074   8.148  14.549  1.00  0.00           H
ATOM    567  HG  LEU A 138     13.980   9.620  11.882  1.00  0.00           H
ATOM    568 HD11 LEU A 138     15.409  11.409  12.965  1.00  0.00           H
ATOM    569 HD12 LEU A 138     13.740  11.395  13.515  1.00  0.00           H
ATOM    570 HD13 LEU A 138     14.987  10.718  14.533  1.00  0.00           H
ATOM    571 HD21 LEU A 138     16.387   9.374  11.872  1.00  0.00           H
ATOM    572 HD22 LEU A 138     16.366   8.649  13.470  1.00  0.00           H
ATOM    573 HD23 LEU A 138     15.661   7.793  12.090  1.00  0.00           H
ATOM    574  N   SER A 139     10.911   6.393  14.166  1.00 20.82           N
ATOM    575  CA  SER A 139     10.182   5.309  14.836  1.00 20.60           C
ATOM    576  C   SER A 139     10.112   4.079  13.922  1.00 21.37           C
ATOM    577  O   SER A 139     10.449   2.973  14.348  1.00 21.68           O
ATOM    578  CB  SER A 139      8.742   5.765  15.203  1.00 19.65           C
ATOM    579  OG  SER A 139      7.984   4.771  15.891  1.00 22.99           O
ATOM    580  H   SER A 139     10.364   7.169  13.818  1.00  0.00           H
ATOM    581  HA  SER A 139     10.727   5.039  15.743  1.00  0.00           H
ATOM    582  HB2 SER A 139      8.777   6.669  15.814  1.00  0.00           H
ATOM    583  HB3 SER A 139      8.177   6.018  14.308  1.00  0.00           H
ATOM    584  HG  SER A 139      7.778   4.071  15.266  1.00  0.00           H
ATOM    585  N   SER A 140      9.719   4.286  12.655  1.00 20.33           N
ATOM    586  CA  SER A 140      9.570   3.249  11.645  1.00 20.38           C
ATOM    587  C   SER A 140     10.922   2.565  11.400  1.00 20.79           C
ATOM    588  O   SER A 140     11.004   1.340  11.467  1.00 19.68           O
ATOM    589  CB  SER A 140      9.052   3.874  10.332  1.00 18.81           C
ATOM    590  OG  SER A 140      8.010   4.820  10.536  1.00 20.17           O
ATOM    591  H   SER A 140      9.481   5.219  12.353  1.00  0.00           H
ATOM    592  HA  SER A 140      8.855   2.513  12.015  1.00  0.00           H
ATOM    593  HB2 SER A 140      9.851   4.353   9.766  1.00  0.00           H
ATOM    594  HB3 SER A 140      8.673   3.074   9.694  1.00  0.00           H
ATOM    595  HG  SER A 140      7.534   4.864   9.701  1.00  0.00           H
ATOM    596  N   ILE A 141     11.984   3.363  11.199  1.00 20.52           N
ATOM    597  CA  ILE A 141     13.355   2.901  11.021  1.00 22.74           C
ATOM    598  C   ILE A 141     13.836   2.114  12.250  1.00 22.91           C
ATOM    599  O   ILE A 141     14.180   0.949  12.085  1.00 25.89           O
ATOM    600  CB  ILE A 141     14.314   4.063  10.639  1.00 21.78           C
ATOM    601 CG1 ILE A 141     13.915   4.729   9.298  1.00 21.69           C
ATOM    602 CG2 ILE A 141     15.773   3.565  10.549  1.00 19.44           C
ATOM    603 CD1 ILE A 141     14.565   6.103   9.064  1.00 20.88           C
ATOM    604  H   ILE A 141     11.816   4.367  11.183  1.00  0.00           H
ATOM    605  HA  ILE A 141     13.351   2.195  10.191  1.00  0.00           H
ATOM    606  HB  ILE A 141     14.259   4.818  11.424  1.00  0.00           H
ATOM    607 HG12 ILE A 141     14.165   4.066   8.468  1.00  0.00           H
ATOM    608 HG13 ILE A 141     12.835   4.859   9.241  1.00  0.00           H
ATOM    609 HG21 ILE A 141     16.442   4.329  10.167  1.00  0.00           H
ATOM    610 HG22 ILE A 141     16.172   3.258  11.516  1.00  0.00           H
ATOM    611 HG23 ILE A 141     15.849   2.704   9.885  1.00  0.00           H
ATOM    612 HD11 ILE A 141     14.234   6.523   8.114  1.00  0.00           H
ATOM    613 HD12 ILE A 141     14.295   6.811   9.848  1.00  0.00           H
ATOM    614 HD13 ILE A 141     15.652   6.046   9.016  1.00  0.00           H
ATOM    615  N   LYS A 142     13.844   2.709  13.459  1.00 22.93           N
ATOM    616  CA  LYS A 142     14.363   2.064  14.674  1.00 24.30           C
ATOM    617  C   LYS A 142     13.660   0.737  15.025  1.00 23.46           C
ATOM    618  O   LYS A 142     14.306  -0.151  15.584  1.00 20.35           O
ATOM    619  CB  LYS A 142     14.359   3.023  15.896  1.00 26.67           C
ATOM    620  CG  LYS A 142     15.706   3.725  16.190  1.00 31.03           C
ATOM    621  CD  LYS A 142     15.958   5.041  15.431  1.00 35.34           C
ATOM    622  CE  LYS A 142     17.322   5.665  15.802  1.00 39.87           C
ATOM    623  NZ  LYS A 142     17.523   6.992  15.198  1.00 41.29          N1+
ATOM    624  H   LYS A 142     13.459   3.644  13.552  1.00  0.00           H
ATOM    625  HA  LYS A 142     15.395   1.784  14.456  1.00  0.00           H
ATOM    626  HB2 LYS A 142     13.531   3.728  15.858  1.00  0.00           H
ATOM    627  HB3 LYS A 142     14.144   2.434  16.790  1.00  0.00           H
ATOM    628  HG2 LYS A 142     15.730   3.951  17.257  1.00  0.00           H
ATOM    629  HG3 LYS A 142     16.529   3.028  16.024  1.00  0.00           H
ATOM    630  HD2 LYS A 142     15.900   4.860  14.357  1.00  0.00           H
ATOM    631  HD3 LYS A 142     15.157   5.743  15.671  1.00  0.00           H
ATOM    632  HE2 LYS A 142     17.404   5.776  16.884  1.00  0.00           H
ATOM    633  HE3 LYS A 142     18.133   5.005  15.494  1.00  0.00           H
ATOM    634  HZ1 LYS A 142     18.482   7.312  15.282  1.00  0.00           H
ATOM    635  HZ2 LYS A 142     17.296   7.001  14.219  1.00  0.00           H
ATOM    636  HZ3 LYS A 142     16.915   7.682  15.670  1.00  0.00           H
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ATOM    637  N   TYR A 143      12.377   0.580  14.675  1.00 22.06           N
ATOM    638  CA  TYR A 143      11.679  -0.695  14.788  1.00 22.59           C
ATOM    639  C   TYR A 143      12.101  -1.661  13.660  1.00 21.72           C
ATOM    640  O   TYR A 143      12.667  -2.709  13.970  1.00 22.10           O
ATOM    641  CB  TYR A 143      10.145  -0.486  14.821  1.00 20.02           C
ATOM    642  CG  TYR A 143       9.526  -0.625  16.207  1.00 21.94           C
ATOM    643  CD1 TYR A 143       9.750  -1.805  16.944  1.00 23.77           C
ATOM    644  CD2 TYR A 143       8.699   0.379  16.760  1.00 22.49           C
ATOM    645  CE1 TYR A 143       9.111  -2.015  18.176  1.00 22.37           C
ATOM    646  CE2 TYR A 143       8.037   0.155  17.989  1.00 23.21           C
ATOM    647  CZ  TYR A 143       8.222  -1.057  18.687  1.00 22.87           C
ATOM    648  OH  TYR A 143       7.540  -1.323  19.840  1.00 21.97           O
ATOM    649  H   TYR A 143      11.884   1.367  14.267  1.00  0.00           H
ATOM    650  HA  TYR A 143      11.991  -1.166  15.722  1.00  0.00           H
ATOM    651  HB2 TYR A 143       9.866   0.469  14.376  1.00  0.00           H
ATOM    652  HB3 TYR A 143       9.650  -1.236  14.204  1.00  0.00           H
ATOM    653  HD1 TYR A 143      10.383  -2.588  16.558  1.00  0.00           H
ATOM    654  HD2 TYR A 143       8.545   1.310  16.233  1.00  0.00           H
ATOM    655  HE1 TYR A 143       9.281  -2.937  18.713  1.00  0.00           H
ATOM    656  HE2 TYR A 143       7.377   0.907  18.396  1.00  0.00           H
ATOM    657  HH  TYR A 143       7.747  -2.230  20.164  1.00  0.00           H
ATOM    658  N   VAL A 144      11.893  -1.314  12.375  1.00 22.79           N
ATOM    659  CA  VAL A 144      12.212  -2.135  11.186  1.00 22.01           C
ATOM    660  C   VAL A 144      13.667  -2.647  11.174  1.00 23.35           C
ATOM    661  O   VAL A 144      13.929  -3.791  10.801  1.00 21.03           O
ATOM    662  CB  VAL A 144      11.844  -1.352   9.888  1.00 21.23           C
ATOM    663  CG1 VAL A 144      12.343  -1.993   8.575  1.00 23.80           C
ATOM    664  CG2 VAL A 144      10.329  -1.098   9.753  1.00 17.15           C
ATOM    665  H   VAL A 144      11.528  -0.385  12.183  1.00  0.00           H
ATOM    666  HA  VAL A 144      11.594  -3.031  11.236  1.00  0.00           H
ATOM    667  HB  VAL A 144      12.337  -0.382   9.963  1.00  0.00           H
ATOM    668 HG11 VAL A 144      12.005  -1.426   7.706  1.00  0.00           H
ATOM    669 HG12 VAL A 144      13.431  -2.027   8.511  1.00  0.00           H
ATOM    670 HG13 VAL A 144      11.975  -3.014   8.460  1.00  0.00           H
ATOM    671 HG21 VAL A 144      10.139  -0.289   9.049  1.00  0.00           H
ATOM    672 HG22 VAL A 144       9.812  -1.976   9.367  1.00  0.00           H
ATOM    673 HG23 VAL A 144       9.857  -0.826  10.697  1.00  0.00           H
ATOM    674  N   GLU A 145      14.601  -1.813  11.641  1.00 23.20           N
ATOM    675  CA  GLU A 145      16.027  -2.088  11.713  1.00 23.64           C
ATOM    676  C   GLU A 145      16.361  -3.341  12.522  1.00 24.71           C
ATOM    677  O   GLU A 145      17.199  -4.150  12.130  1.00 23.64           O
ATOM    678  CB  GLU A 145      16.722  -0.870  12.345  1.00 25.26           C
ATOM    679  CG  GLU A 145      17.405  -0.021  11.271  1.00 25.70           C
ATOM    680  CD  GLU A 145      18.696  -0.674  10.801  1.00 24.54           C
ATOM    681  OE1 GLU A 145      19.458  -1.148  11.668  1.00 27.65           O
ATOM    682  OE2 GLU A 145      18.940  -0.711   9.582  1.00 28.24           O1-
ATOM    683  H   GLU A 145      14.305  -0.869  11.881  1.00  0.00           H
ATOM    684  HA  GLU A 145      16.367  -2.232  10.695  1.00  0.00           H
ATOM    685  HB2 GLU A 145      16.038  -0.273  12.941  1.00  0.00           H
ATOM    686  HB3 GLU A 145      17.461  -1.177  13.085  1.00  0.00           H
ATOM    687  HG2 GLU A 145      16.740   0.148  10.422  1.00  0.00           H
ATOM    688  HG3 GLU A 145      17.627   0.957  11.676  1.00  0.00           H
ATOM    689  N   ASN A 146      15.716  -3.470  13.678  1.00 25.05           N
ATOM    690  CA  ASN A 146      16.035  -4.502  14.656  1.00 28.02           C
ATOM    691  C   ASN A 146      15.020  -5.643  14.532  1.00 26.91           C
ATOM    692  O   ASN A 146      15.393  -6.800  14.709  1.00 26.71           O
ATOM    693  CB  ASN A 146      16.012  -3.883  16.071  1.00 31.59           C
ATOM    694  CG  ASN A 146      17.016  -2.728  16.222  1.00 35.43           C
ATOM    695  OD1 ASN A 146      18.207  -2.858  15.937  1.00 38.91           O
ATOM    696  ND2 ASN A 146      16.552  -1.537  16.577  1.00 38.29           N
ATOM    697  H   ASN A 146      14.970  -2.815  13.874  1.00  0.00           H
ATOM    698  HA  ASN A 146      17.029  -4.921  14.481  1.00  0.00           H
ATOM    699  HB2 ASN A 146      15.006  -3.542  16.320  1.00  0.00           H
ATOM    700  HB3 ASN A 146      16.265  -4.649  16.806  1.00  0.00           H
ATOM    701 HD21 ASN A 146      15.550  -1.355  16.609  1.00  0.00           H
ATOM    702 HD22 ASN A 146      17.186  -0.770  16.705  1.00  0.00           H
ATOM    703  N   LYS A 147      13.770  -5.341  14.142  1.00 25.17           N
ATOM    704  CA  LYS A 147      12.714  -6.326  13.921  1.00 25.56           C
ATOM    705  C   LYS A 147      12.923  -7.137  12.630  1.00 23.80           C
ATOM    706  O   LYS A 147      12.398  -8.249  12.547  1.00 24.25           O
ATOM    707  CB  LYS A 147      11.342  -5.615  13.860  1.00 26.51           C
ATOM    708  CG  LYS A 147      10.893  -5.044  15.222  1.00 27.65           C
ATOM    709  CD  LYS A 147      10.327  -6.125  16.154  1.00 29.92           C
ATOM    710  CE  LYS A 147      10.188  -5.718  17.626  1.00 29.66           C
ATOM    711  NZ  LYS A 147       9.870  -6.867  18.487  1.00 34.14           N1+
ATOM    712  H   LYS A 147      13.517  -4.365  14.015  1.00  0.00           H
ATOM    713  HA  LYS A 147      12.728  -7.037  14.748  1.00  0.00           H
ATOM    714  HB2 LYS A 147      11.378  -4.818  13.117  1.00  0.00           H
ATOM    715  HB3 LYS A 147      10.573  -6.303  13.503  1.00  0.00           H
ATOM    716  HG2 LYS A 147      11.724  -4.530  15.706  1.00  0.00           H
ATOM    717  HG3 LYS A 147      10.129  -4.288  15.050  1.00  0.00           H
ATOM    718  HD2 LYS A 147       9.357  -6.437  15.778  1.00  0.00           H
ATOM    719  HD3 LYS A 147      10.978  -6.990  16.109  1.00  0.00           H
ATOM    720  HE2 LYS A 147      11.113  -5.274  17.992  1.00  0.00           H
ATOM    721  HE3 LYS A 147       9.402  -4.973  17.745  1.00  0.00           H
ATOM    722  HZ1 LYS A 147       9.807  -6.471  19.444  1.00  0.00           H
ATOM    723  HZ2 LYS A 147       8.937  -7.213  18.301  1.00  0.00           H
ATOM    724  HZ3 LYS A 147      10.573  -7.611  18.412  1.00  0.00           H
ATOM    725  N   ILE A 148      13.718  -6.637  11.668  1.00 24.02           N
ATOM    726  CA  ILE A 148      14.155  -7.375  10.484  1.00 21.98           C
ATOM    727  C   ILE A 148      15.584  -7.047  10.012  1.00 23.64           C
ATOM    728  O   ILE A 148      16.381  -7.974   9.879  1.00 24.28           O
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ATOM    729  CB  ILE A 148      13.078  -7.430   9.369  1.00 21.36           C
ATOM    730  CG1 ILE A 148      13.531  -8.312   8.179  1.00 23.00           C
ATOM    731  CG2 ILE A 148      12.634  -6.031   8.903  1.00 19.78           C
ATOM    732  CD1 ILE A 148      12.402  -9.091   7.497  1.00 19.41           C
ATOM    733  H   ILE A 148      14.076  -5.697  11.783  1.00  0.00           H
ATOM    734  HA  ILE A 148      14.247  -8.411  10.813  1.00  0.00           H
ATOM    735  HB  ILE A 148      12.206  -7.909   9.810  1.00  0.00           H
ATOM    736 HG12 ILE A 148      14.076  -7.713   7.446  1.00  0.00           H
ATOM    737 HG13 ILE A 148      14.237  -9.060   8.535  1.00  0.00           H
ATOM    738 HG21 ILE A 148      11.896  -6.098   8.113  1.00  0.00           H
ATOM    739 HG22 ILE A 148      12.181  -5.463   9.715  1.00  0.00           H
ATOM    740 HG23 ILE A 148      13.464  -5.448   8.503  1.00  0.00           H
ATOM    741 HD11 ILE A 148      12.782  -9.651   6.643  1.00  0.00           H
ATOM    742 HD12 ILE A 148      11.962  -9.812   8.184  1.00  0.00           H
ATOM    743 HD13 ILE A 148      11.609  -8.441   7.143  1.00  0.00           H
ATOM    744  N   ASN A 149      15.901  -5.778   9.708  1.00 22.03           N
ATOM    745  CA  ASN A 149      17.017  -5.381   8.819  1.00 24.97           C
ATOM    746  C   ASN A 149      18.400  -5.937   9.206  1.00 27.08           C
ATOM    747  O   ASN A 149      19.139  -6.404   8.345  1.00 26.94           O
ATOM    748  CB  ASN A 149      17.085  -3.843   8.688  1.00 24.58           C
ATOM    749  CG  ASN A 149      17.762  -3.346   7.408  1.00 26.06           C
ATOM    750  OD1 ASN A 149      17.559  -3.910   6.333  1.00 24.50           O
ATOM    751  ND2 ASN A 149      18.550  -2.284   7.491  1.00 25.60           N
ATOM    752  H   ASN A 149      15.189  -5.078   9.887  1.00  0.00           H
ATOM    753  HA  ASN A 149      16.763  -5.809   7.847  1.00  0.00           H
ATOM    754  HB2 ASN A 149      16.083  -3.413   8.704  1.00  0.00           H
ATOM    755  HB3 ASN A 149      17.638  -3.437   9.534  1.00  0.00           H
ATOM    756 HD21 ASN A 149      18.692  -1.757   8.375  1.00  0.00           H
ATOM    757 HD22 ASN A 149      18.982  -1.892   6.652  1.00  0.00           H
ATOM    758  N   LYS A 150      18.735  -5.951  10.502  1.00 30.35           N
ATOM    759  CA  LYS A 150      20.005  -6.485  11.004  1.00 31.86           C
ATOM    760  C   LYS A 150      20.080  -8.025  10.983  1.00 30.69           C
ATOM    761  O   LYS A 150      21.164  -8.578  11.161  1.00 31.66           O
ATOM    762  CB  LYS A 150      20.204  -6.019  12.459  1.00 34.31           C
ATOM    763  CG  LYS A 150      20.578  -4.535  12.574  1.00 37.03           C
ATOM    764  CD  LYS A 150      20.904  -4.157  14.025  1.00 39.82           C
ATOM    765  CE  LYS A 150      21.221  -2.670  14.208  1.00 41.88           C
ATOM    766  NZ  LYS A 150      20.021  -1.844  14.033  1.00 43.28           N1+
ATOM    767  H   LYS A 150      18.107  -5.488  11.153  1.00  0.00           H
ATOM    768  HA  LYS A 150      20.825  -6.114  10.385  1.00  0.00           H
ATOM    769  HB2 LYS A 150      19.309  -6.233  13.046  1.00  0.00           H
ATOM    770  HB3 LYS A 150      21.007  -6.600  12.917  1.00  0.00           H
ATOM    771  HG2 LYS A 150      21.441  -4.324  11.940  1.00  0.00           H
ATOM    772  HG3 LYS A 150      19.768  -3.918  12.184  1.00  0.00           H
ATOM    773  HD2 LYS A 150      20.081  -4.448  14.681  1.00  0.00           H
ATOM    774  HD3 LYS A 150      21.766  -4.741  14.351  1.00  0.00           H
ATOM    775  HE2 LYS A 150      21.600  -2.508  15.218  1.00  0.00           H
ATOM    776  HE3 LYS A 150      22.003  -2.346  13.520  1.00  0.00           H
ATOM    777  HZ1 LYS A 150      20.189  -0.899  14.325  1.00  0.00           H
ATOM    778  HZ2 LYS A 150      19.784  -1.753  13.021  1.00  0.00           H
ATOM    779  HZ3 LYS A 150      19.237  -2.242  14.541  1.00  0.00           H
ATOM    780  N   LYS A 151      18.950  -8.716  10.794  1.00 29.61           N
ATOM    781  CA  LYS A 151      18.880 -10.167  10.640  1.00 28.95           C
ATOM    782  C   LYS A 151      18.801 -10.504   9.137  1.00 28.12           C
ATOM    783  O   LYS A 151      19.462 -11.436   8.685  1.00 26.36           O
ATOM    784  CB  LYS A 151      17.605 -10.692  11.349  1.00 30.41           C
ATOM    785  CG  LYS A 151      17.549 -10.367  12.862  1.00 32.64           C
ATOM    786  CD  LYS A 151      16.261 -10.823  13.583  1.00 35.44           C
ATOM    787  CE  LYS A 151      15.017 -10.040  13.133  1.00 35.31           C
ATOM    788  NZ  LYS A 151      13.809 -10.355  13.909  1.00 36.53           N1+
ATOM    789  H   LYS A 151      18.109  -8.187  10.589  1.00  0.00           H
ATOM    790  HA  LYS A 151      19.759 -10.656  11.064  1.00  0.00           H
ATOM    791  HB2 LYS A 151      16.720 -10.299  10.851  1.00  0.00           H
ATOM    792  HB3 LYS A 151      17.555 -11.775  11.218  1.00  0.00           H
ATOM    793  HG2 LYS A 151      18.408 -10.834  13.346  1.00  0.00           H
ATOM    794  HG3 LYS A 151      17.671  -9.295  13.021  1.00  0.00           H
ATOM    795  HD2 LYS A 151      16.109 -11.893  13.435  1.00  0.00           H
ATOM    796  HD3 LYS A 151      16.399 -10.678  14.656  1.00  0.00           H
ATOM    797  HE2 LYS A 151      15.197  -8.967  13.193  1.00  0.00           H
ATOM    798  HE3 LYS A 151      14.800 -10.270  12.090  1.00  0.00           H
ATOM    799  HZ1 LYS A 151      13.023 -10.000  13.379  1.00  0.00           H
ATOM    800  HZ2 LYS A 151      13.680 -11.355  14.056  1.00  0.00           H
ATOM    801  HZ3 LYS A 151      13.763  -9.876  14.827  1.00  0.00           H
ATOM    802  N   PHE A 152      18.010  -9.745   8.363  1.00 26.10           N
ATOM    803  CA  PHE A 152      17.735  -9.966   6.942  1.00 27.49           C
ATOM    804  C   PHE A 152      17.748  -8.609   6.212  1.00 27.68           C
ATOM    805  O   PHE A 152      16.707  -7.950   6.172  1.00 27.95           O
ATOM    806  CB  PHE A 152      16.407 -10.740   6.773  1.00 28.65           C
ATOM    807  CG  PHE A 152      16.332 -12.051   7.540  1.00 30.27           C
ATOM    808  CD1 PHE A 152      17.038 -13.185   7.088  1.00 29.39           C
ATOM    809  CD2 PHE A 152      15.609 -12.116   8.750  1.00 29.26           C
ATOM    810  CE1 PHE A 152      17.016 -14.378   7.834  1.00 29.40           C
ATOM    811  CE2 PHE A 152      15.618 -13.299   9.510  1.00 30.84           C
ATOM    812  CZ  PHE A 152      16.308 -14.435   9.049  1.00 29.38           C
ATOM    813  H   PHE A 152      17.507  -8.982   8.806  1.00  0.00           H
ATOM    814  HA  PHE A 152      18.509 -10.603   6.516  1.00  0.00           H
ATOM    815  HB2 PHE A 152      15.566 -10.115   7.068  1.00  0.00           H
ATOM    816  HB3 PHE A 152      16.251 -10.943   5.714  1.00  0.00           H
ATOM    817  HD1 PHE A 152      17.618 -13.135   6.177  1.00  0.00           H
ATOM    818  HD2 PHE A 152      15.071 -11.253   9.113  1.00  0.00           H
ATOM    819  HE1 PHE A 152      17.565 -15.242   7.488  1.00  0.00           H
ATOM    820  HE2 PHE A 152      15.096 -13.335  10.452  1.00  0.00           H
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ATOM    821  HZ  PHE A 152      16.302 -15.344   9.635  1.00  0.00           H
ATOM    822  N   PRO A 153      18.903  -8.147   5.680  1.00 27.92           N
ATOM    823  CA  PRO A 153      19.058  -6.771   5.188  1.00 26.86           C
ATOM    824  C   PRO A 153      18.484  -6.518   3.784  1.00 25.61           C
ATOM    825  O   PRO A 153      18.484  -7.412   2.926  1.00 23.81           O
ATOM    826  CB  PRO A 153      20.575  -6.529   5.203  1.00 28.24           C
ATOM    827  CG  PRO A 153      21.186  -7.907   5.004  1.00 29.29           C
ATOM    828  CD  PRO A 153      20.188  -8.853   5.675  1.00 28.25           C
ATOM    829  HA  PRO A 153      18.578  -6.091   5.887  1.00  0.00           H
ATOM    830  HB2 PRO A 153      20.915  -5.805   4.461  1.00  0.00           H
ATOM    831  HB3 PRO A 153      20.862  -6.142   6.183  1.00  0.00           H
ATOM    832  HG2 PRO A 153      21.246  -8.128   3.938  1.00  0.00           H
ATOM    833  HG3 PRO A 153      22.191  -7.990   5.421  1.00  0.00           H
ATOM    834  HD2 PRO A 153      20.134  -9.806   5.147  1.00  0.00           H
ATOM    835  HD3 PRO A 153      20.489  -9.049   6.707  1.00  0.00           H
ATOM    836  N   TYR A 154      18.066  -5.262   3.566  1.00 23.90           N
ATOM    837  CA  TYR A 154      17.635  -4.642   2.308  1.00 25.51           C
ATOM    838  C   TYR A 154      18.064  -3.159   2.266  1.00 24.53           C
ATOM    839  O   TYR A 154      18.272  -2.576   3.334  1.00 23.72           O
ATOM    840  CB  TYR A 154      16.116  -4.835   2.086  1.00 24.29           C
ATOM    841  CG  TYR A 154      15.751  -6.218   1.585  1.00 25.02           C
ATOM    842  CD1 TYR A 154      16.057  -6.580   0.257  1.00 24.50           C
ATOM    843  CD2 TYR A 154      15.164  -7.160   2.454  1.00 23.16           C
ATOM    844  CE1 TYR A 154      15.822  -7.889  -0.192  1.00 26.82           C
ATOM    845  CE2 TYR A 154      14.931  -8.472   2.005  1.00 25.35           C
ATOM    846  CZ  TYR A 154      15.281  -8.838   0.690  1.00 26.98           C
ATOM    847  OH  TYR A 154      15.222 -10.137   0.293  1.00 26.94           O
ATOM    848  H   TYR A 154      18.098  -4.622   4.356  1.00  0.00           H
ATOM    849  HA  TYR A 154      18.175  -5.146   1.507  1.00  0.00           H
ATOM    850  HB2 TYR A 154      15.571  -4.617   3.006  1.00  0.00           H
ATOM    851  HB3 TYR A 154      15.739  -4.115   1.358  1.00  0.00           H
ATOM    852  HD1 TYR A 154      16.506  -5.867  -0.416  1.00  0.00           H
ATOM    853  HD2 TYR A 154      14.935  -6.893   3.477  1.00  0.00           H
ATOM    854  HE1 TYR A 154      16.084  -8.167  -1.204  1.00  0.00           H
ATOM    855  HE2 TYR A 154      14.523  -9.197   2.695  1.00  0.00           H
ATOM    856  HH  TYR A 154      14.872 -10.737   0.987  1.00  0.00           H
ATOM    857  N   PRO A 155      18.201  -2.532   1.075  1.00 24.68           N
ATOM    858  CA  PRO A 155      18.447  -1.087   0.936  1.00 23.85           C
ATOM    859  C   PRO A 155      17.154  -0.276   1.157  1.00 24.27           C
ATOM    860  O   PRO A 155      16.053  -0.815   0.998  1.00 23.44           O
ATOM    861  CB  PRO A 155      18.949  -0.922  -0.506  1.00 23.62           C
ATOM    862  CG  PRO A 155      18.301  -2.065  -1.270  1.00 23.92           C
ATOM    863  CD  PRO A 155      18.154  -3.181  -0.238  1.00 24.00           C
ATOM    864  HA  PRO A 155      19.210  -0.763   1.643  1.00  0.00           H
ATOM    865  HB2 PRO A 155      18.728   0.054  -0.944  1.00  0.00           H
ATOM    866  HB3 PRO A 155      20.032  -1.037  -0.539  1.00  0.00           H
ATOM    867  HG2 PRO A 155      17.319  -1.754  -1.626  1.00  0.00           H
ATOM    868  HG3 PRO A 155      18.882  -2.369  -2.142  1.00  0.00           H
ATOM    869  HD2 PRO A 155      17.222  -3.718  -0.393  1.00  0.00           H
ATOM    870  HD3 PRO A 155      18.981  -3.886  -0.331  1.00  0.00           H
ATOM    871  N   TRP A 156      17.275   1.008   1.517  1.00 23.62           N
ATOM    872  CA  TRP A 156      16.151   1.899   1.814  1.00 24.34           C
ATOM    873  C   TRP A 156      16.162   3.105   0.865  1.00 24.58           C
ATOM    874  O   TRP A 156      17.056   3.948   0.926  1.00 24.78           O
ATOM    875  CB  TRP A 156      16.195   2.312   3.303  1.00 22.47           C
ATOM    876  CG  TRP A 156      14.872   2.615   3.949  1.00 23.60           C
ATOM    877  CD1 TRP A 156      13.856   3.326   3.400  1.00 23.21           C
ATOM    878  CD2 TRP A 156      14.378   2.162   5.250  1.00 24.20           C
ATOM    879  NE1 TRP A 156      12.779   3.335   4.262  1.00 23.02           N
ATOM    880  CE3 TRP A 156      14.909   1.379   6.304  1.00 22.06           C
ATOM    881  CE2 TRP A 156      13.043   2.638   5.415  1.00 24.32           C
ATOM    882  CZ3 TRP A 156      14.142   1.074   7.449  1.00 23.14           C
ATOM    883  CZ2 TRP A 156      12.277   2.362   6.556  1.00 23.17           C
ATOM    884  CH2 TRP A 156      12.824   1.560   7.571  1.00 23.12           C
ATOM    885  H   TRP A 156      18.214   1.391   1.615  1.00  0.00           H
ATOM    886  HA  TRP A 156      15.219   1.362   1.652  1.00  0.00           H
ATOM    887  HB2 TRP A 156      16.632   1.497   3.880  1.00  0.00           H
ATOM    888  HB3 TRP A 156      16.859   3.161   3.455  1.00  0.00           H
ATOM    889  HD1 TRP A 156      13.884   3.803   2.431  1.00  0.00           H
ATOM    890  HE1 TRP A 156      11.881   3.798   4.049  1.00  0.00           H
ATOM    891  HE3 TRP A 156      15.913   0.988   6.216  1.00  0.00           H
ATOM    892  HZ3 TRP A 156      14.566   0.454   8.225  1.00  0.00           H
ATOM    893  HZ2 TRP A 156      11.275   2.752   6.631  1.00  0.00           H
ATOM    894  HH2 TRP A 156      12.228   1.316   8.436  1.00  0.00           H
ATOM    895  N   VAL A 157      15.149   3.196   0.001  1.00 24.62           N
ATOM    896  CA  VAL A 157      14.933   4.294  -0.929  1.00 22.16           C
ATOM    897  C   VAL A 157      13.973   5.289  -0.250  1.00 21.82           C
ATOM    898  O   VAL A 157      12.791   5.003  -0.040  1.00 22.52           O
ATOM    899  CB  VAL A 157      14.312   3.716  -2.230  1.00 20.88           C
ATOM    900  CG1 VAL A 157      13.892   4.817  -3.220  1.00 19.19           C
ATOM    901  CG2 VAL A 157      15.279   2.735  -2.923  1.00 20.83           C
ATOM    902  H   VAL A 157      14.415   2.490   0.038  1.00  0.00           H
ATOM    903  HA  VAL A 157      15.875   4.792  -1.171  1.00  0.00           H
ATOM    904  HB  VAL A 157      13.413   3.152  -1.975  1.00  0.00           H
ATOM    905 HG11 VAL A 157      13.671   4.408  -4.204  1.00  0.00           H
ATOM    906 HG12 VAL A 157      12.997   5.335  -2.883  1.00  0.00           H
ATOM    907 HG13 VAL A 157      14.679   5.560  -3.341  1.00  0.00           H
ATOM    908 HG21 VAL A 157      14.813   2.276  -3.794  1.00  0.00           H
ATOM    909 HG22 VAL A 157      16.185   3.238  -3.262  1.00  0.00           H
ATOM    910 HG23 VAL A 157      15.582   1.920  -2.266  1.00  0.00           H
ATOM    911  N   PHE A 158      14.487   6.467   0.091  1.00 22.60           N
ATOM    912  CA  PHE A 158      13.730   7.581   0.634  1.00 21.72           C
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ATOM    913  C   PHE A 158      13.406   8.523  -0.537  1.00 21.85           C
ATOM    914  O   PHE A 158      14.291   8.904  -1.306  1.00 21.79           O
ATOM    915  CB  PHE A 158      14.606   8.303   1.677  1.00 22.82           C
ATOM    916  CG  PHE A 158      14.986   7.430   2.860  1.00 22.97           C
ATOM    917  CD1 PHE A 158      14.035   7.129   3.857  1.00 20.44           C
ATOM    918  CD2 PHE A 158      16.277   6.869   2.937  1.00 23.38           C
ATOM    919  CE1 PHE A 158      14.373   6.261   4.914  1.00 23.63           C
ATOM    920  CE2 PHE A 158      16.610   6.008   3.996  1.00 22.41           C
ATOM    921  CZ  PHE A 158      15.663   5.710   4.991  1.00 21.10           C
ATOM    922  H   PHE A 158      15.470   6.651  -0.115  1.00  0.00           H
ATOM    923  HA  PHE A 158      12.820   7.232   1.118  1.00  0.00           H
ATOM    924  HB2 PHE A 158      15.507   8.704   1.212  1.00  0.00           H
ATOM    925  HB3 PHE A 158      14.065   9.156   2.080  1.00  0.00           H
ATOM    926  HD1 PHE A 158      13.036   7.532   3.791  1.00  0.00           H
ATOM    927  HD2 PHE A 158      17.011   7.075   2.170  1.00  0.00           H
ATOM    928  HE1 PHE A 158      13.637   5.964   5.645  1.00  0.00           H
ATOM    929  HE2 PHE A 158      17.589   5.561   4.033  1.00  0.00           H
ATOM    930  HZ  PHE A 158      15.905   5.021   5.786  1.00  0.00           H
ATOM    931  N   LEU A 159      12.127   8.880  -0.677  1.00 22.19           N
ATOM    932  CA  LEU A 159      11.555   9.728  -1.717  1.00 20.94           C
ATOM    933  C   LEU A 159      10.908  10.957  -1.052  1.00 21.28           C
ATOM    934  O   LEU A 159      10.387  10.855   0.061  1.00 22.09           O
ATOM    935  CB  LEU A 159      10.522   8.920  -2.538  1.00 22.79           C
ATOM    936  CG  LEU A 159      11.058   7.623  -3.187  1.00 22.80           C
ATOM    937  CD1 LEU A 159       9.926   6.789  -3.806  1.00 23.75           C
ATOM    938  CD2 LEU A 159      12.143   7.911  -4.233  1.00 19.61           C
ATOM    939  H   LEU A 159      11.458   8.511   0.000  1.00  0.00           H
ATOM    940  HA  LEU A 159      12.338  10.064  -2.388  1.00  0.00           H
ATOM    941  HB2 LEU A 159       9.684   8.650  -1.902  1.00  0.00           H
ATOM    942  HB3 LEU A 159      10.106   9.569  -3.308  1.00  0.00           H
ATOM    943  HG  LEU A 159      11.499   7.006  -2.404  1.00  0.00           H
ATOM    944 HD11 LEU A 159      10.306   5.839  -4.183  1.00  0.00           H
ATOM    945 HD12 LEU A 159       9.150   6.566  -3.074  1.00  0.00           H
ATOM    946 HD13 LEU A 159       9.457   7.299  -4.646  1.00  0.00           H
ATOM    947 HD21 LEU A 159      12.472   6.997  -4.730  1.00  0.00           H
ATOM    948 HD22 LEU A 159      11.774   8.587  -5.003  1.00  0.00           H
ATOM    949 HD23 LEU A 159      13.026   8.365  -3.784  1.00  0.00           H
ATOM    950  N   ASN A 160      10.942  12.120  -1.708  1.00 21.67           N
ATOM    951  CA  ASN A 160      10.493  13.416  -1.180  1.00 21.59           C
ATOM    952  C   ASN A 160       9.988  14.292  -2.337  1.00 22.22           C
ATOM    953  O   ASN A 160      10.134  13.930  -3.501  1.00 22.40           O
ATOM    954  CB  ASN A 160      11.653  14.046  -0.377  1.00 21.73           C
ATOM    955  CG  ASN A 160      11.308  15.138   0.640  1.00 20.70           C
ATOM    956  OD1 ASN A 160      10.318  15.860   0.525  1.00 17.56           O
ATOM    957  ND2 ASN A 160      12.146  15.271   1.660  1.00 20.24           N
ATOM    958  H   ASN A 160      11.408  12.149  -2.608  1.00  0.00           H
ATOM    959  HA  ASN A 160       9.644  13.244  -0.518  1.00  0.00           H
ATOM    960  HB2 ASN A 160      12.099  13.254   0.209  1.00  0.00           H
ATOM    961  HB3 ASN A 160      12.437  14.398  -1.048  1.00  0.00           H
ATOM    962 HD21 ASN A 160      12.950  14.661   1.730  1.00  0.00           H
ATOM    963 HD22 ASN A 160      12.041  16.031   2.314  1.00  0.00           H
ATOM    964  N   ASP A 161       9.411  15.455  -2.029  1.00 22.62           N
ATOM    965  CA  ASP A 161       8.938  16.462  -2.987  1.00 21.64           C
ATOM    966  C   ASP A 161       9.641  17.816  -2.750  1.00 24.09           C
ATOM    967  O   ASP A 161       9.653  18.678  -3.631  1.00 24.64           O
ATOM    968  CB  ASP A 161       7.391  16.513  -2.983  1.00 22.24           C
ATOM    969  CG  ASP A 161       6.726  17.501  -2.027  1.00 22.54           C
ATOM    970  OD1 ASP A 161       6.839  17.313  -0.796  1.00 19.79           O
ATOM    971  OD2 ASP A 161       6.038  18.415  -2.545  1.00 25.86           O1-
ATOM    972  H   ASP A 161       9.418  15.705  -1.043  1.00  0.00           H
ATOM    973  HA  ASP A 161       9.240  16.160  -3.992  1.00  0.00           H
ATOM    974  HB2 ASP A 161       7.060  16.746  -3.994  1.00  0.00           H
ATOM    975  HB3 ASP A 161       6.985  15.521  -2.784  1.00  0.00           H
ATOM    976  N   GLU A 162      10.297  17.977  -1.602  1.00 25.03           N
ATOM    977  CA  GLU A 162      11.418  18.884  -1.398  1.00 25.78           C
ATOM    978  C   GLU A 162      12.705  18.078  -1.668  1.00 26.36           C
ATOM    979  O   GLU A 162      12.650  16.846  -1.717  1.00 26.47           O
ATOM    980  CB  GLU A 162      11.421  19.253   0.097  1.00 28.39           C
ATOM    981  CG  GLU A 162      10.315  20.254   0.458  1.00 34.38           C
ATOM    982  CD  GLU A 162      10.285  20.570   1.939  1.00 38.51           C
ATOM    983  OE1 GLU A 162      10.837  19.811   2.768  1.00 40.07           O
ATOM    984  OE2 GLU A 162       9.633  21.565   2.320  1.00 39.26           O1-
ATOM    985  H   GLU A 162      10.278  17.199  -0.954  1.00  0.00           H
ATOM    986  HA  GLU A 162      11.366  19.768  -2.034  1.00  0.00           H
ATOM    987  HB2 GLU A 162      11.319  18.347   0.695  1.00  0.00           H
ATOM    988  HB3 GLU A 162      12.377  19.687   0.393  1.00  0.00           H
ATOM    989  HG2 GLU A 162      10.456  21.180  -0.099  1.00  0.00           H
ATOM    990  HG3 GLU A 162       9.339  19.860   0.173  1.00  0.00           H
ATOM    991  N   PRO A 163      13.885  18.724  -1.750  1.00 25.77           N
ATOM    992  CA  PRO A 163      15.154  18.014  -1.589  1.00 25.31           C
ATOM    993  C   PRO A 163      15.311  17.573  -0.119  1.00 24.48           C
ATOM    994  O   PRO A 163      14.740  18.183   0.791  1.00 23.95           O
ATOM    995  CB  PRO A 163      16.222  19.024  -2.031  1.00 25.46           C
ATOM    996  CG  PRO A 163      15.599  20.388  -1.769  1.00 26.93           C
ATOM    997  CD  PRO A 163      14.090  20.165  -1.910  1.00 25.47           C
ATOM    998  HA  PRO A 163      15.179  17.134  -2.236  1.00  0.00           H
ATOM    999  HB2 PRO A 163      17.177  18.898  -1.517  1.00  0.00           H
ATOM   1000  HB3 PRO A 163      16.406  18.906  -3.100  1.00  0.00           H
ATOM   1001  HG2 PRO A 163      15.826  20.691  -0.746  1.00  0.00           H
ATOM   1002  HG3 PRO A 163      15.974  21.166  -2.435  1.00  0.00           H
ATOM   1003  HD2 PRO A 163      13.540  20.763  -1.184  1.00  0.00           H
ATOM   1004  HD3 PRO A 163      13.750  20.454  -2.903  1.00  0.00           H
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ATOM   1005  N   PHE A 164      16.073  16.505   0.126  1.00 23.91           N
ATOM   1006  CA  PHE A 164      16.311  15.997   1.474  1.00 22.65           C
ATOM   1007  C   PHE A 164      17.320  16.897   2.188  1.00 22.61           C
ATOM   1008  O   PHE A 164      18.432  17.094   1.685  1.00 20.34           O
ATOM   1009  CB  PHE A 164      16.872  14.567   1.406  1.00 21.23           C
ATOM   1010  CG  PHE A 164      15.777  13.529   1.323  1.00 21.71           C
ATOM   1011  CD1 PHE A 164      15.010  13.248   2.472  1.00 21.29           C
ATOM   1012  CD2 PHE A 164      15.498  12.868   0.111  1.00 20.13           C
ATOM   1013  CE1 PHE A 164      13.976  12.300   2.415  1.00 22.86           C
ATOM   1014  CE2 PHE A 164      14.475  11.906   0.064  1.00 22.82           C
ATOM   1015  CZ  PHE A 164      13.716  11.621   1.214  1.00 20.54           C
ATOM   1016  H   PHE A 164      16.552  16.065  -0.656  1.00  0.00           H
ATOM   1017  HA  PHE A 164      15.377  15.994   2.035  1.00  0.00           H
ATOM   1018  HB2 PHE A 164      17.572  14.454   0.577  1.00  0.00           H
ATOM   1019  HB3 PHE A 164      17.442  14.339   2.309  1.00  0.00           H
ATOM   1020  HD1 PHE A 164      15.200  13.771   3.398  1.00  0.00           H
ATOM   1021  HD2 PHE A 164      16.058  13.095  -0.786  1.00  0.00           H
ATOM   1022  HE1 PHE A 164      13.377  12.100   3.288  1.00  0.00           H
ATOM   1023  HE2 PHE A 164      14.254  11.402  -0.863  1.00  0.00           H
ATOM   1024  HZ  PHE A 164      12.905  10.910   1.166  1.00  0.00           H
ATOM   1025  N   THR A 165      16.925  17.432   3.348  1.00 23.48           N
ATOM   1026  CA  THR A 165      17.737  18.255   4.233  1.00 23.94           C
ATOM   1027  C   THR A 165      18.877  17.415   4.835  1.00 26.62           C
ATOM   1028  O   THR A 165      18.718  16.219   5.091  1.00 21.92           O
ATOM   1029  CB  THR A 165      16.801  18.857   5.317  1.00 25.32           C
ATOM   1030  OG1 THR A 165      16.023  17.864   5.965  1.00 27.19           O
ATOM   1031  CG2 THR A 165      15.844  19.916   4.748  1.00 25.62           C
ATOM   1032  H   THR A 165      16.012  17.193   3.727  1.00  0.00           H
ATOM   1033  HA  THR A 165      18.180  19.067   3.656  1.00  0.00           H
ATOM   1034  HB  THR A 165      17.414  19.341   6.080  1.00  0.00           H
ATOM   1035  HG1 THR A 165      16.327  17.774   6.883  1.00  0.00           H
ATOM   1036 HG21 THR A 165      15.211  20.334   5.531  1.00  0.00           H
ATOM   1037 HG22 THR A 165      16.396  20.741   4.298  1.00  0.00           H
ATOM   1038 HG23 THR A 165      15.193  19.503   3.979  1.00  0.00           H
ATOM   1039  N   GLU A 166      20.057  18.020   5.011  1.00 27.49           N
ATOM   1040  CA  GLU A 166      21.290  17.348   5.430  1.00 30.60           C
ATOM   1041  C   GLU A 166      21.150  16.611   6.771  1.00 29.25           C
ATOM   1042  O   GLU A 166      21.626  15.485   6.901  1.00 31.53           O
ATOM   1043  CB  GLU A 166      22.488  18.329   5.402  1.00 34.11           C
ATOM   1044  CG  GLU A 166      22.556  19.293   4.187  1.00 40.02           C
ATOM   1045  CD  GLU A 166      22.175  18.648   2.859  1.00 44.19           C
ATOM   1046  OE1 GLU A 166      21.089  18.990   2.351  1.00 48.52           O
ATOM   1047  OE2 GLU A 166      22.839  17.679   2.439  1.00 46.29           O1-
ATOM   1048  H   GLU A 166      20.180  18.913   4.550  1.00  0.00           H
ATOM   1049  HA  GLU A 166      21.504  16.576   4.697  1.00  0.00           H
ATOM   1050  HB2 GLU A 166      22.493  18.928   6.313  1.00  0.00           H
ATOM   1051  HB3 GLU A 166      23.408  17.743   5.431  1.00  0.00           H
ATOM   1052  HG2 GLU A 166      21.897  20.146   4.353  1.00  0.00           H
ATOM   1053  HG3 GLU A 166      23.561  19.704   4.093  1.00  0.00           H
ATOM   1054  N   GLU A 167      20.403  17.205   7.712  1.00 29.61           N
ATOM   1055  CA  GLU A 167      19.981  16.618   8.983  1.00 30.74           C
ATOM   1056  C   GLU A 167      19.200  15.297   8.820  1.00 29.24           C
ATOM   1057  O   GLU A 167      19.417  14.377   9.605  1.00 26.20           O
ATOM   1058  CB  GLU A 167      19.289  17.714   9.846  1.00 33.76           C
ATOM   1059  CG  GLU A 167      17.957  17.386  10.566  1.00 39.85           C
ATOM   1060  CD  GLU A 167      16.713  17.519   9.692  1.00 43.67           C
ATOM   1061  OE1 GLU A 167      16.856  17.735   8.466  1.00 45.84           O
ATOM   1062  OE2 GLU A 167      15.604  17.494  10.273  1.00 45.11           O1-
ATOM   1063  H   GLU A 167      19.977  18.081   7.455  1.00  0.00           H
ATOM   1064  HA  GLU A 167      20.901  16.339   9.501  1.00  0.00           H
ATOM   1065  HB2 GLU A 167      20.003  18.017  10.612  1.00  0.00           H
ATOM   1066  HB3 GLU A 167      19.137  18.620   9.258  1.00  0.00           H
ATOM   1067  HG2 GLU A 167      17.977  16.402  11.034  1.00  0.00           H
ATOM   1068  HG3 GLU A 167      17.839  18.099  11.382  1.00  0.00           H
ATOM   1069  N   PHE A 168      18.350  15.175   7.789  1.00 26.92           N
ATOM   1070  CA  PHE A 168      17.595  13.969   7.439  1.00 25.65           C
ATOM   1071  C   PHE A 168      18.554  12.822   7.134  1.00 24.16           C
ATOM   1072  O   PHE A 168      18.472  11.750   7.730  1.00 21.85           O
ATOM   1073  CB  PHE A 168      16.662  14.237   6.229  1.00 25.88           C
ATOM   1074  CG  PHE A 168      15.498  13.273   6.061  1.00 25.83           C
ATOM   1075  CD1 PHE A 168      15.700  11.910   5.744  1.00 27.41           C
ATOM   1076  CD2 PHE A 168      14.185  13.757   6.215  1.00 26.00           C
ATOM   1077  CE1 PHE A 168      14.603  11.030   5.670  1.00 27.73           C
ATOM   1078  CE2 PHE A 168      13.086  12.882   6.126  1.00 24.69           C
ATOM   1079  CZ  PHE A 168      13.300  11.514   5.888  1.00 24.72           C
ATOM   1080  H   PHE A 168      18.206  15.992   7.208  1.00  0.00           H
ATOM   1081  HA  PHE A 168      17.000  13.675   8.296  1.00  0.00           H
ATOM   1082  HB2 PHE A 168      16.255  15.245   6.314  1.00  0.00           H
ATOM   1083  HB3 PHE A 168      17.215  14.233   5.291  1.00  0.00           H
ATOM   1084  HD1 PHE A 168      16.693  11.523   5.572  1.00  0.00           H
ATOM   1085  HD2 PHE A 168      14.031  14.805   6.426  1.00  0.00           H
ATOM   1086  HE1 PHE A 168      14.759   9.985   5.441  1.00  0.00           H
ATOM   1087  HE2 PHE A 168      12.080  13.252   6.259  1.00  0.00           H
ATOM   1088  HZ  PHE A 168      12.458  10.846   5.847  1.00  0.00           H
ATOM   1089  N   LYS A 169      19.495  13.084   6.227  1.00 24.01           N
ATOM   1090  CA  LYS A 169      20.456  12.117   5.725  1.00 26.45           C
ATOM   1091  C   LYS A 169      21.452  11.723   6.834  1.00 26.84           C
ATOM   1092  O   LYS A 169      21.725  10.534   7.004  1.00 27.09           O
ATOM   1093  CB  LYS A 169      21.135  12.727   4.482  1.00 29.03           C
ATOM   1094  CG  LYS A 169      20.111  12.998   3.352  1.00 31.88           C
ATOM   1095  CD  LYS A 169      20.650  13.727   2.112  1.00 35.09           C
ATOM   1096  CE  LYS A 169      21.078  15.166   2.431  1.00 37.28           C
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ATOM   1097  NZ  LYS A 169      21.197  16.037   1.258  1.00 38.69          N1+
ATOM   1098  H   LYS A 169      19.525  14.026   5.858  1.00  0.00           H
ATOM   1099  HA  LYS A 169      19.918  11.216   5.426  1.00  0.00           H
ATOM   1100  HB2 LYS A 169      21.664  13.639   4.760  1.00  0.00           H
ATOM   1101  HB3 LYS A 169      21.890  12.032   4.112  1.00  0.00           H
ATOM   1102  HG2 LYS A 169      19.699  12.044   3.032  1.00  0.00           H
ATOM   1103  HG3 LYS A 169      19.260  13.566   3.728  1.00  0.00           H
ATOM   1104  HD2 LYS A 169      21.479  13.167   1.678  1.00  0.00           H
ATOM   1105  HD3 LYS A 169      19.862  13.736   1.357  1.00  0.00           H
ATOM   1106  HE2 LYS A 169      20.350  15.632   3.090  1.00  0.00           H
ATOM   1107  HE3 LYS A 169      22.037  15.155   2.949  1.00  0.00           H
ATOM   1108  HZ1 LYS A 169      21.876  16.772   1.534  1.00  0.00           H
ATOM   1109  HZ2 LYS A 169      21.519  15.523   0.435  1.00  0.00           H
ATOM   1110  HZ3 LYS A 169      20.319  16.506   1.084  1.00  0.00           H
ATOM   1111  N   GLU A 170      21.886  12.682   7.668  1.00 26.50           N
ATOM   1112  CA  GLU A 170      22.719  12.464   8.856  1.00 27.91           C
ATOM   1113  C   GLU A 170      21.972  11.597   9.899  1.00 26.70           C
ATOM   1114  O   GLU A 170      22.528  10.622  10.411  1.00 25.68           O
ATOM   1115  CB  GLU A 170      23.119  13.839   9.467  1.00 30.74           C
ATOM   1116  CG  GLU A 170      24.601  13.971   9.874  1.00 38.58           C
ATOM   1117  CD  GLU A 170      25.033  12.918  10.875  1.00 44.74           C
ATOM   1118  OE1 GLU A 170      24.328  12.722  11.890  1.00 47.54           O
ATOM   1119  OE2 GLU A 170      25.972  12.148  10.575  1.00 48.23          O1-
ATOM   1120  H   GLU A 170      21.629  13.642   7.452  1.00  0.00           H
ATOM   1121  HA  GLU A 170      23.614  11.929   8.530  1.00  0.00           H
ATOM   1122  HB2 GLU A 170      22.937  14.638   8.757  1.00  0.00           H
ATOM   1123  HB3 GLU A 170      22.490  14.082  10.326  1.00  0.00           H
ATOM   1124  HG2 GLU A 170      25.238  13.900   8.991  1.00  0.00           H
ATOM   1125  HG3 GLU A 170      24.784  14.952  10.312  1.00  0.00           H
ATOM   1126  N   ALA A 171      20.697  11.910  10.178  1.00 23.76           N
ATOM   1127  CA  ALA A 171      19.872  11.227  11.171  1.00 23.64           C
ATOM   1128  C   ALA A 171      19.457   9.818  10.724  1.00 23.90           C
ATOM   1129  O   ALA A 171      19.353   8.931  11.575  1.00 22.94           O
ATOM   1130  CB  ALA A 171      18.597  12.040  11.425  1.00 23.80           C
ATOM   1131  H   ALA A 171      20.307  12.743   9.740  1.00  0.00           H
ATOM   1132  HA  ALA A 171      20.440  11.148  12.099  1.00  0.00           H
ATOM   1133  HB1 ALA A 171      17.935  11.546  12.136  1.00  0.00           H
ATOM   1134  HB2 ALA A 171      18.832  13.025  11.829  1.00  0.00           H
ATOM   1135  HB3 ALA A 171      18.044  12.185  10.498  1.00  0.00           H
ATOM   1136  N   VAL A 172      19.247   9.600   9.419  1.00 24.62           N
ATOM   1137  CA  VAL A 172      19.070   8.288   8.793  1.00 25.76           C
ATOM   1138  C   VAL A 172      20.371   7.467   8.906  1.00 26.15           C
ATOM   1139  O   VAL A 172      20.313   6.302   9.302  1.00 25.46           O
ATOM   1140  CB  VAL A 172      18.577   8.471   7.333  1.00 25.40           C
ATOM   1141  CG1 VAL A 172      18.753   7.234   6.436  1.00 25.21           C
ATOM   1142  CG2 VAL A 172      17.092   8.882   7.313  1.00 22.74           C
ATOM   1143  H   VAL A 172      19.242  10.411   8.802  1.00  0.00           H
ATOM   1144  HA  VAL A 172      18.302   7.747   9.347  1.00  0.00           H
ATOM   1145  HB  VAL A 172      19.156   9.272   6.870  1.00  0.00           H
ATOM   1146 HG11 VAL A 172      18.341   7.419   5.446  1.00  0.00           H
ATOM   1147 HG12 VAL A 172      19.800   6.969   6.290  1.00  0.00           H
ATOM   1148 HG13 VAL A 172      18.234   6.370   6.844  1.00  0.00           H
ATOM   1149 HG21 VAL A 172      16.764   9.095   6.298  1.00  0.00           H
ATOM   1150 HG22 VAL A 172      16.455   8.085   7.697  1.00  0.00           H
ATOM   1151 HG23 VAL A 172      16.899   9.770   7.913  1.00  0.00           H
ATOM   1152  N   THR A 173      21.541   8.094   8.715  1.00 26.81           N
ATOM   1153  CA  THR A 173      22.881   7.519   8.929  1.00 28.03           C
ATOM   1154  C   THR A 173      23.235   7.538  10.450  1.00 27.32           C
ATOM   1155  O   THR A 173      24.386   7.678  10.865  1.00 26.39           O
ATOM   1156  CB  THR A 173      23.912   8.325   8.078  1.00 27.81           C
ATOM   1157  OG1 THR A 173      23.423   8.509   6.758  1.00 30.64           O
ATOM   1158  CG2 THR A 173      25.267   7.623   7.886  1.00 27.52           C
ATOM   1159  H   THR A 173      21.510   9.061   8.412  1.00  0.00           H
ATOM   1160  HA  THR A 173      22.876   6.480   8.592  1.00  0.00           H
ATOM   1161  HB  THR A 173      24.076   9.312   8.517  1.00  0.00           H
ATOM   1162  HG1 THR A 173      22.730   9.174   6.795  1.00  0.00           H
ATOM   1163 HG21 THR A 173      25.919   8.208   7.236  1.00  0.00           H
ATOM   1164 HG22 THR A 173      25.803   7.481   8.822  1.00  0.00           H
ATOM   1165 HG23 THR A 173      25.141   6.642   7.425  1.00  0.00           H
ATOM   1166  N   LYS A 174      22.216   7.440  11.309  1.00 27.78           N
ATOM   1167  CA  LYS A 174      22.231   7.220  12.750  1.00 31.22           C
ATOM   1168  C   LYS A 174      20.908   6.547  13.161  1.00 30.61           C
ATOM   1169  O   LYS A 174      20.352   6.782  14.240  1.00 30.04           O
ATOM   1170  CB  LYS A 174      22.642   8.503  13.514  1.00 32.27           C
ATOM   1171  CG  LYS A 174      24.025   8.381  14.189  1.00 36.69           C
ATOM   1172  CD  LYS A 174      24.744   9.729  14.373  1.00 39.08           C
ATOM   1173  CE  LYS A 174      25.723  10.065  13.233  1.00 41.57           C
ATOM   1174  NZ  LYS A 174      25.055  10.152  11.933  1.00 43.16          N1+
ATOM   1175  H   LYS A 174      21.302   7.417  10.874  1.00  0.00           H
ATOM   1176  HA  LYS A 174      22.978   6.445  12.935  1.00  0.00           H
ATOM   1177  HB2 LYS A 174      22.622   9.352  12.829  1.00  0.00           H
ATOM   1178  HB3 LYS A 174      21.909   8.761  14.278  1.00  0.00           H
ATOM   1179  HG2 LYS A 174      23.890   7.902  15.160  1.00  0.00           H
ATOM   1180  HG3 LYS A 174      24.678   7.711  13.626  1.00  0.00           H
ATOM   1181  HD2 LYS A 174      24.023  10.538  14.507  1.00  0.00           H
ATOM   1182  HD3 LYS A 174      25.318   9.694  15.300  1.00  0.00           H
ATOM   1183  HE2 LYS A 174      26.189  11.034  13.426  1.00  0.00           H
ATOM   1184  HE3 LYS A 174      26.528   9.333  13.171  1.00  0.00           H
ATOM   1185  HZ1 LYS A 174      25.644  10.701  11.286  1.00  0.00           H
ATOM   1186  HZ2 LYS A 174      24.761   9.275  11.516  1.00  0.00           H
ATOM   1187  HZ3 LYS A 174      24.294  10.831  11.981  1.00  0.00           H
ATOM   1188  N   ALA A 175      20.371   5.733  12.248  1.00 28.23           N
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ATOM   1189  CA  ALA A 175      19.127   5.008  12.368  1.00 26.89           C
ATOM   1190  C   ALA A 175      19.246   3.690  11.613  1.00 26.79           C
ATOM   1191  O   ALA A 175      19.193   2.645  12.251  1.00 27.40           O
ATOM   1192  CB  ALA A 175      17.936   5.888  11.955  1.00 24.63           C
ATOM   1193  H   ALA A 175      20.901   5.553  11.401  1.00  0.00           H
ATOM   1194  HA  ALA A 175      18.999   4.737  13.415  1.00  0.00           H
ATOM   1195  HB1 ALA A 175      16.989   5.422  12.225  1.00  0.00           H
ATOM   1196  HB2 ALA A 175      17.976   6.863  12.433  1.00  0.00           H
ATOM   1197  HB3 ALA A 175      17.925   6.061  10.880  1.00  0.00           H
ATOM   1198  N   VAL A 176      19.436   3.759  10.289  1.00 27.12           N
ATOM   1199  CA  VAL A 176      19.588   2.615   9.389  1.00 25.91           C
ATOM   1200  C   VAL A 176      21.030   2.069   9.503  1.00 26.78           C
ATOM   1201  O   VAL A 176      21.960   2.823   9.803  1.00 26.76           O
ATOM   1202  CB  VAL A 176      19.294   3.076   7.926  1.00 24.16           C
ATOM   1203  CG1 VAL A 176      19.358   1.925   6.902  1.00 25.45           C
ATOM   1204  CG2 VAL A 176      17.926   3.764   7.777  1.00 19.93           C
ATOM   1205  H   VAL A 176      19.611   4.665   9.866  1.00  0.00           H
ATOM   1206  HA  VAL A 176      18.868   1.850   9.672  1.00  0.00           H
ATOM   1207  HB  VAL A 176      20.051   3.808   7.636  1.00  0.00           H
ATOM   1208 HG11 VAL A 176      18.914   2.197   5.945  1.00  0.00           H
ATOM   1209 HG12 VAL A 176      20.388   1.656   6.685  1.00  0.00           H
ATOM   1210 HG13 VAL A 176      18.836   1.034   7.256  1.00  0.00           H
ATOM   1211 HG21 VAL A 176      17.768   4.078   6.745  1.00  0.00           H
ATOM   1212 HG22 VAL A 176      17.114   3.084   8.029  1.00  0.00           H
ATOM   1213 HG23 VAL A 176      17.842   4.655   8.396  1.00  0.00           H
ATOM   1214  N   SER A 177      21.210   0.770   9.241  1.00 24.88           N
ATOM   1215  CA  SER A 177      22.488   0.062   9.202  1.00 26.57           C
ATOM   1216  C   SER A 177      22.649  -0.818   7.946  1.00 27.23           C
ATOM   1217  O   SER A 177      23.412  -1.782   7.933  1.00 28.95           O
ATOM   1218  CB  SER A 177      22.829  -0.541  10.584  1.00 24.99           C
ATOM   1219  OG  SER A 177      21.989  -1.605  11.001  1.00 23.21           O
ATOM   1220  H   SER A 177      20.369   0.184   9.158  1.00  0.00           H
ATOM   1221  HA  SER A 177      23.259   0.817   9.035  1.00  0.00           H
ATOM   1222  HB2 SER A 177      23.853  -0.917  10.565  1.00  0.00           H
ATOM   1223  HB3 SER A 177      22.805   0.243  11.342  1.00  0.00           H
ATOM   1224  HG  SER A 177      21.063  -1.326  10.971  1.00  0.00           H
ATOM   1225  N   SER A 178      21.983  -0.419   6.859  1.00 26.97           N
ATOM   1226  CA  SER A 178      22.124  -0.913   5.495  1.00 26.31           C
ATOM   1227  C   SER A 178      22.319   0.287   4.542  1.00 26.98           C
ATOM   1228  O   SER A 178      22.588   1.401   4.999  1.00 27.69           O
ATOM   1229  CB  SER A 178      20.953  -1.870   5.177  1.00 26.87           C
ATOM   1230  OG  SER A 178      19.700  -1.207   5.194  1.00 26.69           O
ATOM   1231  H   SER A 178      21.418   0.413   6.941  1.00  0.00           H
ATOM   1232  HA  SER A 178      23.049  -1.489   5.427  1.00  0.00           H
ATOM   1233  HB2 SER A 178      21.093  -2.313   4.190  1.00  0.00           H
ATOM   1234  HB3 SER A 178      20.935  -2.703   5.883  1.00  0.00           H
ATOM   1235  HG  SER A 178      19.132  -1.608   4.529  1.00  0.00           H
ATOM   1236  N   GLU A 179      22.244   0.061   3.223  1.00 28.23           N
ATOM   1237  CA  GLU A 179      22.423   1.079   2.186  1.00 30.32           C
ATOM   1238  C   GLU A 179      21.152   1.948   2.079  1.00 29.86           C
ATOM   1239  O   GLU A 179      20.046   1.481   2.368  1.00 29.62           O
ATOM   1240  CB  GLU A 179      22.730   0.348   0.861  1.00 30.92           C
ATOM   1241  CG  GLU A 179      23.321   1.235  -0.259  1.00 36.26           C
ATOM   1242  CD  GLU A 179      22.447   1.317  -1.503  1.00 40.60           C
ATOM   1243  OE1 GLU A 179      21.237   1.594  -1.378  1.00 42.26           O
ATOM   1244  OE2 GLU A 179      22.978   1.122  -2.617  1.00 41.15           O1-
ATOM   1245  H   GLU A 179      21.908  -0.832   2.910  1.00  0.00           H
ATOM   1246  HA  GLU A 179      23.272   1.710   2.462  1.00  0.00           H
ATOM   1247  HB2 GLU A 179      23.452  -0.447   1.050  1.00  0.00           H
ATOM   1248  HB3 GLU A 179      21.832  -0.163   0.511  1.00  0.00           H
ATOM   1249  HG2 GLU A 179      23.500   2.252   0.087  1.00  0.00           H
ATOM   1250  HG3 GLU A 179      24.295   0.846  -0.559  1.00  0.00           H
ATOM   1251  N   VAL A 180      21.325   3.223   1.721  1.00 28.50           N
ATOM   1252  CA  VAL A 180      20.297   4.255   1.716  1.00 27.87           C
ATOM   1253  C   VAL A 180      20.418   5.096   0.438  1.00 27.26           C
ATOM   1254  O   VAL A 180      21.537   5.415   0.026  1.00 25.36           O
ATOM   1255  CB  VAL A 180      20.343   5.083   3.033  1.00 28.46           C
ATOM   1256  CG1 VAL A 180      19.957   4.240   4.262  1.00 25.72           C
ATOM   1257  CG2 VAL A 180      21.694   5.780   3.293  1.00 29.12           C
ATOM   1258  H   VAL A 180      22.216   3.508   1.345  1.00  0.00           H
ATOM   1259  HA  VAL A 180      19.331   3.760   1.667  1.00  0.00           H
ATOM   1260  HB  VAL A 180      19.594   5.870   2.932  1.00  0.00           H
ATOM   1261 HG11 VAL A 180      19.822   4.860   5.146  1.00  0.00           H
ATOM   1262 HG12 VAL A 180      19.028   3.698   4.090  1.00  0.00           H
ATOM   1263 HG13 VAL A 180      20.723   3.501   4.499  1.00  0.00           H
ATOM   1264 HG21 VAL A 180      21.650   6.402   4.187  1.00  0.00           H
ATOM   1265 HG22 VAL A 180      22.497   5.057   3.436  1.00  0.00           H
ATOM   1266 HG23 VAL A 180      21.980   6.431   2.467  1.00  0.00           H
ATOM   1267  N   LYS A 181      19.286   5.496  -0.154  1.00 26.75           N
ATOM   1268  CA  LYS A 181      19.193   6.399  -1.301  1.00 27.00           C
ATOM   1269  C   LYS A 181      18.123   7.463  -1.033  1.00 26.79           C
ATOM   1270  O   LYS A 181      17.113   7.175  -0.391  1.00 26.53           O
ATOM   1271  CB  LYS A 181      18.964   5.627  -2.617  1.00 28.69           C
ATOM   1272  CG  LYS A 181      20.084   4.620  -2.932  1.00 31.19           C
ATOM   1273  CD  LYS A 181      20.095   4.138  -4.390  1.00 35.82           C
ATOM   1274  CE  LYS A 181      21.236   3.150  -4.663  1.00 35.27           C
ATOM   1275  NZ  LYS A 181      20.943   1.824  -4.119  1.00 36.42           N1+
ATOM   1276  H   LYS A 181      18.403   5.182   0.243  1.00  0.00           H
ATOM   1277  HA  LYS A 181      20.137   6.939  -1.395  1.00  0.00           H
ATOM   1278  HB2 LYS A 181      18.000   5.115  -2.597  1.00  0.00           H
ATOM   1279  HB3 LYS A 181      18.904   6.356  -3.427  1.00  0.00           H
ATOM   1280  HG2 LYS A 181      21.048   5.080  -2.712  1.00  0.00           H
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ATOM   1281  HG3 LYS A 181      19.997   3.769  -2.256  1.00  0.00           H
ATOM   1282  HD2 LYS A 181      19.137   3.693  -4.668  1.00  0.00           H
ATOM   1283  HD3 LYS A 181      20.235   4.999  -5.043  1.00  0.00           H
ATOM   1284  HE2 LYS A 181      21.397   3.042  -5.736  1.00  0.00           H
ATOM   1285  HE3 LYS A 181      22.170   3.511  -4.231  1.00  0.00           H
ATOM   1286  HZ1 LYS A 181      21.818   1.365  -3.840  1.00  0.00           H
ATOM   1287  HZ2 LYS A 181      20.470   1.862  -3.223  1.00  0.00           H
ATOM   1288  HZ3 LYS A 181      20.428   1.278  -4.828  1.00  0.00           H
ATOM   1289  N   PHE A 182      18.356   8.688  -1.510  1.00 25.47           N
ATOM   1290  CA  PHE A 182      17.610   9.901  -1.194  1.00 24.54           C
ATOM   1291  C   PHE A 182      17.268  10.621  -2.504  1.00 23.94           C
ATOM   1292  O   PHE A 182      18.133  11.289  -3.079  1.00 25.57           O
ATOM   1293  CB  PHE A 182      18.477  10.790  -0.274  1.00 24.23           C
ATOM   1294  CG  PHE A 182      18.879  10.183   1.057  1.00 25.85           C
ATOM   1295  CD1 PHE A 182      17.956  10.117   2.122  1.00 25.40           C
ATOM   1296  CD2 PHE A 182      20.193   9.703   1.234  1.00 27.19           C
ATOM   1297  CE1 PHE A 182      18.353   9.577   3.361  1.00 27.01           C
ATOM   1298  CE2 PHE A 182      20.590   9.173   2.475  1.00 25.63           C
ATOM   1299  CZ  PHE A 182      19.672   9.111   3.537  1.00 26.56           C
ATOM   1300  H   PHE A 182      19.177   8.804  -2.114  1.00  0.00           H
ATOM   1301  HA  PHE A 182      16.683   9.662  -0.672  1.00  0.00           H
ATOM   1302  HB2 PHE A 182      19.390  11.081  -0.798  1.00  0.00           H
ATOM   1303  HB3 PHE A 182      17.959  11.724  -0.067  1.00  0.00           H
ATOM   1304  HD1 PHE A 182      16.947  10.484   1.993  1.00  0.00           H
ATOM   1305  HD2 PHE A 182      20.905   9.744   0.421  1.00  0.00           H
ATOM   1306  HE1 PHE A 182      17.643   9.521   4.172  1.00  0.00           H
ATOM   1307  HE2 PHE A 182      21.601   8.817   2.610  1.00  0.00           H
ATOM   1308  HZ  PHE A 182      19.993   8.707   4.485  1.00  0.00           H
ATOM   1309  N   GLY A 183      16.030  10.501  -2.991  1.00 24.28           N
ATOM   1310  CA  GLY A 183      15.587  11.074  -4.263  1.00 21.73           C
ATOM   1311  C   GLY A 183      14.429  12.053  -4.098  1.00 22.11           C
ATOM   1312  O   GLY A 183      13.616  11.907  -3.187  1.00 22.30           O
ATOM   1313  H   GLY A 183      15.349   9.956  -2.464  1.00  0.00           H
ATOM   1314  HA2 GLY A 183      16.404  11.555  -4.799  1.00  0.00           H
ATOM   1315  HA3 GLY A 183      15.234  10.270  -4.906  1.00  0.00           H
ATOM   1316  N   ILE A 184      14.307  13.024  -5.007  1.00 24.31           N
ATOM   1317  CA  ILE A 184      13.093  13.824  -5.155  1.00 25.05           C
ATOM   1318  C   ILE A 184      12.197  13.107  -6.183  1.00 27.69           C
ATOM   1319  O   ILE A 184      12.687  12.421  -7.087  1.00 27.87           O
ATOM   1320  CB  ILE A 184      13.460  15.264  -5.625  1.00 25.38           C
ATOM   1321  CG1 ILE A 184      12.340  16.266  -5.270  1.00 25.06           C
ATOM   1322  CG2 ILE A 184      13.849  15.388  -7.116  1.00 20.90           C
ATOM   1323  CD1 ILE A 184      12.758  17.735  -5.404  1.00 26.79           C
ATOM   1324  H   ILE A 184      14.992  13.072  -5.758  1.00  0.00           H
ATOM   1325  HA  ILE A 184      12.581  13.887  -4.194  1.00  0.00           H
ATOM   1326  HB  ILE A 184      14.327  15.567  -5.037  1.00  0.00           H
ATOM   1327 HG12 ILE A 184      11.459  16.086  -5.885  1.00  0.00           H
ATOM   1328 HG13 ILE A 184      12.023  16.103  -4.239  1.00  0.00           H
ATOM   1329 HG21 ILE A 184      14.283  16.363  -7.327  1.00  0.00           H
ATOM   1330 HG22 ILE A 184      14.582  14.641  -7.412  1.00  0.00           H
ATOM   1331 HG23 ILE A 184      12.986  15.278  -7.775  1.00  0.00           H
ATOM   1332 HD11 ILE A 184      11.952  18.377  -5.061  1.00  0.00           H
ATOM   1333 HD12 ILE A 184      13.641  17.957  -4.805  1.00  0.00           H
ATOM   1334 HD13 ILE A 184      12.970  18.009  -6.437  1.00  0.00           H
ATOM   1335  N   LEU A 185      10.884  13.276  -6.064  1.00 28.44           N
ATOM   1336  CA  LEU A 185       9.904  12.893  -7.070  1.00 29.84           C
ATOM   1337  C   LEU A 185       9.704  14.075  -8.044  1.00 29.59           C
ATOM   1338  O   LEU A 185       9.609  15.210  -7.563  1.00 31.09           O
ATOM   1339  CB  LEU A 185       8.554  12.646  -6.370  1.00 30.35           C
ATOM   1340  CG  LEU A 185       8.552  11.505  -5.331  1.00 31.80           C
ATOM   1341  CD1 LEU A 185       7.124  11.286  -4.827  1.00 29.02           C
ATOM   1342  CD2 LEU A 185       9.174  10.210  -5.870  1.00 32.61           C
ATOM   1343  H   LEU A 185      10.541  13.788  -5.254  1.00  0.00           H
ATOM   1344  HA  LEU A 185      10.229  11.987  -7.575  1.00  0.00           H
ATOM   1345  HB2 LEU A 185       8.207  13.563  -5.886  1.00  0.00           H
ATOM   1346  HB3 LEU A 185       7.811  12.422  -7.138  1.00  0.00           H
ATOM   1347  HG  LEU A 185       9.149  11.800  -4.469  1.00  0.00           H
ATOM   1348 HD11 LEU A 185       7.031  10.370  -4.246  1.00  0.00           H
ATOM   1349 HD12 LEU A 185       6.816  12.122  -4.199  1.00  0.00           H
ATOM   1350 HD13 LEU A 185       6.417  11.226  -5.650  1.00  0.00           H
ATOM   1351 HD21 LEU A 185       8.888   9.348  -5.272  1.00  0.00           H
ATOM   1352 HD22 LEU A 185       8.882  10.013  -6.896  1.00  0.00           H
ATOM   1353 HD23 LEU A 185      10.263  10.269  -5.856  1.00  0.00           H
ATOM   1354  N   PRO A 186       9.615  13.835  -9.375  1.00 28.92           N
ATOM   1355  CA  PRO A 186       9.299  14.843 -10.402  1.00 29.13           C
ATOM   1356  C   PRO A 186       8.104  15.749 -10.048  1.00 28.44           C
ATOM   1357  O   PRO A 186       6.974  15.280  -9.869  1.00 28.12           O
ATOM   1358  CB  PRO A 186       9.041  14.043 -11.688  1.00 30.26           C
ATOM   1359  CG  PRO A 186       9.807  12.747 -11.508  1.00 28.14           C
ATOM   1360  CD  PRO A 186       9.867  12.534  -9.999  1.00 28.20           C
ATOM   1361  HA  PRO A 186      10.196  15.450 -10.532  1.00  0.00           H
ATOM   1362  HB2 PRO A 186       7.981  13.816 -11.812  1.00  0.00           H
ATOM   1363  HB3 PRO A 186       9.372  14.580 -12.577  1.00  0.00           H
ATOM   1364  HG2 PRO A 186       9.348  11.906 -12.028  1.00  0.00           H
ATOM   1365  HG3 PRO A 186      10.820  12.863 -11.899  1.00  0.00           H
ATOM   1366  HD2 PRO A 186       9.091  11.839  -9.687  1.00  0.00           H
ATOM   1367  HD3 PRO A 186      10.837  12.121  -9.719  1.00  0.00           H
ATOM   1368  N   LYS A 187       8.362  17.058  -9.963  1.00 28.27           N
ATOM   1369  CA  LYS A 187       7.426  18.098  -9.548  1.00 28.97           C
ATOM   1370  C   LYS A 187       6.321  18.346 -10.591  1.00 26.32           C
ATOM   1371  O   LYS A 187       5.251  18.849 -10.245  1.00 25.20           O
ATOM   1372  CB  LYS A 187       8.206  19.398  -9.294  1.00 32.18           C
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ATOM   1373  CG  LYS A 187       9.072  19.369  -8.017  1.00 34.77          C
ATOM   1374  CD  LYS A 187       8.407  19.971  -6.762  1.00 38.08          C
ATOM   1375  CE  LYS A 187       7.617  18.968  -5.904  1.00 37.86          C
ATOM   1376  NZ  LYS A 187       7.040  19.632  -4.720  1.00 39.41          N1+
ATOM   1377  H   LYS A 187       9.254  17.364 -10.335  1.00  0.00          H
ATOM   1378  HA  LYS A 187       6.968  17.780  -8.618  1.00  0.00          H
ATOM   1379  HB2 LYS A 187       8.845  19.593 -10.158  1.00  0.00          H
ATOM   1380  HB3 LYS A 187       7.528  20.252  -9.253  1.00  0.00          H
ATOM   1381  HG2 LYS A 187       9.471  18.373  -7.818  1.00  0.00          H
ATOM   1382  HG3 LYS A 187       9.946  19.978  -8.234  1.00  0.00          H
ATOM   1383  HD2 LYS A 187       9.197  20.391  -6.139  1.00  0.00          H
ATOM   1384  HD3 LYS A 187       7.780  20.819  -7.040  1.00  0.00          H
ATOM   1385  HE2 LYS A 187       6.805  18.532  -6.481  1.00  0.00          H
ATOM   1386  HE3 LYS A 187       8.258  18.140  -5.605  1.00  0.00          H
ATOM   1387  HZ1 LYS A 187       6.694  19.004  -3.989  1.00  0.00          H
ATOM   1388  HZ2 LYS A 187       7.689  20.284  -4.273  1.00  0.00          H
ATOM   1389  HZ3 LYS A 187       6.241  20.190  -5.047  1.00  0.00          H
ATOM   1390  N   GLU A 188       6.572  17.934 -11.837  1.00 26.19          N
ATOM   1391  CA  GLU A 188       5.675  17.910 -12.991  1.00 25.89          C
ATOM   1392  C   GLU A 188       4.469  17.008 -12.708  1.00 25.60          C
ATOM   1393  O   GLU A 188       3.319  17.448 -12.709  1.00 25.35          O
ATOM   1394  CB  GLU A 188       6.410  17.383 -14.260  1.00 28.34          C
ATOM   1395  CG  GLU A 188       7.738  16.626 -14.054  1.00 32.78          C
ATOM   1396  CD  GLU A 188       8.895  17.552 -13.732  1.00 33.60          C
ATOM   1397  OE1 GLU A 188       9.397  17.489 -12.595  1.00 31.32          O
ATOM   1398  OE2 GLU A 188       9.245  18.379 -14.601  1.00 35.45          O1-
ATOM   1399  H   GLU A 188       7.530  17.623 -11.995  1.00  0.00          H
ATOM   1400  HA  GLU A 188       5.308  18.921 -13.174  1.00  0.00          H
ATOM   1401  HB2 GLU A 188       5.753  16.746 -14.855  1.00  0.00          H
ATOM   1402  HB3 GLU A 188       6.602  18.227 -14.915  1.00  0.00          H
ATOM   1403  HG2 GLU A 188       7.628  15.861 -13.289  1.00  0.00          H
ATOM   1404  HG3 GLU A 188       7.996  16.092 -14.968  1.00  0.00          H
ATOM   1405  N   HIS A 189       4.758  15.732 -12.427  1.00 23.36          N
ATOM   1406  CA  HIS A 189       3.770  14.680 -12.197  1.00 23.70          C
ATOM   1407  C   HIS A 189       3.119  14.838 -10.812  1.00 22.66          C
ATOM   1408  O   HIS A 189       1.969  14.446 -10.612  1.00 23.19          O
ATOM   1409  CB  HIS A 189       4.447  13.301 -12.315  1.00 22.55          C
ATOM   1410  CG  HIS A 189       5.263  13.082 -13.575  1.00 24.25          C
ATOM   1411  ND1 HIS A 189       4.996  13.698 -14.793  1.00 24.12          N
ATOM   1412  CD2 HIS A 189       6.352  12.272 -13.813  1.00 22.85          C
ATOM   1413  CE1 HIS A 189       5.913  13.284 -15.667  1.00 22.58          C
ATOM   1414  NE2 HIS A 189       6.753  12.399 -15.145  1.00 24.93          N
ATOM   1415  H   HIS A 189       5.733  15.465 -12.451  1.00  0.00          H
ATOM   1416  HA  HIS A 189       2.999  14.762 -12.962  1.00  0.00          H
ATOM   1417  HB2 HIS A 189       5.103  13.123 -11.461  1.00  0.00          H
ATOM   1418  HB3 HIS A 189       3.683  12.523 -12.271  1.00  0.00          H
ATOM   1419  HD1 HIS A 189       4.276  14.404 -15.013  1.00  0.00          H
ATOM   1420  HD2 HIS A 189       6.874  11.608 -13.135  1.00  0.00          H
ATOM   1421  HE1 HIS A 189       5.968  13.630 -16.691  1.00  0.00          H
ATOM   1422  N   TRP A 190       3.812  15.534  -9.904  1.00 21.90          N
ATOM   1423  CA  TRP A 190       3.330  16.047  -8.627  1.00 22.07          C
ATOM   1424  C   TRP A 190       2.594  17.403  -8.807  1.00 22.09          C
ATOM   1425  O   TRP A 190       2.487  18.191  -7.867  1.00 23.25          O
ATOM   1426  CB  TRP A 190       4.571  16.247  -7.741  1.00 20.63          C
ATOM   1427  CG  TRP A 190       4.376  16.314  -6.263  1.00 20.86          C
ATOM   1428  CD1 TRP A 190       4.381  17.447  -5.530  1.00 20.30          C
ATOM   1429  CD2 TRP A 190       4.265  15.218  -5.309  1.00 20.57          C
ATOM   1430  NE1 TRP A 190       4.311  17.128  -4.192  1.00 22.97          N
ATOM   1431  CE3 TRP A 190       4.263  13.809  -5.408  1.00 20.34          C
ATOM   1432  CE2 TRP A 190       4.192  15.773  -3.998  1.00 21.62          C
ATOM   1433  CZ3 TRP A 190       4.205  13.001  -4.255  1.00 20.80          C
ATOM   1434  CZ2 TRP A 190       4.108  14.981  -2.845  1.00 20.94          C
ATOM   1435  CH2 TRP A 190       4.122  13.584  -2.974  1.00 23.55          C
ATOM   1436  H   TRP A 190       4.753  15.803 -10.170  1.00  0.00          H
ATOM   1437  HA  TRP A 190       2.660  15.312  -8.181  1.00  0.00          H
ATOM   1438  HB2 TRP A 190       5.291  15.445  -7.906  1.00  0.00          H
ATOM   1439  HB3 TRP A 190       5.064  17.166  -8.041  1.00  0.00          H
ATOM   1440  HD1 TRP A 190       4.494  18.436  -5.951  1.00  0.00          H
ATOM   1441  HE1 TRP A 190       4.671  17.754  -3.453  1.00  0.00          H
ATOM   1442  HE3 TRP A 190       4.340  13.348  -6.381  1.00  0.00          H
ATOM   1443  HZ3 TRP A 190       4.232  11.928  -4.361  1.00  0.00          H
ATOM   1444  HZ2 TRP A 190       4.069  15.441  -1.872  1.00  0.00          H
ATOM   1445  HH2 TRP A 190       4.085  12.975  -2.083  1.00  0.00          H
ATOM   1446  N   SER A 191       2.058  17.679 -10.000  1.00 23.12          N
ATOM   1447  CA  SER A 191       1.189  18.800 -10.332  1.00 23.81          C
ATOM   1448  C   SER A 191       0.000  18.276 -11.155  1.00 24.41          C
ATOM   1449  O   SER A 191      -0.207  17.062 -11.234  1.00 24.90          O
ATOM   1450  CB  SER A 191       2.010  19.987 -10.890  1.00 25.10          C
ATOM   1451  OG  SER A 191       2.245  19.944 -12.289  1.00 24.23          O
ATOM   1452  H   SER A 191       2.171  16.995 -10.735  1.00  0.00          H
ATOM   1453  HA  SER A 191       0.739  19.154  -9.405  1.00  0.00          H
ATOM   1454  HB2 SER A 191       1.490  20.918 -10.663  1.00  0.00          H
ATOM   1455  HB3 SER A 191       2.966  20.056 -10.376  1.00  0.00          H
ATOM   1456  HG  SER A 191       2.615  19.077 -12.498  1.00  0.00          H
ATOM   1457  N   TYR A 192      -0.813  19.176 -11.710  1.00 24.18          N
ATOM   1458  CA  TYR A 192      -2.031  18.864 -12.452  1.00 22.22          C
ATOM   1459  C   TYR A 192      -1.686  18.975 -13.947  1.00 21.91          C
ATOM   1460  O   TYR A 192      -1.413  20.090 -14.388  1.00 20.67          O
ATOM   1461  CB  TYR A 192      -3.087  19.958 -12.131  1.00 22.43          C
ATOM   1462  CG  TYR A 192      -3.376  20.146 -10.653  1.00 24.33          C
ATOM   1463  CD1 TYR A 192      -4.457  19.484 -10.039  1.00 24.83          C
ATOM   1464  CD2 TYR A 192      -2.539  20.978  -9.881  1.00 24.09          C
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ATOM   1465  CE1 TYR A 192      -4.654  19.603  -8.650  1.00 24.93           C
ATOM   1466  CE2 TYR A 192      -2.735  21.090  -8.496  1.00 24.35           C
ATOM   1467  CZ  TYR A 192      -3.772  20.371  -7.875  1.00 24.98           C
ATOM   1468  OH  TYR A 192      -3.901  20.381  -6.521  1.00 28.04           O
ATOM   1469  H   TYR A 192      -0.526  20.147 -11.730  1.00  0.00           H
ATOM   1470  HA  TYR A 192      -2.432  17.886 -12.185  1.00  0.00           H
ATOM   1471  HB2 TYR A 192      -2.779  20.933 -12.513  1.00  0.00           H
ATOM   1472  HB3 TYR A 192      -4.019  19.725 -12.649  1.00  0.00           H
ATOM   1473  HD1 TYR A 192      -5.114  18.858 -10.623  1.00  0.00           H
ATOM   1474  HD2 TYR A 192      -1.722  21.512 -10.343  1.00  0.00           H
ATOM   1475  HE1 TYR A 192      -5.461  19.079  -8.163  1.00  0.00           H
ATOM   1476  HE2 TYR A 192      -2.062  21.707  -7.920  1.00  0.00           H
ATOM   1477  HH  TYR A 192      -3.335  21.048  -6.107  1.00  0.00           H
ATOM   1478  N   PRO A 193      -1.674  17.884 -14.743  1.00 22.36           N
ATOM   1479  CA  PRO A 193      -1.561  17.958 -16.207  1.00 24.02           C
ATOM   1480  C   PRO A 193      -2.613  18.868 -16.869  1.00 24.39           C
ATOM   1481  O   PRO A 193      -3.703  19.089 -16.341  1.00 24.70           O
ATOM   1482  CB  PRO A 193      -1.753  16.517 -16.694  1.00 24.46           C
ATOM   1483  CG  PRO A 193      -1.391  15.638 -15.512  1.00 25.42           C
ATOM   1484  CD  PRO A 193      -1.645  16.499 -14.277  1.00 24.13           C
ATOM   1485  HA  PRO A 193      -0.558  18.313 -16.452  1.00  0.00           H
ATOM   1486  HB2 PRO A 193      -2.794  16.329 -16.958  1.00  0.00           H
ATOM   1487  HB3 PRO A 193      -1.153  16.294 -17.577  1.00  0.00           H
ATOM   1488  HG2 PRO A 193      -1.965  14.711 -15.495  1.00  0.00           H
ATOM   1489  HG3 PRO A 193      -0.334  15.383 -15.573  1.00  0.00           H
ATOM   1490  HD2 PRO A 193      -2.592  16.224 -13.821  1.00  0.00           H
ATOM   1491  HD3 PRO A 193      -0.861  16.353 -13.538  1.00  0.00           H
ATOM   1492  N   GLU A 194      -2.303  19.359 -18.064  1.00 22.73           N
ATOM   1493  CA  GLU A 194      -3.115  20.293 -18.836  1.00 23.46           C
ATOM   1494  C   GLU A 194      -4.353  19.614 -19.468  1.00 23.36           C
ATOM   1495  O   GLU A 194      -5.193  20.308 -20.036  1.00 21.68           O
ATOM   1496  CB  GLU A 194      -2.208  20.910 -19.931  1.00 25.61           C
ATOM   1497  CG  GLU A 194      -1.191  21.967 -19.417  1.00 28.09           C
ATOM   1498  CD  GLU A 194      -0.184  21.461 -18.385  1.00 32.73           C
ATOM   1499  OE1 GLU A 194       0.091  22.204 -17.418  1.00 31.59           O
ATOM   1500  OE2 GLU A 194       0.240  20.288 -18.496  1.00 33.69           O1-
ATOM   1501  H   GLU A 194      -1.314  19.334 -18.334  1.00  0.00           H
ATOM   1502  HA  GLU A 194      -3.480  21.087 -18.181  1.00  0.00           H
ATOM   1503  HB2 GLU A 194      -1.677  20.121 -20.467  1.00  0.00           H
ATOM   1504  HB3 GLU A 194      -2.830  21.401 -20.679  1.00  0.00           H
ATOM   1505  HG2 GLU A 194      -0.622  22.364 -20.256  1.00  0.00           H
ATOM   1506  HG3 GLU A 194      -1.729  22.811 -18.985  1.00  0.00           H
ATOM   1507  N   TRP A 195      -4.502  18.284 -19.336  1.00 22.03           N
ATOM   1508  CA  TRP A 195      -5.716  17.548 -19.702  1.00 22.35           C
ATOM   1509  C   TRP A 195      -6.749  17.524 -18.555  1.00 22.75           C
ATOM   1510  O   TRP A 195      -7.898  17.149 -18.782  1.00 21.13           O
ATOM   1511  CB  TRP A 195      -5.364  16.086 -20.078  1.00 22.81           C
ATOM   1512  CG  TRP A 195      -4.750  15.163 -19.056  1.00 23.84           C
ATOM   1513  CD1 TRP A 195      -5.397  14.608 -18.005  1.00 25.41           C
ATOM   1514  CD2 TRP A 195      -3.406  14.586 -19.036  1.00 23.39           C
ATOM   1515  NE1 TRP A 195      -4.547  13.760 -17.325  1.00 26.41           N
ATOM   1516  CE3 TRP A 195      -2.257  14.710 -19.854  1.00 23.41           C
ATOM   1517  CE2 TRP A 195      -3.328  13.655 -17.955  1.00 24.13           C
ATOM   1518  CZ3 TRP A 195      -1.104  13.933 -19.618  1.00 26.61           C
ATOM   1519  CZ2 TRP A 195      -2.194  12.862 -17.721  1.00 24.83           C
ATOM   1520  CH2 TRP A 195      -1.074  13.004 -18.559  1.00 23.38           C
ATOM   1521  H   TRP A 195      -3.769  17.784 -18.857  1.00  0.00           H
ATOM   1522  HA  TRP A 195      -6.190  18.021 -20.564  1.00  0.00           H
ATOM   1523  HB2 TRP A 195      -6.276  15.593 -20.421  1.00  0.00           H
ATOM   1524  HB3 TRP A 195      -4.712  16.090 -20.951  1.00  0.00           H
ATOM   1525  HD1 TRP A 195      -6.438  14.779 -17.768  1.00  0.00           H
ATOM   1526  HE1 TRP A 195      -4.860  13.148 -16.563  1.00  0.00           H
ATOM   1527  HE3 TRP A 195      -2.280  15.383 -20.697  1.00  0.00           H
ATOM   1528  HZ3 TRP A 195      -0.253  14.021 -20.277  1.00  0.00           H
ATOM   1529  HZ2 TRP A 195      -2.192  12.133 -16.923  1.00  0.00           H
ATOM   1530  HH2 TRP A 195      -0.209  12.373 -18.411  1.00  0.00           H
ATOM   1531  N   ILE A 196      -6.356  17.888 -17.325  1.00 22.64           N
ATOM   1532  CA  ILE A 196      -7.213  17.856 -16.143  1.00 24.40           C
ATOM   1533  C   ILE A 196      -8.173  19.056 -16.214  1.00 23.38           C
ATOM   1534  O   ILE A 196      -7.752  20.181 -16.497  1.00 23.92           O
ATOM   1535  CB  ILE A 196      -6.323  17.964 -14.862  1.00 23.65           C
ATOM   1536  CG1 ILE A 196      -5.243  16.861 -14.772  1.00 23.75           C
ATOM   1537  CG2 ILE A 196      -7.098  18.034 -13.530  1.00 25.15           C
ATOM   1538  CD1 ILE A 196      -5.764  15.439 -14.558  1.00 22.43           C
ATOM   1539  H   ILE A 196      -5.424  18.264 -17.213  1.00  0.00           H
ATOM   1540  HA  ILE A 196      -7.781  16.925 -16.131  1.00  0.00           H
ATOM   1541  HB  ILE A 196      -5.789  18.912 -14.932  1.00  0.00           H
ATOM   1542 HG12 ILE A 196      -4.628  16.852 -15.669  1.00  0.00           H
ATOM   1543 HG13 ILE A 196      -4.572  17.117 -13.955  1.00  0.00           H
ATOM   1544 HG21 ILE A 196      -6.415  18.091 -12.682  1.00  0.00           H
ATOM   1545 HG22 ILE A 196      -7.736  18.915 -13.473  1.00  0.00           H
ATOM   1546 HG23 ILE A 196      -7.722  17.153 -13.391  1.00  0.00           H
ATOM   1547 HD11 ILE A 196      -4.941  14.723 -14.547  1.00  0.00           H
ATOM   1548 HD12 ILE A 196      -6.285  15.350 -13.611  1.00  0.00           H
ATOM   1549 HD13 ILE A 196      -6.447  15.133 -15.351  1.00  0.00           H
ATOM   1550  N   ASN A 197      -9.453  18.843 -15.884  1.00 22.81           N
ATOM   1551  CA  ASN A 197     -10.425  19.906 -15.636  1.00 22.80           C
ATOM   1552  C   ASN A 197     -10.033  20.625 -14.327  1.00 21.04           C
ATOM   1553  O   ASN A 197     -10.487  20.295 -13.229  1.00 21.74           O
ATOM   1554  CB  ASN A 197     -11.858  19.311 -15.592  1.00  0.00           C
ATOM   1555  CG  ASN A 197     -12.931  20.289 -15.100  1.00  0.00           C
ATOM   1556  OD1 ASN A 197     -13.478  20.097 -14.025  1.00  0.00           O
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ATOM   1557  ND2 ASN A 197     -13.236  21.360 -15.820  1.00  0.00           N
ATOM   1558  H   ASN A 197      -9.733  17.883 -15.683  1.00  0.00           H
ATOM   1559  HA  ASN A 197     -10.382  20.626 -16.457  1.00  0.00           H
ATOM   1560  HB2 ASN A 197     -12.141  18.939 -16.576  1.00  0.00           H
ATOM   1561  HB3 ASN A 197     -11.883  18.447 -14.929  1.00  0.00           H
ATOM   1562 HD22 ASN A 197     -13.862  22.031 -15.367  1.00  0.00           H
ATOM   1563 HD21 ASN A 197     -12.844  21.543 -16.728  1.00  0.00           H
ATOM   1564  N   GLN A 198      -9.188  21.652 -14.454  1.00 20.33           N
ATOM   1565  CA  GLN A 198      -8.776  22.567 -13.391  1.00 20.78           C
ATOM   1566  C   GLN A 198      -9.891  23.595 -13.072  1.00 22.61           C
ATOM   1567  O   GLN A 198      -9.609  24.754 -12.783  1.00 19.79           O
ATOM   1568  CB  GLN A 198      -7.417  23.211 -13.765  1.00 22.47           C
ATOM   1569  CG  GLN A 198      -6.302  22.147 -13.952  1.00 22.31           C
ATOM   1570  CD  GLN A 198      -4.874  22.692 -13.871  1.00 23.01           C
ATOM   1571  OE1 GLN A 198      -4.525  23.407 -12.932  1.00 21.95           O
ATOM   1572  NE2 GLN A 198      -4.020  22.323 -14.819  1.00 23.94           N
ATOM   1573  H   GLN A 198      -8.761  21.768 -15.366  1.00  0.00           H
ATOM   1574  HA  GLN A 198      -8.624  22.016 -12.468  1.00  0.00           H
ATOM   1575  HB2 GLN A 198      -7.512  23.815 -14.668  1.00  0.00           H
ATOM   1576  HB3 GLN A 198      -7.129  23.903 -12.972  1.00  0.00           H
ATOM   1577  HG2 GLN A 198      -6.387  21.385 -13.176  1.00  0.00           H
ATOM   1578  HG3 GLN A 198      -6.439  21.629 -14.900  1.00  0.00           H
ATOM   1579 HE21 GLN A 198      -4.308  21.690 -15.554  1.00  0.00           H
ATOM   1580 HE22 GLN A 198      -3.059  22.666 -14.833  1.00  0.00           H
ATOM   1581  N   THR A 199     -11.152  23.136 -13.070  1.00 22.32           N
ATOM   1582  CA  THR A 199     -12.291  23.769 -12.422  1.00 22.52           C
ATOM   1583  C   THR A 199     -12.688  22.805 -11.294  1.00 21.34           C
ATOM   1584  O   THR A 199     -12.471  23.162 -10.143  1.00 21.66           O
ATOM   1585  CB  THR A 199     -13.414  24.191 -13.416  1.00 21.15           C
ATOM   1586  OG1 THR A 199     -14.333  23.170 -13.749  1.00 24.02           O
ATOM   1587  CG2 THR A 199     -12.889  24.830 -14.712  1.00 20.12           C
ATOM   1588  H   THR A 199     -11.276  22.154 -13.278  1.00  0.00           H
ATOM   1589  HA  THR A 199     -11.956  24.690 -11.940  1.00  0.00           H
ATOM   1590  HB  THR A 199     -14.011  24.949 -12.904  1.00  0.00           H
ATOM   1591  HG1 THR A 199     -14.930  23.125 -12.988  1.00  0.00           H
ATOM   1592 HG21 THR A 199     -13.710  25.225 -15.311  1.00  0.00           H
ATOM   1593 HG22 THR A 199     -12.214  25.657 -14.488  1.00  0.00           H
ATOM   1594 HG23 THR A 199     -12.343  24.113 -15.323  1.00  0.00           H
ATOM   1595  N   LYS A 200     -13.101  21.548 -11.553  1.00 21.45           N
ATOM   1596  CA  LYS A 200     -13.467  20.577 -10.505  1.00 22.36           C
ATOM   1597  C   LYS A 200     -12.255  20.240  -9.613  1.00 21.80           C
ATOM   1598  O   LYS A 200     -12.390  20.107  -8.397  1.00 21.82           O
ATOM   1599  CB  LYS A 200     -14.062  19.298 -11.140  1.00 23.43           C
ATOM   1600  CG  LYS A 200     -14.715  18.316 -10.140  1.00 27.52           C
ATOM   1601  CD  LYS A 200     -15.219  17.029 -10.820  1.00 27.63           C
ATOM   1602  CE  LYS A 200     -15.708  15.959  -9.818  1.00 27.92           C
ATOM   1603  NZ  LYS A 200     -15.713  14.611 -10.419  1.00 31.29          N1+
ATOM   1604  H   LYS A 200     -13.321  21.295 -12.514  1.00  0.00           H
ATOM   1605  HA  LYS A 200     -14.232  21.033  -9.877  1.00  0.00           H
ATOM   1606  HB2 LYS A 200     -14.827  19.597 -11.857  1.00  0.00           H
ATOM   1607  HB3 LYS A 200     -13.288  18.785 -11.713  1.00  0.00           H
ATOM   1608  HG2 LYS A 200     -13.994  18.054  -9.366  1.00  0.00           H
ATOM   1609  HG3 LYS A 200     -15.537  18.819  -9.627  1.00  0.00           H
ATOM   1610  HD2 LYS A 200     -16.014  17.276 -11.525  1.00  0.00           H
ATOM   1611  HD3 LYS A 200     -14.402  16.630 -11.423  1.00  0.00           H
ATOM   1612  HE2 LYS A 200     -15.059  15.930  -8.943  1.00  0.00           H
ATOM   1613  HE3 LYS A 200     -16.701  16.205  -9.440  1.00  0.00           H
ATOM   1614  HZ1 LYS A 200     -15.675  13.877  -9.675  1.00  0.00           H
ATOM   1615  HZ2 LYS A 200     -16.530  14.447 -10.980  1.00  0.00           H
ATOM   1616  HZ3 LYS A 200     -14.883  14.458 -10.968  1.00  0.00           H
ATOM   1617  N   ALA A 201     -11.049  20.202 -10.198  1.00 21.18           N
ATOM   1618  CA  ALA A 201      -9.789  20.094  -9.463  1.00 21.35           C
ATOM   1619  C   ALA A 201      -9.381  21.396  -8.742  1.00 21.94           C
ATOM   1620  O   ALA A 201      -8.366  21.387  -8.050  1.00 19.69           O
ATOM   1621  CB  ALA A 201      -8.663  19.675 -10.427  1.00 16.72           C
ATOM   1622  H   ALA A 201     -11.018  20.334 -11.204  1.00  0.00           H
ATOM   1623  HA  ALA A 201      -9.896  19.331  -8.693  1.00  0.00           H
ATOM   1624  HB1 ALA A 201      -7.678  19.774  -9.970  1.00  0.00           H
ATOM   1625  HB2 ALA A 201      -8.766  18.638 -10.738  1.00  0.00           H
ATOM   1626  HB3 ALA A 201      -8.652  20.275 -11.328  1.00  0.00           H
ATOM   1627  N   ALA A 202     -10.131  22.499  -8.878  1.00 20.87           N
ATOM   1628  CA  ALA A 202      -9.969  23.756  -8.147  1.00 22.47           C
ATOM   1629  C   ALA A 202     -11.108  23.924  -7.120  1.00 22.33           C
ATOM   1630  O   ALA A 202     -10.834  24.213  -5.957  1.00 22.37           O
ATOM   1631  CB  ALA A 202      -9.973  24.939  -9.131  1.00 19.99           C
ATOM   1632  H   ALA A 202     -10.977  22.428  -9.438  1.00  0.00           H
ATOM   1633  HA  ALA A 202      -9.015  23.775  -7.626  1.00  0.00           H
ATOM   1634  HB1 ALA A 202      -9.759  25.872  -8.609  1.00  0.00           H
ATOM   1635  HB2 ALA A 202      -9.210  24.815  -9.899  1.00  0.00           H
ATOM   1636  HB3 ALA A 202     -10.929  25.070  -9.636  1.00  0.00           H
ATOM   1637  N   GLU A 203     -12.368  23.688  -7.519  1.00 22.02           N
ATOM   1638  CA  GLU A 203     -13.600  23.783  -6.726  1.00 23.59           C
ATOM   1639  C   GLU A 203     -13.516  22.921  -5.451  1.00 23.77           C
ATOM   1640  O   GLU A 203     -13.707  23.395  -4.328  1.00 22.97           O
ATOM   1641  CB  GLU A 203     -14.800  23.322  -7.593  1.00 24.19           C
ATOM   1642  CG  GLU A 203     -15.156  24.206  -8.818  1.00 28.14           C
ATOM   1643  CD  GLU A 203     -15.796  23.413  -9.967  1.00 30.24           C
ATOM   1644  OE1 GLU A 203     -16.456  22.395  -9.668  1.00 31.20           O
ATOM   1645  OE2 GLU A 203     -15.562  23.789 -11.140  1.00 32.85          O1-
ATOM   1646  H   GLU A 203     -12.503  23.479  -8.510  1.00  0.00           H
ATOM   1647  HA  GLU A 203     -13.745  24.823  -6.427  1.00  0.00           H
ATOM   1648  HB2 GLU A 203     -14.602  22.303  -7.931  1.00  0.00           H
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ATOM   1649  HB3 GLU A 203     -15.695  23.239  -6.975  1.00  0.00          H
ATOM   1650  HG2 GLU A 203     -15.844  24.997  -8.523  1.00  0.00          H
ATOM   1651  HG3 GLU A 203     -14.273  24.707  -9.210  1.00  0.00          H
ATOM   1652  N   ILE A 204     -13.150  21.648  -5.632  1.00 23.93           N
ATOM   1653  CA  ILE A 204     -13.130  20.627  -4.590  1.00 24.60           C
ATOM   1654  C   ILE A 204     -11.786  20.668  -3.811  1.00 24.13           C
ATOM   1655  O   ILE A 204     -11.569  19.849  -2.917  1.00 26.89           O
ATOM   1656  CB  ILE A 204     -13.454  19.249  -5.255  1.00 24.83           C
ATOM   1657  CG1 ILE A 204     -14.710  19.308  -6.175  1.00 27.64           C
ATOM   1658  CG2 ILE A 204     -13.631  18.088  -4.253  1.00 22.97           C
ATOM   1659  CD1 ILE A 204     -16.015  19.727  -5.481  1.00 28.38           C
ATOM   1660  H   ILE A 204     -12.989  21.335  -6.584  1.00  0.00          H
ATOM   1661  HA  ILE A 204     -13.914  20.842  -3.861  1.00  0.00          H
ATOM   1662  HB  ILE A 204     -12.612  18.982  -5.898  1.00  0.00          H
ATOM   1663 HG12 ILE A 204     -14.542  19.979  -7.016  1.00  0.00          H
ATOM   1664 HG13 ILE A 204     -14.868  18.336  -6.638  1.00  0.00          H
ATOM   1665 HG21 ILE A 204     -14.033  17.203  -4.746  1.00  0.00          H
ATOM   1666 HG22 ILE A 204     -12.692  17.785  -3.798  1.00  0.00          H
ATOM   1667 HG23 ILE A 204     -14.320  18.358  -3.454  1.00  0.00          H
ATOM   1668 HD11 ILE A 204     -16.839  19.740  -6.195  1.00  0.00          H
ATOM   1669 HD12 ILE A 204     -16.284  19.042  -4.678  1.00  0.00          H
ATOM   1670 HD13 ILE A 204     -15.946  20.729  -5.058  1.00  0.00          H
ATOM   1671  N   ARG A 205     -10.912  21.666  -4.049  1.00 23.13           N
ATOM   1672  CA  ARG A 205      -9.798  22.005  -3.148  1.00 25.14           C
ATOM   1673  C   ARG A 205     -10.341  22.750  -1.914  1.00 25.07           C
ATOM   1674  O   ARG A 205      -9.749  22.665  -0.839  1.00 22.75           O
ATOM   1675  CB  ARG A 205      -8.790  22.983  -3.808  1.00 25.21           C
ATOM   1676  CG  ARG A 205      -8.205  22.569  -5.166  1.00 29.73           C
ATOM   1677  CD  ARG A 205      -6.905  21.748  -5.131  1.00 29.20           C
ATOM   1678  NE  ARG A 205      -5.727  22.546  -5.514  1.00 29.90           N
ATOM   1679  CZ  ARG A 205      -5.367  22.967  -6.736  1.00 28.96           C
ATOM   1680  NH1 ARG A 205      -6.154  22.843  -7.802  1.00 29.65           N
ATOM   1681  NH2 ARG A 205      -4.172  23.523  -6.885  1.00 28.01           N1+
ATOM   1682  H   ARG A 205     -11.152  22.332  -4.775  1.00  0.00          H
ATOM   1683  HA  ARG A 205      -9.280  21.100  -2.831  1.00  0.00          H
ATOM   1684  HB2 ARG A 205      -9.279  23.948  -3.949  1.00  0.00          H
ATOM   1685  HB3 ARG A 205      -7.970  23.192  -3.119  1.00  0.00          H
ATOM   1686  HG2 ARG A 205      -8.964  22.039  -5.738  1.00  0.00          H
ATOM   1687  HG3 ARG A 205      -8.009  23.489  -5.716  1.00  0.00          H
ATOM   1688  HD2 ARG A 205      -6.740  21.316  -4.143  1.00  0.00          H
ATOM   1689  HD3 ARG A 205      -6.971  20.904  -5.820  1.00  0.00          H
ATOM   1690  HE  ARG A 205      -5.016  22.708  -4.766  1.00  0.00          H
ATOM   1691 HH11 ARG A 205      -7.020  22.293  -7.778  1.00  0.00          H
ATOM   1692 HH12 ARG A 205      -5.833  23.139  -8.742  1.00  0.00          H
ATOM   1693 HH21 ARG A 205      -3.453  23.277  -6.180  1.00  0.00          H
ATOM   1694 HH22 ARG A 205      -3.811  23.878  -7.769  1.00  0.00          H
ATOM   1695  N   ALA A 206     -11.435  23.509  -2.089  1.00 24.01           N
ATOM   1696  CA  ALA A 206     -12.053  24.333  -1.061  1.00 24.47           C
ATOM   1697  C   ALA A 206     -13.185  23.555  -0.381  1.00 24.30           C
ATOM   1698  O   ALA A 206     -13.142  23.378   0.833  1.00 25.49           O
ATOM   1699  CB  ALA A 206     -12.642  25.591  -1.724  1.00 23.88           C
ATOM   1700  H   ALA A 206     -11.871  23.504  -3.003  1.00  0.00          H
ATOM   1701  HA  ALA A 206     -11.322  24.633  -0.306  1.00  0.00          H
ATOM   1702  HB1 ALA A 206     -13.137  26.225  -0.986  1.00  0.00          H
ATOM   1703  HB2 ALA A 206     -11.857  26.188  -2.188  1.00  0.00          H
ATOM   1704  HB3 ALA A 206     -13.374  25.355  -2.498  1.00  0.00          H
ATOM   1705  N   ASP A 207     -14.178  23.074  -1.153  1.00 23.97           N
ATOM   1706  CA  ASP A 207     -15.400  22.396  -0.668  1.00 24.82           C
ATOM   1707  C   ASP A 207     -15.091  21.237   0.305  1.00 24.07           C
ATOM   1708  O   ASP A 207     -15.698  21.102   1.370  1.00 24.77           O
ATOM   1709  CB  ASP A 207     -16.312  22.000  -1.876  1.00 25.95           C
ATOM   1710  CG  ASP A 207     -16.892  20.582  -1.887  1.00 28.75           C
ATOM   1711  OD1 ASP A 207     -18.115  20.404  -1.693  1.00 30.03           O
ATOM   1712  OD2 ASP A 207     -16.132  19.598  -2.044  1.00 31.14           O1-
ATOM   1713  H   ASP A 207     -14.119  23.259  -2.147  1.00  0.00          H
ATOM   1714  HA  ASP A 207     -15.949  23.131  -0.076  1.00  0.00          H
ATOM   1715  HB2 ASP A 207     -17.143  22.703  -1.943  1.00  0.00          H
ATOM   1716  HB3 ASP A 207     -15.769  22.107  -2.815  1.00  0.00          H
ATOM   1717  N   ALA A 208     -14.102  20.420  -0.069  1.00 23.20           N
ATOM   1718  CA  ALA A 208     -13.743  19.186   0.603  1.00 22.76           C
ATOM   1719  C   ALA A 208     -13.042  19.417   1.951  1.00 22.38           C
ATOM   1720  O   ALA A 208     -13.015  18.503   2.778  1.00 24.01           O
ATOM   1721  CB  ALA A 208     -12.836  18.387  -0.329  1.00 19.96           C
ATOM   1722  H   ALA A 208     -13.711  20.589  -0.984  1.00  0.00          H
ATOM   1723  HA  ALA A 208     -14.653  18.617   0.780  1.00  0.00          H
ATOM   1724  HB1 ALA A 208     -12.509  17.465   0.141  1.00  0.00          H
ATOM   1725  HB2 ALA A 208     -13.357  18.118  -1.247  1.00  0.00          H
ATOM   1726  HB3 ALA A 208     -11.954  18.958  -0.601  1.00  0.00          H
ATOM   1727  N   ALA A 209     -12.559  20.643   2.216  1.00 22.75           N
ATOM   1728  CA  ALA A 209     -12.024  21.083   3.507  1.00 22.99           C
ATOM   1729  C   ALA A 209     -13.112  21.120   4.595  1.00 24.29           C
ATOM   1730  O   ALA A 209     -12.802  21.059   5.785  1.00 25.18           O
ATOM   1731  CB  ALA A 209     -11.431  22.492   3.359  1.00 23.91           C
ATOM   1732  H   ALA A 209     -12.700  21.362   1.512  1.00  0.00          H
ATOM   1733  HA  ALA A 209     -11.243  20.390   3.817  1.00  0.00          H
ATOM   1734  HB1 ALA A 209     -10.845  22.764   4.237  1.00  0.00          H
ATOM   1735  HB2 ALA A 209     -10.777  22.565   2.491  1.00  0.00          H
ATOM   1736  HB3 ALA A 209     -12.208  23.249   3.241  1.00  0.00          H
ATOM   1737  N   THR A 210     -14.377  21.170   4.174  1.00 22.25           N
ATOM   1738  CA  THR A 210     -15.580  21.115   4.984  1.00 22.42           C
ATOM   1739  C   THR A 210     -16.407  19.854   4.655  1.00 21.18           C
ATOM   1740  O   THR A 210     -17.603  19.828   4.937  1.00 19.00           O
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ATOM   1741  CB  THR A 210     -16.341  22.462   4.832  1.00 24.82          C
ATOM   1742  OG1 THR A 210     -16.448  22.875   3.477  1.00 24.17          O
ATOM   1743  CG2 THR A 210     -15.659  23.612   5.587  1.00 24.26          C
ATOM   1744  H   THR A 210     -14.535  21.312   3.182  1.00  0.00          H
ATOM   1745  HA  THR A 210     -15.318  20.999   6.038  1.00  0.00          H
ATOM   1746  HB  THR A 210     -17.352  22.354   5.229  1.00  0.00          H
ATOM   1747  HG1 THR A 210     -16.675  22.134   2.923  1.00  0.00          H
ATOM   1748 HG21 THR A 210     -16.234  24.534   5.495  1.00  0.00          H
ATOM   1749 HG22 THR A 210     -15.564  23.385   6.648  1.00  0.00          H
ATOM   1750 HG23 THR A 210     -14.659  23.807   5.197  1.00  0.00          H
ATOM   1751  N   LYS A 211     -15.784  18.797   4.099  1.00 20.79          N
ATOM   1752  CA  LYS A 211     -16.420  17.495   3.880  1.00 22.47          C
ATOM   1753  C   LYS A 211     -15.634  16.335   4.504  1.00 22.13          C
ATOM   1754  O   LYS A 211     -16.258  15.444   5.080  1.00 22.26          O
ATOM   1755  CB  LYS A 211     -16.719  17.213   2.387  1.00 24.94          C
ATOM   1756  CG  LYS A 211     -17.623  18.250   1.680  1.00 30.95          C
ATOM   1757  CD  LYS A 211     -18.727  17.634   0.801  1.00 35.72          C
ATOM   1758  CE  LYS A 211     -18.244  16.896  -0.461  1.00 40.53          C
ATOM   1759  NZ  LYS A 211     -17.948  17.807  -1.577  1.00 39.99          N1+
ATOM   1760  H   LYS A 211     -14.795  18.885   3.899  1.00  0.00          H
ATOM   1761  HA  LYS A 211     -17.384  17.476   4.395  1.00  0.00          H
ATOM   1762  HB2 LYS A 211     -15.789  17.087   1.836  1.00  0.00          H
ATOM   1763  HB3 LYS A 211     -17.204  16.236   2.342  1.00  0.00          H
ATOM   1764  HG2 LYS A 211     -18.118  18.865   2.432  1.00  0.00          H
ATOM   1765  HG3 LYS A 211     -17.020  18.942   1.094  1.00  0.00          H
ATOM   1766  HD2 LYS A 211     -19.301  16.940   1.417  1.00  0.00          H
ATOM   1767  HD3 LYS A 211     -19.433  18.417   0.518  1.00  0.00          H
ATOM   1768  HE2 LYS A 211     -17.378  16.267  -0.254  1.00  0.00          H
ATOM   1769  HE3 LYS A 211     -19.040  16.230  -0.795  1.00  0.00          H
ATOM   1770  HZ1 LYS A 211     -18.009  17.399  -2.491  1.00  0.00          H
ATOM   1771  HZ2 LYS A 211     -18.495  18.675  -1.564  1.00  0.00          H
ATOM   1772  HZ3 LYS A 211     -17.034  18.282  -1.530  1.00  0.00          H
ATOM   1773  N   TYR A 212     -14.300  16.276   4.361  1.00 21.51          N
ATOM   1774  CA  TYR A 212     -13.535  15.081   4.734  1.00 22.30          C
ATOM   1775  C   TYR A 212     -12.048  15.329   5.007  1.00 19.69          C
ATOM   1776  O   TYR A 212     -11.464  16.288   4.502  1.00 19.22          O
ATOM   1777  CB  TYR A 212     -13.777  13.940   3.716  1.00 22.78          C
ATOM   1778  CG  TYR A 212     -13.591  14.308   2.251  1.00 23.36          C
ATOM   1779  CD1 TYR A 212     -12.307  14.556   1.727  1.00 23.83          C
ATOM   1780  CD2 TYR A 212     -14.712  14.387   1.401  1.00 26.25          C
ATOM   1781  CE1 TYR A 212     -12.150  14.837   0.359  1.00 23.80          C
ATOM   1782  CE2 TYR A 212     -14.551  14.663   0.030  1.00 24.56          C
ATOM   1783  CZ  TYR A 212     -13.264  14.870  -0.497  1.00 23.94          C
ATOM   1784  OH  TYR A 212     -13.094  15.104  -1.828  1.00 25.44          O
ATOM   1785  H   TYR A 212     -13.791  17.009   3.875  1.00  0.00          H
ATOM   1786  HA  TYR A 212     -13.930  14.747   5.693  1.00  0.00          H
ATOM   1787  HB2 TYR A 212     -13.118  13.097   3.936  1.00  0.00          H
ATOM   1788  HB3 TYR A 212     -14.783  13.542   3.855  1.00  0.00          H
ATOM   1789  HD1 TYR A 212     -11.434  14.510   2.362  1.00  0.00          H
ATOM   1790  HD2 TYR A 212     -15.701  14.220   1.801  1.00  0.00          H
ATOM   1791  HE1 TYR A 212     -11.166  15.026  -0.033  1.00  0.00          H
ATOM   1792  HE2 TYR A 212     -15.416  14.693  -0.614  1.00  0.00          H
ATOM   1793  HH  TYR A 212     -13.890  14.977  -2.323  1.00  0.00          H
ATOM   1794  N   ILE A 213     -11.441  14.414   5.776  1.00 19.76          N
ATOM   1795  CA  ILE A 213     -10.013  14.215   6.042  1.00 18.38          C
ATOM   1796  C   ILE A 213      -9.153  14.226   4.755  1.00 19.12          C
ATOM   1797  O   ILE A 213      -9.381  13.428   3.839  1.00 20.73          O
ATOM   1798  CB  ILE A 213      -9.849  12.953   6.946  1.00 18.18          C
ATOM   1799  CG1 ILE A 213      -8.401  12.506   7.253  1.00 16.52          C
ATOM   1800  CG2 ILE A 213     -10.624  11.730   6.428  1.00 15.90          C
ATOM   1801  CD1 ILE A 213      -7.516  13.562   7.918  1.00 15.33          C
ATOM   1802  H   ILE A 213     -12.051  13.737   6.219  1.00  0.00          H
ATOM   1803  HA  ILE A 213      -9.708  15.069   6.642  1.00  0.00          H
ATOM   1804  HB  ILE A 213     -10.294  13.209   7.908  1.00  0.00          H
ATOM   1805 HG12 ILE A 213      -8.434  11.647   7.925  1.00  0.00          H
ATOM   1806 HG13 ILE A 213      -7.923  12.138   6.348  1.00  0.00          H
ATOM   1807 HG21 ILE A 213     -10.491  10.897   7.115  1.00  0.00          H
ATOM   1808 HG22 ILE A 213     -11.697  11.900   6.351  1.00  0.00          H
ATOM   1809 HG23 ILE A 213     -10.266  11.411   5.449  1.00  0.00          H
ATOM   1810 HD11 ILE A 213      -6.584  13.116   8.265  1.00  0.00          H
ATOM   1811 HD12 ILE A 213      -7.239  14.345   7.217  1.00  0.00          H
ATOM   1812 HD13 ILE A 213      -8.006  14.015   8.780  1.00  0.00          H
ATOM   1813  N   TYR A 214      -8.198  15.167   4.687  1.00 17.70          N
ATOM   1814  CA  TYR A 214      -7.240  15.417   3.604  1.00 17.21          C
ATOM   1815  C   TYR A 214      -7.923  15.981   2.339  1.00 16.96          C
ATOM   1816  O   TYR A 214      -7.440  15.823   1.218  1.00 18.78          O
ATOM   1817  CB  TYR A 214      -6.284  14.226   3.326  1.00 16.51          C
ATOM   1818  CG  TYR A 214      -5.450  13.712   4.476  1.00 22.99          C
ATOM   1819  CD1 TYR A 214      -4.439  14.467   5.078  1.00 22.50          C
ATOM   1820  CD2 TYR A 214      -5.586  12.378   4.859  1.00 22.11          C
ATOM   1821  CE1 TYR A 214      -3.580  13.899   6.015  1.00 25.16          C
ATOM   1822  CE2 TYR A 214      -4.744  11.794   5.797  1.00 24.75          C
ATOM   1823  CZ  TYR A 214      -3.719  12.553   6.367  1.00 24.22          C
ATOM   1824  OH  TYR A 214      -2.861  12.042   7.281  1.00 26.19          O
ATOM   1825  H   TYR A 214      -8.094  15.767   5.505  1.00  0.00          H
ATOM   1826  HA  TYR A 214      -6.620  16.240   3.965  1.00  0.00          H
ATOM   1827  HB2 TYR A 214      -6.876  13.395   2.949  1.00  0.00          H
ATOM   1828  HB3 TYR A 214      -5.604  14.498   2.512  1.00  0.00          H
ATOM   1829  HD1 TYR A 214      -4.310  15.514   4.808  1.00  0.00          H
ATOM   1830  HD2 TYR A 214      -6.348  11.751   4.404  1.00  0.00          H
ATOM   1831  HE1 TYR A 214      -2.798  14.484   6.490  1.00  0.00          H
ATOM   1832  HE2 TYR A 214      -4.887  10.755   6.078  1.00  0.00          H
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ATOM   1833  HH  TYR A 214      -2.916  11.063   7.254  1.00  0.00          H
ATOM   1834  N   GLY A 215      -9.045  16.683   2.512  1.00 19.32          N
ATOM   1835  CA  GLY A 215      -9.876  17.222   1.442  1.00 20.66          C
ATOM   1836  C   GLY A 215      -9.567  18.698   1.208  1.00 20.07          C
ATOM   1837  O   GLY A 215      -9.571  19.149   0.064  1.00 23.01          O
ATOM   1838  H   GLY A 215      -9.364  16.831   3.464  1.00  0.00          H
ATOM   1839  HA2 GLY A 215      -9.748  16.670   0.511  1.00  0.00          H
ATOM   1840  HA3 GLY A 215     -10.917  17.125   1.743  1.00  0.00          H
ATOM   1841  N   GLY A 216      -9.119  19.405   2.247  1.00 20.86          N
ATOM   1842  CA  GLY A 216      -8.554  20.746   2.162  1.00 19.87          C
ATOM   1843  C   GLY A 216      -7.030  20.657   2.056  1.00 20.78          C
ATOM   1844  O   GLY A 216      -6.307  21.538   2.519  1.00 20.29          O
ATOM   1845  H   GLY A 216      -9.183  18.981   3.175  1.00  0.00          H
ATOM   1846  HA2 GLY A 216      -8.956  21.306   1.318  1.00  0.00          H
ATOM   1847  HA3 GLY A 216      -8.809  21.298   3.067  1.00  0.00          H
ATOM   1848  N   SER A 217      -6.525  19.559   1.486  1.00 19.48          N
ATOM   1849  CA  SER A 217      -5.127  19.332   1.190  1.00 20.05          C
ATOM   1850  C   SER A 217      -4.919  19.544  -0.312  1.00 20.74          C
ATOM   1851  O   SER A 217      -5.737  19.129  -1.142  1.00 20.42          O
ATOM   1852  CB  SER A 217      -4.771  17.873   1.522  1.00 20.42          C
ATOM   1853  OG  SER A 217      -3.365  17.714   1.514  1.00 20.14          O
ATOM   1854  H   SER A 217      -7.185  18.897   1.103  1.00  0.00          H
ATOM   1855  HA  SER A 217      -4.494  20.010   1.765  1.00  0.00          H
ATOM   1856  HB2 SER A 217      -5.143  17.585   2.505  1.00  0.00          H
ATOM   1857  HB3 SER A 217      -5.224  17.188   0.805  1.00  0.00          H
ATOM   1858  HG  SER A 217      -3.043  18.006   2.367  1.00  0.00          H
ATOM   1859  N   GLU A 218      -3.783  20.154  -0.636  1.00 21.33          N
ATOM   1860  CA  GLU A 218      -3.233  20.264  -1.969  1.00 22.53          C
ATOM   1861  C   GLU A 218      -2.449  18.968  -2.266  1.00 21.12          C
ATOM   1862  O   GLU A 218      -2.868  18.149  -3.085  1.00 21.10          O
ATOM   1863  CB  GLU A 218      -2.301  21.498  -1.930  1.00 25.65          C
ATOM   1864  CG  GLU A 218      -1.631  21.896  -3.243  1.00 26.70          C
ATOM   1865  CD  GLU A 218      -2.604  22.414  -4.281  1.00 27.03          C
ATOM   1866  OE1 GLU A 218      -3.643  23.023  -3.948  1.00 26.49          O
ATOM   1867  OE2 GLU A 218      -2.332  22.217  -5.480  1.00 26.09          O1-
ATOM   1868  H   GLU A 218      -3.208  20.512   0.121  1.00  0.00          H
ATOM   1869  HA  GLU A 218      -4.025  20.400  -2.709  1.00  0.00          H
ATOM   1870  HB2 GLU A 218      -2.874  22.356  -1.584  1.00  0.00          H
ATOM   1871  HB3 GLU A 218      -1.513  21.368  -1.189  1.00  0.00          H
ATOM   1872  HG2 GLU A 218      -0.945  22.710  -3.031  1.00  0.00          H
ATOM   1873  HG3 GLU A 218      -1.036  21.080  -3.651  1.00  0.00          H
ATOM   1874  N   SER A 219      -1.336  18.761  -1.549  1.00 19.74          N
ATOM   1875  CA  SER A 219      -0.292  17.799  -1.883  1.00 18.94          C
ATOM   1876  C   SER A 219      -0.682  16.325  -1.694  1.00 18.73          C
ATOM   1877  O   SER A 219      -0.077  15.460  -2.327  1.00 18.43          O
ATOM   1878  CB  SER A 219       0.961  18.155  -1.064  1.00 17.41          C
ATOM   1879  OG  SER A 219       0.789  17.983   0.335  1.00 21.92          O
ATOM   1880  H   SER A 219      -1.094  19.431  -0.836  1.00  0.00          H
ATOM   1881  HA  SER A 219      -0.050  17.925  -2.934  1.00  0.00          H
ATOM   1882  HB2 SER A 219       1.789  17.519  -1.388  1.00  0.00          H
ATOM   1883  HB3 SER A 219       1.278  19.179  -1.266  1.00  0.00          H
ATOM   1884  HG  SER A 219       1.656  17.689   0.631  1.00  0.00          H
ATOM   1885  N   TYR A 220      -1.720  16.020  -0.898  1.00 20.35          N
ATOM   1886  CA  TYR A 220      -2.210  14.656  -0.694  1.00 20.31          C
ATOM   1887  C   TYR A 220      -2.745  14.036  -2.001  1.00 21.43          C
ATOM   1888  O   TYR A 220      -2.622  12.834  -2.225  1.00 21.25          O
ATOM   1889  CB  TYR A 220      -3.310  14.652   0.392  1.00 18.66          C
ATOM   1890  CG  TYR A 220      -3.751  13.314   0.939  1.00 19.79          C
ATOM   1891  CD1 TYR A 220      -3.068  12.788   2.040  1.00 20.92          C
ATOM   1892  CD2 TYR A 220      -4.886  12.645   0.479  1.00 19.71          C
ATOM   1893  CE1 TYR A 220      -3.485  11.617   2.653  1.00 21.76          C
ATOM   1894  CE2 TYR A 220      -5.328  11.477   1.089  1.00 20.40          C
ATOM   1895  CZ  TYR A 220      -4.625  10.966   2.179  1.00 22.36          C
ATOM   1896  OH  TYR A 220      -5.104   9.846   2.774  1.00 20.26          O
ATOM   1897  H   TYR A 220      -2.181  16.771  -0.399  1.00  0.00          H
ATOM   1898  HA  TYR A 220      -1.374  14.051  -0.335  1.00  0.00          H
ATOM   1899  HB2 TYR A 220      -2.888  15.221   1.222  1.00  0.00          H
ATOM   1900  HB3 TYR A 220      -4.168  15.211   0.009  1.00  0.00          H
ATOM   1901  HD1 TYR A 220      -2.205  13.316   2.437  1.00  0.00          H
ATOM   1902  HD2 TYR A 220      -5.435  13.047  -0.368  1.00  0.00          H
ATOM   1903  HE1 TYR A 220      -2.961  11.232   3.522  1.00  0.00          H
ATOM   1904  HE2 TYR A 220      -6.203  10.943   0.734  1.00  0.00          H
ATOM   1905  HH  TYR A 220      -4.519   9.563   3.496  1.00  0.00          H
ATOM   1906  N   ARG A 221      -3.271  14.871  -2.904  1.00 19.98          N
ATOM   1907  CA  ARG A 221      -3.829  14.465  -4.189  1.00 19.09          C
ATOM   1908  C   ARG A 221      -2.712  14.144  -5.196  1.00 20.19          C
ATOM   1909  O   ARG A 221      -2.842  13.215  -5.992  1.00 18.27          O
ATOM   1910  CB  ARG A 221      -4.662  15.640  -4.726  1.00 19.12          C
ATOM   1911  CG  ARG A 221      -5.822  16.034  -3.795  1.00 16.39          C
ATOM   1912  CD  ARG A 221      -6.526  17.321  -4.236  1.00 17.18          C
ATOM   1913  NE  ARG A 221      -7.977  17.197  -4.054  1.00 19.14          N
ATOM   1914  CZ  ARG A 221      -8.743  17.825  -3.159  1.00 18.73          C
ATOM   1915  NH1 ARG A 221      -8.238  18.642  -2.234  1.00 18.23          N
ATOM   1916  NH2 ARG A 221     -10.049  17.609  -3.197  1.00 17.55          N1+
ATOM   1917  H   ARG A 221      -3.250  15.860  -2.688  1.00  0.00          H
ATOM   1918  HA  ARG A 221      -4.462  13.583  -4.063  1.00  0.00          H
ATOM   1919  HB2 ARG A 221      -4.022  16.506  -4.908  1.00  0.00          H
ATOM   1920  HB3 ARG A 221      -5.076  15.354  -5.693  1.00  0.00          H
ATOM   1921  HG2 ARG A 221      -6.523  15.200  -3.732  1.00  0.00          H
ATOM   1922  HG3 ARG A 221      -5.462  16.194  -2.779  1.00  0.00          H
ATOM   1923  HD2 ARG A 221      -6.117  18.186  -3.713  1.00  0.00          H
ATOM   1924  HD3 ARG A 221      -6.348  17.513  -5.294  1.00  0.00          H
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ATOM   1925  HE  ARG A 221      -8.439  16.594  -4.734  1.00  0.00          H
ATOM   1926 HH11 ARG A 221      -7.233  18.774  -2.091  1.00  0.00          H
ATOM   1927 HH12 ARG A 221      -8.833  18.995  -1.473  1.00  0.00          H
ATOM   1928 HH21 ARG A 221     -10.423  16.852  -3.780  1.00  0.00          H
ATOM   1929 HH22 ARG A 221     -10.712  18.304  -2.836  1.00  0.00          H
ATOM   1930  N   HIS A 222      -1.592  14.880  -5.124  1.00 19.92          N
ATOM   1931  CA  HIS A 222      -0.386  14.654  -5.922  1.00 20.24          C
ATOM   1932  C   HIS A 222       0.331  13.399  -5.424  1.00 19.44          C
ATOM   1933  O   HIS A 222       0.722  12.552  -6.224  1.00 21.15          O
ATOM   1934  CB  HIS A 222       0.566  15.857  -5.776  1.00 18.79          C
ATOM   1935  CG  HIS A 222      -0.019  17.142  -6.271  1.00 19.64          C
ATOM   1936  ND1 HIS A 222      -0.162  18.257  -5.443  1.00 22.12          N
ATOM   1937  CD2 HIS A 222      -0.537  17.437  -7.512  1.00 20.71          C
ATOM   1938  CE1 HIS A 222      -0.810  19.144  -6.181  1.00 20.00          C
ATOM   1939  NE2 HIS A 222      -1.062  18.711  -7.413  1.00 22.40          N
ATOM   1940  H   HIS A 222      -1.550  15.584  -4.401  1.00  0.00          H
ATOM   1941  HA  HIS A 222      -0.656  14.516  -6.970  1.00  0.00          H
ATOM   1942  HB2 HIS A 222       0.879  15.991  -4.740  1.00  0.00          H
ATOM   1943  HB3 HIS A 222       1.483  15.675  -6.331  1.00  0.00          H
ATOM   1944  HD2 HIS A 222      -0.603  16.847  -8.415  1.00  0.00          H
ATOM   1945  HE1 HIS A 222      -1.119  20.109  -5.814  1.00  0.00          H
ATOM   1946  HE2 HIS A 222      -1.610  19.209  -8.107  1.00  0.00          H
ATOM   1947  N   MET A 223       0.424  13.255  -4.097  1.00 20.38          N
ATOM   1948  CA  MET A 223       0.901  12.080  -3.383  1.00 21.04          C
ATOM   1949  C   MET A 223       0.122  10.821  -3.782  1.00 21.36          C
ATOM   1950  O   MET A 223       0.740   9.863  -4.240  1.00 20.45          O
ATOM   1951  CB  MET A 223       0.867  12.378  -1.873  1.00 20.16          C
ATOM   1952  CG  MET A 223       1.478  11.301  -0.968  1.00 21.68          C
ATOM   1953  SD  MET A 223       0.399   9.913  -0.521  1.00 24.24          S
ATOM   1954  CE  MET A 223      -0.874  10.770   0.433  1.00 23.61          C
ATOM   1955  H   MET A 223       0.126  14.045  -3.530  1.00  0.00          H
ATOM   1956  HA  MET A 223       1.932  11.907  -3.678  1.00  0.00          H
ATOM   1957  HB2 MET A 223       1.437  13.292  -1.705  1.00  0.00          H
ATOM   1958  HB3 MET A 223      -0.142  12.608  -1.552  1.00  0.00          H
ATOM   1959  HG2 MET A 223       2.386  10.908  -1.420  1.00  0.00          H
ATOM   1960  HG3 MET A 223       1.789  11.773  -0.041  1.00  0.00          H
ATOM   1961  HE1 MET A 223      -1.561  10.048   0.871  1.00  0.00          H
ATOM   1962  HE2 MET A 223      -0.430  11.354   1.238  1.00  0.00          H
ATOM   1963  HE3 MET A 223      -1.460  11.434  -0.198  1.00  0.00          H
ATOM   1964  N   CYS A 224      -1.215  10.835  -3.690  1.00 20.63          N
ATOM   1965  CA  CYS A 224      -2.055   9.683  -4.022  1.00 20.63          C
ATOM   1966  C   CYS A 224      -2.041   9.345  -5.523  1.00 19.25          C
ATOM   1967  O   CYS A 224      -2.116   8.167  -5.867  1.00 18.72          O
ATOM   1968  CB  CYS A 224      -3.502   9.916  -3.563  1.00 18.88          C
ATOM   1969  SG  CYS A 224      -3.571   9.844  -1.751  1.00 21.25          S
ATOM   1970  H   CYS A 224      -1.666  11.637  -3.259  1.00  0.00          H
ATOM   1971  HA  CYS A 224      -1.663   8.808  -3.497  1.00  0.00          H
ATOM   1972  HB2 CYS A 224      -3.901  10.865  -3.923  1.00  0.00          H
ATOM   1973  HB3 CYS A 224      -4.145   9.127  -3.954  1.00  0.00          H
ATOM   1974  HG  CYS A 224      -2.993  11.039  -1.562  1.00  0.00          H
ATOM   1975  N   ARG A 225      -1.859  10.333  -6.416  1.00 20.13          N
ATOM   1976  CA  ARG A 225      -1.602  10.096  -7.840  1.00 18.90          C
ATOM   1977  C   ARG A 225      -0.234   9.410  -8.017  1.00 18.94          C
ATOM   1978  O   ARG A 225      -0.131   8.396  -8.708  1.00 18.24          O
ATOM   1979  CB  ARG A 225      -1.642  11.428  -8.629  1.00 19.79          C
ATOM   1980  CG  ARG A 225      -1.375  11.270 -10.144  1.00 22.48          C
ATOM   1981  CD  ARG A 225      -1.309  12.601 -10.901  1.00 21.79          C
ATOM   1982  NE  ARG A 225      -1.121  12.369 -12.336  1.00 21.49          N
ATOM   1983  CZ  ARG A 225      -0.394  13.025 -13.243  1.00 23.17          C
ATOM   1984 NH1 ARG A 225       0.368  14.064 -12.903  1.00 23.34          N
ATOM   1985 NH2 ARG A 225      -0.441  12.624 -14.510  1.00 25.08          N1+
ATOM   1986  H   ARG A 225      -1.844  11.289  -6.082  1.00  0.00          H
ATOM   1987  HA  ARG A 225      -2.378   9.432  -8.230  1.00  0.00          H
ATOM   1988  HB2 ARG A 225      -2.619  11.894  -8.493  1.00  0.00          H
ATOM   1989  HB3 ARG A 225      -0.917  12.128  -8.214  1.00  0.00          H
ATOM   1990  HG2 ARG A 225      -0.435  10.749 -10.320  1.00  0.00          H
ATOM   1991  HG3 ARG A 225      -2.156  10.643 -10.577  1.00  0.00          H
ATOM   1992  HD2 ARG A 225      -2.253  13.127 -10.778  1.00  0.00          H
ATOM   1993  HD3 ARG A 225      -0.514  13.230 -10.502  1.00  0.00          H
ATOM   1994  HE  ARG A 225      -1.770  11.615 -12.721  1.00  0.00          H
ATOM   1995 HH11 ARG A 225       0.539  14.288 -11.923  1.00  0.00          H
ATOM   1996 HH12 ARG A 225       0.864  14.614 -13.587  1.00  0.00          H
ATOM   1997 HH21 ARG A 225      -0.941  11.717 -14.745  1.00  0.00          H
ATOM   1998 HH22 ARG A 225       0.017  13.059 -15.290  1.00  0.00          H
ATOM   1999  N   TYR A 226       0.816   9.940  -7.375  1.00 16.90          N
ATOM   2000  CA  TYR A 226       2.183   9.445  -7.507  1.00 18.14          C
ATOM   2001  C   TYR A 226       2.338   8.032  -6.910  1.00 17.98          C
ATOM   2002  O   TYR A 226       2.913   7.149  -7.552  1.00 18.92          O
ATOM   2003  CB  TYR A 226       3.183  10.435  -6.868  1.00 15.96          C
ATOM   2004  CG  TYR A 226       4.575  10.306  -7.457  1.00 20.33          C
ATOM   2005  CD1 TYR A 226       5.018  11.216  -8.443  1.00 18.06          C
ATOM   2006  CD2 TYR A 226       5.397   9.219  -7.092  1.00 19.81          C
ATOM   2007  CE1 TYR A 226       6.232  10.989  -9.121  1.00 20.94          C
ATOM   2008  CE2 TYR A 226       6.601   8.990  -7.777  1.00 22.35          C
ATOM   2009  CZ  TYR A 226       6.995   9.844  -8.821  1.00 20.61          C
ATOM   2010  OH  TYR A 226       8.086   9.529  -9.572  1.00 24.39          O
ATOM   2011  H   TYR A 226       0.669  10.783  -6.822  1.00  0.00          H
ATOM   2012  HA  TYR A 226       2.382   9.394  -8.575  1.00  0.00          H
ATOM   2013  HB2 TYR A 226       2.853  11.459  -7.041  1.00  0.00          H
ATOM   2014  HB3 TYR A 226       3.222  10.311  -5.785  1.00  0.00          H
ATOM   2015  HD1 TYR A 226       4.407  12.061  -8.728  1.00  0.00          H
ATOM   2016  HD2 TYR A 226       5.091   8.526  -6.322  1.00  0.00          H
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ATOM   2017  HE1 TYR A 226       6.548  11.657  -9.909  1.00  0.00           H
ATOM   2018  HE2 TYR A 226       7.212   8.141  -7.517  1.00  0.00           H
ATOM   2019  HH  TYR A 226       8.099   8.613  -9.833  1.00  0.00           H
ATOM   2020  N   GLN A 227       1.758   7.799  -5.726  1.00 19.29           N
ATOM   2021  CA  GLN A 227       1.732   6.513  -5.031  1.00 19.24           C
ATOM   2022  C   GLN A 227       0.772   5.518  -5.701  1.00 21.01           C
ATOM   2023  O   GLN A 227       0.830   4.330  -5.397  1.00 21.37           O
ATOM   2024  CB  GLN A 227       1.256   6.719  -3.578  1.00 19.57           C
ATOM   2025  CG  GLN A 227       2.231   7.481  -2.665  1.00 16.42           C
ATOM   2026  CD  GLN A 227       3.367   6.623  -2.112  1.00 20.53           C
ATOM   2027  OE1 GLN A 227       3.995   5.851  -2.829  1.00 21.69           O
ATOM   2028  NE2 GLN A 227       3.635   6.733  -0.817  1.00 19.47           N
ATOM   2029  H   GLN A 227       1.305   8.583  -5.253  1.00  0.00           H
ATOM   2030  HA  GLN A 227       2.729   6.071  -5.049  1.00  0.00           H
ATOM   2031  HB2 GLN A 227       0.298   7.240  -3.580  1.00  0.00           H
ATOM   2032  HB3 GLN A 227       1.049   5.751  -3.117  1.00  0.00           H
ATOM   2033  HG2 GLN A 227       2.649   8.347  -3.176  1.00  0.00           H
ATOM   2034  HG3 GLN A 227       1.658   7.864  -1.824  1.00  0.00           H
ATOM   2035 HE21 GLN A 227       3.088   7.357  -0.243  1.00  0.00           H
ATOM   2036 HE22 GLN A 227       4.376   6.180  -0.411  1.00  0.00           H
ATOM   2037  N   SER A 228      -0.093   5.952  -6.622  1.00 19.57           N
ATOM   2038  CA  SER A 228      -0.811   5.040  -7.501  1.00 20.36           C
ATOM   2039  C   SER A 228       0.076   4.721  -8.716  1.00 20.27           C
ATOM   2040  O   SER A 228       0.277   3.548  -9.026  1.00 23.07           O
ATOM   2041  CB  SER A 228      -2.108   5.693  -8.004  1.00 16.62           C
ATOM   2042  OG  SER A 228      -3.017   5.861  -6.941  1.00 18.44           O
ATOM   2043  H   SER A 228      -0.152   6.943  -6.807  1.00  0.00           H
ATOM   2044  HA  SER A 228      -1.068   4.107  -6.994  1.00  0.00           H
ATOM   2045  HB2 SER A 228      -1.930   6.660  -8.467  1.00  0.00           H
ATOM   2046  HB3 SER A 228      -2.580   5.056  -8.752  1.00  0.00           H
ATOM   2047  HG  SER A 228      -2.729   6.628  -6.439  1.00  0.00           H
ATOM   2048  N   GLY A 229       0.598   5.742  -9.405  1.00 19.50           N
ATOM   2049  CA  GLY A 229       0.958   5.622 -10.811  1.00 20.20           C
ATOM   2050  C   GLY A 229       2.392   5.923 -11.220  1.00 19.94           C
ATOM   2051  O   GLY A 229       2.704   5.750 -12.399  1.00 17.43           O
ATOM   2052  H   GLY A 229       0.403   6.688  -9.082  1.00  0.00           H
ATOM   2053  HA2 GLY A 229       0.633   4.681 -11.250  1.00  0.00           H
ATOM   2054  HA3 GLY A 229       0.385   6.388 -11.310  1.00  0.00           H
ATOM   2055  N   PHE A 230       3.241   6.429 -10.318  1.00 19.02           N
ATOM   2056  CA  PHE A 230       4.525   7.026 -10.699  1.00 20.56           C
ATOM   2057  C   PHE A 230       5.720   6.523  -9.882  1.00 21.40           C
ATOM   2058  O   PHE A 230       6.860   6.804 -10.249  1.00 24.25           O
ATOM   2059  CB  PHE A 230       4.436   8.563 -10.742  1.00 21.77           C
ATOM   2060  CG  PHE A 230       3.538   9.169 -11.807  1.00 22.64           C
ATOM   2061  CD1 PHE A 230       4.111   9.640 -13.006  1.00 24.17           C
ATOM   2062  CD2 PHE A 230       2.144   9.282 -11.609  1.00 24.47           C
ATOM   2063  CE1 PHE A 230       3.298  10.212 -14.001  1.00 25.11           C
ATOM   2064  CE2 PHE A 230       1.330   9.832 -12.618  1.00 23.94           C
ATOM   2065  CZ  PHE A 230       1.907  10.289 -13.816  1.00 26.08           C
ATOM   2066  H   PHE A 230       2.915   6.575  -9.368  1.00  0.00           H
ATOM   2067  HA  PHE A 230       4.777   6.729 -11.712  1.00  0.00           H
ATOM   2068  HB2 PHE A 230       4.134   8.933  -9.769  1.00  0.00           H
ATOM   2069  HB3 PHE A 230       5.435   8.966 -10.910  1.00  0.00           H
ATOM   2070  HD1 PHE A 230       5.176   9.563 -13.177  1.00  0.00           H
ATOM   2071  HD2 PHE A 230       1.684   8.924 -10.701  1.00  0.00           H
ATOM   2072  HE1 PHE A 230       3.742  10.572 -14.917  1.00  0.00           H
ATOM   2073  HE2 PHE A 230       0.259   9.895 -12.492  1.00  0.00           H
ATOM   2074  HZ  PHE A 230       1.278  10.679 -14.602  1.00  0.00           H
ATOM   2075  N   PHE A 231       5.500   5.784  -8.785  1.00 19.26           N
ATOM   2076  CA  PHE A 231       6.591   5.245  -7.964  1.00 21.27           C
ATOM   2077  C   PHE A 231       7.243   4.010  -8.617  1.00 20.88           C
ATOM   2078  O   PHE A 231       8.434   3.795  -8.437  1.00 21.71           O
ATOM   2079  CB  PHE A 231       6.097   4.960  -6.526  1.00 18.61           C
ATOM   2080  CG  PHE A 231       5.203   3.753  -6.288  1.00 18.09           C
ATOM   2081  CD1 PHE A 231       5.717   2.637  -5.594  1.00 16.51           C
ATOM   2082  CD2 PHE A 231       3.860   3.742  -6.722  1.00 15.34           C
ATOM   2083  CE1 PHE A 231       4.900   1.523  -5.332  1.00 15.19           C
ATOM   2084  CE2 PHE A 231       3.048   2.620  -6.467  1.00 15.58           C
ATOM   2085  CZ  PHE A 231       3.560   1.521  -5.757  1.00 17.00           C
ATOM   2086  H   PHE A 231       4.548   5.612  -8.500  1.00  0.00           H
ATOM   2087  HA  PHE A 231       7.378   5.995  -7.888  1.00  0.00           H
ATOM   2088  HB2 PHE A 231       6.978   4.853  -5.891  1.00  0.00           H
ATOM   2089  HB3 PHE A 231       5.583   5.841  -6.138  1.00  0.00           H
ATOM   2090  HD1 PHE A 231       6.741   2.626  -5.254  1.00  0.00           H
ATOM   2091  HD2 PHE A 231       3.440   4.585  -7.249  1.00  0.00           H
ATOM   2092  HE1 PHE A 231       5.306   0.669  -4.811  1.00  0.00           H
ATOM   2093  HE2 PHE A 231       2.028   2.597  -6.822  1.00  0.00           H
ATOM   2094  HZ  PHE A 231       2.929   0.670  -5.551  1.00  0.00           H
ATOM   2095  N   TRP A 232       6.503   3.282  -9.463  1.00 20.84           N
ATOM   2096  CA  TRP A 232       6.981   2.202 -10.339  1.00 21.29           C
ATOM   2097  C   TRP A 232       7.419   2.758 -11.712  1.00 22.43           C
ATOM   2098  O   TRP A 232       7.364   2.063 -12.724  1.00 24.91           O
ATOM   2099  CB  TRP A 232       5.833   1.184 -10.535  1.00 20.84           C
ATOM   2100  CG  TRP A 232       4.484   1.745 -10.880  1.00 22.17           C
ATOM   2101  CD1 TRP A 232       3.562   2.108  -9.964  1.00 22.45           C
ATOM   2102  CD2 TRP A 232       3.867   1.993 -12.184  1.00 25.05           C
ATOM   2103  NE1 TRP A 232       2.429   2.564 -10.596  1.00 24.51           N
ATOM   2104  CE3 TRP A 232       4.277   1.839 -13.530  1.00 25.82           C
ATOM   2105  CE2 TRP A 232       2.542   2.482 -11.970  1.00 26.33           C
ATOM   2106  CZ3 TRP A 232       3.423   2.161 -14.604  1.00 27.28           C
ATOM   2107  CZ2 TRP A 232       1.668   2.774 -13.034  1.00 26.19           C
ATOM   2108  CH2 TRP A 232       2.117   2.624 -14.358  1.00 25.91           C
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ATOM   2109  H   TRP A 232       5.540   3.552  -9.588  1.00  0.00           H
ATOM   2110  HA  TRP A 232       7.846   1.698  -9.902  1.00  0.00           H
ATOM   2111  HB2 TRP A 232       6.097   0.427 -11.272  1.00  0.00           H
ATOM   2112  HB3 TRP A 232       5.721   0.629  -9.603  1.00  0.00           H
ATOM   2113  HD1 TRP A 232       3.711   2.013  -8.900  1.00  0.00           H
ATOM   2114  HE1 TRP A 232       1.602   2.859 -10.072  1.00  0.00           H
ATOM   2115  HE3 TRP A 232       5.262   1.458 -13.743  1.00  0.00           H
ATOM   2116  HZ3 TRP A 232       3.768   2.037 -15.619  1.00  0.00           H
ATOM   2117  HZ2 TRP A 232       0.661   3.117 -12.851  1.00  0.00           H
ATOM   2118  HH2 TRP A 232       1.459   2.859 -15.181  1.00  0.00           H
ATOM   2119  N   ARG A 233       7.825   4.030 -11.750  1.00 22.95           N
ATOM   2120  CA  ARG A 233       8.530   4.674 -12.848  1.00 23.34           C
ATOM   2121  C   ARG A 233       9.423   5.794 -12.296  1.00 23.57           C
ATOM   2122  O   ARG A 233       9.486   6.878 -12.881  1.00 24.36           O
ATOM   2123  CB  ARG A 233       7.609   5.025 -14.041  1.00 23.72           C
ATOM   2124  CG  ARG A 233       6.321   5.781 -13.682  1.00 23.64           C
ATOM   2125  CD  ARG A 233       5.532   6.209 -14.928  1.00 22.56           C
ATOM   2126  NE  ARG A 233       4.115   6.479 -14.632  1.00 23.96           N
ATOM   2127  CZ  ARG A 233       3.264   7.231 -15.344  1.00 23.37           C
ATOM   2128  NH1 ARG A 233       3.688   8.039 -16.316  1.00 24.58           N
ATOM   2129  NH2 ARG A 233       1.964   7.142 -15.074  1.00 27.02           N1+
ATOM   2130  H   ARG A 233       7.873   4.510 -10.863  1.00  0.00           H
ATOM   2131  HA  ARG A 233       9.244   3.952 -13.241  1.00  0.00           H
ATOM   2132  HB2 ARG A 233       8.178   5.600 -14.773  1.00  0.00           H
ATOM   2133  HB3 ARG A 233       7.338   4.098 -14.549  1.00  0.00           H
ATOM   2134  HG2 ARG A 233       5.704   5.144 -13.047  1.00  0.00           H
ATOM   2135  HG3 ARG A 233       6.580   6.667 -13.102  1.00  0.00           H
ATOM   2136  HD2 ARG A 233       6.013   7.068 -15.387  1.00  0.00           H
ATOM   2137  HD3 ARG A 233       5.549   5.412 -15.673  1.00  0.00           H
ATOM   2138  HE  ARG A 233       3.726   5.978 -13.825  1.00  0.00           H
ATOM   2139 HH11 ARG A 233       4.647   8.416 -16.292  1.00  0.00           H
ATOM   2140 HH12 ARG A 233       3.016   8.534 -16.888  1.00  0.00           H
ATOM   2141 HH21 ARG A 233       1.639   6.600 -14.287  1.00  0.00           H
ATOM   2142 HH22 ARG A 233       1.226   7.669 -15.597  1.00  0.00           H
ATOM   2143  N   HIS A 234      10.080   5.548 -11.153  1.00 23.15           N
ATOM   2144  CA  HIS A 234      11.060   6.436 -10.527  1.00 24.03           C
ATOM   2145  C   HIS A 234      12.418   5.728 -10.554  1.00 25.68           C
ATOM   2146  O   HIS A 234      12.498   4.530 -10.280  1.00 24.39           O
ATOM   2147  CB  HIS A 234      10.652   6.735  -9.071  1.00 21.56           C
ATOM   2148  CG  HIS A 234      11.535   7.765  -8.413  1.00 23.59           C
ATOM   2149  ND1 HIS A 234      12.719   7.436  -7.738  1.00 24.32           N
ATOM   2150  CD2 HIS A 234      11.374   9.132  -8.387  1.00 21.93           C
ATOM   2151  CE1 HIS A 234      13.228   8.605  -7.362  1.00 24.17           C
ATOM   2152  NE2 HIS A 234      12.463   9.641  -7.701  1.00 23.23           N
ATOM   2153  H   HIS A 234      10.088   4.586 -10.826  1.00  0.00           H
ATOM   2154  HA  HIS A 234      11.139   7.380 -11.071  1.00  0.00           H
ATOM   2155  HB2 HIS A 234       9.631   7.114  -9.053  1.00  0.00           H
ATOM   2156  HB3 HIS A 234      10.652   5.827  -8.466  1.00  0.00           H
ATOM   2157  HD2 HIS A 234      10.611   9.760  -8.822  1.00  0.00           H
ATOM   2158  HE1 HIS A 234      14.163   8.714  -6.833  1.00  0.00           H
ATOM   2159  HE2 HIS A 234      12.682  10.623  -7.541  1.00  0.00           H
ATOM   2160  N   GLU A 235      13.486   6.464 -10.857  1.00 26.94           N
ATOM   2161  CA  GLU A 235      14.849   6.000 -11.084  1.00 29.85           C
ATOM   2162  C   GLU A 235      15.465   5.194  -9.924  1.00 27.43           C
ATOM   2163  O   GLU A 235      16.261   4.286 -10.170  1.00 27.58           O
ATOM   2164  CB  GLU A 235      15.725   7.216 -11.455  1.00 32.61           C
ATOM   2165  CG  GLU A 235      15.850   8.338 -10.392  1.00 40.85           C
ATOM   2166  CD  GLU A 235      14.739   9.382 -10.406  1.00 45.22           C
ATOM   2167  OE1 GLU A 235      13.655   9.141 -10.976  1.00 46.95           O
ATOM   2168  OE2 GLU A 235      14.998  10.473  -9.853  1.00 48.79           O1-
ATOM   2169  H   GLU A 235      13.362   7.479 -10.972  1.00  0.00           H
ATOM   2170  HA  GLU A 235      14.815   5.332 -11.946  1.00  0.00           H
ATOM   2171  HB2 GLU A 235      16.725   6.846 -11.680  1.00  0.00           H
ATOM   2172  HB3 GLU A 235      15.369   7.646 -12.392  1.00  0.00           H
ATOM   2173  HG2 GLU A 235      15.939   7.935  -9.386  1.00  0.00           H
ATOM   2174  HG3 GLU A 235      16.781   8.874 -10.570  1.00  0.00           H
ATOM   2175  N   LEU A 236      15.081   5.484  -8.673  1.00 26.47           N
ATOM   2176  CA  LEU A 236      15.546   4.742  -7.499  1.00 26.49           C
ATOM   2177  C   LEU A 236      14.696   3.483  -7.253  1.00 26.64           C
ATOM   2178  O   LEU A 236      15.049   2.691  -6.385  1.00 25.30           O
ATOM   2179  CB  LEU A 236      15.453   5.624  -6.232  1.00 24.84           C
ATOM   2180  CG  LEU A 236      16.386   6.853  -6.184  1.00 24.56           C
ATOM   2181  CD1 LEU A 236      16.193   7.617  -4.868  1.00 23.65           C
ATOM   2182  CD2 LEU A 236      17.861   6.466  -6.324  1.00 22.45           C
ATOM   2183  H   LEU A 236      14.385   6.210  -8.540  1.00  0.00           H
ATOM   2184  HA  LEU A 236      16.573   4.403  -7.633  1.00  0.00           H
ATOM   2185  HB2 LEU A 236      14.420   5.942  -6.085  1.00  0.00           H
ATOM   2186  HB3 LEU A 236      15.701   5.003  -5.371  1.00  0.00           H
ATOM   2187  HG  LEU A 236      16.134   7.522  -7.007  1.00  0.00           H
ATOM   2188 HD11 LEU A 236      16.820   8.508  -4.848  1.00  0.00           H
ATOM   2189 HD12 LEU A 236      15.158   7.926  -4.736  1.00  0.00           H
ATOM   2190 HD13 LEU A 236      16.467   7.009  -4.006  1.00  0.00           H
ATOM   2191 HD21 LEU A 236      18.523   7.316  -6.154  1.00  0.00           H
ATOM   2192 HD22 LEU A 236      18.122   5.686  -5.613  1.00  0.00           H
ATOM   2193 HD23 LEU A 236      18.076   6.088  -7.320  1.00  0.00           H
ATOM   2194  N   LEU A 237      13.604   3.273  -8.002  1.00 25.05           N
ATOM   2195  CA  LEU A 237      12.713   2.125  -7.868  1.00 27.46           C
ATOM   2196  C   LEU A 237      12.732   1.229  -9.108  1.00 27.75           C
ATOM   2197  O   LEU A 237      12.487   0.033  -8.960  1.00 28.17           O
ATOM   2198  CB  LEU A 237      11.288   2.569  -7.468  1.00 25.77           C
ATOM   2199  CG  LEU A 237      10.854   2.004  -6.098  1.00 26.56           C
ATOM   2200  CD1 LEU A 237      11.667   2.600  -4.942  1.00 26.59           C
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ATOM   2201  CD2 LEU A 237       9.357   2.207  -5.852  1.00 27.15           C
ATOM   2202  H   LEU A 237      13.371   3.955  -8.718  1.00  0.00           H
ATOM   2203  HA  LEU A 237      13.089   1.468  -7.086  1.00  0.00           H
ATOM   2204  HB2 LEU A 237      11.201   3.656  -7.466  1.00  0.00           H
ATOM   2205  HB3 LEU A 237      10.577   2.235  -8.228  1.00  0.00           H
ATOM   2206  HG  LEU A 237      11.037   0.929  -6.109  1.00  0.00           H
ATOM   2207 HD11 LEU A 237      11.385   2.150  -3.993  1.00  0.00           H
ATOM   2208 HD12 LEU A 237      12.734   2.417  -5.059  1.00  0.00           H
ATOM   2209 HD13 LEU A 237      11.519   3.677  -4.867  1.00  0.00           H
ATOM   2210 HD21 LEU A 237       9.039   1.719  -4.930  1.00  0.00           H
ATOM   2211 HD22 LEU A 237       9.111   3.267  -5.782  1.00  0.00           H
ATOM   2212 HD23 LEU A 237       8.769   1.788  -6.667  1.00  0.00           H
ATOM   2213  N   GLU A 238      13.119   1.724 -10.295  1.00 28.09           N
ATOM   2214  CA  GLU A 238      13.389   0.896 -11.488  1.00 29.19           C
ATOM   2215  C   GLU A 238      14.682   0.071 -11.329  1.00 29.11           C
ATOM   2216  O   GLU A 238      14.896  -0.922 -12.026  1.00 28.86           O
ATOM   2217  CB  GLU A 238      13.434   1.768 -12.766  1.00 32.53           C
ATOM   2218  CG  GLU A 238      12.150   2.582 -13.076  1.00 39.05           C
ATOM   2219  CD  GLU A 238      10.861   1.834 -12.768  1.00 42.35           C
ATOM   2220  OE1 GLU A 238      10.378   1.071 -13.627  1.00 44.53           O
ATOM   2221  OE2 GLU A 238      10.397   1.919 -11.610  1.00 42.36           O1-
ATOM   2222  H   GLU A 238      13.114   2.734 -10.405  1.00  0.00           H
ATOM   2223  HA  GLU A 238      12.609   0.149 -11.605  1.00  0.00           H
ATOM   2224  HB2 GLU A 238      14.282   2.453 -12.714  1.00  0.00           H
ATOM   2225  HB3 GLU A 238      13.629   1.114 -13.617  1.00  0.00           H
ATOM   2226  HG2 GLU A 238      12.141   3.508 -12.509  1.00  0.00           H
ATOM   2227  HG3 GLU A 238      12.127   2.880 -14.123  1.00  0.00           H
ATOM   2228  N   GLU A 239      15.487   0.421 -10.321  1.00 30.17           N
ATOM   2229  CA  GLU A 239      16.544  -0.379  -9.720  1.00 30.22           C
ATOM   2230  C   GLU A 239      15.991  -1.707  -9.126  1.00 30.36           C
ATOM   2231  O   GLU A 239      16.682  -2.729  -9.131  1.00 29.89           O
ATOM   2232  CB  GLU A 239      17.231   0.541  -8.679  1.00 31.52           C
ATOM   2233  CG  GLU A 239      18.544   0.026  -8.056  1.00 34.59           C
ATOM   2234  CD  GLU A 239      19.228   1.074  -7.174  1.00 35.31           C
ATOM   2235  OE1 GLU A 239      19.293   2.257  -7.573  1.00 38.54           O
ATOM   2236  OE2 GLU A 239      19.696   0.692  -6.077  1.00 36.01           O1-
ATOM   2237  H   GLU A 239      15.238   1.275  -9.843  1.00  0.00           H
ATOM   2238  HA  GLU A 239      17.262  -0.628 -10.503  1.00  0.00           H
ATOM   2239  HB2 GLU A 239      17.445   1.497  -9.160  1.00  0.00           H
ATOM   2240  HB3 GLU A 239      16.532   0.776  -7.875  1.00  0.00           H
ATOM   2241  HG2 GLU A 239      18.357  -0.872  -7.466  1.00  0.00           H
ATOM   2242  HG3 GLU A 239      19.246  -0.251  -8.840  1.00  0.00           H
ATOM   2243  N   TYR A 240      14.713  -1.752  -8.714  1.00 29.40           N
ATOM   2244  CA  TYR A 240      14.087  -2.822  -7.935  1.00 26.76           C
ATOM   2245  C   TYR A 240      12.859  -3.420  -8.639  1.00 26.94           C
ATOM   2246  O   TYR A 240      12.194  -2.783  -9.454  1.00 26.38           O
ATOM   2247  CB  TYR A 240      13.768  -2.305  -6.518  1.00 25.17           C
ATOM   2248  CG  TYR A 240      15.012  -1.851  -5.777  1.00 22.76           C
ATOM   2249  CD1 TYR A 240      15.949  -2.796  -5.315  1.00 23.97           C
ATOM   2250  CD2 TYR A 240      15.283  -0.478  -5.620  1.00 23.51           C
ATOM   2251  CE1 TYR A 240      17.155  -2.380  -4.728  1.00 21.82           C
ATOM   2252  CE2 TYR A 240      16.498  -0.056  -5.052  1.00 21.33           C
ATOM   2253  CZ  TYR A 240      17.438  -1.010  -4.623  1.00 21.91           C
ATOM   2254  OH  TYR A 240      18.654  -0.610  -4.176  1.00 23.59           O
ATOM   2255  H   TYR A 240      14.126  -0.939  -8.875  1.00  0.00           H
ATOM   2256  HA  TYR A 240      14.796  -3.639  -7.821  1.00  0.00           H
ATOM   2257  HB2 TYR A 240      13.046  -1.486  -6.564  1.00  0.00           H
ATOM   2258  HB3 TYR A 240      13.291  -3.088  -5.928  1.00  0.00           H
ATOM   2259  HD1 TYR A 240      15.767  -3.845  -5.436  1.00  0.00           H
ATOM   2260  HD2 TYR A 240      14.578   0.262  -5.963  1.00  0.00           H
ATOM   2261  HE1 TYR A 240      17.881  -3.108  -4.399  1.00  0.00           H
ATOM   2262  HE2 TYR A 240      16.717   1.001  -4.984  1.00  0.00           H
ATOM   2263  HH  TYR A 240      19.071  -0.107  -4.900  1.00  0.00           H
ATOM   2264  N   ASP A 241      12.569  -4.685  -8.334  1.00 27.29           N
ATOM   2265  CA  ASP A 241      11.449  -5.480  -8.847  1.00 26.93           C
ATOM   2266  C   ASP A 241      10.349  -5.599  -7.787  1.00 26.42           C
ATOM   2267  O   ASP A 241       9.209  -5.906  -8.125  1.00 27.05           O
ATOM   2268  CB  ASP A 241      11.928  -6.915  -9.159  1.00 27.77           C
ATOM   2269  CG  ASP A 241      12.819  -6.974 -10.382  1.00 27.65           C
ATOM   2270  OD1 ASP A 241      12.289  -7.321 -11.455  1.00 25.77           O
ATOM   2271  OD2 ASP A 241      14.016  -6.634 -10.241  1.00 26.65           O1-
ATOM   2272  H   ASP A 241      13.136  -5.152  -7.629  1.00  0.00           H
ATOM   2273  HA  ASP A 241      11.016  -5.038  -9.747  1.00  0.00           H
ATOM   2274  HB2 ASP A 241      12.482  -7.335  -8.321  1.00  0.00           H
ATOM   2275  HB3 ASP A 241      11.077  -7.577  -9.333  1.00  0.00           H
ATOM   2276  N   TRP A 242      10.674  -5.368  -6.511  1.00 24.04           N
ATOM   2277  CA  TRP A 242       9.773  -5.403  -5.366  1.00 24.23           C
ATOM   2278  C   TRP A 242      10.021  -4.184  -4.476  1.00 23.82           C
ATOM   2279  O   TRP A 242      11.077  -3.555  -4.554  1.00 22.71           O
ATOM   2280  CB  TRP A 242       9.921  -6.708  -4.555  1.00 23.96           C
ATOM   2281  CG  TRP A 242       9.684  -8.053  -5.180  1.00 23.75           C
ATOM   2282  CD1 TRP A 242      10.390  -8.594  -6.198  1.00 26.08           C
ATOM   2283  CD2 TRP A 242       8.765  -9.101  -4.745  1.00 25.48           C
ATOM   2284  NE1 TRP A 242       9.991  -9.897  -6.410  1.00 23.93           N
ATOM   2285  CE3 TRP A 242       7.750  -9.189  -3.764  1.00 25.82           C
ATOM   2286  CE2 TRP A 242       9.062 -10.291  -5.476  1.00 25.93           C
ATOM   2287  CZ3 TRP A 242       7.122 -10.415  -3.470  1.00 26.34           C
ATOM   2288  CZ2 TRP A 242       8.461 -11.522  -5.181  1.00 26.43           C
ATOM   2289  CH2 TRP A 242       7.503 -11.584  -4.156  1.00 24.99           C
ATOM   2290  H   TRP A 242      11.626  -5.092  -6.308  1.00  0.00           H
ATOM   2291  HA  TRP A 242       8.750  -5.302  -5.716  1.00  0.00           H
ATOM   2292  HB2 TRP A 242      10.926  -6.740  -4.144  1.00  0.00           H
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ATOM   2293  HB3 TRP A 242       9.265  -6.654  -3.688  1.00  0.00           H
ATOM   2294  HD1 TRP A 242      11.191  -8.085  -6.707  1.00  0.00           H
ATOM   2295  HE1 TRP A 242      10.441 -10.509  -7.083  1.00  0.00           H
ATOM   2296  HE3 TRP A 242       7.476  -8.309  -3.203  1.00  0.00           H
ATOM   2297  HZ3 TRP A 242       6.356 -10.462  -2.710  1.00  0.00           H
ATOM   2298  HZ2 TRP A 242       8.719 -12.409  -5.740  1.00  0.00           H
ATOM   2299  HH2 TRP A 242       7.031 -12.527  -3.925  1.00  0.00           H
ATOM   2300  N   TYR A 243       9.059  -3.884  -3.605  1.00 22.84           N
ATOM   2301  CA  TYR A 243       9.080  -2.788  -2.653  1.00 21.90           C
ATOM   2302  C   TYR A 243       8.468  -3.242  -1.328  1.00 22.39           C
ATOM   2303  O   TYR A 243       7.478  -3.977  -1.321  1.00 22.11           O
ATOM   2304  CB  TYR A 243       8.385  -1.545  -3.246  1.00 22.85           C
ATOM   2305  CG  TYR A 243       6.860  -1.588  -3.345  1.00 20.92           C
ATOM   2306  CD1 TYR A 243       6.224  -2.390  -4.316  1.00 18.97           C
ATOM   2307  CD2 TYR A 243       6.063  -0.830  -2.460  1.00 20.38           C
ATOM   2308  CE1 TYR A 243       4.827  -2.382  -4.452  1.00 18.11           C
ATOM   2309  CE2 TYR A 243       4.660  -0.837  -2.578  1.00 20.28           C
ATOM   2310  CZ  TYR A 243       4.044  -1.598  -3.587  1.00 19.55           C
ATOM   2311  OH  TYR A 243       2.691  -1.571  -3.735  1.00 19.44           O
ATOM   2312  H   TYR A 243       8.220  -4.466  -3.578  1.00  0.00           H
ATOM   2313  HA  TYR A 243      10.121  -2.521  -2.461  1.00  0.00           H
ATOM   2314  HB2 TYR A 243       8.668  -0.685  -2.643  1.00  0.00           H
ATOM   2315  HB3 TYR A 243       8.794  -1.335  -4.233  1.00  0.00           H
ATOM   2316  HD1 TYR A 243       6.795  -3.028  -4.967  1.00  0.00           H
ATOM   2317  HD2 TYR A 243       6.519  -0.242  -1.682  1.00  0.00           H
ATOM   2318  HE1 TYR A 243       4.364  -2.996  -5.213  1.00  0.00           H
ATOM   2319  HE2 TYR A 243       4.052  -0.248  -1.907  1.00  0.00           H
ATOM   2320  HH  TYR A 243       2.237  -1.182  -2.958  1.00  0.00           H
ATOM   2321  N   TRP A 244       9.042  -2.793  -0.209  1.00 20.85           N
ATOM   2322  CA  TRP A 244       8.382  -2.749   1.085  1.00 20.48           C
ATOM   2323  C   TRP A 244       8.040  -1.275   1.303  1.00 21.37           C
ATOM   2324  O   TRP A 244       8.938  -0.473   1.559  1.00 18.99           O
ATOM   2325  CB  TRP A 244       9.336  -3.230   2.195  1.00 20.36           C
ATOM   2326  CG  TRP A 244       8.720  -3.613   3.504  1.00 22.78           C
ATOM   2327  CD1 TRP A 244       7.528  -3.213   4.010  1.00 24.36           C
ATOM   2328  CD2 TRP A 244       9.265  -4.553   4.468  1.00 23.95           C
ATOM   2329  NE1 TRP A 244       7.309  -3.839   5.220  1.00 23.22           N
ATOM   2330  CE3 TRP A 244      10.441  -5.334   4.515  1.00 24.80           C
ATOM   2331  CE2 TRP A 244       8.347  -4.683   5.552  1.00 24.71           C
ATOM   2332  CZ3 TRP A 244      10.685  -6.215   5.582  1.00 26.03           C
ATOM   2333  CZ2 TRP A 244       8.582  -5.553   6.628  1.00 26.18           C
ATOM   2334  CH2 TRP A 244       9.749  -6.335   6.626  1.00 24.87           C
ATOM   2335  H   TRP A 244       9.942  -2.326  -0.286  1.00  0.00           H
ATOM   2336  HA  TRP A 244       7.507  -3.388   1.102  1.00  0.00           H
ATOM   2337  HB2 TRP A 244       9.858  -4.115   1.846  1.00  0.00           H
ATOM   2338  HB3 TRP A 244      10.123  -2.520   2.416  1.00  0.00           H
ATOM   2339  HD1 TRP A 244       6.841  -2.533   3.528  1.00  0.00           H
ATOM   2340  HE1 TRP A 244       6.429  -3.763   5.717  1.00  0.00           H
ATOM   2341  HE3 TRP A 244      11.162  -5.255   3.715  1.00  0.00           H
ATOM   2342  HZ3 TRP A 244      11.594  -6.799   5.589  1.00  0.00           H
ATOM   2343  HZ2 TRP A 244       7.867  -5.650   7.430  1.00  0.00           H
ATOM   2344  HH2 TRP A 244       9.933  -7.028   7.428  1.00  0.00           H
ATOM   2345  N   ARG A 245       6.768  -0.885   1.185  1.00 21.39           N
ATOM   2346  CA  ARG A 245       6.351   0.467   1.539  1.00 21.27           C
ATOM   2347  C   ARG A 245       6.321   0.588   3.067  1.00 18.90           C
ATOM   2348  O   ARG A 245       5.543  -0.100   3.730  1.00 20.72           O
ATOM   2349  CB  ARG A 245       4.978   0.813   0.931  1.00 22.80           C
ATOM   2350  CG  ARG A 245       4.476   2.214   1.340  1.00 24.05           C
ATOM   2351  CD  ARG A 245       3.525   2.826   0.322  1.00 22.81           C
ATOM   2352  NE  ARG A 245       2.771   3.876   0.991  1.00 24.70           N
ATOM   2353  CZ  ARG A 245       1.554   4.269   0.570  1.00 24.50           C
ATOM   2354  NH1 ARG A 245       1.214   4.001  -0.684  1.00 21.87           N
ATOM   2355  NH2 ARG A 245       0.759   4.926   1.403  1.00 25.57           N1+
ATOM   2356  H   ARG A 245       6.069  -1.599   0.980  1.00  0.00           H
ATOM   2357  HA  ARG A 245       7.068   1.178   1.135  1.00  0.00           H
ATOM   2358  HB2 ARG A 245       5.077   0.776  -0.152  1.00  0.00           H
ATOM   2359  HB3 ARG A 245       4.228   0.064   1.194  1.00  0.00           H
ATOM   2360  HG2 ARG A 245       4.003   2.147   2.325  1.00  0.00           H
ATOM   2361  HG3 ARG A 245       5.328   2.892   1.451  1.00  0.00           H
ATOM   2362  HD2 ARG A 245       4.109   3.212  -0.518  1.00  0.00           H
ATOM   2363  HD3 ARG A 245       2.848   2.047  -0.031  1.00  0.00           H
ATOM   2364  HE  ARG A 245       3.065   4.191   1.902  1.00  0.00           H
ATOM   2365 HH11 ARG A 245       1.899   3.668  -1.359  1.00  0.00           H
ATOM   2366 HH12 ARG A 245       0.245   4.147  -1.034  1.00  0.00           H
ATOM   2367 HH21 ARG A 245       0.948   4.941   2.404  1.00  0.00           H
ATOM   2368 HH22 ARG A 245      -0.140   5.322   1.123  1.00  0.00           H
ATOM   2369  N   VAL A 246       7.167   1.473   3.600  1.00 18.37           N
ATOM   2370  CA  VAL A 246       7.226   1.840   5.003  1.00 17.88           C
ATOM   2371  C   VAL A 246       6.907   3.342   5.062  1.00 17.66           C
ATOM   2372  O   VAL A 246       7.578   4.164   4.431  1.00 16.95           O
ATOM   2373  CB  VAL A 246       8.617   1.492   5.602  1.00 20.27           C
ATOM   2374  CG1 VAL A 246       8.672   1.793   7.113  1.00 18.44           C
ATOM   2375  CG2 VAL A 246       9.025   0.025   5.353  1.00 22.05           C
ATOM   2376  H   VAL A 246       7.786   1.977   2.966  1.00  0.00           H
ATOM   2377  HA  VAL A 246       6.463   1.295   5.564  1.00  0.00           H
ATOM   2378  HB  VAL A 246       9.369   2.113   5.111  1.00  0.00           H
ATOM   2379 HG11 VAL A 246       9.624   1.487   7.543  1.00  0.00           H
ATOM   2380 HG12 VAL A 246       8.556   2.859   7.310  1.00  0.00           H
ATOM   2381 HG13 VAL A 246       7.886   1.263   7.652  1.00  0.00           H
ATOM   2382 HG21 VAL A 246       9.987  -0.202   5.814  1.00  0.00           H
ATOM   2383 HG22 VAL A 246       8.288  -0.672   5.755  1.00  0.00           H
ATOM   2384 HG23 VAL A 246       9.131  -0.189   4.289  1.00  0.00           H
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ATOM   2385  N   GLU A 247      5.865   3.698   5.812  1.00 18.37           N
ATOM   2386  CA  GLU A 247      5.433   5.072   6.054  1.00 17.71           C
ATOM   2387  C   GLU A 247      6.069   5.604   7.363  1.00 18.77           C
ATOM   2388  O   GLU A 247      6.611   4.821   8.155  1.00 19.80           O
ATOM   2389  CB  GLU A 247      3.888   5.044   6.194  1.00 17.17           C
ATOM   2390  CG  GLU A 247      3.190   5.317   4.857  1.00 16.44           C
ATOM   2391  CD  GLU A 247      1.805   5.939   4.980  1.00 20.59           C
ATOM   2392  OE1 GLU A 247      1.726   6.934   5.760  1.00 21.32           O
ATOM   2393  OE2 GLU A 247      0.895   5.502   4.249  1.00 23.91           O1-
ATOM   2394  H   GLU A 247      5.362   2.964   6.287  1.00  0.00           H
ATOM   2395  HA  GLU A 247      5.757   5.724   5.243  1.00  0.00           H
ATOM   2396  HB2 GLU A 247      3.548   4.084   6.587  1.00  0.00           H
ATOM   2397  HB3 GLU A 247      3.575   5.762   6.956  1.00  0.00           H
ATOM   2398  HG2 GLU A 247      3.770   6.054   4.299  1.00  0.00           H
ATOM   2399  HG3 GLU A 247      3.175   4.388   4.288  1.00  0.00           H
ATOM   2400  N   PRO A 248      6.007   6.929   7.624  1.00 19.92           N
ATOM   2401  CA  PRO A 248      6.464   7.519   8.885  1.00 20.59           C
ATOM   2402  C   PRO A 248      5.484   7.241  10.040  1.00 20.76           C
ATOM   2403  O   PRO A 248      4.280   7.104   9.815  1.00 20.31           O
ATOM   2404  CB  PRO A 248      6.581   9.021   8.596  1.00 22.82           C
ATOM   2405  CG  PRO A 248      5.579   9.277   7.482  1.00 21.16           C
ATOM   2406  CD  PRO A 248      5.513   7.962   6.710  1.00 20.35           C
ATOM   2407  HA  PRO A 248      7.437   7.111   9.132  1.00  0.00           H
ATOM   2408  HB2 PRO A 248      6.407   9.656   9.467  1.00  0.00           H
ATOM   2409  HB3 PRO A 248      7.581   9.244   8.227  1.00  0.00           H
ATOM   2410  HG2 PRO A 248      4.601   9.502   7.909  1.00  0.00           H
ATOM   2411  HG3 PRO A 248      5.858  10.112   6.842  1.00  0.00           H
ATOM   2412  HD2 PRO A 248      4.494   7.774   6.374  1.00  0.00           H
ATOM   2413  HD3 PRO A 248      6.159   8.011   5.832  1.00  0.00           H
ATOM   2414  N   ASP A 249      6.016   7.146  11.267  1.00 20.20           N
ATOM   2415  CA  ASP A 249      5.303   6.957  12.540  1.00 19.81           C
ATOM   2416  C   ASP A 249      4.853   5.503  12.764  1.00 20.04           C
ATOM   2417  O   ASP A 249      3.937   5.246  13.545  1.00 20.11           O
ATOM   2418  CB  ASP A 249      4.219   8.040  12.824  1.00  0.00           C
ATOM   2419  CG  ASP A 249      4.726   9.203  13.673  1.00  0.00           C
ATOM   2420  OD1 ASP A 249      5.136   9.086  14.827  1.00  0.00           O
ATOM   2421  OD2 ASP A 249      4.672  10.393  13.020  1.00  0.00           O
ATOM   2422  H   ASP A 249      7.023   7.211  11.353  1.00  0.00           H
ATOM   2423  HA  ASP A 249      6.074   7.069  13.303  1.00  0.00           H
ATOM   2424  HB2 ASP A 249      3.748   8.416  11.917  1.00  0.00           H
ATOM   2425  HB3 ASP A 249      3.401   7.624  13.408  1.00  0.00           H
ATOM   2426  HD2 ASP A 249      4.854  11.126  13.620  1.00  0.00           H
ATOM   2427  N   ILE A 250      5.485   4.542  12.082  1.00 19.14           N
ATOM   2428  CA  ILE A 250      5.146   3.122  12.130  1.00 20.37           C
ATOM   2429  C   ILE A 250      5.837   2.446  13.329  1.00 19.83           C
ATOM   2430  O   ILE A 250      6.864   2.906  13.841  1.00 20.11           O
ATOM   2431  CB  ILE A 250      5.504   2.476  10.745  1.00 21.38           C
ATOM   2432  CG1 ILE A 250      4.256   2.397   9.844  1.00 23.63           C
ATOM   2433  CG2 ILE A 250      6.183   1.086  10.760  1.00 22.17           C
ATOM   2434  CD1 ILE A 250      3.566   3.732   9.561  1.00 20.80           C
ATOM   2435  H   ILE A 250      6.301   4.799  11.537  1.00  0.00           H
ATOM   2436  HA  ILE A 250      4.073   3.032  12.298  1.00  0.00           H
ATOM   2437  HB  ILE A 250      6.208   3.121  10.229  1.00  0.00           H
ATOM   2438 HG12 ILE A 250      4.533   1.954   8.887  1.00  0.00           H
ATOM   2439 HG13 ILE A 250      3.528   1.724  10.298  1.00  0.00           H
ATOM   2440 HG21 ILE A 250      6.420   0.756   9.748  1.00  0.00           H
ATOM   2441 HG22 ILE A 250      7.124   1.090  11.308  1.00  0.00           H
ATOM   2442 HG23 ILE A 250      5.539   0.326  11.205  1.00  0.00           H
ATOM   2443 HD11 ILE A 250      2.778   3.595   8.822  1.00  0.00           H
ATOM   2444 HD12 ILE A 250      3.114   4.158  10.456  1.00  0.00           H
ATOM   2445 HD13 ILE A 250      4.260   4.469   9.170  1.00  0.00           H
ATOM   2446  N   LYS A 251      5.236   1.333  13.754  1.00 20.52           N
ATOM   2447  CA  LYS A 251      5.728   0.380  14.736  1.00 20.36           C
ATOM   2448  C   LYS A 251      5.632  -1.004  14.072  1.00 21.67           C
ATOM   2449  O   LYS A 251      4.619  -1.287  13.427  1.00 19.23           O
ATOM   2450  CB  LYS A 251      4.857   0.449  16.016  1.00 20.47           C
ATOM   2451  CG  LYS A 251      4.639   1.867  16.599  1.00 20.09           C
ATOM   2452  CD  LYS A 251      3.474   1.945  17.599  1.00 22.23           C
ATOM   2453  CE  LYS A 251      3.835   1.593  19.044  1.00 20.07           C
ATOM   2454  NZ  LYS A 251      2.619   1.338  19.836  1.00 21.10           N1+
ATOM   2455  H   LYS A 251      4.390   1.051  13.271  1.00  0.00           H
ATOM   2456  HA  LYS A 251      6.768   0.596  14.969  1.00  0.00           H
ATOM   2457  HB2 LYS A 251      3.888   0.007  15.789  1.00  0.00           H
ATOM   2458  HB3 LYS A 251      5.291  -0.198  16.782  1.00  0.00           H
ATOM   2459  HG2 LYS A 251      5.561   2.253  17.037  1.00  0.00           H
ATOM   2460  HG3 LYS A 251      4.387   2.560  15.798  1.00  0.00           H
ATOM   2461  HD2 LYS A 251      3.076   2.961  17.598  1.00  0.00           H
ATOM   2462  HD3 LYS A 251      2.657   1.314  17.258  1.00  0.00           H
ATOM   2463  HE2 LYS A 251      4.490   0.725  19.069  1.00  0.00           H
ATOM   2464  HE3 LYS A 251      4.393   2.416  19.488  1.00  0.00           H
ATOM   2465  HZ1 LYS A 251      1.948   2.100  19.687  1.00  0.00           H
ATOM   2466  HZ2 LYS A 251      2.151   0.483  19.541  1.00  0.00           H
ATOM   2467  HZ3 LYS A 251      2.811   1.300  20.834  1.00  0.00           H
ATOM   2468  N   LEU A 252      6.650  -1.858  14.232  1.00 19.01           N
ATOM   2469  CA  LEU A 252      6.579  -3.296  13.969  1.00 20.86           C
ATOM   2470  C   LEU A 252      6.742  -3.946  15.337  1.00 19.45           C
ATOM   2471  O   LEU A 252      7.793  -3.802  15.952  1.00 21.96           O
ATOM   2472  CB  LEU A 252      7.741  -3.770  13.058  1.00 21.87           C
ATOM   2473  CG  LEU A 252      7.396  -3.883  11.561  1.00 22.64           C
ATOM   2474  CD1 LEU A 252      8.664  -4.207  10.762  1.00 23.58           C
ATOM   2475  CD2 LEU A 252      6.343  -4.970  11.293  1.00 23.00           C
ATOM   2476  H   LEU A 252      7.394  -1.592  14.864  1.00  0.00           H
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ATOM   2477  HA  LEU A 252       5.613  -3.587  13.562  1.00  0.00           H
ATOM   2478  HB2 LEU A 252       8.603  -3.117  13.197  1.00  0.00           H
ATOM   2479  HB3 LEU A 252       8.088  -4.757  13.378  1.00  0.00           H
ATOM   2480  HG  LEU A 252       7.009  -2.921  11.219  1.00  0.00           H
ATOM   2481 HD11 LEU A 252       8.477  -4.204   9.688  1.00  0.00           H
ATOM   2482 HD12 LEU A 252       9.442  -3.479  10.969  1.00  0.00           H
ATOM   2483 HD13 LEU A 252       9.063  -5.187  11.029  1.00  0.00           H
ATOM   2484 HD21 LEU A 252       6.164  -5.099  10.226  1.00  0.00           H
ATOM   2485 HD22 LEU A 252       6.668  -5.933  11.691  1.00  0.00           H
ATOM   2486 HD23 LEU A 252       5.384  -4.742  11.748  1.00  0.00           H
ATOM   2487  N   TYR A 253       5.712  -4.629  15.823  1.00 20.60           N
ATOM   2488  CA  TYR A 253       5.690  -5.186  17.167  1.00 20.37           C
ATOM   2489  C   TYR A 253       6.309  -6.585  17.171  1.00 19.45           C
ATOM   2490  O   TYR A 253       7.092  -6.906  18.059  1.00 22.46           O
ATOM   2491  CB  TYR A 253       4.224  -5.329  17.596  1.00 19.57           C
ATOM   2492  CG  TYR A 253       3.465  -4.021  17.718  1.00 20.14           C
ATOM   2493  CD1 TYR A 253       3.947  -3.010  18.570  1.00 20.07           C
ATOM   2494  CD2 TYR A 253       2.228  -3.846  17.064  1.00 19.83           C
ATOM   2495  CE1 TYR A 253       3.171  -1.865  18.806  1.00 20.33           C
ATOM   2496  CE2 TYR A 253       1.453  -2.700  17.304  1.00 19.82           C
ATOM   2497  CZ  TYR A 253       1.919  -1.708  18.186  1.00 18.82           C
ATOM   2498  OH  TYR A 253       1.150  -0.615  18.459  1.00 18.72           O
ATOM   2499  H   TYR A 253       4.914  -4.802  15.221  1.00  0.00           H
ATOM   2500  HA  TYR A 253       6.238  -4.554  17.870  1.00  0.00           H
ATOM   2501  HB2 TYR A 253       3.685  -6.001  16.927  1.00  0.00           H
ATOM   2502  HB3 TYR A 253       4.188  -5.809  18.573  1.00  0.00           H
ATOM   2503  HD1 TYR A 253       4.879  -3.129  19.105  1.00  0.00           H
ATOM   2504  HD2 TYR A 253       1.818  -4.622  16.437  1.00  0.00           H
ATOM   2505  HE1 TYR A 253       3.531  -1.154  19.528  1.00  0.00           H
ATOM   2506  HE2 TYR A 253       0.484  -2.617  16.836  1.00  0.00           H
ATOM   2507  HH  TYR A 253       0.209  -0.816  18.280  1.00  0.00           H
ATOM   2508  N   CYS A 254       5.982  -7.418  16.179  1.00 22.80           N
ATOM   2509  CA  CYS A 254       6.530  -8.765  16.066  1.00 23.68           C
ATOM   2510  C   CYS A 254       7.841  -8.684  15.287  1.00 22.63           C
ATOM   2511  O   CYS A 254       7.938  -7.979  14.279  1.00 23.04           O
ATOM   2512  CB  CYS A 254       5.565  -9.666  15.286  1.00 23.53           C
ATOM   2513  SG  CYS A 254       3.922  -9.839  16.038  1.00 25.59           S
ATOM   2514  H   CYS A 254       5.440  -7.059  15.406  1.00  0.00           H
ATOM   2515  HA  CYS A 254       6.707  -9.198  17.050  1.00  0.00           H
ATOM   2516  HB2 CYS A 254       5.434  -9.285  14.273  1.00  0.00           H
ATOM   2517  HB3 CYS A 254       5.987 -10.667  15.173  1.00  0.00           H
ATOM   2518  N   ASP A 255       8.843  -9.415  15.772  1.00 22.72           N
ATOM   2519  CA  ASP A 255      10.108  -9.680  15.109  1.00 23.70           C
ATOM   2520  C   ASP A 255       9.829 -10.621  13.948  1.00 24.37           C
ATOM   2521  O   ASP A 255       9.363 -11.739  14.147  1.00 24.71           O
ATOM   2522  CB  ASP A 255      11.080 -10.378  16.087  1.00 25.02           C
ATOM   2523  CG  ASP A 255      12.020  -9.395  16.744  1.00 25.86           C
ATOM   2524  OD1 ASP A 255      11.651  -8.842  17.808  1.00 25.31           O
ATOM   2525  OD2 ASP A 255      13.097  -9.205  16.139  1.00 30.23           O1-
ATOM   2526  H   ASP A 255       8.603 -10.055  16.532  1.00  0.00           H
ATOM   2527  HA  ASP A 255      10.536  -8.753  14.723  1.00  0.00           H
ATOM   2528  HB2 ASP A 255      10.547 -10.939  16.854  1.00  0.00           H
ATOM   2529  HB3 ASP A 255      11.697 -11.114  15.575  1.00  0.00           H
ATOM   2530  N   ILE A 256      10.122 -10.164  12.734  1.00 23.24           N
ATOM   2531  CA  ILE A 256       9.956 -10.935  11.518  1.00 25.08           C
ATOM   2532  C   ILE A 256      11.286 -11.694  11.398  1.00 24.17           C
ATOM   2533  O   ILE A 256      12.359 -11.090  11.304  1.00 23.01           O
ATOM   2534  CB  ILE A 256       9.723  -9.967  10.327  1.00 24.13           C
ATOM   2535  CG1 ILE A 256       8.599  -8.937  10.621  1.00 24.74           C
ATOM   2536  CG2 ILE A 256       9.395 -10.761   9.046  1.00 23.47           C
ATOM   2537  CD1 ILE A 256       8.513  -7.794   9.607  1.00 24.32           C
ATOM   2538  H   ILE A 256      10.564  -9.258  12.641  1.00  0.00           H
ATOM   2539  HA  ILE A 256       9.110 -11.622  11.606  1.00  0.00           H
ATOM   2540  HB  ILE A 256      10.643  -9.411  10.156  1.00  0.00           H
ATOM   2541 HG12 ILE A 256       7.643  -9.453  10.683  1.00  0.00           H
ATOM   2542 HG13 ILE A 256       8.733  -8.464  11.593  1.00  0.00           H
ATOM   2543 HG21 ILE A 256       9.302 -10.103   8.186  1.00  0.00           H
ATOM   2544 HG22 ILE A 256      10.169 -11.487   8.799  1.00  0.00           H
ATOM   2545 HG23 ILE A 256       8.455 -11.307   9.140  1.00  0.00           H
ATOM   2546 HD11 ILE A 256       7.705  -7.111   9.866  1.00  0.00           H
ATOM   2547 HD12 ILE A 256       9.440  -7.221   9.595  1.00  0.00           H
ATOM   2548 HD13 ILE A 256       8.312  -8.157   8.600  1.00  0.00           H
ATOM   2549  N   ASN A 257      11.221 -13.020  11.528  1.00 25.64           N
ATOM   2550  CA  ASN A 257      12.379 -13.897  11.718  1.00 27.73           C
ATOM   2551  C   ASN A 257      12.615 -14.764  10.477  1.00 27.85           C
ATOM   2552  O   ASN A 257      13.090 -15.893  10.559  1.00 27.48           O
ATOM   2553  CB  ASN A 257      12.246 -14.708  13.027  1.00 29.60           C
ATOM   2554  CG  ASN A 257      12.354 -13.821  14.271  1.00 31.61           C
ATOM   2555  OD1 ASN A 257      13.282 -13.018  14.391  1.00 33.94           O
ATOM   2556  ND2 ASN A 257      11.386 -13.891  15.173  1.00 33.79           N
ATOM   2557  H   ASN A 257      10.304 -13.430  11.647  1.00  0.00           H
ATOM   2558  HA  ASN A 257      13.290 -13.304  11.804  1.00  0.00           H
ATOM   2559  HB2 ASN A 257      11.310 -15.268  13.035  1.00  0.00           H
ATOM   2560  HB3 ASN A 257      13.045 -15.448  13.098  1.00  0.00           H
ATOM   2561 HD21 ASN A 257      10.534 -14.429  14.985  1.00  0.00           H
ATOM   2562 HD22 ASN A 257      11.420 -13.320  16.000  1.00  0.00           H
ATOM   2563  N   TYR A 258      12.319 -14.190   9.311  1.00 29.16           N
ATOM   2564  CA  TYR A 258      12.616 -14.686   7.981  1.00 29.16           C
ATOM   2565  C   TYR A 258      12.783 -13.472   7.061  1.00 28.34           C
ATOM   2566  O   TYR A 258      12.278 -12.388   7.358  1.00 28.39           O
ATOM   2567  CB  TYR A 258      11.560 -15.714   7.521  1.00 29.46           C
ATOM   2568  CG  TYR A 258      10.148 -15.169   7.386  1.00 30.02           C
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ATOM   2569  CD1 TYR A 258       9.294 -15.130   8.508  1.00 31.04          C
ATOM   2570  CD2 TYR A 258       9.689 -14.685   6.142  1.00 30.30          C
ATOM   2571  CE1 TYR A 258       7.996 -14.599   8.390  1.00 29.83          C
ATOM   2572  CE2 TYR A 258       8.387 -14.167   6.024  1.00 30.49          C
ATOM   2573  CZ  TYR A 258       7.544 -14.118   7.148  1.00 31.23          C
ATOM   2574  OH  TYR A 258       6.294 -13.600   7.021  1.00 30.56          O
ATOM   2575  H   TYR A 258      11.962 -13.242   9.320  1.00  0.00          H
ATOM   2576  HA  TYR A 258      13.585 -15.188   8.023  1.00  0.00          H
ATOM   2577  HB2 TYR A 258      11.859 -16.134   6.560  1.00  0.00          H
ATOM   2578  HB3 TYR A 258      11.543 -16.558   8.212  1.00  0.00          H
ATOM   2579  HD1 TYR A 258       9.630 -15.500   9.465  1.00  0.00          H
ATOM   2580  HD2 TYR A 258      10.333 -14.702   5.277  1.00  0.00          H
ATOM   2581  HE1 TYR A 258       7.344 -14.564   9.252  1.00  0.00          H
ATOM   2582  HE2 TYR A 258       8.025 -13.806   5.073  1.00  0.00          H
ATOM   2583  HH  TYR A 258       5.783 -13.599   7.860  1.00  0.00          H
ATOM   2584  N   ASP A 259      13.482 -13.648   5.937  1.00 26.74          N
ATOM   2585  CA  ASP A 259      13.627 -12.630   4.901  1.00 25.98          C
ATOM   2586  C   ASP A 259      12.365 -12.693   4.027  1.00 26.85          C
ATOM   2587  O   ASP A 259      12.131 -13.700   3.354  1.00 26.32          O
ATOM   2588  CB  ASP A 259      14.891 -12.959   4.078  1.00 24.33          C
ATOM   2589  CG  ASP A 259      15.204 -11.962   2.967  1.00 23.76          C
ATOM   2590  OD1 ASP A 259      14.359 -11.710   2.079  1.00 24.79          O
ATOM   2591  OD2 ASP A 259      16.335 -11.433   2.975  1.00 24.27          O1-
ATOM   2592  H   ASP A 259      13.849 -14.563   5.738  1.00  0.00          H
ATOM   2593  HA  ASP A 259      13.737 -11.639   5.346  1.00  0.00          H
ATOM   2594  HB2 ASP A 259      15.751 -12.993   4.739  1.00  0.00          H
ATOM   2595  HB3 ASP A 259      14.828 -13.959   3.658  1.00  0.00          H
ATOM   2596  N   VAL A 260      11.528 -11.651   4.093  1.00 27.13          N
ATOM   2597  CA  VAL A 260      10.200 -11.611   3.485  1.00 26.80          C
ATOM   2598  C   VAL A 260      10.224 -11.779   1.954  1.00 26.31          C
ATOM   2599  O   VAL A 260       9.447 -12.569   1.425  1.00 25.15          O
ATOM   2600  CB  VAL A 260       9.438 -10.334   3.930  1.00 27.92          C
ATOM   2601  CG1 VAL A 260       9.182 -10.340   5.446  1.00 27.39          C
ATOM   2602  CG2 VAL A 260      10.094  -9.004   3.508  1.00 30.01          C
ATOM   2603  H   VAL A 260      11.756 -10.911   4.738  1.00  0.00          H
ATOM   2604  HA  VAL A 260       9.653 -12.472   3.873  1.00  0.00          H
ATOM   2605  HB  VAL A 260       8.456 -10.368   3.454  1.00  0.00          H
ATOM   2606 HG11 VAL A 260       8.588  -9.478   5.753  1.00  0.00          H
ATOM   2607 HG12 VAL A 260       8.633 -11.231   5.754  1.00  0.00          H
ATOM   2608 HG13 VAL A 260      10.113 -10.317   6.012  1.00  0.00          H
ATOM   2609 HG21 VAL A 260       9.505  -8.157   3.860  1.00  0.00          H
ATOM   2610 HG22 VAL A 260      11.101  -8.894   3.908  1.00  0.00          H
ATOM   2611 HG23 VAL A 260      10.144  -8.904   2.425  1.00  0.00          H
ATOM   2612  N   PHE A 261      11.132 -11.110   1.234  1.00 25.12          N
ATOM   2613  CA  PHE A 261      11.161 -11.151  -0.231  1.00 24.42          C
ATOM   2614  C   PHE A 261      11.846 -12.424  -0.741  1.00 26.37          C
ATOM   2615  O   PHE A 261      11.467 -12.931  -1.794  1.00 26.96          O
ATOM   2616  CB  PHE A 261      11.903  -9.926  -0.784  1.00 24.90          C
ATOM   2617  CG  PHE A 261      11.177  -8.624  -0.531  1.00 24.87          C
ATOM   2618  CD1 PHE A 261       9.975  -8.361  -1.213  1.00 23.69          C
ATOM   2619  CD2 PHE A 261      11.683  -7.686   0.392  1.00 24.07          C
ATOM   2620  CE1 PHE A 261       9.262  -7.177  -0.957  1.00 23.05          C
ATOM   2621  CE2 PHE A 261      10.973  -6.502   0.649  1.00 26.09          C
ATOM   2622  CZ  PHE A 261       9.756  -6.260  -0.014  1.00 24.79          C
ATOM   2623  H   PHE A 261      11.819 -10.551   1.719  1.00  0.00          H
ATOM   2624  HA  PHE A 261      10.141 -11.148  -0.621  1.00  0.00          H
ATOM   2625  HB2 PHE A 261      12.906  -9.870  -0.380  1.00  0.00          H
ATOM   2626  HB3 PHE A 261      12.019 -10.024  -1.862  1.00  0.00          H
ATOM   2627  HD1 PHE A 261       9.593  -9.078  -1.923  1.00  0.00          H
ATOM   2628  HD2 PHE A 261      12.609  -7.869   0.912  1.00  0.00          H
ATOM   2629  HE1 PHE A 261       8.329  -6.973  -1.463  1.00  0.00          H
ATOM   2630  HE2 PHE A 261      11.359  -5.787   1.360  1.00  0.00          H
ATOM   2631  HZ  PHE A 261       9.182  -5.378   0.203  1.00  0.00          H
ATOM   2632  N   LYS A 262      12.780 -13.004   0.028  1.00 25.29          N
ATOM   2633  CA  LYS A 262      13.316 -14.337  -0.226  1.00 27.76          C
ATOM   2634  C   LYS A 262      12.243 -15.420  -0.003  1.00 27.08          C
ATOM   2635  O   LYS A 262      12.365 -16.476  -0.613  1.00 27.65          O
ATOM   2636  CB  LYS A 262      14.511 -14.576   0.722  1.00 27.98          C
ATOM   2637  CG  LYS A 262      15.214 -15.954   0.707  1.00 31.68          C
ATOM   2638  CD  LYS A 262      16.077 -16.247  -0.535  1.00 35.77          C
ATOM   2639  CE  LYS A 262      15.598 -17.451  -1.371  1.00 38.98          C
ATOM   2640  NZ  LYS A 262      14.465 -17.103  -2.232  1.00 38.71          N1+
ATOM   2641  H   LYS A 262      13.099 -12.522   0.872  1.00  0.00          H
ATOM   2642  HA  LYS A 262      13.656 -14.385  -1.262  1.00  0.00          H
ATOM   2643  HB2 LYS A 262      15.256 -13.793   0.573  1.00  0.00          H
ATOM   2644  HB3 LYS A 262      14.127 -14.437   1.728  1.00  0.00          H
ATOM   2645  HG2 LYS A 262      15.876 -15.973   1.574  1.00  0.00          H
ATOM   2646  HG3 LYS A 262      14.507 -16.762   0.900  1.00  0.00          H
ATOM   2647  HD2 LYS A 262      16.185 -15.353  -1.150  1.00  0.00          H
ATOM   2648  HD3 LYS A 262      17.087 -16.475  -0.191  1.00  0.00          H
ATOM   2649  HE2 LYS A 262      16.404 -17.801  -2.013  1.00  0.00          H
ATOM   2650  HE3 LYS A 262      15.323 -18.293  -0.734  1.00  0.00          H
ATOM   2651  HZ1 LYS A 262      14.099 -17.959  -2.702  1.00  0.00          H
ATOM   2652  HZ2 LYS A 262      13.665 -16.781  -1.692  1.00  0.00          H
ATOM   2653  HZ3 LYS A 262      14.722 -16.428  -2.945  1.00  0.00          H
ATOM   2654  N   TRP A 263      11.238 -15.183   0.852  1.00 26.32          N
ATOM   2655  CA  TRP A 263      10.184 -16.132   1.211  1.00 26.06          C
ATOM   2656  C   TRP A 263       8.953 -15.985   0.293  1.00 28.00          C
ATOM   2657  O   TRP A 263       8.459 -16.991  -0.221  1.00 26.85          O
ATOM   2658  CB  TRP A 263       9.778 -15.845   2.674  1.00 25.69          C
ATOM   2659  CG  TRP A 263       8.727 -16.721   3.291  1.00 24.08          C
ATOM   2660  CD1 TRP A 263       8.955 -17.895   3.923  1.00 24.32          C
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ATOM   2661  CD2 TRP A 263       7.289 -16.485   3.388  1.00 24.24           C
ATOM   2662  NE1 TRP A 263       7.758 -18.407   4.386  1.00 24.75           N
ATOM   2663  CE3 TRP A 263       6.420 -15.455   2.960  1.00 25.60           C
ATOM   2664  CE2 TRP A 263       6.697 -17.575   4.094  1.00 24.89           C
ATOM   2665  CZ3 TRP A 263       5.034 -15.507   3.210  1.00 24.08           C
ATOM   2666  CZ2 TRP A 263       5.315 -17.642   4.350  1.00 24.80           C
ATOM   2667  CH2 TRP A 263       4.481 -16.601   3.902  1.00 25.33           C
ATOM   2668  H   TRP A 263      11.268 -14.307   1.361  1.00  0.00           H
ATOM   2669  HA  TRP A 263      10.557 -17.156   1.138  1.00  0.00           H
ATOM   2670  HB2 TRP A 263      10.667 -15.946   3.296  1.00  0.00           H
ATOM   2671  HB3 TRP A 263       9.453 -14.812   2.796  1.00  0.00           H
ATOM   2672  HD1 TRP A 263       9.931 -18.340   4.050  1.00  0.00           H
ATOM   2673  HE1 TRP A 263       7.686 -19.248   4.941  1.00  0.00           H
ATOM   2674  HE3 TRP A 263       6.831 -14.607   2.442  1.00  0.00           H
ATOM   2675  HZ3 TRP A 263       4.395 -14.700   2.880  1.00  0.00           H
ATOM   2676  HZ2 TRP A 263       4.895 -18.481   4.884  1.00  0.00           H
ATOM   2677  HH2 TRP A 263       3.419 -16.635   4.096  1.00  0.00           H
ATOM   2678  N   MET A 264       8.466 -14.754   0.061  1.00 26.69           N
ATOM   2679  CA  MET A 264       7.250 -14.426  -0.705  1.00 27.66           C
ATOM   2680  C   MET A 264       7.324 -14.926  -2.160  1.00 28.61           C
ATOM   2681  O   MET A 264       6.337 -15.398  -2.726  1.00 28.17           O
ATOM   2682  CB  MET A 264       7.044 -12.892  -0.718  1.00 26.75           C
ATOM   2683  CG  MET A 264       6.482 -12.280   0.577  1.00 27.80           C
ATOM   2684  SD  MET A 264       4.695 -12.454   0.808  1.00 32.27           S
ATOM   2685  CE  MET A 264       4.112 -11.131  -0.285  1.00 29.89           C
ATOM   2686  H   MET A 264       8.922 -13.978   0.541  1.00  0.00           H
ATOM   2687  HA  MET A 264       6.390 -14.906  -0.233  1.00  0.00           H
ATOM   2688  HB2 MET A 264       7.991 -12.408  -0.960  1.00  0.00           H
ATOM   2689  HB3 MET A 264       6.373 -12.617  -1.531  1.00  0.00           H
ATOM   2690  HG2 MET A 264       6.972 -12.705   1.448  1.00  0.00           H
ATOM   2691  HG3 MET A 264       6.716 -11.216   0.602  1.00  0.00           H
ATOM   2692  HE1 MET A 264       3.025 -11.150  -0.349  1.00  0.00           H
ATOM   2693  HE2 MET A 264       4.426 -10.161   0.098  1.00  0.00           H
ATOM   2694  HE3 MET A 264       4.510 -11.240  -1.292  1.00  0.00           H
ATOM   2695  N   GLN A 265       8.528 -14.847  -2.735  1.00 28.33           N
ATOM   2696  CA  GLN A 265       8.880 -15.233  -4.094  1.00 30.41           C
ATOM   2697  C   GLN A 265       8.724 -16.751  -4.338  1.00 30.83           C
ATOM   2698  O   GLN A 265       8.355 -17.158  -5.442  1.00 30.37           O
ATOM   2699  CB  GLN A 265      10.334 -14.767  -4.298  1.00 27.86           C
ATOM   2700  CG  GLN A 265      10.910 -14.915  -5.718  1.00 30.57           C
ATOM   2701  CD  GLN A 265      12.429 -14.806  -5.688  1.00 32.16           C
ATOM   2702  OE1 GLN A 265      13.017 -13.854  -6.190  1.00 31.72           O
ATOM   2703  NE2 GLN A 265      13.090 -15.789  -5.098  1.00 32.89           N
ATOM   2704  H   GLN A 265       9.269 -14.450  -2.173  1.00  0.00           H
ATOM   2705  HA  GLN A 265       8.228 -14.702  -4.787  1.00  0.00           H
ATOM   2706  HB2 GLN A 265      10.410 -13.711  -4.035  1.00  0.00           H
ATOM   2707  HB3 GLN A 265      10.964 -15.293  -3.578  1.00  0.00           H
ATOM   2708  HG2 GLN A 265      10.663 -15.885  -6.150  1.00  0.00           H
ATOM   2709  HG3 GLN A 265      10.494 -14.159  -6.386  1.00  0.00           H
ATOM   2710 HE21 GLN A 265      12.559 -16.602  -4.713  1.00  0.00           H
ATOM   2711 HE22 GLN A 265      14.092 -15.832  -5.210  1.00  0.00           H
ATOM   2712  N   GLU A 266       8.968 -17.588  -3.318  1.00 31.44           N
ATOM   2713  CA  GLU A 266       8.900 -19.048  -3.431  1.00 33.01           C
ATOM   2714  C   GLU A 266       7.480 -19.521  -3.109  1.00 32.66           C
ATOM   2715  O   GLU A 266       6.962 -20.419  -3.767  1.00 32.48           O
ATOM   2716  CB  GLU A 266       9.858 -19.763  -2.443  1.00 34.36           C
ATOM   2717  CG  GLU A 266      11.150 -19.032  -2.057  1.00 44.11           C
ATOM   2718  CD  GLU A 266      12.107 -18.712  -3.198  1.00 48.33           C
ATOM   2719  OE1 GLU A 266      13.270 -19.163  -3.143  1.00 49.69           O
ATOM   2720  OE2 GLU A 266      11.807 -17.809  -4.000  1.00 50.67           O1-
ATOM   2721  H   GLU A 266       9.317 -17.196  -2.457  1.00  0.00           H
ATOM   2722  HA  GLU A 266       9.159 -19.353  -4.442  1.00  0.00           H
ATOM   2723  HB2 GLU A 266       9.346 -19.983  -1.503  1.00  0.00           H
ATOM   2724  HB3 GLU A 266      10.115 -20.739  -2.857  1.00  0.00           H
ATOM   2725  HG2 GLU A 266      10.880 -18.108  -1.556  1.00  0.00           H
ATOM   2726  HG3 GLU A 266      11.690 -19.626  -1.319  1.00  0.00           H
ATOM   2727  N   ASN A 267       6.851 -18.882  -2.113  1.00 29.70           N
ATOM   2728  CA  ASN A 267       5.503 -19.183  -1.619  1.00 28.37           C
ATOM   2729  C   ASN A 267       4.406 -18.659  -2.554  1.00 26.52           C
ATOM   2730  O   ASN A 267       3.224 -18.896  -2.297  1.00 27.70           O
ATOM   2731  CB  ASN A 267       5.297 -18.542  -0.226  1.00 29.57           C
ATOM   2732  CG  ASN A 267       5.965 -19.338   0.890  1.00 30.12           C
ATOM   2733  OD1 ASN A 267       5.366 -20.236   1.469  1.00 32.14           O
ATOM   2734  ND2 ASN A 267       7.204 -19.010   1.225  1.00 27.84           N
ATOM   2735  H   ASN A 267       7.367 -18.142  -1.651  1.00  0.00           H
ATOM   2736  HA  ASN A 267       5.373 -20.266  -1.549  1.00  0.00           H
ATOM   2737  HB2 ASN A 267       5.637 -17.505  -0.213  1.00  0.00           H
ATOM   2738  HB3 ASN A 267       4.237 -18.504   0.032  1.00  0.00           H
ATOM   2739 HD21 ASN A 267       7.679 -18.246   0.750  1.00  0.00           H
ATOM   2740 HD22 ASN A 267       7.592 -19.405   2.068  1.00  0.00           H
ATOM   2741  N   GLU A 268       4.782 -17.945  -3.626  1.00 28.56           N
ATOM   2742  CA  GLU A 268       3.942 -17.490  -4.730  1.00 29.03           C
ATOM   2743  C   GLU A 268       3.013 -16.362  -4.263  1.00 27.53           C
ATOM   2744  O   GLU A 268       1.798 -16.467  -4.393  1.00 29.81           O
ATOM   2745  CB  GLU A 268       3.214 -18.686  -5.406  1.00 31.12           C
ATOM   2746  CG  GLU A 268       4.103 -19.460  -6.396  1.00 34.99           C
ATOM   2747  CD  GLU A 268       4.379 -18.644  -7.648  1.00 36.24           C
ATOM   2748  OE1 GLU A 268       3.387 -18.122  -8.201  1.00 38.70           O
ATOM   2749  OE2 GLU A 268       5.572 -18.508  -7.993  1.00 37.35           O1-
ATOM   2750  H   GLU A 268       5.772 -17.764  -3.707  1.00  0.00           H
ATOM   2751  HA  GLU A 268       4.604 -17.020  -5.457  1.00  0.00           H
ATOM   2752  HB2 GLU A 268       2.798 -19.384  -4.684  1.00  0.00           H
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ATOM   2753  HB3 GLU A 268       2.337 -18.322  -5.934  1.00  0.00           H
ATOM   2754  HG2 GLU A 268       5.039 -19.755  -5.921  1.00  0.00           H
ATOM   2755  HG3 GLU A 268       3.605 -20.379  -6.702  1.00  0.00           H
ATOM   2756  N   LYS A 269       3.558 -15.323  -3.627  1.00 25.71           N
ATOM   2757  CA  LYS A 269       2.803 -14.212  -3.059  1.00 25.50           C
ATOM   2758  C   LYS A 269       3.412 -12.921  -3.621  1.00 24.82           C
ATOM   2759  O   LYS A 269       4.599 -12.674  -3.429  1.00 25.11           O
ATOM   2760  CB  LYS A 269       2.822 -14.323  -1.518  1.00 23.34           C
ATOM   2761  CG  LYS A 269       2.291 -15.659  -0.933  1.00 24.75           C
ATOM   2762  CD  LYS A 269       0.782 -15.914  -1.140  1.00 23.23           C
ATOM   2763  CE  LYS A 269       0.364 -17.400  -1.185  1.00 22.16           C
ATOM   2764  NZ  LYS A 269       0.662 -18.018  -2.487  1.00 22.20           N1+
ATOM   2765  H   LYS A 269       4.566 -15.296  -3.490  1.00  0.00           H
ATOM   2766  HA  LYS A 269       1.767 -14.239  -3.387  1.00  0.00           H
ATOM   2767  HB2 LYS A 269       3.854 -14.207  -1.190  1.00  0.00           H
ATOM   2768  HB3 LYS A 269       2.273 -13.484  -1.089  1.00  0.00           H
ATOM   2769  HG2 LYS A 269       2.871 -16.481  -1.345  1.00  0.00           H
ATOM   2770  HG3 LYS A 269       2.501 -15.682   0.137  1.00  0.00           H
ATOM   2771  HD2 LYS A 269       0.229 -15.445  -0.327  1.00  0.00           H
ATOM   2772  HD3 LYS A 269       0.430 -15.411  -2.038  1.00  0.00           H
ATOM   2773  HE2 LYS A 269       0.836 -17.972  -0.386  1.00  0.00           H
ATOM   2774  HE3 LYS A 269      -0.712 -17.477  -1.023  1.00  0.00           H
ATOM   2775  HZ1 LYS A 269      -0.116 -18.594  -2.867  1.00  0.00           H
ATOM   2776  HZ2 LYS A 269       0.786 -17.305  -3.198  1.00  0.00           H
ATOM   2777  HZ3 LYS A 269       1.520 -18.561  -2.461  1.00  0.00           H
ATOM   2778  N   VAL A 270       2.622 -12.143  -4.369  1.00 24.36           N
ATOM   2779  CA  VAL A 270       3.051 -11.000  -5.183  1.00 23.54           C
ATOM   2780  C   VAL A 270       2.635  -9.675  -4.513  1.00 22.50           C
ATOM   2781  O   VAL A 270       3.246  -8.638  -4.776  1.00 23.72           O
ATOM   2782  CB  VAL A 270       2.412 -11.131  -6.604  1.00 23.18           C
ATOM   2783  CG1 VAL A 270       2.899 -10.059  -7.598  1.00 22.05           C
ATOM   2784  CG2 VAL A 270       2.638 -12.505  -7.273  1.00 23.42           C
ATOM   2785  H   VAL A 270       1.631 -12.369  -4.395  1.00  0.00           H
ATOM   2786  HA  VAL A 270       4.135 -10.968  -5.270  1.00  0.00           H
ATOM   2787  HB  VAL A 270       1.334 -11.007  -6.485  1.00  0.00           H
ATOM   2788 HG11 VAL A 270       2.468 -10.205  -8.588  1.00  0.00           H
ATOM   2789 HG12 VAL A 270       2.640  -9.049  -7.283  1.00  0.00           H
ATOM   2790 HG13 VAL A 270       3.980 -10.110  -7.718  1.00  0.00           H
ATOM   2791 HG21 VAL A 270       1.915 -12.655  -8.074  1.00  0.00           H
ATOM   2792 HG22 VAL A 270       3.617 -12.569  -7.740  1.00  0.00           H
ATOM   2793 HG23 VAL A 270       2.550 -13.355  -6.599  1.00  0.00           H
ATOM   2794  N   TYR A 271       1.630  -9.703  -3.629  1.00 21.55           N
ATOM   2795  CA  TYR A 271       1.157  -8.564  -2.855  1.00 22.01           C
ATOM   2796  C   TYR A 271       0.895  -9.059  -1.433  1.00 20.85           C
ATOM   2797  O   TYR A 271      -0.005  -9.871  -1.227  1.00 21.84           O
ATOM   2798  CB  TYR A 271      -0.068  -7.931  -3.549  1.00 19.56           C
ATOM   2799  CG  TYR A 271      -0.615  -6.684  -2.874  1.00 18.54           C
ATOM   2800  CD1 TYR A 271      -0.159  -5.407  -3.262  1.00 18.88           C
ATOM   2801  CD2 TYR A 271      -1.579  -6.797  -1.849  1.00 19.17           C
ATOM   2802  CE1 TYR A 271      -0.660  -4.256  -2.625  1.00 16.85           C
ATOM   2803  CE2 TYR A 271      -2.076  -5.643  -1.214  1.00 18.66           C
ATOM   2804  CZ  TYR A 271      -1.623  -4.370  -1.606  1.00 18.55           C
ATOM   2805  OH  TYR A 271      -2.115  -3.255  -0.993  1.00 19.00           O
ATOM   2806  H   TYR A 271       1.167 -10.586  -3.448  1.00  0.00           H
ATOM   2807  HA  TYR A 271       1.940  -7.808  -2.802  1.00  0.00           H
ATOM   2808  HB2 TYR A 271       0.193  -7.669  -4.576  1.00  0.00           H
ATOM   2809  HB3 TYR A 271      -0.873  -8.664  -3.626  1.00  0.00           H
ATOM   2810  HD1 TYR A 271       0.577  -5.300  -4.046  1.00  0.00           H
ATOM   2811  HD2 TYR A 271      -1.935  -7.767  -1.535  1.00  0.00           H
ATOM   2812  HE1 TYR A 271      -0.299  -3.283  -2.919  1.00  0.00           H
ATOM   2813  HE2 TYR A 271      -2.804  -5.739  -0.423  1.00  0.00           H
ATOM   2814  HH  TYR A 271      -1.577  -2.461  -1.152  1.00  0.00           H
ATOM   2815  N   GLY A 272       1.690  -8.605  -0.464  1.00 20.02           N
ATOM   2816  CA  GLY A 272       1.574  -8.947   0.942  1.00 19.98           C
ATOM   2817  C   GLY A 272       1.320  -7.687   1.759  1.00 19.55           C
ATOM   2818  O   GLY A 272       2.084  -6.729   1.644  1.00 20.95           O
ATOM   2819  H   GLY A 272       2.455  -7.973  -0.688  1.00  0.00           H
ATOM   2820  HA2 GLY A 272       0.812  -9.694   1.116  1.00  0.00           H
ATOM   2821  HA3 GLY A 272       2.511  -9.391   1.262  1.00  0.00           H
ATOM   2822  N   PHE A 273       0.276  -7.690   2.590  1.00 19.12           N
ATOM   2823  CA  PHE A 273      -0.186  -6.543   3.371  1.00 19.96           C
ATOM   2824  C   PHE A 273      -0.498  -6.956   4.824  1.00 20.73           C
ATOM   2825  O   PHE A 273      -0.309  -8.112   5.213  1.00 21.45           O
ATOM   2826  CB  PHE A 273      -1.347  -5.833   2.625  1.00 20.09           C
ATOM   2827  CG  PHE A 273      -2.667  -6.587   2.678  1.00 21.22           C
ATOM   2828  CD1 PHE A 273      -2.899  -7.680   1.819  1.00 20.84           C
ATOM   2829  CD2 PHE A 273      -3.628  -6.257   3.657  1.00 20.08           C
ATOM   2830  CE1 PHE A 273      -4.042  -8.482   1.990  1.00 20.71           C
ATOM   2831  CE2 PHE A 273      -4.756  -7.074   3.843  1.00 20.46           C
ATOM   2832  CZ  PHE A 273      -4.959  -8.190   3.015  1.00 22.49           C
ATOM   2833  H   PHE A 273      -0.303  -8.525   2.639  1.00  0.00           H
ATOM   2834  HA  PHE A 273       0.634  -5.829   3.446  1.00  0.00           H
ATOM   2835  HB2 PHE A 273      -1.495  -4.837   3.044  1.00  0.00           H
ATOM   2836  HB3 PHE A 273      -1.074  -5.660   1.583  1.00  0.00           H
ATOM   2837  HD1 PHE A 273      -2.177  -7.940   1.057  1.00  0.00           H
ATOM   2838  HD2 PHE A 273      -3.477  -5.410   4.309  1.00  0.00           H
ATOM   2839  HE1 PHE A 273      -4.206  -9.336   1.351  1.00  0.00           H
ATOM   2840  HE2 PHE A 273      -5.457  -6.859   4.634  1.00  0.00           H
ATOM   2841  HZ  PHE A 273      -5.826  -8.812   3.159  1.00  0.00           H
ATOM   2842  N   THR A 274      -0.983  -6.005   5.628  1.00 20.67           N
ATOM   2843  CA  THR A 274      -1.480  -6.206   6.987  1.00 19.86           C
ATOM   2844  C   THR A 274      -2.859  -5.540   7.128  1.00 23.58           C
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ATOM   2845  O   THR A 274      -3.887  -6.145   6.827  1.00 27.01           O
ATOM   2846  CB  THR A 274      -0.414  -5.788   8.036  1.00 23.05           C
ATOM   2847  OG1 THR A 274       0.103  -4.493   7.771  1.00 20.98           O
ATOM   2848  CG2 THR A 274       0.741  -6.785   8.198  1.00 20.44           C
ATOM   2849  H   THR A 274      -1.148  -5.092   5.232  1.00  0.00           H
ATOM   2850  HA  THR A 274      -1.682  -7.268   7.147  1.00  0.00           H
ATOM   2851  HB  THR A 274      -0.907  -5.711   8.999  1.00  0.00           H
ATOM   2852  HG1 THR A 274       0.782  -4.587   7.114  1.00  0.00           H
ATOM   2853 HG21 THR A 274       1.460  -6.447   8.945  1.00  0.00           H
ATOM   2854 HG22 THR A 274       0.363  -7.753   8.530  1.00  0.00           H
ATOM   2855 HG23 THR A 274       1.274  -6.949   7.264  1.00  0.00           H
ATOM   2856  N   VAL A 275      -2.891  -4.279   7.566  1.00 21.17           N
ATOM   2857  CA  VAL A 275      -4.115  -3.553   7.896  1.00 19.25           C
ATOM   2858  C   VAL A 275      -4.947  -3.286   6.616  1.00 18.02           C
ATOM   2859  O   VAL A 275      -4.410  -2.961   5.556  1.00 19.67           O
ATOM   2860  CB  VAL A 275      -3.753  -2.236   8.641  1.00 17.62           C
ATOM   2861  CG1 VAL A 275      -4.989  -1.617   9.323  1.00 17.33           C
ATOM   2862  CG2 VAL A 275      -2.656  -2.423   9.711  1.00 17.17           C
ATOM   2863  H   VAL A 275      -1.999  -3.843   7.754  1.00  0.00           H
ATOM   2864  HA  VAL A 275      -4.690  -4.194   8.569  1.00  0.00           H
ATOM   2865  HB  VAL A 275      -3.369  -1.531   7.902  1.00  0.00           H
ATOM   2866 HG11 VAL A 275      -4.736  -0.717   9.883  1.00  0.00           H
ATOM   2867 HG12 VAL A 275      -5.765  -1.344   8.607  1.00  0.00           H
ATOM   2868 HG13 VAL A 275      -5.416  -2.320  10.037  1.00  0.00           H
ATOM   2869 HG21 VAL A 275      -2.466  -1.495  10.253  1.00  0.00           H
ATOM   2870 HG22 VAL A 275      -2.951  -3.175  10.444  1.00  0.00           H
ATOM   2871 HG23 VAL A 275      -1.706  -2.735   9.276  1.00  0.00           H
ATOM   2872  N   SER A 276      -6.268  -3.437   6.720  1.00 18.71           N
ATOM   2873  CA  SER A 276      -7.246  -3.293   5.649  1.00 19.95           C
ATOM   2874  C   SER A 276      -8.514  -2.668   6.243  1.00 18.73           C
ATOM   2875  O   SER A 276      -8.869  -2.966   7.384  1.00 22.68           O
ATOM   2876  CB  SER A 276      -7.407  -4.637   4.912  1.00 18.49           C
ATOM   2877  OG  SER A 276      -7.553  -5.713   5.819  1.00 20.03           O
ATOM   2878  H   SER A 276      -6.676  -3.661   7.617  1.00  0.00           H
ATOM   2879  HA  SER A 276      -6.864  -2.565   4.930  1.00  0.00           H
ATOM   2880  HB2 SER A 276      -8.265  -4.609   4.239  1.00  0.00           H
ATOM   2881  HB3 SER A 276      -6.530  -4.831   4.297  1.00  0.00           H
ATOM   2882  HG  SER A 276      -6.736  -5.796   6.297  1.00  0.00           H
ATOM   2883  N   ILE A 277      -9.146  -1.740   5.523  1.00 19.56           N
ATOM   2884  CA  ILE A 277     -10.046  -0.735   6.076  1.00 18.81           C
ATOM   2885  C   ILE A 277     -11.139  -0.362   5.061  1.00 17.40           C
ATOM   2886  O   ILE A 277     -11.027  -0.663   3.871  1.00 17.52           O
ATOM   2887  CB  ILE A 277      -9.185   0.437   6.650  1.00 16.88           C
ATOM   2888  CG1 ILE A 277      -9.975   1.397   7.562  1.00 21.77           C
ATOM   2889  CG2 ILE A 277      -8.451   1.220   5.552  1.00 21.13           C
ATOM   2890  CD1 ILE A 277      -9.092   2.303   8.433  1.00 19.17           C
ATOM   2891  H   ILE A 277      -8.909  -1.630   4.538  1.00  0.00           H
ATOM   2892  HA  ILE A 277     -10.585  -1.191   6.903  1.00  0.00           H
ATOM   2893  HB  ILE A 277      -8.414  -0.011   7.277  1.00  0.00           H
ATOM   2894 HG12 ILE A 277     -10.644   2.022   6.974  1.00  0.00           H
ATOM   2895 HG13 ILE A 277     -10.612   0.806   8.214  1.00  0.00           H
ATOM   2896 HG21 ILE A 277      -7.733   1.922   5.972  1.00  0.00           H
ATOM   2897 HG22 ILE A 277      -7.902   0.568   4.871  1.00  0.00           H
ATOM   2898 HG23 ILE A 277      -9.161   1.796   4.965  1.00  0.00           H
ATOM   2899 HD11 ILE A 277      -9.705   2.910   9.099  1.00  0.00           H
ATOM   2900 HD12 ILE A 277      -8.412   1.717   9.052  1.00  0.00           H
ATOM   2901 HD13 ILE A 277      -8.492   2.990   7.835  1.00  0.00           H
ATOM   2902  N   HIS A 278     -12.189   0.305   5.551  1.00 17.40           N
ATOM   2903  CA  HIS A 278     -13.216   0.998   4.779  1.00 18.62           C
ATOM   2904  C   HIS A 278     -12.656   2.337   4.280  1.00 20.19           C
ATOM   2905  O   HIS A 278     -11.955   3.024   5.027  1.00 22.16           O
ATOM   2906  CB  HIS A 278     -14.383   1.348   5.731  1.00 19.60           C
ATOM   2907  CG  HIS A 278     -15.578   0.457   5.621  1.00 19.20           C
ATOM   2908  ND1 HIS A 278     -16.607   0.717   4.709  1.00 19.72           N
ATOM   2909  CD2 HIS A 278     -15.897  -0.666   6.348  1.00 19.63           C
ATOM   2910  CE1 HIS A 278     -17.506  -0.232   4.930  1.00 18.30           C
ATOM   2911  NE2 HIS A 278     -17.144  -1.066   5.904  1.00 20.42           N
ATOM   2912  H   HIS A 278     -12.216   0.453   6.552  1.00  0.00           H
ATOM   2913  HA  HIS A 278     -13.556   0.385   3.942  1.00  0.00           H
ATOM   2914  HB2 HIS A 278     -14.055   1.354   6.770  1.00  0.00           H
ATOM   2915  HB3 HIS A 278     -14.751   2.362   5.567  1.00  0.00           H
ATOM   2916  HD2 HIS A 278     -15.366  -1.176   7.138  1.00  0.00           H
ATOM   2917  HE1 HIS A 278     -18.441  -0.308   4.393  1.00  0.00           H
ATOM   2918  HE2 HIS A 278     -17.704  -1.825   6.289  1.00  0.00           H
ATOM   2919  N   GLU A 279     -13.005   2.755   3.059  1.00 18.56           N
ATOM   2920  CA  GLU A 279     -12.812   4.127   2.592  1.00 20.35           C
ATOM   2921  C   GLU A 279     -14.108   4.925   2.799  1.00 20.15           C
ATOM   2922  O   GLU A 279     -15.196   4.354   2.904  1.00 21.21           O
ATOM   2923  CB  GLU A 279     -12.421   4.142   1.090  1.00 18.12           C
ATOM   2924  CG  GLU A 279     -11.928   5.498   0.520  1.00 19.55           C
ATOM   2925  CD  GLU A 279     -10.857   6.197   1.359  1.00 21.45           C
ATOM   2926  OE1 GLU A 279     -11.181   6.692   2.459  1.00 21.73           O
ATOM   2927  OE2 GLU A 279      -9.701   6.301   0.898  1.00 20.95           O1-
ATOM   2928  H   GLU A 279     -13.568   2.132   2.487  1.00  0.00           H
ATOM   2929  HA  GLU A 279     -12.025   4.579   3.186  1.00  0.00           H
ATOM   2930  HB2 GLU A 279     -11.637   3.417   0.902  1.00  0.00           H
ATOM   2931  HB3 GLU A 279     -13.267   3.799   0.492  1.00  0.00           H
ATOM   2932  HG2 GLU A 279     -11.540   5.345  -0.486  1.00  0.00           H
ATOM   2933  HG3 GLU A 279     -12.764   6.185   0.402  1.00  0.00           H
ATOM   2934  N   TYR A 280     -13.988   6.254   2.831  1.00 20.93           N
ATOM   2935  CA  TYR A 280     -15.123   7.170   2.849  1.00 21.95           C
ATOM   2936  C   TYR A 280     -15.589   7.326   1.393  1.00 20.59           C
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ATOM   2937  O   TYR A 280     -14.853   7.860   0.556  1.00 20.61           O
ATOM   2938  CB  TYR A 280     -14.675   8.563   3.333  1.00 23.30           C
ATOM   2939  CG  TYR A 280     -13.939   8.619   4.652  1.00 26.62           C
ATOM   2940  CD1 TYR A 280     -14.637   8.558   5.874  1.00 30.13           C
ATOM   2941  CD2 TYR A 280     -12.540   8.759   4.651  1.00 30.20           C
ATOM   2942  CE1 TYR A 280     -13.937   8.648   7.091  1.00 31.13           C
ATOM   2943  CE2 TYR A 280     -11.845   8.826   5.867  1.00 32.21           C
ATOM   2944  CZ  TYR A 280     -12.537   8.776   7.086  1.00 32.49           C
ATOM   2945  OH  TYR A 280     -11.845   8.866   8.258  1.00 34.99           O
ATOM   2946  H   TYR A 280     -13.052   6.637   2.686  1.00  0.00           H
ATOM   2947  HA  TYR A 280     -15.924   6.793   3.489  1.00  0.00           H
ATOM   2948  HB2 TYR A 280     -14.030   9.033   2.594  1.00  0.00           H
ATOM   2949  HB3 TYR A 280     -15.551   9.204   3.420  1.00  0.00           H
ATOM   2950  HD1 TYR A 280     -15.710   8.440   5.889  1.00  0.00           H
ATOM   2951  HD2 TYR A 280     -11.991   8.805   3.720  1.00  0.00           H
ATOM   2952  HE1 TYR A 280     -14.485   8.593   8.019  1.00  0.00           H
ATOM   2953  HE2 TYR A 280     -10.776   8.927   5.852  1.00  0.00           H
ATOM   2954  HH  TYR A 280     -10.903   8.819   8.110  1.00  0.00           H
ATOM   2955  N   GLU A 281     -16.812   6.886   1.099  1.00 22.29           N
ATOM   2956  CA  GLU A 281     -17.567   7.050  -0.144  1.00 20.70           C
ATOM   2957  C   GLU A 281     -17.458   8.460  -0.764  1.00 20.87           C
ATOM   2958  O   GLU A 281     -17.186   8.591  -1.958  1.00 18.87           O
ATOM   2959  CB  GLU A 281     -19.021   6.559   0.094  1.00 21.60           C
ATOM   2960  CG  GLU A 281     -19.947   7.458   0.955  1.00 27.54           C
ATOM   2961  CD  GLU A 281     -19.335   7.791   2.308  1.00 30.84           C
ATOM   2962  OE1 GLU A 281     -18.981   6.842   3.037  1.00 32.62           O
ATOM   2963  OE2 GLU A 281     -18.979   8.968   2.516  1.00 35.66           O1-
ATOM   2964  H   GLU A 281     -17.376   6.573   1.890  1.00  0.00           H
ATOM   2965  HA  GLU A 281     -17.108   6.364  -0.857  1.00  0.00           H
ATOM   2966  HB2 GLU A 281     -19.498   6.423  -0.876  1.00  0.00           H
ATOM   2967  HB3 GLU A 281     -18.992   5.566   0.542  1.00  0.00           H
ATOM   2968  HG2 GLU A 281     -20.184   8.385   0.433  1.00  0.00           H
ATOM   2969  HG3 GLU A 281     -20.897   6.954   1.130  1.00  0.00           H
ATOM   2970  N   VAL A 282     -17.588   9.508   0.061  1.00 20.46           N
ATOM   2971  CA  VAL A 282     -17.510  10.920  -0.308  1.00 20.98           C
ATOM   2972  C   VAL A 282     -16.137  11.356  -0.885  1.00 20.93           C
ATOM   2973  O   VAL A 282     -16.076  12.380  -1.568  1.00 18.59           O
ATOM   2974  CB  VAL A 282     -17.954  11.766   0.922  1.00 21.34           C
ATOM   2975  CG1 VAL A 282     -17.007  11.653   2.133  1.00 22.74           C
ATOM   2976  CG2 VAL A 282     -18.263  13.235   0.580  1.00 22.47           C
ATOM   2977  H   VAL A 282     -17.910   9.305   1.014  1.00  0.00           H
ATOM   2978  HA  VAL A 282     -18.240  11.068  -1.105  1.00  0.00           H
ATOM   2979  HB  VAL A 282     -18.909  11.350   1.252  1.00  0.00           H
ATOM   2980 HG11 VAL A 282     -17.346  12.276   2.961  1.00  0.00           H
ATOM   2981 HG12 VAL A 282     -16.983  10.632   2.506  1.00  0.00           H
ATOM   2982 HG13 VAL A 282     -15.984  11.937   1.895  1.00  0.00           H
ATOM   2983 HG21 VAL A 282     -18.670  13.758   1.446  1.00  0.00           H
ATOM   2984 HG22 VAL A 282     -17.376  13.772   0.256  1.00  0.00           H
ATOM   2985 HG23 VAL A 282     -19.001  13.299  -0.219  1.00  0.00           H
ATOM   2986  N   THR A 283     -15.050  10.595  -0.668  1.00 19.91           N
ATOM   2987  CA  THR A 283     -13.730  10.893  -1.243  1.00 18.39           C
ATOM   2988  C   THR A 283     -13.563  10.281  -2.651  1.00 19.45           C
ATOM   2989  O   THR A 283     -12.648  10.681  -3.371  1.00 20.36           O
ATOM   2990  CB  THR A 283     -12.602  10.374  -0.304  1.00 20.55           C
ATOM   2991  OG1 THR A 283     -12.523   8.965  -0.182  1.00 18.62           O
ATOM   2992  CG2 THR A 283     -12.628  10.997   1.095  1.00 17.56           C
ATOM   2993  H   THR A 283     -15.163   9.729  -0.153  1.00  0.00           H
ATOM   2994  HA  THR A 283     -13.605  11.973  -1.342  1.00  0.00           H
ATOM   2995  HB  THR A 283     -11.654  10.668  -0.753  1.00  0.00           H
ATOM   2996  HG1 THR A 283     -13.350   8.613   0.158  1.00  0.00           H
ATOM   2997 HG21 THR A 283     -11.890  10.538   1.753  1.00  0.00           H
ATOM   2998 HG22 THR A 283     -12.381  12.051   1.025  1.00  0.00           H
ATOM   2999 HG23 THR A 283     -13.604  10.925   1.571  1.00  0.00           H
ATOM   3000  N   ILE A 284     -14.444   9.349  -3.052  1.00 16.54           N
ATOM   3001  CA  ILE A 284     -14.336   8.507  -4.245  1.00 16.06           C
ATOM   3002  C   ILE A 284     -15.557   8.462  -5.216  1.00 16.32           C
ATOM   3003  O   ILE A 284     -15.662   7.440  -5.904  1.00 18.94           O
ATOM   3004  CB  ILE A 284     -13.837   7.094  -3.802  1.00 14.12           C
ATOM   3005  CG1 ILE A 284     -14.836   6.360  -2.878  1.00 16.19           C
ATOM   3006  CG2 ILE A 284     -12.445   7.142  -3.158  1.00 14.01           C
ATOM   3007  CD1 ILE A 284     -14.470   4.894  -2.618  1.00 12.12           C
ATOM   3008  H   ILE A 284     -15.218   9.134  -2.434  1.00  0.00           H
ATOM   3009  HA  ILE A 284     -13.558   8.925  -4.884  1.00  0.00           H
ATOM   3010  HB  ILE A 284     -13.725   6.490  -4.698  1.00  0.00           H
ATOM   3011 HG12 ILE A 284     -14.909   6.880  -1.923  1.00  0.00           H
ATOM   3012 HG13 ILE A 284     -15.836   6.389  -3.311  1.00  0.00           H
ATOM   3013 HG21 ILE A 284     -11.968   6.164  -3.138  1.00  0.00           H
ATOM   3014 HG22 ILE A 284     -11.785   7.827  -3.685  1.00  0.00           H
ATOM   3015 HG23 ILE A 284     -12.512   7.474  -2.128  1.00  0.00           H
ATOM   3016 HD11 ILE A 284     -15.238   4.412  -2.017  1.00  0.00           H
ATOM   3017 HD12 ILE A 284     -14.374   4.338  -3.551  1.00  0.00           H
ATOM   3018 HD13 ILE A 284     -13.533   4.802  -2.070  1.00  0.00           H
ATOM   3019  N   PRO A 285     -16.460   9.479  -5.345  1.00 17.10           N
ATOM   3020  CA  PRO A 285     -17.633   9.470  -6.250  1.00 18.10           C
ATOM   3021  C   PRO A 285     -17.478   8.901  -7.672  1.00 18.61           C
ATOM   3022  O   PRO A 285     -18.428   8.303  -8.183  1.00 21.16           O
ATOM   3023  CB  PRO A 285     -18.120  10.922  -6.325  1.00 19.30           C
ATOM   3024  CG  PRO A 285     -17.718  11.517  -4.995  1.00 19.72           C
ATOM   3025  CD  PRO A 285     -16.468  10.737  -4.591  1.00 17.67           C
ATOM   3026  HA  PRO A 285     -18.391   8.871  -5.744  1.00  0.00           H
ATOM   3027  HB2 PRO A 285     -17.610  11.459  -7.127  1.00  0.00           H
ATOM   3028  HB3 PRO A 285     -19.192  10.993  -6.511  1.00  0.00           H
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ATOM   3029  HG2 PRO A 285     -17.549  12.594  -5.039  1.00  0.00           H
ATOM   3030  HG3 PRO A 285     -18.508  11.336  -4.264  1.00  0.00           H
ATOM   3031  HD2 PRO A 285     -15.554  11.292  -4.794  1.00  0.00           H
ATOM   3032  HD3 PRO A 285     -16.537  10.556  -3.524  1.00  0.00           H
ATOM   3033  N   THR A 286     -16.313   9.059  -8.314  1.00 19.69           N
ATOM   3034  CA  THR A 286     -16.072   8.560  -9.661  1.00 19.30           C
ATOM   3035  C   THR A 286     -14.913   7.548  -9.755  1.00 20.60           C
ATOM   3036  O   THR A 286     -14.676   7.044 -10.852  1.00 18.78           O
ATOM   3037  CB  THR A 286     -16.114   9.716 -10.707  1.00 21.39           C
ATOM   3038  OG1 THR A 286     -15.072  10.666 -10.577  1.00 21.34           O
ATOM   3039  CG2 THR A 286     -17.438  10.494 -10.726  1.00 19.97           C
ATOM   3040  H   THR A 286     -15.612   9.700  -7.921  1.00  0.00           H
ATOM   3041  HA  THR A 286     -16.908   7.924  -9.947  1.00  0.00           H
ATOM   3042  HB  THR A 286     -15.992   9.265 -11.694  1.00  0.00           H
ATOM   3043  HG1 THR A 286     -15.148  11.111  -9.722  1.00  0.00           H
ATOM   3044 HG21 THR A 286     -17.466  11.198 -11.558  1.00  0.00           H
ATOM   3045 HG22 THR A 286     -18.288   9.822 -10.838  1.00  0.00           H
ATOM   3046 HG23 THR A 286     -17.584  11.061  -9.806  1.00  0.00           H
ATOM   3047  N   LEU A 287     -14.252   7.153  -8.647  1.00 19.85           N
ATOM   3048  CA  LEU A 287     -13.096   6.228  -8.636  1.00 20.60           C
ATOM   3049  C   LEU A 287     -13.525   4.839  -9.123  1.00 20.95           C
ATOM   3050  O   LEU A 287     -13.014   4.333 -10.125  1.00 18.74           O
ATOM   3051  CB  LEU A 287     -12.491   6.121  -7.209  1.00 19.84           C
ATOM   3052  CG  LEU A 287     -11.050   5.547  -7.090  1.00 24.19           C
ATOM   3053  CD1 LEU A 287     -10.537   5.696  -5.652  1.00 17.69           C
ATOM   3054  CD2 LEU A 287     -10.890   4.076  -7.514  1.00 20.76           C
ATOM   3055  H   LEU A 287     -14.538   7.566  -7.766  1.00  0.00           H
ATOM   3056  HA  LEU A 287     -12.334   6.604  -9.317  1.00  0.00           H
ATOM   3057  HB2 LEU A 287     -12.477   7.124  -6.783  1.00  0.00           H
ATOM   3058  HB3 LEU A 287     -13.152   5.543  -6.565  1.00  0.00           H
ATOM   3059  HG  LEU A 287     -10.394   6.141  -7.726  1.00  0.00           H
ATOM   3060 HD11 LEU A 287      -9.486   5.420  -5.571  1.00  0.00           H
ATOM   3061 HD12 LEU A 287     -10.623   6.723  -5.307  1.00  0.00           H
ATOM   3062 HD13 LEU A 287     -11.095   5.059  -4.965  1.00  0.00           H
ATOM   3063 HD21 LEU A 287      -9.921   3.678  -7.210  1.00  0.00           H
ATOM   3064 HD22 LEU A 287     -11.654   3.439  -7.068  1.00  0.00           H
ATOM   3065 HD23 LEU A 287     -10.929   3.960  -8.596  1.00  0.00           H
ATOM   3066  N   TRP A 288     -14.513   4.247  -8.440  1.00 18.96           N
ATOM   3067  CA  TRP A 288     -15.047   2.928  -8.768  1.00 20.78           C
ATOM   3068  C   TRP A 288     -15.745   2.945 -10.136  1.00 21.73           C
ATOM   3069  O   TRP A 288     -15.646   1.980 -10.884  1.00 21.01           O
ATOM   3070  CB  TRP A 288     -16.038   2.475  -7.682  1.00 16.55           C
ATOM   3071  CG  TRP A 288     -16.710   1.168  -7.977  1.00 19.20           C
ATOM   3072  CD1 TRP A 288     -17.995   1.027  -8.372  1.00 17.19           C
ATOM   3073  CD2 TRP A 288     -16.148  -0.180  -7.937  1.00 18.61           C
ATOM   3074  NE1 TRP A 288     -18.259  -0.305  -8.600  1.00 18.83           N
ATOM   3075  CE3 TRP A 288     -14.885  -0.722  -7.601  1.00 16.92           C
ATOM   3076  CE2 TRP A 288     -17.166  -1.102  -8.328  1.00 18.36           C
ATOM   3077  CZ3 TRP A 288     -14.651  -2.112  -7.642  1.00 21.22           C
ATOM   3078  CZ2 TRP A 288     -16.945  -2.489  -8.370  1.00 20.24           C
ATOM   3079  CH2 TRP A 288     -15.680  -2.996  -8.022  1.00 22.41           C
ATOM   3080  H   TRP A 288     -14.872   4.732  -7.630  1.00  0.00           H
ATOM   3081  HA  TRP A 288     -14.221   2.216  -8.807  1.00  0.00           H
ATOM   3082  HB2 TRP A 288     -15.524   2.375  -6.725  1.00  0.00           H
ATOM   3083  HB3 TRP A 288     -16.810   3.233  -7.540  1.00  0.00           H
ATOM   3084  HD1 TRP A 288     -18.686   1.844  -8.523  1.00  0.00           H
ATOM   3085  HE1 TRP A 288     -19.157  -0.625  -8.981  1.00  0.00           H
ATOM   3086  HE3 TRP A 288     -14.087  -0.061  -7.294  1.00  0.00           H
ATOM   3087  HZ3 TRP A 288     -13.678  -2.501  -7.379  1.00  0.00           H
ATOM   3088  HZ2 TRP A 288     -17.740  -3.158  -8.658  1.00  0.00           H
ATOM   3089  HH2 TRP A 288     -15.494  -4.059  -8.049  1.00  0.00           H
ATOM   3090  N   GLN A 289     -16.398   4.060 -10.486  1.00 23.21           N
ATOM   3091  CA  GLN A 289     -17.062   4.262 -11.769  1.00 24.00           C
ATOM   3092  C   GLN A 289     -16.037   4.231 -12.920  1.00 23.78           C
ATOM   3093  O   GLN A 289     -16.210   3.474 -13.867  1.00 21.70           O
ATOM   3094  CB  GLN A 289     -17.853   5.583 -11.700  1.00 26.05           C
ATOM   3095  CG  GLN A 289     -18.793   5.829 -12.897  1.00 30.79           C
ATOM   3096  CD  GLN A 289     -19.805   6.963 -12.698  1.00 32.56           C
ATOM   3097  OE1 GLN A 289     -20.583   7.251 -13.595  1.00 33.91           O
ATOM   3098  NE2 GLN A 289     -19.846   7.623 -11.543  1.00 33.71           N
ATOM   3099  H   GLN A 289     -16.367   4.826  -9.833  1.00  0.00           H
ATOM   3100  HA  GLN A 289     -17.763   3.437 -11.918  1.00  0.00           H
ATOM   3101  HB2 GLN A 289     -18.440   5.566 -10.780  1.00  0.00           H
ATOM   3102  HB3 GLN A 289     -17.165   6.424 -11.624  1.00  0.00           H
ATOM   3103  HG2 GLN A 289     -18.213   6.037 -13.799  1.00  0.00           H
ATOM   3104  HG3 GLN A 289     -19.363   4.924 -13.109  1.00  0.00           H
ATOM   3105 HE21 GLN A 289     -19.254   7.388 -10.762  1.00  0.00           H
ATOM   3106 HE22 GLN A 289     -20.541   8.348 -11.455  1.00  0.00           H
ATOM   3107  N   THR A 290     -14.916   4.948 -12.777  1.00 23.31           N
ATOM   3108  CA  THR A 290     -13.831   4.983 -13.760  1.00 22.84           C
ATOM   3109  C   THR A 290     -13.055   3.641 -13.783  1.00 22.38           C
ATOM   3110  O   THR A 290     -12.530   3.257 -14.825  1.00 22.84           O
ATOM   3111  CB  THR A 290     -12.900   6.173 -13.411  1.00 24.30           C
ATOM   3112  OG1 THR A 290     -13.676   7.358 -13.302  1.00 25.09           O
ATOM   3113  CG2 THR A 290     -11.827   6.467 -14.462  1.00 22.40           C
ATOM   3114  H   THR A 290     -14.806   5.526 -11.952  1.00  0.00           H
ATOM   3115  HA  THR A 290     -14.262   5.144 -14.751  1.00  0.00           H
ATOM   3116  HB  THR A 290     -12.411   5.996 -12.450  1.00  0.00           H
ATOM   3117  HG1 THR A 290     -14.121   7.306 -12.454  1.00  0.00           H
ATOM   3118 HG21 THR A 290     -11.242   7.347 -14.198  1.00  0.00           H
ATOM   3119 HG22 THR A 290     -11.125   5.640 -14.547  1.00  0.00           H
ATOM   3120 HG23 THR A 290     -12.259   6.637 -15.448  1.00  0.00           H
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ATOM   3121  N   SER A 291     -13.050   2.883 -12.673  1.00 19.88           N
ATOM   3122  CA  SER A 291     -12.518   1.520 -12.620  1.00 20.14           C
ATOM   3123  C   SER A 291     -13.472   0.529 -13.323  1.00 20.06           C
ATOM   3124  O   SER A 291     -13.022  -0.419 -13.965  1.00 19.13           O
ATOM   3125  CB  SER A 291     -12.346   1.090 -11.148  1.00 19.42           C
ATOM   3126  OG  SER A 291     -11.433   1.942 -10.470  1.00 19.96           O
ATOM   3127  H   SER A 291     -13.470   3.266 -11.836  1.00  0.00           H
ATOM   3128  HA  SER A 291     -11.557   1.492 -13.137  1.00  0.00           H
ATOM   3129  HB2 SER A 291     -13.296   1.072 -10.617  1.00  0.00           H
ATOM   3130  HB3 SER A 291     -11.961   0.069 -11.106  1.00  0.00           H
ATOM   3131  HG  SER A 291     -11.806   2.822 -10.446  1.00  0.00           H
ATOM   3132  N   MET A 292     -14.789   0.776 -13.279  1.00 22.05           N
ATOM   3133  CA  MET A 292     -15.805   0.061 -14.049  1.00 23.75           C
ATOM   3134  C   MET A 292     -15.573   0.312 -15.550  1.00 23.08           C
ATOM   3135  O   MET A 292     -15.538  -0.638 -16.319  1.00 23.18           O
ATOM   3136  CB  MET A 292     -17.226   0.493 -13.603  1.00 23.46           C
ATOM   3137  CG  MET A 292     -18.162  -0.664 -13.206  1.00 23.79           C
ATOM   3138  SD  MET A 292     -18.991  -1.537 -14.568  1.00 24.01           S
ATOM   3139  CE  MET A 292     -17.849  -2.922 -14.838  1.00 23.71           C
ATOM   3140  H   MET A 292     -15.107   1.540 -12.691  1.00  0.00           H
ATOM   3141  HA  MET A 292     -15.670  -1.003 -13.851  1.00  0.00           H
ATOM   3142  HB2 MET A 292     -17.145   1.131 -12.725  1.00  0.00           H
ATOM   3143  HB3 MET A 292     -17.705   1.128 -14.350  1.00  0.00           H
ATOM   3144  HG2 MET A 292     -17.654  -1.377 -12.554  1.00  0.00           H
ATOM   3145  HG3 MET A 292     -18.962  -0.244 -12.595  1.00  0.00           H
ATOM   3146  HE1 MET A 292     -18.245  -3.596 -15.598  1.00  0.00           H
ATOM   3147  HE2 MET A 292     -16.880  -2.568 -15.183  1.00  0.00           H
ATOM   3148  HE3 MET A 292     -17.704  -3.489 -13.918  1.00  0.00           H
ATOM   3149  N   ASP A 293     -15.267   1.548 -15.964  1.00 25.20           N
ATOM   3150  CA  ASP A 293     -14.849   1.923 -17.332  1.00 24.42           C
ATOM   3151  C   ASP A 293     -13.372   1.581 -17.648  1.00 24.19           C
ATOM   3152  O   ASP A 293     -12.795   2.050 -18.638  1.00 22.66           O
ATOM   3153  CB  ASP A 293     -15.186   3.406 -17.616  1.00 25.99           C
ATOM   3154  CG  ASP A 293     -16.695   3.605 -17.693  1.00 25.87           C
ATOM   3155  OD1 ASP A 293     -17.375   3.638 -16.644  1.00 25.88           O
ATOM   3156  OD2 ASP A 293     -17.274   3.491 -18.793  1.00 26.97           O1-
ATOM   3157  H   ASP A 293     -15.403   2.308 -15.302  1.00  0.00           H
ATOM   3158  HA  ASP A 293     -15.414   1.320 -18.041  1.00  0.00           H
ATOM   3159  HB2 ASP A 293     -14.771   4.057 -16.848  1.00  0.00           H
ATOM   3160  HB3 ASP A 293     -14.764   3.731 -18.567  1.00  0.00           H
ATOM   3161  N   PHE A 294     -12.779   0.680 -16.859  1.00 22.53           N
ATOM   3162  CA  PHE A 294     -11.692  -0.202 -17.260  1.00 21.67           C
ATOM   3163  C   PHE A 294     -12.271  -1.618 -17.431  1.00 22.37           C
ATOM   3164  O   PHE A 294     -12.154  -2.182 -18.511  1.00 23.42           O
ATOM   3165  CB  PHE A 294     -10.559  -0.174 -16.218  1.00 21.57           C
ATOM   3166  CG  PHE A 294      -9.393  -1.082 -16.555  1.00 21.32           C
ATOM   3167  CD1 PHE A 294      -8.444  -0.693 -17.524  1.00 23.19           C
ATOM   3168  CD2 PHE A 294      -9.270  -2.333 -15.915  1.00 21.72           C
ATOM   3169  CE1 PHE A 294      -7.355  -1.534 -17.817  1.00 21.37           C
ATOM   3170  CE2 PHE A 294      -8.190  -3.177 -16.225  1.00 24.26           C
ATOM   3171  CZ  PHE A 294      -7.218  -2.764 -17.149  1.00 21.92           C
ATOM   3172  H   PHE A 294     -13.311   0.392 -16.049  1.00  0.00           H
ATOM   3173  HA  PHE A 294     -11.276   0.103 -18.220  1.00  0.00           H
ATOM   3174  HB2 PHE A 294     -10.178   0.842 -16.116  1.00  0.00           H
ATOM   3175  HB3 PHE A 294     -10.923  -0.448 -15.231  1.00  0.00           H
ATOM   3176  HD1 PHE A 294      -8.527   0.254 -18.037  1.00  0.00           H
ATOM   3177  HD2 PHE A 294     -10.001  -2.656 -15.189  1.00  0.00           H
ATOM   3178  HE1 PHE A 294      -6.617  -1.238 -18.548  1.00  0.00           H
ATOM   3179  HE2 PHE A 294      -8.092  -4.141 -15.753  1.00  0.00           H
ATOM   3180  HZ  PHE A 294      -6.364  -3.395 -17.338  1.00  0.00           H
ATOM   3181  N   ILE A 295     -12.954  -2.183 -16.426  1.00 24.85           N
ATOM   3182  CA  ILE A 295     -13.511  -3.548 -16.446  1.00 26.88           C
ATOM   3183  C   ILE A 295     -14.604  -3.786 -17.532  1.00 27.94           C
ATOM   3184  O   ILE A 295     -14.819  -4.924 -17.938  1.00 27.36           O
ATOM   3185  CB  ILE A 295     -13.968  -3.908 -14.995  1.00 28.74           C
ATOM   3186  CG1 ILE A 295     -12.796  -3.880 -13.976  1.00 30.86           C
ATOM   3187  CG2 ILE A 295     -14.745  -5.235 -14.862  1.00 29.65           C
ATOM   3188  CD1 ILE A 295     -11.715  -4.955 -14.187  1.00 31.32           C
ATOM   3189  H   ILE A 295     -13.023  -1.673 -15.553  1.00  0.00           H
ATOM   3190  HA  ILE A 295     -12.699  -4.221 -16.729  1.00  0.00           H
ATOM   3191  HB  ILE A 295     -14.658  -3.124 -14.682  1.00  0.00           H
ATOM   3192 HG12 ILE A 295     -12.311  -2.904 -13.979  1.00  0.00           H
ATOM   3193 HG13 ILE A 295     -13.198  -3.988 -12.968  1.00  0.00           H
ATOM   3194 HG21 ILE A 295     -14.950  -5.472 -13.818  1.00  0.00           H
ATOM   3195 HG22 ILE A 295     -15.707  -5.195 -15.373  1.00  0.00           H
ATOM   3196 HG23 ILE A 295     -14.185  -6.067 -15.290  1.00  0.00           H
ATOM   3197 HD11 ILE A 295     -10.934  -4.870 -13.430  1.00  0.00           H
ATOM   3198 HD12 ILE A 295     -12.124  -5.963 -14.117  1.00  0.00           H
ATOM   3199 HD13 ILE A 295     -11.224  -4.863 -15.156  1.00  0.00           H
ATOM   3200  N   LYS A 296     -15.253  -2.735 -18.056  1.00 27.30           N
ATOM   3201  CA  LYS A 296     -16.155  -2.788 -19.218  1.00 29.16           C
ATOM   3202  C   LYS A 296     -15.379  -2.872 -20.551  1.00 29.60           C
ATOM   3203  O   LYS A 296     -15.964  -3.212 -21.576  1.00 30.49           O
ATOM   3204  CB  LYS A 296     -16.918  -1.442 -19.332  1.00 30.80           C
ATOM   3205  CG  LYS A 296     -18.022  -1.129 -18.305  1.00 35.46           C
ATOM   3206  CD  LYS A 296     -18.436   0.348 -18.458  1.00 37.53           C
ATOM   3207  CE  LYS A 296     -19.325   0.924 -17.348  1.00 39.57           C
ATOM   3208  NZ  LYS A 296     -19.440   2.388 -17.482  1.00 42.84           N1+
ATOM   3209  H   LYS A 296     -15.129  -1.841 -17.586  1.00  0.00           H
ATOM   3210  HA  LYS A 296     -16.844  -3.631 -19.145  1.00  0.00           H
ATOM   3211  HB2 LYS A 296     -16.177  -0.640 -19.321  1.00  0.00           H
ATOM   3212  HB3 LYS A 296     -17.391  -1.374 -20.315  1.00  0.00           H
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ATOM   3213  HG2 LYS A 296     -18.876  -1.790 -18.453  1.00  0.00          H
ATOM   3214  HG3 LYS A 296     -17.666  -1.320 -17.296  1.00  0.00          H
ATOM   3215  HD2 LYS A 296     -17.529   0.946 -18.493  1.00  0.00          H
ATOM   3216  HD3 LYS A 296     -18.914   0.491 -19.428  1.00  0.00          H
ATOM   3217  HE2 LYS A 296     -20.314   0.466 -17.382  1.00  0.00          H
ATOM   3218  HE3 LYS A 296     -18.898   0.712 -16.369  1.00  0.00          H
ATOM   3219  HZ1 LYS A 296     -20.204   2.806 -16.986  1.00  0.00          H
ATOM   3220  HZ2 LYS A 296     -18.571   2.839 -17.113  1.00  0.00          H
ATOM   3221  HZ3 LYS A 296     -19.382   2.694 -18.444  1.00  0.00          H
ATOM   3222  N   LYS A 297    -14.118  -2.432 -20.548  1.00 28.79          N
ATOM   3223  CA  LYS A 297    -13.326  -2.057 -21.715  1.00 30.07          C
ATOM   3224  C   LYS A 297    -12.159  -3.031 -21.924  1.00 29.13          C
ATOM   3225  O   LYS A 297    -11.798  -3.296 -23.065  1.00 30.10          O
ATOM   3226  CB  LYS A 297    -12.810  -0.628 -21.426  1.00 31.69          C
ATOM   3227  CG  LYS A 297    -11.889   0.022 -22.476  1.00 36.08          C
ATOM   3228  CD  LYS A 297    -11.430   1.420 -22.027  1.00 40.63          C
ATOM   3229  CE  LYS A 297    -10.327   1.394 -20.946  1.00 42.81          C
ATOM   3230  NZ  LYS A 297    -10.415   2.575 -20.073  1.00 42.47          N1+
ATOM   3231  H   LYS A 297    -13.676  -2.301 -19.645  1.00  0.00          H
ATOM   3232  HA  LYS A 297    -13.936  -2.054 -22.621  1.00  0.00          H
ATOM   3233  HB2 LYS A 297    -13.675   0.021 -21.279  1.00  0.00          H
ATOM   3234  HB3 LYS A 297    -12.288  -0.635 -20.472  1.00  0.00          H
ATOM   3235  HG2 LYS A 297    -11.015  -0.602 -22.678  1.00  0.00          H
ATOM   3236  HG3 LYS A 297    -12.429   0.097 -23.421  1.00  0.00          H
ATOM   3237  HD2 LYS A 297    -11.060   1.970 -22.893  1.00  0.00          H
ATOM   3238  HD3 LYS A 297    -12.305   1.970 -21.676  1.00  0.00          H
ATOM   3239  HE2 LYS A 297    -10.404   0.512 -20.312  1.00  0.00          H
ATOM   3240  HE3 LYS A 297     -9.341   1.343 -21.412  1.00  0.00          H
ATOM   3241  HZ1 LYS A 297     -9.599   2.645 -19.453  1.00  0.00          H
ATOM   3242  HZ2 LYS A 297    -10.444   3.420 -20.616  1.00  0.00          H
ATOM   3243  HZ3 LYS A 297    -11.256   2.504 -19.500  1.00  0.00          H
ATOM   3244  N   ASN A 298    -11.588  -3.543 -20.828  1.00 28.47          N
ATOM   3245  CA  ASN A 298    -10.402  -4.395 -20.781  1.00 26.71          C
ATOM   3246  C   ASN A 298    -10.687  -5.676 -19.973  1.00 25.72          C
ATOM   3247  O   ASN A 298    -10.185  -5.809 -18.851  1.00 23.38          O
ATOM   3248  CB  ASN A 298     -9.204  -3.597 -20.206  1.00 27.91          C
ATOM   3249  CG  ASN A 298     -8.605  -2.590 -21.182  1.00 28.07          C
ATOM   3250  OD1 ASN A 298     -8.868  -1.388 -21.105  1.00 30.60          O
ATOM   3251  ND2 ASN A 298     -7.758  -3.074 -22.078  1.00 28.22          N
ATOM   3252  H   ASN A 298    -11.921  -3.218 -19.927  1.00  0.00          H
ATOM   3253  HA  ASN A 298    -10.131  -4.717 -21.788  1.00  0.00          H
ATOM   3254  HB2 ASN A 298     -9.489  -3.088 -19.284  1.00  0.00          H
ATOM   3255  HB3 ASN A 298     -8.406  -4.285 -19.929  1.00  0.00          H
ATOM   3256 HD21 ASN A 298     -7.607  -4.110 -22.093  1.00  0.00          H
ATOM   3257 HD22 ASN A 298     -7.297  -2.496 -22.754  1.00  0.00          H
ATOM   3258  N   PRO A 299    -11.512  -6.622 -20.481  1.00 25.00          N
ATOM   3259  CA  PRO A 299    -11.785  -7.890 -19.791  1.00 25.78          C
ATOM   3260  C   PRO A 299    -10.628  -8.907 -19.862  1.00 25.64          C
ATOM   3261  O   PRO A 299    -10.595  -9.823 -19.044  1.00 25.28          O
ATOM   3262  CB  PRO A 299    -13.044  -8.438 -20.480  1.00 26.77          C
ATOM   3263  CG  PRO A 299    -12.971  -7.885 -21.895  1.00 25.54          C
ATOM   3264  CD  PRO A 299    -12.280  -6.531 -21.728  1.00 25.40          C
ATOM   3265  HA  PRO A 299    -11.999  -7.705 -18.737  1.00  0.00          H
ATOM   3266  HB2 PRO A 299    -13.112  -9.527 -20.457  1.00  0.00          H
ATOM   3267  HB3 PRO A 299    -13.928  -8.044 -19.978  1.00  0.00          H
ATOM   3268  HG2 PRO A 299    -12.342  -8.533 -22.509  1.00  0.00          H
ATOM   3269  HG3 PRO A 299    -13.944  -7.808 -22.380  1.00  0.00          H
ATOM   3270  HD2 PRO A 299    -11.665  -6.283 -22.593  1.00  0.00          H
ATOM   3271  HD3 PRO A 299    -13.035  -5.752 -21.622  1.00  0.00          H
ATOM   3272  N   GLU A 300     -9.678  -8.769 -20.795  1.00 27.36          N
ATOM   3273  CA  GLU A 300     -8.486  -9.603 -20.934  1.00 30.62          C
ATOM   3274  C   GLU A 300     -7.480  -9.342 -19.798  1.00 31.01          C
ATOM   3275  O   GLU A 300     -6.840 -10.277 -19.317  1.00 30.85          O
ATOM   3276  CB  GLU A 300     -7.851  -9.342 -22.330  1.00 33.91          C
ATOM   3277  CG  GLU A 300     -7.125  -7.988 -22.580  1.00 38.15          C
ATOM   3278  CD  GLU A 300     -8.032  -6.769 -22.457  1.00 41.20          C
ATOM   3279  OE1 GLU A 300     -9.246  -6.928 -22.694  1.00 42.55          O
ATOM   3280  OE2 GLU A 300     -7.547  -5.713 -22.011  1.00 42.55          O1-
ATOM   3281  H   GLU A 300     -9.739  -7.998 -21.478  1.00  0.00          H
ATOM   3282  HA  GLU A 300     -8.797 -10.648 -20.880  1.00  0.00          H
ATOM   3283  HB2 GLU A 300     -7.126 -10.134 -22.516  1.00  0.00          H
ATOM   3284  HB3 GLU A 300     -8.616  -9.476 -23.097  1.00  0.00          H
ATOM   3285  HG2 GLU A 300     -6.272  -7.865 -21.913  1.00  0.00          H
ATOM   3286  HG3 GLU A 300     -6.716  -7.977 -23.589  1.00  0.00          H
ATOM   3287  N   TYR A 301     -7.354  -8.088 -19.345  1.00 29.28          N
ATOM   3288  CA  TYR A 301     -6.439  -7.668 -18.284  1.00 27.29          C
ATOM   3289  C   TYR A 301     -6.960  -8.016 -16.874  1.00 26.08          C
ATOM   3290  O   TYR A 301     -6.185  -8.012 -15.916  1.00 25.20          O
ATOM   3291  CB  TYR A 301     -6.230  -6.140 -18.388  1.00 25.45          C
ATOM   3292  CG  TYR A 301     -5.312  -5.613 -19.493  1.00 24.93          C
ATOM   3293  CD1 TYR A 301     -4.324  -6.414 -20.113  1.00 25.31          C
ATOM   3294  CD2 TYR A 301     -5.417  -4.259 -19.879  1.00 23.92          C
ATOM   3295  CE1 TYR A 301     -3.457  -5.862 -21.077  1.00 25.27          C
ATOM   3296  CE2 TYR A 301     -4.529  -3.699 -20.815  1.00 26.82          C
ATOM   3297  CZ  TYR A 301     -3.540  -4.497 -21.409  1.00 25.82          C
ATOM   3298  OH  TYR A 301     -2.650  -3.945 -22.281  1.00 26.18          O
ATOM   3299  H   TYR A 301     -7.856  -7.365 -19.849  1.00  0.00          H
ATOM   3300  HA  TYR A 301     -5.490  -8.195 -18.375  1.00  0.00          H
ATOM   3301  HB2 TYR A 301     -7.202  -5.652 -18.478  1.00  0.00          H
ATOM   3302  HB3 TYR A 301     -5.816  -5.770 -17.451  1.00  0.00          H
ATOM   3303  HD1 TYR A 301     -4.203  -7.457 -19.870  1.00  0.00          H
ATOM   3304  HD2 TYR A 301     -6.181  -3.625 -19.466  1.00  0.00          H
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ATOM   3305  HE1 TYR A 301      -2.704  -6.479 -21.541  1.00  0.00           H
ATOM   3306  HE2 TYR A 301      -4.610  -2.656 -21.083  1.00  0.00           H
ATOM   3307  HH  TYR A 301      -2.364  -3.055 -21.989  1.00  0.00           H
ATOM   3308  N   LEU A 302      -8.235  -8.397 -16.738  1.00 26.08           N
ATOM   3309  CA  LEU A 302      -8.804  -9.003 -15.536  1.00 25.64           C
ATOM   3310  C   LEU A 302      -8.300 -10.458 -15.436  1.00 26.50           C
ATOM   3311  O   LEU A 302      -8.128 -11.135 -16.453  1.00 26.41           O
ATOM   3312  CB  LEU A 302     -10.347  -8.943 -15.677  1.00 26.41           C
ATOM   3313  CG  LEU A 302     -11.206  -9.616 -14.582  1.00 28.11           C
ATOM   3314  CD1 LEU A 302     -10.951  -9.054 -13.178  1.00 26.19           C
ATOM   3315  CD2 LEU A 302     -12.698  -9.508 -14.933  1.00 28.85           C
ATOM   3316  H   LEU A 302      -8.768  -8.492 -17.592  1.00  0.00           H
ATOM   3317  HA  LEU A 302      -8.485  -8.439 -14.657  1.00  0.00           H
ATOM   3318  HB2 LEU A 302     -10.646  -7.898 -15.770  1.00  0.00           H
ATOM   3319  HB3 LEU A 302     -10.618  -9.409 -16.622  1.00  0.00           H
ATOM   3320  HG  LEU A 302     -10.967 -10.680 -14.567  1.00  0.00           H
ATOM   3321 HD11 LEU A 302     -11.585  -9.548 -12.443  1.00  0.00           H
ATOM   3322 HD12 LEU A 302      -9.922  -9.222 -12.868  1.00  0.00           H
ATOM   3323 HD13 LEU A 302     -11.149  -7.983 -13.132  1.00  0.00           H
ATOM   3324 HD21 LEU A 302     -13.314 -10.030 -14.201  1.00  0.00           H
ATOM   3325 HD22 LEU A 302     -13.024  -8.469 -14.971  1.00  0.00           H
ATOM   3326 HD23 LEU A 302     -12.901  -9.954 -15.908  1.00  0.00           H
ATOM   3327  N   ASP A 303      -8.028 -10.932 -14.216  1.00 26.14           N
ATOM   3328  CA  ASP A 303      -7.721 -12.333 -13.933  1.00 26.40           C
ATOM   3329  C   ASP A 303      -9.038 -13.081 -13.690  1.00 26.12           C
ATOM   3330  O   ASP A 303      -9.953 -12.550 -13.053  1.00 26.00           O
ATOM   3331  CB  ASP A 303      -6.875 -12.428 -12.647  1.00 24.91           C
ATOM   3332  CG  ASP A 303      -6.082 -13.725 -12.604  1.00 24.80           C
ATOM   3333  OD1 ASP A 303      -6.692 -14.803 -12.419  1.00 24.92           O
ATOM   3334  OD2 ASP A 303      -4.853 -13.621 -12.793  1.00 22.64           O1-
ATOM   3335  H   ASP A 303      -8.127 -10.324 -13.410  1.00  0.00           H
ATOM   3336  HA  ASP A 303      -7.176 -12.774 -14.772  1.00  0.00           H
ATOM   3337  HB2 ASP A 303      -6.161 -11.606 -12.606  1.00  0.00           H
ATOM   3338  HB3 ASP A 303      -7.479 -12.346 -11.742  1.00  0.00           H
ATOM   3339  N   GLU A 304      -9.137 -14.319 -14.169  1.00 27.08           N
ATOM   3340  CA  GLU A 304     -10.285 -15.202 -13.986  1.00 27.05           C
ATOM   3341  C   GLU A 304     -10.362 -15.757 -12.544  1.00 26.35           C
ATOM   3342  O   GLU A 304     -11.452 -16.079 -12.073  1.00 25.01           O
ATOM   3343  CB  GLU A 304     -10.160 -16.343 -15.019  1.00 29.55           C
ATOM   3344  CG  GLU A 304      -8.882 -17.206 -14.908  1.00 34.94           C
ATOM   3345  CD  GLU A 304      -8.422 -17.775 -16.243  1.00 38.80           C
ATOM   3346  OE1 GLU A 304      -9.293 -18.190 -17.034  1.00 40.86           O
ATOM   3347  OE2 GLU A 304      -7.191 -17.768 -16.463  1.00 37.70           O1-
ATOM   3348  H   GLU A 304      -8.325 -14.724 -14.619  1.00  0.00           H
ATOM   3349  HA  GLU A 304     -11.202 -14.645 -14.186  1.00  0.00           H
ATOM   3350  HB2 GLU A 304     -11.027 -17.000 -14.954  1.00  0.00           H
ATOM   3351  HB3 GLU A 304     -10.214 -15.904 -16.018  1.00  0.00           H
ATOM   3352  HG2 GLU A 304      -8.050 -16.615 -14.531  1.00  0.00           H
ATOM   3353  HG3 GLU A 304      -9.030 -18.027 -14.207  1.00  0.00           H
ATOM   3354  N   ASN A 305      -9.239 -15.810 -11.814  1.00 25.29           N
ATOM   3355  CA  ASN A 305      -9.108 -16.414 -10.479  1.00 24.94           C
ATOM   3356  C   ASN A 305      -9.132 -15.310  -9.397  1.00 25.14           C
ATOM   3357  O   ASN A 305      -8.542 -15.464  -8.324  1.00 24.32           O
ATOM   3358  CB  ASN A 305      -7.744 -17.143 -10.355  1.00 26.38           C
ATOM   3359  CG  ASN A 305      -7.376 -18.090 -11.492  1.00 26.41           C
ATOM   3360  OD1 ASN A 305      -7.680 -19.277 -11.436  1.00 28.64           O
ATOM   3361  ND2 ASN A 305      -6.689 -17.572 -12.504  1.00 27.76           N
ATOM   3362  H   ASN A 305      -8.374 -15.444 -12.229  1.00  0.00           H
ATOM   3363  HA  ASN A 305      -9.916 -17.124 -10.296  1.00  0.00           H
ATOM   3364  HB2 ASN A 305      -6.954 -16.410 -10.288  1.00  0.00           H
ATOM   3365  HB3 ASN A 305      -7.709 -17.710  -9.424  1.00  0.00           H
ATOM   3366 HD21 ASN A 305      -6.537 -16.550 -12.535  1.00  0.00           H
ATOM   3367 HD22 ASN A 305      -6.515 -18.121 -13.334  1.00  0.00           H
ATOM   3368  N   ASN A 306      -9.754 -14.166  -9.705  1.00 24.92           N
ATOM   3369  CA  ASN A 306      -9.767 -12.919  -8.934  1.00 24.17           C
ATOM   3370  C   ASN A 306     -10.454 -13.001  -7.550  1.00 23.07           C
ATOM   3371  O   ASN A 306     -11.089 -13.990  -7.179  1.00 22.07           O
ATOM   3372  CB  ASN A 306     -10.409 -11.787  -9.780  1.00 24.78           C
ATOM   3373  CG  ASN A 306     -11.872 -12.013 -10.168  1.00 23.30           C
ATOM   3374  OD1 ASN A 306     -12.766 -11.872  -9.339  1.00 23.64           O
ATOM   3375  ND2 ASN A 306     -12.133 -12.355 -11.422  1.00 30.14           N
ATOM   3376  H   ASN A 306     -10.201 -14.166 -10.610  1.00  0.00           H
ATOM   3377  HA  ASN A 306      -8.724 -12.652  -8.753  1.00  0.00           H
ATOM   3378  HB2 ASN A 306     -10.376 -10.850  -9.233  1.00  0.00           H
ATOM   3379  HB3 ASN A 306      -9.805 -11.610 -10.670  1.00  0.00           H
ATOM   3380 HD21 ASN A 306     -11.361 -12.437 -12.097  1.00  0.00           H
ATOM   3381 HD22 ASN A 306     -13.073 -12.575 -11.702  1.00  0.00           H
ATOM   3382  N   LEU A 307     -10.343 -11.904  -6.795  1.00 22.52           N
ATOM   3383  CA  LEU A 307     -10.916 -11.661  -5.480  1.00 20.85           C
ATOM   3384  C   LEU A 307     -11.902 -10.472  -5.568  1.00 21.65           C
ATOM   3385  O   LEU A 307     -11.936  -9.618  -4.681  1.00 22.08           O
ATOM   3386  CB  LEU A 307      -9.747 -11.408  -4.494  1.00 21.68           C
ATOM   3387  CG  LEU A 307     -10.109 -11.438  -2.992  1.00 24.57           C
ATOM   3388  CD1 LEU A 307     -10.257 -12.860  -2.452  1.00 25.54           C
ATOM   3389  CD2 LEU A 307      -9.075 -10.665  -2.166  1.00 24.54           C
ATOM   3390  H   LEU A 307      -9.808 -11.123  -7.181  1.00  0.00           H
ATOM   3391  HA  LEU A 307     -11.483 -12.533  -5.152  1.00  0.00           H
ATOM   3392  HB2 LEU A 307      -8.948 -12.127  -4.673  1.00  0.00           H
ATOM   3393  HB3 LEU A 307      -9.307 -10.441  -4.736  1.00  0.00           H
ATOM   3394  HG  LEU A 307     -11.068 -10.951  -2.840  1.00  0.00           H
ATOM   3395 HD11 LEU A 307     -10.471 -12.841  -1.384  1.00  0.00           H
ATOM   3396 HD12 LEU A 307     -11.073 -13.388  -2.943  1.00  0.00           H
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ATOM   3397 HD13 LEU A 307      -9.338 -13.427  -2.589  1.00  0.00           H
ATOM   3398 HD21 LEU A 307      -9.354 -10.657  -1.114  1.00  0.00           H
ATOM   3399 HD22 LEU A 307      -8.089 -11.117  -2.246  1.00  0.00           H
ATOM   3400 HD23 LEU A 307      -8.997  -9.627  -2.493  1.00  0.00           H
ATOM   3401  N   MET A 308     -12.743 -10.402  -6.615  1.00 20.81           N
ATOM   3402  CA  MET A 308     -13.793  -9.377  -6.782  1.00 22.78           C
ATOM   3403  C   MET A 308     -14.769  -9.312  -5.584  1.00 22.78           C
ATOM   3404  O   MET A 308     -15.288  -8.245  -5.255  1.00 22.72           O
ATOM   3405  CB  MET A 308     -14.540  -9.621  -8.115  1.00 21.26           C
ATOM   3406  CG  MET A 308     -15.670  -8.630  -8.444  1.00 20.59           C
ATOM   3407  SD  MET A 308     -15.161  -6.908  -8.702  1.00 23.31           S
ATOM   3408  CE  MET A 308     -14.739  -6.953 -10.468  1.00 20.96           C
ATOM   3409  H   MET A 308     -12.648 -11.099  -7.350  1.00  0.00           H
ATOM   3410  HA  MET A 308     -13.292  -8.409  -6.835  1.00  0.00           H
ATOM   3411  HB2 MET A 308     -13.825  -9.600  -8.936  1.00  0.00           H
ATOM   3412  HB3 MET A 308     -14.958 -10.629  -8.108  1.00  0.00           H
ATOM   3413  HG2 MET A 308     -16.198  -8.967  -9.337  1.00  0.00           H
ATOM   3414  HG3 MET A 308     -16.412  -8.644  -7.650  1.00  0.00           H
ATOM   3415  HE1 MET A 308     -14.322  -5.995 -10.781  1.00  0.00           H
ATOM   3416  HE2 MET A 308     -14.005  -7.730 -10.678  1.00  0.00           H
ATOM   3417  HE3 MET A 308     -15.624  -7.153 -11.070  1.00  0.00           H
ATOM   3418  N   SER A 309     -14.954 -10.435  -4.885  1.00 22.41           N
ATOM   3419  CA  SER A 309     -15.747 -10.593  -3.672  1.00 23.60           C
ATOM   3420  C   SER A 309     -15.189  -9.834  -2.448  1.00 22.97           C
ATOM   3421  O   SER A 309     -15.912  -9.661  -1.469  1.00 22.64           O
ATOM   3422  CB  SER A 309     -15.829 -12.109  -3.396  1.00 24.95           C
ATOM   3423  OG  SER A 309     -14.539 -12.716  -3.380  1.00 30.97           O
ATOM   3424  H   SER A 309     -14.450 -11.262  -5.170  1.00  0.00           H
ATOM   3425  HA  SER A 309     -16.752 -10.208  -3.858  1.00  0.00           H
ATOM   3426  HB2 SER A 309     -16.325 -12.287  -2.440  1.00  0.00           H
ATOM   3427  HB3 SER A 309     -16.442 -12.592  -4.159  1.00  0.00           H
ATOM   3428  HG  SER A 309     -14.620 -13.588  -3.020  1.00  0.00           H
ATOM   3429  N   PHE A 310     -13.935  -9.355  -2.490  1.00 22.04           N
ATOM   3430  CA  PHE A 310     -13.385  -8.459  -1.472  1.00 21.22           C
ATOM   3431  C   PHE A 310     -13.810  -7.009  -1.754  1.00 21.27           C
ATOM   3432  O   PHE A 310     -13.991  -6.246  -0.809  1.00 20.91           O
ATOM   3433  CB  PHE A 310     -11.841  -8.537  -1.490  1.00 20.01           C
ATOM   3434  CG  PHE A 310     -11.116  -7.550  -0.589  1.00 20.57           C
ATOM   3435  CD1 PHE A 310     -11.311  -7.593   0.806  1.00 21.24           C
ATOM   3436  CD2 PHE A 310     -10.283  -6.556  -1.147  1.00 21.25           C
ATOM   3437  CE1 PHE A 310     -10.678  -6.651   1.635  1.00 21.69           C
ATOM   3438  CE2 PHE A 310      -9.661  -5.606  -0.314  1.00 21.89           C
ATOM   3439  CZ  PHE A 310      -9.856  -5.655   1.079  1.00 21.34           C
ATOM   3440  H   PHE A 310     -13.373  -9.543  -3.315  1.00  0.00           H
ATOM   3441  HA  PHE A 310     -13.746  -8.740  -0.480  1.00  0.00           H
ATOM   3442  HB2 PHE A 310     -11.542  -9.534  -1.171  1.00  0.00           H
ATOM   3443  HB3 PHE A 310     -11.467  -8.409  -2.506  1.00  0.00           H
ATOM   3444  HD1 PHE A 310     -11.962  -8.337   1.241  1.00  0.00           H
ATOM   3445  HD2 PHE A 310     -10.122  -6.509  -2.215  1.00  0.00           H
ATOM   3446  HE1 PHE A 310     -10.824  -6.692   2.700  1.00  0.00           H
ATOM   3447  HE2 PHE A 310      -9.010  -4.858  -0.741  1.00  0.00           H
ATOM   3448  HZ  PHE A 310      -9.362  -4.941   1.720  1.00  0.00           H
ATOM   3449  N   LEU A 311     -13.981  -6.629  -3.026  1.00 20.63           N
ATOM   3450  CA  LEU A 311     -14.229  -5.248  -3.438  1.00 22.79           C
ATOM   3451  C   LEU A 311     -15.724  -4.938  -3.551  1.00 24.02           C
ATOM   3452  O   LEU A 311     -16.108  -3.772  -3.501  1.00 26.14           O
ATOM   3453  CB  LEU A 311     -13.692  -5.050  -4.874  1.00 23.27           C
ATOM   3454  CG  LEU A 311     -12.204  -5.369  -5.093  1.00 24.44           C
ATOM   3455  CD1 LEU A 311     -11.892  -5.247  -6.590  1.00 21.83           C
ATOM   3456  CD2 LEU A 311     -11.283  -4.471  -4.254  1.00 24.33           C
ATOM   3457  H   LEU A 311     -13.901  -7.327  -3.752  1.00  0.00           H
ATOM   3458  HA  LEU A 311     -13.769  -4.537  -2.748  1.00  0.00           H
ATOM   3459  HB2 LEU A 311     -14.274  -5.664  -5.566  1.00  0.00           H
ATOM   3460  HB3 LEU A 311     -13.872  -4.018  -5.181  1.00  0.00           H
ATOM   3461  HG  LEU A 311     -12.014  -6.406  -4.808  1.00  0.00           H
ATOM   3462 HD11 LEU A 311     -10.851  -5.475  -6.797  1.00  0.00           H
ATOM   3463 HD12 LEU A 311     -12.495  -5.938  -7.179  1.00  0.00           H
ATOM   3464 HD13 LEU A 311     -12.084  -4.241  -6.962  1.00  0.00           H
ATOM   3465 HD21 LEU A 311     -10.239  -4.742  -4.406  1.00  0.00           H
ATOM   3466 HD22 LEU A 311     -11.395  -3.419  -4.516  1.00  0.00           H
ATOM   3467 HD23 LEU A 311     -11.480  -4.571  -3.186  1.00  0.00           H
ATOM   3468  N   SER A 312     -16.570  -5.944  -3.776  1.00 24.95           N
ATOM   3469  CA  SER A 312     -17.898  -5.753  -4.329  1.00 24.03           C
ATOM   3470  C   SER A 312     -18.951  -6.543  -3.554  1.00 25.46           C
ATOM   3471  O   SER A 312     -18.683  -7.628  -3.043  1.00 23.59           O
ATOM   3472  CB  SER A 312     -17.835  -6.055  -5.838  1.00 22.48           C
ATOM   3473  OG  SER A 312     -19.074  -5.827  -6.481  1.00 23.27           O
ATOM   3474  H   SER A 312     -16.206  -6.889  -3.782  1.00  0.00           H
ATOM   3475  HA  SER A 312     -18.187  -4.708  -4.218  1.00  0.00           H
ATOM   3476  HB2 SER A 312     -17.079  -5.429  -6.316  1.00  0.00           H
ATOM   3477  HB3 SER A 312     -17.530  -7.089  -5.994  1.00  0.00           H
ATOM   3478  HG  SER A 312     -19.263  -4.883  -6.393  1.00  0.00           H
ATOM   3479  N   ASN A 313     -20.162  -5.976  -3.487  1.00 27.59           N
ATOM   3480  CA  ASN A 313     -21.320  -6.540  -2.789  1.00 30.50           C
ATOM   3481  C   ASN A 313     -22.039  -7.522  -3.729  1.00 30.83           C
ATOM   3482  O   ASN A 313     -22.544  -8.550  -3.287  1.00 32.14           O
ATOM   3483  CB  ASN A 313     -22.354  -5.427  -2.457  1.00 29.50           C
ATOM   3484  CG  ASN A 313     -21.762  -4.165  -1.828  1.00 31.80           C
ATOM   3485  OD1 ASN A 313     -21.418  -4.143  -0.653  1.00 30.49           O
ATOM   3486  ND2 ASN A 313     -21.611  -3.110  -2.622  1.00 31.11           N
ATOM   3487  H   ASN A 313     -20.281  -5.081  -3.939  1.00  0.00           H
ATOM   3488  HA  ASN A 313     -21.003  -7.048  -1.875  1.00  0.00           H
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ATOM   3489  HB2 ASN A 313     -22.923  -5.135  -3.342  1.00  0.00          H
ATOM   3490  HB3 ASN A 313     -23.093  -5.829  -1.762  1.00  0.00          H
ATOM   3491 HD21 ASN A 313     -21.920  -3.162  -3.597  1.00  0.00          H
ATOM   3492 HD22 ASN A 313     -21.182  -2.263  -2.269  1.00  0.00          H
ATOM   3493  N   ASP A 314     -22.110  -7.183  -5.024  1.00 32.03          N
ATOM   3494  CA  ASP A 314     -22.825  -7.928  -6.064  1.00 31.57          C
ATOM   3495  C   ASP A 314     -21.847  -8.770  -6.908  1.00 32.42          C
ATOM   3496  O   ASP A 314     -22.269  -9.750  -7.520  1.00 29.58          O
ATOM   3497  CB  ASP A 314     -23.531  -6.911  -7.002  1.00 33.24          C
ATOM   3498  CG  ASP A 314     -22.590  -6.049  -7.835  1.00 33.93          C
ATOM   3499  OD1 ASP A 314     -22.017  -5.092  -7.280  1.00 33.28          O
ATOM   3500  OD2 ASP A 314     -22.363  -6.381  -9.015  1.00 35.28          O1-
ATOM   3501  H   ASP A 314     -21.673  -6.318  -5.314  1.00  0.00          H
ATOM   3502  HA  ASP A 314     -23.571  -8.590  -5.621  1.00  0.00          H
ATOM   3503  HB2 ASP A 314     -24.189  -7.450  -7.684  1.00  0.00          H
ATOM   3504  HB3 ASP A 314     -24.179  -6.255  -6.421  1.00  0.00          H
ATOM   3505  N   ASN A 315     -20.567  -8.377  -6.964  1.00 31.75          N
ATOM   3506  CA  ASN A 315     -19.484  -8.904  -7.797  1.00 32.79          C
ATOM   3507  C   ASN A 315     -19.354  -8.125  -9.113  1.00 31.79          C
ATOM   3508  O   ASN A 315     -19.569  -8.664 -10.201  1.00 30.01          O
ATOM   3509  CB  ASN A 315     -19.379 -10.446  -7.927  1.00 34.98          C
ATOM   3510  CG  ASN A 315     -19.125 -11.141  -6.592  1.00 39.86          C
ATOM   3511  OD1 ASN A 315     -17.987 -11.274  -6.155  1.00 41.48          O
ATOM   3512  ND2 ASN A 315     -20.182 -11.586  -5.925  1.00 39.98          N
ATOM   3513  H   ASN A 315     -20.344  -7.521  -6.468  1.00  0.00          H
ATOM   3514  HA  ASN A 315     -18.593  -8.624  -7.240  1.00  0.00          H
ATOM   3515  HB2 ASN A 315     -20.248 -10.874  -8.426  1.00  0.00          H
ATOM   3516  HB3 ASN A 315     -18.535 -10.690  -8.575  1.00  0.00          H
ATOM   3517 HD21 ASN A 315     -21.108 -11.392  -6.285  1.00  0.00          H
ATOM   3518 HD22 ASN A 315     -20.049 -12.003  -5.018  1.00  0.00          H
ATOM   3519  N   GLY A 316     -19.030  -6.835  -9.019  1.00 29.91          N
ATOM   3520  CA  GLY A 316     -18.422  -6.040 -10.079  1.00 28.90          C
ATOM   3521  C   GLY A 316     -19.172  -4.785 -10.515  1.00 29.49          C
ATOM   3522  O   GLY A 316     -18.621  -4.055 -11.334  1.00 31.30          O
ATOM   3523  H   GLY A 316     -19.012  -6.431  -8.077  1.00  0.00          H
ATOM   3524  HA2 GLY A 316     -17.456  -5.698  -9.714  1.00  0.00          H
ATOM   3525  HA3 GLY A 316     -18.211  -6.642 -10.964  1.00  0.00          H
ATOM   3526  N   LYS A 317     -20.394  -4.511 -10.032  1.00 28.46          N
ATOM   3527  CA  LYS A 317     -21.102  -3.273 -10.375  1.00 29.26          C
ATOM   3528  C   LYS A 317     -21.000  -2.254  -9.226  1.00 28.45          C
ATOM   3529  O   LYS A 317     -20.751  -1.078  -9.489  1.00 29.61          O
ATOM   3530  CB  LYS A 317     -22.586  -3.555 -10.709  1.00 30.65          C
ATOM   3531  CG  LYS A 317     -22.836  -4.182 -12.106  1.00 32.56          C
ATOM   3532  CD  LYS A 317     -23.148  -5.695 -12.121  1.00 33.46          C
ATOM   3533  CE  LYS A 317     -21.913  -6.617 -12.213  1.00 35.75          C
ATOM   3534  NZ  LYS A 317     -21.911  -7.627 -11.142  1.00 33.98          N1+
ATOM   3535  H   LYS A 317     -20.839  -5.132  -9.353  1.00  0.00          H
ATOM   3536  HA  LYS A 317     -20.662  -2.786 -11.248  1.00  0.00          H
ATOM   3537  HB2 LYS A 317     -23.079  -4.118  -9.918  1.00  0.00          H
ATOM   3538  HB3 LYS A 317     -23.101  -2.592 -10.710  1.00  0.00          H
ATOM   3539  HG2 LYS A 317     -23.712  -3.681 -12.519  1.00  0.00          H
ATOM   3540  HG3 LYS A 317     -22.028  -3.939 -12.798  1.00  0.00          H
ATOM   3541  HD2 LYS A 317     -23.775  -5.942 -11.263  1.00  0.00          H
ATOM   3542  HD3 LYS A 317     -23.775  -5.900 -12.991  1.00  0.00          H
ATOM   3543  HE2 LYS A 317     -21.883  -7.124 -13.178  1.00  0.00          H
ATOM   3544  HE3 LYS A 317     -20.994  -6.040 -12.155  1.00  0.00          H
ATOM   3545  HZ1 LYS A 317     -21.003  -8.077 -11.024  1.00  0.00          H
ATOM   3546  HZ2 LYS A 317     -22.086  -7.121 -10.243  1.00  0.00          H
ATOM   3547  HZ3 LYS A 317     -22.633  -8.317 -11.238  1.00  0.00          H
ATOM   3548  N   THR A 318     -21.148  -2.670  -7.964  1.00 28.25          N
ATOM   3549  CA  THR A 318     -21.077  -1.815  -6.778  1.00 25.97          C
ATOM   3550  C   THR A 318     -19.770  -2.093  -6.011  1.00 24.96          C
ATOM   3551  O   THR A 318     -19.303  -3.232  -5.978  1.00 24.07          O
ATOM   3552  CB  THR A 318     -22.319  -2.099  -5.885  1.00 27.38          C
ATOM   3553  OG1 THR A 318     -22.325  -3.408  -5.336  1.00 30.36          O
ATOM   3554  CG2 THR A 318     -23.657  -1.874  -6.604  1.00 28.55          C
ATOM   3555  H   THR A 318     -21.372  -3.660  -7.790  1.00  0.00          H
ATOM   3556  HA  THR A 318     -21.092  -0.761  -7.062  1.00  0.00          H
ATOM   3557  HB  THR A 318     -22.282  -1.408  -5.041  1.00  0.00          H
ATOM   3558  HG1 THR A 318     -22.261  -4.037  -6.079  1.00  0.00          H
ATOM   3559 HG21 THR A 318     -24.494  -1.980  -5.913  1.00  0.00          H
ATOM   3560 HG22 THR A 318     -23.707  -0.873  -7.033  1.00  0.00          H
ATOM   3561 HG23 THR A 318     -23.807  -2.589  -7.414  1.00  0.00          H
ATOM   3562  N   TYR A 319     -19.198  -1.067  -5.372  1.00 22.19          N
ATOM   3563  CA  TYR A 319     -18.063  -1.180  -4.455  1.00 21.55          C
ATOM   3564  C   TYR A 319     -18.640  -1.335  -3.037  1.00 20.73          C
ATOM   3565  O   TYR A 319     -19.678  -0.739  -2.737  1.00 22.78          O
ATOM   3566  CB  TYR A 319     -17.257   0.144  -4.524  1.00 17.02          C
ATOM   3567  CG  TYR A 319     -15.844   0.156  -3.950  1.00 18.70          C
ATOM   3568  CD1 TYR A 319     -14.988  -0.958  -4.084  1.00 15.33          C
ATOM   3569  CD2 TYR A 319     -15.355   1.317  -3.314  1.00 16.65          C
ATOM   3570  CE1 TYR A 319     -13.714  -0.961  -3.486  1.00 16.26          C
ATOM   3571  CE2 TYR A 319     -14.062   1.332  -2.753  1.00 16.78          C
ATOM   3572  CZ  TYR A 319     -13.259   0.180  -2.804  1.00 15.64          C
ATOM   3573  OH  TYR A 319     -12.052   0.167  -2.177  1.00 14.07          O
ATOM   3574  H   TYR A 319     -19.654  -0.170  -5.399  1.00  0.00          H
ATOM   3575  HA  TYR A 319     -17.453  -2.035  -4.739  1.00  0.00          H
ATOM   3576  HB2 TYR A 319     -17.159   0.439  -5.559  1.00  0.00          H
ATOM   3577  HB3 TYR A 319     -17.830   0.947  -4.057  1.00  0.00          H
ATOM   3578  HD1 TYR A 319     -15.292  -1.826  -4.644  1.00  0.00          H
ATOM   3579  HD2 TYR A 319     -15.970   2.202  -3.249  1.00  0.00          H
ATOM   3580  HE1 TYR A 319     -13.091  -1.841  -3.556  1.00  0.00          H
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ATOM   3581  HE2 TYR A 319     -13.698   2.212  -2.243  1.00  0.00           H
ATOM   3582  HH  TYR A 319     -11.892  -0.680  -1.756  1.00  0.00           H
ATOM   3583  N   ASN A 320     -18.002  -2.127  -2.169  1.00 18.73           N
ATOM   3584  CA  ASN A 320     -18.402  -2.293  -0.760  1.00 19.06           C
ATOM   3585  C   ASN A 320     -17.648  -1.331   0.184  1.00 16.51           C
ATOM   3586  O   ASN A 320     -17.972  -1.282   1.369  1.00 16.08           O
ATOM   3587  CB  ASN A 320     -18.188  -3.755  -0.280  1.00 19.10           C
ATOM   3588  CG  ASN A 320     -16.753  -4.284  -0.306  1.00 19.82           C
ATOM   3589  OD1 ASN A 320     -15.798  -3.534  -0.476  1.00 21.01           O
ATOM   3590  ND2 ASN A 320     -16.576  -5.591  -0.191  1.00 17.92           N
ATOM   3591  H   ASN A 320     -17.176  -2.637  -2.489  1.00  0.00           H
ATOM   3592  HA  ASN A 320     -19.464  -2.073  -0.645  1.00  0.00           H
ATOM   3593  HB2 ASN A 320     -18.568  -3.869   0.735  1.00  0.00           H
ATOM   3594  HB3 ASN A 320     -18.795  -4.416  -0.898  1.00  0.00           H
ATOM   3595 HD21 ASN A 320     -17.340  -6.241  -0.098  1.00  0.00           H
ATOM   3596 HD22 ASN A 320     -15.612  -5.925  -0.272  1.00  0.00           H
ATOM   3597  N   LEU A 321     -16.647  -0.605  -0.340  1.00 16.54           N
ATOM   3598  CA  LEU A 321     -15.780   0.387   0.308  1.00 16.81           C
ATOM   3599  C   LEU A 321     -14.457  -0.173   0.867  1.00 19.47           C
ATOM   3600  O   LEU A 321     -13.629   0.609   1.338  1.00 17.04           O
ATOM   3601  CB  LEU A 321     -16.509   1.377   1.255  1.00 17.52           C
ATOM   3602  CG  LEU A 321     -17.695   2.162   0.646  1.00 19.03           C
ATOM   3603  CD1 LEU A 321     -18.522   2.843   1.746  1.00 18.92           C
ATOM   3604  CD2 LEU A 321     -17.235   3.207  -0.379  1.00 19.85           C
ATOM   3605  H   LEU A 321     -16.431  -0.807  -1.305  1.00  0.00           H
ATOM   3606  HA  LEU A 321     -15.432   0.999  -0.518  1.00  0.00           H
ATOM   3607  HB2 LEU A 321     -16.859   0.821   2.121  1.00  0.00           H
ATOM   3608  HB3 LEU A 321     -15.791   2.090   1.660  1.00  0.00           H
ATOM   3609  HG  LEU A 321     -18.359   1.460   0.142  1.00  0.00           H
ATOM   3610 HD11 LEU A 321     -19.426   3.297   1.340  1.00  0.00           H
ATOM   3611 HD12 LEU A 321     -18.833   2.129   2.510  1.00  0.00           H
ATOM   3612 HD13 LEU A 321     -17.955   3.632   2.239  1.00  0.00           H
ATOM   3613 HD21 LEU A 321     -18.083   3.748  -0.798  1.00  0.00           H
ATOM   3614 HD22 LEU A 321     -16.564   3.938   0.076  1.00  0.00           H
ATOM   3615 HD23 LEU A 321     -16.712   2.741  -1.209  1.00  0.00           H
ATOM   3616  N   CYS A 322     -14.224  -1.491   0.811  1.00 19.78           N
ATOM   3617  CA  CYS A 322     -13.061  -2.139   1.421  1.00 21.80           C
ATOM   3618  C   CYS A 322     -11.787  -1.977   0.582  1.00 21.81           C
ATOM   3619  O   CYS A 322     -11.825  -2.033  -0.651  1.00 21.18           O
ATOM   3620  CB  CYS A 322     -13.310  -3.654   1.552  1.00 20.40           C
ATOM   3621  SG  CYS A 322     -14.448  -4.141   2.879  1.00 21.81           S
ATOM   3622  H   CYS A 322     -14.904  -2.098   0.358  1.00  0.00           H
ATOM   3623  HA  CYS A 322     -12.891  -1.706   2.406  1.00  0.00           H
ATOM   3624  HB2 CYS A 322     -13.644  -4.076   0.606  1.00  0.00           H
ATOM   3625  HB3 CYS A 322     -12.371  -4.166   1.764  1.00  0.00           H
ATOM   3626  N   HIS A 323     -10.646  -1.811   1.255  1.00 21.47           N
ATOM   3627  CA  HIS A 323      -9.319  -1.759   0.657  1.00 21.03           C
ATOM   3628  C   HIS A 323      -8.242  -2.268   1.625  1.00 21.77           C
ATOM   3629  O   HIS A 323      -8.454  -2.335   2.837  1.00 21.97           O
ATOM   3630  CB  HIS A 323      -9.034  -0.357   0.089  1.00 19.56           C
ATOM   3631  CG  HIS A 323      -8.959   0.764   1.087  1.00 20.31           C
ATOM   3632  ND1 HIS A 323     -10.063   1.451   1.549  1.00 18.55           N
ATOM   3633  CD2 HIS A 323      -7.882   1.311   1.741  1.00 19.48           C
ATOM   3634  CE1 HIS A 323      -9.614   2.404   2.365  1.00 19.82           C
ATOM   3635  NE2 HIS A 323      -8.297   2.387   2.521  1.00 17.55           N
ATOM   3636  H   HIS A 323     -10.680  -1.648   2.261  1.00  0.00           H
ATOM   3637  HA  HIS A 323      -9.312  -2.458  -0.181  1.00  0.00           H
ATOM   3638  HB2 HIS A 323      -8.071  -0.359  -0.413  1.00  0.00           H
ATOM   3639  HB3 HIS A 323      -9.768  -0.100  -0.673  1.00  0.00           H
ATOM   3640  HD1 HIS A 323     -11.037   1.253   1.346  1.00  0.00           H
ATOM   3641  HD2 HIS A 323      -6.849   1.016   1.696  1.00  0.00           H
ATOM   3642  HE1 HIS A 323     -10.251   3.112   2.870  1.00  0.00           H
ATOM   3643  N   PHE A 324      -7.077  -2.613   1.077  1.00 20.35           N
ATOM   3644  CA  PHE A 324      -5.817  -2.886   1.756  1.00 21.54           C
ATOM   3645  C   PHE A 324      -5.170  -1.514   1.997  1.00 21.67           C
ATOM   3646  O   PHE A 324      -5.097  -0.702   1.072  1.00 19.86           O
ATOM   3647  CB  PHE A 324      -4.913  -3.697   0.796  1.00 21.99           C
ATOM   3648  CG  PHE A 324      -5.534  -4.951   0.188  1.00 23.32           C
ATOM   3649  CD1 PHE A 324      -6.264  -5.856   0.984  1.00 23.40           C
ATOM   3650  CD2 PHE A 324      -5.373  -5.221  -1.188  1.00 21.47           C
ATOM   3651  CE1 PHE A 324      -6.818  -7.016   0.414  1.00 23.76           C
ATOM   3652  CE2 PHE A 324      -5.935  -6.379  -1.762  1.00 21.69           C
ATOM   3653  CZ  PHE A 324      -6.658  -7.280  -0.959  1.00 21.06           C
ATOM   3654  H   PHE A 324      -6.972  -2.481   0.066  1.00  0.00           H
ATOM   3655  HA  PHE A 324      -5.976  -3.416   2.691  1.00  0.00           H
ATOM   3656  HB2 PHE A 324      -4.580  -3.060  -0.025  1.00  0.00           H
ATOM   3657  HB3 PHE A 324      -4.002  -3.995   1.317  1.00  0.00           H
ATOM   3658  HD1 PHE A 324      -6.394  -5.676   2.039  1.00  0.00           H
ATOM   3659  HD2 PHE A 324      -4.795  -4.544  -1.801  1.00  0.00           H
ATOM   3660  HE1 PHE A 324      -7.375  -7.695   1.039  1.00  0.00           H
ATOM   3661  HE2 PHE A 324      -5.806  -6.582  -2.815  1.00  0.00           H
ATOM   3662  HZ  PHE A 324      -7.089  -8.169  -1.395  1.00  0.00           H
ATOM   3663  N   TRP A 325      -4.764  -1.213   3.236  1.00 22.91           N
ATOM   3664  CA  TRP A 325      -4.256   0.100   3.625  1.00 25.28           C
ATOM   3665  C   TRP A 325      -2.747   0.095   3.302  1.00 26.42           C
ATOM   3666  O   TRP A 325      -1.970  -0.640   3.916  1.00 30.29           O
ATOM   3667  CB  TRP A 325      -4.549   0.292   5.138  1.00 24.63           C
ATOM   3668  CG  TRP A 325      -4.816   1.683   5.650  1.00 24.92           C
ATOM   3669  CD1 TRP A 325      -5.265   2.742   4.936  1.00 22.73           C
ATOM   3670  CD2 TRP A 325      -4.640   2.185   7.015  1.00 22.74           C
ATOM   3671  NE1 TRP A 325      -5.387   3.841   5.761  1.00 25.68           N
ATOM   3672  CE3 TRP A 325      -4.172   1.621   8.223  1.00 22.84           C
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ATOM   3673  CE2 TRP A 325      -4.990   3.567   7.047  1.00 24.25           C
ATOM   3674  CZ3 TRP A 325      -4.058   2.385   9.401  1.00 20.89           C
ATOM   3675  CZ2 TRP A 325      -4.882   4.342   8.213  1.00 22.79           C
ATOM   3676  CH2 TRP A 325      -4.416   3.746   9.399  1.00 24.61           C
ATOM   3677  H   TRP A 325      -4.704  -1.945   3.939  1.00  0.00           H
ATOM   3678  HA  TRP A 325      -4.768   0.865   3.042  1.00  0.00           H
ATOM   3679  HB2 TRP A 325      -5.436  -0.277   5.415  1.00  0.00           H
ATOM   3680  HB3 TRP A 325      -3.741  -0.135   5.733  1.00  0.00           H
ATOM   3681  HD1 TRP A 325      -5.521   2.729   3.886  1.00  0.00           H
ATOM   3682  HE1 TRP A 325      -5.808   4.712   5.439  1.00  0.00           H
ATOM   3683  HE3 TRP A 325      -3.865   0.591   8.221  1.00  0.00           H
ATOM   3684  HZ3 TRP A 325      -3.664   1.933  10.300  1.00  0.00           H
ATOM   3685  HZ2 TRP A 325      -5.122   5.392   8.185  1.00  0.00           H
ATOM   3686  HH2 TRP A 325      -4.297   4.337  10.294  1.00  0.00           H
ATOM   3687  N   SER A 326      -2.349   0.853   2.273  1.00 24.03           N
ATOM   3688  CA  SER A 326      -1.105   0.705   1.511  1.00 22.71           C
ATOM   3689  C   SER A 326       0.189   1.117   2.249  1.00 21.08           C
ATOM   3690  O   SER A 326       1.292   0.933   1.743  1.00 19.92           O
ATOM   3691  CB  SER A 326      -1.282   1.489   0.192  1.00 22.45           C
ATOM   3692  OG  SER A 326      -1.759   2.809   0.411  1.00 23.98           O
ATOM   3693  H   SER A 326      -3.006   1.488   1.844  1.00  0.00           H
ATOM   3694  HA  SER A 326      -1.006  -0.351   1.264  1.00  0.00           H
ATOM   3695  HB2 SER A 326      -0.340   1.531  -0.357  1.00  0.00           H
ATOM   3696  HB3 SER A 326      -1.981   0.964  -0.458  1.00  0.00           H
ATOM   3697  HG  SER A 326      -1.683   3.295  -0.423  1.00  0.00           H
ATOM   3698  N   ASN A 327       0.082   1.607   3.485  1.00 18.51           N
ATOM   3699  CA  ASN A 327       1.156   1.935   4.428  1.00 18.42           C
ATOM   3700  C   ASN A 327       2.050   0.743   4.861  1.00 19.32           C
ATOM   3701  O   ASN A 327       3.058   0.945   5.546  1.00 18.72           O
ATOM   3702  CB  ASN A 327       0.520   2.621   5.666  1.00 18.64           C
ATOM   3703  CG  ASN A 327      -0.683   1.891   6.236  1.00 18.91           C
ATOM   3704  OD1 ASN A 327      -1.808   2.163   5.865  1.00 17.18           O
ATOM   3705  ND2 ASN A 327      -0.464   0.960   7.205  1.00 16.88           N
ATOM   3706  H   ASN A 327      -0.874   1.713   3.803  1.00  0.00           H
ATOM   3707  HA  ASN A 327       1.815   2.637   3.918  1.00  0.00           H
ATOM   3708  HB2 ASN A 327       1.274   2.799   6.441  1.00  0.00           H
ATOM   3709  HB3 ASN A 327       0.159   3.589   5.316  1.00  0.00           H
ATOM   3710 HD21 ASN A 327       0.478   0.663   7.446  1.00  0.00           H
ATOM   3711 HD22 ASN A 327      -1.227   0.321   7.374  1.00  0.00           H
ATOM   3712  N   PHE A 328       1.668  -0.485   4.495  1.00 18.00           N
ATOM   3713  CA  PHE A 328       2.439  -1.710   4.632  1.00 19.94           C
ATOM   3714  C   PHE A 328       2.095  -2.593   3.440  1.00 20.27           C
ATOM   3715  O   PHE A 328       1.087  -3.300   3.469  1.00 20.85           O
ATOM   3716  CB  PHE A 328       2.180  -2.388   5.987  1.00 20.17           C
ATOM   3717  CG  PHE A 328       3.109  -3.547   6.319  1.00 21.71           C
ATOM   3718  CD1 PHE A 328       2.818  -4.855   5.875  1.00 20.89           C
ATOM   3719  CD2 PHE A 328       4.272  -3.317   7.082  1.00 21.40           C
ATOM   3720  CE1 PHE A 328       3.673  -5.922   6.209  1.00 23.81           C
ATOM   3721  CE2 PHE A 328       5.112  -4.387   7.439  1.00 23.59           C
ATOM   3722  CZ  PHE A 328       4.814  -5.690   6.999  1.00 20.62           C
ATOM   3723  H   PHE A 328       0.830  -0.562   3.931  1.00  0.00           H
ATOM   3724  HA  PHE A 328       3.501  -1.463   4.580  1.00  0.00           H
ATOM   3725  HB2 PHE A 328       2.281  -1.651   6.772  1.00  0.00           H
ATOM   3726  HB3 PHE A 328       1.144  -2.725   6.041  1.00  0.00           H
ATOM   3727  HD1 PHE A 328       1.947  -5.047   5.267  1.00  0.00           H
ATOM   3728  HD2 PHE A 328       4.519  -2.318   7.403  1.00  0.00           H
ATOM   3729  HE1 PHE A 328       3.453  -6.922   5.863  1.00  0.00           H
ATOM   3730  HE2 PHE A 328       5.993  -4.206   8.038  1.00  0.00           H
ATOM   3731  HZ  PHE A 328       5.464  -6.514   7.255  1.00  0.00           H
ATOM   3732  N   GLU A 329       2.925  -2.533   2.402  1.00 21.96           N
ATOM   3733  CA  GLU A 329       2.873  -3.397   1.236  1.00 21.09           C
ATOM   3734  C   GLU A 329       4.279  -3.956   1.073  1.00 20.76           C
ATOM   3735  O   GLU A 329       5.194  -3.179   0.814  1.00 20.35           O
ATOM   3736  CB  GLU A 329       2.460  -2.582   0.000  1.00 20.27           C
ATOM   3737  CG  GLU A 329       1.001  -2.118   0.076  1.00 21.97           C
ATOM   3738  CD  GLU A 329       0.596  -1.237  -1.089  1.00 23.07           C
ATOM   3739  OE1 GLU A 329       1.455  -0.605  -1.735  1.00 20.27           O
ATOM   3740  OE2 GLU A 329      -0.615  -1.175  -1.390  1.00 25.60           O1-
ATOM   3741  H   GLU A 329       3.726  -1.921   2.459  1.00  0.00           H
ATOM   3742  HA  GLU A 329       2.166  -4.216   1.376  1.00  0.00           H
ATOM   3743  HB2 GLU A 329       3.120  -1.722  -0.117  1.00  0.00           H
ATOM   3744  HB3 GLU A 329       2.590  -3.185  -0.900  1.00  0.00           H
ATOM   3745  HG2 GLU A 329       0.341  -2.983   0.125  1.00  0.00           H
ATOM   3746  HG3 GLU A 329       0.841  -1.556   0.990  1.00  0.00           H
ATOM   3747  N   ILE A 330       4.443  -5.269   1.236  1.00 20.01           N
ATOM   3748  CA  ILE A 330       5.593  -6.047   0.792  1.00 21.19           C
ATOM   3749  C   ILE A 330       5.080  -6.636  -0.529  1.00 21.93           C
ATOM   3750  O   ILE A 330       4.326  -7.611  -0.527  1.00 20.27           O
ATOM   3751  CB  ILE A 330       5.893  -7.159   1.845  1.00 20.93           C
ATOM   3752  CG1 ILE A 330       6.375  -6.541   3.177  1.00 21.73           C
ATOM   3753  CG2 ILE A 330       6.916  -8.216   1.369  1.00 18.92           C
ATOM   3754  CD1 ILE A 330       6.408  -7.515   4.363  1.00 23.49           C
ATOM   3755  H   ILE A 330       3.599  -5.810   1.428  1.00  0.00           H
ATOM   3756  HA  ILE A 330       6.477  -5.432   0.623  1.00  0.00           H
ATOM   3757  HB  ILE A 330       4.957  -7.679   2.031  1.00  0.00           H
ATOM   3758 HG12 ILE A 330       7.369  -6.119   3.032  1.00  0.00           H
ATOM   3759 HG13 ILE A 330       5.739  -5.701   3.460  1.00  0.00           H
ATOM   3760 HG21 ILE A 330       6.944  -9.071   2.041  1.00  0.00           H
ATOM   3761 HG22 ILE A 330       6.688  -8.618   0.382  1.00  0.00           H
ATOM   3762 HG23 ILE A 330       7.922  -7.803   1.337  1.00  0.00           H
ATOM   3763 HD11 ILE A 330       6.826  -7.036   5.244  1.00  0.00           H
ATOM   3764 HD12 ILE A 330       5.407  -7.838   4.634  1.00  0.00           H
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ATOM   3765 HD13 ILE A 330       7.011  -8.398   4.167  1.00  0.00           H
ATOM   3766  N   ALA A 331       5.394  -5.988  -1.650  1.00 21.39           N
ATOM   3767  CA  ALA A 331       4.779  -6.264  -2.939  1.00 22.41           C
ATOM   3768  C   ALA A 331       5.785  -6.143  -4.079  1.00 21.44           C
ATOM   3769  O   ALA A 331       6.853  -5.548  -3.931  1.00 20.66           O
ATOM   3770  CB  ALA A 331       3.511  -5.413  -3.115  1.00 21.06           C
ATOM   3771  H   ALA A 331       6.042  -5.200  -1.607  1.00  0.00           H
ATOM   3772  HA  ALA A 331       4.473  -7.311  -2.955  1.00  0.00           H
ATOM   3773  HB1 ALA A 331       3.061  -5.561  -4.097  1.00  0.00           H
ATOM   3774  HB2 ALA A 331       2.761  -5.659  -2.364  1.00  0.00           H
ATOM   3775  HB3 ALA A 331       3.731  -4.353  -3.006  1.00  0.00           H
ATOM   3776  N   ASN A 332       5.449  -6.750  -5.213  1.00 22.89           N
ATOM   3777  CA  ASN A 332       6.216  -6.722  -6.452  1.00 20.34           C
ATOM   3778  C   ASN A 332       5.824  -5.442  -7.220  1.00 21.01           C
ATOM   3779  O   ASN A 332       4.640  -5.141  -7.358  1.00 20.20           O
ATOM   3780  CB  ASN A 332       5.813  -7.978  -7.244  1.00 21.25           C
ATOM   3781  CG  ASN A 332       6.643  -8.194  -8.503  1.00 19.39           C
ATOM   3782  OD1 ASN A 332       6.314  -7.636  -9.539  1.00 19.86           O
ATOM   3783  ND2 ASN A 332       7.694  -9.004  -8.458  1.00 20.38           N
ATOM   3784  H   ASN A 332       4.546  -7.216  -5.239  1.00  0.00           H
ATOM   3785  HA  ASN A 332       7.283  -6.760  -6.243  1.00  0.00           H
ATOM   3786  HB2 ASN A 332       5.897  -8.864  -6.613  1.00  0.00           H
ATOM   3787  HB3 ASN A 332       4.765  -7.907  -7.538  1.00  0.00           H
ATOM   3788 HD21 ASN A 332       8.040  -9.376  -7.581  1.00  0.00           H
ATOM   3789 HD22 ASN A 332       8.182  -9.219  -9.318  1.00  0.00           H
ATOM   3790  N   LEU A 333       6.812  -4.696  -7.731  1.00 20.23           N
ATOM   3791  CA  LEU A 333       6.627  -3.461  -8.499  1.00 22.19           C
ATOM   3792  C   LEU A 333       6.282  -3.770  -9.960  1.00 22.56           C
ATOM   3793  O   LEU A 333       5.612  -2.969 -10.610  1.00 23.16           O
ATOM   3794  CB  LEU A 333       7.950  -2.654  -8.538  1.00 20.41           C
ATOM   3795  CG  LEU A 333       8.328  -1.957  -7.221  1.00 19.24           C
ATOM   3796  CD1 LEU A 333       9.799  -1.529  -7.208  1.00 21.42           C
ATOM   3797  CD2 LEU A 333       7.415  -0.749  -6.945  1.00 20.07           C
ATOM   3798  H   LEU A 333       7.754  -5.083  -7.704  1.00  0.00           H
ATOM   3799  HA  LEU A 333       5.815  -2.867  -8.075  1.00  0.00           H
ATOM   3800  HB2 LEU A 333       8.758  -3.318  -8.844  1.00  0.00           H
ATOM   3801  HB3 LEU A 333       7.903  -1.890  -9.318  1.00  0.00           H
ATOM   3802  HG  LEU A 333       8.226  -2.685  -6.422  1.00  0.00           H
ATOM   3803 HD11 LEU A 333      10.084  -1.136  -6.233  1.00  0.00           H
ATOM   3804 HD12 LEU A 333      10.456  -2.373  -7.408  1.00  0.00           H
ATOM   3805 HD13 LEU A 333      10.001  -0.757  -7.950  1.00  0.00           H
ATOM   3806 HD21 LEU A 333       7.674  -0.261  -6.006  1.00  0.00           H
ATOM   3807 HD22 LEU A 333       7.495  -0.002  -7.735  1.00  0.00           H
ATOM   3808 HD23 LEU A 333       6.366  -1.034  -6.870  1.00  0.00           H
ATOM   3809  N   ASN A 334       6.707  -4.927 -10.488  1.00 22.33           N
ATOM   3810  CA  ASN A 334       6.472  -5.317 -11.884  1.00 23.39           C
ATOM   3811  C   ASN A 334       4.987  -5.642 -12.135  1.00 23.98           C
ATOM   3812  O   ASN A 334       4.535  -5.558 -13.274  1.00 23.96           O
ATOM   3813  CB  ASN A 334       7.362  -6.500 -12.342  1.00 25.18           C
ATOM   3814  CG  ASN A 334       8.867  -6.254 -12.180  1.00 27.49           C
ATOM   3815  OD1 ASN A 334       9.336  -5.123 -12.306  1.00 28.65           O
ATOM   3816  ND2 ASN A 334       9.626  -7.297 -11.861  1.00 26.16           N
ATOM   3817  H   ASN A 334       7.173  -5.594  -9.886  1.00  0.00           H
ATOM   3818  HA  ASN A 334       6.729  -4.458 -12.499  1.00  0.00           H
ATOM   3819  HB2 ASN A 334       7.079  -7.422 -11.840  1.00  0.00           H
ATOM   3820  HB3 ASN A 334       7.182  -6.685 -13.403  1.00  0.00           H
ATOM   3821 HD21 ASN A 334       9.221  -8.209 -11.734  1.00  0.00           H
ATOM   3822 HD22 ASN A 334      10.658  -7.198 -11.774  1.00  0.00           H
ATOM   3823  N   LEU A 335       4.209  -5.897 -11.071  1.00 23.74           N
ATOM   3824  CA  LEU A 335       2.744  -5.934 -11.067  1.00 22.83           C
ATOM   3825  C   LEU A 335       2.149  -4.568 -11.442  1.00 23.38           C
ATOM   3826  O   LEU A 335       1.178  -4.505 -12.192  1.00 20.24           O
ATOM   3827  CB  LEU A 335       2.252  -6.385  -9.669  1.00 22.39           C
ATOM   3828  CG  LEU A 335       0.716  -6.472  -9.477  1.00 22.32           C
ATOM   3829  CD1 LEU A 335       0.061  -7.497 -10.417  1.00 21.69           C
ATOM   3830  CD2 LEU A 335       0.370  -6.766  -8.010  1.00 20.81           C
ATOM   3831  H   LEU A 335       4.685  -6.001 -10.185  1.00  0.00           H
ATOM   3832  HA  LEU A 335       2.414  -6.645 -11.821  1.00  0.00           H
ATOM   3833  HB2 LEU A 335       2.694  -7.354  -9.433  1.00  0.00           H
ATOM   3834  HB3 LEU A 335       2.644  -5.691  -8.925  1.00  0.00           H
ATOM   3835  HG  LEU A 335       0.273  -5.502  -9.699  1.00  0.00           H
ATOM   3836 HD11 LEU A 335      -1.002  -7.612 -10.204  1.00  0.00           H
ATOM   3837 HD12 LEU A 335       0.138  -7.192 -11.461  1.00  0.00           H
ATOM   3838 HD13 LEU A 335       0.525  -8.478 -10.327  1.00  0.00           H
ATOM   3839 HD21 LEU A 335      -0.710  -6.798  -7.857  1.00  0.00           H
ATOM   3840 HD22 LEU A 335       0.781  -7.721  -7.687  1.00  0.00           H
ATOM   3841 HD23 LEU A 335       0.768  -5.993  -7.350  1.00  0.00           H
ATOM   3842  N   TRP A 336       2.746  -3.471 -10.972  1.00 20.71           N
ATOM   3843  CA  TRP A 336       2.292  -2.121 -11.286  1.00 21.14           C
ATOM   3844  C   TRP A 336       2.870  -1.642 -12.630  1.00 20.82           C
ATOM   3845  O   TRP A 336       2.229  -0.867 -13.331  1.00 21.72           O
ATOM   3846  CB  TRP A 336       2.700  -1.166 -10.158  1.00 19.56           C
ATOM   3847  CG  TRP A 336       2.297  -1.526  -8.752  1.00 21.10           C
ATOM   3848  CD1 TRP A 336       3.045  -1.260  -7.656  1.00 20.91           C
ATOM   3849  CD2 TRP A 336       1.086  -2.189  -8.250  1.00 20.60           C
ATOM   3850  NE1 TRP A 336       2.366  -1.661  -6.524  1.00 21.76           N
ATOM   3851  CE3 TRP A 336      -0.062  -2.780  -8.831  1.00 21.74           C
ATOM   3852  CE2 TRP A 336       1.149  -2.213  -6.825  1.00 18.03           C
ATOM   3853  CZ3 TRP A 336      -1.095  -3.325  -8.039  1.00 18.29           C
ATOM   3854  CZ2 TRP A 336       0.118  -2.726  -6.023  1.00 20.48           C
ATOM   3855  CH2 TRP A 336      -1.017  -3.280  -6.635  1.00 21.36           C
ATOM   3856  H   TRP A 336       3.573  -3.568 -10.397  1.00  0.00           H
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ATOM   3857  HA  TRP A 336       1.210  -2.105 -11.375  1.00  0.00           H
ATOM   3858  HB2 TRP A 336       3.777  -0.998 -10.175  1.00  0.00           H
ATOM   3859  HB3 TRP A 336       2.237  -0.204 -10.368  1.00  0.00           H
ATOM   3860  HD1 TRP A 336       4.010  -0.773  -7.680  1.00  0.00           H
ATOM   3861  HE1 TRP A 336       2.710  -1.573  -5.560  1.00  0.00           H
ATOM   3862  HE3 TRP A 336      -0.159  -2.825  -9.902  1.00  0.00           H
ATOM   3863  HZ3 TRP A 336      -1.948  -3.782  -8.514  1.00  0.00           H
ATOM   3864  HZ2 TRP A 336       0.214  -2.700  -4.950  1.00  0.00           H
ATOM   3865  HH2 TRP A 336      -1.816  -3.680  -6.032  1.00  0.00           H
ATOM   3866  N   ARG A 337       4.023  -2.174 -13.058  1.00 21.65           N
ATOM   3867  CA  ARG A 337       4.565  -1.935 -14.399  1.00 20.04           C
ATOM   3868  C   ARG A 337       3.861  -2.788 -15.477  1.00 18.23           C
ATOM   3869  O   ARG A 337       4.164  -2.601 -16.660  1.00 17.77           O
ATOM   3870  CB  ARG A 337       6.069  -2.283 -14.444  1.00 21.14           C
ATOM   3871  CG  ARG A 337       6.939  -1.447 -13.493  1.00 20.85           C
ATOM   3872  CD  ARG A 337       8.418  -1.853 -13.524  1.00 23.87           C
ATOM   3873  NE  ARG A 337       9.178  -1.040 -12.576  1.00 23.95           N
ATOM   3874  CZ  ARG A 337       9.867  -1.422 -11.500  1.00 25.49           C
ATOM   3875  NH1 ARG A 337      10.087  -2.700 -11.194  1.00 26.97           N
ATOM   3876  NH2 ARG A 337      10.346  -0.481 -10.701  1.00 26.66           N1+
ATOM   3877  H   ARG A 337       4.526  -2.773 -12.416  1.00  0.00           H
ATOM   3878  HA  ARG A 337       4.434  -0.884 -14.664  1.00  0.00           H
ATOM   3879  HB2 ARG A 337       6.204  -3.346 -14.253  1.00  0.00           H
ATOM   3880  HB3 ARG A 337       6.446  -2.126 -15.456  1.00  0.00           H
ATOM   3881  HG2 ARG A 337       6.848  -0.391 -13.748  1.00  0.00           H
ATOM   3882  HG3 ARG A 337       6.574  -1.540 -12.472  1.00  0.00           H
ATOM   3883  HD2 ARG A 337       8.527  -2.910 -13.299  1.00  0.00           H
ATOM   3884  HD3 ARG A 337       8.837  -1.693 -14.518  1.00  0.00           H
ATOM   3885  HE  ARG A 337       9.437  -0.090 -12.947  1.00  0.00           H
ATOM   3886 HH11 ARG A 337       9.764  -3.490 -11.764  1.00  0.00           H
ATOM   3887 HH12 ARG A 337      10.801  -2.895 -10.489  1.00  0.00           H
ATOM   3888 HH21 ARG A 337      10.288   0.525 -11.025  1.00  0.00           H
ATOM   3889 HH22 ARG A 337      11.010  -0.640  -9.945  1.00  0.00           H
ATOM   3890  N   SER A 338       2.959  -3.711 -15.103  1.00 17.15           N
ATOM   3891  CA  SER A 338       2.242  -4.597 -16.021  1.00 19.46           C
ATOM   3892  C   SER A 338       1.196  -3.809 -16.840  1.00 20.12           C
ATOM   3893  O   SER A 338       0.626  -2.854 -16.302  1.00 21.09           O
ATOM   3894  CB  SER A 338       1.551  -5.742 -15.236  1.00 20.32           C
ATOM   3895  OG  SER A 338       0.364  -5.373 -14.552  1.00 21.76           O
ATOM   3896  H   SER A 338       2.748  -3.791 -14.120  1.00  0.00           H
ATOM   3897  HA  SER A 338       3.003  -5.040 -16.662  1.00  0.00           H
ATOM   3898  HB2 SER A 338       1.255  -6.513 -15.946  1.00  0.00           H
ATOM   3899  HB3 SER A 338       2.244  -6.221 -14.543  1.00  0.00           H
ATOM   3900  HG  SER A 338       0.608  -4.994 -13.702  1.00  0.00           H
ATOM   3901  N   PRO A 339       0.921  -4.190 -18.112  1.00 22.35           N
ATOM   3902  CA  PRO A 339      -0.124  -3.587 -18.966  1.00 21.08           C
ATOM   3903  C   PRO A 339      -1.485  -3.395 -18.267  1.00 19.47           C
ATOM   3904  O   PRO A 339      -2.044  -2.300 -18.267  1.00 20.76           O
ATOM   3905  CB  PRO A 339      -0.227  -4.522 -20.176  1.00 20.47           C
ATOM   3906  CG  PRO A 339       1.110  -5.231 -20.264  1.00 21.32           C
ATOM   3907  CD  PRO A 339       1.639  -5.246 -18.834  1.00 19.67           C
ATOM   3908  HA  PRO A 339       0.222  -2.612 -19.312  1.00  0.00           H
ATOM   3909  HB2 PRO A 339      -1.016  -5.262 -20.039  1.00  0.00           H
ATOM   3910  HB3 PRO A 339      -0.444  -3.969 -21.089  1.00  0.00           H
ATOM   3911  HG2 PRO A 339       1.030  -6.228 -20.700  1.00  0.00           H
ATOM   3912  HG3 PRO A 339       1.779  -4.646 -20.897  1.00  0.00           H
ATOM   3913  HD2 PRO A 339       1.429  -6.209 -18.369  1.00  0.00           H
ATOM   3914  HD3 PRO A 339       2.718  -5.088 -18.836  1.00  0.00           H
ATOM   3915  N   ALA A 340      -1.943  -4.438 -17.557  1.00 19.58           N
ATOM   3916  CA  ALA A 340      -3.168  -4.453 -16.765  1.00 19.57           C
ATOM   3917  C   ALA A 340      -3.273  -3.314 -15.742  1.00 19.42           C
ATOM   3918  O   ALA A 340      -4.326  -2.692 -15.638  1.00 17.04           O
ATOM   3919  CB  ALA A 340      -3.316  -5.818 -16.079  1.00 20.76           C
ATOM   3920  H   ALA A 340      -1.425  -5.298 -17.617  1.00  0.00           H
ATOM   3921  HA  ALA A 340      -3.993  -4.315 -17.461  1.00  0.00           H
ATOM   3922  HB1 ALA A 340      -4.224  -5.855 -15.475  1.00  0.00           H
ATOM   3923  HB2 ALA A 340      -3.385  -6.620 -16.815  1.00  0.00           H
ATOM   3924  HB3 ALA A 340      -2.473  -6.032 -15.420  1.00  0.00           H
ATOM   3925  N   TYR A 341      -2.186  -2.999 -15.022  1.00 18.41           N
ATOM   3926  CA  TYR A 341      -2.191  -1.884 -14.078  1.00 20.02           C
ATOM   3927  C   TYR A 341      -1.891  -0.548 -14.778  1.00 20.29           C
ATOM   3928  O   TYR A 341      -2.427   0.475 -14.356  1.00 20.54           O
ATOM   3929  CB  TYR A 341      -1.152  -2.096 -12.970  1.00 19.15           C
ATOM   3930  CG  TYR A 341      -1.297  -1.086 -11.839  1.00 19.29           C
ATOM   3931  CD1 TYR A 341      -2.282  -1.266 -10.849  1.00 18.41           C
ATOM   3932  CD2 TYR A 341      -0.496   0.070 -11.806  1.00 17.75           C
ATOM   3933  CE1 TYR A 341      -2.424  -0.337  -9.796  1.00 19.60           C
ATOM   3934  CE2 TYR A 341      -0.648   1.004 -10.770  1.00 19.82           C
ATOM   3935  CZ  TYR A 341      -1.588   0.791  -9.747  1.00 19.34           C
ATOM   3936  OH  TYR A 341      -1.676   1.683  -8.719  1.00 19.62           O
ATOM   3937  H   TYR A 341      -1.323  -3.497 -15.201  1.00  0.00           H
ATOM   3938  HA  TYR A 341      -3.168  -1.820 -13.600  1.00  0.00           H
ATOM   3939  HB2 TYR A 341      -1.261  -3.096 -12.547  1.00  0.00           H
ATOM   3940  HB3 TYR A 341      -0.143  -2.057 -13.383  1.00  0.00           H
ATOM   3941  HD1 TYR A 341      -2.924  -2.126 -10.912  1.00  0.00           H
ATOM   3942  HD2 TYR A 341       0.223   0.263 -12.587  1.00  0.00           H
ATOM   3943  HE1 TYR A 341      -3.165  -0.488  -9.026  1.00  0.00           H
ATOM   3944  HE2 TYR A 341      -0.033   1.883 -10.785  1.00  0.00           H
ATOM   3945  HH  TYR A 341      -0.964   2.315  -8.803  1.00  0.00           H
ATOM   3946  N   ARG A 342      -1.075  -0.532 -15.840  1.00 20.95           N
ATOM   3947  CA  ARG A 342      -0.716   0.672 -16.593  1.00 21.79           C
ATOM   3948  C   ARG A 342      -1.951   1.336 -17.207  1.00 22.81           C
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ATOM   3949  O   ARG A 342      -2.254   2.490 -16.901  1.00 22.78           O
ATOM   3950  CB  ARG A 342       0.243   0.318 -17.735  1.00 23.26           C
ATOM   3951  CG  ARG A 342       1.681   0.004 -17.341  1.00 23.00           C
ATOM   3952  CD  ARG A 342       2.382  -0.709 -18.504  1.00 25.52           C
ATOM   3953  NE  ARG A 342       3.825  -0.474 -18.470  1.00 27.12           N
ATOM   3954  CZ  ARG A 342       4.482   0.465 -19.160  1.00 24.20           C
ATOM   3955  NH1 ARG A 342       3.844   1.295 -19.992  1.00 21.44           N
ATOM   3956  NH2 ARG A 342       5.802   0.576 -18.994  1.00 25.12           N1+
ATOM   3957  H   ARG A 342      -0.685  -1.417 -16.151  1.00  0.00           H
ATOM   3958  HA  ARG A 342      -0.244   1.386 -15.918  1.00  0.00           H
ATOM   3959  HB2 ARG A 342      -0.168  -0.524 -18.291  1.00  0.00           H
ATOM   3960  HB3 ARG A 342       0.271   1.144 -18.446  1.00  0.00           H
ATOM   3961  HG2 ARG A 342       2.189   0.933 -17.085  1.00  0.00           H
ATOM   3962  HG3 ARG A 342       1.712  -0.612 -16.444  1.00  0.00           H
ATOM   3963  HD2 ARG A 342       2.215  -1.780 -18.439  1.00  0.00           H
ATOM   3964  HD3 ARG A 342       1.973  -0.423 -19.471  1.00  0.00           H
ATOM   3965  HE  ARG A 342       4.273  -1.160 -17.855  1.00  0.00           H
ATOM   3966 HH11 ARG A 342       2.819   1.232 -20.172  1.00  0.00           H
ATOM   3967 HH12 ARG A 342       4.291   2.018 -20.528  1.00  0.00           H
ATOM   3968 HH21 ARG A 342       6.292  -0.035 -18.356  1.00  0.00           H
ATOM   3969 HH22 ARG A 342       6.348   1.276 -19.472  1.00  0.00           H
ATOM   3970  N   GLU A 343      -2.682   0.579 -18.030  1.00 24.14           N
ATOM   3971  CA  GLU A 343      -3.849   1.049 -18.755  1.00 24.75           C
ATOM   3972  C   GLU A 343      -5.044   1.232 -17.792  1.00 24.10           C
ATOM   3973  O   GLU A 343      -5.921   2.056 -18.063  1.00 24.31           O
ATOM   3974  CB  GLU A 343      -4.179   0.034 -19.873  1.00 25.68           C
ATOM   3975  CG  GLU A 343      -3.287   0.170 -21.135  1.00 30.62           C
ATOM   3976  CD  GLU A 343      -1.905  -0.476 -21.040  1.00 30.71           C
ATOM   3977  OE1 GLU A 343      -1.812  -1.669 -21.395  1.00 32.63           O
ATOM   3978  OE2 GLU A 343      -0.943   0.227 -20.652  1.00 29.45           O1-
ATOM   3979  H   GLU A 343      -2.338  -0.352 -18.262  1.00  0.00           H
ATOM   3980  HA  GLU A 343      -3.633   2.023 -19.199  1.00  0.00           H
ATOM   3981  HB2 GLU A 343      -4.132  -0.987 -19.488  1.00  0.00           H
ATOM   3982  HB3 GLU A 343      -5.211   0.177 -20.193  1.00  0.00           H
ATOM   3983  HG2 GLU A 343      -3.794  -0.304 -21.975  1.00  0.00           H
ATOM   3984  HG3 GLU A 343      -3.168   1.217 -21.412  1.00  0.00           H
ATOM   3985  N   TYR A 344      -5.053   0.545 -16.635  1.00 22.33           N
ATOM   3986  CA  TYR A 344      -5.964   0.814 -15.519  1.00 19.95           C
ATOM   3987  C   TYR A 344      -5.632   2.168 -14.883  1.00 21.16           C
ATOM   3988  O   TYR A 344      -6.519   3.011 -14.773  1.00 19.78           O
ATOM   3989  CB  TYR A 344      -5.894  -0.299 -14.449  1.00 17.99           C
ATOM   3990  CG  TYR A 344      -6.676  -0.025 -13.169  1.00 21.67           C
ATOM   3991  CD1 TYR A 344      -8.078   0.087 -13.221  1.00 21.18           C
ATOM   3992  CD2 TYR A 344      -6.010   0.158 -11.936  1.00 21.43           C
ATOM   3993  CE1 TYR A 344      -8.804   0.420 -12.065  1.00 20.99           C
ATOM   3994  CE2 TYR A 344      -6.745   0.471 -10.774  1.00 21.57           C
ATOM   3995  CZ  TYR A 344      -8.141   0.636 -10.844  1.00 21.53           C
ATOM   3996  OH  TYR A 344      -8.850   1.031  -9.746  1.00 19.87           O
ATOM   3997  H   TYR A 344      -4.316  -0.135 -16.499  1.00  0.00           H
ATOM   3998  HA  TYR A 344      -6.983   0.870 -15.897  1.00  0.00           H
ATOM   3999  HB2 TYR A 344      -6.274  -1.225 -14.876  1.00  0.00           H
ATOM   4000  HB3 TYR A 344      -4.858  -0.491 -14.183  1.00  0.00           H
ATOM   4001  HD1 TYR A 344      -8.594  -0.057 -14.156  1.00  0.00           H
ATOM   4002  HD2 TYR A 344      -4.934   0.075 -11.876  1.00  0.00           H
ATOM   4003  HE1 TYR A 344      -9.871   0.517 -12.129  1.00  0.00           H
ATOM   4004  HE2 TYR A 344      -6.231   0.606  -9.834  1.00  0.00           H
ATOM   4005  HH  TYR A 344      -9.744   1.298  -9.961  1.00  0.00           H
ATOM   4006  N   PHE A 345      -4.367   2.404 -14.504  1.00 20.71           N
ATOM   4007  CA  PHE A 345      -3.928   3.656 -13.904  1.00 20.36           C
ATOM   4008  C   PHE A 345      -4.159   4.839 -14.853  1.00 21.44           C
ATOM   4009  O   PHE A 345      -4.719   5.845 -14.429  1.00 22.30           O
ATOM   4010  CB  PHE A 345      -2.455   3.607 -13.434  1.00 18.78           C
ATOM   4011  CG  PHE A 345      -2.022   4.951 -12.863  1.00 18.84           C
ATOM   4012  CD1 PHE A 345      -2.594   5.406 -11.657  1.00 19.24           C
ATOM   4013  CD2 PHE A 345      -1.237   5.828 -13.643  1.00 17.98           C
ATOM   4014  CE1 PHE A 345      -2.442   6.752 -11.271  1.00 17.82           C
ATOM   4015  CE2 PHE A 345      -1.083   7.170 -13.248  1.00 18.95           C
ATOM   4016  CZ  PHE A 345      -1.700   7.636 -12.072  1.00 18.47           C
ATOM   4017  H   PHE A 345      -3.668   1.670 -14.620  1.00  0.00           H
ATOM   4018  HA  PHE A 345      -4.556   3.821 -13.027  1.00  0.00           H
ATOM   4019  HB2 PHE A 345      -2.328   2.836 -12.673  1.00  0.00           H
ATOM   4020  HB3 PHE A 345      -1.801   3.330 -14.263  1.00  0.00           H
ATOM   4021  HD1 PHE A 345      -3.227   4.751 -11.075  1.00  0.00           H
ATOM   4022  HD2 PHE A 345      -0.837   5.508 -14.596  1.00  0.00           H
ATOM   4023  HE1 PHE A 345      -2.932   7.128 -10.388  1.00  0.00           H
ATOM   4024  HE2 PHE A 345      -0.540   7.865 -13.870  1.00  0.00           H
ATOM   4025  HZ  PHE A 345      -1.619   8.677 -11.798  1.00  0.00           H
ATOM   4026  N   ASP A 346      -3.792   4.728 -16.135  1.00 21.25           N
ATOM   4027  CA  ASP A 346      -3.965   5.837 -17.076  1.00 20.54           C
ATOM   4028  C   ASP A 346      -5.452   6.116 -17.383  1.00 20.57           C
ATOM   4029  O   ASP A 346      -5.823   7.271 -17.569  1.00 18.80           O
ATOM   4030  CB  ASP A 346      -3.134   5.628 -18.355  1.00 21.13           C
ATOM   4031  CG  ASP A 346      -2.552   6.959 -18.818  1.00 21.90           C
ATOM   4032  OD1 ASP A 346      -1.516   7.384 -18.255  1.00 20.23           O
ATOM   4033  OD2 ASP A 346      -3.175   7.599 -19.686  1.00 24.56           O1-
ATOM   4034  H   ASP A 346      -3.297   3.892 -16.444  1.00  0.00           H
ATOM   4035  HA  ASP A 346      -3.577   6.720 -16.562  1.00  0.00           H
ATOM   4036  HB2 ASP A 346      -2.293   4.959 -18.172  1.00  0.00           H
ATOM   4037  HB3 ASP A 346      -3.721   5.179 -19.157  1.00  0.00           H
ATOM   4038  N   THR A 347      -6.339   5.108 -17.268  1.00 20.11           N
ATOM   4039  CA  THR A 347      -7.799   5.296 -17.248  1.00 20.50           C
ATOM   4040  C   THR A 347      -8.258   6.168 -16.046  1.00 19.74           C
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ATOM   4041  O   THR A 347      -9.263   6.865 -16.162  1.00 19.02           O
ATOM   4042  CB  THR A 347      -8.531   3.915 -17.283  1.00 17.98           C
ATOM   4043  OG1 THR A 347      -8.291   3.243 -18.514  1.00 21.15           O
ATOM   4044  CG2 THR A 347     -10.063   3.976 -17.157  1.00 18.73           C
ATOM   4045  H   THR A 347      -5.971   4.191 -17.055  1.00  0.00           H
ATOM   4046  HA  THR A 347      -8.069   5.853 -18.148  1.00  0.00           H
ATOM   4047  HB  THR A 347      -8.170   3.275 -16.482  1.00  0.00           H
ATOM   4048  HG1 THR A 347      -7.369   2.949 -18.479  1.00  0.00           H
ATOM   4049 HG21 THR A 347     -10.516   2.990 -17.255  1.00  0.00           H
ATOM   4050 HG22 THR A 347     -10.358   4.336 -16.174  1.00  0.00           H
ATOM   4051 HG23 THR A 347     -10.508   4.643 -17.895  1.00  0.00           H
ATOM   4052  N   LEU A 348      -7.531   6.173 -14.917  1.00 20.95           N
ATOM   4053  CA  LEU A 348      -7.784   7.046 -13.768  1.00 20.70           C
ATOM   4054  C   LEU A 348      -7.090   8.412 -13.965  1.00 20.77           C
ATOM   4055  O   LEU A 348      -7.647   9.447 -13.589  1.00 22.33           O
ATOM   4056  CB  LEU A 348      -7.204   6.400 -12.477  1.00 19.16           C
ATOM   4057  CG  LEU A 348      -7.735   4.991 -12.117  1.00 19.34           C
ATOM   4058  CD1 LEU A 348      -6.947   4.411 -10.937  1.00 18.78           C
ATOM   4059  CD2 LEU A 348      -9.242   4.933 -11.815  1.00 16.55           C
ATOM   4060  H   LEU A 348      -6.683   5.616 -14.892  1.00  0.00           H
ATOM   4061  HA  LEU A 348      -8.854   7.217 -13.652  1.00  0.00           H
ATOM   4062  HB2 LEU A 348      -6.121   6.339 -12.554  1.00  0.00           H
ATOM   4063  HB3 LEU A 348      -7.342   7.066 -11.627  1.00  0.00           H
ATOM   4064  HG  LEU A 348      -7.557   4.337 -12.968  1.00  0.00           H
ATOM   4065 HD11 LEU A 348      -7.290   3.404 -10.698  1.00  0.00           H
ATOM   4066 HD12 LEU A 348      -5.883   4.346 -11.160  1.00  0.00           H
ATOM   4067 HD13 LEU A 348      -7.062   5.023 -10.043  1.00  0.00           H
ATOM   4068 HD21 LEU A 348      -9.568   3.898 -11.708  1.00  0.00           H
ATOM   4069 HD22 LEU A 348      -9.488   5.442 -10.884  1.00  0.00           H
ATOM   4070 HD23 LEU A 348      -9.832   5.372 -12.616  1.00  0.00           H
ATOM   4071  N   ASP A 349      -5.882   8.423 -14.544  1.00 21.51           N
ATOM   4072  CA  ASP A 349      -5.001   9.592 -14.645  1.00 21.24           C
ATOM   4073  C   ASP A 349      -5.429  10.565 -15.754  1.00 21.96           C
ATOM   4074  O   ASP A 349      -5.469  11.777 -15.527  1.00 19.94           O
ATOM   4075  CB  ASP A 349      -3.556   9.125 -14.929  1.00 18.89           C
ATOM   4076  CG  ASP A 349      -2.515  10.112 -14.423  1.00 19.84           C
ATOM   4077  OD1 ASP A 349      -2.655  10.610 -13.288  1.00 20.50           O
ATOM   4078  OD2 ASP A 349      -1.513  10.375 -15.125  1.00 19.99           O1-
ATOM   4079  H   ASP A 349      -5.474   7.520 -14.772  1.00  0.00           H
ATOM   4080  HA  ASP A 349      -5.050  10.115 -13.687  1.00  0.00           H
ATOM   4081  HB2 ASP A 349      -3.361   8.182 -14.422  1.00  0.00           H
ATOM   4082  HB3 ASP A 349      -3.388   8.941 -15.992  1.00  0.00           H
ATOM   4083  N   HIS A 350      -5.824  10.042 -16.925  1.00 22.62           N
ATOM   4084  CA  HIS A 350      -6.408  10.819 -18.027  1.00 23.51           C
ATOM   4085  C   HIS A 350      -7.892  11.155 -17.773  1.00 22.85           C
ATOM   4086  O   HIS A 350      -8.489  11.897 -18.550  1.00 22.01           O
ATOM   4087  CB  HIS A 350      -6.251  10.086 -19.383  1.00  0.00           C
ATOM   4088  CG  HIS A 350      -5.122  10.615 -20.236  1.00  0.00           C
ATOM   4089  ND1 HIS A 350      -3.947   9.922 -20.472  1.00  0.00           N
ATOM   4090  CD2 HIS A 350      -4.985  11.803 -20.921  1.00  0.00           C
ATOM   4091  CE1 HIS A 350      -3.194  10.668 -21.280  1.00  0.00           C
ATOM   4092  NE2 HIS A 350      -3.761  11.828 -21.594  1.00  0.00           N
ATOM   4093  H   HIS A 350      -5.729   9.037 -17.070  1.00  0.00           H
ATOM   4094  HA  HIS A 350      -5.900  11.775 -18.109  1.00  0.00           H
ATOM   4095  HB2 HIS A 350      -6.137   9.012 -19.264  1.00  0.00           H
ATOM   4096  HB3 HIS A 350      -7.146  10.205 -19.995  1.00  0.00           H
ATOM   4097  HD1 HIS A 350      -3.675   8.956 -20.135  1.00  0.00           H
ATOM   4098  HD2 HIS A 350      -5.674  12.633 -20.984  1.00  0.00           H
ATOM   4099  HE1 HIS A 350      -2.222  10.356 -21.637  1.00  0.00           H
ATOM   4100  N   GLN A 351      -8.485  10.661 -16.673  1.00 22.30           N
ATOM   4101  CA  GLN A 351      -9.750  11.161 -16.144  1.00 23.00           C
ATOM   4102  C   GLN A 351      -9.408  12.385 -15.273  1.00 22.67           C
ATOM   4103  O   GLN A 351      -9.788  13.500 -15.626  1.00 19.82           O
ATOM   4104  CB  GLN A 351     -10.465  10.037 -15.347  1.00 23.52           C
ATOM   4105  CG  GLN A 351     -11.985  10.222 -15.137  1.00 26.12           C
ATOM   4106  CD  GLN A 351     -12.382  10.764 -13.763  1.00 28.38           C
ATOM   4107  OE1 GLN A 351     -11.767  11.683 -13.240  1.00 27.29           O
ATOM   4108  NE2 GLN A 351     -13.409  10.193 -13.150  1.00 27.43           N
ATOM   4109  H   GLN A 351      -7.910  10.080 -16.081  1.00  0.00           H
ATOM   4110  HA  GLN A 351     -10.392  11.478 -16.969  1.00  0.00           H
ATOM   4111  HB2 GLN A 351     -10.350   9.119 -15.920  1.00  0.00           H
ATOM   4112  HB3 GLN A 351      -9.977   9.837 -14.395  1.00  0.00           H
ATOM   4113  HG2 GLN A 351     -12.402  10.873 -15.905  1.00  0.00           H
ATOM   4114  HG3 GLN A 351     -12.471   9.256 -15.277  1.00  0.00           H
ATOM   4115 HE21 GLN A 351     -13.750   9.303 -13.509  1.00  0.00           H
ATOM   4116 HE22 GLN A 351     -13.728  10.529 -12.247  1.00  0.00           H
ATOM   4117  N   GLY A 352      -8.628  12.196 -14.197  1.00 21.90           N
ATOM   4118  CA  GLY A 352      -8.073  13.263 -13.358  1.00 22.88           C
ATOM   4119  C   GLY A 352      -8.513  13.204 -11.889  1.00 23.50           C
ATOM   4120  O   GLY A 352      -7.959  13.907 -11.041  1.00 20.98           O
ATOM   4121  H   GLY A 352      -8.297  11.252 -14.015  1.00  0.00           H
ATOM   4122  HA2 GLY A 352      -6.988  13.163 -13.390  1.00  0.00           H
ATOM   4123  HA3 GLY A 352      -8.318  14.252 -13.748  1.00  0.00           H
ATOM   4124  N   GLY A 353      -9.501  12.350 -11.603  1.00 21.49           N
ATOM   4125  CA  GLY A 353     -10.071  11.871 -10.346  1.00 20.56           C
ATOM   4126  C   GLY A 353      -9.441  12.278  -9.013  1.00 21.34           C
ATOM   4127  O   GLY A 353     -10.108  12.891  -8.179  1.00 20.96           O
ATOM   4128  H   GLY A 353      -9.952  11.963 -12.428  1.00  0.00           H
ATOM   4129  HA2 GLY A 353     -11.141  12.082 -10.332  1.00  0.00           H
ATOM   4130  HA3 GLY A 353      -9.967  10.799 -10.405  1.00  0.00           H
ATOM   4131  N   PHE A 354      -8.150  11.959  -8.830  1.00 21.51           N
ATOM   4132  CA  PHE A 354      -7.301  12.264  -7.669  1.00 21.68           C
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ATOM   4133  C   PHE A 354      -7.404  13.725  -7.209  1.00 22.65           C
ATOM   4134  O   PHE A 354      -7.394  14.018  -6.013  1.00 23.57           O
ATOM   4135  CB  PHE A 354      -5.833  11.908  -7.996  1.00 20.06           C
ATOM   4136  CG  PHE A 354      -5.610  10.470  -8.431  1.00 22.30           C
ATOM   4137  CD1 PHE A 354      -5.501   9.453  -7.462  1.00 22.41           C
ATOM   4138  CD2 PHE A 354      -5.518  10.142  -9.802  1.00 19.69           C
ATOM   4139  CE1 PHE A 354      -5.344   8.112  -7.856  1.00 22.82           C
ATOM   4140  CE2 PHE A 354      -5.351   8.801 -10.196  1.00 19.35           C
ATOM   4141  CZ  PHE A 354      -5.280   7.784  -9.224  1.00 19.73           C
ATOM   4142  H   PHE A 354      -7.703  11.453  -9.581  1.00  0.00           H
ATOM   4143  HA  PHE A 354      -7.636  11.645  -6.838  1.00  0.00           H
ATOM   4144  HB2 PHE A 354      -5.450  12.573  -8.773  1.00  0.00           H
ATOM   4145  HB3 PHE A 354      -5.209  12.097  -7.121  1.00  0.00           H
ATOM   4146  HD1 PHE A 354      -5.546   9.694  -6.410  1.00  0.00           H
ATOM   4147  HD2 PHE A 354      -5.571  10.910 -10.562  1.00  0.00           H
ATOM   4148  HE1 PHE A 354      -5.267   7.336  -7.107  1.00  0.00           H
ATOM   4149  HE2 PHE A 354      -5.273   8.555 -11.247  1.00  0.00           H
ATOM   4150  HZ  PHE A 354      -5.159   6.752  -9.524  1.00  0.00           H
ATOM   4151  N   PHE A 355      -7.532  14.631  -8.180  1.00 22.12           N
ATOM   4152  CA  PHE A 355      -7.633  16.064  -7.977  1.00 21.19           C
ATOM   4153  C   PHE A 355      -9.094  16.514  -7.878  1.00 20.42           C
ATOM   4154  O   PHE A 355      -9.393  17.426  -7.113  1.00 20.48           O
ATOM   4155  CB  PHE A 355      -7.007  16.737  -9.209  1.00 22.36           C
ATOM   4156  CG  PHE A 355      -5.566  16.330  -9.467  1.00 24.02           C
ATOM   4157  CD1 PHE A 355      -4.624  16.353  -8.419  1.00 22.48           C
ATOM   4158  CD2 PHE A 355      -5.166  15.912 -10.751  1.00 24.49           C
ATOM   4159  CE1 PHE A 355      -3.300  15.952  -8.648  1.00 22.98           C
ATOM   4160  CE2 PHE A 355      -3.828  15.544 -10.991  1.00 25.14           C
ATOM   4161  CZ  PHE A 355      -2.892  15.578  -9.940  1.00 26.02           C
ATOM   4162  H   PHE A 355      -7.536  14.293  -9.139  1.00  0.00           H
ATOM   4163  HA  PHE A 355      -7.112  16.364  -7.070  1.00  0.00           H
ATOM   4164  HB2 PHE A 355      -7.600  16.528 -10.102  1.00  0.00           H
ATOM   4165  HB3 PHE A 355      -7.033  17.815  -9.076  1.00  0.00           H
ATOM   4166  HD1 PHE A 355      -4.905  16.690  -7.434  1.00  0.00           H
ATOM   4167  HD2 PHE A 355      -5.884  15.871 -11.554  1.00  0.00           H
ATOM   4168  HE1 PHE A 355      -2.606  15.943  -7.825  1.00  0.00           H
ATOM   4169  HE2 PHE A 355      -3.525  15.224 -11.977  1.00  0.00           H
ATOM   4170  HZ  PHE A 355      -1.862  15.310 -10.124  1.00  0.00           H
ATOM   4171  N   TYR A 356      -9.994  15.868  -8.630  1.00 19.12           N
ATOM   4172  CA  TYR A 356     -11.409  16.224  -8.761  1.00 18.71           C
ATOM   4173  C   TYR A 356     -12.228  15.864  -7.524  1.00 20.13           C
ATOM   4174  O   TYR A 356     -13.225  16.514  -7.231  1.00 17.47           O
ATOM   4175  CB  TYR A 356     -12.019  15.375  -9.891  1.00 17.74           C
ATOM   4176  CG  TYR A 356     -11.599  15.653 -11.314  1.00 21.18           C
ATOM   4177  CD1 TYR A 356     -10.897  16.819 -11.676  1.00 20.84           C
ATOM   4178  CD2 TYR A 356     -11.940  14.711 -12.302  1.00 21.61           C
ATOM   4179  CE1 TYR A 356     -10.470  16.998 -13.002  1.00 22.87           C
ATOM   4180  CE2 TYR A 356     -11.536  14.906 -13.631  1.00 22.71           C
ATOM   4181  CZ  TYR A 356     -10.762  16.028 -13.975  1.00 24.04           C
ATOM   4182  OH  TYR A 356     -10.267  16.160 -15.237  1.00 25.85           O
ATOM   4183  H   TYR A 356      -9.665  15.079  -9.169  1.00  0.00           H
ATOM   4184  HA  TYR A 356     -11.528  17.293  -8.943  1.00  0.00           H
ATOM   4185  HB2 TYR A 356     -11.842  14.317  -9.691  1.00  0.00           H
ATOM   4186  HB3 TYR A 356     -13.095  15.485  -9.878  1.00  0.00           H
ATOM   4187  HD1 TYR A 356     -10.659  17.576 -10.949  1.00  0.00           H
ATOM   4188  HD2 TYR A 356     -12.482  13.813 -12.047  1.00  0.00           H
ATOM   4189  HE1 TYR A 356      -9.901  17.873 -13.263  1.00  0.00           H
ATOM   4190  HE2 TYR A 356     -11.792  14.161 -14.370  1.00  0.00           H
ATOM   4191  HH  TYR A 356     -10.150  15.291 -15.634  1.00  0.00           H
ATOM   4192  N   GLU A 357     -11.844  14.786  -6.849  1.00 19.72           N
ATOM   4193  CA  GLU A 357     -12.403  14.320  -5.599  1.00 19.69           C
ATOM   4194  C   GLU A 357     -11.190  14.255  -4.667  1.00 21.19           C
ATOM   4195  O   GLU A 357     -10.480  15.258  -4.534  1.00 22.16           O
ATOM   4196  CB  GLU A 357     -13.193  13.013  -5.852  1.00 19.32           C
ATOM   4197  CG  GLU A 357     -14.532  13.254  -6.594  1.00 20.09           C
ATOM   4198  CD  GLU A 357     -14.837  12.271  -7.719  1.00 23.06           C
ATOM   4199  OE1 GLU A 357     -14.557  11.059  -7.589  1.00 20.05           O
ATOM   4200  OE2 GLU A 357     -15.392  12.730  -8.742  1.00 23.66           O1-
ATOM   4201  H   GLU A 357     -11.033  14.280  -7.197  1.00  0.00           H
ATOM   4202  HA  GLU A 357     -13.075  15.061  -5.164  1.00  0.00           H
ATOM   4203  HB2 GLU A 357     -12.561  12.314  -6.400  1.00  0.00           H
ATOM   4204  HB3 GLU A 357     -13.429  12.531  -4.906  1.00  0.00           H
ATOM   4205  HG2 GLU A 357     -15.359  13.252  -5.889  1.00  0.00           H
ATOM   4206  HG3 GLU A 357     -14.545  14.249  -7.034  1.00  0.00           H
ATOM   4207  N   ARG A 358     -10.925  13.116  -4.030  1.00 19.68           N
ATOM   4208  CA  ARG A 358      -9.729  12.894  -3.233  1.00 19.97           C
ATOM   4209  C   ARG A 358      -9.449  11.395  -3.232  1.00 20.10           C
ATOM   4210  O   ARG A 358      -9.455  10.772  -2.171  1.00 19.00           O
ATOM   4211  CB  ARG A 358      -9.876  13.547  -1.841  1.00 19.86           C
ATOM   4212  CG  ARG A 358      -8.613  13.502  -0.955  1.00 19.86           C
ATOM   4213  CD  ARG A 358      -8.867  12.919   0.445  1.00 19.26           C
ATOM   4214  NE  ARG A 358      -9.108  11.476   0.360  1.00 20.24           N
ATOM   4215  CZ  ARG A 358      -9.181  10.580   1.346  1.00 19.04           C
ATOM   4216  NH1 ARG A 358      -9.122  10.932   2.630  1.00 17.28           N
ATOM   4217  NH2 ARG A 358      -9.318   9.302   1.020  1.00 18.85           N1+
ATOM   4218  H   ARG A 358     -11.546  12.319  -4.141  1.00  0.00           H
ATOM   4219  HA  ARG A 358      -8.879  13.360  -3.739  1.00  0.00           H
ATOM   4220  HB2 ARG A 358     -10.159  14.592  -1.966  1.00  0.00           H
ATOM   4221  HB3 ARG A 358     -10.714  13.073  -1.329  1.00  0.00           H
ATOM   4222  HG2 ARG A 358      -7.816  12.936  -1.441  1.00  0.00           H
ATOM   4223  HG3 ARG A 358      -8.213  14.512  -0.859  1.00  0.00           H
ATOM   4224  HD2 ARG A 358      -7.979  13.072   1.048  1.00  0.00           H
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ATOM   4225  HD3 ARG A 358      -9.691  13.416   0.955  1.00  0.00           H
ATOM   4226  HE  ARG A 358      -9.206  11.126  -0.609  1.00  0.00           H
ATOM   4227 HH11 ARG A 358      -9.120  11.905   2.950  1.00  0.00           H
ATOM   4228 HH12 ARG A 358      -9.111  10.208   3.344  1.00  0.00           H
ATOM   4229 HH21 ARG A 358      -9.403   8.965   0.054  1.00  0.00           H
ATOM   4230 HH22 ARG A 358      -9.364   8.555   1.709  1.00  0.00           H
ATOM   4231  N   TRP A 359      -9.260  10.806  -4.417  1.00 19.26           N
ATOM   4232  CA  TRP A 359      -9.004   9.376  -4.571  1.00 19.61           C
ATOM   4233  C   TRP A 359      -7.652   9.020  -3.944  1.00 18.49           C
ATOM   4234  O   TRP A 359      -6.663   9.717  -4.176  1.00 21.29           O
ATOM   4235  CB  TRP A 359      -8.968   8.980  -6.062  1.00 19.93           C
ATOM   4236  CG  TRP A 359     -10.177   9.218  -6.918  1.00 23.18           C
ATOM   4237  CD1 TRP A 359     -11.352   9.777  -6.545  1.00 23.43           C
ATOM   4238  CD2 TRP A 359     -10.324   8.900  -8.333  1.00 22.00           C
ATOM   4239  NE1 TRP A 359     -12.198   9.857  -7.632  1.00 26.12           N
ATOM   4240  CE3 TRP A 359      -9.488   8.304  -9.308  1.00 22.65           C
ATOM   4241  CE2 TRP A 359     -11.615   9.330  -8.762  1.00 24.16           C
ATOM   4242  CZ3 TRP A 359      -9.928   8.145 -10.638  1.00 21.38           C
ATOM   4243  CZ2 TRP A 359     -12.044   9.188 -10.091  1.00 24.29           C
ATOM   4244  CH2 TRP A 359     -11.203   8.576 -11.032  1.00 23.99           C
ATOM   4245  H   TRP A 359      -9.269  11.377  -5.248  1.00  0.00           H
ATOM   4246  HA  TRP A 359      -9.796   8.823  -4.065  1.00  0.00           H
ATOM   4247  HB2 TRP A 359      -8.136   9.480  -6.554  1.00  0.00           H
ATOM   4248  HB3 TRP A 359      -8.734   7.918  -6.140  1.00  0.00           H
ATOM   4249  HD1 TRP A 359     -11.577  10.130  -5.551  1.00  0.00           H
ATOM   4250  HE1 TRP A 359     -13.133  10.326  -7.598  1.00  0.00           H
ATOM   4251  HE3 TRP A 359      -8.497   7.976  -9.030  1.00  0.00           H
ATOM   4252  HZ3 TRP A 359      -9.288   7.710 -11.380  1.00  0.00           H
ATOM   4253  HZ2 TRP A 359     -13.009   9.540 -10.392  1.00  0.00           H
ATOM   4254  HH2 TRP A 359     -11.520   8.463 -12.057  1.00  0.00           H
ATOM   4255  N   GLY A 360      -7.620   7.930  -3.182  1.00 20.56           N
ATOM   4256  CA  GLY A 360      -6.437   7.437  -2.503  1.00 19.56           C
ATOM   4257  C   GLY A 360      -5.838   6.275  -3.289  1.00 19.97           C
ATOM   4258  O   GLY A 360      -6.554   5.525  -3.956  1.00 19.92           O
ATOM   4259  H   GLY A 360      -8.496   7.475  -2.955  1.00  0.00           H
ATOM   4260  HA2 GLY A 360      -5.707   8.225  -2.343  1.00  0.00           H
ATOM   4261  HA3 GLY A 360      -6.728   7.078  -1.516  1.00  0.00           H
ATOM   4262  N   ASP A 361      -4.518   6.102  -3.191  1.00 18.87           N
ATOM   4263  CA  ASP A 361      -3.770   5.006  -3.812  1.00 20.81           C
ATOM   4264  C   ASP A 361      -4.124   3.639  -3.197  1.00 20.03           C
ATOM   4265  O   ASP A 361      -4.053   2.632  -3.896  1.00 22.19           O
ATOM   4266  CB  ASP A 361      -2.248   5.258  -3.681  1.00 21.93           C
ATOM   4267  CG  ASP A 361      -1.732   5.285  -2.251  1.00 21.87           C
ATOM   4268  OD1 ASP A 361      -1.896   6.332  -1.592  1.00 25.70           O
ATOM   4269  OD2 ASP A 361      -1.241   4.251  -1.758  1.00 23.34           O1-
ATOM   4270  H   ASP A 361      -3.986   6.753  -2.627  1.00  0.00           H
ATOM   4271  HA  ASP A 361      -4.041   4.971  -4.863  1.00  0.00           H
ATOM   4272  HB2 ASP A 361      -1.708   4.485  -4.225  1.00  0.00           H
ATOM   4273  HB3 ASP A 361      -1.983   6.199  -4.158  1.00  0.00           H
ATOM   4274  N   ALA A 362      -4.521   3.591  -1.918  1.00 20.12           N
ATOM   4275  CA  ALA A 362      -4.890   2.373  -1.199  1.00 19.36           C
ATOM   4276  C   ALA A 362      -6.075   1.609  -1.841  1.00 19.28           C
ATOM   4277  O   ALA A 362      -5.875   0.446  -2.206  1.00 17.72           O
ATOM   4278  CB  ALA A 362      -5.097   2.692   0.286  1.00 20.36           C
ATOM   4279  H   ALA A 362      -4.530   4.462  -1.406  1.00  0.00           H
ATOM   4280  HA  ALA A 362      -4.024   1.713  -1.262  1.00  0.00           H
ATOM   4281  HB1 ALA A 362      -5.084   1.778   0.867  1.00  0.00           H
ATOM   4282  HB2 ALA A 362      -4.279   3.293   0.669  1.00  0.00           H
ATOM   4283  HB3 ALA A 362      -6.020   3.224   0.499  1.00  0.00           H
ATOM   4284  N   PRO A 363      -7.258   2.223  -2.102  1.00 17.22           N
ATOM   4285  CA  PRO A 363      -8.297   1.603  -2.936  1.00 17.69           C
ATOM   4286  C   PRO A 363      -7.872   1.289  -4.382  1.00 17.56           C
ATOM   4287  O   PRO A 363      -8.174   0.191  -4.844  1.00 18.84           O
ATOM   4288  CB  PRO A 363      -9.535   2.504  -2.830  1.00 18.18           C
ATOM   4289  CG  PRO A 363      -9.010   3.849  -2.358  1.00 20.02           C
ATOM   4290  CD  PRO A 363      -7.712   3.529  -1.613  1.00 17.04           C
ATOM   4291  HA  PRO A 363      -8.556   0.644  -2.491  1.00  0.00           H
ATOM   4292  HB2 PRO A 363     -10.104   2.577  -3.758  1.00  0.00           H
ATOM   4293  HB3 PRO A 363     -10.209   2.102  -2.072  1.00  0.00           H
ATOM   4294  HG2 PRO A 363      -8.793   4.472  -3.226  1.00  0.00           H
ATOM   4295  HG3 PRO A 363      -9.723   4.394  -1.739  1.00  0.00           H
ATOM   4296  HD2 PRO A 363      -6.981   4.325  -1.707  1.00  0.00           H
ATOM   4297  HD3 PRO A 363      -7.947   3.432  -0.552  1.00  0.00           H
ATOM   4298  N   VAL A 364      -7.115   2.160  -5.069  1.00 15.81           N
ATOM   4299  CA  VAL A 364      -6.575   1.912  -6.418  1.00 13.67           C
ATOM   4300  C   VAL A 364      -5.659   0.664  -6.455  1.00 15.13           C
ATOM   4301  O   VAL A 364      -5.804  -0.188  -7.331  1.00 12.77           O
ATOM   4302  CB  VAL A 364      -5.871   3.201  -6.933  1.00 16.16           C
ATOM   4303  CG1 VAL A 364      -5.100   3.024  -8.254  1.00 13.85           C
ATOM   4304  CG2 VAL A 364      -6.877   4.356  -7.093  1.00 15.04           C
ATOM   4305  H   VAL A 364      -6.896   3.051  -4.643  1.00  0.00           H
ATOM   4306  HA  VAL A 364      -7.417   1.695  -7.079  1.00  0.00           H
ATOM   4307  HB  VAL A 364      -5.137   3.506  -6.189  1.00  0.00           H
ATOM   4308 HG11 VAL A 364      -4.685   3.972  -8.596  1.00  0.00           H
ATOM   4309 HG12 VAL A 364      -4.265   2.330  -8.157  1.00  0.00           H
ATOM   4310 HG13 VAL A 364      -5.751   2.650  -9.042  1.00  0.00           H
ATOM   4311 HG21 VAL A 364      -6.375   5.275  -7.393  1.00  0.00           H
ATOM   4312 HG22 VAL A 364      -7.624   4.123  -7.852  1.00  0.00           H
ATOM   4313 HG23 VAL A 364      -7.407   4.568  -6.168  1.00  0.00           H
ATOM   4314  N   HIS A 365      -4.775   0.502  -5.458  1.00 14.05           N
ATOM   4315  CA  HIS A 365      -3.923  -0.680  -5.297  1.00 17.18           C
ATOM   4316  C   HIS A 365      -4.754  -1.931  -4.989  1.00 16.98           C
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ATOM   4317  O   HIS A 365      -4.391  -3.016  -5.428  1.00 19.79           O
ATOM   4318  CB  HIS A 365      -2.933  -0.523  -4.124  1.00 16.11           C
ATOM   4319  CG  HIS A 365      -1.798   0.455  -4.272  1.00 19.71           C
ATOM   4320  ND1 HIS A 365      -0.776   0.463  -3.347  1.00 19.57           N1+
ATOM   4321  CD2 HIS A 365      -1.521   1.462  -5.180  1.00 18.63           C
ATOM   4322  CE1 HIS A 365       0.065   1.431  -3.667  1.00 21.02           C
ATOM   4323  NE2 HIS A 365      -0.342   2.064  -4.760  1.00 20.54           N
ATOM   4324  H   HIS A 365      -4.686   1.260  -4.780  1.00  0.00           H
ATOM   4325  HA  HIS A 365      -3.369  -0.855  -6.223  1.00  0.00           H
ATOM   4326  HB2 HIS A 365      -3.470  -0.271  -3.208  1.00  0.00           H
ATOM   4327  HB3 HIS A 365      -2.462  -1.489  -3.927  1.00  0.00           H
ATOM   4328  HD1 HIS A 365      -0.639  -0.199  -2.533  1.00  0.00           H
ATOM   4329  HD2 HIS A 365      -2.063   1.814  -6.046  1.00  0.00           H
ATOM   4330  HE1 HIS A 365       0.953   1.671  -3.097  1.00  0.00           H
ATOM   4331  HE2 HIS A 365       0.118   2.913  -5.124  1.00  0.00           H
ATOM   4332  N   SER A 366      -5.860  -1.793  -4.249  1.00 18.87           N
ATOM   4333  CA  SER A 366      -6.681  -2.916  -3.810  1.00 18.88           C
ATOM   4334  C   SER A 366      -7.599  -3.408  -4.931  1.00 19.48           C
ATOM   4335  O   SER A 366      -7.702  -4.616  -5.131  1.00 17.62           O
ATOM   4336  CB  SER A 366      -7.566  -2.463  -2.646  1.00 18.94           C
ATOM   4337  OG  SER A 366      -6.743  -2.077  -1.568  1.00 19.20           O
ATOM   4338  H   SER A 366      -6.120  -0.862  -3.950  1.00  0.00           H
ATOM   4339  HA  SER A 366      -6.046  -3.745  -3.497  1.00  0.00           H
ATOM   4340  HB2 SER A 366      -8.227  -1.642  -2.926  1.00  0.00           H
ATOM   4341  HB3 SER A 366      -8.204  -3.286  -2.320  1.00  0.00           H
ATOM   4342  HG  SER A 366      -6.227  -1.309  -1.826  1.00  0.00           H
ATOM   4343  N   ILE A 367      -8.225  -2.489  -5.684  1.00 19.28           N
ATOM   4344  CA  ILE A 367      -9.024  -2.792  -6.872  1.00 18.73           C
ATOM   4345  C   ILE A 367      -8.148  -3.487  -7.932  1.00 19.02           C
ATOM   4346  O   ILE A 367      -8.603  -4.427  -8.574  1.00 20.14           O
ATOM   4347  CB  ILE A 367      -9.743  -1.507  -7.384  1.00 16.72           C
ATOM   4348  CG1 ILE A 367     -10.772  -0.987  -6.346  1.00 15.35           C
ATOM   4349  CG2 ILE A 367     -10.445  -1.710  -8.746  1.00 14.85           C
ATOM   4350  CD1 ILE A 367     -11.175   0.482  -6.549  1.00 15.61           C
ATOM   4351  H   ILE A 367      -8.095  -1.503  -5.461  1.00  0.00           H
ATOM   4352  HA  ILE A 367      -9.784  -3.510  -6.576  1.00  0.00           H
ATOM   4353  HB  ILE A 367      -8.978  -0.740  -7.524  1.00  0.00           H
ATOM   4354 HG12 ILE A 367     -11.660  -1.618  -6.355  1.00  0.00           H
ATOM   4355 HG13 ILE A 367     -10.374  -1.074  -5.336  1.00  0.00           H
ATOM   4356 HG21 ILE A 367     -10.980  -0.816  -9.061  1.00  0.00           H
ATOM   4357 HG22 ILE A 367      -9.731  -1.929  -9.541  1.00  0.00           H
ATOM   4358 HG23 ILE A 367     -11.160  -2.533  -8.708  1.00  0.00           H
ATOM   4359 HD11 ILE A 367     -11.846   0.809  -5.754  1.00  0.00           H
ATOM   4360 HD12 ILE A 367     -10.299   1.131  -6.528  1.00  0.00           H
ATOM   4361 HD13 ILE A 367     -11.684   0.644  -7.499  1.00  0.00           H
ATOM   4362  N   ALA A 368      -6.874  -3.094  -8.040  1.00 17.53           N
ATOM   4363  CA  ALA A 368      -5.891  -3.769  -8.868  1.00 16.44           C
ATOM   4364  C   ALA A 368      -5.458  -5.124  -8.282  1.00 18.86           C
ATOM   4365  O   ALA A 368      -5.607  -6.142  -8.948  1.00 20.08           O
ATOM   4366  CB  ALA A 368      -4.669  -2.866  -8.997  1.00 16.29           C
ATOM   4367  H   ALA A 368      -6.582  -2.272  -7.526  1.00  0.00           H
ATOM   4368  HA  ALA A 368      -6.317  -3.942  -9.859  1.00  0.00           H
ATOM   4369  HB1 ALA A 368      -3.882  -3.394  -9.530  1.00  0.00           H
ATOM   4370  HB2 ALA A 368      -4.922  -1.967  -9.560  1.00  0.00           H
ATOM   4371  HB3 ALA A 368      -4.268  -2.559  -8.032  1.00  0.00           H
ATOM   4372  N   ALA A 369      -4.942  -5.175  -7.044  1.00 18.52           N
ATOM   4373  CA  ALA A 369      -4.379  -6.383  -6.424  1.00 20.68           C
ATOM   4374  C   ALA A 369      -5.398  -7.515  -6.227  1.00 20.05           C
ATOM   4375  O   ALA A 369      -5.009  -8.677  -6.169  1.00 18.61           O
ATOM   4376  CB  ALA A 369      -3.757  -6.037  -5.061  1.00 20.85           C
ATOM   4377  H   ALA A 369      -4.850  -4.305  -6.521  1.00  0.00           H
ATOM   4378  HA  ALA A 369      -3.593  -6.766  -7.079  1.00  0.00           H
ATOM   4379  HB1 ALA A 369      -3.394  -6.931  -4.551  1.00  0.00           H
ATOM   4380  HB2 ALA A 369      -2.905  -5.371  -5.168  1.00  0.00           H
ATOM   4381  HB3 ALA A 369      -4.476  -5.551  -4.402  1.00  0.00           H
ATOM   4382  N   ALA A 370      -6.692  -7.192  -6.143  1.00 20.81           N
ATOM   4383  CA  ALA A 370      -7.765  -8.172  -6.051  1.00 23.03           C
ATOM   4384  C   ALA A 370      -8.248  -8.659  -7.431  1.00 24.19           C
ATOM   4385  O   ALA A 370      -8.967  -9.654  -7.473  1.00 25.96           O
ATOM   4386  CB  ALA A 370      -8.952  -7.505  -5.342  1.00 24.55           C
ATOM   4387  H   ALA A 370      -6.941  -6.208  -6.134  1.00  0.00           H
ATOM   4388  HA  ALA A 370      -7.444  -9.038  -5.472  1.00  0.00           H
ATOM   4389  HB1 ALA A 370      -9.815  -8.166  -5.282  1.00  0.00           H
ATOM   4390  HB2 ALA A 370      -8.689  -7.216  -4.325  1.00  0.00           H
ATOM   4391  HB3 ALA A 370      -9.263  -6.607  -5.870  1.00  0.00           H
ATOM   4392  N   LEU A 371      -7.896  -7.989  -8.540  1.00 24.56           N
ATOM   4393  CA  LEU A 371      -8.395  -8.295  -9.888  1.00 24.21           C
ATOM   4394  C   LEU A 371      -7.290  -8.652 -10.886  1.00 24.41           C
ATOM   4395  O   LEU A 371      -7.555  -9.380 -11.840  1.00 21.31           O
ATOM   4396  CB  LEU A 371      -9.230  -7.119 -10.440  1.00 24.83           C
ATOM   4397  CG  LEU A 371     -10.495  -6.760  -9.632  1.00 27.38           C
ATOM   4398  CD1 LEU A 371     -11.238  -5.582 -10.280  1.00 25.79           C
ATOM   4399  CD2 LEU A 371     -11.447  -7.945  -9.425  1.00 27.66           C
ATOM   4400  H   LEU A 371      -7.280  -7.190  -8.439  1.00  0.00           H
ATOM   4401  HA  LEU A 371      -9.030  -9.178  -9.869  1.00  0.00           H
ATOM   4402  HB2 LEU A 371      -8.589  -6.237 -10.510  1.00  0.00           H
ATOM   4403  HB3 LEU A 371      -9.520  -7.336 -11.467  1.00  0.00           H
ATOM   4404  HG  LEU A 371     -10.166  -6.440  -8.647  1.00  0.00           H
ATOM   4405 HD11 LEU A 371     -12.073  -5.252  -9.661  1.00  0.00           H
ATOM   4406 HD12 LEU A 371     -10.576  -4.725 -10.413  1.00  0.00           H
ATOM   4407 HD13 LEU A 371     -11.632  -5.852 -11.260  1.00  0.00           H
ATOM   4408 HD21 LEU A 371     -12.354  -7.618  -8.923  1.00  0.00           H
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ATOM   4409 HD22 LEU A 371     -11.727  -8.411 -10.368  1.00  0.00           H
ATOM   4410 HD23 LEU A 371     -11.010  -8.708  -8.786  1.00  0.00           H
ATOM   4411  N   PHE A 372      -6.074  -8.130 -10.703  1.00 22.29           N
ATOM   4412  CA  PHE A 372      -4.930  -8.304 -11.602  1.00 20.76           C
ATOM   4413  C   PHE A 372      -3.924  -9.300 -11.005  1.00 22.10           C
ATOM   4414  O   PHE A 372      -2.810  -9.435 -11.506  1.00 20.77           O
ATOM   4415  CB  PHE A 372      -4.224  -6.944 -11.820  1.00 20.58           C
ATOM   4416  CG  PHE A 372      -5.083  -5.800 -12.342  1.00 20.46           C
ATOM   4417  CD1 PHE A 372      -6.324  -6.024 -12.980  1.00 19.24           C
ATOM   4418  CD2 PHE A 372      -4.635  -4.477 -12.153  1.00 17.33           C
ATOM   4419  CE1 PHE A 372      -7.149  -4.942 -13.329  1.00 21.85           C
ATOM   4420  CE2 PHE A 372      -5.449  -3.394 -12.527  1.00 20.11           C
ATOM   4421  CZ  PHE A 372      -6.715  -3.625 -13.096  1.00 20.51           C
ATOM   4422  H   PHE A 372      -5.945  -7.455  -9.949  1.00  0.00           H
ATOM   4423  HA  PHE A 372      -5.254  -8.705 -12.562  1.00  0.00           H
ATOM   4424  HB2 PHE A 372      -3.771  -6.622 -10.881  1.00  0.00           H
ATOM   4425  HB3 PHE A 372      -3.392  -7.062 -12.514  1.00  0.00           H
ATOM   4426  HD1 PHE A 372      -6.679  -7.023 -13.184  1.00  0.00           H
ATOM   4427  HD2 PHE A 372      -3.670  -4.294 -11.704  1.00  0.00           H
ATOM   4428  HE1 PHE A 372      -8.114  -5.129 -13.774  1.00  0.00           H
ATOM   4429  HE2 PHE A 372      -5.109  -2.383 -12.368  1.00  0.00           H
ATOM   4430  HZ  PHE A 372      -7.346  -2.793 -13.369  1.00  0.00           H
ATOM   4431  N   LEU A 373      -4.317 -10.012  -9.950  1.00 21.49           N
ATOM   4432  CA  LEU A 373      -3.646 -11.197  -9.451  1.00 22.37           C
ATOM   4433  C   LEU A 373      -4.677 -12.326  -9.392  1.00 22.61           C
ATOM   4434  O   LEU A 373      -5.828 -12.058  -9.027  1.00 21.20           O
ATOM   4435  CB  LEU A 373      -3.097 -10.948  -8.030  1.00 21.57           C
ATOM   4436  CG  LEU A 373      -1.879 -10.009  -7.934  1.00 21.65           C
ATOM   4437  CD1 LEU A 373      -1.535  -9.727  -6.462  1.00 25.02           C
ATOM   4438  CD2 LEU A 373      -0.655 -10.576  -8.670  1.00 24.25           C
ATOM   4439  H   LEU A 373      -5.270  -9.891  -9.637  1.00  0.00           H
ATOM   4440  HA  LEU A 373      -2.844 -11.477 -10.130  1.00  0.00           H
ATOM   4441  HB2 LEU A 373      -3.905 -10.564  -7.407  1.00  0.00           H
ATOM   4442  HB3 LEU A 373      -2.840 -11.905  -7.583  1.00  0.00           H
ATOM   4443  HG  LEU A 373      -2.141  -9.057  -8.398  1.00  0.00           H
ATOM   4444 HD11 LEU A 373      -0.674  -9.066  -6.377  1.00  0.00           H
ATOM   4445 HD12 LEU A 373      -2.367  -9.242  -5.951  1.00  0.00           H
ATOM   4446 HD13 LEU A 373      -1.303 -10.643  -5.919  1.00  0.00           H
ATOM   4447 HD21 LEU A 373       0.207  -9.931  -8.522  1.00  0.00           H
ATOM   4448 HD22 LEU A 373      -0.393 -11.571  -8.314  1.00  0.00           H
ATOM   4449 HD23 LEU A 373      -0.818 -10.632  -9.746  1.00  0.00           H
ATOM   4450  N   PRO A 374      -4.263 -13.590  -9.623  1.00 23.37           N
ATOM   4451  CA  PRO A 374      -5.058 -14.749  -9.230  1.00 23.61           C
ATOM   4452  C   PRO A 374      -4.966 -14.862  -7.698  1.00 24.19           C
ATOM   4453  O   PRO A 374      -3.880 -14.693  -7.139  1.00 25.28           O
ATOM   4454  CB  PRO A 374      -4.403 -15.928  -9.970  1.00 21.86           C
ATOM   4455  CG  PRO A 374      -2.957 -15.524 -10.190  1.00 25.99           C
ATOM   4456  CD  PRO A 374      -2.984 -13.994 -10.217  1.00 23.76           C
ATOM   4457  HA  PRO A 374      -6.093 -14.603  -9.539  1.00  0.00           H
ATOM   4458  HB2 PRO A 374      -4.509 -16.883  -9.455  1.00  0.00           H
ATOM   4459  HB3 PRO A 374      -4.863 -16.035 -10.953  1.00  0.00           H
ATOM   4460  HG2 PRO A 374      -2.364 -15.886  -9.362  1.00  0.00           H
ATOM   4461  HG3 PRO A 374      -2.532 -15.954 -11.096  1.00  0.00           H
ATOM   4462  HD2 PRO A 374      -2.139 -13.578  -9.670  1.00  0.00           H
ATOM   4463  HD3 PRO A 374      -2.930 -13.627 -11.242  1.00  0.00           H
ATOM   4464  N   LYS A 375      -6.088 -15.064  -6.994  1.00 23.78           N
ATOM   4465  CA  LYS A 375      -6.211 -14.751  -5.564  1.00 23.97           C
ATOM   4466  C   LYS A 375      -5.288 -15.531  -4.598  1.00 22.75           C
ATOM   4467  O   LYS A 375      -5.180 -15.148  -3.434  1.00 21.14           O
ATOM   4468  CB  LYS A 375      -7.690 -14.799  -5.130  1.00 23.67           C
ATOM   4469  CG  LYS A 375      -8.335 -16.190  -4.969  1.00 25.99           C
ATOM   4470  CD  LYS A 375      -9.808 -16.068  -4.535  1.00 27.02           C
ATOM   4471  CE  LYS A 375     -10.281 -17.217  -3.631  1.00 27.83           C
ATOM   4472  NZ  LYS A 375     -11.588 -16.924  -3.014  1.00 29.10           N1+
ATOM   4473  H   LYS A 375      -6.958 -15.192  -7.512  1.00  0.00           H
ATOM   4474  HA  LYS A 375      -5.898 -13.709  -5.473  1.00  0.00           H
ATOM   4475  HB2 LYS A 375      -7.760 -14.280  -4.173  1.00  0.00           H
ATOM   4476  HB3 LYS A 375      -8.281 -14.204  -5.827  1.00  0.00           H
ATOM   4477  HG2 LYS A 375      -8.262 -16.757  -5.898  1.00  0.00           H
ATOM   4478  HG3 LYS A 375      -7.775 -16.750  -4.220  1.00  0.00           H
ATOM   4479  HD2 LYS A 375      -9.927 -15.137  -3.986  1.00  0.00           H
ATOM   4480  HD3 LYS A 375     -10.441 -15.973  -5.419  1.00  0.00           H
ATOM   4481  HE2 LYS A 375     -10.336 -18.150  -4.194  1.00  0.00           H
ATOM   4482  HE3 LYS A 375      -9.565 -17.385  -2.826  1.00  0.00           H
ATOM   4483  HZ1 LYS A 375     -11.737 -17.559  -2.233  1.00  0.00           H
ATOM   4484  HZ2 LYS A 375     -11.609 -15.990  -2.618  1.00  0.00           H
ATOM   4485  HZ3 LYS A 375     -12.333 -17.006  -3.686  1.00  0.00           H
ATOM   4486  N   ASP A 376      -4.576 -16.563  -5.079  1.00 22.97           N
ATOM   4487  CA  ASP A 376      -3.436 -17.210  -4.408  1.00 23.49           C
ATOM   4488  C   ASP A 376      -2.320 -16.197  -4.077  1.00 24.05           C
ATOM   4489  O   ASP A 376      -1.689 -16.286  -3.030  1.00 23.37           O
ATOM   4490  CB  ASP A 376      -2.910 -18.404  -5.270  1.00 26.21           C
ATOM   4491  CG  ASP A 376      -1.470 -18.872  -4.997  1.00 25.03           C
ATOM   4492  OD1 ASP A 376      -0.649 -18.857  -5.943  1.00 24.00           O
ATOM   4493  OD2 ASP A 376      -1.166 -19.207  -3.831  1.00 25.73           O1-
ATOM   4494  H   ASP A 376      -4.696 -16.739  -6.065  1.00  0.00           H
ATOM   4495  HA  ASP A 376      -3.781 -17.610  -3.453  1.00  0.00           H
ATOM   4496  HB2 ASP A 376      -3.568 -19.264  -5.146  1.00  0.00           H
ATOM   4497  HB3 ASP A 376      -2.957 -18.136  -6.325  1.00  0.00           H
ATOM   4498  N   LYS A 377      -2.075 -15.221  -4.958  1.00 23.50           N
ATOM   4499  CA  LYS A 377      -0.889 -14.368  -4.913  1.00 22.56           C
ATOM   4500  C   LYS A 377      -1.029 -13.164  -3.966  1.00 21.29           C
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ATOM   4501  O   LYS A 377      -0.102 -12.354  -3.874  1.00 20.97          O
ATOM   4502  CB  LYS A 377      -0.604 -13.827  -6.325  1.00 21.84          C
ATOM   4503  CG  LYS A 377      -0.592 -14.873  -7.451  1.00 23.25          C
ATOM   4504  CD  LYS A 377       0.400 -16.034  -7.306  1.00 21.18          C
ATOM   4505  CE  LYS A 377       0.196 -17.111  -8.391  1.00 22.85          C
ATOM   4506  NZ  LYS A 377       0.834 -18.376  -8.023  1.00 23.32          N1+
ATOM   4507  H   LYS A 377      -2.693 -15.133  -5.762  1.00  0.00          H
ATOM   4508  HA  LYS A 377      -0.044 -14.953  -4.573  1.00  0.00          H
ATOM   4509  HB2 LYS A 377      -1.356 -13.081  -6.571  1.00  0.00          H
ATOM   4510  HB3 LYS A 377       0.338 -13.291  -6.316  1.00  0.00          H
ATOM   4511  HG2 LYS A 377      -1.582 -15.306  -7.507  1.00  0.00          H
ATOM   4512  HG3 LYS A 377      -0.437 -14.356  -8.391  1.00  0.00          H
ATOM   4513  HD2 LYS A 377       1.430 -15.675  -7.302  1.00  0.00          H
ATOM   4514  HD3 LYS A 377       0.231 -16.495  -6.336  1.00  0.00          H
ATOM   4515  HE2 LYS A 377      -0.865 -17.330  -8.507  1.00  0.00          H
ATOM   4516  HE3 LYS A 377       0.572 -16.784  -9.359  1.00  0.00          H
ATOM   4517  HZ1 LYS A 377       0.429 -18.656  -7.111  1.00  0.00          H
ATOM   4518  HZ2 LYS A 377       0.636 -19.095  -8.694  1.00  0.00          H
ATOM   4519  HZ3 LYS A 377       1.865 -18.259  -7.979  1.00  0.00          H
ATOM   4520  N   ILE A 378      -2.163 -13.039  -3.278  1.00 20.46          N
ATOM   4521  CA  ILE A 378      -2.451 -11.993  -2.312  1.00 19.71          C
ATOM   4522  C   ILE A 378      -2.207 -12.639  -0.932  1.00 21.20          C
ATOM   4523  O   ILE A 378      -2.714 -13.730  -0.662  1.00 23.96          O
ATOM   4524  CB  ILE A 378      -3.937 -11.543  -2.464  1.00 19.96          C
ATOM   4525  CG1 ILE A 378      -4.358 -11.295  -3.939  1.00 16.92          C
ATOM   4526  CG2 ILE A 378      -4.191 -10.271  -1.628  1.00 15.66          C
ATOM   4527  CD1 ILE A 378      -5.870 -11.125  -4.136  1.00 19.39          C
ATOM   4528  H   ILE A 378      -2.814 -13.813  -3.311  1.00  0.00          H
ATOM   4529  HA  ILE A 378      -1.795 -11.137  -2.467  1.00  0.00          H
ATOM   4530  HB  ILE A 378      -4.575 -12.339  -2.076  1.00  0.00          H
ATOM   4531 HG12 ILE A 378      -3.834 -10.425  -4.337  1.00  0.00          H
ATOM   4532 HG13 ILE A 378      -4.067 -12.129  -4.576  1.00  0.00          H
ATOM   4533 HG21 ILE A 378      -5.228  -9.946  -1.675  1.00  0.00          H
ATOM   4534 HG22 ILE A 378      -3.956 -10.434  -0.578  1.00  0.00          H
ATOM   4535 HG23 ILE A 378      -3.578  -9.440  -1.977  1.00  0.00          H
ATOM   4536 HD11 ILE A 378      -6.109 -11.071  -5.199  1.00  0.00          H
ATOM   4537 HD12 ILE A 378      -6.421 -11.968  -3.718  1.00  0.00          H
ATOM   4538 HD13 ILE A 378      -6.239 -10.208  -3.678  1.00  0.00          H
ATOM   4539  N   HIS A 379      -1.430 -11.987  -0.061  1.00 20.04          N
ATOM   4540  CA  HIS A 379      -1.073 -12.465   1.273  1.00 20.47          C
ATOM   4541  C   HIS A 379      -1.457 -11.422   2.327  1.00 21.04          C
ATOM   4542  O   HIS A 379      -1.249 -10.229   2.127  1.00 19.94          O
ATOM   4543  CB  HIS A 379       0.429 -12.807   1.321  1.00 21.51          C
ATOM   4544  CG  HIS A 379       0.900 -13.373   2.633  1.00 21.45          C
ATOM   4545  ND1 HIS A 379       0.324 -14.510   3.207  1.00 20.38          N
ATOM   4546  CD2 HIS A 379       1.908 -12.926   3.454  1.00 22.37          C
ATOM   4547  CE1 HIS A 379       0.982 -14.686   4.350  1.00 22.41          C
ATOM   4548  NE2 HIS A 379       1.938 -13.778   4.545  1.00 22.62          N
ATOM   4549  H   HIS A 379      -1.033 -11.094  -0.351  1.00  0.00          H
ATOM   4550  HA  HIS A 379      -1.624 -13.380   1.501  1.00  0.00          H
ATOM   4551  HB2 HIS A 379       0.664 -13.533   0.550  1.00  0.00          H
ATOM   4552  HB3 HIS A 379       1.030 -11.929   1.092  1.00  0.00          H
ATOM   4553  HD2 HIS A 379       2.581 -12.089   3.357  1.00  0.00          H
ATOM   4554  HE1 HIS A 379       0.759 -15.474   5.055  1.00  0.00          H
ATOM   4555  HE2 HIS A 379       2.546 -13.704   5.355  1.00  0.00          H
ATOM   4556  N   TYR A 380      -1.973 -11.879   3.466  1.00 21.37          N
ATOM   4557  CA  TYR A 380      -2.107 -11.093   4.686  1.00 21.69          C
ATOM   4558  C   TYR A 380      -1.111 -11.734   5.654  1.00 20.30          C
ATOM   4559  O   TYR A 380      -1.202 -12.938   5.907  1.00 21.92          O
ATOM   4560  CB  TYR A 380      -3.551 -11.212   5.225  1.00 19.97          C
ATOM   4561  CG  TYR A 380      -3.743 -10.756   6.662  1.00 21.86          C
ATOM   4562  CD1 TYR A 380      -3.833  -9.387   6.983  1.00 18.74          C
ATOM   4563  CD2 TYR A 380      -3.772 -11.714   7.695  1.00 19.94          C
ATOM   4564  CE1 TYR A 380      -3.917  -8.984   8.332  1.00 21.73          C
ATOM   4565  CE2 TYR A 380      -3.854 -11.306   9.038  1.00 22.01          C
ATOM   4566  CZ  TYR A 380      -3.898  -9.943   9.360  1.00 22.98          C
ATOM   4567  OH  TYR A 380      -3.932  -9.578  10.673  1.00 22.49          O
ATOM   4568  H   TYR A 380      -1.924 -12.878   3.621  1.00  0.00          H
ATOM   4569  HA  TYR A 380      -1.864 -10.040   4.535  1.00  0.00          H
ATOM   4570  HB2 TYR A 380      -4.217 -10.630   4.588  1.00  0.00          H
ATOM   4571  HB3 TYR A 380      -3.888 -12.246   5.155  1.00  0.00          H
ATOM   4572  HD1 TYR A 380      -3.814  -8.642   6.200  1.00  0.00          H
ATOM   4573  HD2 TYR A 380      -3.703 -12.767   7.462  1.00  0.00          H
ATOM   4574  HE1 TYR A 380      -3.982  -7.936   8.576  1.00  0.00          H
ATOM   4575  HE2 TYR A 380      -3.884 -12.039   9.829  1.00  0.00          H
ATOM   4576  HH  TYR A 380      -4.352  -8.727  10.840  1.00  0.00          H
ATOM   4577  N   PHE A 381      -0.172 -10.949   6.185  1.00 21.02          N
ATOM   4578  CA  PHE A 381       0.808 -11.414   7.160  1.00 22.01          C
ATOM   4579  C   PHE A 381       0.152 -11.460   8.550  1.00 21.75          C
ATOM   4580  O   PHE A 381       0.160 -10.480   9.298  1.00 21.88          O
ATOM   4581  CB  PHE A 381       1.996 -10.441   7.189  1.00 21.96          C
ATOM   4582  CG  PHE A 381       2.931 -10.519   5.999  1.00 23.44          C
ATOM   4583  CD1 PHE A 381       3.974 -11.467   5.990  1.00 24.95          C
ATOM   4584  CD2 PHE A 381       2.798  -9.618   4.925  1.00 24.30          C
ATOM   4585  CE1 PHE A 381       4.888 -11.509   4.920  1.00 24.65          C
ATOM   4586  CE2 PHE A 381       3.710  -9.663   3.857  1.00 24.16          C
ATOM   4587  CZ  PHE A 381       4.759 -10.601   3.854  1.00 22.13          C
ATOM   4588  H   PHE A 381      -0.168  -9.963   5.943  1.00  0.00          H
ATOM   4589  HA  PHE A 381       1.173 -12.411   6.906  1.00  0.00          H
ATOM   4590  HB2 PHE A 381       1.659  -9.414   7.323  1.00  0.00          H
ATOM   4591  HB3 PHE A 381       2.595 -10.675   8.066  1.00  0.00          H
ATOM   4592  HD1 PHE A 381       4.092 -12.153   6.821  1.00  0.00          H
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ATOM   4593  HD2 PHE A 381       2.014  -8.878   4.925  1.00  0.00           H
ATOM   4594  HE1 PHE A 381       5.689 -12.234   4.928  1.00  0.00           H
ATOM   4595  HE2 PHE A 381       3.617  -8.951   3.058  1.00  0.00           H
ATOM   4596  HZ  PHE A 381       5.464 -10.626   3.037  1.00  0.00           H
ATOM   4597  N   SER A 382      -0.421 -12.617   8.893  1.00 22.55           N
ATOM   4598  CA  SER A 382      -1.046 -12.914  10.179  1.00 23.85           C
ATOM   4599  C   SER A 382      -0.030 -13.195  11.297  1.00 23.18           C
ATOM   4600  O   SER A 382      -0.418 -13.347  12.452  1.00 24.66           O
ATOM   4601  CB  SER A 382      -1.932 -14.159   9.963  1.00 23.74           C
ATOM   4602  OG  SER A 382      -1.226 -15.268   9.418  1.00 23.95           O
ATOM   4603  H   SER A 382      -0.410 -13.366   8.211  1.00  0.00           H
ATOM   4604  HA  SER A 382      -1.653 -12.067  10.501  1.00  0.00           H
ATOM   4605  HB2 SER A 382      -2.411 -14.454  10.898  1.00  0.00           H
ATOM   4606  HB3 SER A 382      -2.728 -13.913   9.269  1.00  0.00           H
ATOM   4607  HG  SER A 382      -0.452 -15.423   9.945  1.00  0.00           H
ATOM   4608  N   ASP A 383       1.247 -13.307  10.935  1.00 25.17           N
ATOM   4609  CA  ASP A 383       2.435 -13.511  11.752  1.00 23.87           C
ATOM   4610  C   ASP A 383       3.078 -12.159  12.120  1.00 23.92           C
ATOM   4611  O   ASP A 383       3.863 -12.104  13.067  1.00 24.24           O
ATOM   4612  CB  ASP A 383       3.464 -14.302  10.891  1.00 23.64           C
ATOM   4613  CG  ASP A 383       3.798 -13.704   9.516  1.00 23.19           C
ATOM   4614  OD1 ASP A 383       2.844 -13.354   8.782  1.00 22.50           O
ATOM   4615  OD2 ASP A 383       4.999 -13.604   9.199  1.00 22.18           O1-
ATOM   4616  H   ASP A 383       1.482 -13.205   9.942  1.00  0.00           H
ATOM   4617  HA  ASP A 383       2.192 -14.057  12.665  1.00  0.00           H
ATOM   4618  HB2 ASP A 383       4.394 -14.421  11.450  1.00  0.00           H
ATOM   4619  HB3 ASP A 383       3.093 -15.311  10.719  1.00  0.00           H
ATOM   4620  N   ILE A 384       2.748 -11.070  11.410  1.00 22.55           N
ATOM   4621  CA  ILE A 384       3.302  -9.744  11.645  1.00 22.33           C
ATOM   4622  C   ILE A 384       2.270  -8.918  12.427  1.00 23.48           C
ATOM   4623  O   ILE A 384       1.107  -8.777  12.045  1.00 25.39           O
ATOM   4624  CB  ILE A 384       3.689  -9.065  10.297  1.00 22.93           C
ATOM   4625  CG1 ILE A 384       4.777  -9.907   9.579  1.00 21.02           C
ATOM   4626  CG2 ILE A 384       4.171  -7.607  10.482  1.00 18.69           C
ATOM   4627  CD1 ILE A 384       5.350  -9.296   8.292  1.00 22.41           C
ATOM   4628  H   ILE A 384       2.055 -11.171  10.681  1.00  0.00           H
ATOM   4629  HA  ILE A 384       4.213  -9.822  12.241  1.00  0.00           H
ATOM   4630  HB  ILE A 384       2.800  -9.029   9.665  1.00  0.00           H
ATOM   4631 HG12 ILE A 384       5.593 -10.118  10.267  1.00  0.00           H
ATOM   4632 HG13 ILE A 384       4.378 -10.890   9.331  1.00  0.00           H
ATOM   4633 HG21 ILE A 384       4.393  -7.130   9.529  1.00  0.00           H
ATOM   4634 HG22 ILE A 384       3.417  -6.977  10.953  1.00  0.00           H
ATOM   4635 HG23 ILE A 384       5.070  -7.573  11.096  1.00  0.00           H
ATOM   4636 HD11 ILE A 384       5.966 -10.026   7.766  1.00  0.00           H
ATOM   4637 HD12 ILE A 384       4.560  -8.980   7.611  1.00  0.00           H
ATOM   4638 HD13 ILE A 384       5.978  -8.434   8.501  1.00  0.00           H
ATOM   4639  N   GLY A 385       2.747  -8.295  13.502  1.00 22.88           N
ATOM   4640  CA  GLY A 385       2.042  -7.334  14.325  1.00 21.82           C
ATOM   4641  C   GLY A 385       2.714  -5.990  14.085  1.00 20.82           C
ATOM   4642  O   GLY A 385       3.943  -5.899  14.061  1.00 19.73           O
ATOM   4643  H   GLY A 385       3.712  -8.463  13.737  1.00  0.00           H
ATOM   4644  HA2 GLY A 385       0.986  -7.306  14.066  1.00  0.00           H
ATOM   4645  HA3 GLY A 385       2.115  -7.605  15.378  1.00  0.00           H
ATOM   4646  N   TYR A 386       1.908  -4.960  13.852  1.00 21.09           N
ATOM   4647  CA  TYR A 386       2.285  -3.704  13.220  1.00 20.61           C
ATOM   4648  C   TYR A 386       1.304  -2.613  13.671  1.00 20.86           C
ATOM   4649  O   TYR A 386       0.208  -2.939  14.117  1.00 21.94           O
ATOM   4650  CB  TYR A 386       2.326  -3.955  11.692  1.00 21.65           C
ATOM   4651  CG  TYR A 386       2.342  -2.736  10.797  1.00 21.23           C
ATOM   4652  CD1 TYR A 386       3.554  -2.148  10.387  1.00 20.92           C
ATOM   4653  CD2 TYR A 386       1.115  -2.196  10.367  1.00 17.77           C
ATOM   4654  CE1 TYR A 386       3.534  -1.039   9.519  1.00 20.13           C
ATOM   4655  CE2 TYR A 386       1.097  -1.075   9.526  1.00 19.71           C
ATOM   4656  CZ  TYR A 386       2.305  -0.511   9.080  1.00 19.65           C
ATOM   4657  OH  TYR A 386       2.269   0.521   8.190  1.00 20.30           O
ATOM   4658  H   TYR A 386       0.915  -5.069  14.057  1.00  0.00           H
ATOM   4659  HA  TYR A 386       3.274  -3.412  13.569  1.00  0.00           H
ATOM   4660  HB2 TYR A 386       3.183  -4.577  11.441  1.00  0.00           H
ATOM   4661  HB3 TYR A 386       1.459  -4.550  11.398  1.00  0.00           H
ATOM   4662  HD1 TYR A 386       4.499  -2.554  10.718  1.00  0.00           H
ATOM   4663  HD2 TYR A 386       0.183  -2.644  10.680  1.00  0.00           H
ATOM   4664  HE1 TYR A 386       4.466  -0.612   9.182  1.00  0.00           H
ATOM   4665  HE2 TYR A 386       0.143  -0.684   9.213  1.00  0.00           H
ATOM   4666  HH  TYR A 386       2.968   0.528   7.537  1.00  0.00           H
ATOM   4667  N   HIS A 387       1.650  -1.329  13.532  1.00 19.49           N
ATOM   4668  CA  HIS A 387       0.745  -0.198  13.743  1.00 20.54           C
ATOM   4669  C   HIS A 387       1.126   0.969  12.833  1.00 18.80           C
ATOM   4670  O   HIS A 387       2.255   1.449  12.913  1.00 18.62           O
ATOM   4671  CB  HIS A 387       0.654   0.157  15.247  1.00 20.00           C
ATOM   4672  CG  HIS A 387       0.025   1.480  15.649  1.00 25.81           C
ATOM   4673  ND1 HIS A 387      -1.260   1.590  16.165  1.00 22.90           N1+
ATOM   4674  CD2 HIS A 387       0.566   2.756  15.679  1.00 23.86           C
ATOM   4675  CE1 HIS A 387      -1.442   2.851  16.525  1.00 24.18           C
ATOM   4676  NE2 HIS A 387      -0.393   3.601  16.210  1.00 25.10           N
ATOM   4677  H   HIS A 387       2.577  -1.124  13.168  1.00  0.00           H
ATOM   4678  HA  HIS A 387      -0.243  -0.514  13.415  1.00  0.00           H
ATOM   4679  HB2 HIS A 387       0.127  -0.639  15.766  1.00  0.00           H
ATOM   4680  HB3 HIS A 387       1.658   0.151  15.659  1.00  0.00           H
ATOM   4681  HD1 HIS A 387      -1.918   0.840  16.485  1.00  0.00           H
ATOM   4682  HD2 HIS A 387       1.547   3.126  15.410  1.00  0.00           H
ATOM   4683  HE1 HIS A 387      -2.320   3.201  17.050  1.00  0.00           H
ATOM   4684  HE2 HIS A 387      -0.275   4.598  16.499  1.00  0.00           H
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ATOM   4685  N   HIS A 388       0.167   1.461  12.037  1.00 18.98           N
ATOM   4686  CA  HIS A 388       0.189   2.770  11.393  1.00 18.64           C
ATOM   4687  C   HIS A 388      -0.909   3.585  12.104  1.00 20.19           C
ATOM   4688  O   HIS A 388      -2.045   3.108  12.136  1.00 20.72           O
ATOM   4689  CB  HIS A 388      -0.193   2.638   9.899  1.00  0.00           C
ATOM   4690  CG  HIS A 388      -0.358   3.879   9.066  1.00  0.00           C
ATOM   4691  ND1 HIS A 388      -1.338   3.942   8.100  1.00  0.00           N
ATOM   4692  CD2 HIS A 388       0.316   5.068   8.941  1.00  0.00           C
ATOM   4693  CE1 HIS A 388      -1.231   5.107   7.439  1.00  0.00           C
ATOM   4694  NE2 HIS A 388      -0.238   5.822   7.935  1.00  0.00           N
ATOM   4695  H   HIS A 388      -0.763   1.053  12.124  1.00  0.00           H
ATOM   4696  HA  HIS A 388       1.176   3.227  11.465  1.00  0.00           H
ATOM   4697  HB2 HIS A 388       0.593   2.017   9.470  1.00  0.00           H
ATOM   4698  HB3 HIS A 388      -1.109   2.047   9.839  1.00  0.00           H
ATOM   4699  HD1 HIS A 388      -2.028   3.231   7.873  1.00  0.00           H
ATOM   4700  HD2 HIS A 388       1.164   5.441   9.495  1.00  0.00           H
ATOM   4701  HE1 HIS A 388      -1.863   5.393   6.611  1.00  0.00           H
ATOM   4702  N   PRO A 389      -0.614   4.758  12.707  1.00 19.60           N
ATOM   4703  CA  PRO A 389      -1.590   5.567  13.458  1.00 19.62           C
ATOM   4704  C   PRO A 389      -2.938   5.793  12.732  1.00 19.23           C
ATOM   4705  O   PRO A 389      -2.907   6.264  11.591  1.00 20.06           O
ATOM   4706  CB  PRO A 389      -0.872   6.902  13.715  1.00 19.61           C
ATOM   4707  CG  PRO A 389       0.612   6.595  13.635  1.00 19.36           C
ATOM   4708  CD  PRO A 389       0.721   5.356  12.757  1.00 19.21           C
ATOM   4709  HA  PRO A 389      -1.731   5.049  14.402  1.00  0.00           H
ATOM   4710  HB2 PRO A 389      -1.115   7.640  12.948  1.00  0.00           H
ATOM   4711  HB3 PRO A 389      -1.137   7.343  14.674  1.00  0.00           H
ATOM   4712  HG2 PRO A 389       1.172   7.437  13.230  1.00  0.00           H
ATOM   4713  HG3 PRO A 389       1.010   6.381  14.626  1.00  0.00           H
ATOM   4714  HD2 PRO A 389       1.045   5.644  11.759  1.00  0.00           H
ATOM   4715  HD3 PRO A 389       1.453   4.661  13.170  1.00  0.00           H
ATOM   4716  N   PRO A 390      -4.113   5.532  13.351  1.00 19.23           N
ATOM   4717  CA  PRO A 390      -4.322   5.052  14.728  1.00 19.78           C
ATOM   4718  C   PRO A 390      -4.434   3.513  14.894  1.00 19.82           C
ATOM   4719  O   PRO A 390      -4.786   3.084  15.992  1.00 20.50           O
ATOM   4720  CB  PRO A 390      -5.679   5.675  15.098  1.00 16.45           C
ATOM   4721  CG  PRO A 390      -6.465   5.642  13.797  1.00 19.09           C
ATOM   4722  CD  PRO A 390      -5.393   5.924  12.745  1.00 19.54           C
ATOM   4723  HA  PRO A 390      -3.574   5.432  15.424  1.00  0.00           H
ATOM   4724  HB2 PRO A 390      -6.205   5.179  15.912  1.00  0.00           H
ATOM   4725  HB3 PRO A 390      -5.528   6.705  15.419  1.00  0.00           H
ATOM   4726  HG2 PRO A 390      -6.888   4.650  13.653  1.00  0.00           H
ATOM   4727  HG3 PRO A 390      -7.286   6.360  13.774  1.00  0.00           H
ATOM   4728  HD2 PRO A 390      -5.594   5.372  11.827  1.00  0.00           H
ATOM   4729  HD3 PRO A 390      -5.373   6.986  12.496  1.00  0.00           H
ATOM   4730  N   TYR A 391      -4.204   2.674  13.871  1.00 21.44           N
ATOM   4731  CA  TYR A 391      -4.665   1.276  13.848  1.00 22.01           C
ATOM   4732  C   TYR A 391      -3.535   0.242  13.792  1.00 21.91           C
ATOM   4733  O   TYR A 391      -2.515   0.434  13.125  1.00 21.23           O
ATOM   4734  CB  TYR A 391      -5.663   1.071  12.688  1.00 25.04           C
ATOM   4735  CG  TYR A 391      -6.990   1.785  12.873  1.00 26.98           C
ATOM   4736  CD1 TYR A 391      -7.692   1.625  14.084  1.00 27.76           C
ATOM   4737  CD2 TYR A 391      -7.538   2.592  11.851  1.00 28.12           C
ATOM   4738  CE1 TYR A 391      -8.911   2.283  14.288  1.00 29.80           C
ATOM   4739  CE2 TYR A 391      -8.774   3.242  12.052  1.00 28.51           C
ATOM   4740  CZ  TYR A 391      -9.455   3.088  13.276  1.00 30.11           C
ATOM   4741  OH  TYR A 391     -10.643   3.708  13.515  1.00 29.73           O
ATOM   4742  H   TYR A 391      -3.731   3.003  13.036  1.00  0.00           H
ATOM   4743  HA  TYR A 391      -5.183   1.054  14.780  1.00  0.00           H
ATOM   4744  HB2 TYR A 391      -5.214   1.376  11.746  1.00  0.00           H
ATOM   4745  HB3 TYR A 391      -5.888   0.010  12.573  1.00  0.00           H
ATOM   4746  HD1 TYR A 391      -7.316   0.984  14.865  1.00  0.00           H
ATOM   4747  HD2 TYR A 391      -7.020   2.713  10.911  1.00  0.00           H
ATOM   4748  HE1 TYR A 391      -9.425   2.151  15.226  1.00  0.00           H
ATOM   4749  HE2 TYR A 391      -9.192   3.856  11.267  1.00  0.00           H
ATOM   4750  HH  TYR A 391     -11.020   4.155  12.739  1.00  0.00           H
ATOM   4751  N   ASP A 392      -3.738  -0.857  14.528  1.00 20.65           N
ATOM   4752  CA  ASP A 392      -2.785  -1.932  14.793  1.00 21.18           C
ATOM   4753  C   ASP A 392      -3.230  -3.199  14.063  1.00 20.89           C
ATOM   4754  O   ASP A 392      -4.420  -3.491  13.988  1.00 20.18           O
ATOM   4755  CB  ASP A 392      -2.692  -2.281  16.307  1.00 22.25           C
ATOM   4756  CG  ASP A 392      -2.339  -1.116  17.220  1.00 21.58           C
ATOM   4757  OD1 ASP A 392      -3.034  -0.076  17.170  1.00 20.66           O
ATOM   4758  OD2 ASP A 392      -1.301  -1.155  17.909  1.00 21.72           O1-
ATOM   4759  H   ASP A 392      -4.612  -0.928  15.041  1.00  0.00           H
ATOM   4760  HA  ASP A 392      -1.806  -1.627  14.445  1.00  0.00           H
ATOM   4761  HB2 ASP A 392      -3.632  -2.705  16.661  1.00  0.00           H
ATOM   4762  HB3 ASP A 392      -1.946  -3.065  16.455  1.00  0.00           H
ATOM   4763  N   ASN A 393      -2.259  -3.975  13.587  1.00 20.94           N
ATOM   4764  CA  ASN A 393      -2.396  -5.382  13.220  1.00 20.94           C
ATOM   4765  C   ASN A 393      -1.793  -6.150  14.401  1.00 23.33           C
ATOM   4766  O   ASN A 393      -0.724  -5.752  14.881  1.00 20.26           O
ATOM   4767  CB  ASN A 393      -1.487  -5.664  11.994  1.00 21.01           C
ATOM   4768  CG  ASN A 393      -2.034  -6.802  11.141  1.00 21.80           C
ATOM   4769  OD1 ASN A 393      -2.982  -6.580  10.400  1.00 21.19           O
ATOM   4770  ND2 ASN A 393      -1.446  -7.993  11.166  1.00 18.99           N
ATOM   4771  H   ASN A 393      -1.310  -3.674  13.806  1.00  0.00           H
ATOM   4772  HA  ASN A 393      -3.438  -5.655  13.038  1.00  0.00           H
ATOM   4773  HB2 ASN A 393      -1.454  -4.787  11.348  1.00  0.00           H
ATOM   4774  HB3 ASN A 393      -0.449  -5.866  12.262  1.00  0.00           H
ATOM   4775 HD21 ASN A 393      -0.570  -8.200  11.646  1.00  0.00           H
ATOM   4776 HD22 ASN A 393      -1.889  -8.745  10.648  1.00  0.00           H
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ATOM   4777  N   CYS A 394     -2.405  -7.244  14.862  1.00 21.34           N
ATOM   4778  CA  CYS A 394     -1.797  -8.119  15.868  1.00 23.77           C
ATOM   4779  C   CYS A 394     -2.199  -9.588  15.653  1.00 23.91           C
ATOM   4780  O   CYS A 394     -3.401  -9.850  15.621  1.00 23.61           O
ATOM   4781  CB  CYS A 394     -2.076  -7.601  17.292  1.00 24.76           C
ATOM   4782  SG  CYS A 394     -1.166  -8.443  18.616  1.00 21.89           S
ATOM   4783  H   CYS A 394     -3.333  -7.491  14.505  1.00  0.00           H
ATOM   4784  HA  CYS A 394     -0.721  -8.041  15.746  1.00  0.00           H
ATOM   4785  HB2 CYS A 394     -1.854  -6.536  17.361  1.00  0.00           H
ATOM   4786  HB3 CYS A 394     -3.132  -7.704  17.525  1.00  0.00           H
ATOM   4787  N   PRO A 395     -1.245 -10.550  15.544  1.00 24.08           N
ATOM   4788  CA  PRO A 395     -1.520 -11.998  15.540  1.00 23.62           C
ATOM   4789  C   PRO A 395     -2.366 -12.425  16.752  1.00 23.97           C
ATOM   4790  O   PRO A 395     -2.006 -12.126  17.891  1.00 22.43           O
ATOM   4791  CB  PRO A 395     -0.138 -12.672  15.600  1.00 22.83           C
ATOM   4792  CG  PRO A 395      0.829 -11.649  15.048  1.00 22.60           C
ATOM   4793  CD  PRO A 395      0.185 -10.301  15.347  1.00 24.08           C
ATOM   4794  HA  PRO A 395     -2.018 -12.248  14.602  1.00  0.00           H
ATOM   4795  HB2 PRO A 395      0.153 -12.905  16.624  1.00  0.00           H
ATOM   4796  HB3 PRO A 395     -0.107 -13.609  15.044  1.00  0.00           H
ATOM   4797  HG2 PRO A 395      1.834 -11.756  15.455  1.00  0.00           H
ATOM   4798  HG3 PRO A 395      0.906 -11.768  13.969  1.00  0.00           H
ATOM   4799  HD2 PRO A 395      0.615  -9.884  16.257  1.00  0.00           H
ATOM   4800  HD3 PRO A 395      0.357  -9.610  14.524  1.00  0.00           H
ATOM   4801  N   LEU A 396     -3.501 -13.094  16.513  1.00 23.38           N
ATOM   4802  CA  LEU A 396     -4.477 -13.462  17.545  1.00 25.21           C
ATOM   4803  C   LEU A 396     -4.403 -14.952  17.911  1.00 27.18           C
ATOM   4804  O   LEU A 396     -5.271 -15.459  18.627  1.00 29.80           O
ATOM   4805  CB  LEU A 396     -5.903 -13.125  17.064  1.00 24.81           C
ATOM   4806  CG  LEU A 396     -6.135 -11.643  16.718  1.00 23.79           C
ATOM   4807  CD1 LEU A 396     -7.576 -11.441  16.249  1.00 23.36           C
ATOM   4808  CD2 LEU A 396     -5.800 -10.707  17.890  1.00 21.88           C
ATOM   4809  H   LEU A 396     -3.732 -13.260  15.547  1.00  0.00           H
ATOM   4810  HA  LEU A 396     -4.285 -12.915  18.469  1.00  0.00           H
ATOM   4811  HB2 LEU A 396     -6.158 -13.737  16.202  1.00  0.00           H
ATOM   4812  HB3 LEU A 396     -6.615 -13.404  17.841  1.00  0.00           H
ATOM   4813  HG  LEU A 396     -5.493 -11.365  15.880  1.00  0.00           H
ATOM   4814 HD11 LEU A 396     -7.762 -10.391  16.018  1.00  0.00           H
ATOM   4815 HD12 LEU A 396     -7.775 -12.018  15.347  1.00  0.00           H
ATOM   4816 HD13 LEU A 396     -8.289 -11.750  17.011  1.00  0.00           H
ATOM   4817 HD21 LEU A 396     -6.109  -9.686  17.675  1.00  0.00           H
ATOM   4818 HD22 LEU A 396     -6.292 -11.015  18.809  1.00  0.00           H
ATOM   4819 HD23 LEU A 396     -4.726 -10.671  18.077  1.00  0.00           H
ATOM   4820  N   ASP A 397     -3.355 -15.658  17.477  1.00 26.31           N
ATOM   4821  CA  ASP A 397     -2.977 -17.014  17.886  1.00 26.97           C
ATOM   4822  C   ASP A 397     -2.430 -16.971  19.337  1.00 27.26           C
ATOM   4823  O   ASP A 397     -2.593 -15.974  20.046  1.00 24.89           O
ATOM   4824  CB  ASP A 397     -1.893 -17.518  16.904  1.00 27.87           C
ATOM   4825  CG  ASP A 397     -0.579 -16.772  17.063  1.00 31.48           C
ATOM   4826  OD1 ASP A 397     -0.548 -15.599  16.662  1.00 33.62           O
ATOM   4827  OD2 ASP A 397      0.326 -17.327  17.717  1.00 32.96           O1-
ATOM   4828  H   ASP A 397     -2.604 -15.146  17.011  1.00  0.00           H
ATOM   4829  HA  ASP A 397     -3.845 -17.669  17.842  1.00  0.00           H
ATOM   4830  HB2 ASP A 397     -1.707 -18.582  17.048  1.00  0.00           H
ATOM   4831  HB3 ASP A 397     -2.225 -17.410  15.871  1.00  0.00           H
ATOM   4832  N   LYS A 398     -1.831 -18.060  19.822  1.00 27.55           N
ATOM   4833  CA  LYS A 398     -1.193 -18.148  21.130  1.00 28.98           C
ATOM   4834  C   LYS A 398      0.150 -18.902  21.032  1.00 28.03           C
ATOM   4835  O   LYS A 398      0.574 -19.502  22.020  1.00 27.56           O
ATOM   4836  CB  LYS A 398     -2.179 -18.726  22.186  1.00 32.65           C
ATOM   4837  CG  LYS A 398     -3.578 -18.064  22.284  1.00 38.44           C
ATOM   4838  CD  LYS A 398     -3.596 -16.668  22.945  1.00 40.86           C
ATOM   4839  CE  LYS A 398     -4.886 -15.868  22.654  1.00 42.41           C
ATOM   4840  NZ  LYS A 398     -4.753 -15.009  21.466  1.00 44.87           N1+
ATOM   4841  H   LYS A 398     -1.688 -18.880  19.218  1.00  0.00           H
ATOM   4842  HA  LYS A 398     -0.904 -17.146  21.454  1.00  0.00           H
ATOM   4843  HB2 LYS A 398     -2.320 -19.783  21.956  1.00  0.00           H
ATOM   4844  HB3 LYS A 398     -1.704 -18.709  23.169  1.00  0.00           H
ATOM   4845  HG2 LYS A 398     -4.044 -18.028  21.301  1.00  0.00           H
ATOM   4846  HG3 LYS A 398     -4.225 -18.718  22.870  1.00  0.00           H
ATOM   4847  HD2 LYS A 398     -3.498 -16.806  24.023  1.00  0.00           H
ATOM   4848  HD3 LYS A 398     -2.721 -16.083  22.658  1.00  0.00           H
ATOM   4849  HE2 LYS A 398     -5.742 -16.533  22.536  1.00  0.00           H
ATOM   4850  HE3 LYS A 398     -5.110 -15.212  23.496  1.00  0.00           H
ATOM   4851  HZ1 LYS A 398     -5.635 -14.590  21.165  1.00  0.00           H
ATOM   4852  HZ2 LYS A 398     -4.114 -14.246  21.709  1.00  0.00           H
ATOM   4853  HZ3 LYS A 398     -4.328 -15.493  20.681  1.00  0.00           H
ATOM   4854  N   GLU A 399      0.824 -18.888  19.872  1.00 29.00           N
ATOM   4855  CA  GLU A 399      1.991 -19.717  19.566  1.00 29.56           C
ATOM   4856  C   GLU A 399      3.047 -18.965  18.740  1.00 27.81           C
ATOM   4857  O   GLU A 399      4.171 -18.770  19.202  1.00 26.43           O
ATOM   4858  CB  GLU A 399      1.580 -21.078  18.953  1.00 34.33           C
ATOM   4859  CG  GLU A 399      0.506 -21.028  17.838  1.00 42.27           C
ATOM   4860  CD  GLU A 399     -0.874 -21.431  18.324  1.00 46.74           C
ATOM   4861  OE1 GLU A 399     -1.669 -20.574  18.782  1.00 49.38           O
ATOM   4862  OE2 GLU A 399     -1.214 -22.632  18.278  1.00 48.28           O1-
ATOM   4863  H   GLU A 399      0.479 -18.301  19.099  1.00  0.00           H
ATOM   4864  HA  GLU A 399      2.505 -19.947  20.502  1.00  0.00           H
ATOM   4865  HB2 GLU A 399      2.470 -21.571  18.559  1.00  0.00           H
ATOM   4866  HB3 GLU A 399      1.238 -21.732  19.758  1.00  0.00           H
ATOM   4867  HG2 GLU A 399      0.444 -20.047  17.371  1.00  0.00           H
ATOM   4868  HG3 GLU A 399      0.782 -21.720  17.042  1.00  0.00           H
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ATOM   4869  N   VAL A 400      2.676 -18.507  17.540  1.00 26.01           N
ATOM   4870  CA  VAL A 400      3.485 -17.736  16.597  1.00 24.53           C
ATOM   4871  C   VAL A 400      3.728 -16.336  17.184  1.00 24.42           C
ATOM   4872  O   VAL A 400      4.855 -15.846  17.120  1.00 22.04           O
ATOM   4873  CB  VAL A 400      2.747 -17.645  15.228  1.00 24.87           C
ATOM   4874  CG1 VAL A 400      3.549 -16.883  14.152  1.00 22.22           C
ATOM   4875  CG2 VAL A 400      2.358 -19.034  14.683  1.00 22.82           C
ATOM   4876  H   VAL A 400      1.666 -18.415  17.405  1.00  0.00           H
ATOM   4877  HA  VAL A 400      4.444 -18.240  16.466  1.00  0.00           H
ATOM   4878  HB  VAL A 400      1.820 -17.087  15.375  1.00  0.00           H
ATOM   4879 HG11 VAL A 400      3.002 -16.842  13.210  1.00  0.00           H
ATOM   4880 HG12 VAL A 400      3.741 -15.847  14.438  1.00  0.00           H
ATOM   4881 HG13 VAL A 400      4.509 -17.360  13.954  1.00  0.00           H
ATOM   4882 HG21 VAL A 400      1.866 -18.950  13.713  1.00  0.00           H
ATOM   4883 HG22 VAL A 400      3.234 -19.670  14.557  1.00  0.00           H
ATOM   4884 HG23 VAL A 400      1.663 -19.550  15.344  1.00  0.00           H
ATOM   4885  N   TYR A 401      2.708 -15.765  17.842  1.00 25.28           N
ATOM   4886  CA  TYR A 401      2.745 -14.542  18.643  1.00 27.50           C
ATOM   4887  C   TYR A 401      3.869 -14.581  19.699  1.00 27.74           C
ATOM   4888  O   TYR A 401      4.696 -13.672  19.798  1.00 28.01           O
ATOM   4889  CB  TYR A 401      1.346 -14.349  19.275  1.00 26.68           C
ATOM   4890  CG  TYR A 401      1.187 -13.208  20.266  1.00 28.89           C
ATOM   4891  CD1 TYR A 401      1.330 -13.447  21.651  1.00 27.82           C
ATOM   4892  CD2 TYR A 401      0.868 -11.910  19.814  1.00 27.03           C
ATOM   4893  CE1 TYR A 401      1.144 -12.403  22.575  1.00 26.44           C
ATOM   4894  CE2 TYR A 401      0.693 -10.866  20.743  1.00 26.20           C
ATOM   4895  CZ  TYR A 401      0.815 -11.112  22.123  1.00 27.15           C
ATOM   4896  OH  TYR A 401      0.586 -10.115  23.026  1.00 23.75           O
ATOM   4897  H   TYR A 401      1.797 -16.228  17.752  1.00  0.00           H
ATOM   4898  HA  TYR A 401      2.936 -13.715  17.964  1.00  0.00           H
ATOM   4899  HB2 TYR A 401      0.616 -14.199  18.481  1.00  0.00           H
ATOM   4900  HB3 TYR A 401      1.036 -15.271  19.770  1.00  0.00           H
ATOM   4901  HD1 TYR A 401      1.586 -14.431  22.016  1.00  0.00           H
ATOM   4902  HD2 TYR A 401      0.751 -11.709  18.758  1.00  0.00           H
ATOM   4903  HE1 TYR A 401      1.253 -12.591  23.633  1.00  0.00           H
ATOM   4904  HE2 TYR A 401      0.449  -9.876  20.395  1.00  0.00           H
ATOM   4905  HH  TYR A 401      0.442  -9.258  22.622  1.00  0.00           H
ATOM   4906  N   ASN A 402      3.931 -15.689  20.450  1.00 27.33           N
ATOM   4907  CA  ASN A 402      4.886 -15.897  21.543  1.00 29.34           C
ATOM   4908  C   ASN A 402      6.287 -16.264  21.029  1.00 27.72           C
ATOM   4909  O   ASN A 402      7.261 -16.102  21.758  1.00 27.54           O
ATOM   4910  CB  ASN A 402      4.407 -17.047  22.465  1.00 30.12           C
ATOM   4911  CG  ASN A 402      3.217 -16.662  23.344  1.00 33.27           C
ATOM   4912  OD1 ASN A 402      3.250 -15.663  24.049  1.00 33.60           O
ATOM   4913  ND2 ASN A 402      2.126 -17.419  23.324  1.00 34.63           N
ATOM   4914  H   ASN A 402      3.277 -16.424  20.235  1.00  0.00           H
ATOM   4915  HA  ASN A 402      4.983 -14.976  22.124  1.00  0.00           H
ATOM   4916  HB2 ASN A 402      4.183 -17.940  21.881  1.00  0.00           H
ATOM   4917  HB3 ASN A 402      5.209 -17.328  23.150  1.00  0.00           H
ATOM   4918 HD21 ASN A 402      2.047 -18.270  22.778  1.00  0.00           H
ATOM   4919 HD22 ASN A 402      1.377 -17.143  23.936  1.00  0.00           H
ATOM   4920  N   SER A 403      6.404 -16.741  19.784  1.00 27.84           N
ATOM   4921  CA  SER A 403      7.673 -17.141  19.175  1.00 28.74           C
ATOM   4922  C   SER A 403      8.359 -15.964  18.452  1.00 28.13           C
ATOM   4923  O   SER A 403      9.484 -16.119  17.983  1.00 27.53           O
ATOM   4924  CB  SER A 403      7.376 -18.216  18.108  1.00 28.94           C
ATOM   4925  OG  SER A 403      6.798 -19.371  18.694  1.00 35.87           O
ATOM   4926  H   SER A 403      5.566 -16.832  19.227  1.00  0.00           H
ATOM   4927  HA  SER A 403      8.361 -17.542  19.922  1.00  0.00           H
ATOM   4928  HB2 SER A 403      6.718 -17.832  17.328  1.00  0.00           H
ATOM   4929  HB3 SER A 403      8.301 -18.519  17.614  1.00  0.00           H
ATOM   4930  HG  SER A 403      5.921 -19.147  19.003  1.00  0.00           H
ATOM   4931  N   ASN A 404      7.693 -14.806  18.326  1.00 25.90           N
ATOM   4932  CA  ASN A 404      8.104 -13.697  17.456  1.00 25.37           C
ATOM   4933  C   ASN A 404      8.089 -12.346  18.173  1.00 25.69           C
ATOM   4934  O   ASN A 404      8.024 -11.310  17.519  1.00 25.02           O
ATOM   4935  CB  ASN A 404      7.340 -13.703  16.108  1.00 26.10           C
ATOM   4936  CG  ASN A 404      7.721 -14.867  15.192  1.00 26.26           C
ATOM   4937  OD1 ASN A 404      8.818 -14.920  14.640  1.00 29.36           O
ATOM   4938  ND2 ASN A 404      6.831 -15.839  15.047  1.00 28.99           N
ATOM   4939  H   ASN A 404      6.770 -14.747  18.739  1.00  0.00           H
ATOM   4940  HA  ASN A 404      9.161 -13.813  17.209  1.00  0.00           H
ATOM   4941  HB2 ASN A 404      6.264 -13.689  16.285  1.00  0.00           H
ATOM   4942  HB3 ASN A 404      7.545 -12.793  15.546  1.00  0.00           H
ATOM   4943 HD21 ASN A 404      5.967 -15.791  15.582  1.00  0.00           H
ATOM   4944 HD22 ASN A 404      7.036 -16.602  14.426  1.00  0.00           H
ATOM   4945  N   ASN A 405      8.173 -12.332  19.511  1.00 25.25           N
ATOM   4946  CA  ASN A 405      8.378 -11.145  20.365  1.00 26.77           C
ATOM   4947  C   ASN A 405      7.270 -10.089  20.180  1.00 26.11           C
ATOM   4948  O   ASN A 405      7.561  -8.896  20.122  1.00 25.19           O
ATOM   4949  CB  ASN A 405      9.757 -10.462  20.132  1.00 28.88           C
ATOM   4950  CG  ASN A 405     10.996 -11.334  20.289  1.00 29.98           C
ATOM   4951  OD1 ASN A 405     11.006 -12.311  21.030  1.00 31.34           O
ATOM   4952  ND2 ASN A 405     12.057 -10.993  19.569  1.00 32.27           N
ATOM   4953  H   ASN A 405      8.255 -13.232  19.964  1.00  0.00           H
ATOM   4954  HA  ASN A 405      8.331 -11.482  21.401  1.00  0.00           H
ATOM   4955  HB2 ASN A 405      9.770 -10.016  19.137  1.00  0.00           H
ATOM   4956  HB3 ASN A 405      9.880  -9.635  20.833  1.00  0.00           H
ATOM   4957 HD21 ASN A 405     12.011 -10.159  18.966  1.00  0.00           H
ATOM   4958 HD22 ASN A 405     12.902 -11.531  19.644  1.00  0.00           H
ATOM   4959  N   CYS A 406      6.017 -10.506  19.977  1.00 25.69           N
ATOM   4960  CA  CYS A 406      4.937  -9.628  19.535  1.00 25.23           C
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ATOM   4961  C   CYS A 406       4.446  -8.685  20.646  1.00 26.10           C
ATOM   4962  O   CYS A 406       3.531  -9.011  21.400  1.00 26.16           O
ATOM   4963  CB  CYS A 406       3.788 -10.502  19.024  1.00 27.05           C
ATOM   4964  SG  CYS A 406       4.110 -11.308  17.429  1.00 25.91           S
ATOM   4965  H   CYS A 406       5.828 -11.500  19.998  1.00  0.00           H
ATOM   4966  HA  CYS A 406       5.278  -9.005  18.711  1.00  0.00           H
ATOM   4967  HB2 CYS A 406       3.549 -11.267  19.763  1.00  0.00           H
ATOM   4968  HB3 CYS A 406       2.882  -9.909  18.901  1.00  0.00           H
ATOM   4969  N   GLU A 407       5.028  -7.480  20.700  1.00 25.27           N
ATOM   4970  CA  GLU A 407       4.725  -6.367  21.607  1.00 25.75           C
ATOM   4971  C   GLU A 407       3.342  -5.722  21.315  1.00 24.42           C
ATOM   4972  O   GLU A 407       3.243  -4.498  21.219  1.00 22.09           O
ATOM   4973  CB  GLU A 407       5.827  -5.292  21.415  1.00 29.18           C
ATOM   4974  CG  GLU A 407       7.280  -5.728  21.701  1.00 35.84           C
ATOM   4975  CD  GLU A 407       8.296  -4.899  20.921  1.00 38.75           C
ATOM   4976  OE1 GLU A 407       9.357  -5.465  20.573  1.00 41.17           O
ATOM   4977  OE2 GLU A 407       7.994  -3.723  20.616  1.00 43.63           O1-
ATOM   4978  H   GLU A 407       5.867  -7.373  20.138  1.00  0.00           H
ATOM   4979  HA  GLU A 407       4.731  -6.725  22.637  1.00  0.00           H
ATOM   4980  HB2 GLU A 407       5.762  -4.924  20.390  1.00  0.00           H
ATOM   4981  HB3 GLU A 407       5.624  -4.425  22.046  1.00  0.00           H
ATOM   4982  HG2 GLU A 407       7.500  -5.645  22.765  1.00  0.00           H
ATOM   4983  HG3 GLU A 407       7.441  -6.771  21.440  1.00  0.00           H
ATOM   4984  N   CYS A 408       2.281  -6.513  21.116  1.00 23.64           N
ATOM   4985  CA  CYS A 408       0.983  -6.045  20.632  1.00 21.06           C
ATOM   4986  C   CYS A 408      -0.198  -6.602  21.414  1.00 21.00           C
ATOM   4987  O   CYS A 408      -0.162  -7.708  21.961  1.00 19.91           O
ATOM   4988  CB  CYS A 408       0.861  -6.200  19.107  1.00 20.88           C
ATOM   4989  SG  CYS A 408       0.780  -7.862  18.380  1.00 22.25           S
ATOM   4990  H   CYS A 408       2.399  -7.511  21.277  1.00  0.00           H
ATOM   4991  HA  CYS A 408       0.933  -4.968  20.814  1.00  0.00           H
ATOM   4992  HB2 CYS A 408       0.011  -5.623  18.742  1.00  0.00           H
ATOM   4993  HB3 CYS A 408       1.738  -5.740  18.678  1.00  0.00           H
ATOM   4994  N   ASP A 409      -1.255  -5.792  21.444  1.00 17.35           N
ATOM   4995  CA  ASP A 409      -2.462  -5.942  22.233  1.00 19.95           C
ATOM   4996  C   ASP A 409      -3.442  -6.823  21.445  1.00 21.68           C
ATOM   4997  O   ASP A 409      -4.145  -6.354  20.548  1.00 21.54           O
ATOM   4998  CB  ASP A 409      -3.094  -4.534  22.448  1.00 20.43           C
ATOM   4999  CG  ASP A 409      -2.089  -3.460  22.852  1.00 23.66           C
ATOM   5000  OD1 ASP A 409      -1.826  -3.307  24.057  1.00 21.49           O
ATOM   5001  OD2 ASP A 409      -1.490  -2.849  21.932  1.00 21.32           O1-
ATOM   5002  H   ASP A 409      -1.146  -4.864  21.047  1.00  0.00           H
ATOM   5003  HA  ASP A 409      -2.218  -6.382  23.202  1.00  0.00           H
ATOM   5004  HB2 ASP A 409      -3.558  -4.169  21.533  1.00  0.00           H
ATOM   5005  HB3 ASP A 409      -3.883  -4.577  23.199  1.00  0.00           H
ATOM   5006  N   GLN A 410      -3.550  -8.110  21.805  1.00 19.59           N
ATOM   5007  CA  GLN A 410      -4.452  -9.094  21.179  1.00 20.13           C
ATOM   5008  C   GLN A 410      -5.958  -8.836  21.441  1.00 21.87           C
ATOM   5009  O   GLN A 410      -6.802  -9.656  21.071  1.00 20.41           O
ATOM   5010  CB  GLN A 410      -4.105 -10.509  21.685  1.00 20.31           C
ATOM   5011  CG  GLN A 410      -2.724 -11.012  21.235  1.00 21.69           C
ATOM   5012  CD  GLN A 410      -2.619 -12.529  21.375  1.00 20.78           C
ATOM   5013  OE1 GLN A 410      -3.106 -13.117  22.339  1.00 24.03           O
ATOM   5014  NE2 GLN A 410      -2.100 -13.211  20.369  1.00 20.56           N
ATOM   5015  H   GLN A 410      -2.881  -8.444  22.484  1.00  0.00           H
ATOM   5016  HA  GLN A 410      -4.308  -9.054  20.097  1.00  0.00           H
ATOM   5017  HB2 GLN A 410      -4.179 -10.554  22.772  1.00  0.00           H
ATOM   5018  HB3 GLN A 410      -4.851 -11.212  21.307  1.00  0.00           H
ATOM   5019  HG2 GLN A 410      -2.542 -10.732  20.196  1.00  0.00           H
ATOM   5020  HG3 GLN A 410      -1.941 -10.538  21.826  1.00  0.00           H
ATOM   5021 HE21 GLN A 410      -1.785 -12.704  19.533  1.00  0.00           H
ATOM   5022 HE22 GLN A 410      -1.955 -14.214  20.392  1.00  0.00           H
ATOM   5023  N   GLY A 411      -6.291  -7.705  22.070  1.00 24.50           N
ATOM   5024  CA  GLY A 411      -7.632  -7.191  22.302  1.00 26.96           C
ATOM   5025  C   GLY A 411      -7.873  -5.856  21.589  1.00 27.55           C
ATOM   5026  O   GLY A 411      -8.979  -5.336  21.689  1.00 30.46           O
ATOM   5027  H   GLY A 411      -5.526  -7.089  22.305  1.00  0.00           H
ATOM   5028  HA2 GLY A 411      -8.400  -7.897  21.985  1.00  0.00           H
ATOM   5029  HA3 GLY A 411      -7.768  -7.034  23.372  1.00  0.00           H
ATOM   5030  N   ASN A 412      -6.886  -5.327  20.844  1.00 27.68           N
ATOM   5031  CA  ASN A 412      -6.950  -4.059  20.101  1.00 25.90           C
ATOM   5032  C   ASN A 412      -6.323  -4.181  18.704  1.00 24.16           C
ATOM   5033  O   ASN A 412      -5.825  -3.200  18.144  1.00 24.85           O
ATOM   5034  CB  ASN A 412      -6.463  -2.835  20.921  1.00 26.56           C
ATOM   5035  CG  ASN A 412      -7.379  -2.458  22.083  1.00 27.79           C
ATOM   5036  OD1 ASN A 412      -7.133  -2.826  23.227  1.00 32.66           O
ATOM   5037  ND2 ASN A 412      -8.442  -1.709  21.817  1.00 25.88           N
ATOM   5038  H   ASN A 412      -5.998  -5.816  20.771  1.00  0.00           H
ATOM   5039  HA  ASN A 412      -7.999  -3.865  19.866  1.00  0.00           H
ATOM   5040  HB2 ASN A 412      -5.462  -3.014  21.309  1.00  0.00           H
ATOM   5041  HB3 ASN A 412      -6.375  -1.956  20.281  1.00  0.00           H
ATOM   5042 HD21 ASN A 412      -8.681  -1.474  20.844  1.00  0.00           H
ATOM   5043 HD22 ASN A 412      -9.066  -1.479  22.569  1.00  0.00           H
ATOM   5044  N   ASP A 413      -6.378  -5.388  18.120  1.00 22.31           N
ATOM   5045  CA  ASP A 413      -6.111  -5.641  16.700  1.00 22.05           C
ATOM   5046  C   ASP A 413      -7.249  -5.009  15.885  1.00 21.82           C
ATOM   5047  O   ASP A 413      -8.414  -5.123  16.266  1.00 21.38           O
ATOM   5048  CB  ASP A 413      -6.058  -7.170  16.430  1.00 20.91           C
ATOM   5049  CG  ASP A 413      -6.196  -7.555  14.956  1.00 19.89           C
ATOM   5050  OD1 ASP A 413      -5.304  -7.166  14.165  1.00 19.55           O
ATOM   5051  OD2 ASP A 413      -7.256  -8.104  14.594  1.00 19.62           O1-
ATOM   5052  H   ASP A 413      -6.896  -6.097  18.610  1.00  0.00           H
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ATOM   5053  HA  ASP A 413      -5.161  -5.189  16.409  1.00  0.00           H
ATOM   5054  HB2 ASP A 413      -5.144  -7.607  16.816  1.00  0.00           H
ATOM   5055  HB3 ASP A 413      -6.881  -7.654  16.953  1.00  0.00           H
ATOM   5056  N   PHE A 414      -6.923  -4.363  14.767  1.00 21.02           N
ATOM   5057  CA  PHE A 414      -7.915  -3.781  13.886  1.00 18.26           C
ATOM   5058  C   PHE A 414      -8.432  -4.805  12.863  1.00 19.44           C
ATOM   5059  O   PHE A 414      -9.548  -4.612  12.387  1.00 21.11           O
ATOM   5060  CB  PHE A 414      -7.288  -2.596  13.125  1.00 18.35           C
ATOM   5061  CG  PHE A 414      -8.295  -1.757  12.356  1.00 17.60           C
ATOM   5062  CD1 PHE A 414      -9.267  -1.014  13.056  1.00 19.23           C
ATOM   5063  CD2 PHE A 414      -8.292  -1.746  10.947  1.00 17.55           C
ATOM   5064  CE1 PHE A 414     -10.223  -0.258  12.354  1.00 20.54           C
ATOM   5065  CE2 PHE A 414      -9.236  -0.976  10.247  1.00 16.66           C
ATOM   5066  CZ  PHE A 414     -10.200  -0.229  10.949  1.00 18.35           C
ATOM   5067  H   PHE A 414      -5.942  -4.296  14.497  1.00  0.00           H
ATOM   5068  HA  PHE A 414      -8.756  -3.410  14.472  1.00  0.00           H
ATOM   5069  HB2 PHE A 414      -6.792  -1.935  13.837  1.00  0.00           H
ATOM   5070  HB3 PHE A 414      -6.509  -2.946  12.447  1.00  0.00           H
ATOM   5071  HD1 PHE A 414      -9.276  -1.017  14.136  1.00  0.00           H
ATOM   5072  HD2 PHE A 414      -7.589  -2.345  10.390  1.00  0.00           H
ATOM   5073  HE1 PHE A 414     -10.962   0.316  12.893  1.00  0.00           H
ATOM   5074  HE2 PHE A 414      -9.231  -0.981   9.169  1.00  0.00           H
ATOM   5075  HZ  PHE A 414     -10.926   0.359  10.412  1.00  0.00           H
ATOM   5076  N   THR A 415      -7.691  -5.874  12.515  1.00 20.19           N
ATOM   5077  CA  THR A 415      -7.953  -6.795  11.392  1.00 20.23           C
ATOM   5078  C   THR A 415      -9.410  -7.296  11.319  1.00 22.22           C
ATOM   5079  O   THR A 415      -9.984  -7.415  10.236  1.00 22.79           O
ATOM   5080  CB  THR A 415      -6.971  -7.997  11.410  1.00 21.37           C
ATOM   5081  OG1 THR A 415      -5.634  -7.563  11.574  1.00 17.64           O
ATOM   5082  CG2 THR A 415      -7.029  -8.856  10.133  1.00 20.76           C
ATOM   5083  H   THR A 415      -6.863  -6.089  13.065  1.00  0.00           H
ATOM   5084  HA  THR A 415      -7.767  -6.224  10.481  1.00  0.00           H
ATOM   5085  HB  THR A 415      -7.206  -8.651  12.246  1.00  0.00           H
ATOM   5086  HG1 THR A 415      -5.497  -7.423  12.529  1.00  0.00           H
ATOM   5087 HG21 THR A 415      -6.436  -9.760  10.248  1.00  0.00           H
ATOM   5088 HG22 THR A 415      -8.037  -9.204   9.913  1.00  0.00           H
ATOM   5089 HG23 THR A 415      -6.660  -8.311   9.264  1.00  0.00           H
ATOM   5090  N   PHE A 416     -10.029  -7.546  12.473  1.00 22.70           N
ATOM   5091  CA  PHE A 416     -11.355  -8.140  12.552  1.00 23.45           C
ATOM   5092  C   PHE A 416     -12.399  -7.182  13.136  1.00 22.80           C
ATOM   5093  O   PHE A 416     -13.494  -7.636  13.462  1.00 25.25           O
ATOM   5094  CB  PHE A 416     -11.252  -9.480  13.304  1.00 20.24           C
ATOM   5095  CG  PHE A 416     -10.300 -10.457  12.633  1.00 20.62           C
ATOM   5096  CD1 PHE A 416     -10.685 -11.139  11.463  1.00 20.38           C
ATOM   5097  CD2 PHE A 416      -8.988 -10.603  13.123  1.00 18.91           C
ATOM   5098  CE1 PHE A 416      -9.751 -11.921  10.760  1.00 19.44           C
ATOM   5099  CE2 PHE A 416      -8.057 -11.400  12.434  1.00 18.21           C
ATOM   5100  CZ  PHE A 416      -8.436 -12.047  11.245  1.00 20.50           C
ATOM   5101  H   PHE A 416      -9.468  -7.460  13.318  1.00  0.00           H
ATOM   5102  HA  PHE A 416     -11.736  -8.371  11.557  1.00  0.00           H
ATOM   5103  HB2 PHE A 416     -10.920  -9.312  14.329  1.00  0.00           H
ATOM   5104  HB3 PHE A 416     -12.235  -9.945  13.363  1.00  0.00           H
ATOM   5105  HD1 PHE A 416     -11.682 -11.028  11.080  1.00  0.00           H
ATOM   5106  HD2 PHE A 416      -8.667 -10.047  13.992  1.00  0.00           H
ATOM   5107  HE1 PHE A 416     -10.029 -12.389   9.830  1.00  0.00           H
ATOM   5108  HE2 PHE A 416      -7.038 -11.461  12.793  1.00  0.00           H
ATOM   5109  HZ  PHE A 416      -7.704 -12.617  10.695  1.00  0.00           H
ATOM   5110  N   GLN A 417     -12.107  -5.877  13.266  1.00 23.60           N
ATOM   5111  CA  GLN A 417     -13.048  -4.855  13.748  1.00 22.99           C
ATOM   5112  C   GLN A 417     -14.092  -4.466  12.678  1.00 22.57           C
ATOM   5113  O   GLN A 417     -14.176  -5.091  11.619  1.00 22.49           O
ATOM   5114  CB  GLN A 417     -12.269  -3.613  14.222  1.00 22.97           C
ATOM   5115  CG  GLN A 417     -11.528  -3.860  15.550  1.00 23.29           C
ATOM   5116  CD  GLN A 417     -11.080  -2.595  16.287  1.00 26.35           C
ATOM   5117  OE1 GLN A 417     -10.470  -2.680  17.346  1.00 25.95           O
ATOM   5118  NE2 GLN A 417     -11.396  -1.406  15.785  1.00 24.11           N
ATOM   5119  H   GLN A 417     -11.189  -5.567  12.955  1.00  0.00           H
ATOM   5120  HA  GLN A 417     -13.614  -5.255  14.587  1.00  0.00           H
ATOM   5121  HB2 GLN A 417     -11.580  -3.254  13.456  1.00  0.00           H
ATOM   5122  HB3 GLN A 417     -12.978  -2.809  14.397  1.00  0.00           H
ATOM   5123  HG2 GLN A 417     -12.189  -4.386  16.237  1.00  0.00           H
ATOM   5124  HG3 GLN A 417     -10.674  -4.513  15.388  1.00  0.00           H
ATOM   5125 HE21 GLN A 417     -11.966  -1.310  14.951  1.00  0.00           H
ATOM   5126 HE22 GLN A 417     -11.116  -0.567  16.296  1.00  0.00           H
ATOM   5127  N   GLY A 418     -14.922  -3.452  12.954  1.00 22.92           N
ATOM   5128  CA  GLY A 418     -16.158  -3.180  12.224  1.00 21.05           C
ATOM   5129  C   GLY A 418     -15.988  -2.124  11.135  1.00 21.18           C
ATOM   5130  O   GLY A 418     -16.678  -2.207  10.124  1.00 21.14           O
ATOM   5131  H   GLY A 418     -14.768  -2.912  13.796  1.00  0.00           H
ATOM   5132  HA2 GLY A 418     -16.569  -4.091  11.784  1.00  0.00           H
ATOM   5133  HA3 GLY A 418     -16.903  -2.811  12.929  1.00  0.00           H
ATOM   5134  N   TYR A 419     -15.020  -1.209  11.273  1.00 20.25           N
ATOM   5135  CA  TYR A 419     -14.607  -0.293  10.204  1.00 21.27           C
ATOM   5136  C   TYR A 419     -13.469  -0.931   9.373  1.00 20.92           C
ATOM   5137  O   TYR A 419     -12.973  -0.351   8.407  1.00 19.73           O
ATOM   5138  CB  TYR A 419     -14.100   1.010  10.858  1.00 21.11           C
ATOM   5139  CG  TYR A 419     -14.119   2.217   9.939  1.00 22.25           C
ATOM   5140  CD1 TYR A 419     -15.316   2.938   9.770  1.00 23.37           C
ATOM   5141  CD2 TYR A 419     -12.957   2.627   9.256  1.00 21.83           C
ATOM   5142  CE1 TYR A 419     -15.344   4.084   8.960  1.00 23.61           C
ATOM   5143  CE2 TYR A 419     -12.994   3.744   8.403  1.00 24.89           C
ATOM   5144  CZ  TYR A 419     -14.188   4.478   8.271  1.00 22.99           C
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ATOM   5145  OH  TYR A 419     -14.228   5.610   7.524  1.00 26.03           O
ATOM   5146  H   TYR A 419     -14.518  -1.146  12.152  1.00  0.00           H
ATOM   5147  HA  TYR A 419     -15.450  -0.066   9.548  1.00  0.00           H
ATOM   5148  HB2 TYR A 419     -14.733   1.262  11.710  1.00  0.00           H
ATOM   5149  HB3 TYR A 419     -13.100   0.880  11.274  1.00  0.00           H
ATOM   5150  HD1 TYR A 419     -16.216   2.625  10.277  1.00  0.00           H
ATOM   5151  HD2 TYR A 419     -12.034   2.087   9.384  1.00  0.00           H
ATOM   5152  HE1 TYR A 419     -16.253   4.661   8.867  1.00  0.00           H
ATOM   5153  HE2 TYR A 419     -12.097   4.047   7.883  1.00  0.00           H
ATOM   5154  HH  TYR A 419     -13.546   5.645   6.834  1.00  0.00           H
ATOM   5155  N   SER A 420     -13.042  -2.137   9.754  1.00 19.72           N
ATOM   5156  CA  SER A 420     -11.992  -2.901   9.111  1.00 19.12           C
ATOM   5157  C   SER A 420     -12.591  -3.814   8.036  1.00 19.14           C
ATOM   5158  O   SER A 420     -13.801  -4.071   8.004  1.00 18.72           O
ATOM   5159  CB  SER A 420     -11.325  -3.760  10.190  1.00 20.59           C
ATOM   5160  OG  SER A 420     -10.172  -4.430   9.729  1.00 18.07           O
ATOM   5161  H   SER A 420     -13.574  -2.597  10.474  1.00  0.00           H
ATOM   5162  HA  SER A 420     -11.252  -2.234   8.675  1.00  0.00           H
ATOM   5163  HB2 SER A 420     -11.036  -3.118  11.022  1.00  0.00           H
ATOM   5164  HB3 SER A 420     -12.004  -4.511  10.587  1.00  0.00           H
ATOM   5165  HG  SER A 420      -9.663  -4.614  10.516  1.00  0.00           H
ATOM   5166  N   CYS A 421     -11.699  -4.326   7.188  1.00 20.98           N
ATOM   5167  CA  CYS A 421     -11.983  -5.233   6.089  1.00 19.83           C
ATOM   5168  C   CYS A 421     -11.035  -6.441   6.075  1.00 21.04           C
ATOM   5169  O   CYS A 421     -10.939  -7.141   5.067  1.00 23.25           O
ATOM   5170  CB  CYS A 421     -12.074  -4.467   4.758  1.00 20.05           C
ATOM   5171  SG  CYS A 421     -13.551  -3.427   4.564  1.00 22.53           S
ATOM   5172  H   CYS A 421     -10.725  -4.094   7.369  1.00  0.00           H
ATOM   5173  HA  CYS A 421     -12.963  -5.681   6.252  1.00  0.00           H
ATOM   5174  HB2 CYS A 421     -11.187  -3.849   4.613  1.00  0.00           H
ATOM   5175  HB3 CYS A 421     -12.080  -5.175   3.930  1.00  0.00           H
ATOM   5176  N   GLY A 422     -10.375  -6.761   7.196  1.00 20.19           N
ATOM   5177  CA  GLY A 422      -9.411  -7.861   7.234  1.00 22.14           C
ATOM   5178  C   GLY A 422     -10.122  -9.202   7.423  1.00 22.26           C
ATOM   5179  O   GLY A 422      -9.725 -10.193   6.810  1.00 19.11           O
ATOM   5180  H   GLY A 422     -10.448  -6.164   8.014  1.00  0.00           H
ATOM   5181  HA2 GLY A 422      -8.819  -7.900   6.319  1.00  0.00           H
ATOM   5182  HA3 GLY A 422      -8.703  -7.697   8.044  1.00  0.00           H
ATOM   5183  N   LYS A 423     -11.260  -9.221   8.137  1.00 24.00           N
ATOM   5184  CA  LYS A 423     -12.191 -10.348   8.129  1.00 25.44           C
ATOM   5185  C   LYS A 423     -12.743 -10.564   6.709  1.00 25.53           C
ATOM   5186  O   LYS A 423     -12.758 -11.692   6.227  1.00 26.66           O
ATOM   5187  CB  LYS A 423     -13.365 -10.138   9.115  1.00 26.73           C
ATOM   5188  CG  LYS A 423     -14.115 -11.464   9.389  1.00 31.23           C
ATOM   5189  CD  LYS A 423     -15.520 -11.350  10.008  1.00 34.49           C
ATOM   5190  CE  LYS A 423     -16.513 -10.430   9.274  1.00 36.84           C
ATOM   5191  NZ  LYS A 423     -16.707 -10.758   7.852  1.00 39.84           N1+
ATOM   5192  H   LYS A 423     -11.508  -8.358   8.604  1.00  0.00           H
ATOM   5193  HA  LYS A 423     -11.631 -11.237   8.423  1.00  0.00           H
ATOM   5194  HB2 LYS A 423     -13.020  -9.702  10.051  1.00  0.00           H
ATOM   5195  HB3 LYS A 423     -14.041  -9.396   8.697  1.00  0.00           H
ATOM   5196  HG2 LYS A 423     -14.207 -12.031   8.467  1.00  0.00           H
ATOM   5197  HG3 LYS A 423     -13.497 -12.094  10.029  1.00  0.00           H
ATOM   5198  HD2 LYS A 423     -15.950 -12.350  10.047  1.00  0.00           H
ATOM   5199  HD3 LYS A 423     -15.422 -11.016  11.041  1.00  0.00           H
ATOM   5200  HE2 LYS A 423     -17.485 -10.474   9.766  1.00  0.00           H
ATOM   5201  HE3 LYS A 423     -16.191  -9.394   9.354  1.00  0.00           H
ATOM   5202  HZ1 LYS A 423     -16.440  -9.917   7.317  1.00  0.00           H
ATOM   5203  HZ2 LYS A 423     -16.200 -11.602   7.512  1.00  0.00           H
ATOM   5204  HZ3 LYS A 423     -17.672 -10.915   7.632  1.00  0.00           H
ATOM   5205  N   GLU A 424     -13.161  -9.482   6.043  1.00 23.69           N
ATOM   5206  CA  GLU A 424     -13.749  -9.452   4.707  1.00 23.47           C
ATOM   5207  C   GLU A 424     -12.769 -10.007   3.662  1.00 23.14           C
ATOM   5208  O   GLU A 424     -13.185 -10.795   2.817  1.00 18.61           O
ATOM   5209  CB  GLU A 424     -14.173  -8.005   4.360  1.00 24.63           C
ATOM   5210  CG  GLU A 424     -15.446  -7.479   5.061  1.00 25.57           C
ATOM   5211  CD  GLU A 424     -15.523  -7.716   6.561  1.00 28.25           C
ATOM   5212  OE1 GLU A 424     -14.588  -7.372   7.316  1.00 27.71           O
ATOM   5213  OE2 GLU A 424     -16.517  -8.327   7.014  1.00 33.30           O1-
ATOM   5214  H   GLU A 424     -13.208  -8.605   6.559  1.00  0.00           H
ATOM   5215  HA  GLU A 424     -14.632 -10.094   4.701  1.00  0.00           H
ATOM   5216  HB2 GLU A 424     -13.358  -7.313   4.542  1.00  0.00           H
ATOM   5217  HB3 GLU A 424     -14.353  -7.937   3.285  1.00  0.00           H
ATOM   5218  HG2 GLU A 424     -15.540  -6.408   4.883  1.00  0.00           H
ATOM   5219  HG3 GLU A 424     -16.322  -7.935   4.599  1.00  0.00           H
ATOM   5220  N   TYR A 425     -11.469  -9.691   3.772  1.00 21.56           N
ATOM   5221  CA  TYR A 425     -10.394 -10.324   3.005  1.00 21.96           C
ATOM   5222  C   TYR A 425     -10.357 -11.846   3.239  1.00 23.23           C
ATOM   5223  O   TYR A 425     -10.469 -12.625   2.290  1.00 21.80           O
ATOM   5224  CB  TYR A 425      -9.027  -9.679   3.338  1.00 21.92           C
ATOM   5225  CG  TYR A 425      -7.868 -10.410   2.684  1.00 20.41           C
ATOM   5226  CD1 TYR A 425      -7.731 -10.364   1.283  1.00 20.32           C
ATOM   5227  CD2 TYR A 425      -7.004 -11.227   3.448  1.00 20.40           C
ATOM   5228  CE1 TYR A 425      -6.769 -11.163   0.645  1.00 17.64           C
ATOM   5229  CE2 TYR A 425      -6.033 -12.019   2.805  1.00 18.10           C
ATOM   5230  CZ  TYR A 425      -5.930 -11.996   1.402  1.00 19.87           C
ATOM   5231  OH  TYR A 425      -5.061 -12.810   0.747  1.00 16.52           O
ATOM   5232  H   TYR A 425     -11.217  -8.977   4.450  1.00  0.00           H
ATOM   5233  HA  TYR A 425     -10.598 -10.168   1.944  1.00  0.00           H
ATOM   5234  HB2 TYR A 425      -9.013  -8.639   3.008  1.00  0.00           H
ATOM   5235  HB3 TYR A 425      -8.865  -9.651   4.415  1.00  0.00           H
ATOM   5236  HD1 TYR A 425      -8.389  -9.744   0.693  1.00  0.00           H
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ATOM   5237  HD2 TYR A 425      -7.106 -11.278   4.524  1.00  0.00           H
ATOM   5238  HE1 TYR A 425      -6.690 -11.155  -0.431  1.00  0.00           H
ATOM   5239  HE2 TYR A 425      -5.399 -12.668   3.390  1.00  0.00           H
ATOM   5240  HH  TYR A 425      -4.261 -13.041   1.203  1.00  0.00           H
ATOM   5241  N   TYR A 426     -10.248 -12.268   4.507  1.00 21.99           N
ATOM   5242  CA  TYR A 426     -10.220 -13.669   4.925  1.00 23.50           C
ATOM   5243  C   TYR A 426     -11.446 -14.466   4.440  1.00 23.34           C
ATOM   5244  O   TYR A 426     -11.306 -15.615   4.021  1.00 24.05           O
ATOM   5245  CB  TYR A 426     -10.103 -13.759   6.462  1.00 22.73           C
ATOM   5246  CG  TYR A 426      -8.711 -13.986   7.021  1.00 23.27           C
ATOM   5247  CD1 TYR A 426      -8.003 -12.943   7.649  1.00 22.47           C
ATOM   5248  CD2 TYR A 426      -8.152 -15.279   6.999  1.00 22.87           C
ATOM   5249  CE1 TYR A 426      -6.770 -13.200   8.273  1.00 21.19           C
ATOM   5250  CE2 TYR A 426      -6.900 -15.529   7.588  1.00 22.99           C
ATOM   5251  CZ  TYR A 426      -6.221 -14.494   8.253  1.00 22.86           C
ATOM   5252  OH  TYR A 426      -5.054 -14.747   8.905  1.00 23.29           O
ATOM   5253  H   TYR A 426     -10.173 -11.557   5.228  1.00  0.00           H
ATOM   5254  HA  TYR A 426      -9.342 -14.133   4.470  1.00  0.00           H
ATOM   5255  HB2 TYR A 426     -10.537 -12.878   6.934  1.00  0.00           H
ATOM   5256  HB3 TYR A 426     -10.704 -14.592   6.826  1.00  0.00           H
ATOM   5257  HD1 TYR A 426      -8.405 -11.945   7.702  1.00  0.00           H
ATOM   5258  HD2 TYR A 426      -8.702 -16.098   6.571  1.00  0.00           H
ATOM   5259  HE1 TYR A 426      -6.258 -12.396   8.779  1.00  0.00           H
ATOM   5260  HE2 TYR A 426      -6.487 -16.526   7.565  1.00  0.00           H
ATOM   5261  HH  TYR A 426      -4.571 -15.487   8.563  1.00  0.00           H
ATOM   5262  N   ASP A 427     -12.636 -13.860   4.491  1.00 22.93           N
ATOM   5263  CA  ASP A 427     -13.916 -14.459   4.110  1.00 24.60           C
ATOM   5264  C   ASP A 427     -14.107 -14.460   2.584  1.00 23.59           C
ATOM   5265  O   ASP A 427     -14.650 -15.429   2.057  1.00 22.45           O
ATOM   5266  CB  ASP A 427     -15.097 -13.699   4.769  1.00 25.71           C
ATOM   5267  CG  ASP A 427     -15.158 -13.784   6.295  1.00 25.52           C
ATOM   5268  OD1 ASP A 427     -14.475 -14.653   6.886  1.00 30.54           O
ATOM   5269  OD2 ASP A 427     -15.894 -12.974   6.901  1.00 26.99          O1-
ATOM   5270  H   ASP A 427     -12.664 -12.930   4.908  1.00  0.00           H
ATOM   5271  HA  ASP A 427     -13.938 -15.499   4.443  1.00  0.00           H
ATOM   5272  HB2 ASP A 427     -15.067 -12.646   4.485  1.00  0.00           H
ATOM   5273  HB3 ASP A 427     -16.043 -14.089   4.392  1.00  0.00           H
ATOM   5274  N   ALA A 428     -13.610 -13.442   1.861  1.00 23.60           N
ATOM   5275  CA  ALA A 428     -13.609 -13.380   0.394  1.00 22.71           C
ATOM   5276  C   ALA A 428     -12.614 -14.385  -0.213  1.00 22.99           C
ATOM   5277  O   ALA A 428     -12.844 -14.935  -1.297  1.00 21.89           O
ATOM   5278  CB  ALA A 428     -13.209 -11.967  -0.060  1.00 22.18           C
ATOM   5279  H   ALA A 428     -13.232 -12.637   2.354  1.00  0.00           H
ATOM   5280  HA  ALA A 428     -14.610 -13.610   0.022  1.00  0.00           H
ATOM   5281  HB1 ALA A 428     -13.150 -11.901  -1.147  1.00  0.00           H
ATOM   5282  HB2 ALA A 428     -13.941 -11.229   0.266  1.00  0.00           H
ATOM   5283  HB3 ALA A 428     -12.236 -11.671   0.337  1.00  0.00           H
ATOM   5284  N   GLN A 429     -11.510 -14.656   0.498  1.00 21.48           N
ATOM   5285  CA  GLN A 429     -10.603 -15.755   0.200  1.00 23.47           C
ATOM   5286  C   GLN A 429     -11.293 -17.095   0.514  1.00 23.16           C
ATOM   5287  O   GLN A 429     -11.418 -17.935  -0.382  1.00 24.44           O
ATOM   5288  CB  GLN A 429      -9.290 -15.615   1.004  1.00 24.04           C
ATOM   5289  CG  GLN A 429      -8.313 -14.543   0.469  1.00 23.93           C
ATOM   5290  CD  GLN A 429      -7.607 -14.951  -0.829  1.00 27.30           C
ATOM   5291  OE1 GLN A 429      -8.133 -15.733  -1.615  1.00 28.29           O
ATOM   5292  NE2 GLN A 429      -6.408 -14.446  -1.070  1.00 21.69           N
ATOM   5293  H   GLN A 429     -11.317 -14.069   1.306  1.00  0.00           H
ATOM   5294  HA  GLN A 429     -10.395 -15.736  -0.865  1.00  0.00           H
ATOM   5295  HB2 GLN A 429      -9.510 -15.403   2.049  1.00  0.00           H
ATOM   5296  HB3 GLN A 429      -8.763 -16.570   1.001  1.00  0.00           H
ATOM   5297  HG2 GLN A 429      -8.825 -13.593   0.314  1.00  0.00           H
ATOM   5298  HG3 GLN A 429      -7.553 -14.359   1.227  1.00  0.00           H
ATOM   5299 HE21 GLN A 429      -5.942 -13.814  -0.416  1.00  0.00           H
ATOM   5300 HE22 GLN A 429      -5.907 -14.730  -1.917  1.00  0.00           H
ATOM   5301  N   GLY A 430     -11.793 -17.245   1.746  1.00 24.56           N
ATOM   5302  CA  GLY A 430     -12.496 -18.419   2.265  1.00 25.89           C
ATOM   5303  C   GLY A 430     -11.734 -19.084   3.422  1.00 27.73           C
ATOM   5304  O   GLY A 430     -12.000 -20.233   3.762  1.00 27.40           O
ATOM   5305  H   GLY A 430     -11.697 -16.460   2.383  1.00  0.00           H
ATOM   5306  HA2 GLY A 430     -13.476 -18.106   2.625  1.00  0.00           H
ATOM   5307  HA3 GLY A 430     -12.669 -19.161   1.485  1.00  0.00           H
ATOM   5308  N   LEU A 431     -10.751 -18.385   4.000  1.00 26.14           N
ATOM   5309  CA  LEU A 431      -9.737 -18.920   4.897  1.00 27.26           C
ATOM   5310  C   LEU A 431     -10.152 -18.807   6.378  1.00 25.34           C
ATOM   5311  O   LEU A 431     -10.915 -17.919   6.786  1.00 25.57           O
ATOM   5312  CB  LEU A 431      -8.448 -18.092   4.679  1.00 26.32           C
ATOM   5313  CG  LEU A 431      -7.724 -18.357   3.342  1.00 26.85           C
ATOM   5314  CD1 LEU A 431      -6.698 -17.248   3.056  1.00 28.01           C
ATOM   5315  CD2 LEU A 431      -7.041 -19.734   3.308  1.00 26.82           C
ATOM   5316  H   LEU A 431     -10.699 -17.397   3.779  1.00  0.00           H
ATOM   5317  HA  LEU A 431      -9.557 -19.971   4.666  1.00  0.00           H
ATOM   5318  HB2 LEU A 431      -8.715 -17.036   4.702  1.00  0.00           H
ATOM   5319  HB3 LEU A 431      -7.744 -18.244   5.500  1.00  0.00           H
ATOM   5320  HG  LEU A 431      -8.459 -18.332   2.537  1.00  0.00           H
ATOM   5321 HD11 LEU A 431      -6.224 -17.389   2.083  1.00  0.00           H
ATOM   5322 HD12 LEU A 431      -7.164 -16.262   3.045  1.00  0.00           H
ATOM   5323 HD13 LEU A 431      -5.908 -17.230   3.807  1.00  0.00           H
ATOM   5324 HD21 LEU A 431      -6.515 -19.883   2.364  1.00  0.00           H
ATOM   5325 HD22 LEU A 431      -6.307 -19.837   4.109  1.00  0.00           H
ATOM   5326 HD23 LEU A 431      -7.758 -20.549   3.401  1.00  0.00           H
ATOM   5327  N   VAL A 432      -9.598 -19.718   7.189  1.00 24.67           N
ATOM   5328  CA  VAL A 432      -9.700 -19.791   8.646  1.00 24.91           C
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ATOM   5329  C   VAL A 432      -8.847 -18.660   9.256  1.00 24.65          C
ATOM   5330  O   VAL A 432      -7.816 -18.294   8.701  1.00 23.35          O
ATOM   5331  CB  VAL A 432      -9.194 -21.187   9.116  1.00 26.40          C
ATOM   5332  CG1 VAL A 432      -9.321 -21.399  10.639  1.00 27.65          C
ATOM   5333  CG2 VAL A 432      -9.910 -22.343   8.386  1.00 27.01          C
ATOM   5334  H   VAL A 432      -8.933 -20.347   6.767  1.00  0.00          H
ATOM   5335  HA  VAL A 432     -10.746 -19.658   8.929  1.00  0.00          H
ATOM   5336  HB  VAL A 432      -8.131 -21.261   8.872  1.00  0.00          H
ATOM   5337 HG11 VAL A 432      -8.984 -22.397  10.923  1.00  0.00          H
ATOM   5338 HG12 VAL A 432      -8.708 -20.696  11.206  1.00  0.00          H
ATOM   5339 HG13 VAL A 432     -10.353 -21.294  10.974  1.00  0.00          H
ATOM   5340 HG21 VAL A 432      -9.559 -23.312   8.744  1.00  0.00          H
ATOM   5341 HG22 VAL A 432     -10.988 -22.305   8.541  1.00  0.00          H
ATOM   5342 HG23 VAL A 432      -9.731 -22.328   7.310  1.00  0.00          H
ATOM   5343  N   LYS A 433      -9.306 -18.094  10.376  1.00 25.23          N
ATOM   5344  CA  LYS A 433      -8.800 -16.864  10.989  1.00 27.01          C
ATOM   5345  C   LYS A 433      -8.220 -17.168  12.393  1.00 28.68          C
ATOM   5346  O   LYS A 433      -8.644 -18.154  13.004  1.00 29.12          O
ATOM   5347  CB  LYS A 433     -10.002 -15.897  11.052  1.00 26.07          C
ATOM   5348  CG  LYS A 433     -10.402 -15.353   9.665  1.00 25.95          C
ATOM   5349  CD  LYS A 433     -11.851 -14.843   9.580  1.00 27.29          C
ATOM   5350  CE  LYS A 433     -12.871 -15.966   9.316  1.00 27.92          C
ATOM   5351  NZ  LYS A 433     -12.934 -16.355   7.895  1.00 27.82          N1+
ATOM   5352  H   LYS A 433     -10.032 -18.568  10.886  1.00  0.00          H
ATOM   5353  HA  LYS A 433      -8.017 -16.429  10.367  1.00  0.00          H
ATOM   5354  HB2 LYS A 433     -10.846 -16.408  11.515  1.00  0.00          H
ATOM   5355  HB3 LYS A 433      -9.777 -15.050  11.700  1.00  0.00          H
ATOM   5356  HG2 LYS A 433      -9.714 -14.543   9.435  1.00  0.00          H
ATOM   5357  HG3 LYS A 433     -10.235 -16.094   8.884  1.00  0.00          H
ATOM   5358  HD2 LYS A 433     -12.095 -14.329  10.510  1.00  0.00          H
ATOM   5359  HD3 LYS A 433     -11.942 -14.079   8.805  1.00  0.00          H
ATOM   5360  HE2 LYS A 433     -12.653 -16.839   9.931  1.00  0.00          H
ATOM   5361  HE3 LYS A 433     -13.868 -15.622   9.597  1.00  0.00          H
ATOM   5362  HZ1 LYS A 433     -13.519 -17.160   7.761  1.00  0.00          H
ATOM   5363  HZ2 LYS A 433     -13.440 -15.591   7.390  1.00  0.00          H
ATOM   5364  HZ3 LYS A 433     -12.035 -16.547   7.465  1.00  0.00          H
ATOM   5365  N   PRO A 434      -7.264 -16.360  12.914  1.00 29.99          N
ATOM   5366  CA  PRO A 434      -6.523 -16.651  14.154  1.00 31.36          C
ATOM   5367  C   PRO A 434      -7.360 -16.500  15.443  1.00 32.47          C
ATOM   5368  O   PRO A 434      -8.276 -15.685  15.519  1.00 33.32          O
ATOM   5369  CB  PRO A 434      -5.317 -15.700  14.119  1.00 31.69          C
ATOM   5370  CG  PRO A 434      -5.777 -14.516  13.282  1.00 29.64          C
ATOM   5371  CD  PRO A 434      -6.781 -15.120  12.301  1.00 30.38          C
ATOM   5372  HA  PRO A 434      -6.161 -17.679  14.100  1.00  0.00          H
ATOM   5373  HB2 PRO A 434      -4.955 -15.407  15.103  1.00  0.00          H
ATOM   5374  HB3 PRO A 434      -4.484 -16.190  13.613  1.00  0.00          H
ATOM   5375  HG2 PRO A 434      -6.284 -13.784  13.911  1.00  0.00          H
ATOM   5376  HG3 PRO A 434      -4.955 -14.001  12.781  1.00  0.00          H
ATOM   5377  HD2 PRO A 434      -7.597 -14.429  12.107  1.00  0.00          H
ATOM   5378  HD3 PRO A 434      -6.283 -15.339  11.355  1.00  0.00          H
ATOM   5379  N   LYS A 435      -7.016 -17.326  16.442  1.00 34.56          N
ATOM   5380  CA  LYS A 435      -7.722 -17.768  17.657  1.00 36.88          C
ATOM   5381  C   LYS A 435      -8.711 -16.870  18.436  1.00 37.85          C
ATOM   5382  O   LYS A 435      -9.447 -17.413  19.260  1.00 39.08          O
ATOM   5383  CB  LYS A 435      -6.749 -18.510  18.602  1.00 38.28          C
ATOM   5384  CG  LYS A 435      -6.176 -19.820  18.033  1.00 40.34          C
ATOM   5385  CD  LYS A 435      -5.190 -20.476  19.011  1.00 42.32          C
ATOM   5386  CE  LYS A 435      -4.625 -21.809  18.496  1.00 43.22          C
ATOM   5387  NZ  LYS A 435      -3.536 -22.276  19.358  1.00 42.23          N1+
ATOM   5388  H   LYS A 435      -6.166 -17.836  16.261  1.00  0.00          H
ATOM   5389  HA  LYS A 435      -8.394 -18.535  17.269  1.00  0.00          H
ATOM   5390  HB2 LYS A 435      -5.937 -17.843  18.887  1.00  0.00          H
ATOM   5391  HB3 LYS A 435      -7.259 -18.748  19.537  1.00  0.00          H
ATOM   5392  HG2 LYS A 435      -6.993 -20.509  17.812  1.00  0.00          H
ATOM   5393  HG3 LYS A 435      -5.667 -19.628  17.088  1.00  0.00          H
ATOM   5394  HD2 LYS A 435      -4.365 -19.782  19.189  1.00  0.00          H
ATOM   5395  HD3 LYS A 435      -5.674 -20.631  19.976  1.00  0.00          H
ATOM   5396  HE2 LYS A 435      -5.401 -22.572  18.427  1.00  0.00          H
ATOM   5397  HE3 LYS A 435      -4.209 -21.675  17.495  1.00  0.00          H
ATOM   5398  HZ1 LYS A 435      -2.959 -22.989  18.910  1.00  0.00          H
ATOM   5399  HZ2 LYS A 435      -2.803 -21.541  19.313  1.00  0.00          H
ATOM   5400  HZ3 LYS A 435      -3.750 -22.498  20.311  1.00  0.00          H
ATOM   5401  N   ASN A 436      -8.783 -15.553  18.217  1.00 38.38          N
ATOM   5402  CA  ASN A 436      -9.768 -14.670  18.862  1.00 38.54          C
ATOM   5403  C   ASN A 436     -10.418 -13.632  17.939  1.00 36.60          C
ATOM   5404  O   ASN A 436     -11.046 -12.694  18.431  1.00 35.38          O
ATOM   5405  CB  ASN A 436      -9.391 -14.194  20.289  1.00 41.89          C
ATOM   5406  CG  ASN A 436      -8.155 -13.299  20.407  1.00 46.16          C
ATOM   5407  OD1 ASN A 436      -7.060 -13.782  20.696  1.00 46.58          O
ATOM   5408  ND2 ASN A 436      -8.336 -11.990  20.276  1.00 48.00          N
ATOM   5409  H   ASN A 436      -8.179 -15.173  17.497  1.00  0.00          H
ATOM   5410  HA  ASN A 436     -10.643 -15.297  19.041  1.00  0.00          H
ATOM   5411  HB2 ASN A 436     -10.237 -13.673  20.740  1.00  0.00          H
ATOM   5412  HB3 ASN A 436      -9.229 -15.067  20.922  1.00  0.00          H
ATOM   5413 HD21 ASN A 436      -9.236 -11.612  20.017  1.00  0.00          H
ATOM   5414 HD22 ASN A 436      -7.578 -11.329  20.455  1.00  0.00          H
ATOM   5415  N   TRP A 437     -10.322 -13.839  16.616  1.00 33.69          N
ATOM   5416  CA  TRP A 437     -10.846 -13.002  15.526  1.00 32.40          C
ATOM   5417  C   TRP A 437     -12.288 -12.493  15.714  1.00 31.88          C
ATOM   5418  O   TRP A 437     -12.589 -11.328  15.470  1.00 31.51          O
ATOM   5419  CB  TRP A 437     -10.694 -13.756  14.184  1.00 31.53          C
ATOM   5420  CG  TRP A 437     -11.576 -14.956  13.959  1.00 29.81          C
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ATOM   5421  CD1 TRP A 437     -11.295 -16.233  14.305  1.00 30.15           C
ATOM   5422  CD2 TRP A 437     -12.896 -15.005  13.329  1.00 29.74           C
ATOM   5423  NE1 TRP A 437     -12.336 -17.059  13.939  1.00 29.97           N
ATOM   5424  CE3 TRP A 437     -13.760 -14.039  12.763  1.00 28.47           C
ATOM   5425  CE2 TRP A 437     -13.355 -16.358  13.334  1.00 28.86           C
ATOM   5426  CZ3 TRP A 437     -15.017 -14.401  12.238  1.00 29.95           C
ATOM   5427  CZ2 TRP A 437     -14.601 -16.733  12.802  1.00 30.78           C
ATOM   5428  CH2 TRP A 437     -15.436 -15.746  12.251  1.00 28.37           C
ATOM   5429  H   TRP A 437      -9.741 -14.618  16.319  1.00  0.00           H
ATOM   5430  HA  TRP A 437     -10.213 -12.115  15.481  1.00  0.00           H
ATOM   5431  HB2 TRP A 437     -10.895 -13.066  13.368  1.00  0.00           H
ATOM   5432  HB3 TRP A 437      -9.653 -14.049  14.046  1.00  0.00           H
ATOM   5433  HD1 TRP A 437     -10.386 -16.557  14.787  1.00  0.00           H
ATOM   5434  HE1 TRP A 437     -12.311 -18.056  14.107  1.00  0.00           H
ATOM   5435  HE3 TRP A 437     -13.450 -13.003  12.746  1.00  0.00           H
ATOM   5436  HZ3 TRP A 437     -15.665 -13.644  11.826  1.00  0.00           H
ATOM   5437  HZ2 TRP A 437     -14.918 -17.766  12.822  1.00  0.00           H
ATOM   5438  HH2 TRP A 437     -16.399 -16.017  11.841  1.00  0.00           H
ATOM   5439  N   LYS A 438     -13.195 -13.379  16.145  1.00 30.82           N
ATOM   5440  CA  LYS A 438     -14.638 -13.136  16.163  1.00 31.39           C
ATOM   5441  C   LYS A 438     -15.019 -12.046  17.187  1.00 29.84           C
ATOM   5442  O   LYS A 438     -15.981 -11.317  16.961  1.00 28.51           O
ATOM   5443  CB  LYS A 438     -15.361 -14.476  16.467  1.00 33.89           C
ATOM   5444  CG  LYS A 438     -16.796 -14.634  15.903  1.00 35.72           C
ATOM   5445  CD  LYS A 438     -17.825 -13.655  16.495  1.00 37.55           C
ATOM   5446  CE  LYS A 438     -19.295 -14.062  16.345  1.00 37.38           C
ATOM   5447  NZ  LYS A 438     -20.157 -13.101  17.053  1.00 33.68           N1+
ATOM   5448  H   LYS A 438     -12.860 -14.317  16.304  1.00  0.00           H
ATOM   5449  HA  LYS A 438     -14.927 -12.787  15.169  1.00  0.00           H
ATOM   5450  HB2 LYS A 438     -14.776 -15.291  16.035  1.00  0.00           H
ATOM   5451  HB3 LYS A 438     -15.363 -14.666  17.542  1.00  0.00           H
ATOM   5452  HG2 LYS A 438     -16.780 -14.543  14.816  1.00  0.00           H
ATOM   5453  HG3 LYS A 438     -17.118 -15.654  16.112  1.00  0.00           H
ATOM   5454  HD2 LYS A 438     -17.603 -13.521  17.555  1.00  0.00           H
ATOM   5455  HD3 LYS A 438     -17.705 -12.685  16.015  1.00  0.00           H
ATOM   5456  HE2 LYS A 438     -19.577 -14.106  15.293  1.00  0.00           H
ATOM   5457  HE3 LYS A 438     -19.459 -15.052  16.773  1.00  0.00           H
ATOM   5458  HZ1 LYS A 438     -21.134 -13.333  16.994  1.00  0.00           H
ATOM   5459  HZ2 LYS A 438     -19.889 -13.149  18.064  1.00  0.00           H
ATOM   5460  HZ3 LYS A 438     -19.989 -12.149  16.757  1.00  0.00           H
ATOM   5461  N   LYS A 439     -14.250 -11.884  18.275  1.00 29.46           N
ATOM   5462  CA  LYS A 439     -14.542 -10.946  19.364  1.00 32.01           C
ATOM   5463  C   LYS A 439     -14.581  -9.470  18.936  1.00 31.47           C
ATOM   5464  O   LYS A 439     -15.238  -8.659  19.586  1.00 31.96           O
ATOM   5465  CB  LYS A 439     -13.510 -11.127  20.499  1.00 33.79           C
ATOM   5466  CG  LYS A 439     -13.624 -12.452  21.283  1.00 37.29           C
ATOM   5467  CD  LYS A 439     -15.017 -12.753  21.876  1.00 37.29           C
ATOM   5468  CE  LYS A 439     -15.591 -11.636  22.771  1.00 40.03           C
ATOM   5469  NZ  LYS A 439     -16.967 -11.940  23.191  1.00 40.12           N1+
ATOM   5470  H   LYS A 439     -13.378 -12.397  18.315  1.00  0.00           H
ATOM   5471  HA  LYS A 439     -15.547 -11.163  19.728  1.00  0.00           H
ATOM   5472  HB2 LYS A 439     -12.502 -11.036  20.088  1.00  0.00           H
ATOM   5473  HB3 LYS A 439     -13.590 -10.296  21.203  1.00  0.00           H
ATOM   5474  HG2 LYS A 439     -13.334 -13.276  20.630  1.00  0.00           H
ATOM   5475  HG3 LYS A 439     -12.885 -12.443  22.085  1.00  0.00           H
ATOM   5476  HD2 LYS A 439     -15.711 -12.966  21.060  1.00  0.00           H
ATOM   5477  HD3 LYS A 439     -14.955 -13.680  22.447  1.00  0.00           H
ATOM   5478  HE2 LYS A 439     -14.960 -11.482  23.648  1.00  0.00           H
ATOM   5479  HE3 LYS A 439     -15.626 -10.689  22.229  1.00  0.00           H
ATOM   5480  HZ1 LYS A 439     -17.379 -11.181  23.708  1.00  0.00           H
ATOM   5481  HZ2 LYS A 439     -17.541 -12.047  22.315  1.00  0.00           H
ATOM   5482  HZ3 LYS A 439     -17.039 -12.807  23.693  1.00  0.00           H
ATOM   5483  N   PHE A 440     -13.923  -9.138  17.826  1.00 29.67           N
ATOM   5484  CA  PHE A 440     -13.855  -7.795  17.267  1.00 30.46           C
ATOM   5485  C   PHE A 440     -15.074  -7.484  16.370  1.00 32.12           C
ATOM   5486  O   PHE A 440     -15.343  -6.317  16.101  1.00 32.41           O
ATOM   5487  CB  PHE A 440     -12.560  -7.723  16.453  1.00 27.41           C
ATOM   5488  CG  PHE A 440     -11.303  -7.833  17.292  1.00 25.90           C
ATOM   5489  CD1 PHE A 440     -10.809  -6.686  17.942  1.00 25.42           C
ATOM   5490  CD2 PHE A 440     -10.620  -9.061  17.426  1.00 24.33           C
ATOM   5491  CE1 PHE A 440      -9.636  -6.760  18.709  1.00 23.50           C
ATOM   5492  CE2 PHE A 440      -9.452  -9.134  18.209  1.00 24.72           C
ATOM   5493  CZ  PHE A 440      -8.956  -7.983  18.846  1.00 23.12           C
ATOM   5494  H   PHE A 440     -13.393  -9.854  17.349  1.00  0.00           H
ATOM   5495  HA  PHE A 440     -13.818  -7.049  18.064  1.00  0.00           H
ATOM   5496  HB2 PHE A 440     -12.554  -8.505  15.696  1.00  0.00           H
ATOM   5497  HB3 PHE A 440     -12.510  -6.772  15.928  1.00  0.00           H
ATOM   5498  HD1 PHE A 440     -11.301  -5.730  17.843  1.00  0.00           H
ATOM   5499  HD2 PHE A 440     -10.972  -9.946  16.921  1.00  0.00           H
ATOM   5500  HE1 PHE A 440      -9.259  -5.856  19.161  1.00  0.00           H
ATOM   5501  HE2 PHE A 440      -8.912 -10.061  18.301  1.00  0.00           H
ATOM   5502  HZ  PHE A 440      -8.042  -8.034  19.416  1.00  0.00           H
ATOM   5503  N   ARG A 441     -15.887  -8.489  16.001  1.00 33.77           N
ATOM   5504  CA  ARG A 441     -17.256  -8.312  15.504  1.00 36.52           C
ATOM   5505  C   ARG A 441     -18.221  -8.773  16.620  1.00 38.32           C
ATOM   5506  O   ARG A 441     -19.159  -9.542  16.381  1.00 39.68           O
ATOM   5507  CB  ARG A 441     -17.494  -9.090  14.181  1.00 36.16           C
ATOM   5508  CG  ARG A 441     -16.580  -8.727  12.988  1.00 36.35           C
ATOM   5509  CD  ARG A 441     -16.618  -7.257  12.503  1.00 37.85           C
ATOM   5510  NE  ARG A 441     -17.226  -7.099  11.164  1.00 37.46           N
ATOM   5511  CZ  ARG A 441     -16.616  -6.909   9.981  1.00 38.15           C
ATOM   5512  NH1 ARG A 441     -15.295  -6.852   9.835  1.00 39.40           N
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ATOM   5513  NH2 ARG A 441     -17.394  -6.809   8.915  1.00 37.27          N1+
ATOM   5514  H   ARG A 441     -15.646  -9.417  16.333  1.00  0.00           H
ATOM   5515  HA  ARG A 441     -17.479  -7.258  15.335  1.00  0.00           H
ATOM   5516  HB2 ARG A 441     -17.390 -10.158  14.378  1.00  0.00           H
ATOM   5517  HB3 ARG A 441     -18.529  -8.944  13.870  1.00  0.00           H
ATOM   5518  HG2 ARG A 441     -15.557  -8.990  13.252  1.00  0.00           H
ATOM   5519  HG3 ARG A 441     -16.828  -9.385  12.157  1.00  0.00           H
ATOM   5520  HD2 ARG A 441     -17.147  -6.613  13.204  1.00  0.00           H
ATOM   5521  HD3 ARG A 441     -15.607  -6.874  12.472  1.00  0.00           H
ATOM   5522  HE  ARG A 441     -18.234  -7.019  11.143  1.00  0.00           H
ATOM   5523 HH11 ARG A 441     -14.716  -6.396  10.549  1.00  0.00           H
ATOM   5524 HH12 ARG A 441     -14.893  -6.897   8.868  1.00  0.00           H
ATOM   5525 HH21 ARG A 441     -17.290  -5.888   8.445  1.00  0.00           H
ATOM   5526 HH22 ARG A 441     -17.112  -7.439   8.125  1.00  0.00           H
ATOM   5527  N   GLU A 442     -17.947  -8.307  17.846  1.00 40.76           N
ATOM   5528  CA  GLU A 442     -18.770  -8.366  19.054  1.00 41.35           C
ATOM   5529  C   GLU A 442     -18.539  -7.093  19.877  1.00 40.88           C
ATOM   5530  O   GLU A 442     -19.496  -6.469  20.323  1.00 41.44           O
ATOM   5531  CB  GLU A 442     -18.539  -9.646  19.886  1.00 43.85           C
ATOM   5532  CG  GLU A 442     -18.877 -10.937  19.132  1.00 47.68           C
ATOM   5533  CD  GLU A 442     -18.862 -12.191  19.984  1.00 49.70           C
ATOM   5534  OE1 GLU A 442     -18.279 -12.172  21.088  1.00 49.65           O
ATOM   5535  OE2 GLU A 442     -19.406 -13.189  19.468  1.00 50.39          O1-
ATOM   5536  H   GLU A 442     -17.155  -7.681  17.903  1.00  0.00           H
ATOM   5537  HA  GLU A 442     -19.817  -8.342  18.745  1.00  0.00           H
ATOM   5538  HB2 GLU A 442     -17.510  -9.688  20.238  1.00  0.00           H
ATOM   5539  HB3 GLU A 442     -19.158  -9.590  20.783  1.00  0.00           H
ATOM   5540  HG2 GLU A 442     -19.870 -10.834  18.696  1.00  0.00           H
ATOM   5541  HG3 GLU A 442     -18.172 -11.087  18.318  1.00  0.00           H
ATOM   5542  N   NMA A 442A    -17.270  -6.705  20.060  1.00  0.00           N
ATOM   5543  CA  NMA A 442A    -16.887  -5.476  20.740  1.00  0.00           C
ATOM   5544  H   NMA A 442A    -16.522  -7.332  19.770  1.00  0.00           H
ATOM   5545 1HA  NMA A 442A    -15.801  -5.382  20.767  1.00  0.00           H
ATOM   5546 2HA  NMA A 442A    -17.291  -4.606  20.220  1.00  0.00           H
ATOM   5547 3HA  NMA A 442A    -17.259  -5.465  21.765  1.00  0.00           H
TER    5548      NMA A 442A
HETATM 5549  O   SPC     5      -1.751  -0.663  20.505  1.00  0.00           O
HETATM 5550  H1  SPC     5      -1.719  -1.510  21.068  1.00  0.00           H
HETATM 5551  H2  SPC     5      -1.592  -0.918  19.537  1.00  0.00           H
HETATM 5552  O   SPC     9      -3.447   8.598  14.864  1.00  0.00           O
HETATM 5553  H1  SPC     9      -2.810   9.356  14.671  1.00  0.00           H
HETATM 5554  H2  SPC     9      -3.172   8.167  15.731  1.00  0.00           H
HETATM 5555  O   SPC    12      -7.838   6.566  17.747  1.00  0.00           O
HETATM 5556  H1  SPC    12      -8.477   6.047  17.164  1.00  0.00           H
HETATM 5557  H2  SPC    12      -7.739   7.498  17.371  1.00  0.00           H
HETATM 5558  O   SPC    13      -3.017   5.292  18.289  1.00  0.00           O
HETATM 5559  H1  SPC    13      -2.690   6.199  17.996  1.00  0.00           H
HETATM 5560  H2  SPC    13      -4.000   5.365  18.519  1.00  0.00           H
HETATM 5561  O   SPC    14       5.018   2.335  22.041  1.00  0.00           O
HETATM 5562  H1  SPC    14       4.124   2.243  22.500  1.00  0.00           H
HETATM 5563  H2  SPC    14       5.366   1.406  21.840  1.00  0.00           H
HETATM 5564  O   SPC    15       2.270   7.502  17.124  1.00  0.00           O
HETATM 5565  H1  SPC    15       3.053   8.029  17.484  1.00  0.00           H
HETATM 5566  H2  SPC    15       1.855   8.049  16.376  1.00  0.00           H
HETATM 5567  O   SPC    17       4.361   9.266  17.516  1.00  0.00           O
HETATM 5568  H1  SPC    17       4.669   9.276  16.556  1.00  0.00           H
HETATM 5569  H2  SPC    17       5.115   8.912  18.089  1.00  0.00           H
HETATM 5570  O   SPC    19      -5.745   2.897  19.688  1.00  0.00           O
HETATM 5571  H1  SPC    19      -6.121   2.626  20.577  1.00  0.00           H
HETATM 5572  H2  SPC    19      -4.937   2.318  19.495  1.00  0.00           H
HETATM 5573  O   SPC    21      -4.946   8.252  18.151  1.00  0.00           O
HETATM 5574  H1  SPC    21      -5.175   7.404  18.647  1.00  0.00           H
HETATM 5575  H2  SPC    21      -5.773   8.560  17.655  1.00  0.00           H
HETATM 5576  O   SPC    22      -7.181   3.103  17.305  1.00  0.00           O
HETATM 5577  H1  SPC    22      -6.380   3.128  16.691  1.00  0.00           H
HETATM 5578  H2  SPC    22      -6.841   3.106  18.257  1.00  0.00           H
HETATM 5579  O   SPC    26       6.400   7.922  18.796  1.00  0.00           O
HETATM 5580  H1  SPC    26       6.402   7.646  19.760  1.00  0.00           H
HETATM 5581  H2  SPC    26       6.199   7.104  18.228  1.00  0.00           H
HETATM 5582  O   SPC    31      -0.192   6.139  16.962  1.00  0.00           O
HETATM 5583  H1  SPC    31       0.664   6.634  17.159  1.00  0.00           H
HETATM 5584  H2  SPC    31      -0.969   6.762  17.129  1.00  0.00           H
HETATM 5585  O   SPC    32       5.816   5.789  17.286  1.00  0.00           O
HETATM 5586  H1  SPC    32       6.566   5.365  16.762  1.00  0.00           H
HETATM 5587  H2  SPC    32       4.935   5.439  16.936  1.00  0.00           H
HETATM 5588  O   SPC    34       1.511   4.775  22.074  1.00  0.00           O
HETATM 5589  H1  SPC    34       1.418   5.338  21.244  1.00  0.00           H
HETATM 5590  H2  SPC    34       0.623   4.321  22.253  1.00  0.00           H
HETATM 5591  O   SPC    35       0.627  -1.927  23.270  1.00  0.00           O
HETATM 5592  H1  SPC    35      -0.131  -2.293  22.700  1.00  0.00           H
HETATM 5593  H2  SPC    35       0.439  -2.199  24.218  1.00  0.00           H
HETATM 5594  O   SPC    37      -1.823   3.346  19.720  1.00  0.00           O
HETATM 5595  H1  SPC    37      -2.446   2.552  19.650  1.00  0.00           H
HETATM 5596  H2  SPC    37      -2.260   4.137  19.261  1.00  0.00           H
HETATM 5597  O   SPC    38       2.081   5.718  19.404  1.00  0.00           O
HETATM 5598  H1  SPC    38       2.980   5.472  19.797  1.00  0.00           H
HETATM 5599  H2  SPC    38       2.219   6.396  18.672  1.00  0.00           H
HETATM 5600  O   SPC    39       4.096   4.733  21.023  1.00  0.00           O
HETATM 5601  H1  SPC    39       3.297   4.807  21.634  1.00  0.00           H
HETATM 5602  H2  SPC    39       4.673   3.970  21.347  1.00  0.00           H
HETATM 5603  O   SPC    41      -5.622   5.609  18.944  1.00  0.00           O
HETATM 5604  H1  SPC    41      -6.512   5.894  18.549  1.00  0.00           H
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HETATM 5605  H2  SPC    41      -5.718   4.674  19.311  1.00  0.00           H
HETATM 5606  O   SPC    44       3.146  -1.881  22.043  1.00  0.00           O
HETATM 5607  H1  SPC    44       3.247  -2.825  21.703  1.00  0.00           H
HETATM 5608  H2  SPC    44       2.273  -1.821  22.549  1.00  0.00           H
HETATM 5609  O   SPC    46       3.377   5.164  16.161  1.00  0.00           O
HETATM 5610  H1  SPC    46       2.906   6.007  16.453  1.00  0.00           H
HETATM 5611  H2  SPC    46       3.519   5.198  15.162  1.00  0.00           H
HETATM 5612  O   SPC    52       2.326   2.101  22.509  1.00  0.00           O
HETATM 5613  H1  SPC    52       1.524   1.492  22.596  1.00  0.00           H
HETATM 5614  H2  SPC    52       2.010   3.057  22.573  1.00  0.00           H
HETATM 5615  O   SPC    53      -7.118   9.008  16.674  1.00  0.00           O
HETATM 5616  H1  SPC    53      -7.534   9.929  16.699  1.00  0.00           H
HETATM 5617  H2  SPC    53      -6.753   8.854  15.744  1.00  0.00           H
HETATM 5618  O   SPC    55      -2.398   7.824  17.380  1.00  0.00           O
HETATM 5619  H1  SPC    55      -1.880   8.696  17.401  1.00  0.00           H
HETATM 5620  H2  SPC    55      -3.332   8.004  17.735  1.00  0.00           H
HETATM 5621  O   SPC    57       5.308  -0.270  21.291  1.00  0.00           O
HETATM 5622  H1  SPC    57       6.105  -0.765  20.918  1.00  0.00           H
HETATM 5623  H2  SPC    57       4.649  -0.941  21.664  1.00  0.00           H
HETATM 5624  O   SPC    59       0.097   0.496  22.147  1.00  0.00           O
HETATM 5625  H1  SPC    59      -0.613   0.198  21.489  1.00  0.00           H
HETATM 5626  H2  SPC    59       0.352  -0.309  22.705  1.00  0.00           H
HETATM 5627  O   SPC    61      -0.663   3.183  22.203  1.00  0.00           O
HETATM 5628  H1  SPC    61      -0.526   2.195  22.358  1.00  0.00           H
HETATM 5629  H2  SPC    61      -1.215   3.302  21.366  1.00  0.00           H
HETATM 5630  O   SPC    62       0.864   3.274  19.201  1.00  0.00           O
HETATM 5631  H1  SPC    62       1.207   4.226  19.221  1.00  0.00           H
HETATM 5632  H2  SPC    62      -0.127   3.284  19.405  1.00  0.00           H
HETATM 5633  O   SPC    65      -3.500   1.220  19.414  1.00  0.00           O
HETATM 5634  H1  SPC    65      -3.421   0.788  18.500  1.00  0.00           H
HETATM 5635  H2  SPC    65      -3.056   0.603  20.081  1.00  0.00           H
HETATM 5636  O   SPC   384       1.247   1.594 -20.827  1.00  0.00           O
HETATM 5637  H1  SPC   384       0.456   0.952 -20.752  1.00  0.00           H
HETATM 5638  H2  SPC   384       0.902   2.455 -21.205  1.00  0.00           H
HETATM 5639  O   SPC   406       6.053   9.539 -15.941  1.00  0.00           O
HETATM 5640  H1  SPC   406       6.125  10.541 -15.897  1.00  0.00           H
HETATM 5641  H2  SPC   406       6.818   9.150 -15.402  1.00  0.00           H
HETATM 5642  O   SPC   447      -0.034   8.425 -16.317  1.00  0.00           O
HETATM 5643  H1  SPC   447      -0.554   8.011 -17.087  1.00  0.00           H
HETATM 5644  H2  SPC   447      -0.583   9.193 -15.948  1.00  0.00           H
HETATM 5645  O   SPC   454      -7.214  21.993   5.554  1.00  0.00           O
HETATM 5646  H1  SPC   454      -7.372  21.033   5.817  1.00  0.00           H
HETATM 5647  H2  SPC   454      -7.619  22.592   6.259  1.00  0.00           H
HETATM 5648  O   SPC   455       5.541  27.072  -7.199  1.00  0.00           O
HETATM 5649  H1  SPC   455       6.424  27.309  -7.628  1.00  0.00           H
HETATM 5650  H2  SPC   455       5.661  26.199  -6.700  1.00  0.00           H
HETATM 5651  O   SPC   457       4.534  21.789  -0.181  1.00  0.00           O
HETATM 5652  H1  SPC   457       4.164  21.096  -0.826  1.00  0.00           H
HETATM 5653  H2  SPC   457       3.781  22.387   0.128  1.00  0.00           H
HETATM 5654  O   SPC   458      -0.513  17.377   2.713  1.00  0.00           O
HETATM 5655  H1  SPC   458      -0.652  16.383   2.786  1.00  0.00           H
HETATM 5656  H2  SPC   458      -0.273  17.597   1.755  1.00  0.00           H
HETATM 5657  O   SPC   459       5.968  23.401  -8.476  1.00  0.00           O
HETATM 5658  H1  SPC   459       5.592  22.473  -8.623  1.00  0.00           H
HETATM 5659  H2  SPC   459       5.310  24.075  -8.849  1.00  0.00           H
HETATM 5660  O   SPC   460      -0.200  25.868  -5.189  1.00  0.00           O
HETATM 5661  H1  SPC   460       0.191  25.055  -4.731  1.00  0.00           H
HETATM 5662  H2  SPC   460      -1.192  25.902  -4.980  1.00  0.00           H
HETATM 5663  O   SPC   461      -3.163  18.154   6.785  1.00  0.00           O
HETATM 5664  H1  SPC   461      -3.083  18.189   5.780  1.00  0.00           H
HETATM 5665  H2  SPC   461      -3.837  18.848   7.085  1.00  0.00           H
HETATM 5666  O   SPC   462      -8.211  23.219   7.823  1.00  0.00           O
HETATM 5667  H1  SPC   462      -8.915  23.898   8.040  1.00  0.00           H
HETATM 5668  H2  SPC   462      -8.527  22.308   8.131  1.00  0.00           H
HETATM 5669  O   SPC   463       8.150  23.176   0.974  1.00  0.00           O
HETATM 5670  H1  SPC   463       8.793  22.580   1.488  1.00  0.00           H
HETATM 5671  H2  SPC   463       8.602  23.462   0.113  1.00  0.00           H
HETATM 5672  O   SPC   464       4.834  23.136  -4.260  1.00  0.00           O
HETATM 5673  H1  SPC   464       4.171  23.838  -3.956  1.00  0.00           H
HETATM 5674  H2  SPC   464       5.422  22.900  -3.473  1.00  0.00           H
HETATM 5675  O   SPC   466      -3.536  23.246   7.333  1.00  0.00           O
HETATM 5676  H1  SPC   466      -4.091  23.109   6.500  1.00  0.00           H
HETATM 5677  H2  SPC   466      -2.734  23.808   7.080  1.00  0.00           H
HETATM 5678  O   SPC   467      -0.842  19.595   7.050  1.00  0.00           O
HETATM 5679  H1  SPC   467      -0.977  20.317   7.745  1.00  0.00           H
HETATM 5680  H2  SPC   467      -1.674  19.022   7.022  1.00  0.00           H
HETATM 5681  O   SPC   468       7.804  28.427  -0.976  1.00  0.00           O
HETATM 5682  H1  SPC   468       8.502  27.755  -0.682  1.00  0.00           H
HETATM 5683  H2  SPC   468       7.737  28.403  -1.985  1.00  0.00           H
HETATM 5684  O   SPC   469       7.857  28.287  -3.691  1.00  0.00           O
HETATM 5685  H1  SPC   469       7.902  27.393  -4.163  1.00  0.00           H
HETATM 5686  H2  SPC   469       8.780  28.699  -3.704  1.00  0.00           H
HETATM 5687  O   SPC   470      -3.889  23.961   0.151  1.00  0.00           O
HETATM 5688  H1  SPC   470      -4.098  24.070  -0.825  1.00  0.00           H
HETATM 5689  H2  SPC   470      -4.743  24.080   0.683  1.00  0.00           H
HETATM 5690  O   SPC   471       3.405  26.309   0.730  1.00  0.00           O
HETATM 5691  H1  SPC   471       4.280  26.817   0.713  1.00  0.00           H
HETATM 5692  H2  SPC   471       2.860  26.567  -0.084  1.00  0.00           H
HETATM 5693  O   SPC   472      -5.329  19.399   4.511  1.00  0.00           O
HETATM 5694  H1  SPC   472      -4.390  19.071   4.359  1.00  0.00           H
HETATM 5695  H2  SPC   472      -5.469  20.239   3.975  1.00  0.00           H
HETATM 5696  O   SPC   473       5.935  27.356   0.674  1.00  0.00           O
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HETATM 5697  H1  SPC   473      6.492  27.924   0.048  1.00  0.00          H
HETATM 5698  H2  SPC   473      6.557  26.733   1.174  1.00  0.00          H
HETATM 5699  O   SPC   475      3.314  25.071  -3.243  1.00  0.00          O
HETATM 5700  H1  SPC   475      2.807  25.925  -3.427  1.00  0.00          H
HETATM 5701  H2  SPC   475      4.010  25.259  -2.535  1.00  0.00          H
HETATM 5702  O   SPC   476     -3.600  26.531  -7.258  1.00  0.00          O
HETATM 5703  H1  SPC   476     -3.258  25.972  -8.023  1.00  0.00          H
HETATM 5704  H2  SPC   476     -4.180  27.261  -7.622  1.00  0.00          H
HETATM 5705  O   SPC   477     -1.925  25.230   1.573  1.00  0.00          O
HETATM 5706  H1  SPC   477     -2.630  24.848   0.956  1.00  0.00          H
HETATM 5707  H2  SPC   477     -2.292  25.214   2.519  1.00  0.00          H
HETATM 5708  O   SPC   478      6.694  23.993   7.008  1.00  0.00          O
HETATM 5709  H1  SPC   478      7.535  24.366   7.426  1.00  0.00          H
HETATM 5710  H2  SPC   478      5.902  24.340   7.525  1.00  0.00          H
HETATM 5711  O   SPC   479      6.093  24.663  -6.088  1.00  0.00          O
HETATM 5712  H1  SPC   479      6.108  24.137  -6.953  1.00  0.00          H
HETATM 5713  H2  SPC   479      5.635  24.099  -5.383  1.00  0.00          H
HETATM 5714  O   SPC   480     -4.778  22.960   4.894  1.00  0.00          O
HETATM 5715  H1  SPC   480     -4.233  22.241   4.441  1.00  0.00          H
HETATM 5716  H2  SPC   480     -5.725  22.621   5.022  1.00  0.00          H
HETATM 5717  O   SPC   481      7.655  25.676   1.930  1.00  0.00          O
HETATM 5718  H1  SPC   481      7.137  25.696   2.795  1.00  0.00          H
HETATM 5719  H2  SPC   481      7.790  24.710   1.657  1.00  0.00          H
HETATM 5720  O   SPC   483      0.960  25.142   7.022  1.00  0.00          O
HETATM 5721  H1  SPC   483      1.526  24.580   7.642  1.00  0.00          H
HETATM 5722  H2  SPC   483      1.379  25.132   6.104  1.00  0.00          H
HETATM 5723  O   SPC   484      4.015  26.353   6.023  1.00  0.00          O
HETATM 5724  H1  SPC   484      3.943  27.340   6.188  1.00  0.00          H
HETATM 5725  H2  SPC   484      4.211  25.896   6.901  1.00  0.00          H
HETATM 5726  O   SPC   485      2.919  23.666   1.114  1.00  0.00          O
HETATM 5727  H1  SPC   485      3.126  24.635   0.907  1.00  0.00          H
HETATM 5728  H2  SPC   485      1.918  23.549   1.121  1.00  0.00          H
HETATM 5729  O   SPC   486      6.362  21.278   1.678  1.00  0.00          O
HETATM 5730  H1  SPC   486      7.079  21.923   1.366  1.00  0.00          H
HETATM 5731  H2  SPC   486      5.614  21.292   0.992  1.00  0.00          H
HETATM 5732  O   SPC   487      2.146  24.999   4.552  1.00  0.00          O
HETATM 5733  H1  SPC   487      2.900  25.493   5.009  1.00  0.00          H
HETATM 5734  H2  SPC   487      1.782  25.584   3.808  1.00  0.00          H
HETATM 5735  O   SPC   488      1.407  22.499   3.731  1.00  0.00          O
HETATM 5736  H1  SPC   488      1.761  23.386   4.070  1.00  0.00          H
HETATM 5737  H2  SPC   488      1.035  22.640   2.805  1.00  0.00          H
HETATM 5738  O   SPC   490     -2.343  21.959   1.254  1.00  0.00          O
HETATM 5739  H1  SPC   490     -2.942  22.661   0.839  1.00  0.00          H
HETATM 5740  H2  SPC   490     -1.392  22.296   1.224  1.00  0.00          H
HETATM 5741  O   SPC   491      5.094  23.477   2.781  1.00  0.00          O
HETATM 5742  H1  SPC   491      5.546  22.654   2.412  1.00  0.00          H
HETATM 5743  H2  SPC   491      4.208  23.585   2.304  1.00  0.00          H
HETATM 5744  O   SPC   492     -2.642  18.586   4.071  1.00  0.00          O
HETATM 5745  H1  SPC   492     -1.766  18.191   3.754  1.00  0.00          H
HETATM 5746  H2  SPC   492     -2.592  19.594   3.985  1.00  0.00          H
HETATM 5747  O   SPC   493     -0.294  24.778  -7.752  1.00  0.00          O
HETATM 5748  H1  SPC   493     -0.199  25.355  -6.927  1.00  0.00          H
HETATM 5749  H2  SPC   493      0.450  25.001  -8.398  1.00  0.00          H
HETATM 5750  O   SPC   494     -1.387  24.290   6.103  1.00  0.00          O
HETATM 5751  H1  SPC   494     -0.584  24.750   6.518  1.00  0.00          H
HETATM 5752  H2  SPC   494     -1.105  23.366   5.803  1.00  0.00          H
HETATM 5753  O   SPC   495     -2.856  25.622  -4.697  1.00  0.00          O
HETATM 5754  H1  SPC   495     -3.270  24.752  -4.392  1.00  0.00          H
HETATM 5755  H2  SPC   495     -3.293  25.911  -5.560  1.00  0.00          H
HETATM 5756  O   SPC   497      6.274  23.026  -1.935  1.00  0.00          O
HETATM 5757  H1  SPC   497      6.130  24.015  -1.784  1.00  0.00          H
HETATM 5758  H2  SPC   497      5.737  22.517  -1.246  1.00  0.00          H
HETATM 5759  O   SPC   498     -7.202  19.334   6.406  1.00  0.00          O
HETATM 5760  H1  SPC   498     -6.546  19.309   5.631  1.00  0.00          H
HETATM 5761  H2  SPC   498     -7.535  18.390   6.566  1.00  0.00          H
HETATM 5762  O   SPC   499     -3.035  24.902   4.010  1.00  0.00          O
HETATM 5763  H1  SPC   499     -3.811  24.313   4.275  1.00  0.00          H
HETATM 5764  H2  SPC   499     -2.364  24.895   4.765  1.00  0.00          H
HETATM 5765  O   SPC   500     -8.658  20.599   8.422  1.00  0.00          O
HETATM 5766  H1  SPC   500     -8.152  20.072   7.725  1.00  0.00          H
HETATM 5767  H2  SPC   500     -8.148  20.540   9.297  1.00  0.00          H
HETATM 5768  O   SPC   502     -2.656  24.549  -9.078  1.00  0.00          O
HETATM 5769  H1  SPC   502     -2.395  24.320 -10.032  1.00  0.00          H
HETATM 5770  H2  SPC   502     -1.805  24.611  -8.530  1.00  0.00          H
HETATM 5771  O   SPC   503      2.797  20.423   4.985  1.00  0.00          O
HETATM 5772  H1  SPC   503      2.560  19.590   4.468  1.00  0.00          H
HETATM 5773  H2  SPC   503      2.403  21.220   4.505  1.00  0.00          H
HETATM 5774  O   SPC   504     -8.831  24.098   1.323  1.00  0.00          O
HETATM 5775  H1  SPC   504     -9.171  23.601   0.515  1.00  0.00          H
HETATM 5776  H2  SPC   504     -7.831  24.181   1.265  1.00  0.00          H
HETATM 5777  O   SPC   505      0.721  24.095  -1.302  1.00  0.00          O
HETATM 5778  H1  SPC   505      1.083  25.036  -1.255  1.00  0.00          H
HETATM 5779  H2  SPC   505      0.722  23.804  -2.268  1.00  0.00          H
HETATM 5780  O   SPC   506      1.355  26.518   2.477  1.00  0.00          O
HETATM 5781  H1  SPC   506      0.611  26.917   1.927  1.00  0.00          H
HETATM 5782  H2  SPC   506      2.188  26.482   1.905  1.00  0.00          H
HETATM 5783  O   SPC   507      3.500  21.052   7.595  1.00  0.00          O
HETATM 5784  H1  SPC   507      2.890  20.468   8.154  1.00  0.00          H
HETATM 5785  H2  SPC   507      3.335  20.840   6.619  1.00  0.00          H
HETATM 5786  O   SPC   508     -5.113  23.660 -10.176  1.00  0.00          O
HETATM 5787  H1  SPC   508     -5.100  23.542 -11.176  1.00  0.00          H
HETATM 5788  H2  SPC   508     -4.227  24.043  -9.890  1.00  0.00          H
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HETATM 5789  O   SPC   509     -0.705  21.756   5.268  1.00  0.00          O
HETATM 5790  H1  SPC   509      0.152  21.945   4.764  1.00  0.00          H
HETATM 5791  H2  SPC   509     -0.555  20.971   5.885  1.00  0.00          H
HETATM 5792  O   SPC   510      2.626  23.528   8.448  1.00  0.00          O
HETATM 5793  H1  SPC   510      2.972  22.648   8.089  1.00  0.00          H
HETATM 5794  H2  SPC   510      3.402  24.167   8.535  1.00  0.00          H
HETATM 5795  O   SPC   511      1.074  23.740  -4.077  1.00  0.00          O
HETATM 5796  H1  SPC   511      2.026  24.021  -3.889  1.00  0.00          H
HETATM 5797  H2  SPC   511      1.067  23.063  -4.824  1.00  0.00          H
HETATM 5798  O   SPC   512     -2.900  21.249   3.784  1.00  0.00          O
HETATM 5799  H1  SPC   512     -2.127  21.558   4.362  1.00  0.00          H
HETATM 5800  H2  SPC   512     -2.728  21.552   2.831  1.00  0.00          H
HETATM 5801  O   SPC   513      8.200  25.913  -4.932  1.00  0.00          O
HETATM 5802  H1  SPC   513      8.727  25.192  -4.461  1.00  0.00          H
HETATM 5803  H2  SPC   513      7.413  25.478  -5.398  1.00  0.00          H
HETATM 5804  O   SPC   514      7.341  23.490   4.451  1.00  0.00          O
HETATM 5805  H1  SPC   514      7.070  23.691   5.408  1.00  0.00          H
HETATM 5806  H2  SPC   514      6.526  23.584   3.865  1.00  0.00          H
HETATM 5807  O   SPC   515     -6.040  24.129   1.791  1.00  0.00          O
HETATM 5808  H1  SPC   515     -6.126  23.190   2.157  1.00  0.00          H
HETATM 5809  H2  SPC   515     -6.045  24.774   2.560  1.00  0.00          H
HETATM 5810  O   SPC   516      0.106  23.363   1.202  1.00  0.00          O
HETATM 5811  H1  SPC   516      0.299  23.508   0.215  1.00  0.00          H
HETATM 5812  H2  SPC   516     -0.485  24.120   1.519  1.00  0.00          H
HETATM 5813  O   SPC   520     -4.895  19.848  12.217  1.00  0.00          O
HETATM 5814  H1  SPC   520     -4.288  20.415  12.797  1.00  0.00          H
HETATM 5815  H2  SPC   520     -4.839  18.889  12.541  1.00  0.00          H
HETATM 5816  O   SPC   522      4.800  25.342   8.555  1.00  0.00          O
HETATM 5817  H1  SPC   522      5.366  26.174   8.419  1.00  0.00          H
HETATM 5818  H2  SPC   522      4.852  25.078   9.531  1.00  0.00          H
HETATM 5819  O   SPC   523      5.080  20.703  12.078  1.00  0.00          O
HETATM 5820  H1  SPC   523      4.108  20.808  12.326  1.00  0.00          H
HETATM 5821  H2  SPC   523      5.214  21.136  11.174  1.00  0.00          H
HETATM 5822  O   SPC   525      0.254  12.191  18.486  1.00  0.00          O
HETATM 5823  H1  SPC   525     -0.027  12.394  19.426  1.00  0.00          H
HETATM 5824  H2  SPC   525      0.077  13.010  17.912  1.00  0.00          H
HETATM 5825  O   SPC   531      5.229  21.870   9.612  1.00  0.00          O
HETATM 5826  H1  SPC   531      6.199  21.604   9.526  1.00  0.00          H
HETATM 5827  H2  SPC   531      4.721  21.531   8.806  1.00  0.00          H
HETATM 5828  O   SPC   534     -6.451  16.329   9.468  1.00  0.00          O
HETATM 5829  H1  SPC   534     -7.377  16.576   9.788  1.00  0.00          H
HETATM 5830  H2  SPC   534     -5.977  15.871  10.237  1.00  0.00          H
HETATM 5831  O   SPC   542      3.534  23.629  13.415  1.00  0.00          O
HETATM 5832  H1  SPC   542      3.182  24.419  13.923  1.00  0.00          H
HETATM 5833  H2  SPC   542      3.936  22.973  14.076  1.00  0.00          H
HETATM 5834  O   SPC   543      0.905  18.555  15.465  1.00  0.00          O
HETATM 5835  H1  SPC   543      0.947  17.571  15.674  1.00  0.00          H
HETATM 5836  H2  SPC   543      1.846  18.917  15.434  1.00  0.00          H
HETATM 5837  O   SPC   546      4.016  18.062   9.961  1.00  0.00          O
HETATM 5838  H1  SPC   546      3.276  18.678   9.649  1.00  0.00          H
HETATM 5839  H2  SPC   546      4.282  17.476   9.180  1.00  0.00          H
HETATM 5840  O   SPC   547      6.763  20.126  14.194  1.00  0.00          O
HETATM 5841  H1  SPC   547      6.198  20.474  13.429  1.00  0.00          H
HETATM 5842  H2  SPC   547      6.494  19.168  14.365  1.00  0.00          H
HETATM 5843  O   SPC   551      6.906  18.734  11.463  1.00  0.00          O
HETATM 5844  H1  SPC   551      6.572  17.788  11.532  1.00  0.00          H
HETATM 5845  H2  SPC   551      6.145  19.359  11.684  1.00  0.00          H
HETATM 5846  O   SPC   557      4.148  15.696  15.823  1.00  0.00          O
HETATM 5847  H1  SPC   557      4.698  16.386  15.338  1.00  0.00          H
HETATM 5848  H2  SPC   557      4.765  14.999  16.205  1.00  0.00          H
HETATM 5849  O   SPC   559     -0.241  14.319  16.920  1.00  0.00          O
HETATM 5850  H1  SPC   559      0.399  14.956  16.469  1.00  0.00          H
HETATM 5851  H2  SPC   559     -1.105  14.319  16.398  1.00  0.00          H
HETATM 5852  O   SPC   560     -6.890  20.655  10.487  1.00  0.00          O
HETATM 5853  H1  SPC   560     -6.289  20.299  11.218  1.00  0.00          H
HETATM 5854  H2  SPC   560     -6.393  21.384   9.996  1.00  0.00          H
HETATM 5855  O   SPC   562      0.014  19.814  11.029  1.00  0.00          O
HETATM 5856  H1  SPC   562     -0.365  19.617  11.944  1.00  0.00          H
HETATM 5857  H2  SPC   562      0.011  20.810  10.883  1.00  0.00          H
HETATM 5858  O   SPC   565     -2.931  21.095  13.621  1.00  0.00          O
HETATM 5859  H1  SPC   565     -2.609  21.910  14.103  1.00  0.00          H
HETATM 5860  H2  SPC   565     -2.191  20.404  13.619  1.00  0.00          H
HETATM 5861  O   SPC   566     -6.258  11.662  14.026  1.00  0.00          O
HETATM 5862  H1  SPC   566     -6.377  12.611  13.703  1.00  0.00          H
HETATM 5863  H2  SPC   566     -6.811  11.545  14.864  1.00  0.00          H
HETATM 5864  O   SPC   568      4.668  13.769  12.079  1.00  0.00          O
HETATM 5865  H1  SPC   568      4.726  13.353  12.998  1.00  0.00          H
HETATM 5866  H2  SPC   568      3.894  13.346  11.586  1.00  0.00          H
HETATM 5867  O   SPC   572      5.726  17.500  14.371  1.00  0.00          O
HETATM 5868  H1  SPC   572      5.423  17.256  13.434  1.00  0.00          H
HETATM 5869  H2  SPC   572      6.458  16.854  14.636  1.00  0.00          H
HETATM 5870  O   SPC   575      4.881  12.525  14.538  1.00  0.00          O
HETATM 5871  H1  SPC   575      5.419  12.872  15.318  1.00  0.00          H
HETATM 5872  H2  SPC   575      3.900  12.707  14.720  1.00  0.00          H
HETATM 5873  O   SPC   577     -3.792  11.266  12.949  1.00  0.00          O
HETATM 5874  H1  SPC   577     -4.701  11.380  13.379  1.00  0.00          H
HETATM 5875  H2  SPC   577     -3.759  10.366  12.484  1.00  0.00          H
HETATM 5876  O   SPC   583     -3.287  19.770  10.006  1.00  0.00          O
HETATM 5877  H1  SPC   583     -3.913  19.696   9.216  1.00  0.00          H
HETATM 5878  H2  SPC   583     -3.844  19.838  10.848  1.00  0.00          H
HETATM 5879  O   SPC   587     -2.232  14.023   9.416  1.00  0.00          O
HETATM 5880  H1  SPC   587     -2.225  13.377   8.642  1.00  0.00          H
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HETATM 5881  H2  SPC   587     -2.741  14.852   9.138  1.00  0.00          H
HETATM 5882  O   SPC   591     -1.730  10.851  14.600  1.00  0.00          O
HETATM 5883  H1  SPC   591     -0.979  11.477  14.342  1.00  0.00          H
HETATM 5884  H2  SPC   591     -2.540  11.095  14.043  1.00  0.00          H
HETATM 5885  O   SPC   593     -4.283  12.863  10.819  1.00  0.00          O
HETATM 5886  H1  SPC   593     -3.477  13.230  10.331  1.00  0.00          H
HETATM 5887  H2  SPC   593     -3.965  12.330  11.618  1.00  0.00          H
HETATM 5888  O   SPC   596      2.635  18.764  12.341  1.00  0.00          O
HETATM 5889  H1  SPC   596      3.169  18.470  11.537  1.00  0.00          H
HETATM 5890  H2  SPC   596      2.248  19.678  12.150  1.00  0.00          H
HETATM 5891  O   SPC   597      4.503  21.757  15.107  1.00  0.00          O
HETATM 5892  H1  SPC   597      3.968  20.901  15.140  1.00  0.00          H
HETATM 5893  H2  SPC   597      5.479  21.521  15.141  1.00  0.00          H
HETATM 5894  O   SPC   598      4.897  24.154  11.046  1.00  0.00          O
HETATM 5895  H1  SPC   598      4.940  23.284  10.530  1.00  0.00          H
HETATM 5896  H2  SPC   598      4.347  24.005  11.881  1.00  0.00          H
HETATM 5897  O   SPC   599      7.463  15.492  14.809  1.00  0.00          O
HETATM 5898  H1  SPC   599      8.343  15.909  15.080  1.00  0.00          H
HETATM 5899  H2  SPC   599      7.567  15.045  13.904  1.00  0.00          H
HETATM 5900  O   SPC   600     -7.074  14.130  16.377  1.00  0.00          O
HETATM 5901  H1  SPC   600     -6.097  13.846  16.364  1.00  0.00          H
HETATM 5902  H2  SPC   600     -7.184  14.854  17.061  1.00  0.00          H
HETATM 5903  O   SPC   601     -6.227  11.012  10.091  1.00  0.00          O
HETATM 5904  H1  SPC   601     -5.593  11.778  10.265  1.00  0.00          H
HETATM 5905  H2  SPC   601     -5.696  10.228   9.742  1.00  0.00          H
HETATM 5906  O   SPC   607      7.338  14.279  12.390  1.00  0.00          O
HETATM 5907  H1  SPC   607      6.373  14.067  12.177  1.00  0.00          H
HETATM 5908  H2  SPC   607      7.693  14.910  11.686  1.00  0.00          H
HETATM 5909  O   SPC   612      2.292  13.032  15.030  1.00  0.00          O
HETATM 5910  H1  SPC   612      2.254  12.400  15.821  1.00  0.00          H
HETATM 5911  H2  SPC   612      1.973  13.942  15.323  1.00  0.00          H
HETATM 5912  O   SPC   614     -4.938  19.966   7.820  1.00  0.00          O
HETATM 5913  H1  SPC   614     -5.122  20.898   8.168  1.00  0.00          H
HETATM 5914  H2  SPC   614     -5.779  19.626   7.378  1.00  0.00          H
HETATM 5915  O   SPC   617      0.859  17.488   7.454  1.00  0.00          O
HETATM 5916  H1  SPC   617      0.231  18.228   7.163  1.00  0.00          H
HETATM 5917  H2  SPC   617      1.137  16.959   6.647  1.00  0.00          H
HETATM 5918  O   SPC   625      8.212  11.873  17.182  1.00  0.00          O
HETATM 5919  H1  SPC   625      7.390  12.422  16.984  1.00  0.00          H
HETATM 5920  H2  SPC   625      8.742  11.765  16.329  1.00  0.00          H
HETATM 5921  O   SPC   626      6.290  13.897  16.585  1.00  0.00          O
HETATM 5922  H1  SPC   626      6.749  14.426  15.850  1.00  0.00          H
HETATM 5923  H2  SPC   626      6.519  14.331  17.465  1.00  0.00          H
HETATM 5924  O   SPC   628     -1.696  16.521  13.122  1.00  0.00          O
HETATM 5925  H1  SPC   628     -0.699  16.371  13.181  1.00  0.00          H
HETATM 5926  H2  SPC   628     -1.927  16.712  12.154  1.00  0.00          H
HETATM 5927  O   SPC   630      1.511  15.749  15.336  1.00  0.00          O
HETATM 5928  H1  SPC   630      1.373  15.946  14.353  1.00  0.00          H
HETATM 5929  H2  SPC   630      2.502  15.811  15.544  1.00  0.00          H
HETATM 5930  O   SPC   631     -8.973  16.840  10.412  1.00  0.00          O
HETATM 5931  H1  SPC   631     -8.987  17.624  11.037  1.00  0.00          H
HETATM 5932  H2  SPC   631     -9.520  17.066   9.590  1.00  0.00          H
HETATM 5933  O   SPC   633     -3.729  16.234   8.687  1.00  0.00          O
HETATM 5934  H1  SPC   633     -4.726  16.257   8.841  1.00  0.00          H
HETATM 5935  H2  SPC   633     -3.506  16.863   7.927  1.00  0.00          H
HETATM 5936  O   SPC   634      1.546   9.296  15.273  1.00  0.00          O
HETATM 5937  H1  SPC   634      1.487   9.611  14.312  1.00  0.00          H
HETATM 5938  H2  SPC   634      1.781  10.087  15.854  1.00  0.00          H
HETATM 5939  O   SPC   639      7.731  15.920  18.060  1.00  0.00          O
HETATM 5940  H1  SPC   639      7.414  16.646  18.673  1.00  0.00          H
HETATM 5941  H2  SPC   639      8.280  16.337  17.319  1.00  0.00          H
HETATM 5942  O   SPC   641     -0.229  13.042  11.053  1.00  0.00          O
HETATM 5943  H1  SPC   641     -0.484  12.072  10.932  1.00  0.00          H
HETATM 5944  H2  SPC   641     -0.854  13.605  10.491  1.00  0.00          H
HETATM 5945  O   SPC   642     -7.124  14.272  13.619  1.00  0.00          O
HETATM 5946  H1  SPC   642     -7.138  14.390  14.623  1.00  0.00          H
HETATM 5947  H2  SPC   642     -8.009  13.874  13.329  1.00  0.00          H
HETATM 5948  O   SPC   643     -2.202  14.325  14.948  1.00  0.00          O
HETATM 5949  H1  SPC   643     -2.271  15.165  14.396  1.00  0.00          H
HETATM 5950  H2  SPC   643     -1.532  13.710  14.505  1.00  0.00          H
HETATM 5951  O   SPC   646     -4.505  13.393  16.327  1.00  0.00          O
HETATM 5952  H1  SPC   646     -3.682  13.700  15.830  1.00  0.00          H
HETATM 5953  H2  SPC   646     -4.307  12.503  16.767  1.00  0.00          H
HETATM 5954  O   SPC   647     -0.160  12.923  13.771  1.00  0.00          O
HETATM 5955  H1  SPC   647      0.798  12.885  14.089  1.00  0.00          H
HETATM 5956  H2  SPC   647     -0.164  13.048  12.767  1.00  0.00          H
HETATM 5957  O   SPC   648      2.782  15.014   9.594  1.00  0.00          O
HETATM 5958  H1  SPC   648      1.906  15.483   9.778  1.00  0.00          H
HETATM 5959  H2  SPC   648      2.739  14.088   9.987  1.00  0.00          H
HETATM 5960  O   SPC   649     -3.974  10.968  17.535  1.00  0.00          O
HETATM 5961  H1  SPC   649     -2.988  10.761  17.485  1.00  0.00          H
HETATM 5962  H2  SPC   649     -4.456  10.155  17.880  1.00  0.00          H
HETATM 5963  O   SPC   651      3.541  19.170  14.846  1.00  0.00          O
HETATM 5964  H1  SPC   651      3.145  19.053  13.921  1.00  0.00          H
HETATM 5965  H2  SPC   651      4.358  18.584  14.914  1.00  0.00          H
HETATM 5966  O   SPC   658      0.649  22.383  10.066  1.00  0.00          O
HETATM 5967  H1  SPC   658     -0.198  22.250   9.532  1.00  0.00          H
HETATM 5968  H2  SPC   658      1.308  22.898   9.499  1.00  0.00          H
HETATM 5969  O   SPC   666     -7.839  16.828   7.075  1.00  0.00          O
HETATM 5970  H1  SPC   666     -8.775  16.928   7.448  1.00  0.00          H
HETATM 5971  H2  SPC   666     -7.225  16.535   7.822  1.00  0.00          H
HETATM 5972  O   SPC   670     -1.687  21.611   8.761  1.00  0.00          O
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HETATM 5973  H1  SPC   670      -2.348  22.220   8.302  1.00  0.00          H
HETATM 5974  H2  SPC   670      -2.199  20.973   9.357  1.00  0.00          H
HETATM 5975  O   SPC   676      -6.075   8.977  14.160  1.00  0.00          O
HETATM 5976  H1  SPC   676      -5.107   8.733  14.333  1.00  0.00          H
HETATM 5977  H2  SPC   676      -6.123   9.968  13.963  1.00  0.00          H
HETATM 5978  O   SPC   679      -4.417  17.299  12.964  1.00  0.00          O
HETATM 5979  H1  SPC   679      -4.859  16.531  12.478  1.00  0.00          H
HETATM 5980  H2  SPC   679      -3.504  17.003  13.266  1.00  0.00          H
HETATM 5981  O   SPC   686       1.882  19.421   9.081  1.00  0.00          O
HETATM 5982  H1  SPC   686       1.536  18.697   8.465  1.00  0.00          H
HETATM 5983  H2  SPC   686       1.187  19.585   9.800  1.00  0.00          H
HETATM 5984  O   SPC   687       2.381  11.231  17.036  1.00  0.00          O
HETATM 5985  H1  SPC   687       3.079  10.631  17.451  1.00  0.00          H
HETATM 5986  H2  SPC   687       1.703  11.487  17.742  1.00  0.00          H
HETATM 5987  O   SPC   688      -5.698  22.436   8.759  1.00  0.00          O
HETATM 5988  H1  SPC   688      -6.519  22.919   8.423  1.00  0.00          H
HETATM 5989  H2  SPC   688      -4.877  22.901   8.393  1.00  0.00          H
HETATM 5990  O   SPC   691       0.450  16.404   9.963  1.00  0.00          O
HETATM 5991  H1  SPC   691      -0.477  16.705  10.233  1.00  0.00          H
HETATM 5992  H2  SPC   691       0.629  16.744   9.028  1.00  0.00          H
HETATM 5993  O   SPC   692      -1.316  10.283  17.226  1.00  0.00          O
HETATM 5994  H1  SPC   692      -1.349  10.501  16.236  1.00  0.00          H
HETATM 5995  H2  SPC   692      -0.682  10.928  17.677  1.00  0.00          H
HETATM 5996  O   SPC   693      -8.069  11.540  16.116  1.00  0.00          O
HETATM 5997  H1  SPC   693      -7.875  12.503  16.352  1.00  0.00          H
HETATM 5998  H2  SPC   693      -9.006  11.474  15.747  1.00  0.00          H
HETATM 5999  O   SPC   697       7.474  24.546  11.945  1.00  0.00          O
HETATM 6000  H1  SPC   697       7.733  23.652  12.338  1.00  0.00          H
HETATM 6001  H2  SPC   697       6.513  24.498  11.639  1.00  0.00          H
HETATM 6002  O   SPC   698      -5.470  15.127  11.681  1.00  0.00          O
HETATM 6003  H1  SPC   698      -6.115  14.871  12.420  1.00  0.00          H
HETATM 6004  H2  SPC   698      -5.031  14.283  11.336  1.00  0.00          H
HETATM 6005  O   SPC   703       5.146  16.532  11.900  1.00  0.00          O
HETATM 6006  H1  SPC   703       4.864  15.561  11.887  1.00  0.00          H
HETATM 6007  H2  SPC   703       4.666  17.015  11.151  1.00  0.00          H
HETATM 6008  O   SPC   706      -2.070  17.303  10.557  1.00  0.00          O
HETATM 6009  H1  SPC   706      -2.243  18.294  10.467  1.00  0.00          H
HETATM 6010  H2  SPC   706      -2.709  16.817   9.942  1.00  0.00          H
HETATM 6011  O   SPC   707      -0.959  19.203  13.586  1.00  0.00          O
HETATM 6012  H1  SPC   707      -0.264  19.116  14.318  1.00  0.00          H
HETATM 6013  H2  SPC   707      -1.392  18.302  13.457  1.00  0.00          H
HETATM 6014  O   SPC   709       2.393  21.536  12.047  1.00  0.00          O
HETATM 6015  H1  SPC   709       2.685  22.355  12.560  1.00  0.00          H
HETATM 6016  H2  SPC   709       1.762  21.829  11.313  1.00  0.00          H
HETATM 6017  O   SPC   712       1.076  16.514  12.708  1.00  0.00          O
HETATM 6018  H1  SPC   712       0.898  16.256  11.748  1.00  0.00          H
HETATM 6019  H2  SPC   712       1.597  17.380  12.704  1.00  0.00          H
HETATM 6020  O   SPC  1025       7.564  20.583 -14.107  1.00  0.00          O
HETATM 6021  H1  SPC  1025       8.276  19.869 -14.151  1.00  0.00          H
HETATM 6022  H2  SPC  1025       6.995  20.521 -14.935  1.00  0.00          H
HETATM 6023  O   SPC  1030       1.534  24.952  -9.840  1.00  0.00          O
HETATM 6024  H1  SPC  1030       1.042  25.250 -10.663  1.00  0.00          H
HETATM 6025  H2  SPC  1030       1.938  24.049 -10.016  1.00  0.00          H
HETATM 6026  O   SPC  1049       3.941  18.282 -16.118  1.00  0.00          O
HETATM 6027  H1  SPC  1049       4.721  18.916 -16.192  1.00  0.00          H
HETATM 6028  H2  SPC  1049       3.087  18.816 -16.244  1.00  0.00          H
HETATM 6029  O   SPC  1052       4.498  21.634 -12.358  1.00  0.00          O
HETATM 6030  H1  SPC  1052       3.678  21.048 -12.338  1.00  0.00          H
HETATM 6031  H2  SPC  1052       4.824  21.703 -13.302  1.00  0.00          H
HETATM 6032  O   SPC  1058       6.087  20.143 -16.533  1.00  0.00          O
HETATM 6033  H1  SPC  1058       5.731  20.775 -17.226  1.00  0.00          H
HETATM 6034  H2  SPC  1058       6.993  19.806 -16.832  1.00  0.00          H
HETATM 6035  O   SPC  1061       3.174  15.638 -15.685  1.00  0.00          O
HETATM 6036  H1  SPC  1061       3.466  16.607 -15.668  1.00  0.00          H
HETATM 6037  H2  SPC  1061       2.693  15.472 -16.548  1.00  0.00          H
HETATM 6038  O   SPC  1083       8.129   8.782 -14.339  1.00  0.00          O
HETATM 6039  H1  SPC  1083       8.540   8.050 -13.784  1.00  0.00          H
HETATM 6040  H2  SPC  1083       8.797   9.542 -14.398  1.00  0.00          H
HETATM 6041  O   SPC  1095       0.041  22.153 -12.620  1.00  0.00          O
HETATM 6042  H1  SPC  1095       0.864  21.585 -12.732  1.00  0.00          H
HETATM 6043  H2  SPC  1095      -0.293  22.414 -13.538  1.00  0.00          H
HETATM 6044  O   SPC  1096       9.252  15.103 -17.142  1.00  0.00          O
HETATM 6045  H1  SPC  1096       8.419  15.602 -17.421  1.00  0.00          H
HETATM 6046  H2  SPC  1096       9.965  15.776 -16.902  1.00  0.00          H
HETATM 6047  O   SPC  1097       7.122  16.804 -17.620  1.00  0.00          O
HETATM 6048  H1  SPC  1097       6.146  17.028 -17.577  1.00  0.00          H
HETATM 6049  H2  SPC  1097       7.658  17.649 -17.488  1.00  0.00          H
HETATM 6050  O   SPC  1101      -0.847   9.791 -19.184  1.00  0.00          O
HETATM 6051  H1  SPC  1101      -1.047   8.831 -18.928  1.00  0.00          H
HETATM 6052  H2  SPC  1101      -1.717  10.280 -19.267  1.00  0.00          H
HETATM 6053  O   SPC  1102       8.564  19.091 -17.010  1.00  0.00          O
HETATM 6054  H1  SPC  1102       8.756  18.797 -16.056  1.00  0.00          H
HETATM 6055  H2  SPC  1102       9.439  19.368 -17.427  1.00  0.00          H
HETATM 6056  O   SPC  1109       7.217  21.717 -11.634  1.00  0.00          O
HETATM 6057  H1  SPC  1109       7.496  21.320 -12.521  1.00  0.00          H
HETATM 6058  H2  SPC  1109       6.211  21.775 -11.619  1.00  0.00          H
HETATM 6059  O   SPC  1111       1.817  19.917 -16.446  1.00  0.00          O
HETATM 6060  H1  SPC  1111       1.641  20.790 -15.988  1.00  0.00          H
HETATM 6061  H2  SPC  1111       1.280  19.921 -17.310  1.00  0.00          H
HETATM 6062  O   SPC  1113      -2.022  23.810 -11.600  1.00  0.00          O
HETATM 6063  H1  SPC  1113      -1.253  23.264 -11.962  1.00  0.00          H
HETATM 6064  H2  SPC  1113      -2.792  23.751 -12.248  1.00  0.00          H
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HETATM 6065  O   SPC  1128      4.198  25.369  -9.026  1.00  0.00           O
HETATM 6066  H1  SPC  1128      3.223  25.473  -9.257  1.00  0.00           H
HETATM 6067  H2  SPC  1128      4.495  26.160  -8.478  1.00  0.00           H
HETATM 6068  O   SPC  1147     -0.562  27.350   0.572  1.00  0.00           O
HETATM 6069  H1  SPC  1147     -1.078  26.540   0.895  1.00  0.00           H
HETATM 6070  H2  SPC  1147     -1.188  28.130   0.523  1.00  0.00           H
HETATM 6071  O   SPC  1155      5.508  25.680  -1.632  1.00  0.00           O
HETATM 6072  H1  SPC  1155      5.629  26.092  -0.722  1.00  0.00           H
HETATM 6073  H2  SPC  1155      5.464  26.429  -2.316  1.00  0.00           H
HETATM 6074  O   SPC  1178      3.718  28.359  -5.612  1.00  0.00           O
HETATM 6075  H1  SPC  1178      4.358  27.862  -6.221  1.00  0.00           H
HETATM 6076  H2  SPC  1178      3.530  29.258  -6.013  1.00  0.00           H
HETATM 6077  O   SPC  1184      5.662  25.908   3.891  1.00  0.00           O
HETATM 6078  H1  SPC  1184      5.329  25.086   3.406  1.00  0.00           H
HETATM 6079  H2  SPC  1184      5.048  26.083   4.675  1.00  0.00           H
HETATM 6080  O   SPC  1190      6.340  27.464   7.892  1.00  0.00           O
HETATM 6081  H1  SPC  1190      6.521  27.712   6.929  1.00  0.00           H
HETATM 6082  H2  SPC  1190      7.110  27.793   8.457  1.00  0.00           H
HETATM 6083  O   SPC  1196      1.785  27.278  -3.906  1.00  0.00           O
HETATM 6084  H1  SPC  1196      2.423  27.735  -4.542  1.00  0.00           H
HETATM 6085  H2  SPC  1196      1.005  26.914  -4.437  1.00  0.00           H
HETATM 6086  O   SPC  1211      9.178  30.624  -0.127  1.00  0.00           O
HETATM 6087  H1  SPC  1211      8.612  29.867  -0.486  1.00  0.00           H
HETATM 6088  H2  SPC  1211      8.691  31.045   0.647  1.00  0.00           H
HETATM 6089  O   SPC  1220      7.756  31.443   2.109  1.00  0.00           O
HETATM 6090  H1  SPC  1220      7.177  32.261   2.111  1.00  0.00           H
HETATM 6091  H2  SPC  1220      7.181  30.642   2.356  1.00  0.00           H
HETATM 6092  O   SPC  1223      5.219  27.714  -3.355  1.00  0.00           O
HETATM 6093  H1  SPC  1223      4.618  27.989  -4.117  1.00  0.00           H
HETATM 6094  H2  SPC  1223      6.141  28.096  -3.517  1.00  0.00           H
HETATM 6095  O   SPC  1228      6.273  29.320   2.801  1.00  0.00           O
HETATM 6096  H1  SPC  1228      5.944  28.620   2.156  1.00  0.00           H
HETATM 6097  H2  SPC  1228      6.352  28.909   3.718  1.00  0.00           H
HETATM 6098  O   SPC  1230      1.531  26.760  -1.184  1.00  0.00           O
HETATM 6099  H1  SPC  1230      1.524  27.128  -2.126  1.00  0.00           H
HETATM 6100  H2  SPC  1230      0.724  27.109  -0.686  1.00  0.00           H
HETATM 6101  O   SPC  1254      6.929  27.966   5.222  1.00  0.00           O
HETATM 6102  H1  SPC  1254      6.669  27.126   4.726  1.00  0.00           H
HETATM 6103  H2  SPC  1254      7.923  28.121   5.106  1.00  0.00           H
HETATM 6104  O   SPC  1358      8.544  28.253   9.382  1.00  0.00           O
HETATM 6105  H1  SPC  1358      8.820  27.453   9.941  1.00  0.00           H
HETATM 6106  H2  SPC  1358      8.600  29.077   9.950  1.00  0.00           H
HETATM 6107  O   SPC  3122     23.198   9.285  -2.751  1.00  0.00           O
HETATM 6108  H1  SPC  3122     23.872   8.902  -3.386  1.00  0.00           H
HETATM 6109  H2  SPC  3122     23.074   8.633  -1.980  1.00  0.00           H
HETATM 6110  O   SPC  3135     23.449  11.288   0.815  1.00  0.00           O
HETATM 6111  H1  SPC  3135     23.061  11.497  -0.092  1.00  0.00           H
HETATM 6112  H2  SPC  3135     23.638  10.298   0.868  1.00  0.00           H
HETATM 6113  O   SPC  3137     20.497   8.903  -3.269  1.00  0.00           O
HETATM 6114  H1  SPC  3137     20.212   9.346  -4.131  1.00  0.00           H
HETATM 6115  H2  SPC  3137     21.482   9.067  -3.129  1.00  0.00           H
HETATM 6116  O   SPC  3144     24.222   8.637   1.418  1.00  0.00           O
HETATM 6117  H1  SPC  3144     24.039   8.707   2.414  1.00  0.00           H
HETATM 6118  H2  SPC  3144     25.152   8.285   1.292  1.00  0.00           H
HETATM 6119  O   SPC  3156     22.912   7.608  -0.725  1.00  0.00           O
HETATM 6120  H1  SPC  3156     23.318   7.946   0.136  1.00  0.00           H
HETATM 6121  H2  SPC  3156     22.403   6.757  -0.529  1.00  0.00           H
HETATM 6122  O   SPC  3162     23.985   9.005   4.064  1.00  0.00           O
HETATM 6123  H1  SPC  3162     24.120  10.005   4.004  1.00  0.00           H
HETATM 6124  H2  SPC  3162     23.869   8.746   5.032  1.00  0.00           H
HETATM 6125  O   SPC  3189     10.851   7.598  17.458  1.00  0.00           O
HETATM 6126  H1  SPC  3189     10.532   6.691  17.769  1.00  0.00           H
HETATM 6127  H2  SPC  3189     10.070   8.242  17.514  1.00  0.00           H
HETATM 6128  O   SPC  3194     13.269   8.811  17.405  1.00  0.00           O
HETATM 6129  H1  SPC  3194     12.414   8.269  17.314  1.00  0.00           H
HETATM 6130  H2  SPC  3194     13.372   9.074  18.367  1.00  0.00           H
HETATM 6131  O   SPC  3212      9.603   5.230  18.177  1.00  0.00           O
HETATM 6132  H1  SPC  3212      8.941   5.008  17.451  1.00  0.00           H
HETATM 6133  H2  SPC  3212      9.400   4.671  18.983  1.00  0.00           H
HETATM 6134  O   SPC  3266      8.631   9.161  17.663  1.00  0.00           O
HETATM 6135  H1  SPC  3266      7.823   8.720  18.080  1.00  0.00           H
HETATM 6136  H2  SPC  3266      8.463  10.155  17.607  1.00  0.00           H
HETATM 6137  O   SPC  3271     15.899   8.713  16.422  1.00  0.00           O
HETATM 6138  H1  SPC  3271     16.252   9.660  16.353  1.00  0.00           H
HETATM 6139  H2  SPC  3271     14.941   8.750  16.744  1.00  0.00           H
HETATM 6140  O   SPC  3671     16.187   8.355 -15.270  1.00  0.00           O
HETATM 6141  H1  SPC  3671     15.404   7.776 -14.996  1.00  0.00           H
HETATM 6142  H2  SPC  3671     16.497   8.888 -14.469  1.00  0.00           H
HETATM 6143  O   SPC  3690     12.512  10.257 -13.013  1.00  0.00           O
HETATM 6144  H1  SPC  3690     13.289  10.662 -13.512  1.00  0.00           H
HETATM 6145  H2  SPC  3690     12.865   9.884 -12.133  1.00  0.00           H
HETATM 6146  O   SPC  3693     18.992   8.216 -12.044  1.00  0.00           O
HETATM 6147  H1  SPC  3693     19.032   7.906 -11.086  1.00  0.00           H
HETATM 6148  H2  SPC  3693     19.115   7.412 -12.646  1.00  0.00           H
HETATM 6149  O   SPC  3704     19.039   6.023 -13.646  1.00  0.00           O
HETATM 6150  H1  SPC  3704     18.850   6.281 -14.603  1.00  0.00           H
HETATM 6151  H2  SPC  3704     18.449   5.249 -13.401  1.00  0.00           H
HETATM 6152  O   SPC  3725     16.481   4.849 -14.679  1.00  0.00           O
HETATM 6153  H1  SPC  3725     15.751   5.496 -14.421  1.00  0.00           H
HETATM 6154  H2  SPC  3725     17.110   5.316 -15.314  1.00  0.00           H
HETATM 6155  O   SPC  3734     14.246   6.491 -14.659  1.00  0.00           O
HETATM 6156  H1  SPC  3734     13.419   6.935 -14.273  1.00  0.00           H
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HETATM 6157  H2  SPC  3734      13.955   5.674 -15.176  1.00  0.00           H
HETATM 6158  O   SPC  3757      18.875   4.387  -9.103  1.00  0.00           O
HETATM 6159  H1  SPC  3757      19.116   3.602  -8.502  1.00  0.00           H
HETATM 6160  H2  SPC  3757      17.993   4.187  -9.544  1.00  0.00           H
HETATM 6161  O   SPC  3761      19.314   7.133  -9.444  1.00  0.00           O
HETATM 6162  H1  SPC  3761      19.037   6.166  -9.321  1.00  0.00           H
HETATM 6163  H2  SPC  3761      20.311   7.186  -9.359  1.00  0.00           H
HETATM 6164  O   SPC  3778      14.085   3.919 -15.719  1.00  0.00           O
HETATM 6165  H1  SPC  3778      13.661   3.087 -15.357  1.00  0.00           H
HETATM 6166  H2  SPC  3778      15.044   3.963 -15.407  1.00  0.00           H
HETATM 6167  O   SPC  3781      12.013   7.660 -13.747  1.00  0.00           O
HETATM 6168  H1  SPC  3781      12.179   8.622 -13.486  1.00  0.00           H
HETATM 6169  H2  SPC  3781      11.068   7.419 -13.499  1.00  0.00           H
HETATM 6170  O   SPC  3783      18.037   6.624 -16.162  1.00  0.00           O
HETATM 6171  H1  SPC  3783      18.365   6.837 -17.083  1.00  0.00           H
HETATM 6172  H2  SPC  3783      17.367   7.335 -15.884  1.00  0.00           H
HETATM 6173  O   SPC  3785      18.649   9.560  -7.916  1.00  0.00           O
HETATM 6174  H1  SPC  3785      17.668   9.767  -7.773  1.00  0.00           H
HETATM 6175  H2  SPC  3785      18.728   8.695  -8.429  1.00  0.00           H
HETATM 6176  O   SPC  3790      17.728  22.381   1.285  1.00  0.00           O
HETATM 6177  H1  SPC  3790      18.199  21.483   1.248  1.00  0.00           H
HETATM 6178  H2  SPC  3790      17.947  22.821   2.167  1.00  0.00           H
HETATM 6179  O   SPC  3794       9.232  22.203   8.286  1.00  0.00           O
HETATM 6180  H1  SPC  3794       9.080  23.195   8.169  1.00  0.00           H
HETATM 6181  H2  SPC  3794       8.558  21.841   8.946  1.00  0.00           H
HETATM 6182  O   SPC  3796      22.463  11.771  -1.839  1.00  0.00           O
HETATM 6183  H1  SPC  3796      22.816  10.859  -2.093  1.00  0.00           H
HETATM 6184  H2  SPC  3796      21.895  12.104  -2.604  1.00  0.00           H
HETATM 6185  O   SPC  3798      18.931  19.942   1.286  1.00  0.00           O
HETATM 6186  H1  SPC  3798      19.849  19.705   1.657  1.00  0.00           H
HETATM 6187  H2  SPC  3798      18.419  19.087   1.171  1.00  0.00           H
HETATM 6188  O   SPC  3799      15.414  28.613  -0.620  1.00  0.00           O
HETATM 6189  H1  SPC  3799      14.787  29.068   0.026  1.00  0.00           H
HETATM 6190  H2  SPC  3799      15.898  27.871  -0.139  1.00  0.00           H
HETATM 6191  O   SPC  3800      13.296  22.623   8.623  1.00  0.00           O
HETATM 6192  H1  SPC  3800      12.780  22.942   7.811  1.00  0.00           H
HETATM 6193  H2  SPC  3800      14.268  22.872   8.495  1.00  0.00           H
HETATM 6194  O   SPC  3803      16.109  20.265   8.411  1.00  0.00           O
HETATM 6195  H1  SPC  3803      15.250  20.192   8.937  1.00  0.00           H
HETATM 6196  H2  SPC  3803      16.496  19.332   8.326  1.00  0.00           H
HETATM 6197  O   SPC  3808      11.259  23.540   2.590  1.00  0.00           O
HETATM 6198  H1  SPC  3808      10.591  22.787   2.455  1.00  0.00           H
HETATM 6199  H2  SPC  3808      11.707  23.723   1.701  1.00  0.00           H
HETATM 6200  O   SPC  3810      14.978  22.533   1.128  1.00  0.00           O
HETATM 6201  H1  SPC  3810      14.686  22.787   0.198  1.00  0.00           H
HETATM 6202  H2  SPC  3810      15.975  22.367   1.123  1.00  0.00           H
HETATM 6203  O   SPC  3811       8.178  21.790  -3.502  1.00  0.00           O
HETATM 6204  H1  SPC  3811       7.530  22.192  -2.839  1.00  0.00           H
HETATM 6205  H2  SPC  3811       8.953  22.424  -3.613  1.00  0.00           H
HETATM 6206  O   SPC  3812      13.711  25.582   3.212  1.00  0.00           O
HETATM 6207  H1  SPC  3812      13.633  25.736   2.214  1.00  0.00           H
HETATM 6208  H2  SPC  3812      13.950  24.613   3.372  1.00  0.00           H
HETATM 6209  O   SPC  3813      13.879  24.278  -4.082  1.00  0.00           O
HETATM 6210  H1  SPC  3813      13.939  23.348  -4.479  1.00  0.00           H
HETATM 6211  H2  SPC  3813      13.477  24.890  -4.773  1.00  0.00           H
HETATM 6212  O   SPC  3814      14.442  23.609  -1.485  1.00  0.00           O
HETATM 6213  H1  SPC  3814      15.414  23.830  -1.330  1.00  0.00           H
HETATM 6214  H2  SPC  3814      14.204  23.869  -2.436  1.00  0.00           H
HETATM 6215  O   SPC  3815      16.144  10.604  -7.506  1.00  0.00           O
HETATM 6216  H1  SPC  3815      16.274  11.579  -7.293  1.00  0.00           H
HETATM 6217  H2  SPC  3815      15.653  10.529  -8.393  1.00  0.00           H
HETATM 6218  O   SPC  3818      19.633  10.348  -5.426  1.00  0.00           O
HETATM 6219  H1  SPC  3818      19.359  10.052  -6.354  1.00  0.00           H
HETATM 6220  H2  SPC  3818      18.833  10.755  -4.969  1.00  0.00           H
HETATM 6221  O   SPC  3822      21.557  14.337  -0.875  1.00  0.00           O
HETATM 6222  H1  SPC  3822      22.180  13.572  -1.080  1.00  0.00           H
HETATM 6223  H2  SPC  3822      20.649  14.112  -1.265  1.00  0.00           H
HETATM 6224  O   SPC  3823      13.452  25.996   0.553  1.00  0.00           O
HETATM 6225  H1  SPC  3823      13.243  26.649  -0.190  1.00  0.00           H
HETATM 6226  H2  SPC  3823      12.958  25.134   0.363  1.00  0.00           H
HETATM 6227  O   SPC  3825       9.973  27.607  -6.148  1.00  0.00           O
HETATM 6228  H1  SPC  3825      10.252  28.278  -5.450  1.00  0.00           H
HETATM 6229  H2  SPC  3825       9.356  26.932  -5.714  1.00  0.00           H
HETATM 6230  O   SPC  3826      12.116  25.691  -5.822  1.00  0.00           O
HETATM 6231  H1  SPC  3826      11.603  24.881  -6.144  1.00  0.00           H
HETATM 6232  H2  SPC  3826      11.682  26.512  -6.210  1.00  0.00           H
HETATM 6233  O   SPC  3827      11.374  20.800  -4.513  1.00  0.00           O
HETATM 6234  H1  SPC  3827      11.266  20.939  -5.506  1.00  0.00           H
HETATM 6235  H2  SPC  3827      10.710  20.109  -4.205  1.00  0.00           H
HETATM 6236  O   SPC  3829      11.450  26.212  -3.233  1.00  0.00           O
HETATM 6237  H1  SPC  3829      12.142  26.566  -2.584  1.00  0.00           H
HETATM 6238  H2  SPC  3829      11.901  26.035  -4.121  1.00  0.00           H
HETATM 6239  O   SPC  3831      16.668  13.276  -6.718  1.00  0.00           O
HETATM 6240  H1  SPC  3831      17.589  13.205  -6.301  1.00  0.00           H
HETATM 6241  H2  SPC  3831      16.764  13.694  -7.635  1.00  0.00           H
HETATM 6242  O   SPC  3832      15.125  27.274   4.711  1.00  0.00           O
HETATM 6243  H1  SPC  3832      14.573  26.675   4.107  1.00  0.00           H
HETATM 6244  H2  SPC  3832      14.956  26.992   5.662  1.00  0.00           H
HETATM 6245  O   SPC  3839      12.072  23.442   6.323  1.00  0.00           O
HETATM 6246  H1  SPC  3839      12.180  22.626   5.735  1.00  0.00           H
HETATM 6247  H2  SPC  3839      11.215  23.905   6.059  1.00  0.00           H
HETATM 6248  O   SPC  3843      11.324  26.585   4.021  1.00  0.00           O
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HETATM 6249  H1  SPC  3843      12.249  26.234   3.806  1.00  0.00           H
HETATM 6250  H2  SPC  3843      10.772  25.821   4.387  1.00  0.00           H
HETATM 6251  O   SPC  3845      19.142  13.638  -1.864  1.00  0.00           O
HETATM 6252  H1  SPC  3845      18.856  12.834  -2.401  1.00  0.00           H
HETATM 6253  H2  SPC  3845      18.480  14.386  -2.016  1.00  0.00           H
HETATM 6254  O   SPC  3847      11.761  21.521  -7.202  1.00  0.00           O
HETATM 6255  H1  SPC  3847      11.691  21.283  -8.183  1.00  0.00           H
HETATM 6256  H2  SPC  3847      12.731  21.657  -6.974  1.00  0.00           H
HETATM 6257  O   SPC  3848      12.118  23.721  -0.005  1.00  0.00           O
HETATM 6258  H1  SPC  3848      12.856  23.512  -0.664  1.00  0.00           H
HETATM 6259  H2  SPC  3848      11.236  23.751  -0.498  1.00  0.00           H
HETATM 6260  O   SPC  3850      16.483  17.719  -6.322  1.00  0.00           O
HETATM 6261  H1  SPC  3850      16.034  18.621  -6.285  1.00  0.00           H
HETATM 6262  H2  SPC  3850      16.488  17.407  -7.285  1.00  0.00           H
HETATM 6263  O   SPC  3851      18.352  23.852   3.617  1.00  0.00           O
HETATM 6264  H1  SPC  3851      19.342  23.960   3.725  1.00  0.00           H
HETATM 6265  H2  SPC  3851      17.947  24.761   3.416  1.00  0.00           H
HETATM 6266  O   SPC  3853       9.891  24.055  -3.821  1.00  0.00           O
HETATM 6267  H1  SPC  3853      10.549  24.775  -3.548  1.00  0.00           H
HETATM 6268  H2  SPC  3853      10.112  23.765  -4.766  1.00  0.00           H
HETATM 6269  O   SPC  3855      16.247  23.716   5.504  1.00  0.00           O
HETATM 6270  H1  SPC  3855      17.119  23.770   5.001  1.00  0.00           H
HETATM 6271  H2  SPC  3855      15.536  23.391   4.859  1.00  0.00           H
HETATM 6272  O   SPC  3858      21.290  12.255  -4.365  1.00  0.00           O
HETATM 6273  H1  SPC  3858      20.728  11.492  -4.721  1.00  0.00           H
HETATM 6274  H2  SPC  3858      22.039  12.428  -5.008  1.00  0.00           H
HETATM 6275  O   SPC  3859      17.615  15.854  -2.272  1.00  0.00           O
HETATM 6276  H1  SPC  3859      17.246  15.685  -3.202  1.00  0.00           H
HETATM 6277  H2  SPC  3859      18.213  16.657  -2.311  1.00  0.00           H
HETATM 6278  O   SPC  3860      24.358  11.649   3.367  1.00  0.00           O
HETATM 6279  H1  SPC  3860      23.969  11.569   2.435  1.00  0.00           H
HETATM 6280  H2  SPC  3860      24.982  12.432   3.388  1.00  0.00           H
HETATM 6281  O   SPC  3862       9.635  24.169  -1.075  1.00  0.00           O
HETATM 6282  H1  SPC  3862       9.635  25.148  -0.823  1.00  0.00           H
HETATM 6283  H2  SPC  3862       9.599  24.090  -2.081  1.00  0.00           H
HETATM 6284  O   SPC  3863      14.412  22.945   3.693  1.00  0.00           O
HETATM 6285  H1  SPC  3863      13.731  22.267   4.001  1.00  0.00           H
HETATM 6286  H2  SPC  3863      14.638  22.752   2.721  1.00  0.00           H
HETATM 6287  O   SPC  3864      18.944  13.486  -5.276  1.00  0.00           O
HETATM 6288  H1  SPC  3864      19.800  13.202  -4.824  1.00  0.00           H
HETATM 6289  H2  SPC  3864      18.659  14.378  -4.911  1.00  0.00           H
HETATM 6290  O   SPC  3870      12.121  21.591   4.314  1.00  0.00           O
HETATM 6291  H1  SPC  3870      11.899  22.397   3.746  1.00  0.00           H
HETATM 6292  H2  SPC  3870      11.707  20.780   3.872  1.00  0.00           H
HETATM 6293  O   SPC  3872      15.985  22.912   8.117  1.00  0.00           O
HETATM 6294  H1  SPC  3872      16.185  23.256   7.188  1.00  0.00           H
HETATM 6295  H2  SPC  3872      16.147  21.910   8.130  1.00  0.00           H
HETATM 6296  O   SPC  3873      13.064  27.651  -1.611  1.00  0.00           O
HETATM 6297  H1  SPC  3873      14.024  27.956  -1.523  1.00  0.00           H
HETATM 6298  H2  SPC  3873      12.465  28.457  -1.495  1.00  0.00           H
HETATM 6299  O   SPC  3874      12.369  26.175   8.531  1.00  0.00           O
HETATM 6300  H1  SPC  3874      11.621  26.639   8.035  1.00  0.00           H
HETATM 6301  H2  SPC  3874      13.110  25.966   7.878  1.00  0.00           H
HETATM 6302  O   SPC  3876      14.144  25.277   6.579  1.00  0.00           O
HETATM 6303  H1  SPC  3876      13.375  24.646   6.405  1.00  0.00           H
HETATM 6304  H2  SPC  3876      14.999  24.825   6.292  1.00  0.00           H
HETATM 6305  O   SPC  3877       7.792  21.078  10.318  1.00  0.00           O
HETATM 6306  H1  SPC  3877       7.650  20.107  10.560  1.00  0.00           H
HETATM 6307  H2  SPC  3877       8.015  21.581  11.166  1.00  0.00           H
HETATM 6308  O   SPC  3879       8.942  24.932   8.223  1.00  0.00           O
HETATM 6309  H1  SPC  3879       8.989  25.268   9.175  1.00  0.00           H
HETATM 6310  H2  SPC  3879       9.425  25.597   7.636  1.00  0.00           H
HETATM 6311  O   SPC  3881       9.518  26.654   0.163  1.00  0.00           O
HETATM 6312  H1  SPC  3881       8.900  26.289   0.875  1.00  0.00           H
HETATM 6313  H2  SPC  3881      10.229  27.213   0.616  1.00  0.00           H
HETATM 6314  O   SPC  3883      16.164  26.223   0.634  1.00  0.00           O
HETATM 6315  H1  SPC  3883      16.576  25.482   0.084  1.00  0.00           H
HETATM 6316  H2  SPC  3883      15.160  26.097   0.636  1.00  0.00           H
HETATM 6317  O   SPC  3888      10.346  23.694  -6.487  1.00  0.00           O
HETATM 6318  H1  SPC  3888       9.654  23.935  -7.186  1.00  0.00           H
HETATM 6319  H2  SPC  3888      10.833  22.860  -6.793  1.00  0.00           H
HETATM 6320  O   SPC  3890      16.988  15.520  -4.860  1.00  0.00           O
HETATM 6321  H1  SPC  3890      16.652  14.762  -5.432  1.00  0.00           H
HETATM 6322  H2  SPC  3890      16.819  16.390  -5.356  1.00  0.00           H
HETATM 6323  O   SPC  3891      17.113  24.036  -0.792  1.00  0.00           O
HETATM 6324  H1  SPC  3891      17.819  24.019  -1.502  1.00  0.00           H
HETATM 6325  H2  SPC  3891      17.393  23.416  -0.041  1.00  0.00           H
HETATM 6326  O   SPC  3895      13.849  21.826  -5.162  1.00  0.00           O
HETATM 6327  H1  SPC  3895      13.032  21.358  -4.793  1.00  0.00           H
HETATM 6328  H2  SPC  3895      14.462  21.141  -5.583  1.00  0.00           H
HETATM 6329  O   SPC  3898       9.920  24.375   4.766  1.00  0.00           O
HETATM 6330  H1  SPC  3898      10.407  24.084   3.926  1.00  0.00           H
HETATM 6331  H2  SPC  3898       8.952  24.094   4.686  1.00  0.00           H
HETATM 6332  O   SPC  3899      17.238  26.245   3.158  1.00  0.00           O
HETATM 6333  H1  SPC  3899      16.886  26.320   2.213  1.00  0.00           H
HETATM 6334  H2  SPC  3899      16.582  26.689   3.782  1.00  0.00           H
HETATM 6335  O   SPC  3903      13.929  20.577  12.661  1.00  0.00           O
HETATM 6336  H1  SPC  3903      13.905  21.586  12.693  1.00  0.00           H
HETATM 6337  H2  SPC  3903      13.161  20.218  13.211  1.00  0.00           H
HETATM 6338  O   SPC  3911       9.341  19.525  15.198  1.00  0.00           O
HETATM 6339  H1  SPC  3911       8.411  19.666  14.832  1.00  0.00           H
HETATM 6340  H2  SPC  3911       9.711  20.426  15.477  1.00  0.00           H
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HETATM 6341  O   SPC  3923       9.435  16.912  16.104  1.00  0.00           O
HETATM 6342  H1  SPC  3923       9.499  17.880  15.816  1.00  0.00           H
HETATM 6343  H2  SPC  3923      10.361  16.575  16.326  1.00  0.00           H
HETATM 6344  O   SPC  3942       8.332  22.093  12.808  1.00  0.00           O
HETATM 6345  H1  SPC  3942       7.936  21.430  13.456  1.00  0.00           H
HETATM 6346  H2  SPC  3942       9.309  22.218  13.026  1.00  0.00           H
HETATM 6347  O   SPC  3960       9.312  26.054  10.727  1.00  0.00           O
HETATM 6348  H1  SPC  3960      10.238  25.720  10.953  1.00  0.00           H
HETATM 6349  H2  SPC  3960       8.636  25.542  11.286  1.00  0.00           H
HETATM 6350  O   SPC  3961      11.815  24.832  10.801  1.00  0.00           O
HETATM 6351  H1  SPC  3961      11.534  23.925  10.468  1.00  0.00           H
HETATM 6352  H2  SPC  3961      12.117  25.387  10.005  1.00  0.00           H
HETATM 6353  O   SPC  3963      13.831  20.262   9.912  1.00  0.00           O
HETATM 6354  H1  SPC  3963      13.608  21.126   9.439  1.00  0.00           H
HETATM 6355  H2  SPC  3963      13.930  20.446  10.900  1.00  0.00           H
HETATM 6356  O   SPC  3965      13.664  23.360  12.317  1.00  0.00           O
HETATM 6357  H1  SPC  3965      14.552  23.265  11.837  1.00  0.00           H
HETATM 6358  H2  SPC  3965      13.136  24.092  11.862  1.00  0.00           H
HETATM 6359  O   SPC  3970      18.866   9.470  14.229  1.00  0.00           O
HETATM 6360  H1  SPC  3970      19.741   9.777  14.609  1.00  0.00           H
HETATM 6361  H2  SPC  3970      18.995   9.264  13.249  1.00  0.00           H
HETATM 6362  O   SPC  3978      11.789  15.544  16.842  1.00  0.00           O
HETATM 6363  H1  SPC  3978      12.458  14.878  16.475  1.00  0.00           H
HETATM 6364  H2  SPC  3978      11.119  15.034  17.404  1.00  0.00           H
HETATM 6365  O   SPC  3991      11.168  19.481  11.184  1.00  0.00           O
HETATM 6366  H1  SPC  3991      11.124  20.406  10.786  1.00  0.00           H
HETATM 6367  H2  SPC  3991      11.258  19.559  12.184  1.00  0.00           H
HETATM 6368  O   SPC  3992      10.348  22.003  15.477  1.00  0.00           O
HETATM 6369  H1  SPC  3992      10.727  22.157  14.552  1.00  0.00           H
HETATM 6370  H2  SPC  3992      10.549  22.802  16.046  1.00  0.00           H
HETATM 6371  O   SPC  3996      11.122  22.419  12.886  1.00  0.00           O
HETATM 6372  H1  SPC  3996      12.033  22.844  12.986  1.00  0.00           H
HETATM 6373  H2  SPC  3996      10.963  22.267  11.900  1.00  0.00           H
HETATM 6374  O   SPC  4004      15.903  16.611  14.875  1.00  0.00           O
HETATM 6375  H1  SPC  4004      16.596  17.081  15.425  1.00  0.00           H
HETATM 6376  H2  SPC  4004      15.764  17.141  14.020  1.00  0.00           H
HETATM 6377  O   SPC  4008      17.131  11.102  15.866  1.00  0.00           O
HETATM 6378  H1  SPC  4008      17.724  10.739  15.139  1.00  0.00           H
HETATM 6379  H2  SPC  4008      16.840  12.036  15.619  1.00  0.00           H
HETATM 6380  O   SPC  4015      16.248  13.851  15.579  1.00  0.00           O
HETATM 6381  H1  SPC  4015      16.570  14.038  16.510  1.00  0.00           H
HETATM 6382  H2  SPC  4015      16.117  14.732  15.103  1.00  0.00           H
HETATM 6383  O   SPC  4018      13.473  13.647  15.890  1.00  0.00           O
HETATM 6384  H1  SPC  4018      14.462  13.586  15.710  1.00  0.00           H
HETATM 6385  H2  SPC  4018      13.104  12.711  16.005  1.00  0.00           H
HETATM 6386  O   SPC  4019      12.401  11.162  16.136  1.00  0.00           O
HETATM 6387  H1  SPC  4019      12.694  10.290  16.550  1.00  0.00           H
HETATM 6388  H2  SPC  4019      11.409  11.129  15.973  1.00  0.00           H
HETATM 6389  O   SPC  4040      15.902  22.823  10.874  1.00  0.00           O
HETATM 6390  H1  SPC  4040      15.964  23.061   9.894  1.00  0.00           H
HETATM 6391  H2  SPC  4040      16.538  22.072  11.060  1.00  0.00           H
HETATM 6392  O   SPC  4047      11.838  19.304  13.975  1.00  0.00           O
HETATM 6393  H1  SPC  4047      12.408  18.712  14.567  1.00  0.00           H
HETATM 6394  H2  SPC  4047      10.924  19.386  14.395  1.00  0.00           H
HETATM 6395  O   SPC  4049      13.270  17.552  15.543  1.00  0.00           O
HETATM 6396  H1  SPC  4049      12.771  16.897  16.127  1.00  0.00           H
HETATM 6397  H2  SPC  4049      14.192  17.188  15.365  1.00  0.00           H
HETATM 6398  O   SPC  4057      11.153  22.111  10.153  1.00  0.00           O
HETATM 6399  H1  SPC  4057      10.409  22.074   9.465  1.00  0.00           H
HETATM 6400  H2  SPC  4057      12.026  22.248   9.657  1.00  0.00           H
HETATM 6401  O   SPC  4065       9.790  14.083  18.025  1.00  0.00           O
HETATM 6402  H1  SPC  4065       9.410  13.158  17.907  1.00  0.00           H
HETATM 6403  H2  SPC  4065       9.028  14.721  18.201  1.00  0.00           H
HETATM 6404  O   SPC  4072      15.551  18.290  12.790  1.00  0.00           O
HETATM 6405  H1  SPC  4072      15.101  19.193  12.789  1.00  0.00           H
HETATM 6406  H2  SPC  4072      15.674  17.992  11.827  1.00  0.00           H
HETATM 6407  O   SPC  4392       9.406  22.449 -10.138  1.00  0.00           O
HETATM 6408  H1  SPC  4392       8.619  22.175 -10.714  1.00  0.00           H
HETATM 6409  H2  SPC  4392       9.127  23.226  -9.561  1.00  0.00           H
HETATM 6410  O   SPC  4394      11.868  16.779 -12.289  1.00  0.00           O
HETATM 6411  H1  SPC  4394      11.996  16.032 -12.956  1.00  0.00           H
HETATM 6412  H2  SPC  4394      10.897  17.080 -12.343  1.00  0.00           H
HETATM 6413  O   SPC  4398      18.603  12.027  -9.361  1.00  0.00           O
HETATM 6414  H1  SPC  4398      18.807  11.179  -8.856  1.00  0.00           H
HETATM 6415  H2  SPC  4398      18.067  11.792 -10.184  1.00  0.00           H
HETATM 6416  O   SPC  4400      14.793  11.053 -14.406  1.00  0.00           O
HETATM 6417  H1  SPC  4400      14.773  10.545 -15.271  1.00  0.00           H
HETATM 6418  H2  SPC  4400      15.601  10.752 -13.881  1.00  0.00           H
HETATM 6419  O   SPC  4410      14.247  20.480  -9.028  1.00  0.00           O
HETATM 6420  H1  SPC  4410      14.688  19.981  -9.787  1.00  0.00           H
HETATM 6421  H2  SPC  4410      13.324  20.761  -9.330  1.00  0.00           H
HETATM 6422  O   SPC  4411       8.479  24.424  -8.368  1.00  0.00           O
HETATM 6423  H1  SPC  4411       8.341  25.423  -8.356  1.00  0.00           H
HETATM 6424  H2  SPC  4411       7.575  23.976  -8.467  1.00  0.00           H
HETATM 6425  O   SPC  4416      16.334  16.903  -8.916  1.00  0.00           O
HETATM 6426  H1  SPC  4416      15.480  16.898  -9.451  1.00  0.00           H
HETATM 6427  H2  SPC  4416      16.763  15.991  -8.992  1.00  0.00           H
HETATM 6428  O   SPC  4423      15.508  20.277  -6.668  1.00  0.00           O
HETATM 6429  H1  SPC  4423      16.398  20.711  -6.822  1.00  0.00           H
HETATM 6430  H2  SPC  4423      14.993  20.282  -7.543  1.00  0.00           H
HETATM 6431  O   SPC  4433      13.601  12.652  -9.621  1.00  0.00           O
HETATM 6432  H1  SPC  4433      13.217  12.656  -8.690  1.00  0.00           H
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HETATM 6433  H2  SPC  4433      14.018  11.741  -9.791  1.00  0.00           H
HETATM 6434  O   SPC  4458      12.556  19.467 -12.042  1.00  0.00           O
HETATM 6435  H1  SPC  4458      13.548  19.465 -11.858  1.00  0.00           H
HETATM 6436  H2  SPC  4458      12.247  18.509 -12.140  1.00  0.00           H
HETATM 6437  O   SPC  4466      11.353  19.635 -17.212  1.00  0.00           O
HETATM 6438  H1  SPC  4466      11.387  19.822 -16.214  1.00  0.00           H
HETATM 6439  H2  SPC  4466      12.052  20.191 -17.665  1.00  0.00           H
HETATM 6440  O   SPC  4479      11.711  14.890 -14.419  1.00  0.00           O
HETATM 6441  H1  SPC  4479      11.593  15.627 -15.099  1.00  0.00           H
HETATM 6442  H2  SPC  4479      10.964  14.221 -14.541  1.00  0.00           H
HETATM 6443  O   SPC  4481      17.124   9.890 -13.188  1.00  0.00           O
HETATM 6444  H1  SPC  4481      17.030  10.647 -12.524  1.00  0.00           H
HETATM 6445  H2  SPC  4481      17.844   9.265 -12.846  1.00  0.00           H
HETATM 6446  O   SPC  4484      10.087  10.671 -14.288  1.00  0.00           O
HETATM 6447  H1  SPC  4484      10.954  10.545 -13.785  1.00  0.00           H
HETATM 6448  H2  SPC  4484      10.049  11.618 -14.634  1.00  0.00           H
HETATM 6449  O   SPC  4485      11.718  21.059  -9.928  1.00  0.00           O
HETATM 6450  H1  SPC  4485      11.888  20.506 -10.757  1.00  0.00           H
HETATM 6451  H2  SPC  4485      10.868  21.595 -10.071  1.00  0.00           H
HETATM 6452  O   SPC  4491      14.139  13.706 -13.665  1.00  0.00           O
HETATM 6453  H1  SPC  4491      14.290  12.785 -14.047  1.00  0.00           H
HETATM 6454  H2  SPC  4491      13.262  14.067 -14.014  1.00  0.00           H
HETATM 6455  O   SPC  4519      15.123  14.109 -11.223  1.00  0.00           O
HETATM 6456  H1  SPC  4519      14.795  14.025 -12.182  1.00  0.00           H
HETATM 6457  H2  SPC  4519      14.483  13.591 -10.624  1.00  0.00           H
HETATM 6458  O   SPC  4533      14.191  16.624 -10.766  1.00  0.00           O
HETATM 6459  H1  SPC  4533      13.274  16.671 -11.192  1.00  0.00           H
HETATM 6460  H2  SPC  4533      14.567  15.699 -10.931  1.00  0.00           H
HETATM 6461  O   SPC  4538      15.185  19.079 -11.202  1.00  0.00           O
HETATM 6462  H1  SPC  4538      14.841  18.140 -11.033  1.00  0.00           H
HETATM 6463  H2  SPC  4538      16.156  19.024 -11.444  1.00  0.00           H
HETATM 6464  O   SPC  4549       8.175  27.239  -8.219  1.00  0.00           O
HETATM 6465  H1  SPC  4549       8.867  27.453  -7.512  1.00  0.00           H
HETATM 6466  H2  SPC  4549       8.468  27.643  -9.089  1.00  0.00           H
HETATM 6467  O   SPC  4562      17.075  14.287  -9.225  1.00  0.00           O
HETATM 6468  H1  SPC  4562      17.777  13.562  -9.311  1.00  0.00           H
HETATM 6469  H2  SPC  4562      16.424  14.197  -9.992  1.00  0.00           H
HETATM 6470  O   SPC  4578       9.515  13.282 -15.152  1.00  0.00           O
HETATM 6471  H1  SPC  4578       9.474  13.871 -15.975  1.00  0.00           H
HETATM 6472  H2  SPC  4578       8.592  12.911 -14.988  1.00  0.00           H
HETATM 6473  O   SPC  4583      10.988  17.002 -16.139  1.00  0.00           O
HETATM 6474  H1  SPC  4583      10.379  17.450 -15.466  1.00  0.00           H
HETATM 6475  H2  SPC  4583      11.383  17.718 -16.727  1.00  0.00           H
HETATM 6476  O   SPC  4591      11.371  19.931 -14.531  1.00  0.00           O
HETATM 6477  H1  SPC  4591      11.846  19.949 -13.641  1.00  0.00           H
HETATM 6478  H2  SPC  4591      10.531  19.372 -14.431  1.00  0.00           H
HETATM 6479  O   SPC  4593      16.685  11.803 -11.327  1.00  0.00           O
HETATM 6480  H1  SPC  4593      16.040  11.256 -10.761  1.00  0.00           H
HETATM 6481  H2  SPC  4593      16.250  12.689 -11.531  1.00  0.00           H
HETATM 6482  O   SPC  4595       9.604  28.450   4.891  1.00  0.00           O
HETATM 6483  H1  SPC  4595      10.271  27.759   4.568  1.00  0.00           H
HETATM 6484  H2  SPC  4595       9.738  29.294   4.350  1.00  0.00           H
HETATM 6485  O   SPC  4603      15.002  29.542   3.175  1.00  0.00           O
HETATM 6486  H1  SPC  4603      14.991  28.743   3.796  1.00  0.00           H
HETATM 6487  H2  SPC  4603      15.903  29.977   3.230  1.00  0.00           H
HETATM 6488  O   SPC  4655      10.124  27.299   7.334  1.00  0.00           O
HETATM 6489  H1  SPC  4655       9.975  27.779   6.458  1.00  0.00           H
HETATM 6490  H2  SPC  4655       9.578  27.759   8.049  1.00  0.00           H
HETATM 6491  O   SPC  4664      11.084  28.202   1.829  1.00  0.00           O
HETATM 6492  H1  SPC  4664      11.216  27.546   2.588  1.00  0.00           H
HETATM 6493  H2  SPC  4664      10.639  29.031   2.196  1.00  0.00           H
HETATM 6494  O   SPC  4699      13.343  29.542   1.027  1.00  0.00           O
HETATM 6495  H1  SPC  4699      13.938  29.632   1.843  1.00  0.00           H
HETATM 6496  H2  SPC  4699      12.558  28.952   1.269  1.00  0.00           H
HETATM 6497  O   SPC  4716      10.531  28.790  -3.588  1.00  0.00           O
HETATM 6498  H1  SPC  4716      10.838  27.845  -3.402  1.00  0.00           H
HETATM 6499  H2  SPC  4716      10.930  29.397  -2.888  1.00  0.00           H
HETATM 6500  O   SPC  4729      11.590  29.920  -1.177  1.00  0.00           O
HETATM 6501  H1  SPC  4729      12.291  30.063  -0.465  1.00  0.00           H
HETATM 6502  H2  SPC  4729      10.703  30.254  -0.820  1.00  0.00           H
HETATM 6503  O   SPC  4733      10.108  30.472   3.098  1.00  0.00           O
HETATM 6504  H1  SPC  4733       9.241  30.859   2.747  1.00  0.00           H
HETATM 6505  H2  SPC  4733      10.831  31.161   3.002  1.00  0.00           H
HETATM 6506  O   SPC  A25J    -18.163   6.716   8.032  1.00  0.00           O
HETATM 6507  H1  SPC  A25J    -17.885   6.419   7.105  1.00  0.00           H
HETATM 6508  H2  SPC  A25J    -19.114   7.026   7.986  1.00  0.00           H
HETATM 6509  O   SPC  A25P    -18.334  -2.589   8.061  1.00  0.00           O
HETATM 6510  H1  SPC  A25P    -17.865  -3.421   7.744  1.00  0.00           H
HETATM 6511  H2  SPC  A25P    -17.866  -2.269   8.896  1.00  0.00           H
HETATM 6512  O   SPC  A25R    -17.523   2.601   7.374  1.00  0.00           O
HETATM 6513  H1  SPC  A25R    -16.684   2.922   7.821  1.00  0.00           H
HETATM 6514  H2  SPC  A25R    -17.554   2.984   6.442  1.00  0.00           H
HETATM 6515  O   SPC  A25S    -18.844  -2.908   3.359  1.00  0.00           O
HETATM 6516  H1  SPC  A25S    -19.818  -3.000   3.149  1.00  0.00           H
HETATM 6517  H2  SPC  A25S    -18.430  -2.259   2.705  1.00  0.00           H
HETATM 6518  O   SPC  A26K    -16.985  -4.082   4.959  1.00  0.00           O
HETATM 6519  H1  SPC  A26K    -16.121  -3.957   4.461  1.00  0.00           H
HETATM 6520  H2  SPC  A26K    -17.734  -3.694   4.399  1.00  0.00           H
HETATM 6521  O   SPC  A26V    -17.981   6.117   5.307  1.00  0.00           O
HETATM 6522  H1  SPC  A26V    -18.447   6.376   4.437  1.00  0.00           H
HETATM 6523  H2  SPC  A26V    -17.656   5.166   5.214  1.00  0.00           H
HETATM 6524  O   SPC  A278    -16.544  -4.636   7.534  1.00  0.00           O
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HETATM 6525  H1  SPC  A278     -15.576  -4.420   7.724  1.00  0.00          H
HETATM 6526  H2  SPC  A278     -16.709  -4.498   6.540  1.00  0.00          H
HETATM 6527  O   SPC  A27A     -17.022   3.536   4.780  1.00  0.00          O
HETATM 6528  H1  SPC  A27A     -16.398   3.944   4.099  1.00  0.00          H
HETATM 6529  H2  SPC  A27A     -17.011   2.535   4.655  1.00  0.00          H
HETATM 6530  O   SPC  A281    -14.544   4.714  12.685  1.00  0.00          O
HETATM 6531  H1  SPC  A281    -14.432   5.713  12.581  1.00  0.00          H
HETATM 6532  H2  SPC  A281    -14.289   4.458  13.630  1.00  0.00          H
HETATM 6533  O   SPC  A287     -8.773   8.966  13.423  1.00  0.00          O
HETATM 6534  H1  SPC  A287     -7.834   8.742  13.717  1.00  0.00          H
HETATM 6535  H2  SPC  A287     -8.715   9.536  12.587  1.00  0.00          H
HETATM 6536  O   SPC  A28N    -10.670   0.942  17.121  1.00  0.00          O
HETATM 6537  H1  SPC  A28N    -11.013   0.999  18.062  1.00  0.00          H
HETATM 6538  H2  SPC  A28N     -9.674   0.760  17.154  1.00  0.00          H
HETATM 6539  O   SPC  A291     -9.254   4.820  16.119  1.00  0.00          O
HETATM 6540  H1  SPC  A291     -9.522   4.449  15.223  1.00  0.00          H
HETATM 6541  H2  SPC  A291     -8.611   4.176  16.557  1.00  0.00          H
HETATM 6542  O   SPC  A298    -13.791   3.997  15.182  1.00  0.00          O
HETATM 6543  H1  SPC  A298    -13.269   3.133  15.185  1.00  0.00          H
HETATM 6544  H2  SPC  A298    -13.157   4.756  15.407  1.00  0.00          H
HETATM 6545  O   SPC  A29N    -18.188   0.612   9.123  1.00  0.00          O
HETATM 6546  H1  SPC  A29N    -18.029   1.366   8.466  1.00  0.00          H
HETATM 6547  H2  SPC  A29N    -18.436  -0.212   8.609  1.00  0.00          H
HETATM 6548  O   SPC  A2AC    -12.138   1.780  14.910  1.00  0.00          O
HETATM 6549  H1  SPC  A2AC    -11.562   2.403  14.362  1.00  0.00          H
HETATM 6550  H2  SPC  A2AC    -11.628   1.518  15.743  1.00  0.00          H
HETATM 6551  O   SPC  A2AJ    -17.847   5.880  10.703  1.00  0.00          O
HETATM 6552  H1  SPC  A2AJ    -17.499   6.746  11.067  1.00  0.00          H
HETATM 6553  H2  SPC  A2AJ    -17.986   5.983   9.709  1.00  0.00          H
HETATM 6554  O   SPC  A2AP    -11.865   5.934  15.487  1.00  0.00          O
HETATM 6555  H1  SPC  A2AP    -11.730   6.703  14.849  1.00  0.00          H
HETATM 6556  H2  SPC  A2AP    -10.977   5.689  15.893  1.00  0.00          H
HETATM 6557  O   SPC  A2BE    -17.636   0.993  11.810  1.00  0.00          O
HETATM 6558  H1  SPC  A2BE    -17.588   1.988  11.968  1.00  0.00          H
HETATM 6559  H2  SPC  A2BE    -17.889   0.828  10.845  1.00  0.00          H
HETATM 6560  O   SPC  A2BQ    -16.249   2.665  14.871  1.00  0.00          O
HETATM 6561  H1  SPC  A2BQ    -16.718   3.096  14.090  1.00  0.00          H
HETATM 6562  H2  SPC  A2BQ    -15.452   3.228  15.123  1.00  0.00          H
HETATM 6563  O   SPC  A2BS    -17.097   3.768  12.384  1.00  0.00          O
HETATM 6564  H1  SPC  A2BS    -16.120   4.031  12.400  1.00  0.00          H
HETATM 6565  H2  SPC  A2BS    -17.590   4.436  11.809  1.00  0.00          H
HETATM 6566  O   SPC  A2BV    -16.221   0.097  13.950  1.00  0.00          O
HETATM 6567  H1  SPC  A2BV    -16.788   0.251  13.125  1.00  0.00          H
HETATM 6568  H2  SPC  A2BV    -16.250   0.943  14.505  1.00  0.00          H
HETATM 6569  O   SPC  A2OW    -18.049   8.962   5.012  1.00  0.00          O
HETATM 6570  H1  SPC  A2OW    -18.438   9.069   4.080  1.00  0.00          H
HETATM 6571  H2  SPC  A2OW    -17.998   7.976   5.212  1.00  0.00          H
HETATM 6572  O   SPC  A2QF    -17.451  10.527   7.139  1.00  0.00          O
HETATM 6573  H1  SPC  A2QF    -17.629   9.918   6.347  1.00  0.00          H
HETATM 6574  H2  SPC  A2QF    -17.883  11.412   6.962  1.00  0.00          H
HETATM 6575  O   SPC  A2QT    -10.831  19.645   7.001  1.00  0.00          O
HETATM 6576  H1  SPC  A2QT    -10.222  20.176   7.607  1.00  0.00          H
HETATM 6577  H2  SPC  A2QT    -11.595  20.236   6.702  1.00  0.00          H
HETATM 6578  O   SPC  A2R4    -11.391   7.999  13.588  1.00  0.00          O
HETATM 6579  H1  SPC  A2R4    -10.385   8.077  13.560  1.00  0.00          H
HETATM 6580  H2  SPC  A2R4    -11.783   8.862  13.238  1.00  0.00          H
HETATM 6581  O   SPC  A2RI     -8.590  10.679  11.333  1.00  0.00          O
HETATM 6582  H1  SPC  A2RI     -9.371  10.929  10.742  1.00  0.00          H
HETATM 6583  H2  SPC  A2RI     -7.729  10.790  10.806  1.00  0.00          H
HETATM 6584  O   SPC  A2RJ    -10.937  11.704  10.343  1.00  0.00          O
HETATM 6585  H1  SPC  A2RJ    -10.746  12.696  10.373  1.00  0.00          H
HETATM 6586  H2  SPC  A2RJ    -11.806  11.556   9.847  1.00  0.00          H
HETATM 6587  O   SPC  A2RY    -16.773   8.859   9.220  1.00  0.00          O
HETATM 6588  H1  SPC  A2RY    -16.968   9.588   8.545  1.00  0.00          H
HETATM 6589  H2  SPC  A2RY    -17.133   7.992   8.852  1.00  0.00          H
HETATM 6590  O   SPC  A2S2    -14.776   9.569  11.004  1.00  0.00          O
HETATM 6591  H1  SPC  A2S2    -14.562   8.747  11.550  1.00  0.00          H
HETATM 6592  H2  SPC  A2S2    -15.572   9.361  10.414  1.00  0.00          H
HETATM 6593  O   SPC  A2S9    -10.260  14.372  10.781  1.00  0.00          O
HETATM 6594  H1  SPC  A2S9     -9.952  13.916  11.630  1.00  0.00          H
HETATM 6595  H2  SPC  A2S9     -9.725  15.221  10.665  1.00  0.00          H
HETATM 6596  O   SPC  A2T8    -12.047  15.301   8.845  1.00  0.00          O
HETATM 6597  H1  SPC  A2T8    -12.673  14.598   8.479  1.00  0.00          H
HETATM 6598  H2  SPC  A2T8    -11.535  14.908   9.621  1.00  0.00          H
HETATM 6599  O   SPC  A2TA    -10.342  10.977  14.570  1.00  0.00          O
HETATM 6600  H1  SPC  A2TA     -9.778  10.179  14.311  1.00  0.00          H
HETATM 6601  H2  SPC  A2TA    -11.258  10.860  14.168  1.00  0.00          H
HETATM 6602  O   SPC  A2TV    -12.275  10.362  12.479  1.00  0.00          O
HETATM 6603  H1  SPC  A2TV    -13.213  10.251  12.129  1.00  0.00          H
HETATM 6604  H2  SPC  A2TV    -11.722  10.829  11.776  1.00  0.00          H
HETATM 6605  O   SPC  A2UG    -13.607  13.291   7.780  1.00  0.00          O
HETATM 6606  H1  SPC  A2UG    -14.581  13.420   7.576  1.00  0.00          H
HETATM 6607  H2  SPC  A2UG    -13.500  12.432   8.306  1.00  0.00          H
HETATM 6608  O   SPC  A2UN     -9.293  12.849  12.862  1.00  0.00          O
HETATM 6609  H1  SPC  A2UN     -8.897  12.126  12.276  1.00  0.00          H
HETATM 6610  H2  SPC  A2UN     -9.799  12.398  13.610  1.00  0.00          H
HETATM 6611  O   SPC  A2V9    -10.314  17.226   8.118  1.00  0.00          O
HETATM 6612  H1  SPC  A2V9    -11.078  16.579   8.284  1.00  0.00          H
HETATM 6613  H2  SPC  A2V9    -10.686  18.070   7.702  1.00  0.00          H
HETATM 6614  O   SPC  A2W8    -13.306  11.026   9.228  1.00  0.00          O
HETATM 6615  H1  SPC  A2W8    -13.964  10.641   9.894  1.00  0.00          H
HETATM 6616  H2  SPC  A2W8    -12.901  10.259   8.711  1.00  0.00          H
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HETATM 6617  O   SPC  A4YB     2.442  12.557  10.865  1.00  0.00          O
HETATM 6618  H1  SPC  A4YB     1.483  12.838  11.027  1.00  0.00          H
HETATM 6619  H2  SPC  A4YB     2.451  11.897  10.104  1.00  0.00          H
HETATM 6620  O   SPC  A4YC    -9.822  18.341   4.807  1.00  0.00          O
HETATM 6621  H1  SPC  A4YC   -10.534  17.631   4.712  1.00  0.00          H
HETATM 6622  H2  SPC  A4YC   -10.046  18.905   5.614  1.00  0.00          H
HETATM 6623  O   SPC  A4YD    -9.970   7.825  -1.235  1.00  0.00          O
HETATM 6624  H1  SPC  A4YD    -9.801   7.113  -0.532  1.00  0.00          H
HETATM 6625  H2  SPC  A4YD   -10.916   8.155  -1.132  1.00  0.00          H
HETATM 6626  O   SPC  A4YE    -1.061   8.543   8.660  1.00  0.00          O
HETATM 6627  H1  SPC  A4YE    -1.851   8.881   8.176  1.00  0.00          H
HETATM 6628  H2  SPC  A4YE    -1.325   7.706   9.068  1.00  0.00          H
HETATM 6629  O   SPC  A4YF    -7.974   0.511  17.358  1.00  0.00          O
HETATM 6630  H1  SPC  A4YF    -7.152  -0.030  17.119  1.00  0.00          H
HETATM 6631  H2  SPC  A4YF    -7.722   1.491  17.344  1.00  0.00          H
HETATM 6632  O   SPC  A4YG     2.168  19.004  -3.954  1.00  0.00          O
HETATM 6633  H1  SPC  A4YG     2.804  18.307  -4.306  1.00  0.00          H
HETATM 6634  H2  SPC  A4YG     1.311  18.947  -4.480  1.00  0.00          H
HETATM 6635  O   SPC  A4YH     2.038  10.783   8.418  1.00  0.00          O
HETATM 6636  H1  SPC  A4YH     2.754  11.265   7.928  1.00  0.00          H
HETATM 6637  H2  SPC  A4YH     1.300  10.750   7.782  1.00  0.00          H
HETATM 6638  O   SPC  A4YJ     2.985   3.347  -3.067  1.00  0.00          O
HETATM 6639  H1  SPC  A4YJ     3.301   2.821  -3.861  1.00  0.00          H
HETATM 6640  H2  SPC  A4YJ     3.434   4.251  -3.081  1.00  0.00          H
HETATM 6641  O   SPC  A4YK   -13.572  -0.394  13.884  1.00  0.00          O
HETATM 6642  H1  SPC  A4YK   -13.076   0.426  14.203  1.00  0.00          H
HETATM 6643  H2  SPC  A4YK   -14.566  -0.219  13.976  1.00  0.00          H
HETATM 6644  O   SPC  A4YL     9.028  18.043   3.289  1.00  0.00          O
HETATM 6645  H1  SPC  A4YL     9.825  18.613   3.021  1.00  0.00          H
HETATM 6646  H2  SPC  A4YL     8.397  17.984   2.498  1.00  0.00          H
HETATM 6647  O   SPC  A4YM     4.313  16.340   7.863  1.00  0.00          O
HETATM 6648  H1  SPC  A4YM     4.184  15.954   6.945  1.00  0.00          H
HETATM 6649  H2  SPC  A4YM     3.767  15.790   8.519  1.00  0.00          H
HETATM 6650  O   SPC  A4YN   -12.343   5.608   5.702  1.00  0.00          O
HETATM 6651  H1  SPC  A4YN   -12.132   4.658   5.431  1.00  0.00          H
HETATM 6652  H2  SPC  A4YN   -12.224   6.211   4.908  1.00  0.00          H
HETATM 6653  O   SPC  A4YO     5.914   6.113   2.273  1.00  0.00          O
HETATM 6654  H1  SPC  A4YO     6.296   5.560   3.018  1.00  0.00          H
HETATM 6655  H2  SPC  A4YO     5.754   7.050   2.605  1.00  0.00          H
HETATM 6656  O   SPC  A4YP    -3.351   8.992  11.534  1.00  0.00          O
HETATM 6657  H1  SPC  A4YP    -3.175   8.023  11.744  1.00  0.00          H
HETATM 6658  H2  SPC  A4YP    -3.914   9.034  10.693  1.00  0.00          H
HETATM 6659  O   SPC  A4YQ     3.887  19.885  -1.951  1.00  0.00          O
HETATM 6660  H1  SPC  A4YQ     3.246  19.673  -2.702  1.00  0.00          H
HETATM 6661  H2  SPC  A4YQ     4.738  19.350  -2.084  1.00  0.00          H
HETATM 6662  O   SPC  A4YS     1.554  10.307  12.762  1.00  0.00          O
HETATM 6663  H1  SPC  A4YS     0.749  10.160  12.173  1.00  0.00          H
HETATM 6664  H2  SPC  A4YS     2.169  10.960  12.309  1.00  0.00          H
HETATM 6665  O   SPC  A4YT     4.652  21.003  -8.560  1.00  0.00          O
HETATM 6666  H1  SPC  A4YT     4.858  20.289  -9.243  1.00  0.00          H
HETATM 6667  H2  SPC  A4YT     3.653  21.016  -8.396  1.00  0.00          H
HETATM 6668  O   SPC  A4YU    -5.635  -0.783  16.823  1.00  0.00          O
HETATM 6669  H1  SPC  A4YU    -5.740  -1.686  17.265  1.00  0.00          H
HETATM 6670  H2  SPC  A4YU    -4.703  -0.439  17.016  1.00  0.00          H
HETATM 6671  O   SPC  A4YV    -1.079  22.576 -15.120  1.00  0.00          O
HETATM 6672  H1  SPC  A4YV    -1.250  21.596 -14.942  1.00  0.00          H
HETATM 6673  H2  SPC  A4YV    -0.614  22.647 -16.024  1.00  0.00          H
HETATM 6674  O   SPC  A4YY   -11.984   4.793  11.489  1.00  0.00          O
HETATM 6675  H1  SPC  A4YY   -12.098   5.466  10.748  1.00  0.00          H
HETATM 6676  H2  SPC  A4YY   -12.900   4.493  11.785  1.00  0.00          H
HETATM 6677  O   SPC  A4YZ     1.841   8.174   8.625  1.00  0.00          O
HETATM 6678  H1  SPC  A4YZ     2.647   7.683   8.848  1.00  0.00          H
HETATM 6679  H2  SPC  A4YZ     2.069   9.140   8.644  1.00  0.00          H
HETATM 6680  O   SPC  A4Z0     2.034  18.191   3.412  1.00  0.00          O
HETATM 6681  H1  SPC  A4Z0     1.056  18.116   3.166  1.00  0.00          H
HETATM 6682  H2  SPC  A4Z0     2.583  18.114   2.571  1.00  0.00          H
HETATM 6683  O   SPC  A4Z2    -4.735   8.826   9.260  1.00  0.00          O
HETATM 6684  H1  SPC  A4Z2    -4.278   9.037   8.384  1.00  0.00          H
HETATM 6685  H2  SPC  A4Z2    -5.268   7.985   9.139  1.00  0.00          H
HETATM 6686  O   SPC  A4Z3     7.124  18.567   1.462  1.00  0.00          O
HETATM 6687  H1  SPC  A4Z3     6.765  19.499   1.332  1.00  0.00          H
HETATM 6688  H2  SPC  A4Z3     7.059  18.074   0.574  1.00  0.00          H
HETATM 6689  O   SPC  A4Z5    -0.731  10.159  10.911  1.00  0.00          O
HETATM 6690  H1  SPC  A4Z5    -1.596   9.853  11.229  1.00  0.00          H
HETATM 6691  H2  SPC  A4Z5    -0.617   9.691  10.070  1.00  0.00          H
HETATM 6692  O   SPC  A4Z6   -13.760   7.322  12.246  1.00  0.00          O
HETATM 6693  H1  SPC  A4Z6   -13.446   7.100  11.309  1.00  0.00          H
HETATM 6694  H2  SPC  A4Z6   -12.949   7.406  12.842  1.00  0.00          H
HETATM 6695  O   SPC  A4Z7    -9.117  -1.195  19.176  1.00  0.00          O
HETATM 6696  H1  SPC  A4Z7    -9.625  -1.854  18.601  1.00  0.00          H
HETATM 6697  H2  SPC  A4Z7    -8.613  -0.567  18.568  1.00  0.00          H
HETATM 6698  O   SPC  A4Z8     5.051  20.960  -5.847  1.00  0.00          O
HETATM 6699  H1  SPC  A4Z8     4.785  21.804  -5.357  1.00  0.00          H
HETATM 6700  H2  SPC  A4Z8     4.849  21.073  -6.831  1.00  0.00          H
HETATM 6701  O   SPC  A4Z9     2.036  20.936  -7.810  1.00  0.00          O
HETATM 6702  H1  SPC  A4Z9     2.054  19.959  -7.562  1.00  0.00          H
HETATM 6703  H2  SPC  A4Z9     1.352  21.408  -7.234  1.00  0.00          H
HETATM 6704  O   SPC  A4ZA    -1.012  14.502   4.189  1.00  0.00          O
HETATM 6705  H1  SPC  A4ZA    -0.805  13.599   4.509  1.00  0.00          H
HETATM 6706  H2  SPC  A4ZA    -1.946  14.583   4.423  1.00  0.00          H
HETATM 6707  O   SPC  A4ZB     0.121  22.406  -6.437  1.00  0.00          O
HETATM 6708  H1  SPC  A4ZB    -0.784  22.253  -6.005  1.00  0.00          H
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HETATM 6709  H2  SPC  A4ZB       0.055  23.237  -7.008  1.00  0.00          H
HETATM 6710  O   SPC  A4ZC     -12.913   6.804   9.741  1.00  0.00          O
HETATM 6711  H1  SPC  A4ZC     -12.528   7.591   9.241  1.00  0.00          H
HETATM 6712  H2  SPC  A4ZC     -13.515   6.295   9.109  1.00  0.00          H
HETATM 6713  C1  MMA A 901      -7.653   7.099   7.591  1.00 38.63          C
HETATM 6714  C2  MMA A 901      -6.923   8.185   6.815  1.00 39.79          C
HETATM 6715  O1  MMA A 901      -8.767   7.665   8.229  1.00 38.68          O
HETATM 6716  C3  MMA A 901      -7.721   8.613   5.590  1.00 38.55          C
HETATM 6717  C7  MMA A 901      -9.366   6.745   9.130  1.00 39.29          C
HETATM 6718  O2  MMA A 901      -5.678   7.632   6.449  1.00 42.66          O
HETATM 6719  C4  MMA A 901      -8.262   7.436   4.801  1.00 38.26          C
HETATM 6720  O3  MMA A 901      -6.882   9.429   4.788  1.00 36.39          O
HETATM 6721  C5  MMA A 901      -8.862   6.351   5.702  1.00 38.04          C
HETATM 6722  O4  MMA A 901      -9.229   7.999   3.931  1.00 36.12          O
HETATM 6723  C6  MMA A 901      -9.081   5.066   4.926  1.00 39.02          C
HETATM 6724  O5  MMA A 901      -7.986   6.020   6.779  1.00 38.49          O
HETATM 6725  O6  MMA A 901      -7.909   4.791   4.203  1.00 37.72          O
HETATM 6726  H1  MMA A 901      -6.982   6.679   8.355  1.00  0.00          H
HETATM 6727  H2  MMA A 901      -6.793   9.063   7.465  1.00  0.00          H
HETATM 6728  H3  MMA A 901      -8.564   9.221   5.943  1.00  0.00          H
HETATM 6729  H71 MMA A 901     -10.046   7.305   9.773  1.00  0.00          H
HETATM 6730  H72 MMA A 901      -9.911   5.961   8.596  1.00  0.00          H
HETATM 6731  H73 MMA A 901      -8.603   6.276   9.763  1.00  0.00          H
HETATM 6732  HO2 MMA A 901      -5.328   8.152   5.707  1.00  0.00          H
HETATM 6733  H4  MMA A 901      -7.443   6.985   4.231  1.00  0.00          H
HETATM 6734  HO3 MMA A 901      -6.801   9.062   3.893  1.00  0.00          H
HETATM 6735  H5  MMA A 901      -9.821   6.695   6.111  1.00  0.00          H
HETATM 6736  HO4 MMA A 901      -9.764   7.323   3.459  1.00  0.00          H
HETATM 6737  H61 MMA A 901      -9.327   4.274   5.644  1.00  0.00          H
HETATM 6738  H62 MMA A 901      -9.939   5.199   4.258  1.00  0.00          H
HETATM 6739  HO6 MMA A 901      -7.993   3.937   3.748  1.00  0.00          H
HETATM 6740  PB  GDP A 904      -2.403   8.815   5.696  1.00 26.19          P
HETATM 6741  O1B GDP A 904      -3.527   8.422   4.612  1.00 27.84          O
HETATM 6742  O2B GDP A 904      -1.450   7.659   5.880  1.00 26.32          O1-
HETATM 6743  O3B GDP A 904      -3.004   9.391   6.962  1.00 26.19          O1-
HETATM 6744  O3A GDP A 904      -1.668  10.041   4.911  1.00 25.44          O
HETATM 6745  PA  GDP A 904      -0.211  10.706   5.248  1.00 25.23          P
HETATM 6746  O1A GDP A 904       0.445   9.861   6.328  1.00 25.43          O
HETATM 6747  O2A GDP A 904      -0.318  12.181   5.457  1.00 26.02          O1-
HETATM 6748  O5' GDP A 904       0.513  10.554   3.824  1.00 25.21          O
HETATM 6749  C5' GDP A 904       0.778   9.297   3.228  1.00 23.27          C
HETATM 6750  C4' GDP A 904       2.262   9.255   2.825  1.00 23.57          C
HETATM 6751  O4' GDP A 904       2.522  10.333   1.929  1.00 24.01          O
HETATM 6752  C3' GDP A 904       3.229   9.429   4.000  1.00 23.80          C
HETATM 6753  O3' GDP A 904       4.344   8.577   3.815  1.00 22.36          O
HETATM 6754  C2' GDP A 904       3.680  10.880   3.906  1.00 23.31          C
HETATM 6755  O2' GDP A 904       5.009  10.950   4.389  1.00 21.65          O
HETATM 6756  C1' GDP A 904       3.550  11.152   2.402  1.00 24.11          C
HETATM 6757  N9  GDP A 904       3.156  12.570   2.127  1.00 24.67          N
HETATM 6758  C8  GDP A 904       1.944  13.186   2.346  1.00 24.89          C
HETATM 6759  N7  GDP A 904       1.902  14.442   1.998  1.00 24.52          N
HETATM 6760  C5  GDP A 904       3.176  14.691   1.504  1.00 24.90          C
HETATM 6761  C6  GDP A 904       3.747  15.912   1.011  1.00 26.54          C
HETATM 6762  O6  GDP A 904       3.234  17.036   1.000  1.00 27.33          O
HETATM 6763  N1  GDP A 904       5.055  15.734   0.564  1.00 26.79          N
HETATM 6764  C2  GDP A 904       5.761  14.545   0.668  1.00 25.66          C
HETATM 6765  N2  GDP A 904       7.033  14.581   0.281  1.00 26.54          N
HETATM 6766  N3  GDP A 904       5.253  13.429   1.156  1.00 26.00          N
HETATM 6767  C4  GDP A 904       3.950  13.548   1.561  1.00 24.67          C
HETATM 6768 H5'1 GDP A 904       0.569   8.477   3.916  1.00  0.00          H
HETATM 6769 H5'2 GDP A 904       0.137   9.146   2.357  1.00  0.00          H
HETATM 6770  H4' GDP A 904       2.449   8.312   2.308  1.00  0.00          H
HETATM 6771  H3' GDP A 904       2.785   9.220   4.972  1.00  0.00          H
HETATM 6772  HO3 GDP A 904       5.089   9.182   3.879  1.00  0.00          H
HETATM 6773  H2' GDP A 904       3.005  11.526   4.468  1.00  0.00          H
HETATM 6774  HO2 GDP A 904       5.092  11.781   4.882  1.00  0.00          H
HETATM 6775  H1' GDP A 904       4.470  10.965   1.849  1.00  0.00          H
HETATM 6776  H8  GDP A 904       1.085  12.683   2.763  1.00  0.00          H
HETATM 6777  HN1 GDP A 904       5.536  16.540   0.144  1.00  0.00          H
HETATM 6778  HN2 GDP A 904       7.697  13.900   0.642  1.00  0.00          H
HETATM 6779  H1  GDP A 904       7.378  15.437  -0.154  1.00  0.00          H
HETATM 6780 MN1   MN A 909       0.376   7.794   7.045  1.00 24.77         Mn2+
HETATM 6781  C1  0MA   2      -3.490   7.017   4.062  0.00  0.00          C1+
HETATM 6782  C2  0MA   2      -2.235   6.847   3.176  0.00  0.00          C
HETATM 6783  O2  0MA   2      -1.743   5.548   3.366  0.00  0.00          O
HETATM 6784  C3  0MA   2      -2.530   7.090   1.700  0.00  0.00          C
HETATM 6785  O3  0MA   2      -1.345   6.805   0.996  0.00  0.00          O
HETATM 6786  C4  0MA   2      -3.729   6.239   1.318  0.00  0.00          C
HETATM 6787  O4  0MA   2      -4.072   6.349  -0.042  0.00  0.00          O
HETATM 6788  C5  0MA   2      -4.924   6.800   2.078  0.00  0.00          C
HETATM 6789  O5  0MA   2      -4.713   6.756   3.509  0.00  0.00          O
HETATM 6790  C6  0MA   2      -6.212   6.057   1.784  0.00  0.00          C
HETATM 6791  O6  0MA   2      -7.281   6.937   2.028  0.00  0.00          O
HETATM 6792  H1  0MA   2      -3.389   6.376   4.938  0.00  0.00          H
HETATM 6793  H2  0MA   2      -1.498   7.582   3.500  0.00  0.00          H
HETATM 6794  H2O 0MA   2      -0.901   5.611   3.851  0.00  0.00          H
HETATM 6795  H3  0MA   2      -2.815   8.146   1.557  0.00  0.00          H
HETATM 6796  H3O 0MA   2      -1.500   6.803   0.020  0.00  0.00          H
HETATM 6797  H4  0MA   2      -3.517   5.200   1.610  0.00  0.00          H
HETATM 6798  H4O 0MA   2      -3.251   6.317  -0.589  0.00  0.00          H
HETATM 6799  H5  0MA   2      -5.066   7.840   1.767  0.00  0.00          H
HETATM 6800  H61 0MA   2      -6.267   5.162   2.419  0.00  0.00          H
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HETATM 6801  H62 0MA     2      -6.181   5.751   0.732  0.00  0.00           H
HETATM 6802  H6O 0MA     2      -8.113   6.558   1.665  0.00  0.00           H
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(c) The Cartesian coordinates (in the PDB format) of the M06-2X:OPLS2005 optimized transition state **TS12** (**WT_Mn**).

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REMARK 888
REMARK 888 WRITTEN BY MAESTRO (A PRODUCT OF SCHRODINGER, LLC)
TITLE     TS12 (WT_Mn)
MODEL        1
ATOM      1  CH3 ACE A 103      -7.073 -19.247 -19.446  1.00  0.00          C
ATOM      2  C   ACE A 103      -5.987 -18.209 -19.681  1.00  0.00          C
ATOM      3  O   ACE A 103      -5.286 -18.267 -20.692  1.00  0.00          O
ATOM      4 1H   ACE A 103      -8.053 -18.769 -19.438  1.00  0.00          H
ATOM      5 2H   ACE A 103      -7.062 -20.010 -20.224  1.00  0.00          H
ATOM      6 3H   ACE A 103      -6.931 -19.730 -18.479  1.00  0.00          H
ATOM      7  N   LYS A 104      -5.848 -17.263 -18.751  1.00 36.95          N
ATOM      8  CA  LYS A 104      -4.837 -16.218 -18.730  1.00 37.33          C
ATOM      9  C   LYS A 104      -4.817 -15.614 -17.327  1.00 36.73          C
ATOM     10  O   LYS A 104      -5.646 -14.742 -17.038  1.00 37.03          O
ATOM     11  CB  LYS A 104      -5.121 -15.131 -19.804  1.00 38.20          C
ATOM     12  CG  LYS A 104      -4.012 -14.058 -19.931  1.00 40.08          C
ATOM     13  CD  LYS A 104      -4.497 -12.590 -19.902  1.00 40.86          C
ATOM     14  CE  LYS A 104      -4.389 -11.887 -18.531  1.00 41.37          C
ATOM     15  NZ  LYS A 104      -5.543 -12.128 -17.647  1.00 44.72          N1+
ATOM     16  HA  LYS A 104      -3.868 -16.677 -18.933  1.00  0.00          H
ATOM     17  HB2 LYS A 104      -5.246 -15.608 -20.777  1.00  0.00          H
ATOM     18  HB3 LYS A 104      -6.086 -14.665 -19.598  1.00  0.00          H
ATOM     19  HG2 LYS A 104      -3.225 -14.206 -19.188  1.00  0.00          H
ATOM     20  HG3 LYS A 104      -3.510 -14.231 -20.884  1.00  0.00          H
ATOM     21  HD2 LYS A 104      -3.846 -12.033 -20.578  1.00  0.00          H
ATOM     22  HD3 LYS A 104      -5.496 -12.487 -20.331  1.00  0.00          H
ATOM     23  HE2 LYS A 104      -3.466 -12.168 -18.028  1.00  0.00          H
ATOM     24  HE3 LYS A 104      -4.322 -10.809 -18.684  1.00  0.00          H
ATOM     25  HZ1 LYS A 104      -5.378 -11.653 -16.759  1.00  0.00          H
ATOM     26  HZ2 LYS A 104      -6.386 -11.727 -18.048  1.00  0.00          H
ATOM     27  HZ3 LYS A 104      -5.679 -13.123 -17.457  1.00  0.00          H
ATOM     28  H2  LYS A 104      -6.426 -17.369 -17.896  1.00  0.00          H
ATOM     29  N   THR A 105      -3.824 -15.955 -16.495  1.00 34.30          N
ATOM     30  CA  THR A 105      -3.615 -15.238 -15.242  1.00 33.23          C
ATOM     31  C   THR A 105      -2.977 -13.879 -15.591  1.00 32.56          C
ATOM     32  O   THR A 105      -2.174 -13.767 -16.522  1.00 32.13          O
ATOM     33  CB  THR A 105      -2.761 -16.050 -14.222  1.00 32.21          C
ATOM     34  OG1 THR A 105      -1.364 -15.789 -14.199  1.00 35.33          O
ATOM     35  CG2 THR A 105      -2.996 -17.567 -14.251  1.00 33.79          C
ATOM     36  H   THR A 105      -3.103 -16.599 -16.786  1.00  0.00          H
ATOM     37  HA  THR A 105      -4.597 -15.085 -14.793  1.00  0.00          H
ATOM     38  HB  THR A 105      -3.112 -15.704 -13.250  1.00  0.00          H
ATOM     39  HG1 THR A 105      -0.931 -16.174 -14.990  1.00  0.00          H
ATOM     40 HG21 THR A 105      -2.530 -18.052 -13.393  1.00  0.00          H
ATOM     41 HG22 THR A 105      -4.062 -17.797 -14.225  1.00  0.00          H
ATOM     42 HG23 THR A 105      -2.577 -18.019 -15.151  1.00  0.00          H
ATOM     43  N   THR A 106      -3.328 -12.826 -14.857  1.00 30.71          N
ATOM     44  CA  THR A 106      -2.700 -11.513 -14.987  1.00 29.71          C
ATOM     45  C   THR A 106      -1.382 -11.472 -14.166  1.00 28.38          C
ATOM     46  O   THR A 106      -0.628 -10.503 -14.253  1.00 26.84          O
ATOM     47  CB  THR A 106      -3.744 -10.442 -14.581  1.00 29.60          C
ATOM     48  OG1 THR A 106      -4.835 -10.514 -15.496  1.00 29.62          O
ATOM     49  CG2 THR A 106      -3.250  -8.990 -14.682  1.00 29.22          C
ATOM     50  H   THR A 106      -3.963 -13.005 -14.062  1.00  0.00          H
ATOM     51  HA  THR A 106      -2.415 -11.328 -16.024  1.00  0.00          H
ATOM     52  HB  THR A 106      -4.111 -10.643 -13.575  1.00  0.00          H
ATOM     53  HG1 THR A 106      -5.364  -9.725 -15.373  1.00  0.00          H
ATOM     54 HG21 THR A 106      -4.045  -8.275 -14.482  1.00  0.00          H
ATOM     55 HG22 THR A 106      -2.450  -8.777 -13.975  1.00  0.00          H
ATOM     56 HG23 THR A 106      -2.865  -8.770 -15.672  1.00  0.00          H
ATOM     57  N   MET A 107      -1.015 -12.574 -13.483  1.00 27.33          N
ATOM     58  CA  MET A 107       0.317 -12.781 -12.913  1.00 27.87          C
ATOM     59  C   MET A 107       1.352 -13.006 -14.026  1.00 27.83          C
ATOM     60  O   MET A 107       2.527 -12.727 -13.818  1.00 28.87          O
ATOM     61  CB  MET A 107       0.332 -14.020 -11.985  1.00 25.92          C
ATOM     62  CG  MET A 107       1.123 -13.818 -10.680  1.00 26.21          C
ATOM     63  SD  MET A 107       2.936 -13.713 -10.776  1.00 27.25          S
ATOM     64  CE  MET A 107       3.440 -15.156  -9.793  1.00 24.40          C
ATOM     65  H   MET A 107      -1.625 -13.380 -13.551  1.00  0.00          H
ATOM     66  HA  MET A 107       0.590 -11.890 -12.347  1.00  0.00          H
ATOM     67  HB2 MET A 107      -0.690 -14.271 -11.713  1.00  0.00          H
ATOM     68  HB3 MET A 107       0.698 -14.909 -12.504  1.00  0.00          H
ATOM     69  HG2 MET A 107       0.754 -12.933 -10.162  1.00  0.00          H
ATOM     70  HG3 MET A 107       0.904 -14.662 -10.037  1.00  0.00          H
ATOM     71  HE1 MET A 107       4.518 -15.293  -9.854  1.00  0.00          H
ATOM     72  HE2 MET A 107       3.179 -15.027  -8.744  1.00  0.00          H
ATOM     73  HE3 MET A 107       2.967 -16.067 -10.160  1.00  0.00          H
ATOM     74  N   ASP A 108       0.960 -13.476 -15.216  1.00 28.14          N
ATOM     75  CA  ASP A 108       1.891 -13.843 -16.294  1.00 28.57          C
ATOM     76  C   ASP A 108       2.498 -12.652 -17.054  1.00 28.39          C
ATOM     77  O   ASP A 108       3.269 -12.830 -17.996  1.00 28.31          O
ATOM     78  CB  ASP A 108       1.264 -14.889 -17.237  1.00 29.94          C
ATOM     79  CG  ASP A 108       1.173 -16.235 -16.530  1.00 31.66          C
ATOM     80  OD1 ASP A 108       2.261 -16.769 -16.207  1.00 31.67          O
ATOM     81  OD2 ASP A 108       0.030 -16.651 -16.228  1.00 33.98          O1-
ATOM     82  H   ASP A 108      -0.007 -13.761 -15.333  1.00  0.00          H
ATOM     83  HA  ASP A 108       2.752 -14.300 -15.821  1.00  0.00          H
ATOM     84  HB2 ASP A 108       0.279 -14.575 -17.580  1.00  0.00          H
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ATOM     85  HB3 ASP A 108       1.877 -15.037 -18.126  1.00  0.00           H
ATOM     86  N   TYR A 109       2.259 -11.428 -16.571  1.00 29.03           N
ATOM     87  CA  TYR A 109       3.067 -10.249 -16.879  1.00 29.95           C
ATOM     88  C   TYR A 109       4.203 -10.066 -15.839  1.00 29.37           C
ATOM     89  O   TYR A 109       4.986  -9.125 -15.960  1.00 30.93           O
ATOM     90  CB  TYR A 109       2.155  -9.004 -16.826  1.00 32.34           C
ATOM     91  CG  TYR A 109       0.970  -9.026 -17.782  1.00 34.77           C
ATOM     92  CD1 TYR A 109      -0.346  -8.917 -17.284  1.00 34.89           C
ATOM     93  CD2 TYR A 109       1.174  -9.174 -19.171  1.00 35.80           C
ATOM     94  CE1 TYR A 109      -1.445  -8.989 -18.163  1.00 34.99           C
ATOM     95  CE2 TYR A 109       0.073  -9.244 -20.049  1.00 35.75           C
ATOM     96  CZ  TYR A 109      -1.238  -9.164 -19.541  1.00 36.34           C
ATOM     97  OH  TYR A 109      -2.317  -9.266 -20.368  1.00 36.60           O
ATOM     98  H   TYR A 109       1.580 -11.365 -15.826  1.00  0.00           H
ATOM     99  HA  TYR A 109       3.521 -10.332 -17.868  1.00  0.00           H
ATOM    100  HB2 TYR A 109       1.787  -8.860 -15.809  1.00  0.00           H
ATOM    101  HB3 TYR A 109       2.746  -8.117 -17.058  1.00  0.00           H
ATOM    102  HD1 TYR A 109      -0.521  -8.801 -16.223  1.00  0.00           H
ATOM    103  HD2 TYR A 109       2.174  -9.261 -19.569  1.00  0.00           H
ATOM    104  HE1 TYR A 109      -2.454  -8.923 -17.789  1.00  0.00           H
ATOM    105  HE2 TYR A 109       0.248  -9.379 -21.106  1.00  0.00           H
ATOM    106  HH  TYR A 109      -2.094  -9.265 -21.288  1.00  0.00           H
ATOM    107  N   ILE A 110       4.287 -10.931 -14.815  1.00 28.23           N
ATOM    108  CA  ILE A 110       5.174 -10.860 -13.653  1.00 27.12           C
ATOM    109  C   ILE A 110       5.956 -12.177 -13.455  1.00 28.39           C
ATOM    110  O   ILE A 110       7.111 -12.106 -13.019  1.00 27.18           O
ATOM    111  CB  ILE A 110       4.382 -10.431 -12.376  1.00 26.29           C
ATOM    112  CG1 ILE A 110       3.594  -9.114 -12.560  1.00 26.10           C
ATOM    113  CG2 ILE A 110       5.269 -10.332 -11.119  1.00 24.77           C
ATOM    114  CD1 ILE A 110       2.111  -9.326 -12.898  1.00 26.96           C
ATOM    115  H   ILE A 110       3.575 -11.655 -14.763  1.00  0.00           H
ATOM    116  HA  ILE A 110       5.928 -10.094 -13.842  1.00  0.00           H
ATOM    117  HB  ILE A 110       3.659 -11.213 -12.147  1.00  0.00           H
ATOM    118 HG12 ILE A 110       3.633  -8.542 -11.635  1.00  0.00           H
ATOM    119 HG13 ILE A 110       4.070  -8.482 -13.311  1.00  0.00           H
ATOM    120 HG21 ILE A 110       4.697  -9.996 -10.254  1.00  0.00           H
ATOM    121 HG22 ILE A 110       5.694 -11.296 -10.842  1.00  0.00           H
ATOM    122 HG23 ILE A 110       6.089  -9.633 -11.271  1.00  0.00           H
ATOM    123 HD11 ILE A 110       1.610  -8.386 -13.124  1.00  0.00           H
ATOM    124 HD12 ILE A 110       1.980  -9.976 -13.760  1.00  0.00           H
ATOM    125 HD13 ILE A 110       1.583  -9.787 -12.063  1.00  0.00           H
ATOM    126  N   THR A 111       5.368 -13.351 -13.762  1.00 28.11           N
ATOM    127  CA  THR A 111       5.938 -14.705 -13.623  1.00 29.58           C
ATOM    128  C   THR A 111       7.457 -14.895 -13.876  1.00 30.49           C
ATOM    129  O   THR A 111       8.098 -15.513 -13.021  1.00 30.80           O
ATOM    130  CB  THR A 111       5.031 -15.829 -14.202  1.00 29.32           C
ATOM    131  OG1 THR A 111       4.733 -15.626 -15.565  1.00 32.94           O
ATOM    132  CG2 THR A 111       3.736 -16.047 -13.413  1.00 28.93           C
ATOM    133  H   THR A 111       4.399 -13.326 -14.065  1.00  0.00           H
ATOM    134  HA  THR A 111       5.870 -14.849 -12.544  1.00  0.00           H
ATOM    135  HB  THR A 111       5.580 -16.772 -14.151  1.00  0.00           H
ATOM    136  HG1 THR A 111       3.925 -16.116 -15.794  1.00  0.00           H
ATOM    137 HG21 THR A 111       3.171 -16.894 -13.804  1.00  0.00           H
ATOM    138 HG22 THR A 111       3.946 -16.262 -12.367  1.00  0.00           H
ATOM    139 HG23 THR A 111       3.083 -15.181 -13.453  1.00  0.00           H
ATOM    140  N   PRO A 112       8.089 -14.331 -14.939  1.00 32.29           N
ATOM    141  CA  PRO A 112       9.557 -14.266 -15.086  1.00 33.46           C
ATOM    142  C   PRO A 112      10.357 -13.805 -13.847  1.00 35.96           C
ATOM    143  O   PRO A 112      11.382 -14.405 -13.531  1.00 35.45           O
ATOM    144  CB  PRO A 112       9.799 -13.319 -16.270  1.00 33.51           C
ATOM    145  CG  PRO A 112       8.556 -13.467 -17.129  1.00 31.85           C
ATOM    146  CD  PRO A 112       7.437 -13.788 -16.138  1.00 31.36           C
ATOM    147  HA  PRO A 112       9.891 -15.270 -15.353  1.00  0.00           H
ATOM    148  HB2 PRO A 112       9.877 -12.284 -15.933  1.00  0.00           H
ATOM    149  HB3 PRO A 112      10.714 -13.558 -16.813  1.00  0.00           H
ATOM    150  HG2 PRO A 112       8.343 -12.584 -17.733  1.00  0.00           H
ATOM    151  HG3 PRO A 112       8.684 -14.308 -17.812  1.00  0.00           H
ATOM    152  HD2 PRO A 112       6.889 -12.876 -15.912  1.00  0.00           H
ATOM    153  HD3 PRO A 112       6.734 -14.495 -16.578  1.00  0.00           H
ATOM    154  N   SER A 113       9.885 -12.792 -13.103  1.00 36.66           N
ATOM    155  CA  SER A 113      10.554 -12.299 -11.890  1.00 35.89           C
ATOM    156  C   SER A 113      10.359 -13.249 -10.682  1.00 36.89           C
ATOM    157  O   SER A 113      11.084 -13.151  -9.693  1.00 37.22           O
ATOM    158  CB  SER A 113      10.077 -10.853 -11.595  1.00 35.80           C
ATOM    159  OG  SER A 113       8.717 -10.723 -11.199  1.00 33.01           O
ATOM    160  H   SER A 113       8.981 -12.396 -13.341  1.00  0.00           H
ATOM    161  HA  SER A 113      11.627 -12.253 -12.085  1.00  0.00           H
ATOM    162  HB2 SER A 113      10.697 -10.428 -10.802  1.00  0.00           H
ATOM    163  HB3 SER A 113      10.252 -10.225 -12.471  1.00  0.00           H
ATOM    164  HG  SER A 113       8.154 -11.139 -11.853  1.00  0.00           H
ATOM    165  N   PHE A 114       9.439 -14.217 -10.792  1.00 37.03           N
ATOM    166  CA  PHE A 114       9.173 -15.276  -9.822  1.00 38.15           C
ATOM    167  C   PHE A 114       9.865 -16.594 -10.213  1.00 40.29           C
ATOM    168  O   PHE A 114       9.690 -17.594  -9.515  1.00 41.86           O
ATOM    169  CB  PHE A 114       7.644 -15.493  -9.714  1.00 37.24           C
ATOM    170  CG  PHE A 114       7.011 -14.617  -8.655  1.00 37.59           C
ATOM    171  CD1 PHE A 114       6.921 -13.224  -8.854  1.00 37.08           C
ATOM    172  CD2 PHE A 114       6.538 -15.191  -7.457  1.00 36.59           C
ATOM    173  CE1 PHE A 114       6.385 -12.407  -7.845  1.00 37.47           C
ATOM    174  CE2 PHE A 114       6.007 -14.373  -6.447  1.00 35.73           C
ATOM    175  CZ  PHE A 114       5.943 -12.985  -6.642  1.00 36.89           C
ATOM    176  H   PHE A 114       8.929 -14.282 -11.666  1.00  0.00           H
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ATOM    177  HA  PHE A 114       9.564 -15.005  -8.838  1.00  0.00           H
ATOM    178  HB2 PHE A 114       7.146 -15.301 -10.661  1.00  0.00           H
ATOM    179  HB3 PHE A 114       7.392 -16.527  -9.477  1.00  0.00           H
ATOM    180  HD1 PHE A 114       7.271 -12.776  -9.773  1.00  0.00           H
ATOM    181  HD2 PHE A 114       6.579 -16.258  -7.300  1.00  0.00           H
ATOM    182  HE1 PHE A 114       6.315 -11.340  -7.994  1.00  0.00           H
ATOM    183  HE2 PHE A 114       5.659 -14.803  -5.520  1.00  0.00           H
ATOM    184  HZ  PHE A 114       5.548 -12.364  -5.859  1.00  0.00           H
ATOM    185  N   ALA A 115      10.686 -16.612 -11.275  1.00 -1.00           N
ATOM    186  CA  ALA A 115      11.513 -17.761 -11.657  1.00 -1.00           C
ATOM    187  C   ALA A 115      12.817 -17.816 -10.834  1.00 -1.00           C
ATOM    188  O   ALA A 115      13.480 -18.848 -10.791  1.00 -1.00           O
ATOM    189  CB  ALA A 115      11.897 -17.614 -13.138  1.00 -1.00           C
ATOM    190  H   ALA A 115      10.749 -15.778 -11.847  1.00 -1.00           H
ATOM    191  HA  ALA A 115      10.959 -18.691 -11.516  1.00 -1.00           H
ATOM    192  HB1 ALA A 115      12.445 -18.491 -13.486  1.00 -1.00           H
ATOM    193  HB2 ALA A 115      11.013 -17.512 -13.767  1.00 -1.00           H
ATOM    194  HB3 ALA A 115      12.532 -16.745 -13.311  1.00 -1.00           H
ATOM    195  N   ASN A 116      13.162 -16.724 -10.141  1.00 -1.00           N
ATOM    196  CA  ASN A 116      14.372 -16.477  -9.339  1.00 -1.00           C
ATOM    197  C   ASN A 116      14.371 -17.250  -7.988  1.00 -1.00           C
ATOM    198  O   ASN A 116      15.002 -16.838  -7.009  1.00 -1.00           O
ATOM    199  CB  ASN A 116      14.410 -14.941  -9.130  1.00 -1.00           C
ATOM    200  CG  ASN A 116      15.693 -14.385  -8.508  1.00 -1.00           C
ATOM    201  OD1 ASN A 116      16.786 -14.575  -9.028  1.00 -1.00           O
ATOM    202  ND2 ASN A 116      15.569 -13.708  -7.374  1.00 -1.00           N
ATOM    203  H   ASN A 116      12.516 -15.952 -10.220  1.00 -1.00           H
ATOM    204  HA  ASN A 116      15.247 -16.792  -9.911  1.00 -1.00           H
ATOM    205  HB2 ASN A 116      14.315 -14.446 -10.098  1.00 -1.00           H
ATOM    206  HB3 ASN A 116      13.541 -14.620  -8.556  1.00 -1.00           H
ATOM    207 HD21 ASN A 116      16.378 -13.274  -6.948  1.00 -1.00           H
ATOM    208 HD22 ASN A 116      14.645 -13.637  -6.939  1.00 -1.00           H
ATOM    209  N   LYS A 117      13.674 -18.394  -7.927  1.00 -1.00           N
ATOM    210  CA  LYS A 117      13.443 -19.278  -6.778  1.00 -1.00           C
ATOM    211  C   LYS A 117      14.719 -20.021  -6.321  1.00 -1.00           C
ATOM    212  O   LYS A 117      14.797 -21.249  -6.311  1.00 -1.00           O
ATOM    213  CB  LYS A 117      12.303 -20.257  -7.142  1.00 -1.00           C
ATOM    214  CG  LYS A 117      10.907 -19.614  -7.046  1.00 -1.00           C
ATOM    215  CD  LYS A 117       9.813 -20.492  -7.684  1.00 -1.00           C
ATOM    216  CE  LYS A 117       8.363 -20.102  -7.336  1.00 -1.00           C
ATOM    217  NZ  LYS A 117       8.065 -18.698  -7.637  1.00 -1.00          N1+
ATOM    218  H   LYS A 117      13.323 -18.719  -8.821  1.00 -1.00           H
ATOM    219  HA  LYS A 117      13.128 -18.667  -5.934  1.00 -1.00           H
ATOM    220  HB2 LYS A 117      12.475 -20.669  -8.138  1.00 -1.00           H
ATOM    221  HB3 LYS A 117      12.308 -21.111  -6.462  1.00 -1.00           H
ATOM    222  HG2 LYS A 117      10.694 -19.432  -5.995  1.00 -1.00           H
ATOM    223  HG3 LYS A 117      10.922 -18.633  -7.519  1.00 -1.00           H
ATOM    224  HD2 LYS A 117       9.944 -20.486  -8.767  1.00 -1.00           H
ATOM    225  HD3 LYS A 117       9.962 -21.528  -7.374  1.00 -1.00           H
ATOM    226  HE2 LYS A 117       7.676 -20.720  -7.916  1.00 -1.00           H
ATOM    227  HE3 LYS A 117       8.136 -20.297  -6.289  1.00 -1.00           H
ATOM    228  HZ1 LYS A 117       7.038 -18.604  -7.813  1.00 -1.00           H
ATOM    229  HZ2 LYS A 117       8.274 -18.102  -6.837  1.00 -1.00           H
ATOM    230  HZ3 LYS A 117       8.571 -18.366  -8.453  1.00 -1.00           H
ATOM    231  N   ALA A 118      15.735 -19.237  -5.963  1.00 -1.00           N
ATOM    232  CA  ALA A 118      17.001 -19.631  -5.364  1.00 -1.00           C
ATOM    233  C   ALA A 118      17.640 -18.457  -4.609  1.00 -1.00           C
ATOM    234  O   ALA A 118      18.327 -18.669  -3.612  1.00 -1.00           O
ATOM    235  CB  ALA A 118      17.944 -20.231  -6.419  1.00 -1.00           C
ATOM    236  H   ALA A 118      15.543 -18.248  -6.087  1.00 -1.00           H
ATOM    237  HA  ALA A 118      16.786 -20.401  -4.620  1.00 -1.00           H
ATOM    238  HB1 ALA A 118      18.896 -20.520  -5.971  1.00 -1.00           H
ATOM    239  HB2 ALA A 118      17.512 -21.125  -6.871  1.00 -1.00           H
ATOM    240  HB3 ALA A 118      18.153 -19.520  -7.218  1.00 -1.00           H
ATOM    241  N   GLY A 119      17.410 -17.214  -5.056  1.00 49.69           N
ATOM    242  CA  GLY A 119      18.046 -16.013  -4.521  1.00 48.49           C
ATOM    243  C   GLY A 119      17.032 -15.050  -3.902  1.00 47.46           C
ATOM    244  O   GLY A 119      15.839 -15.353  -3.813  1.00 48.38           O
ATOM    245  H   GLY A 119      16.807 -17.084  -5.860  1.00 -1.00           H
ATOM    246  HA2 GLY A 119      18.817 -16.244  -3.785  1.00  0.00           H
ATOM    247  HA3 GLY A 119      18.544 -15.506  -5.349  1.00  0.00           H
ATOM    248  N   LYS A 120      17.512 -13.874  -3.478  1.00 45.71           N
ATOM    249  CA  LYS A 120      16.677 -12.703  -3.200  1.00 42.69           C
ATOM    250  C   LYS A 120      16.312 -12.080  -4.565  1.00 40.13           C
ATOM    251  O   LYS A 120      17.155 -12.119  -5.468  1.00 39.70           O
ATOM    252  CB  LYS A 120      17.514 -11.623  -2.461  1.00 44.31           C
ATOM    253  CG  LYS A 120      17.862 -11.867  -0.978  1.00 45.11           C
ATOM    254  CD  LYS A 120      18.779 -10.736  -0.449  1.00 45.84           C
ATOM    255  CE  LYS A 120      18.934 -10.644   1.084  1.00 46.18           C
ATOM    256  NZ  LYS A 120      17.851  -9.870   1.705  1.00 44.91          N1+
ATOM    257  H   LYS A 120      18.480 -13.677  -3.679  1.00  0.00           H
ATOM    258  HA  LYS A 120      15.793 -12.983  -2.624  1.00  0.00           H
ATOM    259  HB2 LYS A 120      18.432 -11.433  -3.021  1.00  0.00           H
ATOM    260  HB3 LYS A 120      16.961 -10.680  -2.499  1.00  0.00           H
ATOM    261  HG2 LYS A 120      16.943 -11.923  -0.395  1.00  0.00           H
ATOM    262  HG3 LYS A 120      18.356 -12.832  -0.857  1.00  0.00           H
ATOM    263  HD2 LYS A 120      19.768 -10.883  -0.886  1.00  0.00           H
ATOM    264  HD3 LYS A 120      18.442  -9.770  -0.831  1.00  0.00           H
ATOM    265  HE2 LYS A 120      18.981 -11.635   1.537  1.00  0.00           H
ATOM    266  HE3 LYS A 120      19.870 -10.140   1.328  1.00  0.00           H
ATOM    267  HZ1 LYS A 120      17.284 -10.498   2.318  1.00  0.00           H
ATOM    268  HZ2 LYS A 120      18.157  -9.060   2.242  1.00  0.00           H
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ATOM    269  HZ3 LYS A 120      17.176  -9.566   1.017  1.00  0.00           H
ATOM    270  N   PRO A 121      15.127 -11.460  -4.730  1.00 37.16           N
ATOM    271  CA  PRO A 121      14.872 -10.563  -5.863  1.00 35.52           C
ATOM    272  C   PRO A 121      15.552  -9.201  -5.605  1.00 33.34           C
ATOM    273  O   PRO A 121      16.075  -8.956  -4.513  1.00 31.34           O
ATOM    274  CB  PRO A 121      13.346 -10.428  -5.887  1.00 35.26           C
ATOM    275  CG  PRO A 121      12.923 -10.591  -4.433  1.00 37.08           C
ATOM    276  CD  PRO A 121      13.971 -11.535  -3.833  1.00 36.33           C
ATOM    277  HA  PRO A 121      15.236 -10.977  -6.805  1.00  0.00           H
ATOM    278  HB2 PRO A 121      13.006  -9.488  -6.319  1.00  0.00           H
ATOM    279  HB3 PRO A 121      12.918 -11.233  -6.486  1.00  0.00           H
ATOM    280  HG2 PRO A 121      12.974  -9.620  -3.940  1.00  0.00           H
ATOM    281  HG3 PRO A 121      11.904 -10.966  -4.325  1.00  0.00           H
ATOM    282  HD2 PRO A 121      14.222 -11.236  -2.814  1.00  0.00           H
ATOM    283  HD3 PRO A 121      13.593 -12.558  -3.808  1.00  0.00           H
ATOM    284  N   LYS A 122      15.507  -8.282  -6.579  1.00 31.90           N
ATOM    285  CA  LYS A 122      15.881  -6.891  -6.339  1.00 31.10           C
ATOM    286  C   LYS A 122      14.691  -6.255  -5.595  1.00 29.95           C
ATOM    287  O   LYS A 122      13.657  -5.973  -6.200  1.00 31.41           O
ATOM    288  CB  LYS A 122      16.133  -6.148  -7.675  1.00 33.97           C
ATOM    289  CG  LYS A 122      17.145  -6.832  -8.617  1.00 35.41           C
ATOM    290  CD  LYS A 122      17.778  -5.893  -9.670  1.00 40.19           C
ATOM    291  CE  LYS A 122      16.957  -5.626 -10.951  1.00 42.24           C
ATOM    292  NZ  LYS A 122      15.739  -4.841 -10.709  1.00 43.94           N1+
ATOM    293  H   LYS A 122      15.028  -8.495  -7.442  1.00  0.00           H
ATOM    294  HA  LYS A 122      16.785  -6.836  -5.728  1.00  0.00           H
ATOM    295  HB2 LYS A 122      15.198  -5.995  -8.207  1.00  0.00           H
ATOM    296  HB3 LYS A 122      16.505  -5.152  -7.427  1.00  0.00           H
ATOM    297  HG2 LYS A 122      17.955  -7.230  -8.004  1.00  0.00           H
ATOM    298  HG3 LYS A 122      16.688  -7.695  -9.104  1.00  0.00           H
ATOM    299  HD2 LYS A 122      18.083  -4.954  -9.205  1.00  0.00           H
ATOM    300  HD3 LYS A 122      18.712  -6.357  -9.990  1.00  0.00           H
ATOM    301  HE2 LYS A 122      17.575  -5.068 -11.656  1.00  0.00           H
ATOM    302  HE3 LYS A 122      16.681  -6.561 -11.441  1.00  0.00           H
ATOM    303  HZ1 LYS A 122      15.384  -4.434 -11.559  1.00  0.00           H
ATOM    304  HZ2 LYS A 122      15.007  -5.518 -10.399  1.00  0.00           H
ATOM    305  HZ3 LYS A 122      15.908  -4.112 -10.022  1.00  0.00           H
ATOM    306  N   ALA A 123      14.827  -6.057  -4.285  1.00 25.55           N
ATOM    307  CA  ALA A 123      13.825  -5.469  -3.407  1.00 25.13           C
ATOM    308  C   ALA A 123      14.481  -4.395  -2.544  1.00 23.88           C
ATOM    309  O   ALA A 123      15.680  -4.471  -2.275  1.00 23.84           O
ATOM    310  CB  ALA A 123      13.169  -6.567  -2.561  1.00 23.35           C
ATOM    311  H   ALA A 123      15.711  -6.278  -3.847  1.00  0.00           H
ATOM    312  HA  ALA A 123      13.057  -4.984  -4.006  1.00  0.00           H
ATOM    313  HB1 ALA A 123      12.305  -6.174  -2.024  1.00  0.00           H
ATOM    314  HB2 ALA A 123      12.829  -7.399  -3.175  1.00  0.00           H
ATOM    315  HB3 ALA A 123      13.858  -6.971  -1.822  1.00  0.00           H
ATOM    316  N   CYS A 124      13.689  -3.425  -2.093  1.00 25.75           N
ATOM    317  CA  CYS A 124      14.091  -2.325  -1.226  1.00 23.52           C
ATOM    318  C   CYS A 124      12.976  -2.056  -0.214  1.00 23.67           C
ATOM    319  O   CYS A 124      11.827  -2.450  -0.433  1.00 24.40           O
ATOM    320  CB  CYS A 124      14.466  -1.089  -2.077  1.00 22.25           C
ATOM    321  SG  CYS A 124      13.028  -0.382  -2.956  1.00 23.91           S
ATOM    322  H   CYS A 124      12.713  -3.420  -2.359  1.00  0.00           H
ATOM    323  HA  CYS A 124      14.971  -2.628  -0.656  1.00  0.00           H
ATOM    324  HB2 CYS A 124      14.902  -0.312  -1.449  1.00  0.00           H
ATOM    325  HB3 CYS A 124      15.229  -1.358  -2.804  1.00  0.00           H
ATOM    326  HG  CYS A 124      12.508   0.220  -1.881  1.00  0.00           H
ATOM    327  N   TYR A 125      13.277  -1.294   0.839  1.00 21.36           N
ATOM    328  CA  TYR A 125      12.258  -0.512   1.532  1.00 22.40           C
ATOM    329  C   TYR A 125      12.075   0.773   0.711  1.00 21.88           C
ATOM    330  O   TYR A 125      13.061   1.325   0.215  1.00 20.40           O
ATOM    331  CB  TYR A 125      12.720  -0.111   2.946  1.00 21.32           C
ATOM    332  CG  TYR A 125      13.247  -1.228   3.826  1.00 22.30           C
ATOM    333  CD1 TYR A 125      12.373  -2.099   4.510  1.00 20.05           C
ATOM    334  CD2 TYR A 125      14.639  -1.374   3.980  1.00 18.10           C
ATOM    335  CE1 TYR A 125      12.899  -3.121   5.327  1.00 20.76           C
ATOM    336  CE2 TYR A 125      15.159  -2.392   4.792  1.00 18.47           C
ATOM    337  CZ  TYR A 125      14.292  -3.276   5.459  1.00 18.41           C
ATOM    338  OH  TYR A 125      14.802  -4.280   6.226  1.00 19.18           O
ATOM    339  H   TYR A 125      14.246  -0.996   0.949  1.00  0.00           H
ATOM    340  HA  TYR A 125      11.331  -1.064   1.589  1.00  0.00           H
ATOM    341  HB2 TYR A 125      13.498   0.639   2.871  1.00  0.00           H
ATOM    342  HB3 TYR A 125      11.899   0.381   3.470  1.00  0.00           H
ATOM    343  HD1 TYR A 125      11.303  -1.987   4.419  1.00  0.00           H
ATOM    344  HD2 TYR A 125      15.320  -0.700   3.482  1.00  0.00           H
ATOM    345  HE1 TYR A 125      12.234  -3.786   5.857  1.00  0.00           H
ATOM    346  HE2 TYR A 125      16.229  -2.474   4.889  1.00  0.00           H
ATOM    347  HH  TYR A 125      15.758  -4.280   6.200  1.00  0.00           H
ATOM    348  N   VAL A 126      10.837   1.243   0.559  1.00 22.88           N
ATOM    349  CA  VAL A 126      10.512   2.515  -0.064  1.00 20.05           C
ATOM    350  C   VAL A 126       9.735   3.355   0.952  1.00 20.90           C
ATOM    351  O   VAL A 126       8.844   2.861   1.651  1.00 19.39           O
ATOM    352  CB  VAL A 126       9.812   2.334  -1.435  1.00 21.97           C
ATOM    353  CG1 VAL A 126       8.409   1.717  -1.357  1.00 21.20           C
ATOM    354  CG2 VAL A 126       9.760   3.656  -2.221  1.00 17.14           C
ATOM    355  H   VAL A 126      10.069   0.746   1.011  1.00  0.00           H
ATOM    356  HA  VAL A 126      11.441   3.040  -0.271  1.00  0.00           H
ATOM    357  HB  VAL A 126      10.430   1.644  -2.011  1.00  0.00           H
ATOM    358 HG11 VAL A 126       8.009   1.543  -2.356  1.00  0.00           H
ATOM    359 HG12 VAL A 126       8.434   0.763  -0.834  1.00  0.00           H
ATOM    360 HG13 VAL A 126       7.705   2.369  -0.840  1.00  0.00           H
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ATOM    361 HG21 VAL A 126       9.353   3.508  -3.221  1.00  0.00           H
ATOM    362 HG22 VAL A 126       9.136   4.400  -1.725  1.00  0.00           H
ATOM    363 HG23 VAL A 126      10.757   4.085  -2.337  1.00  0.00           H
ATOM    364  N   THR A 127      10.085   4.634   1.020  1.00 20.50           N
ATOM    365  CA  THR A 127       9.519   5.608   1.921  1.00 20.93           C
ATOM    366  C   THR A 127       9.374   6.918   1.146  1.00 21.13           C
ATOM    367  O   THR A 127      10.372   7.591   0.906  1.00 23.81           O
ATOM    368  CB  THR A 127      10.430   5.682   3.172  1.00 22.06           C
ATOM    369  OG1 THR A 127      10.276   4.515   3.962  1.00 22.71           O
ATOM    370  CG2 THR A 127      10.146   6.869   4.089  1.00 19.49           C
ATOM    371  H   THR A 127      10.892   4.933   0.476  1.00  0.00           H
ATOM    372  HA  THR A 127       8.517   5.305   2.226  1.00  0.00           H
ATOM    373  HB  THR A 127      11.473   5.747   2.855  1.00  0.00           H
ATOM    374  HG1 THR A 127       9.336   4.343   4.048  1.00  0.00           H
ATOM    375 HG21 THR A 127      10.835   6.859   4.927  1.00  0.00           H
ATOM    376 HG22 THR A 127      10.324   7.807   3.568  1.00  0.00           H
ATOM    377 HG23 THR A 127       9.123   6.869   4.465  1.00  0.00           H
ATOM    378  N   LEU A 128       8.145   7.316   0.801  1.00 20.38           N
ATOM    379  CA  LEU A 128       7.843   8.690   0.414  1.00 18.73           C
ATOM    380  C   LEU A 128       7.575   9.439   1.719  1.00 18.52           C
ATOM    381  O   LEU A 128       6.799   8.960   2.547  1.00 17.90           O
ATOM    382  CB  LEU A 128       6.592   8.702  -0.481  1.00 18.41           C
ATOM    383  CG  LEU A 128       6.094  10.093  -0.941  1.00 18.76           C
ATOM    384  CD1 LEU A 128       7.209  11.024  -1.447  1.00 18.77           C
ATOM    385  CD2 LEU A 128       4.996   9.915  -1.993  1.00 14.06           C
ATOM    386  H   LEU A 128       7.355   6.761   1.122  1.00  0.00           H
ATOM    387  HA  LEU A 128       8.677   9.139  -0.110  1.00  0.00           H
ATOM    388  HB2 LEU A 128       6.808   8.097  -1.363  1.00  0.00           H
ATOM    389  HB3 LEU A 128       5.776   8.197   0.036  1.00  0.00           H
ATOM    390  HG  LEU A 128       5.639  10.599  -0.091  1.00  0.00           H
ATOM    391 HD11 LEU A 128       6.796  11.930  -1.892  1.00  0.00           H
ATOM    392 HD12 LEU A 128       7.850  11.361  -0.634  1.00  0.00           H
ATOM    393 HD13 LEU A 128       7.847  10.537  -2.183  1.00  0.00           H
ATOM    394 HD21 LEU A 128       4.633  10.871  -2.353  1.00  0.00           H
ATOM    395 HD22 LEU A 128       5.346   9.347  -2.856  1.00  0.00           H
ATOM    396 HD23 LEU A 128       4.146   9.387  -1.567  1.00  0.00           H
ATOM    397  N   VAL A 129       8.274  10.549   1.945  1.00 18.42           N
ATOM    398  CA  VAL A 129       8.297  11.243   3.219  1.00 18.44           C
ATOM    399  C   VAL A 129       8.519  12.745   3.013  1.00 18.85           C
ATOM    400  O   VAL A 129       9.117  13.160   2.020  1.00 19.12           O
ATOM    401  CB  VAL A 129       9.273  10.501   4.171  1.00 19.71           C
ATOM    402  CG1 VAL A 129      10.735  10.556   3.687  1.00 19.20           C
ATOM    403  CG2 VAL A 129       9.125  10.911   5.640  1.00 16.64           C
ATOM    404  H   VAL A 129       8.948  10.869   1.250  1.00  0.00           H
ATOM    405  HA  VAL A 129       7.305  11.169   3.645  1.00  0.00           H
ATOM    406  HB  VAL A 129       8.967   9.457   4.159  1.00  0.00           H
ATOM    407 HG11 VAL A 129      11.372   9.886   4.258  1.00  0.00           H
ATOM    408 HG12 VAL A 129      10.826  10.248   2.646  1.00  0.00           H
ATOM    409 HG13 VAL A 129      11.141  11.566   3.763  1.00  0.00           H
ATOM    410 HG21 VAL A 129       9.599  10.198   6.309  1.00  0.00           H
ATOM    411 HG22 VAL A 129       9.573  11.881   5.833  1.00  0.00           H
ATOM    412 HG23 VAL A 129       8.072  10.950   5.915  1.00  0.00           H
ATOM    413  N   ARG A 130       8.031  13.559   3.952  1.00 21.17           N
ATOM    414  CA  ARG A 130       8.364  14.973   4.078  1.00 21.51           C
ATOM    415  C   ARG A 130       9.571  15.101   5.022  1.00 21.74           C
ATOM    416  O   ARG A 130       9.722  14.304   5.948  1.00 18.71           O
ATOM    417  CB  ARG A 130       7.174  15.687   4.760  1.00 24.72           C
ATOM    418  CG  ARG A 130       5.940  15.761   3.853  1.00 26.46           C
ATOM    419  CD  ARG A 130       4.662  16.258   4.542  1.00 30.21           C
ATOM    420  NE  ARG A 130       3.950  15.138   5.175  1.00 33.85           N
ATOM    421  CZ  ARG A 130       2.632  14.904   5.271  1.00 35.23           C
ATOM    422  NH1 ARG A 130       1.723  15.772   4.825  1.00 35.12           N
ATOM    423  NH2 ARG A 130       2.229  13.777   5.847  1.00 31.29           N1+
ATOM    424  H   ARG A 130       7.475  13.152   4.695  1.00  0.00           H
ATOM    425  HA  ARG A 130       8.589  15.418   3.106  1.00  0.00           H
ATOM    426  HB2 ARG A 130       6.923  15.193   5.699  1.00  0.00           H
ATOM    427  HB3 ARG A 130       7.455  16.701   5.024  1.00  0.00           H
ATOM    428  HG2 ARG A 130       6.170  16.404   3.003  1.00  0.00           H
ATOM    429  HG3 ARG A 130       5.747  14.773   3.440  1.00  0.00           H
ATOM    430  HD2 ARG A 130       4.865  17.059   5.253  1.00  0.00           H
ATOM    431  HD3 ARG A 130       4.020  16.676   3.774  1.00  0.00           H
ATOM    432  HE  ARG A 130       4.582  14.327   5.402  1.00  0.00           H
ATOM    433 HH11 ARG A 130       1.993  16.620   4.313  1.00  0.00           H
ATOM    434 HH12 ARG A 130       0.759  15.450   4.695  1.00  0.00           H
ATOM    435 HH21 ARG A 130       2.918  13.150   6.326  1.00  0.00           H
ATOM    436 HH22 ARG A 130       1.271  13.416   5.831  1.00  0.00           H
ATOM    437  N   ASN A 131      10.373  16.166   4.893  1.00 21.83           N
ATOM    438  CA  ASN A 131      11.494  16.485   5.802  1.00 20.92           C
ATOM    439  C   ASN A 131      11.022  16.720   7.256  1.00 21.34           C
ATOM    440  O   ASN A 131      11.739  16.455   8.225  1.00 20.83           O
ATOM    441  CB  ASN A 131      12.312  17.699   5.298  1.00 24.29           C
ATOM    442  CG  ASN A 131      13.152  17.399   4.054  1.00 24.72           C
ATOM    443  OD1 ASN A 131      13.979  16.493   4.055  1.00 26.89           O
ATOM    444  ND2 ASN A 131      12.931  18.108   2.954  1.00 26.08           N
ATOM    445  H   ASN A 131      10.123  16.832   4.159  1.00  0.00           H
ATOM    446  HA  ASN A 131      12.143  15.615   5.822  1.00  0.00           H
ATOM    447  HB2 ASN A 131      11.663  18.557   5.123  1.00  0.00           H
ATOM    448  HB3 ASN A 131      13.021  18.011   6.068  1.00  0.00           H
ATOM    449 HD21 ASN A 131      12.198  18.831   2.911  1.00  0.00           H
ATOM    450 HD22 ASN A 131      13.567  18.022   2.158  1.00  0.00           H
ATOM    451  N   LYS A 132       9.751  17.115   7.392  1.00 21.47           N
ATOM    452  CA  LYS A 132       8.963  17.255   8.613  1.00 21.50           C
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ATOM    453  C   LYS A 132       8.720  15.903   9.307  1.00 20.13           C
ATOM    454  O   LYS A 132       8.610  15.841  10.530  1.00 20.64           O
ATOM    455  CB  LYS A 132       7.585  17.841   8.220  1.00 18.17           C
ATOM    456  CG  LYS A 132       7.642  19.254   7.609  1.00 -1.00          C
ATOM    457  CD  LYS A 132       7.631  19.255   6.077  1.00 -1.00          C
ATOM    458  CE  LYS A 132       7.888  20.631   5.456  1.00 -1.00          C
ATOM    459  NZ  LYS A 132       7.901  20.531   3.989  1.00 -1.00          N1+
ATOM    460  H   LYS A 132       9.265  17.273   6.523  1.00  0.00           H
ATOM    461  HA  LYS A 132       9.476  17.922   9.309  1.00  0.00           H
ATOM    462  HB2 LYS A 132       7.048  17.163   7.554  1.00  0.00           H
ATOM    463  HB3 LYS A 132       6.960  17.885   9.109  1.00  0.00           H
ATOM    464  HG2 LYS A 132       6.784  19.830   7.960  1.00 -1.00          H
ATOM    465  HG3 LYS A 132       8.527  19.767   7.981  1.00 -1.00          H
ATOM    466  HD2 LYS A 132       8.409  18.586   5.721  1.00 -1.00          H
ATOM    467  HD3 LYS A 132       6.678  18.859   5.722  1.00 -1.00          H
ATOM    468  HE2 LYS A 132       7.131  21.343   5.782  1.00 -1.00          H
ATOM    469  HE3 LYS A 132       8.856  21.015   5.781  1.00 -1.00          H
ATOM    470  HZ1 LYS A 132       7.005  20.692   3.546  1.00 -1.00          H
ATOM    471  HZ2 LYS A 132       8.551  21.203   3.567  1.00 -1.00          H
ATOM    472  HZ3 LYS A 132       8.256  19.623   3.698  1.00 -1.00          H
ATOM    473  N   GLU A 133       8.640  14.812   8.536  1.00 20.07           N
ATOM    474  CA  GLU A 133       8.267  13.485   9.008  1.00 17.67           C
ATOM    475  C   GLU A 133       9.493  12.612   9.295  1.00 18.46           C
ATOM    476  O   GLU A 133       9.300  11.474   9.715  1.00 15.28           O
ATOM    477  CB  GLU A 133       7.380  12.807   7.952  1.00 17.59           C
ATOM    478  CG  GLU A 133       5.904  13.179   8.147  1.00 20.24           C
ATOM    479  CD  GLU A 133       5.058  12.800   6.954  1.00 23.42           C
ATOM    480  OE1 GLU A 133       3.934  12.292   7.135  1.00 24.54           O
ATOM    481  OE2 GLU A 133       5.455  13.101   5.808  1.00 22.56           O1-
ATOM    482  H   GLU A 133       8.849  14.892   7.546  1.00  0.00           H
ATOM    483  HA  GLU A 133       7.707  13.541   9.940  1.00  0.00           H
ATOM    484  HB2 GLU A 133       7.720  13.064   6.951  1.00  0.00           H
ATOM    485  HB3 GLU A 133       7.444  11.722   8.019  1.00  0.00           H
ATOM    486  HG2 GLU A 133       5.505  12.705   9.045  1.00  0.00           H
ATOM    487  HG3 GLU A 133       5.807  14.253   8.292  1.00  0.00           H
ATOM    488  N   LEU A 134      10.732  13.135   9.213  1.00 18.65           N
ATOM    489  CA  LEU A 134      11.951  12.496   9.747  1.00 19.98           C
ATOM    490  C   LEU A 134      11.737  12.065  11.204  1.00 18.99           C
ATOM    491  O   LEU A 134      11.950  10.918  11.587  1.00 19.26           O
ATOM    492  CB  LEU A 134      13.149  13.474   9.668  1.00 19.11           C
ATOM    493  CG  LEU A 134      14.480  12.978  10.289  1.00 23.22           C
ATOM    494  CD1 LEU A 134      15.056  11.765   9.542  1.00 21.36           C
ATOM    495  CD2 LEU A 134      15.491  14.130  10.383  1.00 21.65           C
ATOM    496  H   LEU A 134      10.812  14.058   8.809  1.00  0.00           H
ATOM    497  HA  LEU A 134      12.161  11.612   9.143  1.00  0.00           H
ATOM    498  HB2 LEU A 134      13.320  13.761   8.638  1.00  0.00           H
ATOM    499  HB3 LEU A 134      12.880  14.403  10.162  1.00  0.00           H
ATOM    500  HG  LEU A 134      14.314  12.663  11.318  1.00  0.00           H
ATOM    501 HD11 LEU A 134      15.980  11.415  10.001  1.00  0.00           H
ATOM    502 HD12 LEU A 134      14.366  10.921   9.545  1.00  0.00           H
ATOM    503 HD13 LEU A 134      15.278  12.003   8.505  1.00  0.00           H
ATOM    504 HD21 LEU A 134      16.503  13.776  10.567  1.00  0.00           H
ATOM    505 HD22 LEU A 134      15.503  14.735   9.476  1.00  0.00           H
ATOM    506 HD23 LEU A 134      15.262  14.797  11.208  1.00  0.00           H
ATOM    507  N   LYS A 135      11.223  13.023  11.974  1.00 17.87           N
ATOM    508  CA  LYS A 135      10.947  13.006  13.395  1.00 18.77           C
ATOM    509  C   LYS A 135       9.881  11.964  13.803  1.00 18.88           C
ATOM    510  O   LYS A 135       9.767  11.642  14.986  1.00 18.40           O
ATOM    511  CB  LYS A 135      10.531  14.445  13.772  1.00 18.36           C
ATOM    512  CG  LYS A 135      11.602  15.520  13.474  1.00 19.77           C
ATOM    513  CD  LYS A 135      11.562  16.203  12.082  1.00 16.28           C
ATOM    514  CE  LYS A 135      12.921  16.857  11.762  1.00 18.85           C
ATOM    515  NZ  LYS A 135      13.009  17.515  10.446  1.00 18.17           N1+
ATOM    516  H   LYS A 135      11.011  13.890  11.507  1.00  0.00           H
ATOM    517  HA  LYS A 135      11.869  12.750  13.917  1.00  0.00           H
ATOM    518  HB2 LYS A 135       9.606  14.727  13.282  1.00  0.00           H
ATOM    519  HB3 LYS A 135      10.316  14.456  14.842  1.00  0.00           H
ATOM    520  HG2 LYS A 135      11.482  16.314  14.208  1.00  0.00           H
ATOM    521  HG3 LYS A 135      12.589  15.096  13.667  1.00  0.00           H
ATOM    522  HD2 LYS A 135      11.301  15.502  11.295  1.00  0.00           H
ATOM    523  HD3 LYS A 135      10.768  16.952  12.074  1.00  0.00           H
ATOM    524  HE2 LYS A 135      13.155  17.596  12.523  1.00  0.00           H
ATOM    525  HE3 LYS A 135      13.707  16.111  11.817  1.00  0.00           H
ATOM    526  HZ1 LYS A 135      14.010  17.688  10.252  1.00  0.00           H
ATOM    527  HZ2 LYS A 135      12.633  16.979   9.673  1.00  0.00           H
ATOM    528  HZ3 LYS A 135      12.531  18.416  10.485  1.00  0.00           H
ATOM    529  N   GLY A 136       9.160  11.389  12.834  1.00 19.43           N
ATOM    530  CA  GLY A 136       8.228  10.280  12.995  1.00 17.22           C
ATOM    531  C   GLY A 136       8.735   9.020  12.282  1.00 19.59           C
ATOM    532  O   GLY A 136       8.538   7.911  12.773  1.00 18.34           O
ATOM    533  H   GLY A 136       9.326  11.717  11.892  1.00  0.00           H
ATOM    534  HA2 GLY A 136       8.028  10.055  14.045  1.00  0.00           H
ATOM    535  HA3 GLY A 136       7.280  10.570  12.546  1.00  0.00           H
ATOM    536  N   LEU A 137       9.424   9.157  11.142  1.00 18.36           N
ATOM    537  CA  LEU A 137      10.035   8.075  10.368  1.00 21.19           C
ATOM    538  C   LEU A 137      11.129   7.337  11.143  1.00 22.14           C
ATOM    539  O   LEU A 137      11.305   6.133  10.963  1.00 24.02           O
ATOM    540  CB  LEU A 137      10.614   8.648   9.059  1.00 21.04           C
ATOM    541  CG  LEU A 137      11.208   7.608   8.087  1.00 21.35           C
ATOM    542  CD1 LEU A 137      10.136   6.657   7.525  1.00 23.22           C
ATOM    543  CD2 LEU A 137      11.989   8.315   6.978  1.00 20.28           C
ATOM    544  H   LEU A 137       9.508  10.090  10.741  1.00  0.00           H
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ATOM    545  HA  LEU A 137       9.262   7.344  10.156  1.00  0.00           H
ATOM    546  HB2 LEU A 137       9.852   9.217   8.531  1.00  0.00           H
ATOM    547  HB3 LEU A 137      11.390   9.369   9.316  1.00  0.00           H
ATOM    548  HG  LEU A 137      11.940   6.998   8.610  1.00  0.00           H
ATOM    549 HD11 LEU A 137      10.587   5.885   6.901  1.00  0.00           H
ATOM    550 HD12 LEU A 137       9.600   6.132   8.311  1.00  0.00           H
ATOM    551 HD13 LEU A 137       9.398   7.194   6.928  1.00  0.00           H
ATOM    552 HD21 LEU A 137      12.497   7.600   6.341  1.00  0.00           H
ATOM    553 HD22 LEU A 137      11.337   8.904   6.341  1.00  0.00           H
ATOM    554 HD23 LEU A 137      12.756   8.975   7.387  1.00  0.00           H
ATOM    555  N   LEU A 138     11.833   8.032  12.039  1.00 21.78           N
ATOM    556  CA  LEU A 138     12.820   7.444  12.934  1.00 22.46           C
ATOM    557  C   LEU A 138     12.230   6.351  13.851  1.00 21.43           C
ATOM    558  O   LEU A 138     12.961   5.418  14.175  1.00 22.46           O
ATOM    559  CB  LEU A 138     13.522   8.560  13.727  1.00 19.96           C
ATOM    560  CG  LEU A 138     14.464   9.437  12.865  1.00 22.18           C
ATOM    561 CD1 LEU A 138     14.680  10.806  13.522  1.00 21.53           C
ATOM    562 CD2 LEU A 138     15.809   8.760  12.574  1.00 21.97           C
ATOM    563  H   LEU A 138     11.701   9.041  12.065  1.00  0.00           H
ATOM    564  HA  LEU A 138     13.561   6.943  12.311  1.00  0.00           H
ATOM    565  HB2 LEU A 138     12.756   9.185  14.190  1.00  0.00           H
ATOM    566  HB3 LEU A 138     14.083   8.132  14.557  1.00  0.00           H
ATOM    567  HG  LEU A 138     14.003   9.615  11.895  1.00  0.00           H
ATOM    568 HD11 LEU A 138     15.431  11.396  12.996  1.00  0.00           H
ATOM    569 HD12 LEU A 138     13.758  11.386  13.532  1.00  0.00           H
ATOM    570 HD13 LEU A 138     14.994  10.700  14.557  1.00  0.00           H
ATOM    571 HD21 LEU A 138     16.408   9.367  11.893  1.00  0.00           H
ATOM    572 HD22 LEU A 138     16.380   8.637  13.489  1.00  0.00           H
ATOM    573 HD23 LEU A 138     15.679   7.786  12.103  1.00  0.00           H
ATOM    574  N   SER A 139     10.918   6.388  14.157  1.00 20.82           N
ATOM    575  CA  SER A 139     10.185   5.305  14.824  1.00 20.60           C
ATOM    576  C   SER A 139     10.112   4.076  13.908  1.00 21.37           C
ATOM    577  O   SER A 139     10.442   2.969  14.334  1.00 21.68           O
ATOM    578  CB  SER A 139      8.746   5.766  15.191  1.00 19.65           C
ATOM    579  OG  SER A 139      7.986   4.774  15.878  1.00 22.99           O
ATOM    580  H   SER A 139     10.375   7.167  13.809  1.00  0.00           H
ATOM    581  HA  SER A 139     10.727   5.032  15.731  1.00  0.00           H
ATOM    582  HB2 SER A 139      8.785   6.669  15.803  1.00  0.00           H
ATOM    583  HB3 SER A 139      8.183   6.023  14.295  1.00  0.00           H
ATOM    584  HG  SER A 139      7.781   4.072  15.253  1.00  0.00           H
ATOM    585  N   SER A 140      9.723   4.284  12.640  1.00 20.33           N
ATOM    586  CA  SER A 140      9.575   3.245  11.630  1.00 20.38           C
ATOM    587  C   SER A 140     10.927   2.561  11.388  1.00 20.79           C
ATOM    588  O   SER A 140     11.008   1.336  11.456  1.00 19.68           O
ATOM    589  CB  SER A 140      9.061   3.867  10.313  1.00 18.81           C
ATOM    590  OG  SER A 140      8.010   4.804  10.510  1.00 20.17           O
ATOM    591  H   SER A 140      9.492   5.218  12.335  1.00  0.00           H
ATOM    592  HA  SER A 140      8.859   2.510  11.999  1.00  0.00           H
ATOM    593  HB2 SER A 140      9.860   4.352   9.753  1.00  0.00           H
ATOM    594  HB3 SER A 140      8.691   3.065   9.674  1.00  0.00           H
ATOM    595  HG  SER A 140      7.532   4.840   9.677  1.00  0.00           H
ATOM    596  N   ILE A 141     11.989   3.359  11.189  1.00 20.52           N
ATOM    597  CA  ILE A 141     13.360   2.895  11.013  1.00 22.74           C
ATOM    598  C   ILE A 141     13.837   2.107  12.243  1.00 22.91           C
ATOM    599  O   ILE A 141     14.177   0.940  12.078  1.00 25.89           O
ATOM    600  CB  ILE A 141     14.321   4.058  10.635  1.00 21.78           C
ATOM    601 CG1 ILE A 141     13.928   4.720   9.290  1.00 21.69           C
ATOM    602 CG2 ILE A 141     15.781   3.561  10.554  1.00 19.44           C
ATOM    603 CD1 ILE A 141     14.585   6.089   9.050  1.00 20.88           C
ATOM    604  H   ILE A 141     11.822   4.363  11.173  1.00  0.00           H
ATOM    605  HA  ILE A 141     13.358   2.190  10.183  1.00  0.00           H
ATOM    606  HB  ILE A 141     14.261   4.814  11.418  1.00  0.00           H
ATOM    607 HG12 ILE A 141     14.174   4.051   8.463  1.00  0.00           H
ATOM    608 HG13 ILE A 141     12.849   4.856   9.233  1.00  0.00           H
ATOM    609 HG21 ILE A 141     16.451   4.324  10.174  1.00  0.00           H
ATOM    610 HG22 ILE A 141     16.175   3.256  11.523  1.00  0.00           H
ATOM    611 HG23 ILE A 141     15.862   2.698   9.892  1.00  0.00           H
ATOM    612 HD11 ILE A 141     14.255   6.508   8.099  1.00  0.00           H
ATOM    613 HD12 ILE A 141     14.320   6.801   9.832  1.00  0.00           H
ATOM    614 HD13 ILE A 141     15.671   6.026   9.001  1.00  0.00           H
ATOM    615  N   LYS A 142     13.846   2.701  13.453  1.00 22.93           N
ATOM    616  CA  LYS A 142     14.364   2.055  14.667  1.00 24.30           C
ATOM    617  C   LYS A 142     13.660   0.730  15.019  1.00 23.46           C
ATOM    618  O   LYS A 142     14.305  -0.159  15.577  1.00 20.35           O
ATOM    619  CB  LYS A 142     14.363   3.014  15.889  1.00 26.67           C
ATOM    620  CG  LYS A 142     15.711   3.713  16.184  1.00 31.03           C
ATOM    621  CD  LYS A 142     15.966   5.031  15.430  1.00 35.34           C
ATOM    622  CE  LYS A 142     17.329   5.652  15.806  1.00 39.87           C
ATOM    623  NZ  LYS A 142     17.534   6.982  15.207  1.00 41.29          N1+
ATOM    624  H   LYS A 142     13.464   3.638  13.545  1.00  0.00           H
ATOM    625  HA  LYS A 142     15.396   1.774  14.448  1.00  0.00           H
ATOM    626  HB2 LYS A 142     13.536   3.721  15.852  1.00  0.00           H
ATOM    627  HB3 LYS A 142     14.145   2.425  16.784  1.00  0.00           H
ATOM    628  HG2 LYS A 142     15.736   3.936  17.252  1.00  0.00           H
ATOM    629  HG3 LYS A 142     16.532   3.015  16.016  1.00  0.00           H
ATOM    630  HD2 LYS A 142     15.910   4.853  14.355  1.00  0.00           H
ATOM    631  HD3 LYS A 142     15.165   5.733  15.669  1.00  0.00           H
ATOM    632  HE2 LYS A 142     17.409   5.760  16.889  1.00  0.00           H
ATOM    633  HE3 LYS A 142     18.140   4.992  15.499  1.00  0.00           H
ATOM    634  HZ1 LYS A 142     18.492   7.301  15.297  1.00  0.00           H
ATOM    635  HZ2 LYS A 142     17.311   6.994  14.227  1.00  0.00           H
ATOM    636  HZ3 LYS A 142     16.924   7.670  15.679  1.00  0.00           H
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ATOM    637  N   TYR A 143      12.376   0.574  14.670  1.00 22.06           N
ATOM    638  CA  TYR A 143      11.678  -0.701  14.788  1.00 22.59           C
ATOM    639  C   TYR A 143      12.096  -1.669  13.661  1.00 21.72           C
ATOM    640  O   TYR A 143      12.658  -2.720  13.972  1.00 22.10           O
ATOM    641  CB  TYR A 143      10.143  -0.492  14.824  1.00 20.02           C
ATOM    642  CG  TYR A 143       9.526  -0.639  16.211  1.00 21.94           C
ATOM    643  CD1 TYR A 143       9.758  -1.820  16.945  1.00 23.77           C
ATOM    644  CD2 TYR A 143       8.693   0.358  16.766  1.00 22.49           C
ATOM    645  CE1 TYR A 143       9.121  -2.037  18.177  1.00 22.37           C
ATOM    646  CE2 TYR A 143       8.033   0.128  17.996  1.00 23.21           C
ATOM    647  CZ  TYR A 143       8.226  -1.085  18.690  1.00 22.87           C
ATOM    648  OH  TYR A 143       7.548  -1.357  19.844  1.00 21.97           O
ATOM    649  H   TYR A 143      11.883   1.360  14.260  1.00  0.00           H
ATOM    650  HA  TYR A 143      11.992  -1.169  15.722  1.00  0.00           H
ATOM    651  HB2 TYR A 143       9.863   0.466  14.386  1.00  0.00           H
ATOM    652  HB3 TYR A 143       9.647  -1.238  14.203  1.00  0.00           H
ATOM    653  HD1 TYR A 143      10.395  -2.598  16.556  1.00  0.00           H
ATOM    654  HD2 TYR A 143       8.533   1.289  16.242  1.00  0.00           H
ATOM    655  HE1 TYR A 143       9.298  -2.958  18.712  1.00  0.00           H
ATOM    656  HE2 TYR A 143       7.368   0.874  18.404  1.00  0.00           H
ATOM    657  HH  TYR A 143       7.760  -2.263  20.166  1.00  0.00           H
ATOM    658  N   VAL A 144      11.891  -1.322  12.375  1.00 22.79           N
ATOM    659  CA  VAL A 144      12.208  -2.145  11.188  1.00 22.01           C
ATOM    660  C   VAL A 144      13.663  -2.656  11.177  1.00 23.35           C
ATOM    661  O   VAL A 144      13.927  -3.801  10.804  1.00 21.03           O
ATOM    662  CB  VAL A 144      11.838  -1.365   9.889  1.00 21.23           C
ATOM    663  CG1 VAL A 144      12.331  -2.012   8.576  1.00 23.80           C
ATOM    664  CG2 VAL A 144      10.323  -1.106   9.757  1.00 17.15           C
ATOM    665  H   VAL A 144      11.528  -0.392  12.183  1.00  0.00           H
ATOM    666  HA  VAL A 144      11.590  -3.041  11.241  1.00  0.00           H
ATOM    667  HB  VAL A 144      12.335  -0.396   9.960  1.00  0.00           H
ATOM    668 HG11 VAL A 144      11.994  -1.446   7.707  1.00  0.00           H
ATOM    669 HG12 VAL A 144      13.419  -2.050   8.510  1.00  0.00           H
ATOM    670 HG13 VAL A 144      11.959  -3.031   8.466  1.00  0.00           H
ATOM    671 HG21 VAL A 144      10.135  -0.297   9.051  1.00  0.00           H
ATOM    672 HG22 VAL A 144       9.803  -1.982   9.374  1.00  0.00           H
ATOM    673 HG23 VAL A 144       9.855  -0.830  10.701  1.00  0.00           H
ATOM    674  N   GLU A 145      14.597  -1.821  11.643  1.00 23.20           N
ATOM    675  CA  GLU A 145      16.023  -2.094  11.716  1.00 23.64           C
ATOM    676  C   GLU A 145      16.357  -3.348  12.526  1.00 24.71           C
ATOM    677  O   GLU A 145      17.193  -4.157  12.132  1.00 23.64           O
ATOM    678  CB  GLU A 145      16.716  -0.876  12.350  1.00 25.26           C
ATOM    679  CG  GLU A 145      17.400  -0.026  11.277  1.00 25.70           C
ATOM    680  CD  GLU A 145      18.692  -0.678  10.809  1.00 24.54           C
ATOM    681  OE1 GLU A 145      19.454  -1.151  11.677  1.00 27.65           O
ATOM    682  OE2 GLU A 145      18.938  -0.716   9.590  1.00 28.24           O1-
ATOM    683  H   GLU A 145      14.300  -0.876  11.881  1.00  0.00           H
ATOM    684  HA  GLU A 145      16.365  -2.237  10.698  1.00  0.00           H
ATOM    685  HB2 GLU A 145      16.031  -0.280  12.945  1.00  0.00           H
ATOM    686  HB3 GLU A 145      17.454  -1.184  13.091  1.00  0.00           H
ATOM    687  HG2 GLU A 145      16.737   0.143  10.428  1.00  0.00           H
ATOM    688  HG3 GLU A 145      17.622   0.952  11.684  1.00  0.00           H
ATOM    689  N   ASN A 146      15.714  -3.476  13.682  1.00 25.05           N
ATOM    690  CA  ASN A 146      16.034  -4.507  14.661  1.00 28.02           C
ATOM    691  C   ASN A 146      15.022  -5.650  14.537  1.00 26.91           C
ATOM    692  O   ASN A 146      15.397  -6.806  14.714  1.00 26.71           O
ATOM    693  CB  ASN A 146      16.010  -3.888  16.075  1.00 31.59           C
ATOM    694  CG  ASN A 146      17.013  -2.733  16.228  1.00 35.43           C
ATOM    695  OD1 ASN A 146      18.204  -2.862  15.944  1.00 38.91           O
ATOM    696  ND2 ASN A 146      16.547  -1.542  16.582  1.00 38.29           N
ATOM    697  H   ASN A 146      14.968  -2.820  13.880  1.00  0.00           H
ATOM    698  HA  ASN A 146      17.029  -4.924  14.486  1.00  0.00           H
ATOM    699  HB2 ASN A 146      15.003  -3.548  16.324  1.00  0.00           H
ATOM    700  HB3 ASN A 146      16.262  -4.654  16.811  1.00  0.00           H
ATOM    701 HD21 ASN A 146      15.545  -1.361  16.612  1.00  0.00           H
ATOM    702 HD22 ASN A 146      17.181  -0.775  16.710  1.00  0.00           H
ATOM    703  N   LYS A 147      13.771  -5.350  14.147  1.00 25.17           N
ATOM    704  CA  LYS A 147      12.717  -6.339  13.927  1.00 25.56           C
ATOM    705  C   LYS A 147      12.928  -7.150  12.637  1.00 23.80           C
ATOM    706  O   LYS A 147      12.405  -8.264  12.554  1.00 24.25           O
ATOM    707  CB  LYS A 147      11.344  -5.630  13.865  1.00 26.51           C
ATOM    708  CG  LYS A 147      10.893  -5.060  15.226  1.00 27.65           C
ATOM    709  CD  LYS A 147      10.327  -6.142  16.156  1.00 29.92           C
ATOM    710  CE  LYS A 147      10.186  -5.737  17.629  1.00 29.66           C
ATOM    711  NZ  LYS A 147       9.873  -6.889  18.488  1.00 34.14           N1+
ATOM    712  H   LYS A 147      13.516  -4.376  14.019  1.00  0.00           H
ATOM    713  HA  LYS A 147      12.732  -7.048  14.754  1.00  0.00           H
ATOM    714  HB2 LYS A 147      11.379  -4.833  13.121  1.00  0.00           H
ATOM    715  HB3 LYS A 147      10.576  -6.319  13.507  1.00  0.00           H
ATOM    716  HG2 LYS A 147      11.724  -4.547  15.712  1.00  0.00           H
ATOM    717  HG3 LYS A 147      10.130  -4.304  15.053  1.00  0.00           H
ATOM    718  HD2 LYS A 147       9.356  -6.453  15.779  1.00  0.00           H
ATOM    719  HD3 LYS A 147      10.977  -7.007  16.110  1.00  0.00           H
ATOM    720  HE2 LYS A 147      11.110  -5.290  17.996  1.00  0.00           H
ATOM    721  HE3 LYS A 147       9.398  -4.996  17.748  1.00  0.00           H
ATOM    722  HZ1 LYS A 147       9.811  -6.496  19.447  1.00  0.00           H
ATOM    723  HZ2 LYS A 147       8.941  -7.238  18.303  1.00  0.00           H
ATOM    724  HZ3 LYS A 147      10.578  -7.631  18.411  1.00  0.00           H
ATOM    725  N   ILE A 148      13.722  -6.649  11.674  1.00 24.02           N
ATOM    726  CA  ILE A 148      14.157  -7.387  10.489  1.00 21.98           C
ATOM    727  C   ILE A 148      15.584  -7.057  10.014  1.00 23.64           C
ATOM    728  O   ILE A 148      16.381  -7.983   9.879  1.00 24.28           O
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ATOM    729  CB  ILE A 148     13.076  -7.441   9.376  1.00 21.36           C
ATOM    730  CG1 ILE A 148     13.525  -8.319   8.182  1.00 23.00           C
ATOM    731  CG2 ILE A 148     12.628  -6.042   8.915  1.00 19.78           C
ATOM    732  CD1 ILE A 148     12.395  -9.102   7.510  1.00 19.41           C
ATOM    733  H   ILE A 148     14.078  -5.709  11.789  1.00  0.00           H
ATOM    734  HA  ILE A 148     14.250  -8.423  10.817  1.00  0.00           H
ATOM    735  HB  ILE A 148     12.207  -7.923   9.820  1.00  0.00           H
ATOM    736 HG12 ILE A 148     14.061  -7.717   7.446  1.00  0.00           H
ATOM    737 HG13 ILE A 148     14.238  -9.065   8.532  1.00  0.00           H
ATOM    738 HG21 ILE A 148     11.886  -6.109   8.129  1.00  0.00           H
ATOM    739 HG22 ILE A 148     12.177  -5.476   9.730  1.00  0.00           H
ATOM    740 HG23 ILE A 148     13.455  -5.456   8.513  1.00  0.00           H
ATOM    741 HD11 ILE A 148     12.767  -9.653   6.647  1.00  0.00           H
ATOM    742 HD12 ILE A 148     11.970  -9.832   8.198  1.00  0.00           H
ATOM    743 HD13 ILE A 148     11.590  -8.457   7.173  1.00  0.00           H
ATOM    744  N   ASN A 149     15.900  -5.788   9.711  1.00 22.03           N
ATOM    745  CA  ASN A 149     17.016  -5.389   8.823  1.00 24.97           C
ATOM    746  C   ASN A 149     18.400  -5.943   9.212  1.00 27.08           C
ATOM    747  O   ASN A 149     19.139  -6.410   8.351  1.00 26.94           O
ATOM    748  CB  ASN A 149     17.083  -3.850   8.693  1.00 24.58           C
ATOM    749  CG  ASN A 149     17.762  -3.353   7.414  1.00 26.06           C
ATOM    750  OD1 ASN A 149     17.562  -3.917   6.339  1.00 24.50           O
ATOM    751  ND2 ASN A 149     18.550  -2.290   7.499  1.00 25.60           N
ATOM    752  H   ASN A 149     15.188  -5.088   9.891  1.00  0.00           H
ATOM    753  HA  ASN A 149     16.764  -5.817   7.850  1.00  0.00           H
ATOM    754  HB2 ASN A 149     16.080  -3.422   8.708  1.00  0.00           H
ATOM    755  HB3 ASN A 149     17.634  -3.445   9.540  1.00  0.00           H
ATOM    756 HD21 ASN A 149     18.690  -1.763   8.383  1.00  0.00           H
ATOM    757 HD22 ASN A 149     18.982  -1.898   6.661  1.00  0.00           H
ATOM    758  N   LYS A 150     18.734  -5.957  10.507  1.00 30.35           N
ATOM    759  CA  LYS A 150     20.004  -6.489  11.010  1.00 31.86           C
ATOM    760  C   LYS A 150     20.082  -8.029  10.989  1.00 30.69           C
ATOM    761  O   LYS A 150     21.166  -8.580  11.169  1.00 31.66           O
ATOM    762  CB  LYS A 150     20.201  -6.023  12.466  1.00 34.31           C
ATOM    763  CG  LYS A 150     20.573  -4.539  12.582  1.00 37.03           C
ATOM    764  CD  LYS A 150     20.899  -4.161  14.033  1.00 39.82           C
ATOM    765  CE  LYS A 150     21.217  -2.675  14.217  1.00 41.88           C
ATOM    766  NZ  LYS A 150     20.018  -1.847  14.042  1.00 43.28           N1+
ATOM    767  H   LYS A 150     18.104  -5.494  11.158  1.00  0.00           H
ATOM    768  HA  LYS A 150     20.824  -6.116  10.393  1.00  0.00           H
ATOM    769  HB2 LYS A 150     19.306  -6.238  13.052  1.00  0.00           H
ATOM    770  HB3 LYS A 150     21.004  -6.603  12.924  1.00  0.00           H
ATOM    771  HG2 LYS A 150     21.437  -4.326  11.948  1.00  0.00           H
ATOM    772  HG3 LYS A 150     19.763  -3.922  12.192  1.00  0.00           H
ATOM    773  HD2 LYS A 150     20.076  -4.453  14.689  1.00  0.00           H
ATOM    774  HD3 LYS A 150     21.762  -4.746  14.359  1.00  0.00           H
ATOM    775  HE2 LYS A 150     21.595  -2.513  15.226  1.00  0.00           H
ATOM    776  HE3 LYS A 150     21.999  -2.351  13.529  1.00  0.00           H
ATOM    777  HZ1 LYS A 150     20.186  -0.903  14.334  1.00  0.00           H
ATOM    778  HZ2 LYS A 150     19.780  -1.757  13.029  1.00  0.00           H
ATOM    779  HZ3 LYS A 150     19.233  -2.246  14.550  1.00  0.00           H
ATOM    780  N   LYS A 151     18.953  -8.721  10.798  1.00 29.61           N
ATOM    781  CA  LYS A 151     18.886 -10.172  10.642  1.00 28.95           C
ATOM    782  C   LYS A 151     18.808 -10.509   9.140  1.00 28.12           C
ATOM    783  O   LYS A 151     19.471 -11.439   8.687  1.00 26.36           O
ATOM    784  CB  LYS A 151     17.611 -10.700  11.351  1.00 30.41           C
ATOM    785  CG  LYS A 151     17.555 -10.378  12.865  1.00 32.64           C
ATOM    786  CD  LYS A 151     16.268 -10.835  13.585  1.00 35.44           C
ATOM    787  CE  LYS A 151     15.023 -10.052  13.137  1.00 35.31           C
ATOM    788  NZ  LYS A 151     13.816 -10.368  13.913  1.00 36.53           N1+
ATOM    789  H   LYS A 151     18.112  -8.194  10.592  1.00  0.00           H
ATOM    790  HA  LYS A 151     19.766 -10.660  11.067  1.00  0.00           H
ATOM    791  HB2 LYS A 151     16.726 -10.307  10.854  1.00  0.00           H
ATOM    792  HB3 LYS A 151     17.563 -11.782  11.219  1.00  0.00           H
ATOM    793  HG2 LYS A 151     18.415 -10.845  13.348  1.00  0.00           H
ATOM    794  HG3 LYS A 151     17.677  -9.306  13.025  1.00  0.00           H
ATOM    795  HD2 LYS A 151     16.116 -11.905  13.435  1.00  0.00           H
ATOM    796  HD3 LYS A 151     16.406 -10.692  14.658  1.00  0.00           H
ATOM    797  HE2 LYS A 151     15.203  -8.979  13.198  1.00  0.00           H
ATOM    798  HE3 LYS A 151     14.806 -10.281  12.094  1.00  0.00           H
ATOM    799  HZ1 LYS A 151     13.029 -10.012  13.385  1.00  0.00           H
ATOM    800  HZ2 LYS A 151     13.687 -11.368  14.059  1.00  0.00           H
ATOM    801  HZ3 LYS A 151     13.771  -9.890  14.831  1.00  0.00           H
ATOM    802  N   PHE A 152     18.016  -9.750   8.365  1.00 26.10           N
ATOM    803  CA  PHE A 152     17.742  -9.971   6.944  1.00 27.49           C
ATOM    804  C   PHE A 152     17.755  -8.614   6.214  1.00 27.68           C
ATOM    805  O   PHE A 152     16.713  -7.957   6.173  1.00 27.95           O
ATOM    806  CB  PHE A 152     16.415 -10.745   6.775  1.00 28.65           C
ATOM    807  CG  PHE A 152     16.343 -12.058   7.540  1.00 30.27           C
ATOM    808  CD1 PHE A 152     17.050 -13.190   7.084  1.00 29.39           C
ATOM    809  CD2 PHE A 152     15.622 -12.127   8.750  1.00 29.26           C
ATOM    810  CE1 PHE A 152     17.032 -14.385   7.829  1.00 29.40           C
ATOM    811  CE2 PHE A 152     15.634 -13.311   9.509  1.00 30.84           C
ATOM    812  CZ  PHE A 152     16.326 -14.445   9.045  1.00 29.38           C
ATOM    813  H   PHE A 152     17.512  -8.988   8.809  1.00  0.00           H
ATOM    814  HA  PHE A 152     18.516 -10.608   6.519  1.00  0.00           H
ATOM    815  HB2 PHE A 152     15.574 -10.122   7.072  1.00  0.00           H
ATOM    816  HB3 PHE A 152     16.258 -10.947   5.716  1.00  0.00           H
ATOM    817  HD1 PHE A 152     17.628 -13.138   6.173  1.00  0.00           H
ATOM    818  HD2 PHE A 152     15.083 -11.265   9.116  1.00  0.00           H
ATOM    819  HE1 PHE A 152     17.581 -15.247   7.480  1.00  0.00           H
ATOM    820  HE2 PHE A 152     15.115 -13.348  10.452  1.00  0.00           H
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ATOM    821  HZ  PHE A 152      16.323 -15.354   9.629  1.00  0.00           H
ATOM    822  N   PRO A 153      18.911  -8.150   5.685  1.00 27.92           N
ATOM    823  CA  PRO A 153      19.065  -6.774   5.193  1.00 26.86           C
ATOM    824  C   PRO A 153      18.492  -6.521   3.789  1.00 25.61           C
ATOM    825  O   PRO A 153      18.493  -7.415   2.930  1.00 23.81           O
ATOM    826  CB  PRO A 153      20.582  -6.530   5.211  1.00 28.24           C
ATOM    827  CG  PRO A 153      21.195  -7.908   5.013  1.00 29.29           C
ATOM    828  CD  PRO A 153      20.196  -8.855   5.682  1.00 28.25           C
ATOM    829  HA  PRO A 153      18.583  -6.095   5.892  1.00  0.00           H
ATOM    830  HB2 PRO A 153      20.922  -5.806   4.469  1.00  0.00           H
ATOM    831  HB3 PRO A 153      20.867  -6.143   6.191  1.00  0.00           H
ATOM    832  HG2 PRO A 153      21.257  -8.129   3.946  1.00  0.00           H
ATOM    833  HG3 PRO A 153      22.199  -7.990   5.431  1.00  0.00           H
ATOM    834  HD2 PRO A 153      20.144  -9.808   5.154  1.00  0.00           H
ATOM    835  HD3 PRO A 153      20.496  -9.051   6.714  1.00  0.00           H
ATOM    836  N   TYR A 154      18.074  -5.265   3.570  1.00 23.90           N
ATOM    837  CA  TYR A 154      17.642  -4.645   2.313  1.00 25.51           C
ATOM    838  C   TYR A 154      18.068  -3.161   2.273  1.00 24.53           C
ATOM    839  O   TYR A 154      18.275  -2.579   3.342  1.00 23.72           O
ATOM    840  CB  TYR A 154      16.124  -4.841   2.089  1.00 24.29           C
ATOM    841  CG  TYR A 154      15.761  -6.224   1.588  1.00 25.02           C
ATOM    842  CD1 TYR A 154      16.070  -6.587   0.261  1.00 24.50           C
ATOM    843  CD2 TYR A 154      15.172  -7.165   2.455  1.00 23.16           C
ATOM    844  CE1 TYR A 154      15.834  -7.896  -0.189  1.00 26.82           C
ATOM    845  CE2 TYR A 154      14.939  -8.478   2.007  1.00 25.35           C
ATOM    846  CZ  TYR A 154      15.291  -8.844   0.692  1.00 26.98           C
ATOM    847  OH  TYR A 154      15.230 -10.142   0.295  1.00 26.94           O
ATOM    848  H   TYR A 154      18.104  -4.626   4.361  1.00  0.00           H
ATOM    849  HA  TYR A 154      18.185  -5.147   1.511  1.00  0.00           H
ATOM    850  HB2 TYR A 154      15.578  -4.624   3.008  1.00  0.00           H
ATOM    851  HB3 TYR A 154      15.747  -4.121   1.361  1.00  0.00           H
ATOM    852  HD1 TYR A 154      16.520  -5.874  -0.412  1.00  0.00           H
ATOM    853  HD2 TYR A 154      14.941  -6.898   3.478  1.00  0.00           H
ATOM    854  HE1 TYR A 154      16.098  -8.173  -1.201  1.00  0.00           H
ATOM    855  HE2 TYR A 154      14.530  -9.202   2.695  1.00  0.00           H
ATOM    856  HH  TYR A 154      14.880 -10.743   0.989  1.00  0.00           H
ATOM    857  N   PRO A 155      18.204  -2.532   1.083  1.00 24.68           N
ATOM    858  CA  PRO A 155      18.446  -1.085   0.948  1.00 23.85           C
ATOM    859  C   PRO A 155      17.151  -0.278   1.171  1.00 24.27           C
ATOM    860  O   PRO A 155      16.053  -0.818   1.005  1.00 23.44           O
ATOM    861  CB  PRO A 155      18.947  -0.916  -0.494  1.00 23.62           C
ATOM    862  CG  PRO A 155      18.303  -2.060  -1.261  1.00 23.92           C
ATOM    863  CD  PRO A 155      18.159  -3.178  -0.231  1.00 24.00           C
ATOM    864  HA  PRO A 155      19.209  -0.761   1.655  1.00  0.00           H
ATOM    865  HB2 PRO A 155      18.723   0.060  -0.930  1.00  0.00           H
ATOM    866  HB3 PRO A 155      20.030  -1.028  -0.528  1.00  0.00           H
ATOM    867  HG2 PRO A 155      17.320  -1.750  -1.616  1.00  0.00           H
ATOM    868  HG3 PRO A 155      18.884  -2.360  -2.133  1.00  0.00           H
ATOM    869  HD2 PRO A 155      17.228  -3.718  -0.387  1.00  0.00           H
ATOM    870  HD3 PRO A 155      18.987  -3.880  -0.325  1.00  0.00           H
ATOM    871  N   TRP A 156      17.268   1.005   1.539  1.00 23.62           N
ATOM    872  CA  TRP A 156      16.140   1.892   1.830  1.00 24.34           C
ATOM    873  C   TRP A 156      16.156   3.100   0.882  1.00 24.58           C
ATOM    874  O   TRP A 156      17.049   3.943   0.949  1.00 24.78           O
ATOM    875  CB  TRP A 156      16.171   2.304   3.320  1.00 22.47           C
ATOM    876  CG  TRP A 156      14.843   2.605   3.958  1.00 23.60           C
ATOM    877  CD1 TRP A 156      13.828   3.313   3.404  1.00 23.21           C
ATOM    878  CD2 TRP A 156      14.343   2.153   5.257  1.00 24.20           C
ATOM    879  NE1 TRP A 156      12.747   3.323   4.261  1.00 23.02           N
ATOM    880  CE3 TRP A 156      14.871   1.373   6.315  1.00 22.06           C
ATOM    881  CE2 TRP A 156      13.006   2.626   5.415  1.00 24.32           C
ATOM    882  CZ3 TRP A 156      14.100   1.069   7.457  1.00 23.14           C
ATOM    883  CZ2 TRP A 156      12.236   2.350   6.553  1.00 23.17           C
ATOM    884  CH2 TRP A 156      12.781   1.553   7.574  1.00 23.12           C
ATOM    885  H   TRP A 156      18.205   1.390   1.640  1.00  0.00           H
ATOM    886  HA  TRP A 156      15.210   1.354   1.660  1.00  0.00           H
ATOM    887  HB2 TRP A 156      16.605   1.488   3.899  1.00  0.00           H
ATOM    888  HB3 TRP A 156      16.834   3.153   3.479  1.00  0.00           H
ATOM    889  HD1 TRP A 156      13.860   3.790   2.434  1.00  0.00           H
ATOM    890  HE1 TRP A 156      11.852   3.791   4.048  1.00  0.00           H
ATOM    891  HE3 TRP A 156      15.876   0.984   6.233  1.00  0.00           H
ATOM    892  HZ3 TRP A 156      14.522   0.452   8.237  1.00  0.00           H
ATOM    893  HZ2 TRP A 156      11.232   2.737   6.624  1.00  0.00           H
ATOM    894  HH2 TRP A 156      12.182   1.310   8.437  1.00  0.00           H
ATOM    895  N   VAL A 157      15.148   3.190   0.012  1.00 24.62           N
ATOM    896  CA  VAL A 157      14.937   4.288  -0.918  1.00 22.16           C
ATOM    897  C   VAL A 157      13.980   5.287  -0.241  1.00 21.82           C
ATOM    898  O   VAL A 157      12.797   5.005  -0.029  1.00 22.52           O
ATOM    899  CB  VAL A 157      14.313   3.712  -2.220  1.00 20.88           C
ATOM    900  CG1 VAL A 157      13.898   4.813  -3.211  1.00 19.19           C
ATOM    901  CG2 VAL A 157      15.276   2.727  -2.912  1.00 20.83           C
ATOM    902  H   VAL A 157      14.416   2.482   0.043  1.00  0.00           H
ATOM    903  HA  VAL A 157      15.881   4.782  -1.160  1.00  0.00           H
ATOM    904  HB  VAL A 157      13.412   3.152  -1.963  1.00  0.00           H
ATOM    905 HG11 VAL A 157      13.671   4.404  -4.194  1.00  0.00           H
ATOM    906 HG12 VAL A 157      13.007   5.338  -2.872  1.00  0.00           H
ATOM    907 HG13 VAL A 157      14.688   5.552  -3.335  1.00  0.00           H
ATOM    908 HG21 VAL A 157      14.808   2.269  -3.783  1.00  0.00           H
ATOM    909 HG22 VAL A 157      16.184   3.226  -3.251  1.00  0.00           H
ATOM    910 HG23 VAL A 157      15.575   1.911  -2.255  1.00  0.00           H
ATOM    911  N   PHE A 158      14.497   6.466   0.095  1.00 22.60           N
ATOM    912  CA  PHE A 158      13.743   7.582   0.638  1.00 21.72           C
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ATOM    913  C   PHE A 158      13.425   8.526  -0.533  1.00 21.85           C
ATOM    914  O   PHE A 158      14.314   8.908  -1.297  1.00 21.79           O
ATOM    915  CB  PHE A 158      14.619   8.300   1.684  1.00 22.82           C
ATOM    916  CG  PHE A 158      14.993   7.422   2.866  1.00 22.97           C
ATOM    917  CD1 PHE A 158      14.034   7.112   3.853  1.00 20.44           C
ATOM    918  CD2 PHE A 158      16.285   6.864   2.950  1.00 23.38           C
ATOM    919  CE1 PHE A 158      14.366   6.238   4.908  1.00 23.63           C
ATOM    920  CE2 PHE A 158      16.611   5.998   4.007  1.00 22.41           C
ATOM    921  CZ  PHE A 158      15.657   5.691   4.993  1.00 21.10           C
ATOM    922  H   PHE A 158      15.481   6.648  -0.110  1.00  0.00           H
ATOM    923  HA  PHE A 158      12.830   7.236   1.120  1.00  0.00           H
ATOM    924  HB2 PHE A 158      15.523   8.698   1.222  1.00  0.00           H
ATOM    925  HB3 PHE A 158      14.081   9.153   2.088  1.00  0.00           H
ATOM    926  HD1 PHE A 158      13.035   7.513   3.781  1.00  0.00           H
ATOM    927  HD2 PHE A 158      17.024   7.076   2.189  1.00  0.00           H
ATOM    928  HE1 PHE A 158      13.625   5.936   5.631  1.00  0.00           H
ATOM    929  HE2 PHE A 158      17.592   5.554   4.050  1.00  0.00           H
ATOM    930  HZ  PHE A 158      15.895   4.999   5.786  1.00  0.00           H
ATOM    931  N   LEU A 159      12.147   8.882  -0.679  1.00 22.19           N
ATOM    932  CA  LEU A 159      11.580   9.733  -1.719  1.00 20.94           C
ATOM    933  C   LEU A 159      10.938  10.964  -1.053  1.00 21.28           C
ATOM    934  O   LEU A 159      10.418  10.863   0.060  1.00 22.09           O
ATOM    935  CB  LEU A 159      10.542   8.929  -2.540  1.00 22.79           C
ATOM    936  CG  LEU A 159      11.072   7.628  -3.185  1.00 22.80           C
ATOM    937  CD1 LEU A 159       9.936   6.798  -3.803  1.00 23.75           C
ATOM    938  CD2 LEU A 159      12.159   7.909  -4.231  1.00 19.61           C
ATOM    939  H   LEU A 159      11.475   8.507  -0.009  1.00  0.00           H
ATOM    940  HA  LEU A 159      12.364  10.065  -2.391  1.00  0.00           H
ATOM    941  HB2 LEU A 159       9.702   8.666  -1.904  1.00  0.00           H
ATOM    942  HB3 LEU A 159      10.131   9.579  -3.311  1.00  0.00           H
ATOM    943  HG  LEU A 159      11.509   7.011  -2.400  1.00  0.00           H
ATOM    944 HD11 LEU A 159      10.312   5.845  -4.175  1.00  0.00           H
ATOM    945 HD12 LEU A 159       9.158   6.581  -3.071  1.00  0.00           H
ATOM    946 HD13 LEU A 159       9.472   7.307  -4.645  1.00  0.00           H
ATOM    947 HD21 LEU A 159      12.482   6.993  -4.727  1.00  0.00           H
ATOM    948 HD22 LEU A 159      11.793   8.587  -5.001  1.00  0.00           H
ATOM    949 HD23 LEU A 159      13.043   8.358  -3.782  1.00  0.00           H
ATOM    950  N   ASN A 160      10.975  12.127  -1.709  1.00 21.67           N
ATOM    951  CA  ASN A 160      10.531  13.424  -1.180  1.00 21.59           C
ATOM    952  C   ASN A 160      10.010  14.296  -2.332  1.00 22.22           C
ATOM    953  O   ASN A 160      10.130  13.925  -3.497  1.00 22.40           O
ATOM    954  CB  ASN A 160      11.701  14.059  -0.394  1.00 21.73           C
ATOM    955  CG  ASN A 160      11.364  15.146   0.632  1.00 20.70           C
ATOM    956  OD1 ASN A 160      10.378  15.875   0.522  1.00 17.56           O
ATOM    957  ND2 ASN A 160      12.202  15.266   1.654  1.00 20.24           N
ATOM    958  H   ASN A 160      11.441  12.154  -2.608  1.00  0.00           H
ATOM    959  HA  ASN A 160       9.691  13.254  -0.506  1.00  0.00           H
ATOM    960  HB2 ASN A 160      12.162  13.268   0.181  1.00  0.00           H
ATOM    961  HB3 ASN A 160      12.471  14.418  -1.077  1.00  0.00           H
ATOM    962 HD21 ASN A 160      13.001  14.650   1.721  1.00  0.00           H
ATOM    963 HD22 ASN A 160      12.099  16.020   2.315  1.00  0.00           H
ATOM    964  N   ASP A 161       9.448  15.465  -2.021  1.00 22.62           N
ATOM    965  CA  ASP A 161       8.964  16.471  -2.975  1.00 21.64           C
ATOM    966  C   ASP A 161       9.663  17.827  -2.743  1.00 24.09           C
ATOM    967  O   ASP A 161       9.666  18.689  -3.623  1.00 24.64           O
ATOM    968  CB  ASP A 161       7.416  16.512  -2.966  1.00 22.24           C
ATOM    969  CG  ASP A 161       6.751  17.499  -2.009  1.00 22.54           C
ATOM    970  OD1 ASP A 161       6.872  17.315  -0.778  1.00 19.79           O
ATOM    971  OD2 ASP A 161       6.054  18.407  -2.524  1.00 25.86           O1-
ATOM    972  H   ASP A 161       9.476  15.719  -1.036  1.00  0.00           H
ATOM    973  HA  ASP A 161       9.263  16.170  -3.981  1.00  0.00           H
ATOM    974  HB2 ASP A 161       7.079  16.742  -3.975  1.00  0.00           H
ATOM    975  HB3 ASP A 161       7.015  15.519  -2.763  1.00  0.00           H
ATOM    976  N   GLU A 162      10.328  17.990  -1.599  1.00 25.03           N
ATOM    977  CA  GLU A 162      11.448  18.900  -1.402  1.00 25.78           C
ATOM    978  C   GLU A 162      12.736  18.095  -1.674  1.00 26.36           C
ATOM    979  O   GLU A 162      12.681  16.862  -1.727  1.00 26.47           O
ATOM    980  CB  GLU A 162      11.454  19.273   0.092  1.00 28.39           C
ATOM    981  CG  GLU A 162      10.348  20.274   0.453  1.00 34.38           C
ATOM    982  CD  GLU A 162      10.318  20.591   1.933  1.00 38.51           C
ATOM    983  OE1 GLU A 162      10.874  19.836   2.762  1.00 40.07           O
ATOM    984  OE2 GLU A 162       9.662  21.584   2.313  1.00 39.26           O1-
ATOM    985  H   GLU A 162      10.316  17.213  -0.951  1.00  0.00           H
ATOM    986  HA  GLU A 162      11.393  19.782  -2.040  1.00  0.00           H
ATOM    987  HB2 GLU A 162      11.354  18.368   0.693  1.00  0.00           H
ATOM    988  HB3 GLU A 162      12.410  19.709   0.385  1.00  0.00           H
ATOM    989  HG2 GLU A 162      10.488  21.200  -0.106  1.00  0.00           H
ATOM    990  HG3 GLU A 162       9.372  19.879   0.168  1.00  0.00           H
ATOM    991  N   PRO A 163      13.916  18.740  -1.756  1.00 25.77           N
ATOM    992  CA  PRO A 163      15.185  18.028  -1.594  1.00 25.31           C
ATOM    993  C   PRO A 163      15.342  17.589  -0.123  1.00 24.48           C
ATOM    994  O   PRO A 163      14.774  18.202   0.786  1.00 23.95           O
ATOM    995  CB  PRO A 163      16.254  19.038  -2.036  1.00 25.46           C
ATOM    996  CG  PRO A 163      15.631  20.403  -1.774  1.00 26.93           C
ATOM    997  CD  PRO A 163      14.122  20.180  -1.916  1.00 25.47           C
ATOM    998  HA  PRO A 163      15.209  17.148  -2.241  1.00  0.00           H
ATOM    999  HB2 PRO A 163      17.208  18.911  -1.523  1.00  0.00           H
ATOM   1000  HB3 PRO A 163      16.437  18.920  -3.106  1.00  0.00           H
ATOM   1001  HG2 PRO A 163      15.858  20.705  -0.751  1.00  0.00           H
ATOM   1002  HG3 PRO A 163      16.006  21.180  -2.440  1.00  0.00           H
ATOM   1003  HD2 PRO A 163      13.572  20.780  -1.190  1.00  0.00           H
ATOM   1004  HD3 PRO A 163      13.782  20.469  -2.909  1.00  0.00           H
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ATOM   1005  N   PHE A 164      16.100  16.518   0.123  1.00 23.91           N
ATOM   1006  CA  PHE A 164      16.336  16.011   1.472  1.00 22.65           C
ATOM   1007  C   PHE A 164      17.345  16.909   2.188  1.00 22.61           C
ATOM   1008  O   PHE A 164      18.457  17.106   1.685  1.00 20.34           O
ATOM   1009  CB  PHE A 164      16.897  14.580   1.406  1.00 21.23           C
ATOM   1010  CG  PHE A 164      15.803  13.540   1.329  1.00 21.71           C
ATOM   1011  CD1 PHE A 164      15.039  13.262   2.480  1.00 21.29           C
ATOM   1012  CD2 PHE A 164      15.525  12.872   0.121  1.00 20.13           C
ATOM   1013  CE1 PHE A 164      14.006  12.312   2.429  1.00 22.86           C
ATOM   1014  CE2 PHE A 164      14.505  11.907   0.080  1.00 22.82           C
ATOM   1015  CZ  PHE A 164      13.746  11.627   1.231  1.00 20.54           C
ATOM   1016  H   PHE A 164      16.576  16.074  -0.659  1.00  0.00           H
ATOM   1017  HA  PHE A 164      15.401  16.008   2.030  1.00  0.00           H
ATOM   1018  HB2 PHE A 164      17.595  14.465   0.576  1.00  0.00           H
ATOM   1019  HB3 PHE A 164      17.470  14.355   2.307  1.00  0.00           H
ATOM   1020  HD1 PHE A 164      15.229  13.790   3.404  1.00  0.00           H
ATOM   1021  HD2 PHE A 164      16.084  13.096  -0.778  1.00  0.00           H
ATOM   1022  HE1 PHE A 164      13.409  12.115   3.304  1.00  0.00           H
ATOM   1023  HE2 PHE A 164      14.284  11.399  -0.845  1.00  0.00           H
ATOM   1024  HZ  PHE A 164      12.936  10.915   1.186  1.00  0.00           H
ATOM   1025  N   THR A 165      16.951  17.442   3.349  1.00 23.48           N
ATOM   1026  CA  THR A 165      17.765  18.262   4.236  1.00 23.94           C
ATOM   1027  C   THR A 165      18.903  17.419   4.838  1.00 26.62           C
ATOM   1028  O   THR A 165      18.740  16.223   5.095  1.00 21.92           O
ATOM   1029  CB  THR A 165      16.832  18.868   5.319  1.00 25.32           C
ATOM   1030  OG1 THR A 165      16.051  17.878   5.970  1.00 27.19           O
ATOM   1031  CG2 THR A 165      15.879  19.931   4.752  1.00 25.62           C
ATOM   1032  H   THR A 165      16.038  17.204   3.728  1.00  0.00           H
ATOM   1033  HA  THR A 165      18.211  19.073   3.658  1.00  0.00           H
ATOM   1034  HB  THR A 165      17.447  19.350   6.082  1.00  0.00           H
ATOM   1035  HG1 THR A 165      16.357  17.786   6.887  1.00  0.00           H
ATOM   1036 HG21 THR A 165      15.246  20.350   5.534  1.00  0.00           H
ATOM   1037 HG22 THR A 165      16.434  20.755   4.303  1.00  0.00           H
ATOM   1038 HG23 THR A 165      15.227  19.521   3.981  1.00  0.00           H
ATOM   1039  N   GLU A 166      20.084  18.020   5.014  1.00 27.49           N
ATOM   1040  CA  GLU A 166      21.316  17.346   5.431  1.00 30.60           C
ATOM   1041  C   GLU A 166      21.177  16.610   6.773  1.00 29.25           C
ATOM   1042  O   GLU A 166      21.651  15.483   6.903  1.00 31.53           O
ATOM   1043  CB  GLU A 166      22.516  18.324   5.402  1.00 34.11           C
ATOM   1044  CG  GLU A 166      22.584  19.290   4.188  1.00 40.02           C
ATOM   1045  CD  GLU A 166      22.200  18.646   2.859  1.00 44.19           C
ATOM   1046  OE1 GLU A 166      21.114  18.993   2.354  1.00 48.52           O
ATOM   1047  OE2 GLU A 166      22.859  17.675   2.439  1.00 46.29           O1-
ATOM   1048  H   GLU A 166      20.209  18.913   4.553  1.00  0.00           H
ATOM   1049  HA  GLU A 166      21.527  16.574   4.698  1.00  0.00           H
ATOM   1050  HB2 GLU A 166      22.524  18.923   6.314  1.00  0.00           H
ATOM   1051  HB3 GLU A 166      23.435  17.736   5.429  1.00  0.00           H
ATOM   1052  HG2 GLU A 166      21.928  20.144   4.356  1.00  0.00           H
ATOM   1053  HG3 GLU A 166      23.590  19.698   4.092  1.00  0.00           H
ATOM   1054  N   GLU A 167      20.432  17.206   7.715  1.00 29.61           N
ATOM   1055  CA  GLU A 167      20.013  16.621   8.988  1.00 30.74           C
ATOM   1056  C   GLU A 167      19.231  15.300   8.828  1.00 29.24           C
ATOM   1057  O   GLU A 167      19.452  14.378   9.610  1.00 26.20           O
ATOM   1058  CB  GLU A 167      19.323  17.718   9.851  1.00 33.76           C
ATOM   1059  CG  GLU A 167      17.990  17.393  10.570  1.00 39.85           C
ATOM   1060  CD  GLU A 167      16.746  17.528   9.695  1.00 43.67           C
ATOM   1061  OE1 GLU A 167      16.890  17.744   8.470  1.00 45.84           O
ATOM   1062  OE2 GLU A 167      15.637  17.503  10.277  1.00 45.11           O1-
ATOM   1063  H   GLU A 167      20.008  18.083   7.459  1.00  0.00           H
ATOM   1064  HA  GLU A 167      20.934  16.342   9.505  1.00  0.00           H
ATOM   1065  HB2 GLU A 167      20.037  18.020  10.617  1.00  0.00           H
ATOM   1066  HB3 GLU A 167      19.173  18.625   9.262  1.00  0.00           H
ATOM   1067  HG2 GLU A 167      18.007  16.409  11.038  1.00  0.00           H
ATOM   1068  HG3 GLU A 167      17.872  18.106  11.386  1.00  0.00           H
ATOM   1069  N   PHE A 168      18.376  15.181   7.800  1.00 26.92           N
ATOM   1070  CA  PHE A 168      17.618  13.977   7.451  1.00 25.65           C
ATOM   1071  C   PHE A 168      18.573  12.828   7.144  1.00 24.16           C
ATOM   1072  O   PHE A 168      18.491  11.756   7.740  1.00 21.85           O
ATOM   1073  CB  PHE A 168      16.683  14.249   6.243  1.00 25.88           C
ATOM   1074  CG  PHE A 168      15.514  13.290   6.078  1.00 25.83           C
ATOM   1075  CD1 PHE A 168      15.708  11.926   5.762  1.00 27.41           C
ATOM   1076  CD2 PHE A 168      14.205  13.781   6.235  1.00 26.00           C
ATOM   1077  CE1 PHE A 168      14.606  11.052   5.690  1.00 27.73           C
ATOM   1078  CE2 PHE A 168      13.101  12.912   6.149  1.00 24.69           C
ATOM   1079  CZ  PHE A 168      13.306  11.543   5.909  1.00 24.72           C
ATOM   1080  H   PHE A 168      18.229  16.000   7.224  1.00  0.00           H
ATOM   1081  HA  PHE A 168      17.023  13.686   8.309  1.00  0.00           H
ATOM   1082  HB2 PHE A 168      16.282  15.258   6.328  1.00  0.00           H
ATOM   1083  HB3 PHE A 168      17.235  14.241   5.303  1.00  0.00           H
ATOM   1084  HD1 PHE A 168      16.700  11.533   5.588  1.00  0.00           H
ATOM   1085  HD2 PHE A 168      14.058  14.830   6.448  1.00  0.00           H
ATOM   1086  HE1 PHE A 168      14.757  10.006   5.460  1.00  0.00           H
ATOM   1087  HE2 PHE A 168      12.098  13.287   6.285  1.00  0.00           H
ATOM   1088  HZ  PHE A 168      12.459  10.880   5.869  1.00  0.00           H
ATOM   1089  N   LYS A 169      19.511  13.086   6.232  1.00 24.01           N
ATOM   1090  CA  LYS A 169      20.467  12.116   5.726  1.00 26.45           C
ATOM   1091  C   LYS A 169      21.465  11.717   6.831  1.00 26.84           C
ATOM   1092  O   LYS A 169      21.734  10.527   6.999  1.00 27.09           O
ATOM   1093  CB  LYS A 169      21.145  12.725   4.482  1.00 29.03           C
ATOM   1094  CG  LYS A 169      20.119  13.002   3.354  1.00 31.88           C
ATOM   1095  CD  LYS A 169      20.659  13.729   2.114  1.00 35.09           C
ATOM   1096  CE  LYS A 169      21.092  15.165   2.433  1.00 37.28           C
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ATOM   1097  NZ  LYS A 169      21.213  16.037   1.259  1.00 38.69          N1+
ATOM   1098  H   LYS A 169      19.542  14.028   5.863  1.00  0.00           H
ATOM   1099  HA  LYS A 169      19.924  11.218   5.428  1.00  0.00           H
ATOM   1100  HB2 LYS A 169      21.678  13.634   4.760  1.00  0.00           H
ATOM   1101  HB3 LYS A 169      21.895  12.028   4.109  1.00  0.00           H
ATOM   1102  HG2 LYS A 169      19.702  12.050   3.035  1.00  0.00           H
ATOM   1103  HG3 LYS A 169      19.272  13.573   3.734  1.00  0.00           H
ATOM   1104  HD2 LYS A 169      21.486  13.166   1.679  1.00  0.00           H
ATOM   1105  HD3 LYS A 169      19.871  13.740   1.360  1.00  0.00           H
ATOM   1106  HE2 LYS A 169      20.367  15.634   3.093  1.00  0.00           H
ATOM   1107  HE3 LYS A 169      22.052  15.151   2.949  1.00  0.00           H
ATOM   1108  HZ1 LYS A 169      21.893  16.770   1.535  1.00  0.00           H
ATOM   1109  HZ2 LYS A 169      21.533  15.522   0.436  1.00  0.00           H
ATOM   1110  HZ3 LYS A 169      20.336  16.509   1.086  1.00  0.00           H
ATOM   1111  N   GLU A 170      21.908  12.674   7.663  1.00 26.50           N
ATOM   1112  CA  GLU A 170      22.747  12.451   8.846  1.00 27.91           C
ATOM   1113  C   GLU A 170      22.002  11.587   9.893  1.00 26.70           C
ATOM   1114  O   GLU A 170      22.557  10.609  10.401  1.00 25.68           O
ATOM   1115  CB  GLU A 170      23.155  13.824   9.455  1.00 30.74           C
ATOM   1116  CG  GLU A 170      24.640  13.949   9.858  1.00 38.58           C
ATOM   1117  CD  GLU A 170      25.069  12.894  10.859  1.00 44.74           C
ATOM   1118  OE1 GLU A 170      24.366  12.702  11.876  1.00 47.54           O
ATOM   1119  OE2 GLU A 170      26.003  12.119  10.556  1.00 48.23          O1-
ATOM   1120  H   GLU A 170      21.652  13.635   7.450  1.00  0.00           H
ATOM   1121  HA  GLU A 170      23.637  11.914   8.515  1.00  0.00           H
ATOM   1122  HB2 GLU A 170      22.976  14.625   8.745  1.00  0.00           H
ATOM   1123  HB3 GLU A 170      22.530  14.072  10.316  1.00  0.00           H
ATOM   1124  HG2 GLU A 170      25.273  13.875   8.974  1.00  0.00           H
ATOM   1125  HG3 GLU A 170      24.828  14.929  10.296  1.00  0.00           H
ATOM   1126  N   ALA A 171      20.730  11.904  10.179  1.00 23.76           N
ATOM   1127  CA  ALA A 171      19.908  11.224  11.176  1.00 23.64           C
ATOM   1128  C   ALA A 171      19.481   9.818  10.730  1.00 23.90           C
ATOM   1129  O   ALA A 171      19.374   8.931  11.580  1.00 22.94           O
ATOM   1130  CB  ALA A 171      18.640  12.044  11.439  1.00 23.80           C
ATOM   1131  H   ALA A 171      20.340  12.738   9.743  1.00  0.00           H
ATOM   1132  HA  ALA A 171      20.482  11.140  12.100  1.00  0.00           H
ATOM   1133  HB1 ALA A 171      17.977  11.552  12.152  1.00  0.00           H
ATOM   1134  HB2 ALA A 171      18.883  13.027  11.844  1.00  0.00           H
ATOM   1135  HB3 ALA A 171      18.084  12.194  10.515  1.00  0.00           H
ATOM   1136  N   VAL A 172      19.264   9.602   9.425  1.00 24.62           N
ATOM   1137  CA  VAL A 172      19.078   8.292   8.800  1.00 25.76           C
ATOM   1138  C   VAL A 172      20.375   7.463   8.906  1.00 26.15           C
ATOM   1139  O   VAL A 172      20.313   6.298   9.300  1.00 25.46           O
ATOM   1140  CB  VAL A 172      18.578   8.477   7.342  1.00 25.40           C
ATOM   1141  CG1 VAL A 172      18.740   7.239   6.444  1.00 25.21           C
ATOM   1142  CG2 VAL A 172      17.096   8.897   7.330  1.00 22.74           C
ATOM   1143  H   VAL A 172      19.262  10.414   8.809  1.00  0.00           H
ATOM   1144  HA  VAL A 172      18.310   7.754   9.357  1.00  0.00           H
ATOM   1145  HB  VAL A 172      19.160   9.274   6.877  1.00  0.00           H
ATOM   1146 HG11 VAL A 172      18.327   7.427   5.456  1.00  0.00           H
ATOM   1147 HG12 VAL A 172      19.785   6.965   6.295  1.00  0.00           H
ATOM   1148 HG13 VAL A 172      18.215   6.380   6.854  1.00  0.00           H
ATOM   1149 HG21 VAL A 172      16.764   9.114   6.315  1.00  0.00           H
ATOM   1150 HG22 VAL A 172      16.455   8.105   7.715  1.00  0.00           H
ATOM   1151 HG23 VAL A 172      16.911   9.786   7.931  1.00  0.00           H
ATOM   1152  N   THR A 173      21.547   8.086   8.711  1.00 26.81           N
ATOM   1153  CA  THR A 173      22.885   7.505   8.920  1.00 28.03           C
ATOM   1154  C   THR A 173      23.244   7.521  10.440  1.00 27.32           C
ATOM   1155  O   THR A 173      24.398   7.657  10.851  1.00 26.39           O
ATOM   1156  CB  THR A 173      23.916   8.308   8.066  1.00 27.81           C
ATOM   1157  OG1 THR A 173      23.424   8.495   6.748  1.00 30.64           O
ATOM   1158  CG2 THR A 173      25.268   7.600   7.868  1.00 27.52           C
ATOM   1159  H   THR A 173      21.519   9.054   8.410  1.00  0.00           H
ATOM   1160  HA  THR A 173      22.875   6.467   8.582  1.00  0.00           H
ATOM   1161  HB  THR A 173      24.086   9.293   8.505  1.00  0.00           H
ATOM   1162  HG1 THR A 173      22.733   9.163   6.788  1.00  0.00           H
ATOM   1163 HG21 THR A 173      25.920   8.184   7.217  1.00  0.00           H
ATOM   1164 HG22 THR A 173      25.806   7.455   8.803  1.00  0.00           H
ATOM   1165 HG23 THR A 173      25.136   6.620   7.407  1.00  0.00           H
ATOM   1166  N   LYS A 174      22.228   7.427  11.302  1.00 27.78           N
ATOM   1167  CA  LYS A 174      22.247   7.206  12.743  1.00 31.22           C
ATOM   1168  C   LYS A 174      20.923   6.538  13.159  1.00 30.61           C
ATOM   1169  O   LYS A 174      20.370   6.774  14.239  1.00 30.04           O
ATOM   1170  CB  LYS A 174      22.665   8.488  13.506  1.00 32.27           C
ATOM   1171  CG  LYS A 174      24.050   8.360  14.176  1.00 36.69           C
ATOM   1172  CD  LYS A 174      24.774   9.706  14.358  1.00 39.08           C
ATOM   1173  CE  LYS A 174      25.752  10.039  13.215  1.00 41.57           C
ATOM   1174  NZ  LYS A 174      25.080  10.128  11.917  1.00 43.16          N1+
ATOM   1175  H   LYS A 174      21.312   7.407  10.870  1.00  0.00           H
ATOM   1176  HA  LYS A 174      22.991   6.429  12.926  1.00  0.00           H
ATOM   1177  HB2 LYS A 174      22.645   9.337  12.821  1.00  0.00           H
ATOM   1178  HB3 LYS A 174      21.936   8.749  14.273  1.00  0.00           H
ATOM   1179  HG2 LYS A 174      23.916   7.882  15.147  1.00  0.00           H
ATOM   1180  HG3 LYS A 174      24.699   7.689  13.610  1.00  0.00           H
ATOM   1181  HD2 LYS A 174      24.057  10.518  14.494  1.00  0.00           H
ATOM   1182  HD3 LYS A 174      25.351   9.669  15.283  1.00  0.00           H
ATOM   1183  HE2 LYS A 174      26.221  11.006  13.407  1.00  0.00           H
ATOM   1184  HE3 LYS A 174      26.554   9.303  13.150  1.00  0.00           H
ATOM   1185  HZ1 LYS A 174      25.669  10.675  11.268  1.00  0.00           H
ATOM   1186  HZ2 LYS A 174      24.782   9.253  11.500  1.00  0.00           H
ATOM   1187  HZ3 LYS A 174      24.322  10.809  11.966  1.00  0.00           H
ATOM   1188  N   ALA A 175      20.379   5.727  12.247  1.00 28.23           N
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ATOM   1189  CA  ALA A 175      19.133   5.006  12.370  1.00 26.89           C
ATOM   1190  C   ALA A 175      19.246   3.687  11.616  1.00 26.79           C
ATOM   1191  O   ALA A 175      19.187   2.642  12.255  1.00 27.40           O
ATOM   1192  CB  ALA A 175      17.944   5.890  11.959  1.00 24.63           C
ATOM   1193  H   ALA A 175      20.907   5.545  11.399  1.00  0.00           H
ATOM   1194  HA  ALA A 175      19.006   4.736  13.418  1.00  0.00           H
ATOM   1195  HB1 ALA A 175      16.996   5.427  12.228  1.00  0.00           H
ATOM   1196  HB2 ALA A 175      17.989   6.865  12.437  1.00  0.00           H
ATOM   1197  HB3 ALA A 175      17.934   6.063  10.883  1.00  0.00           H
ATOM   1198  N   VAL A 176      19.437   3.755  10.292  1.00 27.12           N
ATOM   1199  CA  VAL A 176      19.587   2.610   9.394  1.00 25.91           C
ATOM   1200  C   VAL A 176      21.029   2.063   9.509  1.00 26.78           C
ATOM   1201  O   VAL A 176      21.959   2.817   9.807  1.00 26.76           O
ATOM   1202  CB  VAL A 176      19.295   3.070   7.929  1.00 24.16           C
ATOM   1203  CG1 VAL A 176      19.353   1.916   6.909  1.00 25.45           C
ATOM   1204  CG2 VAL A 176      17.930   3.765   7.779  1.00 19.93           C
ATOM   1205  H   VAL A 176      19.614   4.660   9.868  1.00  0.00           H
ATOM   1206  HA  VAL A 176      18.866   1.846   9.677  1.00  0.00           H
ATOM   1207  HB  VAL A 176      20.055   3.798   7.638  1.00  0.00           H
ATOM   1208 HG11 VAL A 176      18.910   2.188   5.951  1.00  0.00           H
ATOM   1209 HG12 VAL A 176      20.381   1.641   6.691  1.00  0.00           H
ATOM   1210 HG13 VAL A 176      18.826   1.029   7.264  1.00  0.00           H
ATOM   1211 HG21 VAL A 176      17.775   4.080   6.748  1.00  0.00           H
ATOM   1212 HG22 VAL A 176      17.114   3.088   8.029  1.00  0.00           H
ATOM   1213 HG23 VAL A 176      17.850   4.656   8.399  1.00  0.00           H
ATOM   1214  N   SER A 177      21.209   0.763   9.248  1.00 24.88           N
ATOM   1215  CA  SER A 177      22.486   0.055   9.212  1.00 26.57           C
ATOM   1216  C   SER A 177      22.649  -0.825   7.956  1.00 27.23           C
ATOM   1217  O   SER A 177      23.410  -1.791   7.944  1.00 28.95           O
ATOM   1218  CB  SER A 177      22.826  -0.547  10.595  1.00 24.99           C
ATOM   1219  OG  SER A 177      21.985  -1.611  11.010  1.00 23.21           O
ATOM   1220  H   SER A 177      20.367   0.178   9.166  1.00  0.00           H
ATOM   1221  HA  SER A 177      23.258   0.809   9.045  1.00  0.00           H
ATOM   1222  HB2 SER A 177      23.849  -0.924  10.577  1.00  0.00           H
ATOM   1223  HB3 SER A 177      22.800   0.237  11.352  1.00  0.00           H
ATOM   1224  HG  SER A 177      21.059  -1.331  10.980  1.00  0.00           H
ATOM   1225  N   SER A 178      21.985  -0.425   6.868  1.00 26.97           N
ATOM   1226  CA  SER A 178      22.127  -0.919   5.505  1.00 26.31           C
ATOM   1227  C   SER A 178      22.321   0.281   4.551  1.00 26.98           C
ATOM   1228  O   SER A 178      22.590   1.395   5.008  1.00 27.69           O
ATOM   1229  CB  SER A 178      20.956  -1.877   5.187  1.00 26.87           C
ATOM   1230  OG  SER A 178      19.702  -1.214   5.204  1.00 26.69           O
ATOM   1231  H   SER A 178      21.422   0.408   6.949  1.00  0.00           H
ATOM   1232  HA  SER A 178      23.052  -1.495   5.436  1.00  0.00           H
ATOM   1233  HB2 SER A 178      21.096  -2.320   4.200  1.00  0.00           H
ATOM   1234  HB3 SER A 178      20.938  -2.709   5.893  1.00  0.00           H
ATOM   1235  HG  SER A 178      19.135  -1.614   4.538  1.00  0.00           H
ATOM   1236  N   GLU A 179      22.246   0.055   3.232  1.00 28.23           N
ATOM   1237  CA  GLU A 179      22.424   1.074   2.196  1.00 30.32           C
ATOM   1238  C   GLU A 179      21.152   1.942   2.090  1.00 29.86           C
ATOM   1239  O   GLU A 179      20.047   1.475   2.381  1.00 29.62           O
ATOM   1240  CB  GLU A 179      22.730   0.343   0.870  1.00 30.92           C
ATOM   1241  CG  GLU A 179      23.319   1.231  -0.251  1.00 36.26           C
ATOM   1242  CD  GLU A 179      22.445   1.310  -1.494  1.00 40.60           C
ATOM   1243  OE1 GLU A 179      21.234   1.586  -1.371  1.00 42.26           O
ATOM   1244  OE2 GLU A 179      22.975   1.111  -2.608  1.00 41.15           O1-
ATOM   1245  H   GLU A 179      21.910  -0.838   2.919  1.00  0.00           H
ATOM   1246  HA  GLU A 179      23.272   1.704   2.471  1.00  0.00           H
ATOM   1247  HB2 GLU A 179      23.453  -0.451   1.058  1.00  0.00           H
ATOM   1248  HB3 GLU A 179      21.832  -0.169   0.522  1.00  0.00           H
ATOM   1249  HG2 GLU A 179      23.495   2.249   0.095  1.00  0.00           H
ATOM   1250  HG3 GLU A 179      24.294   0.845  -0.550  1.00  0.00           H
ATOM   1251  N   VAL A 180      21.324   3.217   1.730  1.00 28.50           N
ATOM   1252  CA  VAL A 180      20.297   4.248   1.724  1.00 27.87           C
ATOM   1253  C   VAL A 180      20.419   5.089   0.446  1.00 27.26           C
ATOM   1254  O   VAL A 180      21.539   5.405   0.035  1.00 25.36           O
ATOM   1255  CB  VAL A 180      20.340   5.076   3.042  1.00 28.46           C
ATOM   1256  CG1 VAL A 180      19.951   4.233   4.270  1.00 25.72           C
ATOM   1257  CG2 VAL A 180      21.691   5.773   3.303  1.00 29.12           C
ATOM   1258  H   VAL A 180      22.215   3.501   1.354  1.00  0.00           H
ATOM   1259  HA  VAL A 180      19.331   3.752   1.673  1.00  0.00           H
ATOM   1260  HB  VAL A 180      19.591   5.863   2.939  1.00  0.00           H
ATOM   1261 HG11 VAL A 180      19.815   4.853   5.154  1.00  0.00           H
ATOM   1262 HG12 VAL A 180      19.023   3.691   4.095  1.00  0.00           H
ATOM   1263 HG13 VAL A 180      20.717   3.494   4.508  1.00  0.00           H
ATOM   1264 HG21 VAL A 180      21.645   6.395   4.198  1.00  0.00           H
ATOM   1265 HG22 VAL A 180      22.493   5.049   3.449  1.00  0.00           H
ATOM   1266 HG23 VAL A 180      21.978   6.423   2.478  1.00  0.00           H
ATOM   1267  N   LYS A 181      19.288   5.491  -0.145  1.00 26.75           N
ATOM   1268  CA  LYS A 181      19.197   6.393  -1.294  1.00 27.00           C
ATOM   1269  C   LYS A 181      18.131   7.461  -1.024  1.00 26.79           C
ATOM   1270  O   LYS A 181      17.123   7.176  -0.379  1.00 26.53           O
ATOM   1271  CB  LYS A 181      18.966   5.621  -2.609  1.00 28.69           C
ATOM   1272  CG  LYS A 181      20.084   4.612  -2.923  1.00 31.19           C
ATOM   1273  CD  LYS A 181      20.095   4.130  -4.382  1.00 35.82           C
ATOM   1274  CE  LYS A 181      21.236   3.142  -4.654  1.00 35.27           C
ATOM   1275  NZ  LYS A 181      20.942   1.816  -4.112  1.00 36.42           N1+
ATOM   1276  H   LYS A 181      18.404   5.180   0.252  1.00  0.00           H
ATOM   1277  HA  LYS A 181      20.143   6.930  -1.388  1.00  0.00           H
ATOM   1278  HB2 LYS A 181      18.001   5.111  -2.588  1.00  0.00           H
ATOM   1279  HB3 LYS A 181      18.907   6.350  -3.419  1.00  0.00           H
ATOM   1280  HG2 LYS A 181      21.049   5.071  -2.703  1.00  0.00           H
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ATOM   1281  HG3 LYS A 181      19.995   3.761  -2.248  1.00  0.00           H
ATOM   1282  HD2 LYS A 181      19.137   3.686  -4.661  1.00  0.00           H
ATOM   1283  HD3 LYS A 181      20.235   4.992  -5.035  1.00  0.00           H
ATOM   1284  HE2 LYS A 181      21.397   3.034  -5.728  1.00  0.00           H
ATOM   1285  HE3 LYS A 181      22.170   3.502  -4.222  1.00  0.00           H
ATOM   1286  HZ1 LYS A 181      21.816   1.355  -3.833  1.00  0.00           H
ATOM   1287  HZ2 LYS A 181      20.468   1.854  -3.216  1.00  0.00           H
ATOM   1288  HZ3 LYS A 181      20.426   1.271  -4.821  1.00  0.00           H
ATOM   1289  N   PHE A 182      18.367   8.684  -1.504  1.00 25.47           N
ATOM   1290  CA  PHE A 182      17.626   9.900  -1.187  1.00 24.54           C
ATOM   1291  C   PHE A 182      17.285  10.621  -2.498  1.00 23.94           C
ATOM   1292  O   PHE A 182      18.151  11.289  -3.071  1.00 25.57           O
ATOM   1293  CB  PHE A 182      18.497  10.786  -0.268  1.00 24.23           C
ATOM   1294  CG  PHE A 182      18.894  10.180   1.065  1.00 25.85           C
ATOM   1295  CD1 PHE A 182      17.968  10.116   2.127  1.00 25.40           C
ATOM   1296  CD2 PHE A 182      20.207   9.697   1.247  1.00 27.19           C
ATOM   1297  CE1 PHE A 182      18.360   9.577   3.368  1.00 27.01           C
ATOM   1298  CE2 PHE A 182      20.599   9.168   2.489  1.00 25.63           C
ATOM   1299  CZ  PHE A 182      19.678   9.109   3.549  1.00 26.56           C
ATOM   1300  H   PHE A 182      19.187   8.797  -2.110  1.00  0.00           H
ATOM   1301  HA  PHE A 182      16.699   9.665  -0.664  1.00  0.00           H
ATOM   1302  HB2 PHE A 182      19.411  11.072  -0.792  1.00  0.00           H
ATOM   1303  HB3 PHE A 182      17.983  11.723  -0.062  1.00  0.00           H
ATOM   1304  HD1 PHE A 182      16.960  10.485   1.995  1.00  0.00           H
ATOM   1305  HD2 PHE A 182      20.921   9.737   0.436  1.00  0.00           H
ATOM   1306  HE1 PHE A 182      17.648   9.523   4.177  1.00  0.00           H
ATOM   1307  HE2 PHE A 182      21.609   8.810   2.627  1.00  0.00           H
ATOM   1308  HZ  PHE A 182      19.995   8.705   4.497  1.00  0.00           H
ATOM   1309  N   GLY A 183      16.048  10.502  -2.985  1.00 24.28           N
ATOM   1310  CA  GLY A 183      15.605  11.078  -4.255  1.00 21.73           C
ATOM   1311  C   GLY A 183      14.446  12.056  -4.087  1.00 22.11           C
ATOM   1312  O   GLY A 183      13.642  11.918  -3.166  1.00 22.30           O
ATOM   1313  H   GLY A 183      15.366   9.957  -2.457  1.00  0.00           H
ATOM   1314  HA2 GLY A 183      16.421  11.561  -4.790  1.00  0.00           H
ATOM   1315  HA3 GLY A 183      15.251  10.275  -4.900  1.00  0.00           H
ATOM   1316  N   ILE A 184      14.312  13.019  -5.004  1.00 24.31           N
ATOM   1317  CA  ILE A 184      13.097  13.815  -5.149  1.00 25.05           C
ATOM   1318  C   ILE A 184      12.200  13.095  -6.174  1.00 27.69           C
ATOM   1319  O   ILE A 184      12.689  12.408  -7.077  1.00 27.87           O
ATOM   1320  CB  ILE A 184      13.460  15.256  -5.621  1.00 25.38           C
ATOM   1321  CG1 ILE A 184      12.341  16.257  -5.263  1.00 25.06           C
ATOM   1322  CG2 ILE A 184      13.844  15.379  -7.114  1.00 20.90           C
ATOM   1323  CD1 ILE A 184      12.755  17.726  -5.404  1.00 26.79           C
ATOM   1324  H   ILE A 184      14.991  13.061  -5.761  1.00  0.00           H
ATOM   1325  HA  ILE A 184      12.586  13.878  -4.188  1.00  0.00           H
ATOM   1326  HB  ILE A 184      14.328  15.560  -5.036  1.00  0.00           H
ATOM   1327 HG12 ILE A 184      11.456  16.073  -5.873  1.00  0.00           H
ATOM   1328 HG13 ILE A 184      12.029  16.097  -4.230  1.00  0.00           H
ATOM   1329 HG21 ILE A 184      14.277  16.353  -7.327  1.00  0.00           H
ATOM   1330 HG22 ILE A 184      14.576  14.632  -7.412  1.00  0.00           H
ATOM   1331 HG23 ILE A 184      12.980  15.268  -7.770  1.00  0.00           H
ATOM   1332 HD11 ILE A 184      11.950  18.368  -5.058  1.00  0.00           H
ATOM   1333 HD12 ILE A 184      13.642  17.951  -4.811  1.00  0.00           H
ATOM   1334 HD13 ILE A 184      12.961  17.997  -6.440  1.00  0.00           H
ATOM   1335  N   LEU A 185      10.886  13.264  -6.055  1.00 28.44           N
ATOM   1336  CA  LEU A 185       9.907  12.884  -7.063  1.00 29.84           C
ATOM   1337  C   LEU A 185       9.714  14.065  -8.039  1.00 29.59           C
ATOM   1338  O   LEU A 185       9.629  15.202  -7.561  1.00 31.09           O
ATOM   1339  CB  LEU A 185       8.552  12.647  -6.368  1.00 30.35           C
ATOM   1340  CG  LEU A 185       8.535  11.509  -5.327  1.00 31.80           C
ATOM   1341  CD1 LEU A 185       7.101  11.301  -4.836  1.00 29.02           C
ATOM   1342  CD2 LEU A 185       9.154  10.208  -5.855  1.00 32.61           C
ATOM   1343  H   LEU A 185      10.543  13.778  -5.246  1.00  0.00           H
ATOM   1344  HA  LEU A 185      10.229  11.975  -7.565  1.00  0.00           H
ATOM   1345  HB2 LEU A 185       8.209  13.567  -5.889  1.00  0.00           H
ATOM   1346  HB3 LEU A 185       7.812  12.425  -7.140  1.00  0.00           H
ATOM   1347  HG  LEU A 185       9.126  11.803  -4.460  1.00  0.00           H
ATOM   1348 HD11 LEU A 185       6.996  10.389  -4.252  1.00  0.00           H
ATOM   1349 HD12 LEU A 185       6.791  12.142  -4.217  1.00  0.00           H
ATOM   1350 HD13 LEU A 185       6.402  11.241  -5.666  1.00  0.00           H
ATOM   1351 HD21 LEU A 185       8.862   9.352  -5.253  1.00  0.00           H
ATOM   1352 HD22 LEU A 185       8.864  10.006  -6.882  1.00  0.00           H
ATOM   1353 HD23 LEU A 185      10.243  10.262  -5.838  1.00  0.00           H
ATOM   1354  N   PRO A 186       9.616  13.822  -9.369  1.00 28.92           N
ATOM   1355  CA  PRO A 186       9.293  14.828 -10.395  1.00 29.13           C
ATOM   1356  C   PRO A 186       8.098  15.732 -10.033  1.00 28.44           C
ATOM   1357  O   PRO A 186       6.971  15.261  -9.849  1.00 28.12           O
ATOM   1358  CB  PRO A 186       9.028  14.026 -11.679  1.00 30.26           C
ATOM   1359  CG  PRO A 186       9.793  12.729 -11.500  1.00 28.14           C
ATOM   1360  CD  PRO A 186       9.861  12.519  -9.992  1.00 28.20           C
ATOM   1361  HA  PRO A 186      10.189  15.436 -10.531  1.00  0.00           H
ATOM   1362  HB2 PRO A 186       7.967  13.802 -11.797  1.00  0.00           H
ATOM   1363  HB3 PRO A 186       9.357  14.562 -12.569  1.00  0.00           H
ATOM   1364  HG2 PRO A 186       9.329  11.888 -12.016  1.00  0.00           H
ATOM   1365  HG3 PRO A 186      10.803  12.843 -11.898  1.00  0.00           H
ATOM   1366  HD2 PRO A 186       9.086  11.825  -9.674  1.00  0.00           H
ATOM   1367  HD3 PRO A 186      10.833  12.104  -9.716  1.00  0.00           H
ATOM   1368  N   LYS A 187       8.356  17.041  -9.948  1.00 28.27           N
ATOM   1369  CA  LYS A 187       7.419  18.079  -9.527  1.00 28.97           C
ATOM   1370  C   LYS A 187       6.311  18.328 -10.566  1.00 26.32           C
ATOM   1371  O   LYS A 187       5.241  18.828 -10.217  1.00 25.20           O
ATOM   1372  CB  LYS A 187       8.198  19.381  -9.275  1.00 32.18           C
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ATOM   1373  CG  LYS A 187       9.070  19.354  -8.002  1.00 34.77           C
ATOM   1374  CD  LYS A 187       8.412  19.960  -6.746  1.00 38.08           C
ATOM   1375  CE  LYS A 187       7.619  18.962  -5.885  1.00 37.86           C
ATOM   1376  NZ  LYS A 187       7.046  19.630  -4.702  1.00 39.41           N1+
ATOM   1377  H   LYS A 187       9.245  17.349 -10.322  1.00  0.00           H
ATOM   1378  HA  LYS A 187       6.964  17.760  -8.597  1.00  0.00           H
ATOM   1379  HB2 LYS A 187       8.833  19.577 -10.142  1.00  0.00           H
ATOM   1380  HB3 LYS A 187       7.519  20.234  -9.232  1.00  0.00           H
ATOM   1381  HG2 LYS A 187       9.467  18.356  -7.802  1.00  0.00           H
ATOM   1382  HG3 LYS A 187       9.945  19.959  -8.225  1.00  0.00           H
ATOM   1383  HD2 LYS A 187       9.205  20.377  -6.126  1.00  0.00           H
ATOM   1384  HD3 LYS A 187       7.787  20.811  -7.024  1.00  0.00           H
ATOM   1385  HE2 LYS A 187       6.805  18.528  -6.461  1.00  0.00           H
ATOM   1386  HE3 LYS A 187       8.258  18.133  -5.585  1.00  0.00           H
ATOM   1387  HZ1 LYS A 187       6.701  19.004  -3.968  1.00  0.00           H
ATOM   1388  HZ2 LYS A 187       7.696  20.283  -4.258  1.00  0.00           H
ATOM   1389  HZ3 LYS A 187       6.247  20.188  -5.028  1.00  0.00           H
ATOM   1390  N   GLU A 188       6.557  17.916 -11.814  1.00 26.19           N
ATOM   1391  CA  GLU A 188       5.656  17.892 -12.964  1.00 25.89           C
ATOM   1392  C   GLU A 188       4.450  16.991 -12.675  1.00 25.60           C
ATOM   1393  O   GLU A 188       3.300  17.431 -12.675  1.00 25.35           O
ATOM   1394  CB  GLU A 188       6.385  17.363 -14.236  1.00 28.34           C
ATOM   1395  CG  GLU A 188       7.715  16.608 -14.036  1.00 32.78           C
ATOM   1396  CD  GLU A 188       8.872  17.535 -13.719  1.00 33.60           C
ATOM   1397  OE1 GLU A 188       9.380  17.472 -12.585  1.00 31.32           O
ATOM   1398  OE2 GLU A 188       9.219  18.363 -14.590  1.00 35.45           O1-
ATOM   1399  H   GLU A 188       7.515  17.606 -11.976  1.00  0.00           H
ATOM   1400  HA  GLU A 188       5.288  18.903 -13.147  1.00  0.00           H
ATOM   1401  HB2 GLU A 188       5.726  16.725 -14.827  1.00  0.00           H
ATOM   1402  HB3 GLU A 188       6.573  18.207 -14.893  1.00  0.00           H
ATOM   1403  HG2 GLU A 188       7.609  15.843 -13.270  1.00  0.00           H
ATOM   1404  HG3 GLU A 188       7.969  16.074 -14.951  1.00  0.00           H
ATOM   1405  N   HIS A 189       4.739  15.716 -12.391  1.00 23.36           N
ATOM   1406  CA  HIS A 189       3.751  14.664 -12.159  1.00 23.70           C
ATOM   1407  C   HIS A 189       3.104  14.820 -10.772  1.00 22.66           C
ATOM   1408  O   HIS A 189       1.956  14.424 -10.568  1.00 23.19           O
ATOM   1409  CB  HIS A 189       4.428  13.285 -12.282  1.00 22.55           C
ATOM   1410  CG  HIS A 189       5.243  13.071 -13.543  1.00 24.25           C
ATOM   1411  ND1 HIS A 189       4.971  13.687 -14.760  1.00 24.12           N
ATOM   1412  CD2 HIS A 189       6.337  12.269 -13.783  1.00 22.85           C
ATOM   1413  CE1 HIS A 189       5.890  13.280 -15.635  1.00 22.58           C
ATOM   1414  NE2 HIS A 189       6.737  12.400 -15.115  1.00 24.93           N
ATOM   1415  H   HIS A 189       5.714  15.449 -12.416  1.00  0.00           H
ATOM   1416  HA  HIS A 189       2.978  14.747 -12.922  1.00  0.00           H
ATOM   1417  HB2 HIS A 189       5.085  13.105 -11.429  1.00  0.00           H
ATOM   1418  HB3 HIS A 189       3.664  12.507 -12.240  1.00  0.00           H
ATOM   1419  HD1 HIS A 189       4.246  14.389 -14.978  1.00  0.00           H
ATOM   1420  HD2 HIS A 189       6.864  11.607 -13.106  1.00  0.00           H
ATOM   1421  HE1 HIS A 189       5.942  13.629 -16.659  1.00  0.00           H
ATOM   1422  N   TRP A 190       3.797  15.520  -9.867  1.00 21.90           N
ATOM   1423  CA  TRP A 190       3.318  16.034  -8.590  1.00 22.07           C
ATOM   1424  C   TRP A 190       2.577  17.387  -8.769  1.00 22.09           C
ATOM   1425  O   TRP A 190       2.464  18.172  -7.828  1.00 23.25           O
ATOM   1426  CB  TRP A 190       4.563  16.243  -7.712  1.00 20.63           C
ATOM   1427  CG  TRP A 190       4.374  16.310  -6.234  1.00 20.86           C
ATOM   1428  CD1 TRP A 190       4.390  17.443  -5.499  1.00 20.30           C
ATOM   1429  CD2 TRP A 190       4.255  15.215  -5.281  1.00 20.57           C
ATOM   1430  NE1 TRP A 190       4.327  17.122  -4.162  1.00 22.97           N
ATOM   1431  CE3 TRP A 190       4.234  13.806  -5.382  1.00 20.34           C
ATOM   1432  CE2 TRP A 190       4.193  15.768  -3.969  1.00 21.62           C
ATOM   1433  CZ3 TRP A 190       4.167  12.997  -4.231  1.00 20.80           C
ATOM   1434  CZ2 TRP A 190       4.103  14.975  -2.817  1.00 20.94           C
ATOM   1435  CH2 TRP A 190       4.095  13.579  -2.948  1.00 23.55           C
ATOM   1436  H   TRP A 190       4.735  15.793 -10.138  1.00  0.00           H
ATOM   1437  HA  TRP A 190       2.652  15.300  -8.136  1.00  0.00           H
ATOM   1438  HB2 TRP A 190       5.287  15.445  -7.879  1.00  0.00           H
ATOM   1439  HB3 TRP A 190       5.050  17.165  -8.016  1.00  0.00           H
ATOM   1440  HD1 TRP A 190       4.508  18.432  -5.919  1.00  0.00           H
ATOM   1441  HE1 TRP A 190       4.697  17.745  -3.425  1.00  0.00           H
ATOM   1442  HE3 TRP A 190       4.302  13.346  -6.357  1.00  0.00           H
ATOM   1443  HZ3 TRP A 190       4.180  11.923  -4.339  1.00  0.00           H
ATOM   1444  HZ2 TRP A 190       4.072  15.435  -1.843  1.00  0.00           H
ATOM   1445  HH2 TRP A 190       4.049  12.968  -2.059  1.00  0.00           H
ATOM   1446  N   SER A 191       2.046  17.665  -9.964  1.00 23.12           N
ATOM   1447  CA  SER A 191       1.177  18.785 -10.298  1.00 23.81           C
ATOM   1448  C   SER A 191      -0.008  18.262 -11.126  1.00 24.41           C
ATOM   1449  O   SER A 191      -0.218  17.048 -11.204  1.00 24.90           O
ATOM   1450  CB  SER A 191       2.001  19.972 -10.854  1.00 25.10           C
ATOM   1451  OG  SER A 191       2.236  19.931 -12.253  1.00 24.23           O
ATOM   1452  H   SER A 191       2.166  16.984 -10.701  1.00  0.00           H
ATOM   1453  HA  SER A 191       0.724  19.138  -9.372  1.00  0.00           H
ATOM   1454  HB2 SER A 191       1.482  20.903 -10.624  1.00  0.00           H
ATOM   1455  HB3 SER A 191       2.957  20.038 -10.339  1.00  0.00           H
ATOM   1456  HG  SER A 191       2.604  19.065 -12.463  1.00  0.00           H
ATOM   1457  N   TYR A 192      -0.815  19.164 -11.688  1.00 24.18           N
ATOM   1458  CA  TYR A 192      -2.033  18.858 -12.432  1.00 22.22           C
ATOM   1459  C   TYR A 192      -1.687  18.973 -13.926  1.00 21.91           C
ATOM   1460  O   TYR A 192      -1.416  20.090 -14.364  1.00 20.67           O
ATOM   1461  CB  TYR A 192      -3.086  19.952 -12.105  1.00 22.43           C
ATOM   1462  CG  TYR A 192      -3.371  20.137 -10.626  1.00 24.33           C
ATOM   1463  CD1 TYR A 192      -4.451  19.475 -10.011  1.00 24.83           C
ATOM   1464  CD2 TYR A 192      -2.529  20.964  -9.854  1.00 24.09           C
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ATOM   1465  CE1 TYR A 192      -4.643  19.589  -8.620  1.00 24.93           C
ATOM   1466  CE2 TYR A 192      -2.718  21.070  -8.468  1.00 24.35           C
ATOM   1467  CZ  TYR A 192      -3.756  20.352  -7.846  1.00 24.98           C
ATOM   1468  OH  TYR A 192      -3.881  20.360  -6.492  1.00 28.04           O
ATOM   1469  H   TYR A 192      -0.524  20.134 -11.707  1.00  0.00           H
ATOM   1470  HA  TYR A 192      -2.436  17.880 -12.168  1.00  0.00           H
ATOM   1471  HB2 TYR A 192      -2.778  20.928 -12.485  1.00  0.00           H
ATOM   1472  HB3 TYR A 192      -4.020  19.723 -12.622  1.00  0.00           H
ATOM   1473  HD1 TYR A 192      -5.112  18.853 -10.595  1.00  0.00           H
ATOM   1474  HD2 TYR A 192      -1.711  21.497 -10.317  1.00  0.00           H
ATOM   1475  HE1 TYR A 192      -5.449  19.066  -8.132  1.00  0.00           H
ATOM   1476  HE2 TYR A 192      -2.042  21.683  -7.893  1.00  0.00           H
ATOM   1477  HH  TYR A 192      -3.314  21.026  -6.079  1.00  0.00           H
ATOM   1478  N   PRO A 193      -1.672  17.885 -14.724  1.00 22.36           N
ATOM   1479  CA  PRO A 193      -1.556  17.961 -16.188  1.00 24.02           C
ATOM   1480  C   PRO A 193      -2.607  18.871 -16.851  1.00 24.39           C
ATOM   1481  O   PRO A 193      -3.698  19.091 -16.324  1.00 24.70           O
ATOM   1482  CB  PRO A 193      -1.746  16.520 -16.677  1.00 24.46           C
ATOM   1483  CG  PRO A 193      -1.382  15.641 -15.497  1.00 25.42           C
ATOM   1484  CD  PRO A 193      -1.639  16.499 -14.261  1.00 24.13           C
ATOM   1485  HA  PRO A 193      -0.553  18.318 -16.431  1.00  0.00           H
ATOM   1486  HB2 PRO A 193      -2.787  16.332 -16.940  1.00  0.00           H
ATOM   1487  HB3 PRO A 193      -1.147  16.300 -17.561  1.00  0.00           H
ATOM   1488  HG2 PRO A 193      -1.953  14.712 -15.483  1.00  0.00           H
ATOM   1489  HG3 PRO A 193      -0.323  15.389 -15.557  1.00  0.00           H
ATOM   1490  HD2 PRO A 193      -2.586  16.220 -13.806  1.00  0.00           H
ATOM   1491  HD3 PRO A 193      -0.856  16.355 -13.521  1.00  0.00           H
ATOM   1492  N   GLU A 194      -2.296  19.364 -18.045  1.00 22.73           N
ATOM   1493  CA  GLU A 194      -3.108  20.298 -18.817  1.00 23.46           C
ATOM   1494  C   GLU A 194      -4.347  19.618 -19.449  1.00 23.36           C
ATOM   1495  O   GLU A 194      -5.186  20.312 -20.018  1.00 21.68           O
ATOM   1496  CB  GLU A 194      -2.201  20.915 -19.912  1.00 25.61           C
ATOM   1497  CG  GLU A 194      -1.185  21.972 -19.397  1.00 28.09           C
ATOM   1498  CD  GLU A 194      -0.179  21.468 -18.364  1.00 32.73           C
ATOM   1499  OE1 GLU A 194       0.094  22.210 -17.397  1.00 31.59           O
ATOM   1500  OE2 GLU A 194       0.246  20.294 -18.474  1.00 33.69           O1-
ATOM   1501  H   GLU A 194      -1.307  19.340 -18.314  1.00  0.00           H
ATOM   1502  HA  GLU A 194      -3.473  21.091 -18.162  1.00  0.00           H
ATOM   1503  HB2 GLU A 194      -1.670  20.126 -20.447  1.00  0.00           H
ATOM   1504  HB3 GLU A 194      -2.823  21.405 -20.661  1.00  0.00           H
ATOM   1505  HG2 GLU A 194      -0.615  22.368 -20.237  1.00  0.00           H
ATOM   1506  HG3 GLU A 194      -1.724  22.816 -18.967  1.00  0.00           H
ATOM   1507  N   TRP A 195      -4.496  18.289 -19.316  1.00 22.03           N
ATOM   1508  CA  TRP A 195      -5.711  17.554 -19.680  1.00 22.35           C
ATOM   1509  C   TRP A 195      -6.742  17.530 -18.532  1.00 22.75           C
ATOM   1510  O   TRP A 195      -7.892  17.156 -18.757  1.00 21.13           O
ATOM   1511  CB  TRP A 195      -5.361  16.091 -20.056  1.00 22.81           C
ATOM   1512  CG  TRP A 195      -4.745  15.168 -19.035  1.00 23.84           C
ATOM   1513  CD1 TRP A 195      -5.391  14.613 -17.982  1.00 25.41           C
ATOM   1514  CD2 TRP A 195      -3.402  14.590 -19.017  1.00 23.39           C
ATOM   1515  NE1 TRP A 195      -4.541  13.765 -17.304  1.00 26.41           N
ATOM   1516  CE3 TRP A 195      -2.255  14.713 -19.836  1.00 23.41           C
ATOM   1517  CE2 TRP A 195      -3.323  13.659 -17.935  1.00 24.13           C
ATOM   1518  CZ3 TRP A 195      -1.101  13.936 -19.601  1.00 26.61           C
ATOM   1519  CZ2 TRP A 195      -2.189  12.865 -17.703  1.00 24.83           C
ATOM   1520  CH2 TRP A 195      -1.070  13.007 -18.542  1.00 23.38           C
ATOM   1521  H   TRP A 195      -3.764  17.789 -18.836  1.00  0.00           H
ATOM   1522  HA  TRP A 195      -6.186  18.026 -20.542  1.00  0.00           H
ATOM   1523  HB2 TRP A 195      -6.273  15.598 -20.397  1.00  0.00           H
ATOM   1524  HB3 TRP A 195      -4.710  16.094 -20.930  1.00  0.00           H
ATOM   1525  HD1 TRP A 195      -6.432  14.786 -17.744  1.00  0.00           H
ATOM   1526  HE1 TRP A 195      -4.854  13.153 -16.543  1.00  0.00           H
ATOM   1527  HE3 TRP A 195      -2.278  15.386 -20.679  1.00  0.00           H
ATOM   1528  HZ3 TRP A 195      -0.251  14.023 -20.262  1.00  0.00           H
ATOM   1529  HZ2 TRP A 195      -2.186  12.136 -16.905  1.00  0.00           H
ATOM   1530  HH2 TRP A 195      -0.205  12.376 -18.396  1.00  0.00           H
ATOM   1531  N   ILE A 196      -6.348  17.894 -17.302  1.00 22.64           N
ATOM   1532  CA  ILE A 196      -7.204  17.864 -16.119  1.00 24.40           C
ATOM   1533  C   ILE A 196      -8.161  19.066 -16.192  1.00 23.38           C
ATOM   1534  O   ILE A 196      -7.738  20.190 -16.475  1.00 23.92           O
ATOM   1535  CB  ILE A 196      -6.314  17.971 -14.838  1.00 23.65           C
ATOM   1536  CG1 ILE A 196      -5.235  16.868 -14.747  1.00 23.75           C
ATOM   1537  CG2 ILE A 196      -7.091  18.044 -13.506  1.00 25.15           C
ATOM   1538  CD1 ILE A 196      -5.758  15.446 -14.529  1.00 22.43           C
ATOM   1539  H   ILE A 196      -5.415  18.270 -17.190  1.00  0.00           H
ATOM   1540  HA  ILE A 196      -7.774  16.934 -16.106  1.00  0.00           H
ATOM   1541  HB  ILE A 196      -5.779  18.919 -14.908  1.00  0.00           H
ATOM   1542 HG12 ILE A 196      -4.621  16.857 -15.644  1.00  0.00           H
ATOM   1543 HG13 ILE A 196      -4.564  17.125 -13.930  1.00  0.00           H
ATOM   1544 HG21 ILE A 196      -6.408  18.100 -12.659  1.00  0.00           H
ATOM   1545 HG22 ILE A 196      -7.728  18.925 -13.451  1.00  0.00           H
ATOM   1546 HG23 ILE A 196      -7.716  17.163 -13.368  1.00  0.00           H
ATOM   1547 HD11 ILE A 196      -4.935  14.730 -14.519  1.00  0.00           H
ATOM   1548 HD12 ILE A 196      -6.277  15.360 -13.581  1.00  0.00           H
ATOM   1549 HD13 ILE A 196      -6.442  15.140 -15.320  1.00  0.00           H
ATOM   1550  N   ASN A 197      -9.442  18.856 -15.864  1.00 22.81           N
ATOM   1551  CA  ASN A 197     -10.412  19.922 -15.617  1.00 22.80           C
ATOM   1552  C   ASN A 197     -10.020  20.639 -14.307  1.00 21.04           C
ATOM   1553  O   ASN A 197     -10.476  20.310 -13.210  1.00 21.74           O
ATOM   1554  CB  ASN A 197     -11.846  19.330 -15.575  1.00  0.00           C
ATOM   1555  CG  ASN A 197     -12.917  20.311 -15.086  1.00  0.00           C
ATOM   1556  OD1 ASN A 197     -13.469  20.119 -14.013  1.00  0.00           O
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ATOM   1557  ND2 ASN A 197     -13.217  21.384 -15.806  1.00  0.00           N
ATOM   1558  H   ASN A 197      -9.725  17.897 -15.665  1.00  0.00           H
ATOM   1559  HA  ASN A 197     -10.366  20.641 -16.438  1.00  0.00           H
ATOM   1560  HB2 ASN A 197     -12.128  18.959 -16.560  1.00  0.00           H
ATOM   1561  HB3 ASN A 197     -11.874  18.466 -14.912  1.00  0.00           H
ATOM   1562 HD22 ASN A 197     -13.842  22.055 -15.354  1.00  0.00           H
ATOM   1563 HD21 ASN A 197     -12.822  21.566 -16.712  1.00  0.00           H
ATOM   1564  N   GLN A 198      -9.172  21.663 -14.433  1.00 20.33           N
ATOM   1565  CA  GLN A 198      -8.759  22.577 -13.369  1.00 20.78           C
ATOM   1566  C   GLN A 198      -9.869  23.610 -13.053  1.00 22.61           C
ATOM   1567  O   GLN A 198      -9.582  24.766 -12.756  1.00 19.79           O
ATOM   1568  CB  GLN A 198      -7.397  23.217 -13.741  1.00 22.47           C
ATOM   1569  CG  GLN A 198      -6.285  22.151 -13.927  1.00 22.31           C
ATOM   1570  CD  GLN A 198      -4.856  22.693 -13.842  1.00 23.01           C
ATOM   1571  OE1 GLN A 198      -4.507  23.403 -12.899  1.00 21.95           O
ATOM   1572  NE2 GLN A 198      -4.002  22.328 -14.791  1.00 23.94           N
ATOM   1573  H   GLN A 198      -8.744  21.779 -15.344  1.00  0.00           H
ATOM   1574  HA  GLN A 198      -8.610  22.026 -12.446  1.00  0.00           H
ATOM   1575  HB2 GLN A 198      -7.489  23.822 -14.645  1.00  0.00           H
ATOM   1576  HB3 GLN A 198      -7.108  23.909 -12.948  1.00  0.00           H
ATOM   1577  HG2 GLN A 198      -6.373  21.389 -13.152  1.00  0.00           H
ATOM   1578  HG3 GLN A 198      -6.420  21.633 -14.875  1.00  0.00           H
ATOM   1579 HE21 GLN A 198      -4.290  21.699 -15.530  1.00  0.00           H
ATOM   1580 HE22 GLN A 198      -3.040  22.669 -14.803  1.00  0.00           H
ATOM   1581  N   THR A 199     -11.133  23.159 -13.060  1.00 22.32           N
ATOM   1582  CA  THR A 199     -12.270  23.796 -12.412  1.00 22.52           C
ATOM   1583  C   THR A 199     -12.667  22.832 -11.282  1.00 21.34           C
ATOM   1584  O   THR A 199     -12.444  23.188 -10.132  1.00 21.66           O
ATOM   1585  CB  THR A 199     -13.393  24.216 -13.405  1.00 21.15           C
ATOM   1586  OG1 THR A 199     -14.313  23.196 -13.736  1.00 24.02           O
ATOM   1587  CG2 THR A 199     -12.869  24.853 -14.702  1.00 20.12           C
ATOM   1588  H   THR A 199     -11.263  22.179 -13.273  1.00  0.00           H
ATOM   1589  HA  THR A 199     -11.933  24.717 -11.931  1.00  0.00           H
ATOM   1590  HB  THR A 199     -13.989  24.976 -12.894  1.00  0.00           H
ATOM   1591  HG1 THR A 199     -14.910  23.153 -12.975  1.00  0.00           H
ATOM   1592 HG21 THR A 199     -13.690  25.248 -15.301  1.00  0.00           H
ATOM   1593 HG22 THR A 199     -12.194  25.680 -14.480  1.00  0.00           H
ATOM   1594 HG23 THR A 199     -12.324  24.135 -15.313  1.00  0.00           H
ATOM   1595  N   LYS A 200     -13.085  21.577 -11.541  1.00 21.45           N
ATOM   1596  CA  LYS A 200     -13.453  20.607 -10.493  1.00 22.36           C
ATOM   1597  C   LYS A 200     -12.243  20.267  -9.600  1.00 21.80           C
ATOM   1598  O   LYS A 200     -12.378  20.136  -8.384  1.00 21.82           O
ATOM   1599  CB  LYS A 200     -14.052  19.329 -11.127  1.00 23.43           C
ATOM   1600  CG  LYS A 200     -14.708  18.350 -10.127  1.00 27.52           C
ATOM   1601  CD  LYS A 200     -15.216  17.064 -10.806  1.00 27.63           C
ATOM   1602  CE  LYS A 200     -15.708  15.998  -9.804  1.00 27.92           C
ATOM   1603  NZ  LYS A 200     -15.718  14.649 -10.404  1.00 31.29           N1+
ATOM   1604  H   LYS A 200     -13.308  21.325 -12.501  1.00  0.00           H
ATOM   1605  HA  LYS A 200     -14.217  21.065  -9.865  1.00  0.00           H
ATOM   1606  HB2 LYS A 200     -14.817  19.631 -11.844  1.00  0.00           H
ATOM   1607  HB3 LYS A 200     -13.280  18.814 -11.701  1.00  0.00           H
ATOM   1608  HG2 LYS A 200     -13.987  18.085  -9.353  1.00  0.00           H
ATOM   1609  HG3 LYS A 200     -15.528  18.856  -9.614  1.00  0.00           H
ATOM   1610  HD2 LYS A 200     -16.010  17.314 -11.512  1.00  0.00           H
ATOM   1611  HD3 LYS A 200     -14.400  16.663 -11.409  1.00  0.00           H
ATOM   1612  HE2 LYS A 200     -15.060  15.966  -8.930  1.00  0.00           H
ATOM   1613  HE3 LYS A 200     -16.701  16.247  -9.425  1.00  0.00           H
ATOM   1614  HZ1 LYS A 200     -15.671  13.916  -9.659  1.00  0.00           H
ATOM   1615  HZ2 LYS A 200     -16.541  14.484 -10.956  1.00  0.00           H
ATOM   1616  HZ3 LYS A 200     -14.894  14.496 -10.961  1.00  0.00           H
ATOM   1617  N   ALA A 201     -11.036  20.222 -10.185  1.00 21.18           N
ATOM   1618  CA  ALA A 201      -9.779  20.107  -9.449  1.00 21.35           C
ATOM   1619  C   ALA A 201      -9.365  21.406  -8.725  1.00 21.94           C
ATOM   1620  O   ALA A 201      -8.352  21.391  -8.030  1.00 19.69           O
ATOM   1621  CB  ALA A 201      -8.653  19.681 -10.410  1.00 16.72           C
ATOM   1622  H   ALA A 201     -11.005  20.352 -11.192  1.00  0.00           H
ATOM   1623  HA  ALA A 201      -9.891  19.345  -8.679  1.00  0.00           H
ATOM   1624  HB1 ALA A 201      -7.669  19.774  -9.951  1.00  0.00           H
ATOM   1625  HB2 ALA A 201      -8.763  18.645 -10.722  1.00  0.00           H
ATOM   1626  HB3 ALA A 201      -8.636  20.281 -11.311  1.00  0.00           H
ATOM   1627  N   ALA A 202     -10.109  22.513  -8.862  1.00 20.87           N
ATOM   1628  CA  ALA A 202      -9.945  23.768  -8.127  1.00 22.47           C
ATOM   1629  C   ALA A 202     -11.085  23.937  -7.103  1.00 22.33           C
ATOM   1630  O   ALA A 202     -10.814  24.221  -5.938  1.00 22.37           O
ATOM   1631  CB  ALA A 202      -9.942  24.953  -9.108  1.00 19.99           C
ATOM   1632  H   ALA A 202     -10.954  22.447  -9.424  1.00  0.00           H
ATOM   1633  HA  ALA A 202      -8.992  23.781  -7.603  1.00  0.00           H
ATOM   1634  HB1 ALA A 202      -9.727  25.884  -8.583  1.00  0.00           H
ATOM   1635  HB2 ALA A 202      -9.175  24.829  -9.873  1.00  0.00           H
ATOM   1636  HB3 ALA A 202     -10.895  25.087  -9.617  1.00  0.00           H
ATOM   1637  N   GLU A 203     -12.346  23.708  -7.506  1.00 22.02           N
ATOM   1638  CA  GLU A 203     -13.579  23.806  -6.716  1.00 23.59           C
ATOM   1639  C   GLU A 203     -13.502  22.942  -5.443  1.00 23.77           C
ATOM   1640  O   GLU A 203     -13.695  23.415  -4.319  1.00 22.97           O
ATOM   1641  CB  GLU A 203     -14.779  23.349  -7.586  1.00 24.19           C
ATOM   1642  CG  GLU A 203     -15.132  24.236  -8.811  1.00 28.14           C
ATOM   1643  CD  GLU A 203     -15.775  23.445  -9.959  1.00 30.24           C
ATOM   1644  OE1 GLU A 203     -16.440  22.431  -9.660  1.00 31.20           O
ATOM   1645  OE2 GLU A 203     -15.540  23.820 -11.132  1.00 32.85           O1-
ATOM   1646  H   GLU A 203     -12.479  23.502  -8.499  1.00  0.00           H
ATOM   1647  HA  GLU A 203     -13.722  24.845  -6.416  1.00  0.00           H
ATOM   1648  HB2 GLU A 203     -14.585  22.330  -7.925  1.00  0.00           H
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ATOM   1649  HB3 GLU A 203     -15.675  23.269  -6.969  1.00  0.00          H
ATOM   1650  HG2 GLU A 203     -15.816  25.030  -8.516  1.00  0.00          H
ATOM   1651  HG3 GLU A 203     -14.246  24.733  -9.202  1.00  0.00          H
ATOM   1652  N   ILE A 204     -13.138  21.668  -5.624  1.00 23.93          N
ATOM   1653  CA  ILE A 204     -13.123  20.646  -4.583  1.00 24.60          C
ATOM   1654  C   ILE A 204     -11.781  20.683  -3.801  1.00 24.13          C
ATOM   1655  O   ILE A 204     -11.569  19.864  -2.906  1.00 26.89          O
ATOM   1656  CB  ILE A 204     -13.448  19.269  -5.251  1.00 24.83          C
ATOM   1657  CG1 ILE A 204     -14.700  19.332  -6.175  1.00 27.64          C
ATOM   1658  CG2 ILE A 204     -13.631  18.107  -4.252  1.00 22.97          C
ATOM   1659  CD1 ILE A 204     -16.008  19.749  -5.485  1.00 28.38          C
ATOM   1660  H   ILE A 204     -12.974  21.356  -6.576  1.00  0.00          H
ATOM   1661  HA  ILE A 204     -13.909  20.861  -3.856  1.00  0.00          H
ATOM   1662  HB  ILE A 204     -12.604  19.002  -5.892  1.00  0.00          H
ATOM   1663 HG12 ILE A 204     -14.530  20.005  -7.014  1.00  0.00          H
ATOM   1664 HG13 ILE A 204     -14.858  18.361  -6.642  1.00  0.00          H
ATOM   1665 HG21 ILE A 204     -14.029  17.223  -4.747  1.00  0.00          H
ATOM   1666 HG22 ILE A 204     -12.694  17.804  -3.792  1.00  0.00          H
ATOM   1667 HG23 ILE A 204     -14.324  18.376  -3.456  1.00  0.00          H
ATOM   1668 HD11 ILE A 204     -16.829  19.767  -6.202  1.00  0.00          H
ATOM   1669 HD12 ILE A 204     -16.281  19.062  -4.686  1.00  0.00          H
ATOM   1670 HD13 ILE A 204     -15.939  20.749  -5.058  1.00  0.00          H
ATOM   1671  N   ARG A 205     -10.904  21.679  -4.036  1.00 23.13          N
ATOM   1672  CA  ARG A 205      -9.792  22.015  -3.131  1.00 25.14          C
ATOM   1673  C   ARG A 205     -10.338  22.769  -1.904  1.00 25.07          C
ATOM   1674  O   ARG A 205      -9.750  22.688  -0.826  1.00 22.75          O
ATOM   1675  CB  ARG A 205      -8.774  22.984  -3.789  1.00 25.21          C
ATOM   1676  CG  ARG A 205      -8.185  22.561  -5.143  1.00 29.73          C
ATOM   1677  CD  ARG A 205      -6.888  21.734  -5.097  1.00 29.20          C
ATOM   1678  NE  ARG A 205      -5.704  22.526  -5.477  1.00 29.90          N
ATOM   1679  CZ  ARG A 205      -5.344  22.951  -6.698  1.00 28.96          C
ATOM   1680  NH1 ARG A 205      -6.133  22.835  -7.763  1.00 29.65          N
ATOM   1681  NH2 ARG A 205      -4.147  23.502  -6.847  1.00 28.01          N1+
ATOM   1682  H   ARG A 205     -11.139  22.345  -4.763  1.00  0.00          H
ATOM   1683  HA  ARG A 205      -9.281  21.108  -2.806  1.00  0.00          H
ATOM   1684  HB2 ARG A 205      -9.256  23.952  -3.936  1.00  0.00          H
ATOM   1685  HB3 ARG A 205      -7.956  23.190  -3.096  1.00  0.00          H
ATOM   1686  HG2 ARG A 205      -8.943  22.032  -5.715  1.00  0.00          H
ATOM   1687  HG3 ARG A 205      -7.982  23.477  -5.695  1.00  0.00          H
ATOM   1688  HD2 ARG A 205      -6.730  21.304  -4.107  1.00  0.00          H
ATOM   1689  HD3 ARG A 205      -6.955  20.890  -5.785  1.00  0.00          H
ATOM   1690  HE  ARG A 205      -4.991  22.677  -4.729  1.00  0.00          H
ATOM   1691 HH11 ARG A 205      -7.002  22.288  -7.741  1.00  0.00          H
ATOM   1692 HH12 ARG A 205      -5.813  23.133  -8.702  1.00  0.00          H
ATOM   1693 HH21 ARG A 205      -3.424  23.246  -6.150  1.00  0.00          H
ATOM   1694 HH22 ARG A 205      -3.788  23.861  -7.731  1.00  0.00          H
ATOM   1695  N   ALA A 206     -11.427  23.531  -2.087  1.00 24.01          N
ATOM   1696  CA  ALA A 206     -12.047  24.362  -1.064  1.00 24.47          C
ATOM   1697  C   ALA A 206     -13.184  23.590  -0.385  1.00 24.30          C
ATOM   1698  O   ALA A 206     -13.147  23.419   0.830  1.00 25.49          O
ATOM   1699  CB  ALA A 206     -12.629  25.620  -1.733  1.00 23.88          C
ATOM   1700  H   ALA A 206     -11.861  23.524  -3.002  1.00  0.00          H
ATOM   1701  HA  ALA A 206     -11.317  24.662  -0.307  1.00  0.00          H
ATOM   1702  HB1 ALA A 206     -13.122  26.258  -0.999  1.00  0.00          H
ATOM   1703  HB2 ALA A 206     -11.840  26.212  -2.197  1.00  0.00          H
ATOM   1704  HB3 ALA A 206     -13.360  25.384  -2.508  1.00  0.00          H
ATOM   1705  N   ASP A 207     -14.174  23.107  -1.159  1.00 23.97          N
ATOM   1706  CA  ASP A 207     -15.399  22.435  -0.675  1.00 24.82          C
ATOM   1707  C   ASP A 207     -15.095  21.277   0.300  1.00 24.07          C
ATOM   1708  O   ASP A 207     -15.702  21.147   1.364  1.00 24.77          O
ATOM   1709  CB  ASP A 207     -16.311  22.040  -1.885  1.00 25.95          C
ATOM   1710  CG  ASP A 207     -16.888  20.621  -1.899  1.00 28.75          C
ATOM   1711  OD1 ASP A 207     -18.109  20.439  -1.704  1.00 30.03          O
ATOM   1712  OD2 ASP A 207     -16.125  19.639  -2.057  1.00 31.14          O1-
ATOM   1713  H   ASP A 207     -14.110  23.287  -2.155  1.00  0.00          H
ATOM   1714  HA  ASP A 207     -15.946  23.173  -0.086  1.00  0.00          H
ATOM   1715  HB2 ASP A 207     -17.144  22.741  -1.949  1.00  0.00          H
ATOM   1716  HB3 ASP A 207     -15.769  22.151  -2.823  1.00  0.00          H
ATOM   1717  N   ALA A 208     -14.110  20.454  -0.073  1.00 23.20          N
ATOM   1718  CA  ALA A 208     -13.765  19.216   0.602  1.00 22.76          C
ATOM   1719  C   ALA A 208     -13.053  19.444   1.944  1.00 22.38          C
ATOM   1720  O   ALA A 208     -13.029  18.532   2.773  1.00 24.01          O
ATOM   1721  CB  ALA A 208     -12.872  18.401  -0.330  1.00 19.96          C
ATOM   1722  H   ALA A 208     -13.719  20.617  -0.989  1.00  0.00          H
ATOM   1723  HA  ALA A 208     -14.680  18.660   0.786  1.00  0.00          H
ATOM   1724  HB1 ALA A 208     -12.562  17.474   0.142  1.00  0.00          H
ATOM   1725  HB2 ALA A 208     -13.399  18.139  -1.247  1.00  0.00          H
ATOM   1726  HB3 ALA A 208     -11.980  18.954  -0.604  1.00  0.00          H
ATOM   1727  N   ALA A 209     -12.559  20.667   2.204  1.00 22.75          N
ATOM   1728  CA  ALA A 209     -12.015  21.105   3.493  1.00 22.99          C
ATOM   1729  C   ALA A 209     -13.099  21.151   4.584  1.00 24.29          C
ATOM   1730  O   ALA A 209     -12.786  21.088   5.773  1.00 25.18          O
ATOM   1731  CB  ALA A 209     -11.411  22.508   3.339  1.00 23.91          C
ATOM   1732  H   ALA A 209     -12.697  21.385   1.499  1.00  0.00          H
ATOM   1733  HA  ALA A 209     -11.239  20.406   3.800  1.00  0.00          H
ATOM   1734  HB1 ALA A 209     -10.820  22.777   4.216  1.00  0.00          H
ATOM   1735  HB2 ALA A 209     -10.758  22.573   2.470  1.00  0.00          H
ATOM   1736  HB3 ALA A 209     -12.181  23.271   3.222  1.00  0.00          H
ATOM   1737  N   THR A 210     -14.365  21.208   4.167  1.00 22.25          N
ATOM   1738  CA  THR A 210     -15.567  21.158   4.980  1.00 22.42          C
ATOM   1739  C   THR A 210     -16.401  19.901   4.651  1.00 21.18          C
ATOM   1740  O   THR A 210     -17.597  19.880   4.935  1.00 19.00          O
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ATOM   1741  CB  THR A 210     -16.323  22.508   4.830  1.00 24.82           C
ATOM   1742  OG1 THR A 210     -16.431  22.922   3.476  1.00 24.17           O
ATOM   1743  CG2 THR A 210     -15.634  23.654   5.584  1.00 24.26           C
ATOM   1744  H   THR A 210     -14.525  21.352   3.175  1.00  0.00           H
ATOM   1745  HA  THR A 210     -15.303  21.039   6.032  1.00  0.00           H
ATOM   1746  HB  THR A 210     -17.333  22.404   5.230  1.00  0.00           H
ATOM   1747  HG1 THR A 210     -16.661  22.183   2.921  1.00  0.00           H
ATOM   1748 HG21 THR A 210     -16.204  24.579   5.495  1.00  0.00           H
ATOM   1749 HG22 THR A 210     -15.537  23.426   6.645  1.00  0.00           H
ATOM   1750 HG23 THR A 210     -14.634  23.845   5.192  1.00  0.00           H
ATOM   1751  N   LYS A 211     -15.784  18.840   4.094  1.00 20.79           N
ATOM   1752  CA  LYS A 211     -16.426  17.540   3.882  1.00 22.47           C
ATOM   1753  C   LYS A 211     -15.640  16.378   4.505  1.00 22.13           C
ATOM   1754  O   LYS A 211     -16.264  15.487   5.078  1.00 22.26           O
ATOM   1755  CB  LYS A 211     -16.734  17.253   2.391  1.00 24.94           C
ATOM   1756  CG  LYS A 211     -17.636  18.291   1.686  1.00 30.95           C
ATOM   1757  CD  LYS A 211     -18.733  17.677   0.797  1.00 35.72           C
ATOM   1758  CE  LYS A 211     -18.241  16.936  -0.460  1.00 40.53           C
ATOM   1759  NZ  LYS A 211     -17.935  17.843  -1.576  1.00 39.99           N1+
ATOM   1760  H   LYS A 211     -14.795  18.923   3.893  1.00  0.00           H
ATOM   1761  HA  LYS A 211     -17.387  17.525   4.402  1.00  0.00           H
ATOM   1762  HB2 LYS A 211     -15.807  17.119   1.836  1.00  0.00           H
ATOM   1763  HB3 LYS A 211     -17.225  16.279   2.354  1.00  0.00           H
ATOM   1764  HG2 LYS A 211     -18.138  18.900   2.439  1.00  0.00           H
ATOM   1765  HG3 LYS A 211     -17.032  18.989   1.107  1.00  0.00           H
ATOM   1766  HD2 LYS A 211     -19.315  16.985   1.408  1.00  0.00           H
ATOM   1767  HD3 LYS A 211     -19.436  18.461   0.506  1.00  0.00           H
ATOM   1768  HE2 LYS A 211     -17.379  16.304  -0.245  1.00  0.00           H
ATOM   1769  HE3 LYS A 211     -19.036  16.271  -0.800  1.00  0.00           H
ATOM   1770  HZ1 LYS A 211     -17.993  17.435  -2.490  1.00  0.00           H
ATOM   1771  HZ2 LYS A 211     -18.478  18.715  -1.568  1.00  0.00           H
ATOM   1772  HZ3 LYS A 211     -17.019  18.314  -1.525  1.00  0.00           H
ATOM   1773  N   TYR A 212     -14.306  16.320   4.362  1.00 21.51           N
ATOM   1774  CA  TYR A 212     -13.540  15.127   4.739  1.00 22.30           C
ATOM   1775  C   TYR A 212     -12.053  15.379   5.008  1.00 19.69           C
ATOM   1776  O   TYR A 212     -11.474  16.343   4.507  1.00 19.22           O
ATOM   1777  CB  TYR A 212     -13.781  13.981   3.726  1.00 22.78           C
ATOM   1778  CG  TYR A 212     -13.594  14.341   2.258  1.00 23.36           C
ATOM   1779  CD1 TYR A 212     -12.310  14.586   1.733  1.00 23.83           C
ATOM   1780  CD2 TYR A 212     -14.715  14.413   1.406  1.00 26.25           C
ATOM   1781  CE1 TYR A 212     -12.151  14.856   0.362  1.00 23.80           C
ATOM   1782  CE2 TYR A 212     -14.552  14.677   0.034  1.00 24.56           C
ATOM   1783  CZ  TYR A 212     -13.265  14.879  -0.494  1.00 23.94           C
ATOM   1784  OH  TYR A 212     -13.094  15.098  -1.829  1.00 25.44           O
ATOM   1785  H   TYR A 212     -13.797  17.052   3.875  1.00  0.00           H
ATOM   1786  HA  TYR A 212     -13.934  14.797   5.699  1.00  0.00           H
ATOM   1787  HB2 TYR A 212     -13.123  13.140   3.950  1.00  0.00           H
ATOM   1788  HB3 TYR A 212     -14.787  13.583   3.865  1.00  0.00           H
ATOM   1789  HD1 TYR A 212     -11.437  14.547   2.369  1.00  0.00           H
ATOM   1790  HD2 TYR A 212     -15.704  14.248   1.806  1.00  0.00           H
ATOM   1791  HE1 TYR A 212     -11.167  15.042  -0.030  1.00  0.00           H
ATOM   1792  HE2 TYR A 212     -15.416  14.702  -0.611  1.00  0.00           H
ATOM   1793  HH  TYR A 212     -13.887  14.947  -2.322  1.00  0.00           H
ATOM   1794  N   ILE A 213     -11.441  14.462   5.769  1.00 19.76           N
ATOM   1795  CA  ILE A 213     -10.012  14.261   6.027  1.00 18.38           C
ATOM   1796  C   ILE A 213      -9.154  14.306   4.740  1.00 19.12           C
ATOM   1797  O   ILE A 213      -9.386  13.533   3.805  1.00 20.73           O
ATOM   1798  CB  ILE A 213      -9.843  12.976   6.899  1.00 18.18           C
ATOM   1799  CG1 ILE A 213      -8.393  12.534   7.203  1.00 16.52           C
ATOM   1800  CG2 ILE A 213     -10.605  11.760   6.344  1.00 15.90           C
ATOM   1801  CD1 ILE A 213      -7.523  13.579   7.907  1.00 15.33           C
ATOM   1802  H   ILE A 213     -12.048  13.779   6.208  1.00  0.00           H
ATOM   1803  HA  ILE A 213      -9.707  15.101   6.647  1.00  0.00           H
ATOM   1804  HB  ILE A 213     -10.296  13.204   7.865  1.00  0.00           H
ATOM   1805 HG12 ILE A 213      -8.422  11.655   7.849  1.00  0.00           H
ATOM   1806 HG13 ILE A 213      -7.904  12.200   6.290  1.00  0.00           H
ATOM   1807 HG21 ILE A 213     -10.476  10.914   7.016  1.00  0.00           H
ATOM   1808 HG22 ILE A 213     -11.678  11.927   6.256  1.00  0.00           H
ATOM   1809 HG23 ILE A 213     -10.232  11.463   5.364  1.00  0.00           H
ATOM   1810 HD11 ILE A 213      -6.591  13.130   8.251  1.00  0.00           H
ATOM   1811 HD12 ILE A 213      -7.246  14.382   7.229  1.00  0.00           H
ATOM   1812 HD13 ILE A 213      -8.025  14.005   8.775  1.00  0.00           H
ATOM   1813  N   TYR A 214      -8.197  15.244   4.685  1.00 17.70           N
ATOM   1814  CA  TYR A 214      -7.246  15.502   3.598  1.00 17.21           C
ATOM   1815  C   TYR A 214      -7.938  16.042   2.326  1.00 16.96           C
ATOM   1816  O   TYR A 214      -7.452  15.884   1.207  1.00 18.78           O
ATOM   1817  CB  TYR A 214      -6.272  14.321   3.331  1.00 16.51           C
ATOM   1818  CG  TYR A 214      -5.416  13.849   4.482  1.00 22.99           C
ATOM   1819  CD1 TYR A 214      -4.433  14.651   5.071  1.00 22.50           C
ATOM   1820  CD2 TYR A 214      -5.501  12.517   4.887  1.00 22.11           C
ATOM   1821  CE1 TYR A 214      -3.552  14.129   6.013  1.00 25.16           C
ATOM   1822  CE2 TYR A 214      -4.633  11.978   5.827  1.00 24.75           C
ATOM   1823  CZ  TYR A 214      -3.632  12.781   6.379  1.00 24.22           C
ATOM   1824  OH  TYR A 214      -2.741  12.313   7.281  1.00 26.19           O
ATOM   1825  H   TYR A 214      -8.087  15.831   5.512  1.00  0.00           H
ATOM   1826  HA  TYR A 214      -6.641  16.339   3.950  1.00  0.00           H
ATOM   1827  HB2 TYR A 214      -6.850  13.472   2.973  1.00  0.00           H
ATOM   1828  HB3 TYR A 214      -5.606  14.591   2.504  1.00  0.00           H
ATOM   1829  HD1 TYR A 214      -4.342  15.697   4.785  1.00  0.00           H
ATOM   1830  HD2 TYR A 214      -6.247  11.859   4.448  1.00  0.00           H
ATOM   1831  HE1 TYR A 214      -2.797  14.752   6.485  1.00  0.00           H
ATOM   1832  HE2 TYR A 214      -4.726  10.936   6.120  1.00  0.00           H
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ATOM   1833 HH  TYR A 214      -2.717  11.328   7.242  1.00  0.00          H
ATOM   1834 N   GLY A 215      -9.068  16.731   2.494  1.00 19.32          N
ATOM   1835 CA  GLY A 215      -9.894  17.272   1.422  1.00 20.66          C
ATOM   1836 C   GLY A 215      -9.579  18.748   1.193  1.00 20.07          C
ATOM   1837 O   GLY A 215      -9.599  19.209   0.053  1.00 23.01          O
ATOM   1838 H   GLY A 215      -9.389  16.880   3.446  1.00  0.00          H
ATOM   1839 HA2 GLY A 215      -9.764  16.721   0.490  1.00  0.00          H
ATOM   1840 HA3 GLY A 215     -10.937  17.178   1.720  1.00  0.00          H
ATOM   1841 N   GLY A 216      -9.108  19.442   2.232  1.00 20.86          N
ATOM   1842 CA  GLY A 216      -8.518  20.772   2.148  1.00 19.87          C
ATOM   1843 C   GLY A 216      -6.995  20.659   2.043  1.00 20.78          C
ATOM   1844 O   GLY A 216      -6.262  21.558   2.454  1.00 20.29          O
ATOM   1845 H   GLY A 216      -9.166  19.014   3.158  1.00  0.00          H
ATOM   1846 HA2 GLY A 216      -8.908  21.340   1.303  1.00  0.00          H
ATOM   1847 HA3 GLY A 216      -8.765  21.329   3.052  1.00  0.00          H
ATOM   1848 N   SER A 217      -6.500  19.529   1.526  1.00 19.48          N
ATOM   1849 CA  SER A 217      -5.105  19.298   1.215  1.00 20.05          C
ATOM   1850 C   SER A 217      -4.910  19.520  -0.287  1.00 20.74          C
ATOM   1851 O   SER A 217      -5.735  19.111  -1.114  1.00 20.42          O
ATOM   1852 CB  SER A 217      -4.745  17.833   1.520  1.00 20.42          C
ATOM   1853 OG  SER A 217      -3.340  17.667   1.489  1.00 20.14          O
ATOM   1854 H   SER A 217      -7.164  18.852   1.181  1.00  0.00          H
ATOM   1855 HA  SER A 217      -4.462  19.966   1.791  1.00  0.00          H
ATOM   1856 HB2 SER A 217      -5.104  17.533   2.504  1.00  0.00          H
ATOM   1857 HB3 SER A 217      -5.209  17.158   0.800  1.00  0.00          H
ATOM   1858 HG  SER A 217      -3.005  17.947   2.340  1.00  0.00          H
ATOM   1859 N   GLU A 218      -3.772  20.125  -0.614  1.00 21.33          N
ATOM   1860 CA  GLU A 218      -3.215  20.212  -1.945  1.00 22.53          C
ATOM   1861 C   GLU A 218      -2.455  18.898  -2.225  1.00 21.12          C
ATOM   1862 O   GLU A 218      -2.873  18.089  -3.056  1.00 21.10          O
ATOM   1863 CB  GLU A 218      -2.258  21.426  -1.911  1.00 25.65          C
ATOM   1864 CG  GLU A 218      -1.599  21.816  -3.232  1.00 26.70          C
ATOM   1865 CD  GLU A 218      -2.575  22.369  -4.251  1.00 27.03          C
ATOM   1866 OE1 GLU A 218      -3.611  22.972  -3.901  1.00 26.49          O
ATOM   1867 OE2 GLU A 218      -2.308  22.200  -5.456  1.00 26.09          O1-
ATOM   1868 H   GLU A 218      -3.196  20.485   0.140  1.00  0.00          H
ATOM   1869 HA  GLU A 218      -4.002  20.357  -2.689  1.00  0.00          H
ATOM   1870 HB2 GLU A 218      -2.807  22.294  -1.555  1.00  0.00          H
ATOM   1871 HB3 GLU A 218      -1.463  21.277  -1.181  1.00  0.00          H
ATOM   1872 HG2 GLU A 218      -0.883  22.605  -3.027  1.00  0.00          H
ATOM   1873 HG3 GLU A 218      -1.036  20.984  -3.654  1.00  0.00          H
ATOM   1874 N   SER A 219      -1.362  18.663  -1.485  1.00 19.74          N
ATOM   1875 CA  SER A 219      -0.335  17.685  -1.816  1.00 18.94          C
ATOM   1876 C   SER A 219      -0.745  16.218  -1.613  1.00 18.73          C
ATOM   1877 O   SER A 219      -0.149  15.347  -2.244  1.00 18.43          O
ATOM   1878 CB  SER A 219       0.933  18.024  -1.011  1.00 17.41          C
ATOM   1879 OG  SER A 219       0.787  17.843   0.389  1.00 21.92          O
ATOM   1880 H   SER A 219      -1.119  19.323  -0.763  1.00  0.00          H
ATOM   1881 HA  SER A 219      -0.097  17.798  -2.871  1.00  0.00          H
ATOM   1882 HB2 SER A 219       1.749  17.384  -1.352  1.00  0.00          H
ATOM   1883 HB3 SER A 219       1.257  19.047  -1.211  1.00  0.00          H
ATOM   1884 HG  SER A 219       1.663  17.560   0.668  1.00  0.00          H
ATOM   1885 N   TYR A 220      -1.788  15.922  -0.816  1.00 20.35          N
ATOM   1886 CA  TYR A 220      -2.291  14.560  -0.615  1.00 20.31          C
ATOM   1887 C   TYR A 220      -2.813  13.943  -1.931  1.00 21.43          C
ATOM   1888 O   TYR A 220      -2.692  12.741  -2.157  1.00 21.25          O
ATOM   1889 CB  TYR A 220      -3.398  14.551   0.466  1.00 18.66          C
ATOM   1890 CG  TYR A 220      -3.801  13.207   1.033  1.00 19.79          C
ATOM   1891 CD1 TYR A 220      -3.082  12.713   2.126  1.00 20.92          C
ATOM   1892 CD2 TYR A 220      -4.916  12.490   0.597  1.00 19.71          C
ATOM   1893 CE1 TYR A 220      -3.436  11.524   2.744  1.00 21.76          C
ATOM   1894 CE2 TYR A 220      -5.299  11.304   1.217  1.00 20.40          C
ATOM   1895 CZ  TYR A 220      -4.552  10.820   2.289  1.00 22.36          C
ATOM   1896 OH  TYR A 220      -4.939   9.662   2.888  1.00 20.26          O
ATOM   1897 H   TYR A 220      -2.241  16.676  -0.311  1.00  0.00          H
ATOM   1898 HA  TYR A 220      -1.458  13.952  -0.254  1.00  0.00          H
ATOM   1899 HB2 TYR A 220      -2.996  15.142   1.290  1.00  0.00          H
ATOM   1900 HB3 TYR A 220      -4.270  15.081   0.070  1.00  0.00          H
ATOM   1901 HD1 TYR A 220      -2.233  13.275   2.509  1.00  0.00          H
ATOM   1902 HD2 TYR A 220      -5.496  12.863  -0.243  1.00  0.00          H
ATOM   1903 HE1 TYR A 220      -2.871  11.158   3.593  1.00  0.00          H
ATOM   1904 HE2 TYR A 220      -6.158  10.739   0.875  1.00  0.00          H
ATOM   1905 HH  TYR A 220      -4.330   9.443   3.633  1.00  0.00          H
ATOM   1906 N   ARG A 221      -3.319  14.785  -2.839  1.00 19.98          N
ATOM   1907 CA  ARG A 221      -3.860  14.392  -4.135  1.00 19.09          C
ATOM   1908 C   ARG A 221      -2.731  14.084  -5.134  1.00 20.19          C
ATOM   1909 O   ARG A 221      -2.847  13.154  -5.930  1.00 18.27          O
ATOM   1910 CB  ARG A 221      -4.683  15.575  -4.670  1.00 19.12          C
ATOM   1911 CG  ARG A 221      -5.851  15.965  -3.749  1.00 16.39          C
ATOM   1912 CD  ARG A 221      -6.540  17.261  -4.185  1.00 17.18          C
ATOM   1913 NE  ARG A 221      -7.992  17.155  -4.001  1.00 19.14          N
ATOM   1914 CZ  ARG A 221      -8.753  17.814  -3.124  1.00 18.73          C
ATOM   1915 NH1 ARG A 221      -8.241  18.642  -2.213  1.00 18.23          N
ATOM   1916 NH2 ARG A 221     -10.062  17.617  -3.166  1.00 17.55          N1+
ATOM   1917 H   ARG A 221      -3.293  15.772  -2.617  1.00  0.00          H
ATOM   1918 HA  ARG A 221      -4.495  13.509  -4.027  1.00  0.00          H
ATOM   1919 HB2 ARG A 221      -4.039  16.441  -4.836  1.00  0.00          H
ATOM   1920 HB3 ARG A 221      -5.086  15.301  -5.645  1.00  0.00          H
ATOM   1921 HG2 ARG A 221      -6.559  15.136  -3.702  1.00  0.00          H
ATOM   1922 HG3 ARG A 221      -5.504  16.113  -2.726  1.00  0.00          H
ATOM   1923 HD2 ARG A 221      -6.119  18.119  -3.660  1.00  0.00          H
ATOM   1924 HD3 ARG A 221      -6.361  17.454  -5.242  1.00  0.00          H
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ATOM   1925  HE  ARG A 221      -8.459  16.539  -4.666  1.00  0.00           H
ATOM   1926 HH11 ARG A 221      -7.235  18.762  -2.065  1.00  0.00           H
ATOM   1927 HH12 ARG A 221      -8.836  19.020  -1.464  1.00  0.00           H
ATOM   1928 HH21 ARG A 221     -10.442  16.866  -3.753  1.00  0.00           H
ATOM   1929 HH22 ARG A 221     -10.717  18.325  -2.816  1.00  0.00           H
ATOM   1930  N   HIS A 222      -1.620  14.832  -5.058  1.00 19.92           N
ATOM   1931  CA  HIS A 222      -0.409  14.619  -5.856  1.00 20.24           C
ATOM   1932  C   HIS A 222       0.313  13.362  -5.370  1.00 19.44           C
ATOM   1933  O   HIS A 222       0.709  12.525  -6.178  1.00 21.15           O
ATOM   1934  CB  HIS A 222       0.540  15.822  -5.701  1.00 18.79           C
ATOM   1935  CG  HIS A 222      -0.036  17.107  -6.209  1.00 19.64           C
ATOM   1936  ND1 HIS A 222      -0.169  18.231  -5.392  1.00 22.12           N
ATOM   1937  CD2 HIS A 222      -0.545  17.395  -7.455  1.00 20.71           C
ATOM   1938  CE1 HIS A 222      -0.802  19.119  -6.143  1.00 20.00           C
ATOM   1939  NE2 HIS A 222      -1.056  18.675  -7.371  1.00 22.40           N
ATOM   1940  H   HIS A 222      -1.586  15.538  -4.337  1.00  0.00           H
ATOM   1941  HA  HIS A 222      -0.678  14.487  -6.906  1.00  0.00           H
ATOM   1942  HB2 HIS A 222       0.839  15.958  -4.661  1.00  0.00           H
ATOM   1943  HB3 HIS A 222       1.464  15.640  -6.246  1.00  0.00           H
ATOM   1944  HD2 HIS A 222      -0.611  16.799  -8.353  1.00  0.00           H
ATOM   1945  HE1 HIS A 222      -1.098  20.092  -5.791  1.00  0.00           H
ATOM   1946  HE2 HIS A 222      -1.595  19.173  -8.072  1.00  0.00           H
ATOM   1947  N   MET A 223       0.403  13.209  -4.044  1.00 20.38           N
ATOM   1948  CA  MET A 223       0.879  12.029  -3.337  1.00 21.04           C
ATOM   1949  C   MET A 223       0.101  10.775  -3.751  1.00 21.36           C
ATOM   1950  O   MET A 223       0.720   9.825  -4.223  1.00 20.45           O
ATOM   1951  CB  MET A 223       0.839  12.317  -1.826  1.00 20.16           C
ATOM   1952  CG  MET A 223       1.443  11.233  -0.926  1.00 21.68           C
ATOM   1953  SD  MET A 223       0.359   9.841  -0.504  1.00 24.24           S
ATOM   1954  CE  MET A 223      -0.920  10.695   0.447  1.00 23.61           C
ATOM   1955  H   MET A 223       0.096  13.990  -3.471  1.00  0.00           H
ATOM   1956  HA  MET A 223       1.912  11.860  -3.629  1.00  0.00           H
ATOM   1957  HB2 MET A 223       1.412  13.228  -1.649  1.00  0.00           H
ATOM   1958  HB3 MET A 223      -0.172  12.552  -1.508  1.00  0.00           H
ATOM   1959  HG2 MET A 223       2.357  10.846  -1.371  1.00  0.00           H
ATOM   1960  HG3 MET A 223       1.742  11.697   0.010  1.00  0.00           H
ATOM   1961  HE1 MET A 223      -1.603   9.971   0.886  1.00  0.00           H
ATOM   1962  HE2 MET A 223      -0.480  11.284   1.251  1.00  0.00           H
ATOM   1963  HE3 MET A 223      -1.509  11.355  -0.185  1.00  0.00           H
ATOM   1964  N   CYS A 224      -1.236  10.786  -3.657  1.00 20.63           N
ATOM   1965  CA  CYS A 224      -2.072   9.635  -4.005  1.00 20.63           C
ATOM   1966  C   CYS A 224      -2.060   9.314  -5.510  1.00 19.25           C
ATOM   1967  O   CYS A 224      -2.143   8.140  -5.865  1.00 18.72           O
ATOM   1968  CB  CYS A 224      -3.519   9.852  -3.537  1.00 18.88           C
ATOM   1969  SG  CYS A 224      -3.584   9.736  -1.726  1.00 21.25           S
ATOM   1970  H   CYS A 224      -1.690  11.581  -3.216  1.00  0.00           H
ATOM   1971  HA  CYS A 224      -1.673   8.756  -3.492  1.00  0.00           H
ATOM   1972  HB2 CYS A 224      -3.923  10.808  -3.873  1.00  0.00           H
ATOM   1973  HB3 CYS A 224      -4.161   9.071  -3.944  1.00  0.00           H
ATOM   1974  HG  CYS A 224      -3.028  10.937  -1.512  1.00  0.00           H
ATOM   1975  N   ARG A 225      -1.872  10.309  -6.394  1.00 20.13           N
ATOM   1976  CA  ARG A 225      -1.617  10.081  -7.820  1.00 18.90           C
ATOM   1977  C   ARG A 225      -0.249   9.398  -8.001  1.00 18.94           C
ATOM   1978  O   ARG A 225      -0.146   8.382  -8.689  1.00 18.24           O
ATOM   1979  CB  ARG A 225      -1.658  11.418  -8.603  1.00 19.79           C
ATOM   1980  CG  ARG A 225      -1.393  11.264 -10.118  1.00 22.48           C
ATOM   1981  CD  ARG A 225      -1.326  12.597 -10.874  1.00 21.79           C
ATOM   1982  NE  ARG A 225      -1.132  12.366 -12.308  1.00 21.49           N
ATOM   1983  CZ  ARG A 225      -0.405  13.026 -13.211  1.00 23.17           C
ATOM   1984 NH1 ARG A 225       0.352  14.068 -12.867  1.00 23.34           N
ATOM   1985 NH2 ARG A 225      -0.445  12.628 -14.480  1.00 25.08           N1+
ATOM   1986  H   ARG A 225      -1.858  11.263  -6.052  1.00  0.00           H
ATOM   1987  HA  ARG A 225      -2.392   9.419  -8.214  1.00  0.00           H
ATOM   1988  HB2 ARG A 225      -2.634  11.883  -8.463  1.00  0.00           H
ATOM   1989  HB3 ARG A 225      -0.932  12.115  -8.186  1.00  0.00           H
ATOM   1990  HG2 ARG A 225      -0.453  10.743 -10.298  1.00  0.00           H
ATOM   1991  HG3 ARG A 225      -2.174  10.638 -10.553  1.00  0.00           H
ATOM   1992  HD2 ARG A 225      -2.271  13.121 -10.753  1.00  0.00           H
ATOM   1993  HD3 ARG A 225      -0.532  13.225 -10.471  1.00  0.00           H
ATOM   1994  HE  ARG A 225      -1.775  11.610 -12.697  1.00  0.00           H
ATOM   1995 HH11 ARG A 225       0.518  14.292 -11.886  1.00  0.00           H
ATOM   1996 HH12 ARG A 225       0.848  14.621 -13.548  1.00  0.00           H
ATOM   1997 HH21 ARG A 225      -0.941  11.721 -14.719  1.00  0.00           H
ATOM   1998 HH22 ARG A 225       0.016  13.066 -15.257  1.00  0.00           H
ATOM   1999  N   TYR A 226       0.803   9.934  -7.366  1.00 16.90           N
ATOM   2000  CA  TYR A 226       2.171   9.444  -7.506  1.00 18.14           C
ATOM   2001  C   TYR A 226       2.331   8.029  -6.915  1.00 17.98           C
ATOM   2002  O   TYR A 226       2.902   7.149  -7.562  1.00 18.92           O
ATOM   2003  CB  TYR A 226       3.171  10.433  -6.867  1.00 15.96           C
ATOM   2004  CG  TYR A 226       4.565  10.300  -7.453  1.00 20.33           C
ATOM   2005  CD1 TYR A 226       5.013  11.211  -8.437  1.00 18.06           C
ATOM   2006  CD2 TYR A 226       5.383   9.211  -7.087  1.00 19.81           C
ATOM   2007  CE1 TYR A 226       6.228  10.980  -9.111  1.00 20.94           C
ATOM   2008  CE2 TYR A 226       6.587   8.978  -7.770  1.00 22.35           C
ATOM   2009  CZ  TYR A 226       6.986   9.832  -8.812  1.00 20.61           C
ATOM   2010  OH  TYR A 226       8.077   9.515  -9.561  1.00 24.39           O
ATOM   2011  H   TYR A 226       0.657  10.777  -6.813  1.00  0.00           H
ATOM   2012  HA  TYR A 226       2.368   9.398  -8.575  1.00  0.00           H
ATOM   2013  HB2 TYR A 226       2.843  11.457  -7.042  1.00  0.00           H
ATOM   2014  HB3 TYR A 226       3.209  10.311  -5.784  1.00  0.00           H
ATOM   2015  HD1 TYR A 226       4.405  12.058  -8.722  1.00  0.00           H
ATOM   2016  HD2 TYR A 226       5.074   8.518  -6.318  1.00  0.00           H
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ATOM   2017  HE1 TYR A 226       6.548  11.649  -9.898  1.00  0.00           H
ATOM   2018  HE2 TYR A 226       7.194   8.125  -7.510  1.00  0.00           H
ATOM   2019  HH  TYR A 226       8.086   8.599  -9.825  1.00  0.00           H
ATOM   2020  N   GLN A 227       1.756   7.793  -5.729  1.00 19.29           N
ATOM   2021  CA  GLN A 227       1.734   6.507  -5.036  1.00 19.24           C
ATOM   2022  C   GLN A 227       0.763   5.515  -5.694  1.00 21.01           C
ATOM   2023  O   GLN A 227       0.803   4.332  -5.370  1.00 21.37           O
ATOM   2024  CB  GLN A 227       1.280   6.714  -3.575  1.00 19.57           C
ATOM   2025  CG  GLN A 227       2.280   7.467  -2.679  1.00 16.42           C
ATOM   2026  CD  GLN A 227       3.415   6.594  -2.147  1.00 20.53           C
ATOM   2027  OE1 GLN A 227       4.014   5.808  -2.874  1.00 21.69           O
ATOM   2028  NE2 GLN A 227       3.716   6.706  -0.860  1.00 19.47           N
ATOM   2029  H   GLN A 227       1.303   8.575  -5.253  1.00  0.00           H
ATOM   2030  HA  GLN A 227       2.729   6.061  -5.069  1.00  0.00           H
ATOM   2031  HB2 GLN A 227       0.326   7.243  -3.561  1.00  0.00           H
ATOM   2032  HB3 GLN A 227       1.072   5.748  -3.112  1.00  0.00           H
ATOM   2033  HG2 GLN A 227       2.699   8.327  -3.199  1.00  0.00           H
ATOM   2034  HG3 GLN A 227       1.728   7.859  -1.828  1.00  0.00           H
ATOM   2035 HE21 GLN A 227       3.196   7.344  -0.275  1.00  0.00           H
ATOM   2036 HE22 GLN A 227       4.454   6.140  -0.468  1.00  0.00           H
ATOM   2037  N   SER A 228      -0.091   5.943  -6.629  1.00 19.57           N
ATOM   2038  CA  SER A 228      -0.805   5.025  -7.504  1.00 20.36           C
ATOM   2039  C   SER A 228       0.082   4.711  -8.720  1.00 20.27           C
ATOM   2040  O   SER A 228       0.285   3.539  -9.032  1.00 23.07           O
ATOM   2041  CB  SER A 228      -2.107   5.670  -8.006  1.00 16.62           C
ATOM   2042  OG  SER A 228      -3.015   5.829  -6.941  1.00 18.44           O
ATOM   2043  H   SER A 228      -0.132   6.932  -6.834  1.00  0.00           H
ATOM   2044  HA  SER A 228      -1.056   4.092  -6.997  1.00  0.00           H
ATOM   2045  HB2 SER A 228      -1.936   6.639  -8.468  1.00  0.00           H
ATOM   2046  HB3 SER A 228      -2.575   5.029  -8.755  1.00  0.00           H
ATOM   2047  HG  SER A 228      -2.734   6.601  -6.443  1.00  0.00           H
ATOM   2048  N   GLY A 229       0.601   5.733  -9.409  1.00 19.50           N
ATOM   2049  CA  GLY A 229       0.961   5.614 -10.816  1.00 20.20           C
ATOM   2050  C   GLY A 229       2.395   5.913 -11.224  1.00 19.94           C
ATOM   2051  O   GLY A 229       2.708   5.740 -12.402  1.00 17.43           O
ATOM   2052  H   GLY A 229       0.402   6.678  -9.086  1.00  0.00           H
ATOM   2053  HA2 GLY A 229       0.634   4.673 -11.255  1.00  0.00           H
ATOM   2054  HA3 GLY A 229       0.390   6.382 -11.313  1.00  0.00           H
ATOM   2055  N   PHE A 230       3.244   6.419 -10.322  1.00 19.02           N
ATOM   2056  CA  PHE A 230       4.527   7.019 -10.701  1.00 20.56           C
ATOM   2057  C   PHE A 230       5.723   6.515  -9.886  1.00 21.40           C
ATOM   2058  O   PHE A 230       6.863   6.807 -10.245  1.00 24.25           O
ATOM   2059  CB  PHE A 230       4.433   8.556 -10.737  1.00 21.77           C
ATOM   2060  CG  PHE A 230       3.532   9.163 -11.799  1.00 22.64           C
ATOM   2061  CD1 PHE A 230       4.101   9.635 -12.999  1.00 24.17           C
ATOM   2062  CD2 PHE A 230       2.138   9.274 -11.598  1.00 24.47           C
ATOM   2063  CE1 PHE A 230       3.285  10.208 -13.991  1.00 25.11           C
ATOM   2064  CE2 PHE A 230       1.321   9.825 -12.604  1.00 23.94           C
ATOM   2065  CZ  PHE A 230       1.894  10.284 -13.802  1.00 26.08           C
ATOM   2066  H   PHE A 230       2.917   6.567  -9.372  1.00  0.00           H
ATOM   2067  HA  PHE A 230       4.779   6.727 -11.716  1.00  0.00           H
ATOM   2068  HB2 PHE A 230       4.130   8.920  -9.762  1.00  0.00           H
ATOM   2069  HB3 PHE A 230       5.430   8.963 -10.904  1.00  0.00           H
ATOM   2070  HD1 PHE A 230       5.166   9.559 -13.172  1.00  0.00           H
ATOM   2071  HD2 PHE A 230       1.680   8.914 -10.689  1.00  0.00           H
ATOM   2072  HE1 PHE A 230       3.727  10.569 -14.908  1.00  0.00           H
ATOM   2073  HE2 PHE A 230       0.250   9.887 -12.475  1.00  0.00           H
ATOM   2074  HZ  PHE A 230       1.263  10.675 -14.586  1.00  0.00           H
ATOM   2075  N   PHE A 231       5.502   5.762  -8.799  1.00 19.26           N
ATOM   2076  CA  PHE A 231       6.590   5.217  -7.979  1.00 21.27           C
ATOM   2077  C   PHE A 231       7.246   3.990  -8.642  1.00 20.88           C
ATOM   2078  O   PHE A 231       8.438   3.779  -8.467  1.00 21.71           O
ATOM   2079  CB  PHE A 231       6.088   4.911  -6.548  1.00 18.61           C
ATOM   2080  CG  PHE A 231       5.168   3.717  -6.340  1.00 18.09           C
ATOM   2081  CD1 PHE A 231       5.660   2.568  -5.685  1.00 16.51           C
ATOM   2082  CD2 PHE A 231       3.824   3.751  -6.765  1.00 15.34           C
ATOM   2083  CE1 PHE A 231       4.817   1.468  -5.449  1.00 15.19           C
ATOM   2084  CE2 PHE A 231       2.985   2.643  -6.537  1.00 15.58           C
ATOM   2085  CZ  PHE A 231       3.475   1.512  -5.863  1.00 17.00           C
ATOM   2086  H   PHE A 231       4.549   5.575  -8.526  1.00  0.00           H
ATOM   2087  HA  PHE A 231       7.376   5.968  -7.890  1.00  0.00           H
ATOM   2088  HB2 PHE A 231       6.964   4.773  -5.912  1.00  0.00           H
ATOM   2089  HB3 PHE A 231       5.590   5.793  -6.144  1.00  0.00           H
ATOM   2090  HD1 PHE A 231       6.686   2.522  -5.354  1.00  0.00           H
ATOM   2091  HD2 PHE A 231       3.420   4.619  -7.264  1.00  0.00           H
ATOM   2092  HE1 PHE A 231       5.205   0.589  -4.954  1.00  0.00           H
ATOM   2093  HE2 PHE A 231       1.963   2.655  -6.887  1.00  0.00           H
ATOM   2094  HZ  PHE A 231       2.822   0.673  -5.676  1.00  0.00           H
ATOM   2095  N   TRP A 232       6.507   3.262  -9.490  1.00 20.84           N
ATOM   2096  CA  TRP A 232       6.986   2.188 -10.372  1.00 21.29           C
ATOM   2097  C   TRP A 232       7.421   2.754 -11.742  1.00 22.43           C
ATOM   2098  O   TRP A 232       7.358   2.068 -12.760  1.00 24.91           O
ATOM   2099  CB  TRP A 232       5.840   1.170 -10.572  1.00 20.84           C
ATOM   2100  CG  TRP A 232       4.488   1.731 -10.910  1.00 22.17           C
ATOM   2101  CD1 TRP A 232       3.571   2.090  -9.989  1.00 22.45           C
ATOM   2102  CD2 TRP A 232       3.867   1.985 -12.211  1.00 25.05           C
ATOM   2103  NE1 TRP A 232       2.435   2.550 -10.614  1.00 24.51           N
ATOM   2104  CE3 TRP A 232       4.272   1.837 -13.559  1.00 25.82           C
ATOM   2105  CE2 TRP A 232       2.543   2.473 -11.989  1.00 26.33           C
ATOM   2106  CZ3 TRP A 232       3.413   2.164 -14.628  1.00 27.28           C
ATOM   2107  CZ2 TRP A 232       1.664   2.770 -13.049  1.00 26.19           C
ATOM   2108  CH2 TRP A 232       2.108   2.626 -14.375  1.00 25.91           C
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ATOM   2109  H   TRP A 232       5.542   3.530  -9.611  1.00  0.00           H
ATOM   2110  HA  TRP A 232       7.852   1.684  -9.939  1.00  0.00           H
ATOM   2111  HB2 TRP A 232       6.103   0.418 -11.316  1.00  0.00           H
ATOM   2112  HB3 TRP A 232       5.731   0.608  -9.644  1.00  0.00           H
ATOM   2113  HD1 TRP A 232       3.725   1.990  -8.926  1.00  0.00           H
ATOM   2114  HE1 TRP A 232       1.611   2.845 -10.086  1.00  0.00           H
ATOM   2115  HE3 TRP A 232       5.256   1.456 -13.777  1.00  0.00           H
ATOM   2116  HZ3 TRP A 232       3.756   2.044 -15.644  1.00  0.00           H
ATOM   2117  HZ2 TRP A 232       0.659   3.113 -12.860  1.00  0.00           H
ATOM   2118  HH2 TRP A 232       1.448   2.865 -15.195  1.00  0.00           H
ATOM   2119  N   ARG A 233       7.834   4.023 -11.770  1.00 22.95           N
ATOM   2120  CA  ARG A 233       8.538   4.675 -12.863  1.00 23.34           C
ATOM   2121  C   ARG A 233       9.428   5.793 -12.304  1.00 23.57           C
ATOM   2122  O   ARG A 233       9.493   6.878 -12.885  1.00 24.36           O
ATOM   2123  CB  ARG A 233       7.616   5.032 -14.054  1.00 23.72           C
ATOM   2124  CG  ARG A 233       6.326   5.783 -13.690  1.00 23.64           C
ATOM   2125  CD  ARG A 233       5.534   6.212 -14.934  1.00 22.56           C
ATOM   2126  NE  ARG A 233       4.117   6.479 -14.635  1.00 23.96           N
ATOM   2127  CZ  ARG A 233       3.265   7.232 -15.342  1.00 23.37           C
ATOM   2128  NH1 ARG A 233       3.686   8.045 -16.313  1.00 24.58           N
ATOM   2129  NH2 ARG A 233       1.965   7.140 -15.071  1.00 27.02           N1+
ATOM   2130  H   ARG A 233       7.888   4.493 -10.878  1.00  0.00           H
ATOM   2131  HA  ARG A 233       9.254   3.956 -13.260  1.00  0.00           H
ATOM   2132  HB2 ARG A 233       8.184   5.613 -14.782  1.00  0.00           H
ATOM   2133  HB3 ARG A 233       7.348   4.108 -14.569  1.00  0.00           H
ATOM   2134  HG2 ARG A 233       5.712   5.143 -13.056  1.00  0.00           H
ATOM   2135  HG3 ARG A 233       6.584   6.668 -13.107  1.00  0.00           H
ATOM   2136  HD2 ARG A 233       6.013   7.073 -15.392  1.00  0.00           H
ATOM   2137  HD3 ARG A 233       5.552   5.417 -15.680  1.00  0.00           H
ATOM   2138  HE  ARG A 233       3.730   5.973 -13.830  1.00  0.00           H
ATOM   2139 HH11 ARG A 233       4.644   8.424 -16.287  1.00  0.00           H
ATOM   2140 HH12 ARG A 233       3.013   8.540 -16.882  1.00  0.00           H
ATOM   2141 HH21 ARG A 233       1.641   6.594 -14.286  1.00  0.00           H
ATOM   2142 HH22 ARG A 233       1.225   7.668 -15.591  1.00  0.00           H
ATOM   2143  N   HIS A 234      10.081   5.544 -11.159  1.00 23.15           N
ATOM   2144  CA  HIS A 234      11.060   6.431 -10.529  1.00 24.03           C
ATOM   2145  C   HIS A 234      12.417   5.721 -10.555  1.00 25.68           C
ATOM   2146  O   HIS A 234      12.496   4.522 -10.281  1.00 24.39           O
ATOM   2147  CB  HIS A 234      10.650   6.726  -9.072  1.00 21.56           C
ATOM   2148  CG  HIS A 234      11.532   7.755  -8.412  1.00 23.59           C
ATOM   2149  ND1 HIS A 234      12.719   7.427  -7.743  1.00 24.32           N
ATOM   2150  CD2 HIS A 234      11.367   9.122  -8.378  1.00 21.93           C
ATOM   2151  CE1 HIS A 234      13.227   8.595  -7.364  1.00 24.17           C
ATOM   2152  NE2 HIS A 234      12.458   9.631  -7.695  1.00 23.23           N
ATOM   2153  H   HIS A 234      10.088   4.582 -10.833  1.00  0.00           H
ATOM   2154  HA  HIS A 234      11.141   7.376 -11.071  1.00  0.00           H
ATOM   2155  HB2 HIS A 234       9.629   7.105  -9.056  1.00  0.00           H
ATOM   2156  HB3 HIS A 234      10.650   5.817  -8.470  1.00  0.00           H
ATOM   2157  HD2 HIS A 234      10.601   9.750  -8.807  1.00  0.00           H
ATOM   2158  HE1 HIS A 234      14.165   8.704  -6.840  1.00  0.00           H
ATOM   2159  HE2 HIS A 234      12.676  10.613  -7.532  1.00  0.00           H
ATOM   2160  N   GLU A 235      13.486   6.456 -10.858  1.00 26.94           N
ATOM   2161  CA  GLU A 235      14.849   5.992 -11.082  1.00 29.85           C
ATOM   2162  C   GLU A 235      15.462   5.184  -9.922  1.00 27.43           C
ATOM   2163  O   GLU A 235      16.256   4.274 -10.167  1.00 27.58           O
ATOM   2164  CB  GLU A 235      15.727   7.207 -11.452  1.00 32.61           C
ATOM   2165  CG  GLU A 235      15.849   8.329 -10.389  1.00 40.85           C
ATOM   2166  CD  GLU A 235      14.739   9.372 -10.404  1.00 45.22           C
ATOM   2167  OE1 GLU A 235      13.656   9.133 -10.975  1.00 46.95           O
ATOM   2168  OE2 GLU A 235      14.996  10.464  -9.850  1.00 48.79           O1-
ATOM   2169  H   GLU A 235      13.363   7.471 -10.972  1.00  0.00           H
ATOM   2170  HA  GLU A 235      14.817   5.324 -11.945  1.00  0.00           H
ATOM   2171  HB2 GLU A 235      16.727   6.837 -11.675  1.00  0.00           H
ATOM   2172  HB3 GLU A 235      15.373   7.637 -12.389  1.00  0.00           H
ATOM   2173  HG2 GLU A 235      15.938   7.926  -9.382  1.00  0.00           H
ATOM   2174  HG3 GLU A 235      16.780   8.865 -10.565  1.00  0.00           H
ATOM   2175  N   LEU A 236      15.079   5.475  -8.671  1.00 26.47           N
ATOM   2176  CA  LEU A 236      15.542   4.734  -7.496  1.00 26.49           C
ATOM   2177  C   LEU A 236      14.691   3.476  -7.249  1.00 26.64           C
ATOM   2178  O   LEU A 236      15.041   2.686  -6.379  1.00 25.30           O
ATOM   2179  CB  LEU A 236      15.452   5.618  -6.231  1.00 24.84           C
ATOM   2180  CG  LEU A 236      16.388   6.844  -6.184  1.00 24.56           C
ATOM   2181  CD1 LEU A 236      16.195   7.614  -4.872  1.00 23.65           C
ATOM   2182  CD2 LEU A 236      17.863   6.453  -6.320  1.00 22.45           C
ATOM   2183  H   LEU A 236      14.384   6.203  -8.538  1.00  0.00           H
ATOM   2184  HA  LEU A 236      16.569   4.392  -7.631  1.00  0.00           H
ATOM   2185  HB2 LEU A 236      14.420   5.938  -6.083  1.00  0.00           H
ATOM   2186  HB3 LEU A 236      15.699   4.997  -5.368  1.00  0.00           H
ATOM   2187  HG  LEU A 236      16.139   7.511  -7.010  1.00  0.00           H
ATOM   2188 HD11 LEU A 236      16.823   8.504  -4.854  1.00  0.00           H
ATOM   2189 HD12 LEU A 236      15.160   7.928  -4.744  1.00  0.00           H
ATOM   2190 HD13 LEU A 236      16.465   7.009  -4.006  1.00  0.00           H
ATOM   2191 HD21 LEU A 236      18.526   7.303  -6.152  1.00  0.00           H
ATOM   2192 HD22 LEU A 236      18.120   5.677  -5.604  1.00  0.00           H
ATOM   2193 HD23 LEU A 236      18.079   6.069  -7.312  1.00  0.00           H
ATOM   2194  N   LEU A 237      13.599   3.266  -7.999  1.00 25.05           N
ATOM   2195  CA  LEU A 237      12.708   2.119  -7.867  1.00 27.46           C
ATOM   2196  C   LEU A 237      12.728   1.222  -9.107  1.00 27.75           C
ATOM   2197  O   LEU A 237      12.486   0.025  -8.959  1.00 28.17           O
ATOM   2198  CB  LEU A 237      11.282   2.564  -7.471  1.00 25.77           C
ATOM   2199  CG  LEU A 237      10.846   2.005  -6.098  1.00 26.56           C
ATOM   2200  CD1 LEU A 237      11.663   2.600  -4.944  1.00 26.59           C
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ATOM   2201  CD2 LEU A 237       9.350   2.217  -5.852  1.00 27.15           C
ATOM   2202  H   LEU A 237      13.368   3.947  -8.717  1.00  0.00           H
ATOM   2203  HA  LEU A 237      13.082   1.462  -7.084  1.00  0.00           H
ATOM   2204  HB2 LEU A 237      11.195   3.651  -7.474  1.00  0.00           H
ATOM   2205  HB3 LEU A 237      10.572   2.226  -8.229  1.00  0.00           H
ATOM   2206  HG  LEU A 237      11.023   0.930  -6.106  1.00  0.00           H
ATOM   2207 HD11 LEU A 237      11.382   2.151  -3.995  1.00  0.00           H
ATOM   2208 HD12 LEU A 237      12.729   2.414  -5.062  1.00  0.00           H
ATOM   2209 HD13 LEU A 237      11.518   3.677  -4.870  1.00  0.00           H
ATOM   2210 HD21 LEU A 237       9.029   1.736  -4.928  1.00  0.00           H
ATOM   2211 HD22 LEU A 237       9.108   3.278  -5.788  1.00  0.00           H
ATOM   2212 HD23 LEU A 237       8.760   1.795  -6.665  1.00  0.00           H
ATOM   2213  N   GLU A 238      13.114   1.718 -10.294  1.00 28.09           N
ATOM   2214  CA  GLU A 238      13.386   0.891 -11.486  1.00 29.19           C
ATOM   2215  C   GLU A 238      14.681   0.069 -11.328  1.00 29.11           C
ATOM   2216  O   GLU A 238      14.897  -0.923 -12.026  1.00 28.86           O
ATOM   2217  CB  GLU A 238      13.428   1.763 -12.765  1.00 32.53           C
ATOM   2218  CG  GLU A 238      12.140   2.572 -13.074  1.00 39.05           C
ATOM   2219  CD  GLU A 238      10.855   1.819 -12.767  1.00 42.35           C
ATOM   2220  OE1 GLU A 238      10.376   1.054 -13.627  1.00 44.53           O
ATOM   2221  OE2 GLU A 238      10.390   1.901 -11.610  1.00 42.36           O1-
ATOM   2222  H   GLU A 238      13.109   2.728 -10.403  1.00  0.00           H
ATOM   2223  HA  GLU A 238      12.608   0.142 -11.604  1.00  0.00           H
ATOM   2224  HB2 GLU A 238      14.273   2.451 -12.713  1.00  0.00           H
ATOM   2225  HB3 GLU A 238      13.625   1.110 -13.616  1.00  0.00           H
ATOM   2226  HG2 GLU A 238      12.128   3.497 -12.506  1.00  0.00           H
ATOM   2227  HG3 GLU A 238      12.117   2.871 -14.120  1.00  0.00           H
ATOM   2228  N   GLU A 239      15.485   0.419 -10.319  1.00 30.17           N
ATOM   2229  CA  GLU A 239      16.543  -0.381  -9.720  1.00 30.22           C
ATOM   2230  C   GLU A 239      15.992  -1.711  -9.128  1.00 30.36           C
ATOM   2231  O   GLU A 239      16.684  -2.732  -9.134  1.00 29.89           O
ATOM   2232  CB  GLU A 239      17.229   0.539  -8.677  1.00 31.52           C
ATOM   2233  CG  GLU A 239      18.541   0.023  -8.052  1.00 34.59           C
ATOM   2234  CD  GLU A 239      19.225   1.072  -7.170  1.00 35.31           C
ATOM   2235  OE1 GLU A 239      19.290   2.254  -7.569  1.00 38.54           O
ATOM   2236  OE2 GLU A 239      19.694   0.689  -6.073  1.00 36.01           O1-
ATOM   2237  H   GLU A 239      15.235   1.272  -9.841  1.00  0.00           H
ATOM   2238  HA  GLU A 239      17.262  -0.628 -10.502  1.00  0.00           H
ATOM   2239  HB2 GLU A 239      17.444   1.495  -9.157  1.00  0.00           H
ATOM   2240  HB3 GLU A 239      16.529   0.773  -7.874  1.00  0.00           H
ATOM   2241  HG2 GLU A 239      18.353  -0.874  -7.463  1.00  0.00           H
ATOM   2242  HG3 GLU A 239      19.244  -0.254  -8.836  1.00  0.00           H
ATOM   2243  N   TYR A 240      14.715  -1.757  -8.714  1.00 29.40           N
ATOM   2244  CA  TYR A 240      14.091  -2.829  -7.937  1.00 26.76           C
ATOM   2245  C   TYR A 240      12.864  -3.429  -8.641  1.00 26.94           C
ATOM   2246  O   TYR A 240      12.198  -2.792  -9.456  1.00 26.38           O
ATOM   2247  CB  TYR A 240      13.769  -2.314  -6.519  1.00 25.17           C
ATOM   2248  CG  TYR A 240      15.012  -1.858  -5.777  1.00 22.76           C
ATOM   2249  CD1 TYR A 240      15.950  -2.801  -5.314  1.00 23.97           C
ATOM   2250  CD2 TYR A 240      15.280  -0.484  -5.620  1.00 23.51           C
ATOM   2251  CE1 TYR A 240      17.154  -2.383  -4.726  1.00 21.82           C
ATOM   2252  CE2 TYR A 240      16.493  -0.060  -5.050  1.00 21.33           C
ATOM   2253  CZ  TYR A 240      17.434  -1.012  -4.620  1.00 21.91           C
ATOM   2254  OH  TYR A 240      18.649  -0.610  -4.171  1.00 23.59           O
ATOM   2255  H   TYR A 240      14.126  -0.944  -8.873  1.00  0.00           H
ATOM   2256  HA  TYR A 240      14.801  -3.644  -7.823  1.00  0.00           H
ATOM   2257  HB2 TYR A 240      13.046  -1.497  -6.565  1.00  0.00           H
ATOM   2258  HB3 TYR A 240      13.294  -3.098  -5.931  1.00  0.00           H
ATOM   2259  HD1 TYR A 240      15.771  -3.851  -5.435  1.00  0.00           H
ATOM   2260  HD2 TYR A 240      14.574   0.254  -5.964  1.00  0.00           H
ATOM   2261  HE1 TYR A 240      17.881  -3.109  -4.395  1.00  0.00           H
ATOM   2262  HE2 TYR A 240      16.710   0.997  -4.981  1.00  0.00           H
ATOM   2263  HH  TYR A 240      19.066  -0.108  -4.896  1.00  0.00           H
ATOM   2264  N   ASP A 241      12.575  -4.694  -8.337  1.00 27.29           N
ATOM   2265  CA  ASP A 241      11.455  -5.490  -8.848  1.00 26.93           C
ATOM   2266  C   ASP A 241      10.357  -5.610  -7.787  1.00 26.42           C
ATOM   2267  O   ASP A 241       9.216  -5.914  -8.123  1.00 27.05           O
ATOM   2268  CB  ASP A 241      11.935  -6.926  -9.158  1.00 27.77           C
ATOM   2269  CG  ASP A 241      12.821  -6.986 -10.385  1.00 27.65           C
ATOM   2270  OD1 ASP A 241      12.288  -7.344 -11.453  1.00 25.77           O
ATOM   2271  OD2 ASP A 241      14.017  -6.639 -10.251  1.00 26.65           O1-
ATOM   2272  H   ASP A 241      13.143  -5.160  -7.631  1.00  0.00           H
ATOM   2273  HA  ASP A 241      11.022  -5.050  -9.748  1.00  0.00           H
ATOM   2274  HB2 ASP A 241      12.494  -7.342  -8.322  1.00  0.00           H
ATOM   2275  HB3 ASP A 241      11.085  -7.589  -9.327  1.00  0.00           H
ATOM   2276  N   TRP A 242      10.685  -5.381  -6.511  1.00 24.04           N
ATOM   2277  CA  TRP A 242       9.786  -5.420  -5.364  1.00 24.23           C
ATOM   2278  C   TRP A 242      10.035  -4.201  -4.473  1.00 23.82           C
ATOM   2279  O   TRP A 242      11.087  -3.567  -4.556  1.00 22.71           O
ATOM   2280  CB  TRP A 242       9.940  -6.726  -4.556  1.00 23.96           C
ATOM   2281  CG  TRP A 242       9.697  -8.068  -5.183  1.00 23.75           C
ATOM   2282  CD1 TRP A 242      10.397  -8.610  -6.204  1.00 26.08           C
ATOM   2283  CD2 TRP A 242       8.776  -9.114  -4.746  1.00 25.48           C
ATOM   2284  NE1 TRP A 242       9.994  -9.912  -6.416  1.00 23.93           N
ATOM   2285  CE3 TRP A 242       7.763  -9.200  -3.763  1.00 25.82           C
ATOM   2286  CE2 TRP A 242       9.067 -10.304  -5.479  1.00 25.93           C
ATOM   2287  CZ3 TRP A 242       7.132 -10.424  -3.469  1.00 26.34           C
ATOM   2288  CZ2 TRP A 242       8.463 -11.533  -5.183  1.00 26.43           C
ATOM   2289  CH2 TRP A 242       7.507 -11.593  -4.156  1.00 24.99           C
ATOM   2290  H   TRP A 242      11.637  -5.107  -6.310  1.00  0.00           H
ATOM   2291  HA  TRP A 242       8.762  -5.319  -5.711  1.00  0.00           H
ATOM   2292  HB2 TRP A 242      10.949  -6.759  -4.155  1.00  0.00           H
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ATOM   2293  HB3 TRP A 242      9.292  -6.673  -3.684  1.00  0.00           H
ATOM   2294  HD1 TRP A 242     11.197  -8.103  -6.716  1.00  0.00           H
ATOM   2295  HE1 TRP A 242     10.440 -10.525  -7.091  1.00  0.00           H
ATOM   2296  HE3 TRP A 242      7.494  -8.319  -3.200  1.00  0.00           H
ATOM   2297  HZ3 TRP A 242      6.367 -10.469  -2.707  1.00  0.00           H
ATOM   2298  HZ2 TRP A 242      8.716 -12.421  -5.745  1.00  0.00           H
ATOM   2299  HH2 TRP A 242      7.032 -12.535  -3.925  1.00  0.00           H
ATOM   2300  N   TYR A 243      9.076  -3.905  -3.597  1.00 22.84           N
ATOM   2301  CA  TYR A 243      9.096  -2.804  -2.650  1.00 21.90           C
ATOM   2302  C   TYR A 243      8.480  -3.250  -1.324  1.00 22.39           C
ATOM   2303  O   TYR A 243      7.482  -3.974  -1.316  1.00 22.11           O
ATOM   2304  CB  TYR A 243      8.408  -1.562  -3.253  1.00 22.85           C
ATOM   2305  CG  TYR A 243      6.883  -1.601  -3.360  1.00 20.92           C
ATOM   2306  CD1 TYR A 243      6.248  -2.423  -4.315  1.00 18.97           C
ATOM   2307  CD2 TYR A 243      6.086  -0.820  -2.496  1.00 20.38           C
ATOM   2308  CE1 TYR A 243      4.850  -2.418  -4.450  1.00 18.11           C
ATOM   2309  CE2 TYR A 243      4.683  -0.830  -2.614  1.00 20.28           C
ATOM   2310  CZ  TYR A 243      4.067  -1.617  -3.601  1.00 19.55           C
ATOM   2311  OH  TYR A 243      2.713  -1.599  -3.743  1.00 19.44           O
ATOM   2312  H   TYR A 243      8.239  -4.490  -3.566  1.00  0.00           H
ATOM   2313  HA  TYR A 243     10.137  -2.539  -2.456  1.00  0.00           H
ATOM   2314  HB2 TYR A 243      8.691  -0.700  -2.654  1.00  0.00           H
ATOM   2315  HB3 TYR A 243      8.822  -1.359  -4.240  1.00  0.00           H
ATOM   2316  HD1 TYR A 243      6.819  -3.075  -4.951  1.00  0.00           H
ATOM   2317  HD2 TYR A 243      6.544  -0.214  -1.733  1.00  0.00           H
ATOM   2318  HE1 TYR A 243      4.388  -3.050  -5.197  1.00  0.00           H
ATOM   2319  HE2 TYR A 243      4.075  -0.225  -1.957  1.00  0.00           H
ATOM   2320  HH  TYR A 243      2.262  -1.198  -2.971  1.00  0.00           H
ATOM   2321  N   TRP A 244      9.059  -2.808  -0.205  1.00 20.85           N
ATOM   2322  CA  TRP A 244      8.401  -2.764   1.091  1.00 20.48           C
ATOM   2323  C   TRP A 244      8.063  -1.289   1.311  1.00 21.37           C
ATOM   2324  O   TRP A 244      8.958  -0.488   1.578  1.00 18.99           O
ATOM   2325  CB  TRP A 244      9.351  -3.249   2.202  1.00 20.36           C
ATOM   2326  CG  TRP A 244      8.729  -3.624   3.512  1.00 22.78           C
ATOM   2327  CD1 TRP A 244      7.538  -3.217   4.014  1.00 24.36           C
ATOM   2328  CD2 TRP A 244      9.267  -4.565   4.480  1.00 23.95           C
ATOM   2329  NE1 TRP A 244      7.313  -3.838   5.224  1.00 23.22           N
ATOM   2330  CE3 TRP A 244     10.438  -5.353   4.532  1.00 24.80           C
ATOM   2331  CE2 TRP A 244      8.345  -4.686   5.562  1.00 24.71           C
ATOM   2332  CZ3 TRP A 244     10.674  -6.232   5.603  1.00 26.03           C
ATOM   2333  CZ2 TRP A 244      8.572  -5.554   6.642  1.00 26.18           C
ATOM   2334  CH2 TRP A 244      9.735  -6.343   6.645  1.00 24.87           C
ATOM   2335  H   TRP A 244      9.964  -2.350  -0.281  1.00  0.00           H
ATOM   2336  HA  TRP A 244      7.523  -3.399   1.107  1.00  0.00           H
ATOM   2337  HB2 TRP A 244      9.865  -4.139   1.856  1.00  0.00           H
ATOM   2338  HB3 TRP A 244     10.144  -2.545   2.422  1.00  0.00           H
ATOM   2339  HD1 TRP A 244      6.855  -2.535   3.528  1.00  0.00           H
ATOM   2340  HE1 TRP A 244      6.431  -3.755   5.718  1.00  0.00           H
ATOM   2341  HE3 TRP A 244     11.161  -5.280   3.734  1.00  0.00           H
ATOM   2342  HZ3 TRP A 244     11.579  -6.821   5.614  1.00  0.00           H
ATOM   2343  HZ2 TRP A 244      7.854  -5.644   7.442  1.00  0.00           H
ATOM   2344  HH2 TRP A 244      9.913  -7.035   7.450  1.00  0.00           H
ATOM   2345  N   ARG A 245      6.793  -0.900   1.182  1.00 21.39           N
ATOM   2346  CA  ARG A 245      6.372   0.454   1.518  1.00 21.27           C
ATOM   2347  C   ARG A 245      6.314   0.587   3.044  1.00 18.90           C
ATOM   2348  O   ARG A 245      5.531  -0.102   3.699  1.00 20.72           O
ATOM   2349  CB  ARG A 245      5.009   0.785   0.888  1.00 22.80           C
ATOM   2350  CG  ARG A 245      4.507   2.197   1.249  1.00 24.05           C
ATOM   2351  CD  ARG A 245      3.550   2.756   0.207  1.00 22.81           C
ATOM   2352  NE  ARG A 245      2.802   3.839   0.831  1.00 24.70           N
ATOM   2353  CZ  ARG A 245      1.580   4.193   0.395  1.00 24.50           C
ATOM   2354  NH1 ARG A 245      1.238   3.881  -0.847  1.00 21.87           N
ATOM   2355  NH2 ARG A 245      0.772   4.864   1.206  1.00 25.57           N1+
ATOM   2356  H   ARG A 245      6.095  -1.615   0.977  1.00  0.00           H
ATOM   2357  HA  ARG A 245      7.095   1.163   1.119  1.00  0.00           H
ATOM   2358  HB2 ARG A 245      5.119   0.717  -0.191  1.00  0.00           H
ATOM   2359  HB3 ARG A 245      4.255   0.046   1.167  1.00  0.00           H
ATOM   2360  HG2 ARG A 245      4.037   2.167   2.236  1.00  0.00           H
ATOM   2361  HG3 ARG A 245      5.357   2.882   1.330  1.00  0.00           H
ATOM   2362  HD2 ARG A 245      4.130   3.106  -0.651  1.00  0.00           H
ATOM   2363  HD3 ARG A 245      2.873   1.960  -0.108  1.00  0.00           H
ATOM   2364  HE  ARG A 245      3.039   4.113   1.771  1.00  0.00           H
ATOM   2365 HH11 ARG A 245      1.925   3.556  -1.526  1.00  0.00           H
ATOM   2366 HH12 ARG A 245      0.266   4.047  -1.184  1.00  0.00           H
ATOM   2367 HH21 ARG A 245      0.962   4.924   2.205  1.00  0.00           H
ATOM   2368 HH22 ARG A 245     -0.139   5.208   0.912  1.00  0.00           H
ATOM   2369  N   VAL A 246      7.143   1.484   3.583  1.00 18.37           N
ATOM   2370  CA  VAL A 246      7.185   1.856   4.985  1.00 17.88           C
ATOM   2371  C   VAL A 246      6.870   3.359   5.036  1.00 17.66           C
ATOM   2372  O   VAL A 246      7.549   4.178   4.410  1.00 16.95           O
ATOM   2373  CB  VAL A 246      8.565   1.499   5.605  1.00 20.27           C
ATOM   2374  CG1 VAL A 246      8.605   1.812   7.113  1.00 18.44           C
ATOM   2375  CG2 VAL A 246      8.959   0.025   5.373  1.00 22.05           C
ATOM   2376  H   VAL A 246      7.769   1.988   2.955  1.00  0.00           H
ATOM   2377  HA  VAL A 246      6.411   1.316   5.536  1.00  0.00           H
ATOM   2378  HB  VAL A 246      9.329   2.108   5.117  1.00  0.00           H
ATOM   2379 HG11 VAL A 246      9.549   1.500   7.557  1.00  0.00           H
ATOM   2380 HG12 VAL A 246      8.497   2.880   7.299  1.00  0.00           H
ATOM   2381 HG13 VAL A 246      7.808   1.294   7.646  1.00  0.00           H
ATOM   2382 HG21 VAL A 246      9.912  -0.211   5.848  1.00  0.00           H
ATOM   2383 HG22 VAL A 246      8.209  -0.660   5.769  1.00  0.00           H
ATOM   2384 HG23 VAL A 246      9.078  -0.199   4.312  1.00  0.00           H
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ATOM   2385  N   GLU A 247      5.823   3.720   5.777  1.00 18.37           N
ATOM   2386  CA  GLU A 247      5.406   5.097   6.029  1.00 17.71           C
ATOM   2387  C   GLU A 247      6.046   5.605   7.345  1.00 18.77           C
ATOM   2388  O   GLU A 247      6.575   4.804   8.129  1.00 19.80           O
ATOM   2389  CB  GLU A 247      3.859   5.084   6.151  1.00 17.17           C
ATOM   2390  CG  GLU A 247      3.186   5.293   4.789  1.00 16.44           C
ATOM   2391  CD  GLU A 247      1.784   5.884   4.837  1.00 20.59           C
ATOM   2392  OE1 GLU A 247      1.619   6.843   5.638  1.00 21.32           O
ATOM   2393  OE2 GLU A 247      0.940   5.454   4.019  1.00 23.91           O1-
ATOM   2394  H   GLU A 247      5.315   2.989   6.251  1.00  0.00           H
ATOM   2395  HA  GLU A 247      5.742   5.754   5.226  1.00  0.00           H
ATOM   2396  HB2 GLU A 247      3.508   4.148   6.590  1.00  0.00           H
ATOM   2397  HB3 GLU A 247      3.546   5.847   6.866  1.00  0.00           H
ATOM   2398  HG2 GLU A 247      3.764   6.026   4.223  1.00  0.00           H
ATOM   2399  HG3 GLU A 247      3.220   4.352   4.243  1.00  0.00           H
ATOM   2400  N   PRO A 248      6.017   6.928   7.619  1.00 19.92           N
ATOM   2401  CA  PRO A 248      6.496   7.494   8.884  1.00 20.59           C
ATOM   2402  C   PRO A 248      5.520   7.223  10.043  1.00 20.76           C
ATOM   2403  O   PRO A 248      4.317   7.076   9.822  1.00 20.31           O
ATOM   2404  CB  PRO A 248      6.647   8.996   8.611  1.00 22.82           C
ATOM   2405  CG  PRO A 248      5.649   9.287   7.504  1.00 21.16           C
ATOM   2406  CD  PRO A 248      5.546   7.982   6.719  1.00 20.35           C
ATOM   2407  HA  PRO A 248      7.462   7.059   9.119  1.00  0.00           H
ATOM   2408  HB2 PRO A 248      6.492   9.625   9.490  1.00  0.00           H
ATOM   2409  HB3 PRO A 248      7.650   9.200   8.240  1.00  0.00           H
ATOM   2410  HG2 PRO A 248      4.681   9.536   7.937  1.00  0.00           H
ATOM   2411  HG3 PRO A 248      5.950  10.120   6.871  1.00  0.00           H
ATOM   2412  HD2 PRO A 248      4.521   7.825   6.382  1.00  0.00           H
ATOM   2413  HD3 PRO A 248      6.191   8.025   5.840  1.00  0.00           H
ATOM   2414  N   ASP A 249      6.052   7.141  11.272  1.00 20.20           N
ATOM   2415  CA  ASP A 249      5.336   6.956  12.543  1.00 19.81           C
ATOM   2416  C   ASP A 249      4.883   5.503  12.770  1.00 20.04           C
ATOM   2417  O   ASP A 249      3.980   5.248  13.566  1.00 20.11           O
ATOM   2418  CB  ASP A 249      4.250   8.039  12.818  1.00  0.00           C
ATOM   2419  CG  ASP A 249      4.749   9.198  13.678  1.00  0.00           C
ATOM   2420  OD1 ASP A 249      5.137   9.077  14.839  1.00  0.00           O
ATOM   2421  OD2 ASP A 249      4.715  10.388  13.024  1.00  0.00           O
ATOM   2422  H   ASP A 249      7.058   7.214  11.358  1.00  0.00           H
ATOM   2423  HA  ASP A 249      6.105   7.070  13.308  1.00  0.00           H
ATOM   2424  HB2 ASP A 249      3.794   8.422  11.906  1.00  0.00           H
ATOM   2425  HB3 ASP A 249      3.420   7.622  13.385  1.00  0.00           H
ATOM   2426  HD2 ASP A 249      4.887  11.122  13.625  1.00  0.00           H
ATOM   2427  N   ILE A 250      5.498   4.540  12.073  1.00 19.14           N
ATOM   2428  CA  ILE A 250      5.152   3.122  12.123  1.00 20.37           C
ATOM   2429  C   ILE A 250      5.846   2.443  13.318  1.00 19.83           C
ATOM   2430  O   ILE A 250      6.877   2.897  13.825  1.00 20.11           O
ATOM   2431  CB  ILE A 250      5.498   2.472  10.735  1.00 21.38           C
ATOM   2432  CG1 ILE A 250      4.244   2.394   9.842  1.00 23.63           C
ATOM   2433  CG2 ILE A 250      6.171   1.078  10.748  1.00 22.17           C
ATOM   2434  CD1 ILE A 250      3.561   3.732   9.555  1.00 20.80           C
ATOM   2435  H   ILE A 250      6.306   4.795  11.516  1.00  0.00           H
ATOM   2436  HA  ILE A 250      4.079   3.039  12.296  1.00  0.00           H
ATOM   2437  HB  ILE A 250      6.201   3.113  10.214  1.00  0.00           H
ATOM   2438 HG12 ILE A 250      4.512   1.945   8.886  1.00  0.00           H
ATOM   2439 HG13 ILE A 250      3.514   1.728  10.304  1.00  0.00           H
ATOM   2440 HG21 ILE A 250      6.401   0.747   9.735  1.00  0.00           H
ATOM   2441 HG22 ILE A 250      7.116   1.080  11.291  1.00  0.00           H
ATOM   2442 HG23 ILE A 250      5.526   0.322  11.196  1.00  0.00           H
ATOM   2443 HD11 ILE A 250      2.766   3.595   8.824  1.00  0.00           H
ATOM   2444 HD12 ILE A 250      3.121   4.168  10.451  1.00  0.00           H
ATOM   2445 HD13 ILE A 250      4.256   4.461   9.152  1.00  0.00           H
ATOM   2446  N   LYS A 251      5.241   1.332  13.747  1.00 20.52           N
ATOM   2447  CA  LYS A 251      5.734   0.375  14.724  1.00 20.36           C
ATOM   2448  C   LYS A 251      5.635  -1.007  14.056  1.00 21.67           C
ATOM   2449  O   LYS A 251      4.622  -1.287  13.410  1.00 19.23           O
ATOM   2450  CB  LYS A 251      4.863   0.441  16.004  1.00 20.47           C
ATOM   2451  CG  LYS A 251      4.649   1.858  16.593  1.00 20.09           C
ATOM   2452  CD  LYS A 251      3.484   1.935  17.594  1.00 22.23           C
ATOM   2453  CE  LYS A 251      3.846   1.578  19.038  1.00 20.07           C
ATOM   2454  NZ  LYS A 251      2.630   1.322  19.831  1.00 21.10           N1+
ATOM   2455  H   LYS A 251      4.387   1.059  13.271  1.00  0.00           H
ATOM   2456  HA  LYS A 251      6.774   0.590  14.958  1.00  0.00           H
ATOM   2457  HB2 LYS A 251      3.892   0.003  15.774  1.00  0.00           H
ATOM   2458  HB3 LYS A 251      5.294  -0.210  16.767  1.00  0.00           H
ATOM   2459  HG2 LYS A 251      5.571   2.240  17.031  1.00  0.00           H
ATOM   2460  HG3 LYS A 251      4.397   2.554  15.795  1.00  0.00           H
ATOM   2461  HD2 LYS A 251      3.088   2.951  17.596  1.00  0.00           H
ATOM   2462  HD3 LYS A 251      2.667   1.305  17.252  1.00  0.00           H
ATOM   2463  HE2 LYS A 251      4.500   0.709  19.060  1.00  0.00           H
ATOM   2464  HE3 LYS A 251      4.405   2.400  19.484  1.00  0.00           H
ATOM   2465  HZ1 LYS A 251      1.960   2.086  19.685  1.00  0.00           H
ATOM   2466  HZ2 LYS A 251      2.160   0.469  19.533  1.00  0.00           H
ATOM   2467  HZ3 LYS A 251      2.824   1.281  20.828  1.00  0.00           H
ATOM   2468  N   LEU A 252      6.652  -1.862  14.213  1.00 19.01           N
ATOM   2469  CA  LEU A 252      6.580  -3.299  13.950  1.00 20.86           C
ATOM   2470  C   LEU A 252      6.746  -3.951  15.317  1.00 19.45           C
ATOM   2471  O   LEU A 252      7.794  -3.800  15.934  1.00 21.96           O
ATOM   2472  CB  LEU A 252      7.738  -3.775  13.036  1.00 21.87           C
ATOM   2473  CG  LEU A 252      7.394  -3.877  11.537  1.00 22.64           C
ATOM   2474  CD1 LEU A 252      8.658  -4.225  10.742  1.00 23.58           C
ATOM   2475  CD2 LEU A 252      6.320  -4.941  11.262  1.00 23.00           C
ATOM   2476  H   LEU A 252      7.398  -1.598  14.846  1.00  0.00           H
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ATOM   2477  HA  LEU A 252       5.611  -3.589  13.547  1.00  0.00           H
ATOM   2478  HB2 LEU A 252       8.605  -3.130  13.180  1.00  0.00           H
ATOM   2479  HB3 LEU A 252       8.077  -4.767  13.350  1.00  0.00           H
ATOM   2480  HG  LEU A 252       7.028  -2.907  11.196  1.00  0.00           H
ATOM   2481 HD11 LEU A 252       8.474  -4.216   9.666  1.00  0.00           H
ATOM   2482 HD12 LEU A 252       9.451  -3.515  10.952  1.00  0.00           H
ATOM   2483 HD13 LEU A 252       9.035  -5.214  11.007  1.00  0.00           H
ATOM   2484 HD21 LEU A 252       6.154  -5.076  10.194  1.00  0.00           H
ATOM   2485 HD22 LEU A 252       6.616  -5.908  11.673  1.00  0.00           H
ATOM   2486 HD23 LEU A 252       5.359  -4.685  11.700  1.00  0.00           H
ATOM   2487  N   TYR A 253      5.719  -4.641  15.800  1.00 20.60           N
ATOM   2488  CA  TYR A 253      5.698  -5.198  17.144  1.00 20.37           C
ATOM   2489  C   TYR A 253      6.317  -6.597  17.150  1.00 19.45           C
ATOM   2490  O   TYR A 253      7.096  -6.918  18.041  1.00 22.46           O
ATOM   2491  CB  TYR A 253      4.231  -5.342  17.573  1.00 19.57           C
ATOM   2492  CG  TYR A 253      3.474  -4.033  17.696  1.00 20.14           C
ATOM   2493  CD1 TYR A 253      3.956  -3.025  18.552  1.00 20.07           C
ATOM   2494  CD2 TYR A 253      2.238  -3.855  17.041  1.00 19.83           C
ATOM   2495  CE1 TYR A 253      3.181  -1.880  18.791  1.00 20.33           C
ATOM   2496  CE2 TYR A 253      1.463  -2.710  17.285  1.00 19.82           C
ATOM   2497  CZ  TYR A 253      1.929  -1.721  18.171  1.00 18.82           C
ATOM   2498  OH  TYR A 253      1.160  -0.629  18.448  1.00 18.72           O
ATOM   2499  H   TYR A 253      4.922  -4.817  15.197  1.00  0.00           H
ATOM   2500  HA  TYR A 253      6.245  -4.566  17.848  1.00  0.00           H
ATOM   2501  HB2 TYR A 253      3.692  -6.012  16.902  1.00  0.00           H
ATOM   2502  HB3 TYR A 253      4.194  -5.823  18.550  1.00  0.00           H
ATOM   2503  HD1 TYR A 253      4.888  -3.146  19.088  1.00  0.00           H
ATOM   2504  HD2 TYR A 253      1.828  -4.629  16.411  1.00  0.00           H
ATOM   2505  HE1 TYR A 253      3.541  -1.172  19.514  1.00  0.00           H
ATOM   2506  HE2 TYR A 253      0.494  -2.625  16.817  1.00  0.00           H
ATOM   2507  HH  TYR A 253      0.218  -0.830  18.271  1.00  0.00           H
ATOM   2508  N   CYS A 254      5.994  -7.430  16.157  1.00 22.80           N
ATOM   2509  CA  CYS A 254      6.539  -8.779  16.048  1.00 23.68           C
ATOM   2510  C   CYS A 254      7.853  -8.703  15.274  1.00 22.63           C
ATOM   2511  O   CYS A 254      7.957  -7.999  14.266  1.00 23.04           O
ATOM   2512  CB  CYS A 254      5.573  -9.677  15.265  1.00 23.53           C
ATOM   2513  SG  CYS A 254      3.929  -9.847  16.015  1.00 25.59           S
ATOM   2514  H   CYS A 254      5.455  -7.071  15.381  1.00  0.00           H
ATOM   2515  HA  CYS A 254      6.711  -9.211  17.033  1.00  0.00           H
ATOM   2516  HB2 CYS A 254      5.446  -9.296  14.252  1.00  0.00           H
ATOM   2517  HB3 CYS A 254      5.994 -10.679  15.152  1.00  0.00           H
ATOM   2518  N   ASP A 255      8.852  -9.434  15.766  1.00 22.72           N
ATOM   2519  CA  ASP A 255     10.121  -9.701  15.110  1.00 23.70           C
ATOM   2520  C   ASP A 255      9.848 -10.645  13.950  1.00 24.37           C
ATOM   2521  O   ASP A 255      9.390 -11.766  14.151  1.00 24.71           O
ATOM   2522  CB  ASP A 255     11.089 -10.395  16.095  1.00 25.02           C
ATOM   2523  CG  ASP A 255     12.028  -9.409  16.749  1.00 25.86           C
ATOM   2524  OD1 ASP A 255     11.659  -8.855  17.812  1.00 25.31           O
ATOM   2525  OD2 ASP A 255     13.104  -9.219  16.143  1.00 30.23           O1-
ATOM   2526  H   ASP A 255      8.608 -10.073  16.525  1.00  0.00           H
ATOM   2527  HA  ASP A 255     10.551  -8.775  14.724  1.00  0.00           H
ATOM   2528  HB2 ASP A 255     10.553 -10.952  16.863  1.00  0.00           H
ATOM   2529  HB3 ASP A 255     11.707 -11.135  15.589  1.00  0.00           H
ATOM   2530  N   ILE A 256     10.135 -10.186  12.736  1.00 23.24           N
ATOM   2531  CA  ILE A 256      9.968 -10.956  11.520  1.00 25.08           C
ATOM   2532  C   ILE A 256     11.300 -11.711  11.394  1.00 24.17           C
ATOM   2533  O   ILE A 256     12.370 -11.104  11.287  1.00 23.01           O
ATOM   2534  CB  ILE A 256      9.724  -9.988  10.332  1.00 24.13           C
ATOM   2535  CG1 ILE A 256      8.592  -8.970  10.633  1.00 24.74           C
ATOM   2536  CG2 ILE A 256      9.399 -10.781   9.049  1.00 23.47           C
ATOM   2537  CD1 ILE A 256      8.485  -7.827   9.620  1.00 24.32           C
ATOM   2538  H   ILE A 256     10.569  -9.277  12.642  1.00  0.00           H
ATOM   2539  HA  ILE A 256      9.125 -11.647  11.610  1.00  0.00           H
ATOM   2540  HB  ILE A 256     10.639  -9.424  10.160  1.00  0.00           H
ATOM   2541 HG12 ILE A 256      7.643  -9.497  10.704  1.00  0.00           H
ATOM   2542 HG13 ILE A 256      8.729  -8.495  11.604  1.00  0.00           H
ATOM   2543 HG21 ILE A 256      9.300 -10.122   8.191  1.00  0.00           H
ATOM   2544 HG22 ILE A 256     10.178 -11.502   8.799  1.00  0.00           H
ATOM   2545 HG23 ILE A 256      8.463 -11.334   9.144  1.00  0.00           H
ATOM   2546 HD11 ILE A 256      7.671  -7.154   9.886  1.00  0.00           H
ATOM   2547 HD12 ILE A 256      9.405  -7.243   9.604  1.00  0.00           H
ATOM   2548 HD13 ILE A 256      8.283  -8.191   8.614  1.00  0.00           H
ATOM   2549  N   ASN A 257     11.240 -13.035  11.538  1.00 25.64           N
ATOM   2550  CA  ASN A 257     12.402 -13.909  11.724  1.00 27.73           C
ATOM   2551  C   ASN A 257     12.635 -14.773  10.481  1.00 27.85           C
ATOM   2552  O   ASN A 257     13.109 -15.904  10.561  1.00 27.48           O
ATOM   2553  CB  ASN A 257     12.271 -14.724  13.031  1.00 29.60           C
ATOM   2554  CG  ASN A 257     12.374 -13.840  14.276  1.00 31.61           C
ATOM   2555  OD1 ASN A 257     13.297 -13.032  14.399  1.00 33.94           O
ATOM   2556  ND2 ASN A 257     11.406 -13.918  15.179  1.00 33.79           N
ATOM   2557  H   ASN A 257     10.325 -13.446  11.670  1.00  0.00           H
ATOM   2558  HA  ASN A 257     13.311 -13.312  11.810  1.00  0.00           H
ATOM   2559  HB2 ASN A 257     11.337 -15.288  13.036  1.00  0.00           H
ATOM   2560  HB3 ASN A 257     13.073 -15.460  13.100  1.00  0.00           H
ATOM   2561 HD21 ASN A 257     10.556 -14.458  14.989  1.00  0.00           H
ATOM   2562 HD22 ASN A 257     11.437 -13.348  16.006  1.00  0.00           H
ATOM   2563  N   TYR A 258     12.338 -14.198   9.316  1.00 29.16           N
ATOM   2564  CA  TYR A 258     12.630 -14.695   7.986  1.00 29.16           C
ATOM   2565  C   TYR A 258     12.796 -13.480   7.065  1.00 28.34           C
ATOM   2566  O   TYR A 258     12.292 -12.395   7.364  1.00 28.39           O
ATOM   2567  CB  TYR A 258     11.570 -15.720   7.528  1.00 29.46           C
ATOM   2568  CG  TYR A 258     10.161 -15.170   7.390  1.00 30.02           C
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ATOM   2569  CD1 TYR A 258       9.307 -15.118   8.512  1.00 31.04          C
ATOM   2570  CD2 TYR A 258       9.704 -14.694   6.143  1.00 30.30          C
ATOM   2571  CE1 TYR A 258       8.012 -14.582   8.391  1.00 29.83          C
ATOM   2572  CE2 TYR A 258       8.403 -14.171   6.020  1.00 30.49          C
ATOM   2573  CZ  TYR A 258       7.562 -14.109   7.144  1.00 31.23          C
ATOM   2574  OH  TYR A 258       6.315 -13.584   7.014  1.00 30.56          O
ATOM   2575  H   TYR A 258      11.983 -13.250   9.326  1.00  0.00          H
ATOM   2576  HA  TYR A 258      13.598 -15.198   8.024  1.00  0.00          H
ATOM   2577  HB2 TYR A 258      11.869 -16.144   6.569  1.00  0.00          H
ATOM   2578  HB3 TYR A 258      11.550 -16.561   8.222  1.00  0.00          H
ATOM   2579  HD1 TYR A 258       9.643 -15.481   9.472  1.00  0.00          H
ATOM   2580  HD2 TYR A 258      10.347 -14.721   5.277  1.00  0.00          H
ATOM   2581  HE1 TYR A 258       7.361 -14.535   9.253  1.00  0.00          H
ATOM   2582  HE2 TYR A 258       8.043 -13.817   5.067  1.00  0.00          H
ATOM   2583  HH  TYR A 258       5.803 -13.577   7.852  1.00  0.00          H
ATOM   2584  N   ASP A 259      13.492 -13.656   5.939  1.00 26.74          N
ATOM   2585  CA  ASP A 259      13.635 -12.637   4.903  1.00 25.98          C
ATOM   2586  C   ASP A 259      12.372 -12.701   4.031  1.00 26.85          C
ATOM   2587  O   ASP A 259      12.137 -13.708   3.359  1.00 26.32          O
ATOM   2588  CB  ASP A 259      14.898 -12.964   4.078  1.00 24.33          C
ATOM   2589  CG  ASP A 259      15.209 -11.967   2.966  1.00 23.76          C
ATOM   2590  OD1 ASP A 259      14.362 -11.716   2.079  1.00 24.79          O
ATOM   2591  OD2 ASP A 259      16.339 -11.438   2.972  1.00 24.27          O1-
ATOM   2592  H   ASP A 259      13.858 -14.571   5.738  1.00  0.00          H
ATOM   2593  HA  ASP A 259      13.744 -11.646   5.349  1.00  0.00          H
ATOM   2594  HB2 ASP A 259      15.759 -12.996   4.739  1.00  0.00          H
ATOM   2595  HB3 ASP A 259      14.836 -13.965   3.659  1.00  0.00          H
ATOM   2596  N   VAL A 260      11.535 -11.659   4.096  1.00 27.13          N
ATOM   2597  CA  VAL A 260      10.207 -11.619   3.488  1.00 26.80          C
ATOM   2598  C   VAL A 260      10.230 -11.787   1.957  1.00 26.31          C
ATOM   2599  O   VAL A 260       9.451 -12.574   1.428  1.00 25.15          O
ATOM   2600  CB  VAL A 260       9.445 -10.341   3.933  1.00 27.92          C
ATOM   2601  CG1 VAL A 260       9.188 -10.347   5.449  1.00 27.39          C
ATOM   2602  CG2 VAL A 260      10.101  -9.012   3.511  1.00 30.01          C
ATOM   2603  H   VAL A 260      11.763 -10.918   4.739  1.00  0.00          H
ATOM   2604  HA  VAL A 260       9.660 -12.479   3.877  1.00  0.00          H
ATOM   2605  HB  VAL A 260       8.463 -10.375   3.457  1.00  0.00          H
ATOM   2606 HG11 VAL A 260       8.595  -9.485   5.756  1.00  0.00          H
ATOM   2607 HG12 VAL A 260       8.637 -11.237   5.756  1.00  0.00          H
ATOM   2608 HG13 VAL A 260      10.119 -10.326   6.016  1.00  0.00          H
ATOM   2609 HG21 VAL A 260       9.512  -8.164   3.862  1.00  0.00          H
ATOM   2610 HG22 VAL A 260      11.108  -8.901   3.913  1.00  0.00          H
ATOM   2611 HG23 VAL A 260      10.154  -8.912   2.428  1.00  0.00          H
ATOM   2612  N   PHE A 261      11.140 -11.120   1.237  1.00 25.12          N
ATOM   2613  CA  PHE A 261      11.169 -11.161  -0.228  1.00 24.42          C
ATOM   2614  C   PHE A 261      11.853 -12.434  -0.738  1.00 26.37          C
ATOM   2615  O   PHE A 261      11.473 -12.942  -1.790  1.00 26.96          O
ATOM   2616  CB  PHE A 261      11.911  -9.937  -0.780  1.00 24.90          C
ATOM   2617  CG  PHE A 261      11.185  -8.635  -0.528  1.00 24.87          C
ATOM   2618  CD1 PHE A 261       9.982  -8.373  -1.210  1.00 23.69          C
ATOM   2619  CD2 PHE A 261      11.691  -7.696   0.394  1.00 24.07          C
ATOM   2620  CE1 PHE A 261       9.268  -7.190  -0.953  1.00 23.05          C
ATOM   2621  CE2 PHE A 261      10.979  -6.513   0.652  1.00 26.09          C
ATOM   2622  CZ  PHE A 261       9.761  -6.273  -0.012  1.00 24.79          C
ATOM   2623  H   PHE A 261      11.830 -10.565   1.722  1.00  0.00          H
ATOM   2624  HA  PHE A 261      10.149 -11.157  -0.618  1.00  0.00          H
ATOM   2625  HB2 PHE A 261      12.914  -9.880  -0.375  1.00  0.00          H
ATOM   2626  HB3 PHE A 261      12.028 -10.034  -1.858  1.00  0.00          H
ATOM   2627  HD1 PHE A 261       9.601  -9.091  -1.919  1.00  0.00          H
ATOM   2628  HD2 PHE A 261      12.617  -7.878   0.914  1.00  0.00          H
ATOM   2629  HE1 PHE A 261       8.334  -6.987  -1.458  1.00  0.00          H
ATOM   2630  HE2 PHE A 261      11.365  -5.797   1.362  1.00  0.00          H
ATOM   2631  HZ  PHE A 261       9.186  -5.391   0.206  1.00  0.00          H
ATOM   2632  N   LYS A 262      12.787 -13.014   0.032  1.00 25.29          N
ATOM   2633  CA  LYS A 262      13.322 -14.348  -0.221  1.00 27.76          C
ATOM   2634  C   LYS A 262      12.247 -15.430   0.002  1.00 27.08          C
ATOM   2635  O   LYS A 262      12.370 -16.487  -0.606  1.00 27.65          O
ATOM   2636  CB  LYS A 262      14.516 -14.587   0.728  1.00 27.98          C
ATOM   2637  CG  LYS A 262      15.218 -15.965   0.714  1.00 31.68          C
ATOM   2638  CD  LYS A 262      16.082 -16.260  -0.527  1.00 35.77          C
ATOM   2639  CE  LYS A 262      15.601 -17.462  -1.364  1.00 38.98          C
ATOM   2640  NZ  LYS A 262      14.469 -17.111  -2.226  1.00 38.71          N1+
ATOM   2641  H   LYS A 262      13.107 -12.531   0.875  1.00  0.00          H
ATOM   2642  HA  LYS A 262      13.662 -14.397  -1.257  1.00  0.00          H
ATOM   2643  HB2 LYS A 262      15.261 -13.805   0.579  1.00  0.00          H
ATOM   2644  HB3 LYS A 262      14.131 -14.448   1.733  1.00  0.00          H
ATOM   2645  HG2 LYS A 262      15.879 -15.984   1.582  1.00  0.00          H
ATOM   2646  HG3 LYS A 262      14.510 -16.773   0.907  1.00  0.00          H
ATOM   2647  HD2 LYS A 262      16.193 -15.366  -1.141  1.00  0.00          H
ATOM   2648  HD3 LYS A 262      17.091 -16.490  -0.182  1.00  0.00          H
ATOM   2649  HE2 LYS A 262      16.407 -17.813  -2.006  1.00  0.00          H
ATOM   2650  HE3 LYS A 262      15.323 -18.304  -0.728  1.00  0.00          H
ATOM   2651  HZ1 LYS A 262      14.103 -17.966  -2.697  1.00  0.00          H
ATOM   2652  HZ2 LYS A 262      13.669 -16.790  -1.686  1.00  0.00          H
ATOM   2653  HZ3 LYS A 262      14.727 -16.435  -2.938  1.00  0.00          H
ATOM   2654  N   TRP A 263      11.241 -15.190   0.854  1.00 26.32          N
ATOM   2655  CA  TRP A 263      10.185 -16.138   1.212  1.00 26.06          C
ATOM   2656  C   TRP A 263       8.955 -15.989   0.292  1.00 28.00          C
ATOM   2657  O   TRP A 263       8.460 -16.994  -0.222  1.00 26.85          O
ATOM   2658  CB  TRP A 263       9.778 -15.851   2.674  1.00 25.69          C
ATOM   2659  CG  TRP A 263       8.727 -16.726   3.291  1.00 24.08          C
ATOM   2660  CD1 TRP A 263       8.953 -17.900   3.924  1.00 24.32          C
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ATOM   2661  CD2 TRP A 263       7.288 -16.490   3.386  1.00 24.24           C
ATOM   2662  NE1 TRP A 263       7.756 -18.412   4.385  1.00 24.75           N
ATOM   2663  CE3 TRP A 263       6.420 -15.461   2.956  1.00 25.60           C
ATOM   2664  CE2 TRP A 263       6.695 -17.580   4.091  1.00 24.89           C
ATOM   2665  CZ3 TRP A 263       5.033 -15.514   3.202  1.00 24.08           C
ATOM   2666  CZ2 TRP A 263       5.313 -17.648   4.344  1.00 24.80           C
ATOM   2667  CH2 TRP A 263       4.479 -16.608   3.893  1.00 25.33           C
ATOM   2668  H   TRP A 263      11.270 -14.313   1.361  1.00  0.00           H
ATOM   2669  HA  TRP A 263      10.557 -17.162   1.139  1.00  0.00           H
ATOM   2670  HB2 TRP A 263      10.667 -15.952   3.297  1.00  0.00           H
ATOM   2671  HB3 TRP A 263       9.454 -14.818   2.797  1.00  0.00           H
ATOM   2672  HD1 TRP A 263       9.930 -18.344   4.053  1.00  0.00           H
ATOM   2673  HE1 TRP A 263       7.684 -19.253   4.941  1.00  0.00           H
ATOM   2674  HE3 TRP A 263       6.831 -14.613   2.438  1.00  0.00           H
ATOM   2675  HZ3 TRP A 263       4.394 -14.707   2.870  1.00  0.00           H
ATOM   2676  HZ2 TRP A 263       4.892 -18.487   4.877  1.00  0.00           H
ATOM   2677  HH2 TRP A 263       3.417 -16.643   4.085  1.00  0.00           H
ATOM   2678  N   MET A 264       8.470 -14.757   0.061  1.00 26.69           N
ATOM   2679  CA  MET A 264       7.254 -14.428  -0.705  1.00 27.66           C
ATOM   2680  C   MET A 264       7.328 -14.926  -2.160  1.00 28.61           C
ATOM   2681  O   MET A 264       6.341 -15.395  -2.728  1.00 28.17           O
ATOM   2682  CB  MET A 264       7.048 -12.894  -0.717  1.00 26.75           C
ATOM   2683  CG  MET A 264       6.486 -12.283   0.578  1.00 27.80           C
ATOM   2684  SD  MET A 264       4.699 -12.457   0.807  1.00 32.27           S
ATOM   2685  CE  MET A 264       4.118 -11.130  -0.283  1.00 29.89           C
ATOM   2686  H   MET A 264       8.925 -13.982   0.542  1.00  0.00           H
ATOM   2687  HA  MET A 264       6.394 -14.909  -0.234  1.00  0.00           H
ATOM   2688  HB2 MET A 264       7.996 -12.410  -0.958  1.00  0.00           H
ATOM   2689  HB3 MET A 264       6.378 -12.619  -1.531  1.00  0.00           H
ATOM   2690  HG2 MET A 264       6.975 -12.709   1.449  1.00  0.00           H
ATOM   2691  HG3 MET A 264       6.720 -11.219   0.605  1.00  0.00           H
ATOM   2692  HE1 MET A 264       3.031 -11.148  -0.348  1.00  0.00           H
ATOM   2693  HE2 MET A 264       4.431 -10.161   0.104  1.00  0.00           H
ATOM   2694  HE3 MET A 264       4.517 -11.235  -1.289  1.00  0.00           H
ATOM   2695  N   GLN A 265       8.534 -14.850  -2.734  1.00 28.33           N
ATOM   2696  CA  GLN A 265       8.886 -15.235  -4.094  1.00 30.41           C
ATOM   2697  C   GLN A 265       8.729 -16.752  -4.339  1.00 30.83           C
ATOM   2698  O   GLN A 265       8.360 -17.159  -5.443  1.00 30.37           O
ATOM   2699  CB  GLN A 265      10.340 -14.769  -4.297  1.00 27.86           C
ATOM   2700  CG  GLN A 265      10.917 -14.916  -5.716  1.00 30.57           C
ATOM   2701  CD  GLN A 265      12.436 -14.810  -5.684  1.00 32.16           C
ATOM   2702  OE1 GLN A 265      13.026 -13.859  -6.187  1.00 31.72           O
ATOM   2703  NE2 GLN A 265      13.096 -15.792  -5.093  1.00 32.89           N
ATOM   2704  H   GLN A 265       9.274 -14.455  -2.172  1.00  0.00           H
ATOM   2705  HA  GLN A 265       8.234 -14.702  -4.787  1.00  0.00           H
ATOM   2706  HB2 GLN A 265      10.417 -13.713  -4.033  1.00  0.00           H
ATOM   2707  HB3 GLN A 265      10.970 -15.296  -3.577  1.00  0.00           H
ATOM   2708  HG2 GLN A 265      10.669 -15.886  -6.149  1.00  0.00           H
ATOM   2709  HG3 GLN A 265      10.503 -14.160  -6.384  1.00  0.00           H
ATOM   2710 HE21 GLN A 265      12.564 -16.604  -4.708  1.00  0.00           H
ATOM   2711 HE22 GLN A 265      14.098 -15.835  -5.203  1.00  0.00           H
ATOM   2712  N   GLU A 266       8.971 -17.590  -3.319  1.00 31.44           N
ATOM   2713  CA  GLU A 266       8.902 -19.050  -3.432  1.00 33.01           C
ATOM   2714  C   GLU A 266       7.481 -19.521  -3.111  1.00 32.66           C
ATOM   2715  O   GLU A 266       6.962 -20.417  -3.770  1.00 32.48           O
ATOM   2716  CB  GLU A 266       9.858 -19.766  -2.444  1.00 34.36           C
ATOM   2717  CG  GLU A 266      11.151 -19.035  -2.056  1.00 44.11           C
ATOM   2718  CD  GLU A 266      12.109 -18.716  -3.196  1.00 48.33           C
ATOM   2719  OE1 GLU A 266      13.272 -19.168  -3.141  1.00 49.69           O
ATOM   2720  OE2 GLU A 266      11.811 -17.811  -3.998  1.00 50.67           O1-
ATOM   2721  H   GLU A 266       9.320 -17.198  -2.457  1.00  0.00           H
ATOM   2722  HA  GLU A 266       9.161 -19.355  -4.443  1.00  0.00           H
ATOM   2723  HB2 GLU A 266       9.346 -19.987  -1.505  1.00  0.00           H
ATOM   2724  HB3 GLU A 266      10.116 -20.742  -2.858  1.00  0.00           H
ATOM   2725  HG2 GLU A 266      10.881 -18.112  -1.555  1.00  0.00           H
ATOM   2726  HG3 GLU A 266      11.689 -19.630  -1.318  1.00  0.00           H
ATOM   2727  N   ASN A 267       6.853 -18.882  -2.114  1.00 29.70           N
ATOM   2728  CA  ASN A 267       5.505 -19.182  -1.619  1.00 28.37           C
ATOM   2729  C   ASN A 267       4.408 -18.656  -2.554  1.00 26.52           C
ATOM   2730  O   ASN A 267       3.226 -18.893  -2.295  1.00 27.70           O
ATOM   2731  CB  ASN A 267       5.301 -18.543  -0.225  1.00 29.57           C
ATOM   2732  CG  ASN A 267       5.969 -19.342   0.889  1.00 30.12           C
ATOM   2733  OD1 ASN A 267       5.369 -20.240   1.467  1.00 32.14           O
ATOM   2734  ND2 ASN A 267       7.209 -19.016   1.222  1.00 27.84           N
ATOM   2735  H   ASN A 267       7.370 -18.144  -1.651  1.00  0.00           H
ATOM   2736  HA  ASN A 267       5.374 -20.265  -1.551  1.00  0.00           H
ATOM   2737  HB2 ASN A 267       5.642 -17.507  -0.210  1.00  0.00           H
ATOM   2738  HB3 ASN A 267       4.241 -18.504   0.033  1.00  0.00           H
ATOM   2739 HD21 ASN A 267       7.683 -18.252   0.748  1.00  0.00           H
ATOM   2740 HD22 ASN A 267       7.597 -19.413   2.064  1.00  0.00           H
ATOM   2741  N   GLU A 268       4.784 -17.942  -3.625  1.00 28.56           N
ATOM   2742  CA  GLU A 268       3.944 -17.487  -4.729  1.00 29.03           C
ATOM   2743  C   GLU A 268       3.015 -16.359  -4.262  1.00 27.53           C
ATOM   2744  O   GLU A 268       1.800 -16.465  -4.391  1.00 29.81           O
ATOM   2745  CB  GLU A 268       3.216 -18.683  -5.405  1.00 31.12           C
ATOM   2746  CG  GLU A 268       4.106 -19.458  -6.393  1.00 34.99           C
ATOM   2747  CD  GLU A 268       4.382 -18.644  -7.647  1.00 36.24           C
ATOM   2748  OE1 GLU A 268       3.389 -18.124  -8.201  1.00 38.70           O
ATOM   2749  OE2 GLU A 268       5.575 -18.507  -7.991  1.00 37.35           O1-
ATOM   2750  H   GLU A 268       5.774 -17.761  -3.706  1.00  0.00           H
ATOM   2751  HA  GLU A 268       4.606 -17.017  -5.456  1.00  0.00           H
ATOM   2752  HB2 GLU A 268       2.799 -19.380  -4.682  1.00  0.00           H
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ATOM   2753  HB3 GLU A 268       2.340 -18.318  -5.933  1.00  0.00           H
ATOM   2754  HG2 GLU A 268       5.042 -19.752  -5.917  1.00  0.00           H
ATOM   2755  HG3 GLU A 268       3.608 -20.378  -6.698  1.00  0.00           H
ATOM   2756  N   LYS A 269       3.560 -15.319  -3.628  1.00 25.71           N
ATOM   2757  CA  LYS A 269       2.804 -14.209  -3.060  1.00 25.50           C
ATOM   2758  C   LYS A 269       3.412 -12.916  -3.621  1.00 24.82           C
ATOM   2759  O   LYS A 269       4.597 -12.666  -3.427  1.00 25.11           O
ATOM   2760  CB  LYS A 269       2.824 -14.320  -1.518  1.00 23.34           C
ATOM   2761  CG  LYS A 269       2.294 -15.656  -0.933  1.00 24.75           C
ATOM   2762  CD  LYS A 269       0.785 -15.911  -1.138  1.00 23.23           C
ATOM   2763  CE  LYS A 269       0.367 -17.397  -1.183  1.00 22.16           C
ATOM   2764  NZ  LYS A 269       0.665 -18.016  -2.484  1.00 22.20           N1+
ATOM   2765  H   LYS A 269       4.568 -15.291  -3.492  1.00  0.00           H
ATOM   2766  HA  LYS A 269       1.768 -14.236  -3.387  1.00  0.00           H
ATOM   2767  HB2 LYS A 269       3.857 -14.204  -1.192  1.00  0.00           H
ATOM   2768  HB3 LYS A 269       2.277 -13.481  -1.089  1.00  0.00           H
ATOM   2769  HG2 LYS A 269       2.873 -16.478  -1.346  1.00  0.00           H
ATOM   2770  HG3 LYS A 269       2.505 -15.679   0.137  1.00  0.00           H
ATOM   2771  HD2 LYS A 269       0.233 -15.443  -0.324  1.00  0.00           H
ATOM   2772  HD3 LYS A 269       0.431 -15.407  -2.035  1.00  0.00           H
ATOM   2773  HE2 LYS A 269       0.839 -17.969  -0.384  1.00  0.00           H
ATOM   2774  HE3 LYS A 269      -0.709 -17.474  -1.021  1.00  0.00           H
ATOM   2775  HZ1 LYS A 269      -0.113 -18.593  -2.863  1.00  0.00           H
ATOM   2776  HZ2 LYS A 269       0.787 -17.303  -3.196  1.00  0.00           H
ATOM   2777  HZ3 LYS A 269       1.523 -18.558  -2.459  1.00  0.00           H
ATOM   2778  N   VAL A 270       2.622 -12.142  -4.373  1.00 24.36           N
ATOM   2779  CA  VAL A 270       3.050 -10.999  -5.189  1.00 23.54           C
ATOM   2780  C   VAL A 270       2.632  -9.673  -4.520  1.00 22.50           C
ATOM   2781  O   VAL A 270       3.247  -8.638  -4.779  1.00 23.72           O
ATOM   2782  CB  VAL A 270       2.411 -11.131  -6.609  1.00 23.18           C
ATOM   2783  CG1 VAL A 270       2.898 -10.059  -7.603  1.00 22.05           C
ATOM   2784  CG2 VAL A 270       2.638 -12.505  -7.277  1.00 23.42           C
ATOM   2785  H   VAL A 270       1.631 -12.369  -4.400  1.00  0.00           H
ATOM   2786  HA  VAL A 270       4.133 -10.965  -5.275  1.00  0.00           H
ATOM   2787  HB  VAL A 270       1.333 -11.008  -6.490  1.00  0.00           H
ATOM   2788 HG11 VAL A 270       2.467 -10.206  -8.594  1.00  0.00           H
ATOM   2789 HG12 VAL A 270       2.639  -9.050  -7.289  1.00  0.00           H
ATOM   2790 HG13 VAL A 270       3.979 -10.110  -7.723  1.00  0.00           H
ATOM   2791 HG21 VAL A 270       1.916 -12.657  -8.077  1.00  0.00           H
ATOM   2792 HG22 VAL A 270       3.617 -12.568  -7.745  1.00  0.00           H
ATOM   2793 HG23 VAL A 270       2.552 -13.355  -6.602  1.00  0.00           H
ATOM   2794  N   TYR A 271       1.623  -9.700  -3.641  1.00 21.55           N
ATOM   2795  CA  TYR A 271       1.153  -8.561  -2.866  1.00 22.01           C
ATOM   2796  C   TYR A 271       0.892  -9.055  -1.443  1.00 20.85           C
ATOM   2797  O   TYR A 271      -0.008  -9.867  -1.236  1.00 21.84           O
ATOM   2798  CB  TYR A 271      -0.071  -7.921  -3.556  1.00 19.56           C
ATOM   2799  CG  TYR A 271      -0.610  -6.673  -2.876  1.00 18.54           C
ATOM   2800  CD1 TYR A 271      -0.142  -5.398  -3.256  1.00 18.88           C
ATOM   2801  CD2 TYR A 271      -1.575  -6.783  -1.852  1.00 19.17           C
ATOM   2802  CE1 TYR A 271      -0.633  -4.246  -2.613  1.00 16.85           C
ATOM   2803  CE2 TYR A 271      -2.061  -5.629  -1.211  1.00 18.66           C
ATOM   2804  CZ  TYR A 271      -1.598  -4.357  -1.594  1.00 18.55           C
ATOM   2805  OH  TYR A 271      -2.082  -3.241  -0.976  1.00 19.00           O
ATOM   2806  H   TYR A 271       1.157 -10.582  -3.462  1.00  0.00           H
ATOM   2807  HA  TYR A 271       1.939  -7.806  -2.812  1.00  0.00           H
ATOM   2808  HB2 TYR A 271       0.189  -7.658  -4.582  1.00  0.00           H
ATOM   2809  HB3 TYR A 271      -0.879  -8.651  -3.631  1.00  0.00           H
ATOM   2810  HD1 TYR A 271       0.596  -5.294  -4.039  1.00  0.00           H
ATOM   2811  HD2 TYR A 271      -1.939  -7.752  -1.543  1.00  0.00           H
ATOM   2812  HE1 TYR A 271      -0.263  -3.275  -2.902  1.00  0.00           H
ATOM   2813  HE2 TYR A 271      -2.791  -5.723  -0.420  1.00  0.00           H
ATOM   2814  HH  TYR A 271      -1.543  -2.449  -1.141  1.00  0.00           H
ATOM   2815  N   GLY A 272       1.688  -8.601  -0.475  1.00 20.02           N
ATOM   2816  CA  GLY A 272       1.573  -8.942   0.931  1.00 19.98           C
ATOM   2817  C   GLY A 272       1.318  -7.682   1.747  1.00 19.55           C
ATOM   2818  O   GLY A 272       2.077  -6.720   1.630  1.00 20.95           O
ATOM   2819  H   GLY A 272       2.453  -7.969  -0.699  1.00  0.00           H
ATOM   2820  HA2 GLY A 272       0.812  -9.690   1.105  1.00  0.00           H
ATOM   2821  HA3 GLY A 272       2.511  -9.385   1.250  1.00  0.00           H
ATOM   2822  N   PHE A 273       0.277  -7.689   2.581  1.00 19.12           N
ATOM   2823  CA  PHE A 273      -0.186  -6.547   3.368  1.00 19.96           C
ATOM   2824  C   PHE A 273      -0.495  -6.972   4.817  1.00 20.73           C
ATOM   2825  O   PHE A 273      -0.305  -8.132   5.196  1.00 21.45           O
ATOM   2826  CB  PHE A 273      -1.351  -5.837   2.627  1.00 20.09           C
ATOM   2827  CG  PHE A 273      -2.668  -6.597   2.677  1.00 21.22           C
ATOM   2828  CD1 PHE A 273      -2.895  -7.686   1.811  1.00 20.84           C
ATOM   2829  CD2 PHE A 273      -3.629  -6.276   3.658  1.00 20.08           C
ATOM   2830  CE1 PHE A 273      -4.036  -8.493   1.978  1.00 20.71           C
ATOM   2831  CE2 PHE A 273      -4.754  -7.099   3.839  1.00 20.46           C
ATOM   2832  CZ  PHE A 273      -4.953  -8.210   3.005  1.00 22.49           C
ATOM   2833  H   PHE A 273      -0.297  -8.528   2.633  1.00  0.00           H
ATOM   2834  HA  PHE A 273       0.631  -5.829   3.444  1.00  0.00           H
ATOM   2835  HB2 PHE A 273      -1.503  -4.844   3.054  1.00  0.00           H
ATOM   2836  HB3 PHE A 273      -1.079  -5.656   1.586  1.00  0.00           H
ATOM   2837  HD1 PHE A 273      -2.172  -7.939   1.049  1.00  0.00           H
ATOM   2838  HD2 PHE A 273      -3.481  -5.433   4.316  1.00  0.00           H
ATOM   2839  HE1 PHE A 273      -4.196  -9.344   1.335  1.00  0.00           H
ATOM   2840  HE2 PHE A 273      -5.455  -6.890   4.632  1.00  0.00           H
ATOM   2841  HZ  PHE A 273      -5.817  -8.836   3.146  1.00  0.00           H
ATOM   2842  N   THR A 274      -0.976  -6.029   5.632  1.00 20.67           N
ATOM   2843  CA  THR A 274      -1.466  -6.244   6.990  1.00 19.86           C
ATOM   2844  C   THR A 274      -2.853  -5.595   7.134  1.00 23.58           C
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ATOM   2845  O   THR A 274      -3.873  -6.208   6.821  1.00 27.01           O
ATOM   2846  CB  THR A 274      -0.404  -5.815   8.037  1.00 23.05           C
ATOM   2847  OG1 THR A 274       0.096  -4.512   7.775  1.00 20.98           O
ATOM   2848  CG2 THR A 274       0.763  -6.797   8.194  1.00 20.44           C
ATOM   2849  H   THR A 274      -1.145  -5.112   5.245  1.00  0.00           H
ATOM   2850  HA  THR A 274      -1.656  -7.309   7.148  1.00  0.00           H
ATOM   2851  HB  THR A 274      -0.895  -5.747   9.002  1.00  0.00           H
ATOM   2852  HG1 THR A 274       0.780  -4.596   7.121  1.00  0.00           H
ATOM   2853 HG21 THR A 274       1.484  -6.449   8.935  1.00  0.00           H
ATOM   2854 HG22 THR A 274       0.399  -7.769   8.530  1.00  0.00           H
ATOM   2855 HG23 THR A 274       1.292  -6.957   7.256  1.00  0.00           H
ATOM   2856  N   VAL A 275      -2.902  -4.339   7.583  1.00 21.17           N
ATOM   2857  CA  VAL A 275      -4.136  -3.631   7.910  1.00 19.25           C
ATOM   2858  C   VAL A 275      -4.962  -3.364   6.627  1.00 18.02           C
ATOM   2859  O   VAL A 275      -4.420  -3.040   5.568  1.00 19.67           O
ATOM   2860  CB  VAL A 275      -3.790  -2.315   8.661  1.00 17.62           C
ATOM   2861  CG1 VAL A 275      -5.038  -1.683   9.306  1.00 17.33           C
ATOM   2862  CG2 VAL A 275      -2.725  -2.508   9.763  1.00 17.17           C
ATOM   2863  H   VAL A 275      -2.016  -3.894   7.780  1.00  0.00           H
ATOM   2864  HA  VAL A 275      -4.709  -4.281   8.576  1.00  0.00           H
ATOM   2865  HB  VAL A 275      -3.379  -1.620   7.929  1.00  0.00           H
ATOM   2866 HG11 VAL A 275      -4.794  -0.788   9.877  1.00  0.00           H
ATOM   2867 HG12 VAL A 275      -5.790  -1.398   8.568  1.00  0.00           H
ATOM   2868 HG13 VAL A 275      -5.494  -2.384  10.003  1.00  0.00           H
ATOM   2869 HG21 VAL A 275      -2.537  -1.579  10.303  1.00  0.00           H
ATOM   2870 HG22 VAL A 275      -3.052  -3.250  10.493  1.00  0.00           H
ATOM   2871 HG23 VAL A 275      -1.769  -2.837   9.358  1.00  0.00           H
ATOM   2872  N   SER A 276      -6.284  -3.509   6.726  1.00 18.71           N
ATOM   2873  CA  SER A 276      -7.259  -3.347   5.655  1.00 19.95           C
ATOM   2874  C   SER A 276      -8.525  -2.724   6.253  1.00 18.73           C
ATOM   2875  O   SER A 276      -8.882  -3.030   7.391  1.00 22.68           O
ATOM   2876  CB  SER A 276      -7.422  -4.678   4.897  1.00 18.49           C
ATOM   2877  OG  SER A 276      -7.579  -5.765   5.789  1.00 20.03           O
ATOM   2878  H   SER A 276      -6.696  -3.731   7.622  1.00  0.00           H
ATOM   2879  HA  SER A 276      -6.871  -2.610   4.949  1.00  0.00           H
ATOM   2880  HB2 SER A 276      -8.278  -4.636   4.221  1.00  0.00           H
ATOM   2881  HB3 SER A 276      -6.544  -4.869   4.284  1.00  0.00           H
ATOM   2882  HG  SER A 276      -6.767  -5.854   6.274  1.00  0.00           H
ATOM   2883  N   ILE A 277      -9.155  -1.790   5.539  1.00 19.56           N
ATOM   2884  CA  ILE A 277     -10.057  -0.790   6.095  1.00 18.81           C
ATOM   2885  C   ILE A 277     -11.145  -0.409   5.078  1.00 17.40           C
ATOM   2886  O   ILE A 277     -11.022  -0.696   3.885  1.00 17.52           O
ATOM   2887  CB  ILE A 277      -9.199   0.380   6.676  1.00 16.88           C
ATOM   2888  CG1 ILE A 277      -9.989   1.336   7.592  1.00 21.77           C
ATOM   2889  CG2 ILE A 277      -8.470   1.171   5.582  1.00 21.13           C
ATOM   2890  CD1 ILE A 277      -9.106   2.234   8.472  1.00 19.17           C
ATOM   2891  H   ILE A 277      -8.913  -1.672   4.556  1.00  0.00           H
ATOM   2892  HA  ILE A 277     -10.599  -1.250   6.918  1.00  0.00           H
ATOM   2893  HB  ILE A 277      -8.426  -0.070   7.301  1.00  0.00           H
ATOM   2894 HG12 ILE A 277     -10.657   1.965   7.006  1.00  0.00           H
ATOM   2895 HG13 ILE A 277     -10.628   0.741   8.239  1.00  0.00           H
ATOM   2896 HG21 ILE A 277      -7.763   1.879   6.008  1.00  0.00           H
ATOM   2897 HG22 ILE A 277      -7.911   0.527   4.903  1.00  0.00           H
ATOM   2898 HG23 ILE A 277      -9.183   1.743   4.993  1.00  0.00           H
ATOM   2899 HD11 ILE A 277      -9.720   2.836   9.141  1.00  0.00           H
ATOM   2900 HD12 ILE A 277      -8.428   1.643   9.087  1.00  0.00           H
ATOM   2901 HD13 ILE A 277      -8.505   2.925   7.880  1.00  0.00           H
ATOM   2902  N   HIS A 278     -12.199   0.250   5.567  1.00 17.40           N
ATOM   2903  CA  HIS A 278     -13.217   0.952   4.793  1.00 18.62           C
ATOM   2904  C   HIS A 278     -12.645   2.285   4.292  1.00 20.19           C
ATOM   2905  O   HIS A 278     -11.924   2.963   5.029  1.00 22.16           O
ATOM   2906  CB  HIS A 278     -14.387   1.311   5.737  1.00 19.60           C
ATOM   2907  CG  HIS A 278     -15.585   0.424   5.623  1.00 19.20           C
ATOM   2908  ND1 HIS A 278     -16.606   0.684   4.703  1.00 19.72           N
ATOM   2909  CD2 HIS A 278     -15.913  -0.694   6.353  1.00 19.63           C
ATOM   2910  CE1 HIS A 278     -17.511  -0.261   4.923  1.00 18.30           C
ATOM   2911  NE2 HIS A 278     -17.159  -1.091   5.902  1.00 20.42           N
ATOM   2912  H   HIS A 278     -12.236   0.386   6.570  1.00  0.00           H
ATOM   2913  HA  HIS A 278     -13.557   0.342   3.954  1.00  0.00           H
ATOM   2914  HB2 HIS A 278     -14.064   1.321   6.777  1.00  0.00           H
ATOM   2915  HB3 HIS A 278     -14.751   2.326   5.565  1.00  0.00           H
ATOM   2916  HD2 HIS A 278     -15.390  -1.203   7.148  1.00  0.00           H
ATOM   2917  HE1 HIS A 278     -18.443  -0.335   4.381  1.00  0.00           H
ATOM   2918  HE2 HIS A 278     -17.723  -1.846   6.288  1.00  0.00           H
ATOM   2919  N   GLU A 279     -13.010   2.707   3.078  1.00 18.56           N
ATOM   2920  CA  GLU A 279     -12.812   4.074   2.605  1.00 20.35           C
ATOM   2921  C   GLU A 279     -14.101   4.883   2.815  1.00 20.15           C
ATOM   2922  O   GLU A 279     -15.191   4.319   2.931  1.00 21.21           O
ATOM   2923  CB  GLU A 279     -12.440   4.077   1.099  1.00 18.12           C
ATOM   2924  CG  GLU A 279     -11.916   5.419   0.530  1.00 19.55           C
ATOM   2925  CD  GLU A 279     -10.803   6.064   1.353  1.00 21.45           C
ATOM   2926  OE1 GLU A 279     -11.088   6.566   2.462  1.00 21.73           O
ATOM   2927  OE2 GLU A 279      -9.651   6.101   0.872  1.00 20.95           O1-
ATOM   2928  H   GLU A 279     -13.582   2.088   2.512  1.00  0.00           H
ATOM   2929  HA  GLU A 279     -12.020   4.521   3.194  1.00  0.00           H
ATOM   2930  HB2 GLU A 279     -11.679   3.329   0.902  1.00  0.00           H
ATOM   2931  HB3 GLU A 279     -13.301   3.758   0.510  1.00  0.00           H
ATOM   2932  HG2 GLU A 279     -11.553   5.263  -0.485  1.00  0.00           H
ATOM   2933  HG3 GLU A 279     -12.728   6.138   0.435  1.00  0.00           H
ATOM   2934  N   TYR A 280     -13.973   6.212   2.830  1.00 20.93           N
ATOM   2935  CA  TYR A 280     -15.109   7.129   2.835  1.00 21.95           C
ATOM   2936  C   TYR A 280     -15.562   7.280   1.375  1.00 20.59           C
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ATOM   2937  O   TYR A 280     -14.817   7.808   0.542  1.00 20.61           O
ATOM   2938  CB  TYR A 280     -14.669   8.526   3.312  1.00 23.30           C
ATOM   2939  CG  TYR A 280     -13.914   8.587   4.618  1.00 26.62           C
ATOM   2940  CD1 TYR A 280     -14.593   8.523   5.851  1.00 30.13           C
ATOM   2941  CD2 TYR A 280     -12.516   8.734   4.593  1.00 30.20           C
ATOM   2942  CE1 TYR A 280     -13.874   8.618   7.056  1.00 31.13           C
ATOM   2943  CE2 TYR A 280     -11.805   8.815   5.797  1.00 32.21           C
ATOM   2944  CZ  TYR A 280     -12.475   8.758   7.028  1.00 32.49           C
ATOM   2945  OH  TYR A 280     -11.765   8.853   8.188  1.00 34.99           O
ATOM   2946  H   TYR A 280     -13.038   6.591   2.682  1.00  0.00           H
ATOM   2947  HA  TYR A 280     -15.914   6.755   3.470  1.00  0.00           H
ATOM   2948  HB2 TYR A 280     -14.043   9.009   2.566  1.00  0.00           H
ATOM   2949  HB3 TYR A 280     -15.553   9.155   3.415  1.00  0.00           H
ATOM   2950  HD1 TYR A 280     -15.665   8.398   5.883  1.00  0.00           H
ATOM   2951  HD2 TYR A 280     -11.980   8.779   3.654  1.00  0.00           H
ATOM   2952  HE1 TYR A 280     -14.406   8.560   7.994  1.00  0.00           H
ATOM   2953  HE2 TYR A 280     -10.739   8.930   5.759  1.00  0.00           H
ATOM   2954  HH  TYR A 280     -10.824   8.816   8.027  1.00  0.00           H
ATOM   2955  N   GLU A 281     -16.787   6.851   1.077  1.00 22.29           N
ATOM   2956  CA  GLU A 281     -17.539   7.030  -0.166  1.00 20.70           C
ATOM   2957  C   GLU A 281     -17.414   8.444  -0.774  1.00 20.87           C
ATOM   2958  O   GLU A 281     -17.135   8.579  -1.965  1.00 18.87           O
ATOM   2959  CB  GLU A 281     -18.997   6.550   0.066  1.00 21.60           C
ATOM   2960  CG  GLU A 281     -19.918   7.451   0.930  1.00 27.54           C
ATOM   2961  CD  GLU A 281     -19.305   7.771   2.286  1.00 30.84           C
ATOM   2962  OE1 GLU A 281     -18.960   6.816   3.011  1.00 32.62           O
ATOM   2963  OE2 GLU A 281     -18.937   8.944   2.500  1.00 35.66           O1-
ATOM   2964  H   GLU A 281     -17.357   6.542   1.867  1.00  0.00           H
ATOM   2965  HA  GLU A 281     -17.084   6.345  -0.883  1.00  0.00           H
ATOM   2966  HB2 GLU A 281     -19.473   6.424  -0.907  1.00  0.00           H
ATOM   2967  HB3 GLU A 281     -18.978   5.553   0.507  1.00  0.00           H
ATOM   2968  HG2 GLU A 281     -20.147   8.383   0.413  1.00  0.00           H
ATOM   2969  HG3 GLU A 281     -20.872   6.952   1.102  1.00  0.00           H
ATOM   2970  N   VAL A 282     -17.540   9.488   0.059  1.00 20.46           N
ATOM   2971  CA  VAL A 282     -17.458  10.900  -0.306  1.00 20.98           C
ATOM   2972  C   VAL A 282     -16.077  11.339  -0.858  1.00 20.93           C
ATOM   2973  O   VAL A 282     -16.009  12.362  -1.543  1.00 18.59           O
ATOM   2974  CB  VAL A 282     -17.921  11.744   0.919  1.00 21.34           C
ATOM   2975  CG1 VAL A 282     -16.982  11.645   2.139  1.00 22.74           C
ATOM   2976  CG2 VAL A 282     -18.242  13.209   0.571  1.00 22.47           C
ATOM   2977  H   VAL A 282     -17.868   9.281   1.008  1.00  0.00           H
ATOM   2978  HA  VAL A 282     -18.177  11.051  -1.113  1.00  0.00           H
ATOM   2979  HB  VAL A 282     -18.874  11.320   1.243  1.00  0.00           H
ATOM   2980 HG11 VAL A 282     -17.340  12.259   2.965  1.00  0.00           H
ATOM   2981 HG12 VAL A 282     -16.943  10.623   2.509  1.00  0.00           H
ATOM   2982 HG13 VAL A 282     -15.962  11.948   1.912  1.00  0.00           H
ATOM   2983 HG21 VAL A 282     -18.658  13.732   1.433  1.00  0.00           H
ATOM   2984 HG22 VAL A 282     -17.358  13.754   0.249  1.00  0.00           H
ATOM   2985 HG23 VAL A 282     -18.977  13.264  -0.232  1.00  0.00           H
ATOM   2986  N   THR A 283     -14.991  10.581  -0.625  1.00 19.91           N
ATOM   2987  CA  THR A 283     -13.668  10.880  -1.191  1.00 18.39           C
ATOM   2988  C   THR A 283     -13.493  10.267  -2.599  1.00 19.45           C
ATOM   2989  O   THR A 283     -12.594  10.687  -3.327  1.00 20.36           O
ATOM   2990  CB  THR A 283     -12.542  10.369  -0.245  1.00 20.55           C
ATOM   2991  OG1 THR A 283     -12.469   8.962  -0.100  1.00 18.62           O
ATOM   2992  CG2 THR A 283     -12.559  11.013   1.144  1.00 17.56           C
ATOM   2993  H   THR A 283     -15.110   9.714  -0.114  1.00  0.00           H
ATOM   2994  HA  THR A 283     -13.545  11.960  -1.293  1.00  0.00           H
ATOM   2995  HB  THR A 283     -11.593  10.653  -0.700  1.00  0.00           H
ATOM   2996  HG1 THR A 283     -13.306   8.611   0.211  1.00  0.00           H
ATOM   2997 HG21 THR A 283     -11.799  10.580   1.796  1.00  0.00           H
ATOM   2998 HG22 THR A 283     -12.335  12.071   1.055  1.00  0.00           H
ATOM   2999 HG23 THR A 283     -13.525  10.929   1.637  1.00  0.00           H
ATOM   3000  N   ILE A 284     -14.357   9.317  -2.995  1.00 16.54           N
ATOM   3001  CA  ILE A 284     -14.237   8.478  -4.189  1.00 16.06           C
ATOM   3002  C   ILE A 284     -15.451   8.435  -5.171  1.00 16.32           C
ATOM   3003  O   ILE A 284     -15.540   7.420  -5.872  1.00 18.94           O
ATOM   3004  CB  ILE A 284     -13.743   7.064  -3.741  1.00 14.12           C
ATOM   3005  CG1 ILE A 284     -14.768   6.314  -2.859  1.00 16.19           C
ATOM   3006  CG2 ILE A 284     -12.372   7.110  -3.048  1.00 14.01           C
ATOM   3007  CD1 ILE A 284     -14.408   4.844  -2.615  1.00 12.12           C
ATOM   3008  H   ILE A 284     -15.126   9.089  -2.375  1.00  0.00           H
ATOM   3009  HA  ILE A 284     -13.451   8.895  -4.819  1.00  0.00           H
ATOM   3010  HB  ILE A 284     -13.599   6.472  -4.640  1.00  0.00           H
ATOM   3011 HG12 ILE A 284     -14.869   6.818  -1.898  1.00  0.00           H
ATOM   3012 HG13 ILE A 284     -15.756   6.348  -3.318  1.00  0.00           H
ATOM   3013 HG21 ILE A 284     -11.889   6.134  -3.033  1.00  0.00           H
ATOM   3014 HG22 ILE A 284     -11.700   7.807  -3.542  1.00  0.00           H
ATOM   3015 HG23 ILE A 284     -12.470   7.422  -2.015  1.00  0.00           H
ATOM   3016 HD11 ILE A 284     -15.191   4.351  -2.042  1.00  0.00           H
ATOM   3017 HD12 ILE A 284     -14.289   4.304  -3.554  1.00  0.00           H
ATOM   3018 HD13 ILE A 284     -13.484   4.743  -2.046  1.00  0.00           H
ATOM   3019  N   PRO A 285     -16.367   9.441  -5.292  1.00 17.10           N
ATOM   3020  CA  PRO A 285     -17.554   9.418  -6.179  1.00 18.10           C
ATOM   3021  C   PRO A 285     -17.418   8.846  -7.601  1.00 18.61           C
ATOM   3022  O   PRO A 285     -18.361   8.217  -8.085  1.00 21.16           O
ATOM   3023  CB  PRO A 285     -18.057  10.865  -6.253  1.00 19.30           C
ATOM   3024  CG  PRO A 285     -17.645  11.467  -4.930  1.00 19.72           C
ATOM   3025  CD  PRO A 285     -16.380  10.703  -4.543  1.00 17.67           C
ATOM   3026  HA  PRO A 285     -18.298   8.814  -5.658  1.00  0.00           H
ATOM   3027  HB2 PRO A 285     -17.564  11.405  -7.063  1.00  0.00           H
ATOM   3028  HB3 PRO A 285     -19.133  10.923  -6.424  1.00  0.00           H
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ATOM   3029  HG2 PRO A 285     -17.492  12.545  -4.977  1.00  0.00           H
ATOM   3030  HG3 PRO A 285     -18.422  11.276  -4.188  1.00  0.00           H
ATOM   3031  HD2 PRO A 285     -15.475  11.266  -4.761  1.00  0.00           H
ATOM   3032  HD3 PRO A 285     -16.432  10.529  -3.475  1.00  0.00           H
ATOM   3033  N   THR A 286     -16.275   9.037  -8.272  1.00 19.69           N
ATOM   3034  CA  THR A 286     -16.056   8.545  -9.626  1.00 19.30           C
ATOM   3035  C   THR A 286     -14.895   7.537  -9.735  1.00 20.60           C
ATOM   3036  O   THR A 286     -14.661   7.040 -10.836  1.00 18.78           O
ATOM   3037  CB  THR A 286     -16.105   9.710 -10.661  1.00 21.39           C
ATOM   3038  OG1 THR A 286     -15.058  10.654 -10.537  1.00 21.34           O
ATOM   3039  CG2 THR A 286     -17.427  10.492 -10.654  1.00 19.97           C
ATOM   3040  H   THR A 286     -15.581   9.696  -7.897  1.00  0.00           H
ATOM   3041  HA  THR A 286     -16.896   7.913  -9.908  1.00  0.00           H
ATOM   3042  HB  THR A 286     -15.998   9.266 -11.653  1.00  0.00           H
ATOM   3043  HG1 THR A 286     -15.118  11.092  -9.677  1.00  0.00           H
ATOM   3044 HG21 THR A 286     -17.464  11.204 -11.478  1.00  0.00           H
ATOM   3045 HG22 THR A 286     -18.280   9.824 -10.759  1.00  0.00           H
ATOM   3046 HG23 THR A 286     -17.557  11.051  -9.726  1.00  0.00           H
ATOM   3047  N   LEU A 287     -14.229   7.141  -8.632  1.00 19.85           N
ATOM   3048  CA  LEU A 287     -13.073   6.218  -8.621  1.00 20.60           C
ATOM   3049  C   LEU A 287     -13.500   4.829  -9.109  1.00 20.95           C
ATOM   3050  O   LEU A 287     -12.986   4.322 -10.108  1.00 18.74           O
ATOM   3051  CB  LEU A 287     -12.476   6.117  -7.192  1.00 19.84           C
ATOM   3052  CG  LEU A 287     -11.036   5.544  -7.060  1.00 24.19           C
ATOM   3053  CD1 LEU A 287     -10.535   5.706  -5.619  1.00 17.69           C
ATOM   3054  CD2 LEU A 287     -10.876   4.068  -7.469  1.00 20.76           C
ATOM   3055  H   LEU A 287     -14.517   7.547  -7.748  1.00  0.00           H
ATOM   3056  HA  LEU A 287     -12.310   6.596  -9.300  1.00  0.00           H
ATOM   3057  HB2 LEU A 287     -12.464   7.122  -6.771  1.00  0.00           H
ATOM   3058  HB3 LEU A 287     -13.143   5.543  -6.550  1.00  0.00           H
ATOM   3059  HG  LEU A 287     -10.377   6.133  -7.697  1.00  0.00           H
ATOM   3060 HD11 LEU A 287      -9.482   5.438  -5.529  1.00  0.00           H
ATOM   3061 HD12 LEU A 287     -10.632   6.735  -5.281  1.00  0.00           H
ATOM   3062 HD13 LEU A 287     -11.094   5.070  -4.932  1.00  0.00           H
ATOM   3063 HD21 LEU A 287      -9.908   3.674  -7.159  1.00  0.00           H
ATOM   3064 HD22 LEU A 287     -11.641   3.436  -7.018  1.00  0.00           H
ATOM   3065 HD23 LEU A 287     -10.914   3.942  -8.550  1.00  0.00           H
ATOM   3066  N   TRP A 288     -14.492   4.238  -8.429  1.00 18.96           N
ATOM   3067  CA  TRP A 288     -15.028   2.921  -8.759  1.00 20.78           C
ATOM   3068  C   TRP A 288     -15.725   2.942 -10.128  1.00 21.73           C
ATOM   3069  O   TRP A 288     -15.624   1.979 -10.878  1.00 21.01           O
ATOM   3070  CB  TRP A 288     -16.021   2.469  -7.676  1.00 16.55           C
ATOM   3071  CG  TRP A 288     -16.699   1.165  -7.976  1.00 19.20           C
ATOM   3072  CD1 TRP A 288     -17.984   1.029  -8.369  1.00 17.19           C
ATOM   3073  CD2 TRP A 288     -16.139  -0.185  -7.945  1.00 18.61           C
ATOM   3074  NE1 TRP A 288     -18.252  -0.301  -8.604  1.00 18.83           N
ATOM   3075  CE3 TRP A 288     -14.877  -0.732  -7.615  1.00 16.92           C
ATOM   3076  CE2 TRP A 288     -17.160  -1.102  -8.338  1.00 18.36           C
ATOM   3077  CZ3 TRP A 288     -14.647  -2.123  -7.664  1.00 21.22           C
ATOM   3078  CZ2 TRP A 288     -16.943  -2.490  -8.389  1.00 20.24           C
ATOM   3079  CH2 TRP A 288     -15.679  -3.002  -8.046  1.00 22.41           C
ATOM   3080  H   TRP A 288     -14.853   4.725  -7.621  1.00  0.00           H
ATOM   3081  HA  TRP A 288     -14.203   2.207  -8.799  1.00  0.00           H
ATOM   3082  HB2 TRP A 288     -15.509   2.364  -6.719  1.00  0.00           H
ATOM   3083  HB3 TRP A 288     -16.791   3.228  -7.532  1.00  0.00           H
ATOM   3084  HD1 TRP A 288     -18.674   1.849  -8.513  1.00  0.00           H
ATOM   3085  HE1 TRP A 288     -19.152  -0.618  -8.984  1.00  0.00           H
ATOM   3086  HE3 TRP A 288     -14.077  -0.076  -7.306  1.00  0.00           H
ATOM   3087  HZ3 TRP A 288     -13.674  -2.516  -7.405  1.00  0.00           H
ATOM   3088  HZ2 TRP A 288     -17.741  -3.155  -8.679  1.00  0.00           H
ATOM   3089  HH2 TRP A 288     -15.496  -4.066  -8.079  1.00  0.00           H
ATOM   3090  N   GLN A 289     -16.379   4.057 -10.476  1.00 23.21           N
ATOM   3091  CA  GLN A 289     -17.043   4.259 -11.760  1.00 24.00           C
ATOM   3092  C   GLN A 289     -16.018   4.230 -12.910  1.00 23.78           C
ATOM   3093  O   GLN A 289     -16.190   3.474 -13.858  1.00 21.70           O
ATOM   3094  CB  GLN A 289     -17.836   5.579 -11.691  1.00 26.05           C
ATOM   3095  CG  GLN A 289     -18.766   5.827 -12.896  1.00 30.79           C
ATOM   3096  CD  GLN A 289     -19.778   6.963 -12.703  1.00 32.56           C
ATOM   3097  OE1 GLN A 289     -20.550   7.254 -13.605  1.00 33.91           O
ATOM   3098  NE2 GLN A 289     -19.827   7.620 -11.547  1.00 33.71           N
ATOM   3099  H   GLN A 289     -16.351   4.822  -9.822  1.00  0.00           H
ATOM   3100  HA  GLN A 289     -17.743   3.434 -11.909  1.00  0.00           H
ATOM   3101  HB2 GLN A 289     -18.430   5.558 -10.777  1.00  0.00           H
ATOM   3102  HB3 GLN A 289     -17.150   6.421 -11.607  1.00  0.00           H
ATOM   3103  HG2 GLN A 289     -18.180   6.037 -13.793  1.00  0.00           H
ATOM   3104  HG3 GLN A 289     -19.336   4.923 -13.114  1.00  0.00           H
ATOM   3105 HE21 GLN A 289     -19.241   7.380 -10.763  1.00  0.00           H
ATOM   3106 HE22 GLN A 289     -20.521   8.346 -11.462  1.00  0.00           H
ATOM   3107  N   THR A 290     -14.897   4.947 -12.766  1.00 23.31           N
ATOM   3108  CA  THR A 290     -13.812   4.983 -13.749  1.00 22.84           C
ATOM   3109  C   THR A 290     -13.037   3.641 -13.774  1.00 22.38           C
ATOM   3110  O   THR A 290     -12.511   3.258 -14.817  1.00 22.84           O
ATOM   3111  CB  THR A 290     -12.882   6.173 -13.398  1.00 24.30           C
ATOM   3112  OG1 THR A 290     -13.658   7.357 -13.285  1.00 25.09           O
ATOM   3113  CG2 THR A 290     -11.812   6.469 -14.451  1.00 22.40           C
ATOM   3114  H   THR A 290     -14.788   5.525 -11.941  1.00  0.00           H
ATOM   3115  HA  THR A 290     -14.243   5.145 -14.740  1.00  0.00           H
ATOM   3116  HB  THR A 290     -12.391   5.993 -12.439  1.00  0.00           H
ATOM   3117  HG1 THR A 290     -14.103   7.303 -12.438  1.00  0.00           H
ATOM   3118 HG21 THR A 290     -11.227   7.350 -14.188  1.00  0.00           H
ATOM   3119 HG22 THR A 290     -11.110   5.644 -14.541  1.00  0.00           H
ATOM   3120 HG23 THR A 290     -12.247   6.641 -15.436  1.00  0.00           H
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ATOM   3121  N   SER A 291     -13.032   2.881 -12.666  1.00 19.88           N
ATOM   3122  CA  SER A 291     -12.501   1.517 -12.615  1.00 20.14           C
ATOM   3123  C   SER A 291     -13.456   0.528 -13.319  1.00 20.06           C
ATOM   3124  O   SER A 291     -13.007  -0.419 -13.964  1.00 19.13           O
ATOM   3125  CB  SER A 291     -12.329   1.084 -11.143  1.00 19.42           C
ATOM   3126  OG  SER A 291     -11.414   1.932 -10.463  1.00 19.96           O
ATOM   3127  H   SER A 291     -13.452   3.262 -11.828  1.00  0.00           H
ATOM   3128  HA  SER A 291     -11.540   1.489 -13.132  1.00  0.00           H
ATOM   3129  HB2 SER A 291     -13.279   1.067 -10.613  1.00  0.00           H
ATOM   3130  HB3 SER A 291     -11.947   0.062 -11.103  1.00  0.00           H
ATOM   3131  HG  SER A 291     -11.786   2.813 -10.437  1.00  0.00           H
ATOM   3132  N   MET A 292     -14.773   0.776 -13.274  1.00 22.05           N
ATOM   3133  CA  MET A 292     -15.791   0.062 -14.043  1.00 23.75           C
ATOM   3134  C   MET A 292     -15.561   0.315 -15.545  1.00 23.08           C
ATOM   3135  O   MET A 292     -15.528  -0.634 -16.314  1.00 23.18           O
ATOM   3136  CB  MET A 292     -17.210   0.496 -13.595  1.00 23.46           C
ATOM   3137  CG  MET A 292     -18.148  -0.661 -13.201  1.00 23.79           C
ATOM   3138  SD  MET A 292     -18.980  -1.528 -14.564  1.00 24.01           S
ATOM   3139  CE  MET A 292     -17.843  -2.916 -14.838  1.00 23.71           C
ATOM   3140  H   MET A 292     -15.090   1.539 -12.685  1.00  0.00           H
ATOM   3141  HA  MET A 292     -15.656  -1.002 -13.847  1.00  0.00           H
ATOM   3142  HB2 MET A 292     -17.128   1.130 -12.715  1.00  0.00           H
ATOM   3143  HB3 MET A 292     -17.690   1.133 -14.339  1.00  0.00           H
ATOM   3144  HG2 MET A 292     -17.641  -1.378 -12.552  1.00  0.00           H
ATOM   3145  HG3 MET A 292     -18.946  -0.242 -12.587  1.00  0.00           H
ATOM   3146  HE1 MET A 292     -18.241  -3.586 -15.600  1.00  0.00           H
ATOM   3147  HE2 MET A 292     -16.873  -2.564 -15.182  1.00  0.00           H
ATOM   3148  HE3 MET A 292     -17.700  -3.487 -13.920  1.00  0.00           H
ATOM   3149  N   ASP A 293     -15.253   1.551 -15.958  1.00 25.20           N
ATOM   3150  CA  ASP A 293     -14.838   1.926 -17.326  1.00 24.42           C
ATOM   3151  C   ASP A 293     -13.362   1.582 -17.646  1.00 24.19           C
ATOM   3152  O   ASP A 293     -12.786   2.050 -18.636  1.00 22.66           O
ATOM   3153  CB  ASP A 293     -15.172   3.411 -17.607  1.00 25.99           C
ATOM   3154  CG  ASP A 293     -16.680   3.613 -17.683  1.00 25.87           C
ATOM   3155  OD1 ASP A 293     -17.359   3.645 -16.633  1.00 25.88           O
ATOM   3156  OD2 ASP A 293     -17.260   3.501 -18.782  1.00 26.97           O1-
ATOM   3157  H   ASP A 293     -15.388   2.311 -15.294  1.00  0.00           H
ATOM   3158  HA  ASP A 293     -15.405   1.325 -18.035  1.00  0.00           H
ATOM   3159  HB2 ASP A 293     -14.754   4.060 -16.838  1.00  0.00           H
ATOM   3160  HB3 ASP A 293     -14.749   3.737 -18.558  1.00  0.00           H
ATOM   3161  N   PHE A 294     -12.769   0.679 -16.858  1.00 22.53           N
ATOM   3162  CA  PHE A 294     -11.684  -0.205 -17.262  1.00 21.67           C
ATOM   3163  C   PHE A 294     -12.265  -1.621 -17.432  1.00 22.37           C
ATOM   3164  O   PHE A 294     -12.150  -2.185 -18.511  1.00 23.42           O
ATOM   3165  CB  PHE A 294     -10.549  -0.179 -16.224  1.00 21.57           C
ATOM   3166  CG  PHE A 294      -9.386  -1.089 -16.562  1.00 21.32           C
ATOM   3167  CD1 PHE A 294      -8.435  -0.702 -17.530  1.00 23.19           C
ATOM   3168  CD2 PHE A 294      -9.267  -2.342 -15.923  1.00 21.72           C
ATOM   3169  CE1 PHE A 294      -7.349  -1.546 -17.823  1.00 21.37           C
ATOM   3170  CE2 PHE A 294      -8.190  -3.189 -16.234  1.00 24.26           C
ATOM   3171  CZ  PHE A 294      -7.215  -2.777 -17.156  1.00 21.92           C
ATOM   3172  H   PHE A 294     -13.300   0.392 -16.048  1.00  0.00           H
ATOM   3173  HA  PHE A 294     -11.271   0.099 -18.223  1.00  0.00           H
ATOM   3174  HB2 PHE A 294     -10.165   0.838 -16.124  1.00  0.00           H
ATOM   3175  HB3 PHE A 294     -10.911  -0.450 -15.235  1.00  0.00           H
ATOM   3176  HD1 PHE A 294      -8.515   0.246 -18.041  1.00  0.00           H
ATOM   3177  HD2 PHE A 294      -9.999  -2.664 -15.198  1.00  0.00           H
ATOM   3178  HE1 PHE A 294      -6.609  -1.251 -18.553  1.00  0.00           H
ATOM   3179  HE2 PHE A 294      -8.095  -4.154 -15.763  1.00  0.00           H
ATOM   3180  HZ  PHE A 294      -6.363  -3.411 -17.346  1.00  0.00           H
ATOM   3181  N   ILE A 295     -12.949  -2.184 -16.426  1.00 24.85           N
ATOM   3182  CA  ILE A 295     -13.509  -3.548 -16.445  1.00 26.88           C
ATOM   3183  C   ILE A 295     -14.604  -3.783 -17.530  1.00 27.94           C
ATOM   3184  O   ILE A 295     -14.822  -4.921 -17.935  1.00 27.36           O
ATOM   3185  CB  ILE A 295     -13.964  -3.906 -14.994  1.00 28.74           C
ATOM   3186  CG1 ILE A 295     -12.791  -3.880 -13.976  1.00 30.86           C
ATOM   3187  CG2 ILE A 295     -14.744  -5.232 -14.859  1.00 29.65           C
ATOM   3188  CD1 ILE A 295     -11.712  -4.959 -14.188  1.00 31.32           C
ATOM   3189  H   ILE A 295     -13.017  -1.673 -15.553  1.00  0.00           H
ATOM   3190  HA  ILE A 295     -12.699  -4.222 -16.729  1.00  0.00           H
ATOM   3191  HB  ILE A 295     -14.653  -3.122 -14.680  1.00  0.00           H
ATOM   3192 HG12 ILE A 295     -12.304  -2.907 -13.980  1.00  0.00           H
ATOM   3193 HG13 ILE A 295     -13.193  -3.988 -12.968  1.00  0.00           H
ATOM   3194 HG21 ILE A 295     -14.948  -5.469 -13.815  1.00  0.00           H
ATOM   3195 HG22 ILE A 295     -15.706  -5.190 -15.369  1.00  0.00           H
ATOM   3196 HG23 ILE A 295     -14.186  -6.066 -15.288  1.00  0.00           H
ATOM   3197 HD11 ILE A 295     -10.931  -4.874 -13.432  1.00  0.00           H
ATOM   3198 HD12 ILE A 295     -12.124  -5.965 -14.116  1.00  0.00           H
ATOM   3199 HD13 ILE A 295     -11.224  -4.868 -15.158  1.00  0.00           H
ATOM   3200  N   LYS A 296     -15.251  -2.730 -18.053  1.00 27.30           N
ATOM   3201  CA  LYS A 296     -16.154  -2.781 -19.215  1.00 29.16           C
ATOM   3202  C   LYS A 296     -15.379  -2.867 -20.549  1.00 29.60           C
ATOM   3203  O   LYS A 296     -15.967  -3.204 -21.573  1.00 30.49           O
ATOM   3204  CB  LYS A 296     -16.914  -1.433 -19.327  1.00 30.80           C
ATOM   3205  CG  LYS A 296     -18.015  -1.118 -18.299  1.00 35.46           C
ATOM   3206  CD  LYS A 296     -18.428   0.359 -18.452  1.00 37.53           C
ATOM   3207  CE  LYS A 296     -19.314   0.936 -17.340  1.00 39.57           C
ATOM   3208  NZ  LYS A 296     -19.427   2.400 -17.473  1.00 42.84           N1+
ATOM   3209  H   LYS A 296     -15.124  -1.837 -17.584  1.00  0.00           H
ATOM   3210  HA  LYS A 296     -16.845  -3.622 -19.141  1.00  0.00           H
ATOM   3211  HB2 LYS A 296     -16.171  -0.633 -19.317  1.00  0.00           H
ATOM   3212  HB3 LYS A 296     -17.387  -1.363 -20.310  1.00  0.00           H
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ATOM   3213  HG2 LYS A 296     -18.871  -1.778 -18.447  1.00  0.00          H
ATOM   3214  HG3 LYS A 296     -17.659  -1.310 -17.291  1.00  0.00          H
ATOM   3215  HD2 LYS A 296     -17.521   0.956 -18.490  1.00  0.00          H
ATOM   3216  HD3 LYS A 296     -18.909   0.502 -19.421  1.00  0.00          H
ATOM   3217  HE2 LYS A 296     -20.303   0.480 -17.371  1.00  0.00          H
ATOM   3218  HE3 LYS A 296     -18.884   0.723 -16.362  1.00  0.00          H
ATOM   3219  HZ1 LYS A 296     -20.190   2.819 -16.976  1.00  0.00          H
ATOM   3220  HZ2 LYS A 296     -18.557   2.850 -17.105  1.00  0.00          H
ATOM   3221  HZ3 LYS A 296     -19.370   2.707 -18.435  1.00  0.00          H
ATOM   3222  N   LYS A 297     -14.116  -2.434 -20.546  1.00 28.79          N
ATOM   3223  CA  LYS A 297     -13.324  -2.060 -21.714  1.00 30.07          C
ATOM   3224  C   LYS A 297     -12.158  -3.035 -21.923  1.00 29.13          C
ATOM   3225  O   LYS A 297     -11.797  -3.300 -23.065  1.00 30.10          O
ATOM   3226  CB  LYS A 297     -12.807  -0.631 -21.425  1.00 31.69          C
ATOM   3227  CG  LYS A 297     -11.885   0.018 -22.477  1.00 36.08          C
ATOM   3228  CD  LYS A 297     -11.425   1.416 -22.028  1.00 40.63          C
ATOM   3229  CE  LYS A 297     -10.322   1.390 -20.948  1.00 42.81          C
ATOM   3230  NZ  LYS A 297     -10.409   2.572 -20.076  1.00 42.47          N1+
ATOM   3231  H   LYS A 297     -13.673  -2.305 -19.644  1.00  0.00          H
ATOM   3232  HA  LYS A 297     -13.934  -2.057 -22.619  1.00  0.00          H
ATOM   3233  HB2 LYS A 297     -13.671   0.019 -21.279  1.00  0.00          H
ATOM   3234  HB3 LYS A 297     -12.284  -0.639 -20.472  1.00  0.00          H
ATOM   3235  HG2 LYS A 297     -11.012  -0.607 -22.678  1.00  0.00          H
ATOM   3236  HG3 LYS A 297     -12.426   0.092 -23.421  1.00  0.00          H
ATOM   3237  HD2 LYS A 297     -11.056   1.966 -22.895  1.00  0.00          H
ATOM   3238  HD3 LYS A 297     -12.300   1.966 -21.677  1.00  0.00          H
ATOM   3239  HE2 LYS A 297     -10.399   0.509 -20.313  1.00  0.00          H
ATOM   3240  HE3 LYS A 297      -9.336   1.339 -21.414  1.00  0.00          H
ATOM   3241  HZ1 LYS A 297      -9.593   2.643 -19.456  1.00  0.00          H
ATOM   3242  HZ2 LYS A 297     -10.438   3.417 -20.620  1.00  0.00          H
ATOM   3243  HZ3 LYS A 297     -11.250   2.502 -19.502  1.00  0.00          H
ATOM   3244  N   ASN A 298     -11.588  -3.549 -20.829  1.00 28.47          N
ATOM   3245  CA  ASN A 298     -10.402  -4.402 -20.783  1.00 26.71          C
ATOM   3246  C   ASN A 298     -10.687  -5.684 -19.978  1.00 25.72          C
ATOM   3247  O   ASN A 298     -10.186  -5.818 -18.854  1.00 23.38          O
ATOM   3248  CB  ASN A 298      -9.204  -3.605 -20.206  1.00 27.91          C
ATOM   3249  CG  ASN A 298      -8.604  -2.597 -21.181  1.00 28.07          C
ATOM   3250  OD1 ASN A 298      -8.867  -1.395 -21.104  1.00 30.60          O
ATOM   3251  ND2 ASN A 298      -7.756  -3.081 -22.077  1.00 28.22          N
ATOM   3252  H   ASN A 298     -11.921  -3.225 -19.927  1.00  0.00          H
ATOM   3253  HA  ASN A 298     -10.131  -4.722 -21.790  1.00  0.00          H
ATOM   3254  HB2 ASN A 298      -9.490  -3.096 -19.285  1.00  0.00          H
ATOM   3255  HB3 ASN A 298      -8.406  -4.293 -19.929  1.00  0.00          H
ATOM   3256 HD21 ASN A 298      -7.606  -4.117 -22.092  1.00  0.00          H
ATOM   3257 HD22 ASN A 298      -7.295  -2.504 -22.753  1.00  0.00          H
ATOM   3258  N   PRO A 299     -11.510  -6.630 -20.488  1.00 25.00          N
ATOM   3259  CA  PRO A 299     -11.782  -7.900 -19.801  1.00 25.78          C
ATOM   3260  C   PRO A 299     -10.624  -8.916 -19.872  1.00 25.64          C
ATOM   3261  O   PRO A 299     -10.591  -9.833 -19.055  1.00 25.28          O
ATOM   3262  CB  PRO A 299     -13.040  -8.448 -20.492  1.00 26.77          C
ATOM   3263  CG  PRO A 299     -12.966  -7.892 -21.906  1.00 25.54          C
ATOM   3264  CD  PRO A 299     -12.277  -6.537 -21.735  1.00 25.40          C
ATOM   3265  HA  PRO A 299     -11.998  -7.717 -18.746  1.00  0.00          H
ATOM   3266  HB2 PRO A 299     -13.108  -9.537 -20.471  1.00  0.00          H
ATOM   3267  HB3 PRO A 299     -13.925  -8.056 -19.990  1.00  0.00          H
ATOM   3268  HG2 PRO A 299     -12.336  -8.538 -22.520  1.00  0.00          H
ATOM   3269  HG3 PRO A 299     -13.939  -7.814 -22.391  1.00  0.00          H
ATOM   3270  HD2 PRO A 299     -11.661  -6.287 -22.600  1.00  0.00          H
ATOM   3271  HD3 PRO A 299     -13.033  -5.760 -21.628  1.00  0.00          H
ATOM   3272  N   GLU A 300      -9.675  -8.777 -20.806  1.00 27.36          N
ATOM   3273  CA  GLU A 300      -8.483  -9.611 -20.945  1.00 30.62          C
ATOM   3274  C   GLU A 300      -7.477  -9.351 -19.809  1.00 31.01          C
ATOM   3275  O   GLU A 300      -6.838 -10.288 -19.327  1.00 30.85          O
ATOM   3276  CB  GLU A 300      -7.848  -9.346 -22.341  1.00 33.91          C
ATOM   3277  CG  GLU A 300      -7.122  -7.992 -22.588  1.00 38.15          C
ATOM   3278  CD  GLU A 300      -8.030  -6.774 -22.462  1.00 41.20          C
ATOM   3279  OE1 GLU A 300      -9.243  -6.932 -22.702  1.00 42.55          O
ATOM   3280  OE2 GLU A 300      -7.547  -5.720 -22.008  1.00 42.55          O1-
ATOM   3281  H   GLU A 300      -9.736  -8.004 -21.487  1.00  0.00          H
ATOM   3282  HA  GLU A 300      -8.793 -10.656 -20.893  1.00  0.00          H
ATOM   3283  HB2 GLU A 300      -7.122 -10.138 -22.528  1.00  0.00          H
ATOM   3284  HB3 GLU A 300      -8.612  -9.480 -23.108  1.00  0.00          H
ATOM   3285  HG2 GLU A 300      -6.269  -7.870 -21.922  1.00  0.00          H
ATOM   3286  HG3 GLU A 300      -6.715  -7.979 -23.598  1.00  0.00          H
ATOM   3287  N   TYR A 301      -7.350  -8.098 -19.355  1.00 29.28          N
ATOM   3288  CA  TYR A 301      -6.435  -7.680 -18.293  1.00 27.29          C
ATOM   3289  C   TYR A 301      -6.956  -8.029 -16.883  1.00 26.08          C
ATOM   3290  O   TYR A 301      -6.181  -8.024 -15.925  1.00 25.20          O
ATOM   3291  CB  TYR A 301      -6.225  -6.152 -18.396  1.00 25.45          C
ATOM   3292  CG  TYR A 301      -5.307  -5.624 -19.501  1.00 24.93          C
ATOM   3293  CD1 TYR A 301      -4.319  -6.425 -20.121  1.00 25.31          C
ATOM   3294  CD2 TYR A 301      -5.413  -4.269 -19.887  1.00 23.92          C
ATOM   3295  CE1 TYR A 301      -3.453  -5.872 -21.085  1.00 25.27          C
ATOM   3296  CE2 TYR A 301      -4.525  -3.709 -20.823  1.00 26.82          C
ATOM   3297  CZ  TYR A 301      -3.537  -4.507 -21.417  1.00 25.82          C
ATOM   3298  OH  TYR A 301      -2.647  -3.954 -22.289  1.00 26.18          O
ATOM   3299  H   TYR A 301      -7.850  -7.374 -19.860  1.00  0.00          H
ATOM   3300  HA  TYR A 301      -5.486  -8.207 -18.385  1.00  0.00          H
ATOM   3301  HB2 TYR A 301      -7.196  -5.663 -18.485  1.00  0.00          H
ATOM   3302  HB3 TYR A 301      -5.811  -5.783 -17.459  1.00  0.00          H
ATOM   3303  HD1 TYR A 301      -4.198  -7.467 -19.879  1.00  0.00          H
ATOM   3304  HD2 TYR A 301      -6.178  -3.636 -19.474  1.00  0.00          H
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ATOM   3305  HE1 TYR A 301      -2.699  -6.488 -21.550  1.00  0.00           H
ATOM   3306  HE2 TYR A 301      -4.607  -2.667 -21.090  1.00  0.00           H
ATOM   3307  HH  TYR A 301      -2.362  -3.064 -21.998  1.00  0.00           H
ATOM   3308  N   LEU A 302      -8.231  -8.410 -16.748  1.00 26.08           N
ATOM   3309  CA  LEU A 302      -8.800  -9.016 -15.546  1.00 25.64           C
ATOM   3310  C   LEU A 302      -8.296 -10.471 -15.445  1.00 26.50           C
ATOM   3311  O   LEU A 302      -8.123 -11.148 -16.461  1.00 26.41           O
ATOM   3312  CB  LEU A 302     -10.343  -8.957 -15.688  1.00 26.41           C
ATOM   3313  CG  LEU A 302     -11.202  -9.630 -14.593  1.00 28.11           C
ATOM   3314  CD1 LEU A 302     -10.948  -9.065 -13.190  1.00 26.19           C
ATOM   3315  CD2 LEU A 302     -12.694  -9.523 -14.945  1.00 28.85           C
ATOM   3316  H   LEU A 302      -8.764  -8.505 -17.603  1.00  0.00           H
ATOM   3317  HA  LEU A 302      -8.482  -8.451 -14.667  1.00  0.00           H
ATOM   3318  HB2 LEU A 302     -10.642  -7.913 -15.783  1.00  0.00           H
ATOM   3319  HB3 LEU A 302     -10.613  -9.425 -16.632  1.00  0.00           H
ATOM   3320  HG  LEU A 302     -10.963 -10.693 -14.576  1.00  0.00           H
ATOM   3321 HD11 LEU A 302     -11.582  -9.559 -12.454  1.00  0.00           H
ATOM   3322 HD12 LEU A 302      -9.919  -9.233 -12.878  1.00  0.00           H
ATOM   3323 HD13 LEU A 302     -11.147  -7.995 -13.144  1.00  0.00           H
ATOM   3324 HD21 LEU A 302     -13.311 -10.044 -14.213  1.00  0.00           H
ATOM   3325 HD22 LEU A 302     -13.021  -8.483 -14.984  1.00  0.00           H
ATOM   3326 HD23 LEU A 302     -12.897  -9.970 -15.919  1.00  0.00           H
ATOM   3327  N   ASP A 303      -8.024 -10.943 -14.224  1.00 26.14           N
ATOM   3328  CA  ASP A 303      -7.716 -12.344 -13.940  1.00 26.40           C
ATOM   3329  C   ASP A 303      -9.033 -13.091 -13.695  1.00 26.12           C
ATOM   3330  O   ASP A 303      -9.947 -12.560 -13.057  1.00 26.00           O
ATOM   3331  CB  ASP A 303      -6.869 -12.438 -12.654  1.00 24.91           C
ATOM   3332  CG  ASP A 303      -6.076 -13.734 -12.610  1.00 24.80           C
ATOM   3333  OD1 ASP A 303      -6.686 -14.812 -12.423  1.00 24.92           O
ATOM   3334  OD2 ASP A 303      -4.847 -13.631 -12.799  1.00 22.64           O1-
ATOM   3335  H   ASP A 303      -8.123 -10.334 -13.419  1.00  0.00           H
ATOM   3336  HA  ASP A 303      -7.172 -12.786 -14.778  1.00  0.00           H
ATOM   3337  HB2 ASP A 303      -6.155 -11.615 -12.615  1.00  0.00           H
ATOM   3338  HB3 ASP A 303      -7.472 -12.354 -11.749  1.00  0.00           H
ATOM   3339  N   GLU A 304      -9.133 -14.330 -14.173  1.00 27.08           N
ATOM   3340  CA  GLU A 304     -10.281 -15.212 -13.988  1.00 27.05           C
ATOM   3341  C   GLU A 304     -10.357 -15.767 -12.547  1.00 26.35           C
ATOM   3342  O   GLU A 304     -11.447 -16.088 -12.074  1.00 25.01           O
ATOM   3343  CB  GLU A 304     -10.156 -16.353 -15.022  1.00 29.55           C
ATOM   3344  CG  GLU A 304      -8.878 -17.217 -14.910  1.00 34.94           C
ATOM   3345  CD  GLU A 304      -8.417 -17.784 -16.246  1.00 38.80           C
ATOM   3346  OE1 GLU A 304      -9.288 -18.197 -17.038  1.00 40.86           O
ATOM   3347  OE2 GLU A 304      -7.187 -17.779 -16.464  1.00 37.70           O1-
ATOM   3348  H   GLU A 304      -8.322 -14.735 -14.623  1.00  0.00           H
ATOM   3349  HA  GLU A 304     -11.197 -14.655 -14.189  1.00  0.00           H
ATOM   3350  HB2 GLU A 304     -11.024 -17.011 -14.956  1.00  0.00           H
ATOM   3351  HB3 GLU A 304     -10.211 -15.915 -16.020  1.00  0.00           H
ATOM   3352  HG2 GLU A 304      -8.047 -16.627 -14.532  1.00  0.00           H
ATOM   3353  HG3 GLU A 304      -9.027 -18.039 -14.211  1.00  0.00           H
ATOM   3354  N   ASN A 305      -9.233 -15.821 -11.817  1.00 25.29           N
ATOM   3355  CA  ASN A 305      -9.102 -16.425 -10.483  1.00 24.94           C
ATOM   3356  C   ASN A 305      -9.126 -15.321  -9.400  1.00 25.14           C
ATOM   3357  O   ASN A 305      -8.537 -15.477  -8.327  1.00 24.32           O
ATOM   3358  CB  ASN A 305      -7.737 -17.153 -10.359  1.00 26.38           C
ATOM   3359  CG  ASN A 305      -7.369 -18.099 -11.497  1.00 26.41           C
ATOM   3360  OD1 ASN A 305      -7.673 -19.286 -11.441  1.00 28.64           O
ATOM   3361  ND2 ASN A 305      -6.682 -17.580 -12.509  1.00 27.76           N
ATOM   3362  H   ASN A 305      -8.369 -15.455 -12.233  1.00  0.00           H
ATOM   3363  HA  ASN A 305      -9.910 -17.135 -10.300  1.00  0.00           H
ATOM   3364  HB2 ASN A 305      -6.948 -16.419 -10.293  1.00  0.00           H
ATOM   3365  HB3 ASN A 305      -7.702 -17.720  -9.429  1.00  0.00           H
ATOM   3366 HD21 ASN A 305      -6.531 -16.559 -12.540  1.00  0.00           H
ATOM   3367 HD22 ASN A 305      -6.508 -18.130 -13.339  1.00  0.00           H
ATOM   3368  N   ASN A 306      -9.747 -14.177  -9.708  1.00 24.92           N
ATOM   3369  CA  ASN A 306      -9.760 -12.930  -8.937  1.00 24.17           C
ATOM   3370  C   ASN A 306     -10.445 -13.012  -7.552  1.00 23.07           C
ATOM   3371  O   ASN A 306     -11.080 -14.000  -7.180  1.00 22.07           O
ATOM   3372  CB  ASN A 306     -10.402 -11.798  -9.783  1.00 24.78           C
ATOM   3373  CG  ASN A 306     -11.865 -12.024 -10.171  1.00 23.30           C
ATOM   3374  OD1 ASN A 306     -12.759 -11.883  -9.341  1.00 23.64           O
ATOM   3375  ND2 ASN A 306     -12.126 -12.366 -11.425  1.00 30.14           N
ATOM   3376  H   ASN A 306     -10.193 -14.176 -10.614  1.00  0.00           H
ATOM   3377  HA  ASN A 306      -8.716 -12.663  -8.757  1.00  0.00           H
ATOM   3378  HB2 ASN A 306     -10.368 -10.861  -9.236  1.00  0.00           H
ATOM   3379  HB3 ASN A 306      -9.798 -11.621 -10.674  1.00  0.00           H
ATOM   3380 HD21 ASN A 306     -11.355 -12.448 -12.100  1.00  0.00           H
ATOM   3381 HD22 ASN A 306     -13.066 -12.586 -11.704  1.00  0.00           H
ATOM   3382  N   LEU A 307     -10.333 -11.915  -6.797  1.00 22.52           N
ATOM   3383  CA  LEU A 307     -10.906 -11.672  -5.482  1.00 20.85           C
ATOM   3384  C   LEU A 307     -11.891 -10.483  -5.570  1.00 21.65           C
ATOM   3385  O   LEU A 307     -11.924  -9.628  -4.683  1.00 22.08           O
ATOM   3386  CB  LEU A 307      -9.737 -11.421  -4.495  1.00 21.68           C
ATOM   3387  CG  LEU A 307     -10.101 -11.451  -2.993  1.00 24.57           C
ATOM   3388  CD1 LEU A 307     -10.260 -12.873  -2.456  1.00 25.54           C
ATOM   3389  CD2 LEU A 307      -9.061 -10.688  -2.165  1.00 24.54           C
ATOM   3390  H   LEU A 307      -9.799 -11.133  -7.184  1.00  0.00           H
ATOM   3391  HA  LEU A 307     -11.474 -12.544  -5.155  1.00  0.00           H
ATOM   3392  HB2 LEU A 307      -8.939 -12.141  -4.675  1.00  0.00           H
ATOM   3393  HB3 LEU A 307      -9.296 -10.454  -4.736  1.00  0.00           H
ATOM   3394  HG  LEU A 307     -11.056 -10.957  -2.840  1.00  0.00           H
ATOM   3395 HD11 LEU A 307     -10.476 -12.855  -1.389  1.00  0.00           H
ATOM   3396 HD12 LEU A 307     -11.078 -13.395  -2.950  1.00  0.00           H
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ATOM   3397 HD13 LEU A 307      -9.344 -13.446  -2.592  1.00  0.00           H
ATOM   3398 HD21 LEU A 307      -9.338 -10.681  -1.113  1.00  0.00           H
ATOM   3399 HD22 LEU A 307      -8.077 -11.149  -2.248  1.00  0.00           H
ATOM   3400 HD23 LEU A 307      -8.974  -9.650  -2.489  1.00  0.00           H
ATOM   3401  N   MET A 308     -12.735 -10.414  -6.615  1.00 20.81           N
ATOM   3402  CA  MET A 308     -13.786  -9.390  -6.780  1.00 22.78           C
ATOM   3403  C   MET A 308     -14.760  -9.327  -5.579  1.00 22.78           C
ATOM   3404  O   MET A 308     -15.279  -8.261  -5.248  1.00 22.72           O
ATOM   3405  CB  MET A 308     -14.536  -9.637  -8.111  1.00 21.26           C
ATOM   3406  CG  MET A 308     -15.669  -8.648  -8.438  1.00 20.59           C
ATOM   3407  SD  MET A 308     -15.164  -6.926  -8.698  1.00 23.31           S
ATOM   3408  CE  MET A 308     -14.743  -6.972 -10.465  1.00 20.96           C
ATOM   3409  H   MET A 308     -12.640 -11.111  -7.349  1.00  0.00           H
ATOM   3410  HA  MET A 308     -13.287  -8.421  -6.834  1.00  0.00           H
ATOM   3411  HB2 MET A 308     -13.823  -9.615  -8.934  1.00  0.00           H
ATOM   3412  HB3 MET A 308     -14.952 -10.646  -8.102  1.00  0.00           H
ATOM   3413  HG2 MET A 308     -16.199  -8.987  -9.329  1.00  0.00           H
ATOM   3414  HG3 MET A 308     -16.409  -8.663  -7.641  1.00  0.00           H
ATOM   3415  HE1 MET A 308     -14.328  -6.015 -10.780  1.00  0.00           H
ATOM   3416  HE2 MET A 308     -14.009  -7.749 -10.674  1.00  0.00           H
ATOM   3417  HE3 MET A 308     -15.629  -7.174 -11.066  1.00  0.00           H
ATOM   3418  N   SER A 309     -14.941 -10.450  -4.879  1.00 22.41           N
ATOM   3419  CA  SER A 309     -15.730 -10.610  -3.665  1.00 23.60           C
ATOM   3420  C   SER A 309     -15.171  -9.851  -2.442  1.00 22.97           C
ATOM   3421  O   SER A 309     -15.893  -9.677  -1.462  1.00 22.64           O
ATOM   3422  CB  SER A 309     -15.811 -12.125  -3.390  1.00 24.95           C
ATOM   3423  OG  SER A 309     -14.520 -12.731  -3.377  1.00 30.97           O
ATOM   3424  H   SER A 309     -14.437 -11.277  -5.167  1.00  0.00           H
ATOM   3425  HA  SER A 309     -16.736 -10.226  -3.849  1.00  0.00           H
ATOM   3426  HB2 SER A 309     -16.305 -12.305  -2.433  1.00  0.00           H
ATOM   3427  HB3 SER A 309     -16.425 -12.609  -4.151  1.00  0.00           H
ATOM   3428  HG  SER A 309     -14.599 -13.602  -3.014  1.00  0.00           H
ATOM   3429  N   PHE A 310     -13.917  -9.372  -2.485  1.00 22.04           N
ATOM   3430  CA  PHE A 310     -13.368  -8.474  -1.468  1.00 21.22           C
ATOM   3431  C   PHE A 310     -13.793  -7.025  -1.753  1.00 21.27           C
ATOM   3432  O   PHE A 310     -13.971  -6.259  -0.810  1.00 20.91           O
ATOM   3433  CB  PHE A 310     -11.823  -8.551  -1.484  1.00 20.01           C
ATOM   3434  CG  PHE A 310     -11.100  -7.560  -0.584  1.00 20.57           C
ATOM   3435  CD1 PHE A 310     -11.290  -7.605   0.811  1.00 21.24           C
ATOM   3436  CD2 PHE A 310     -10.275  -6.561  -1.144  1.00 21.25           C
ATOM   3437  CE1 PHE A 310     -10.659  -6.660   1.640  1.00 21.69           C
ATOM   3438  CE2 PHE A 310      -9.656  -5.608  -0.313  1.00 21.89           C
ATOM   3439  CZ  PHE A 310      -9.845  -5.659   1.081  1.00 21.34           C
ATOM   3440  H   PHE A 310     -13.356  -9.558  -3.311  1.00  0.00           H
ATOM   3441  HA  PHE A 310     -13.729  -8.753  -0.476  1.00  0.00           H
ATOM   3442  HB2 PHE A 310     -11.524  -9.546  -1.163  1.00  0.00           H
ATOM   3443  HB3 PHE A 310     -11.448  -8.425  -2.500  1.00  0.00           H
ATOM   3444  HD1 PHE A 310     -11.936  -8.352   1.248  1.00  0.00           H
ATOM   3445  HD2 PHE A 310     -10.118  -6.512  -2.212  1.00  0.00           H
ATOM   3446  HE1 PHE A 310     -10.800  -6.703   2.706  1.00  0.00           H
ATOM   3447  HE2 PHE A 310      -9.012  -4.855  -0.741  1.00  0.00           H
ATOM   3448  HZ  PHE A 310      -9.353  -4.942   1.721  1.00  0.00           H
ATOM   3449  N   LEU A 311     -13.968  -6.647  -3.026  1.00 20.63           N
ATOM   3450  CA  LEU A 311     -14.217  -5.267  -3.440  1.00 22.79           C
ATOM   3451  C   LEU A 311     -15.712  -4.956  -3.550  1.00 24.02           C
ATOM   3452  O   LEU A 311     -16.095  -3.790  -3.497  1.00 26.14           O
ATOM   3453  CB  LEU A 311     -13.684  -5.072  -4.878  1.00 23.27           C
ATOM   3454  CG  LEU A 311     -12.197  -5.393  -5.100  1.00 24.44           C
ATOM   3455  CD1 LEU A 311     -11.888  -5.269  -6.597  1.00 21.83           C
ATOM   3456  CD2 LEU A 311     -11.273  -4.495  -4.262  1.00 24.33           C
ATOM   3457  H   LEU A 311     -13.892  -7.347  -3.750  1.00  0.00           H
ATOM   3458  HA  LEU A 311     -13.755  -4.555  -2.752  1.00  0.00           H
ATOM   3459  HB2 LEU A 311     -14.268  -5.687  -5.567  1.00  0.00           H
ATOM   3460  HB3 LEU A 311     -13.864  -4.040  -5.186  1.00  0.00           H
ATOM   3461  HG  LEU A 311     -12.007  -6.429  -4.816  1.00  0.00           H
ATOM   3462 HD11 LEU A 311     -10.848  -5.495  -6.807  1.00  0.00           H
ATOM   3463 HD12 LEU A 311     -12.492  -5.960  -7.185  1.00  0.00           H
ATOM   3464 HD13 LEU A 311     -12.083  -4.263  -6.969  1.00  0.00           H
ATOM   3465 HD21 LEU A 311     -10.230  -4.770  -4.413  1.00  0.00           H
ATOM   3466 HD22 LEU A 311     -11.381  -3.444  -4.526  1.00  0.00           H
ATOM   3467 HD23 LEU A 311     -11.470  -4.593  -3.194  1.00  0.00           H
ATOM   3468  N   SER A 312     -16.559  -5.961  -3.778  1.00 24.95           N
ATOM   3469  CA  SER A 312     -17.886  -5.768  -4.331  1.00 24.03           C
ATOM   3470  C   SER A 312     -18.941  -6.555  -3.557  1.00 25.46           C
ATOM   3471  O   SER A 312     -18.676  -7.642  -3.047  1.00 23.59           O
ATOM   3472  CB  SER A 312     -17.822  -6.069  -5.840  1.00 22.48           C
ATOM   3473  OG  SER A 312     -19.060  -5.837  -6.485  1.00 23.27           O
ATOM   3474  H   SER A 312     -16.195  -6.907  -3.787  1.00  0.00           H
ATOM   3475  HA  SER A 312     -18.172  -4.721  -4.220  1.00  0.00           H
ATOM   3476  HB2 SER A 312     -17.064  -5.445  -6.318  1.00  0.00           H
ATOM   3477  HB3 SER A 312     -17.519  -7.103  -5.996  1.00  0.00           H
ATOM   3478  HG  SER A 312     -19.247  -4.893  -6.395  1.00  0.00           H
ATOM   3479  N   ASN A 313     -20.150  -5.984  -3.489  1.00 27.59           N
ATOM   3480  CA  ASN A 313     -21.309  -6.545  -2.790  1.00 30.50           C
ATOM   3481  C   ASN A 313     -22.031  -7.525  -3.730  1.00 30.83           C
ATOM   3482  O   ASN A 313     -22.538  -8.553  -3.288  1.00 32.14           O
ATOM   3483  CB  ASN A 313     -22.340  -5.429  -2.458  1.00 29.50           C
ATOM   3484  CG  ASN A 313     -21.744  -4.169  -1.829  1.00 31.80           C
ATOM   3485  OD1 ASN A 313     -21.397  -4.149  -0.655  1.00 30.49           O
ATOM   3486  ND2 ASN A 313     -21.592  -3.113  -2.622  1.00 31.11           N
ATOM   3487  H   ASN A 313     -20.266  -5.088  -3.940  1.00  0.00           H
ATOM   3488  HA  ASN A 313     -20.993  -7.054  -1.877  1.00  0.00           H
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ATOM   3489  HB2 ASN A 313     -22.908  -5.134  -3.343  1.00  0.00           H
ATOM   3490  HB3 ASN A 313     -23.080  -5.828  -1.763  1.00  0.00           H
ATOM   3491 HD21 ASN A 313     -21.903  -3.163  -3.597  1.00  0.00           H
ATOM   3492 HD22 ASN A 313     -21.160  -2.267  -2.269  1.00  0.00           H
ATOM   3493  N   ASP A 314     -22.104  -7.185  -5.025  1.00 32.03           N
ATOM   3494  CA  ASP A 314     -22.820  -7.928  -6.064  1.00 31.57           C
ATOM   3495  C   ASP A 314     -21.844  -8.771  -6.909  1.00 32.42           C
ATOM   3496  O   ASP A 314     -22.268  -9.749  -7.522  1.00 29.58           O
ATOM   3497  CB  ASP A 314     -23.525  -6.908  -7.001  1.00 33.24           C
ATOM   3498  CG  ASP A 314     -22.582  -6.047  -7.832  1.00 33.93           C
ATOM   3499  OD1 ASP A 314     -22.006  -5.092  -7.276  1.00 33.28           O
ATOM   3500  OD2 ASP A 314     -22.357  -6.378  -9.013  1.00 35.28           O1-
ATOM   3501  H   ASP A 314     -21.665  -6.320  -5.315  1.00  0.00           H
ATOM   3502  HA  ASP A 314     -23.567  -8.589  -5.621  1.00  0.00           H
ATOM   3503  HB2 ASP A 314     -24.184  -7.445  -7.684  1.00  0.00           H
ATOM   3504  HB3 ASP A 314     -24.171  -6.251  -6.419  1.00  0.00           H
ATOM   3505  N   ASN A 315     -20.564  -8.380  -6.966  1.00 31.75           N
ATOM   3506  CA  ASN A 315     -19.483  -8.908  -7.801  1.00 32.79           C
ATOM   3507  C   ASN A 315     -19.354  -8.131  -9.117  1.00 31.79           C
ATOM   3508  O   ASN A 315     -19.575  -8.670 -10.205  1.00 30.01           O
ATOM   3509  CB  ASN A 315     -19.378 -10.450  -7.928  1.00 34.98           C
ATOM   3510  CG  ASN A 315     -19.119 -11.142  -6.592  1.00 39.86           C
ATOM   3511  OD1 ASN A 315     -17.979 -11.273  -6.159  1.00 41.48           O
ATOM   3512  ND2 ASN A 315     -20.174 -11.586  -5.920  1.00 39.98           N
ATOM   3513  H   ASN A 315     -20.339  -7.524  -6.471  1.00  0.00           H
ATOM   3514  HA  ASN A 315     -18.591  -8.627  -7.246  1.00  0.00           H
ATOM   3515  HB2 ASN A 315     -20.248 -10.879  -8.423  1.00  0.00           H
ATOM   3516  HB3 ASN A 315     -18.536 -10.695  -8.578  1.00  0.00           H
ATOM   3517 HD21 ASN A 315     -21.101 -11.394  -6.278  1.00  0.00           H
ATOM   3518 HD22 ASN A 315     -20.037 -12.000  -5.013  1.00  0.00           H
ATOM   3519  N   GLY A 316     -19.026  -6.841  -9.025  1.00 29.91           N
ATOM   3520  CA  GLY A 316     -18.421  -6.049 -10.088  1.00 28.90           C
ATOM   3521  C   GLY A 316     -19.168  -4.791 -10.521  1.00 29.49           C
ATOM   3522  O   GLY A 316     -18.616  -4.061 -11.340  1.00 31.30           O
ATOM   3523  H   GLY A 316     -19.003  -6.438  -8.084  1.00  0.00           H
ATOM   3524  HA2 GLY A 316     -17.451  -5.711  -9.728  1.00  0.00           H
ATOM   3525  HA3 GLY A 316     -18.216  -6.651 -10.975  1.00  0.00           H
ATOM   3526  N   LYS A 317     -20.388  -4.514 -10.035  1.00 28.46           N
ATOM   3527  CA  LYS A 317     -21.094  -3.275 -10.376  1.00 29.26           C
ATOM   3528  C   LYS A 317     -20.988  -2.256  -9.227  1.00 28.45           C
ATOM   3529  O   LYS A 317     -20.743  -1.080  -9.490  1.00 29.61           O
ATOM   3530  CB  LYS A 317     -22.580  -3.553 -10.708  1.00 30.65           C
ATOM   3531  CG  LYS A 317     -22.832  -4.181 -12.104  1.00 32.56           C
ATOM   3532  CD  LYS A 317     -23.149  -5.693 -12.118  1.00 33.46           C
ATOM   3533  CE  LYS A 317     -21.918  -6.619 -12.211  1.00 35.75           C
ATOM   3534  NZ  LYS A 317     -21.916  -7.628 -11.141  1.00 33.98           N1+
ATOM   3535  H   LYS A 317     -20.834  -5.135  -9.357  1.00  0.00           H
ATOM   3536  HA  LYS A 317     -20.654  -2.789 -11.250  1.00  0.00           H
ATOM   3537  HB2 LYS A 317     -23.072  -4.115  -9.916  1.00  0.00           H
ATOM   3538  HB3 LYS A 317     -23.092  -2.589 -10.709  1.00  0.00           H
ATOM   3539  HG2 LYS A 317     -23.708  -3.678 -12.517  1.00  0.00           H
ATOM   3540  HG3 LYS A 317     -22.024  -3.941 -12.798  1.00  0.00           H
ATOM   3541  HD2 LYS A 317     -23.775  -5.938 -11.258  1.00  0.00           H
ATOM   3542  HD3 LYS A 317     -23.779  -5.896 -12.986  1.00  0.00           H
ATOM   3543  HE2 LYS A 317     -21.891  -7.126 -13.177  1.00  0.00           H
ATOM   3544  HE3 LYS A 317     -20.996  -6.045 -12.156  1.00  0.00           H
ATOM   3545  HZ1 LYS A 317     -21.010  -8.081 -11.024  1.00  0.00           H
ATOM   3546  HZ2 LYS A 317     -22.087  -7.121 -10.241  1.00  0.00           H
ATOM   3547  HZ3 LYS A 317     -22.641  -8.316 -11.234  1.00  0.00           H
ATOM   3548  N   THR A 318     -21.130  -2.673  -7.965  1.00 28.25           N
ATOM   3549  CA  THR A 318     -21.055  -1.819  -6.778  1.00 25.97           C
ATOM   3550  C   THR A 318     -19.749  -2.102  -6.012  1.00 24.96           C
ATOM   3551  O   THR A 318     -19.287  -3.243  -5.978  1.00 24.07           O
ATOM   3552  CB  THR A 318     -22.298  -2.096  -5.886  1.00 27.38           C
ATOM   3553  OG1 THR A 318     -22.311  -3.405  -5.335  1.00 30.36           O
ATOM   3554  CG2 THR A 318     -23.636  -1.865  -6.606  1.00 28.55           C
ATOM   3555  H   THR A 318     -21.354  -3.662  -7.790  1.00  0.00           H
ATOM   3556  HA  THR A 318     -21.064  -0.765  -7.062  1.00  0.00           H
ATOM   3557  HB  THR A 318     -22.259  -1.404  -5.042  1.00  0.00           H
ATOM   3558  HG1 THR A 318     -22.248  -4.035  -6.078  1.00  0.00           H
ATOM   3559 HG21 THR A 318     -24.473  -1.967  -5.915  1.00  0.00           H
ATOM   3560 HG22 THR A 318     -23.681  -0.864  -7.035  1.00  0.00           H
ATOM   3561 HG23 THR A 318     -23.789  -2.581  -7.414  1.00  0.00           H
ATOM   3562  N   TYR A 319     -19.172  -1.079  -5.373  1.00 22.19           N
ATOM   3563  CA  TYR A 319     -18.038  -1.197  -4.456  1.00 21.55           C
ATOM   3564  C   TYR A 319     -18.615  -1.349  -3.038  1.00 20.73           C
ATOM   3565  O   TYR A 319     -19.650  -0.748  -2.737  1.00 22.78           O
ATOM   3566  CB  TYR A 319     -17.225   0.122  -4.524  1.00 17.02           C
ATOM   3567  CG  TYR A 319     -15.808   0.125  -3.958  1.00 18.70           C
ATOM   3568  CD1 TYR A 319     -14.958  -0.993  -4.100  1.00 15.33           C
ATOM   3569  CD2 TYR A 319     -15.309   1.282  -3.322  1.00 16.65           C
ATOM   3570  CE1 TYR A 319     -13.681  -1.004  -3.510  1.00 16.26           C
ATOM   3571  CE2 TYR A 319     -14.013   1.289  -2.769  1.00 16.78           C
ATOM   3572  CZ  TYR A 319     -13.215   0.133  -2.829  1.00 15.64           C
ATOM   3573  OH  TYR A 319     -12.003   0.114  -2.212  1.00 14.07           O
ATOM   3574  H   TYR A 319     -19.624  -0.179  -5.399  1.00  0.00           H
ATOM   3575  HA  TYR A 319     -17.432  -2.056  -4.740  1.00  0.00           H
ATOM   3576  HB2 TYR A 319     -17.129   0.420  -5.560  1.00  0.00           H
ATOM   3577  HB3 TYR A 319     -17.790   0.928  -4.052  1.00  0.00           H
ATOM   3578  HD1 TYR A 319     -15.270  -1.858  -4.661  1.00  0.00           H
ATOM   3579  HD2 TYR A 319     -15.919   2.169  -3.252  1.00  0.00           H
ATOM   3580  HE1 TYR A 319     -13.062  -1.887  -3.588  1.00  0.00           H
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ATOM   3581  HE2 TYR A 319     -13.641   2.165  -2.259  1.00  0.00           H
ATOM   3582  HH  TYR A 319     -11.851  -0.727  -1.775  1.00  0.00           H
ATOM   3583  N   ASN A 320     -17.981  -2.146  -2.171  1.00 18.73           N
ATOM   3584  CA  ASN A 320     -18.380  -2.309  -0.761  1.00 19.06           C
ATOM   3585  C   ASN A 320     -17.623  -1.346   0.180  1.00 16.51           C
ATOM   3586  O   ASN A 320     -17.947  -1.292   1.365  1.00 16.08           O
ATOM   3587  CB  ASN A 320     -18.166  -3.771  -0.279  1.00 19.10           C
ATOM   3588  CG  ASN A 320     -16.732  -4.300  -0.304  1.00 19.82           C
ATOM   3589  OD1 ASN A 320     -15.775  -3.551  -0.474  1.00 21.01           O
ATOM   3590  ND2 ASN A 320     -16.555  -5.607  -0.188  1.00 17.92           N
ATOM   3591  H   ASN A 320     -17.159  -2.660  -2.491  1.00  0.00           H
ATOM   3592  HA  ASN A 320     -19.442  -2.088  -0.645  1.00  0.00           H
ATOM   3593  HB2 ASN A 320     -18.547  -3.882   0.736  1.00  0.00           H
ATOM   3594  HB3 ASN A 320     -18.774  -4.432  -0.896  1.00  0.00           H
ATOM   3595 HD21 ASN A 320     -17.320  -6.256  -0.094  1.00  0.00           H
ATOM   3596 HD22 ASN A 320     -15.592  -5.942  -0.268  1.00  0.00           H
ATOM   3597  N   LEU A 321     -16.622  -0.623  -0.348  1.00 16.54           N
ATOM   3598  CA  LEU A 321     -15.753   0.370   0.295  1.00 16.81           C
ATOM   3599  C   LEU A 321     -14.430  -0.189   0.854  1.00 19.47           C
ATOM   3600  O   LEU A 321     -13.605   0.593   1.328  1.00 17.04           O
ATOM   3601  CB  LEU A 321     -16.480   1.364   1.240  1.00 17.52           C
ATOM   3602  CG  LEU A 321     -17.669   2.146   0.633  1.00 19.03           C
ATOM   3603  CD1 LEU A 321     -18.489   2.835   1.733  1.00 18.92           C
ATOM   3604  CD2 LEU A 321     -17.216   3.183  -0.403  1.00 19.85           C
ATOM   3605  H   LEU A 321     -16.407  -0.829  -1.312  1.00  0.00           H
ATOM   3606  HA  LEU A 321     -15.407   0.979  -0.534  1.00  0.00           H
ATOM   3607  HB2 LEU A 321     -16.825   0.812   2.111  1.00  0.00           H
ATOM   3608  HB3 LEU A 321     -15.761   2.080   1.638  1.00  0.00           H
ATOM   3609  HG  LEU A 321     -18.338   1.441   0.139  1.00  0.00           H
ATOM   3610 HD11 LEU A 321     -19.394   3.289   1.330  1.00  0.00           H
ATOM   3611 HD12 LEU A 321     -18.796   2.128   2.504  1.00  0.00           H
ATOM   3612 HD13 LEU A 321     -17.917   3.627   2.218  1.00  0.00           H
ATOM   3613 HD21 LEU A 321     -18.067   3.724  -0.817  1.00  0.00           H
ATOM   3614 HD22 LEU A 321     -16.538   3.914   0.041  1.00  0.00           H
ATOM   3615 HD23 LEU A 321     -16.703   2.709  -1.235  1.00  0.00           H
ATOM   3616  N   CYS A 322     -14.195  -1.507   0.799  1.00 19.78           N
ATOM   3617  CA  CYS A 322     -13.033  -2.152   1.417  1.00 21.80           C
ATOM   3618  C   CYS A 322     -11.752  -1.983   0.588  1.00 21.81           C
ATOM   3619  O   CYS A 322     -11.779  -2.050  -0.644  1.00 21.18           O
ATOM   3620  CB  CYS A 322     -13.280  -3.666   1.545  1.00 20.40           C
ATOM   3621  SG  CYS A 322     -14.431  -4.155   2.860  1.00 21.81           S
ATOM   3622  H   CYS A 322     -14.874  -2.116   0.349  1.00  0.00           H
ATOM   3623  HA  CYS A 322     -12.872  -1.719   2.404  1.00  0.00           H
ATOM   3624  HB2 CYS A 322     -13.605  -4.088   0.596  1.00  0.00           H
ATOM   3625  HB3 CYS A 322     -12.342  -4.177   1.765  1.00  0.00           H
ATOM   3626  N   HIS A 323     -10.617  -1.801   1.269  1.00 21.47           N
ATOM   3627  CA  HIS A 323      -9.285  -1.739   0.681  1.00 21.03           C
ATOM   3628  C   HIS A 323      -8.212  -2.259   1.646  1.00 21.77           C
ATOM   3629  O   HIS A 323      -8.425  -2.330   2.858  1.00 21.97           O
ATOM   3630  CB  HIS A 323      -8.996  -0.332   0.130  1.00 19.56           C
ATOM   3631  CG  HIS A 323      -8.917   0.781   1.138  1.00 20.31           C
ATOM   3632  ND1 HIS A 323     -10.017   1.484   1.585  1.00 18.55           N
ATOM   3633  CD2 HIS A 323      -7.844   1.311   1.813  1.00 19.48           C
ATOM   3634  CE1 HIS A 323      -9.568   2.438   2.400  1.00 19.82           C
ATOM   3635  NE2 HIS A 323      -8.253   2.399   2.580  1.00 17.55           N
ATOM   3636  H   HIS A 323     -10.662  -1.633   2.274  1.00  0.00           H
ATOM   3637  HA  HIS A 323      -9.272  -2.429  -0.165  1.00  0.00           H
ATOM   3638  HB2 HIS A 323      -8.035  -0.331  -0.376  1.00  0.00           H
ATOM   3639  HB3 HIS A 323      -9.731  -0.065  -0.628  1.00  0.00           H
ATOM   3640  HD1 HIS A 323     -10.991   1.300   1.367  1.00  0.00           H
ATOM   3641  HD2 HIS A 323      -6.814   1.001   1.786  1.00  0.00           H
ATOM   3642  HE1 HIS A 323     -10.204   3.159   2.888  1.00  0.00           H
ATOM   3643  N   PHE A 324      -7.047  -2.606   1.099  1.00 20.35           N
ATOM   3644  CA  PHE A 324      -5.791  -2.896   1.781  1.00 21.54           C
ATOM   3645  C   PHE A 324      -5.132  -1.534   2.047  1.00 21.67           C
ATOM   3646  O   PHE A 324      -5.050  -0.710   1.135  1.00 19.86           O
ATOM   3647  CB  PHE A 324      -4.889  -3.701   0.813  1.00 21.99           C
ATOM   3648  CG  PHE A 324      -5.515  -4.946   0.192  1.00 23.32           C
ATOM   3649  CD1 PHE A 324      -6.245  -5.858   0.980  1.00 23.40           C
ATOM   3650  CD2 PHE A 324      -5.357  -5.202  -1.187  1.00 21.47           C
ATOM   3651  CE1 PHE A 324      -6.803  -7.011   0.398  1.00 23.76           C
ATOM   3652  CE2 PHE A 324      -5.923  -6.352  -1.772  1.00 21.69           C
ATOM   3653  CZ  PHE A 324      -6.646  -7.260  -0.978  1.00 21.06           C
ATOM   3654  H   PHE A 324      -6.944  -2.478   0.087  1.00  0.00           H
ATOM   3655  HA  PHE A 324      -5.959  -3.440   2.707  1.00  0.00           H
ATOM   3656  HB2 PHE A 324      -4.554  -3.056  -0.002  1.00  0.00           H
ATOM   3657  HB3 PHE A 324      -3.979  -4.008   1.331  1.00  0.00           H
ATOM   3658  HD1 PHE A 324      -6.373  -5.689   2.037  1.00  0.00           H
ATOM   3659  HD2 PHE A 324      -4.779  -4.520  -1.795  1.00  0.00           H
ATOM   3660  HE1 PHE A 324      -7.360  -7.695   1.017  1.00  0.00           H
ATOM   3661  HE2 PHE A 324      -5.798  -6.544  -2.828  1.00  0.00           H
ATOM   3662  HZ  PHE A 324      -7.080  -8.144  -1.422  1.00  0.00           H
ATOM   3663  N   TRP A 325      -4.726  -1.255   3.292  1.00 22.91           N
ATOM   3664  CA  TRP A 325      -4.222   0.052   3.709  1.00 25.28           C
ATOM   3665  C   TRP A 325      -2.719   0.080   3.359  1.00 26.42           C
ATOM   3666  O   TRP A 325      -1.909  -0.609   3.983  1.00 30.29           O
ATOM   3667  CB  TRP A 325      -4.486   0.200   5.234  1.00 24.63           C
ATOM   3668  CG  TRP A 325      -4.788   1.569   5.788  1.00 24.92           C
ATOM   3669  CD1 TRP A 325      -5.313   2.617   5.111  1.00 22.73           C
ATOM   3670  CD2 TRP A 325      -4.586   2.054   7.155  1.00 22.74           C
ATOM   3671  NE1 TRP A 325      -5.472   3.690   5.965  1.00 25.68           N
ATOM   3672  CE3 TRP A 325      -4.041   1.497   8.334  1.00 22.84           C
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ATOM   3673  CE2 TRP A 325      -5.019   3.411   7.232  1.00 24.25           C
ATOM   3674  CZ3 TRP A 325      -3.937   2.241   9.525  1.00 20.89           C
ATOM   3675  CZ2 TRP A 325      -4.927   4.166   8.414  1.00 22.79           C
ATOM   3676  CH2 TRP A 325      -4.381   3.575   9.567  1.00 24.61           C
ATOM   3677  H   TRP A 325      -4.682  -1.998   3.986  1.00  0.00           H
ATOM   3678  HA  TRP A 325      -4.753   0.826   3.156  1.00  0.00           H
ATOM   3679  HB2 TRP A 325      -5.352  -0.399   5.516  1.00  0.00           H
ATOM   3680  HB3 TRP A 325      -3.656  -0.216   5.805  1.00  0.00           H
ATOM   3681  HD1 TRP A 325      -5.610   2.607   4.073  1.00  0.00           H
ATOM   3682  HE1 TRP A 325      -5.972   4.532   5.680  1.00  0.00           H
ATOM   3683  HE3 TRP A 325      -3.673   0.488   8.305  1.00  0.00           H
ATOM   3684  HZ3 TRP A 325      -3.495   1.792  10.403  1.00  0.00           H
ATOM   3685  HZ2 TRP A 325      -5.247   5.195   8.425  1.00  0.00           H
ATOM   3686  HH2 TRP A 325      -4.274   4.149  10.474  1.00  0.00           H
ATOM   3687  N   SER A 326      -2.363   0.819   2.300  1.00 24.03           N
ATOM   3688  CA  SER A 326      -1.119   0.713   1.531  1.00 22.71           C
ATOM   3689  C   SER A 326       0.169   1.164   2.256  1.00 21.08           C
ATOM   3690  O   SER A 326       1.272   1.022   1.737  1.00 19.92           O
ATOM   3691  CB  SER A 326      -1.327   1.479   0.207  1.00 22.45           C
ATOM   3692  OG  SER A 326      -1.811   2.798   0.417  1.00 23.98           O
ATOM   3693  H   SER A 326      -3.058   1.402   1.858  1.00  0.00           H
ATOM   3694  HA  SER A 326      -0.989  -0.342   1.290  1.00  0.00           H
ATOM   3695  HB2 SER A 326      -0.393   1.524  -0.356  1.00  0.00           H
ATOM   3696  HB3 SER A 326      -2.029   0.938  -0.428  1.00  0.00           H
ATOM   3697  HG  SER A 326      -1.716   3.283  -0.416  1.00  0.00           H
ATOM   3698  N   ASN A 327       0.061   1.642   3.497  1.00 18.51           N
ATOM   3699  CA  ASN A 327       1.139   1.971   4.433  1.00 18.42           C
ATOM   3700  C   ASN A 327       2.016   0.770   4.873  1.00 19.32           C
ATOM   3701  O   ASN A 327       3.029   0.963   5.554  1.00 18.72           O
ATOM   3702  CB  ASN A 327       0.515   2.677   5.667  1.00 18.64           C
ATOM   3703  CG  ASN A 327      -0.725   2.010   6.233  1.00 18.91           C
ATOM   3704  OD1 ASN A 327      -1.832   2.340   5.852  1.00 17.18           O
ATOM   3705  ND2 ASN A 327      -0.553   1.079   7.211  1.00 16.88           N
ATOM   3706  H   ASN A 327      -0.893   1.721   3.828  1.00  0.00           H
ATOM   3707  HA  ASN A 327       1.808   2.656   3.914  1.00  0.00           H
ATOM   3708  HB2 ASN A 327       1.267   2.831   6.449  1.00  0.00           H
ATOM   3709  HB3 ASN A 327       0.192   3.655   5.309  1.00  0.00           H
ATOM   3710 HD21 ASN A 327       0.374   0.742   7.455  1.00  0.00           H
ATOM   3711 HD22 ASN A 327      -1.346   0.482   7.391  1.00  0.00           H
ATOM   3712  N   PHE A 328       1.625  -0.457   4.510  1.00 18.00           N
ATOM   3713  CA  PHE A 328       2.401  -1.681   4.633  1.00 19.94           C
ATOM   3714  C   PHE A 328       2.068  -2.559   3.432  1.00 20.27           C
ATOM   3715  O   PHE A 328       1.045  -3.245   3.438  1.00 20.85           O
ATOM   3716  CB  PHE A 328       2.140  -2.376   5.980  1.00 20.17           C
ATOM   3717  CG  PHE A 328       3.075  -3.532   6.302  1.00 21.71           C
ATOM   3718  CD1 PHE A 328       2.794  -4.836   5.842  1.00 20.89           C
ATOM   3719  CD2 PHE A 328       4.235  -3.303   7.069  1.00 21.40           C
ATOM   3720  CE1 PHE A 328       3.655  -5.902   6.164  1.00 23.81           C
ATOM   3721  CE2 PHE A 328       5.083  -4.372   7.414  1.00 23.59           C
ATOM   3722  CZ  PHE A 328       4.793  -5.671   6.958  1.00 20.62           C
ATOM   3723  H   PHE A 328       0.777  -0.534   3.959  1.00  0.00           H
ATOM   3724  HA  PHE A 328       3.462  -1.430   4.588  1.00  0.00           H
ATOM   3725  HB2 PHE A 328       2.235  -1.646   6.772  1.00  0.00           H
ATOM   3726  HB3 PHE A 328       1.106  -2.720   6.027  1.00  0.00           H
ATOM   3727  HD1 PHE A 328       1.924  -5.026   5.229  1.00  0.00           H
ATOM   3728  HD2 PHE A 328       4.476  -2.306   7.402  1.00  0.00           H
ATOM   3729  HE1 PHE A 328       3.442  -6.899   5.805  1.00  0.00           H
ATOM   3730  HE2 PHE A 328       5.961  -4.192   8.016  1.00  0.00           H
ATOM   3731  HZ  PHE A 328       5.448  -6.494   7.205  1.00  0.00           H
ATOM   3732  N   GLU A 329       2.929  -2.525   2.417  1.00 21.96           N
ATOM   3733  CA  GLU A 329       2.882  -3.388   1.248  1.00 21.09           C
ATOM   3734  C   GLU A 329       4.286  -3.954   1.091  1.00 20.76           C
ATOM   3735  O   GLU A 329       5.207  -3.180   0.842  1.00 20.35           O
ATOM   3736  CB  GLU A 329       2.470  -2.577   0.008  1.00 20.27           C
ATOM   3737  CG  GLU A 329       1.029  -2.063   0.100  1.00 21.97           C
ATOM   3738  CD  GLU A 329       0.624  -1.214  -1.088  1.00 23.07           C
ATOM   3739  OE1 GLU A 329       1.484  -0.600  -1.750  1.00 20.27           O
ATOM   3740  OE2 GLU A 329      -0.588  -1.160  -1.389  1.00 25.60           O1-
ATOM   3741  H   GLU A 329       3.744  -1.935   2.495  1.00  0.00           H
ATOM   3742  HA  GLU A 329       2.173  -4.205   1.388  1.00  0.00           H
ATOM   3743  HB2 GLU A 329       3.154  -1.739  -0.134  1.00  0.00           H
ATOM   3744  HB3 GLU A 329       2.568  -3.197  -0.885  1.00  0.00           H
ATOM   3745  HG2 GLU A 329       0.342  -2.903   0.199  1.00  0.00           H
ATOM   3746  HG3 GLU A 329       0.912  -1.460   0.994  1.00  0.00           H
ATOM   3747  N   ILE A 330       4.444  -5.269   1.245  1.00 20.01           N
ATOM   3748  CA  ILE A 330       5.595  -6.048   0.802  1.00 21.19           C
ATOM   3749  C   ILE A 330       5.082  -6.638  -0.519  1.00 21.93           C
ATOM   3750  O   ILE A 330       4.325  -7.610  -0.516  1.00 20.27           O
ATOM   3751  CB  ILE A 330       5.895  -7.161   1.854  1.00 20.93           C
ATOM   3752  CG1 ILE A 330       6.373  -6.544   3.189  1.00 21.73           C
ATOM   3753  CG2 ILE A 330       6.921  -8.215   1.377  1.00 18.92           C
ATOM   3754  CD1 ILE A 330       6.412  -7.523   4.371  1.00 23.49           C
ATOM   3755  H   ILE A 330       3.597  -5.809   1.427  1.00  0.00           H
ATOM   3756  HA  ILE A 330       6.479  -5.433   0.633  1.00  0.00           H
ATOM   3757  HB  ILE A 330       4.959  -7.682   2.037  1.00  0.00           H
ATOM   3758 HG12 ILE A 330       7.364  -6.117   3.044  1.00  0.00           H
ATOM   3759 HG13 ILE A 330       5.732  -5.710   3.475  1.00  0.00           H
ATOM   3760 HG21 ILE A 330       6.949  -9.071   2.048  1.00  0.00           H
ATOM   3761 HG22 ILE A 330       6.696  -8.615   0.390  1.00  0.00           H
ATOM   3762 HG23 ILE A 330       7.926  -7.800   1.349  1.00  0.00           H
ATOM   3763 HD11 ILE A 330       6.827  -7.045   5.253  1.00  0.00           H
ATOM   3764 HD12 ILE A 330       5.414  -7.855   4.640  1.00  0.00           H
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ATOM   3765 HD13 ILE A 330       7.022  -8.401   4.171  1.00  0.00           H
ATOM   3766  N   ALA A 331       5.402  -5.995  -1.641  1.00 21.39           N
ATOM   3767  CA  ALA A 331       4.791  -6.276  -2.931  1.00 22.41           C
ATOM   3768  C   ALA A 331       5.799  -6.159  -4.069  1.00 21.44           C
ATOM   3769  O   ALA A 331       6.871  -5.574  -3.918  1.00 20.66           O
ATOM   3770  CB  ALA A 331       3.522  -5.427  -3.111  1.00 21.06           C
ATOM   3771  H   ALA A 331       6.052  -5.210  -1.600  1.00  0.00           H
ATOM   3772  HA  ALA A 331       4.485  -7.323  -2.945  1.00  0.00           H
ATOM   3773  HB1 ALA A 331       3.076  -5.575  -4.095  1.00  0.00           H
ATOM   3774  HB2 ALA A 331       2.769  -5.675  -2.363  1.00  0.00           H
ATOM   3775  HB3 ALA A 331       3.739  -4.367  -2.999  1.00  0.00           H
ATOM   3776  N   ASN A 332       5.459  -6.761  -5.206  1.00 22.89           N
ATOM   3777  CA  ASN A 332       6.225  -6.733  -6.445  1.00 20.34           C
ATOM   3778  C   ASN A 332       5.831  -5.453  -7.213  1.00 21.01           C
ATOM   3779  O   ASN A 332       4.647  -5.151  -7.345  1.00 20.20           O
ATOM   3780  CB  ASN A 332       5.820  -7.988  -7.237  1.00 21.25           C
ATOM   3781  CG  ASN A 332       6.646  -8.203  -8.500  1.00 19.39           C
ATOM   3782  OD1 ASN A 332       6.312  -7.644  -9.534  1.00 19.86           O
ATOM   3783  ND2 ASN A 332       7.697  -9.013  -8.459  1.00 20.38           N
ATOM   3784  H   ASN A 332       4.553  -7.220  -5.234  1.00  0.00           H
ATOM   3785  HA  ASN A 332       7.292  -6.772  -6.238  1.00  0.00           H
ATOM   3786  HB2 ASN A 332       5.906  -8.875  -6.608  1.00  0.00           H
ATOM   3787  HB3 ASN A 332       4.771  -7.917  -7.528  1.00  0.00           H
ATOM   3788 HD21 ASN A 332       8.047  -9.386  -7.585  1.00  0.00           H
ATOM   3789 HD22 ASN A 332       8.181  -9.229  -9.322  1.00  0.00           H
ATOM   3790  N   LEU A 333       6.817  -4.708  -7.727  1.00 20.23           N
ATOM   3791  CA  LEU A 333       6.630  -3.473  -8.495  1.00 22.19           C
ATOM   3792  C   LEU A 333       6.283  -3.782  -9.955  1.00 22.56           C
ATOM   3793  O   LEU A 333       5.612  -2.980 -10.604  1.00 23.16           O
ATOM   3794  CB  LEU A 333       7.954  -2.666  -8.536  1.00 20.41           C
ATOM   3795  CG  LEU A 333       8.335  -1.970  -7.220  1.00 19.24           C
ATOM   3796  CD1 LEU A 333       9.807  -1.543  -7.211  1.00 21.42           C
ATOM   3797  CD2 LEU A 333       7.425  -0.760  -6.942  1.00 20.07           C
ATOM   3798  H   LEU A 333       7.760  -5.095  -7.704  1.00  0.00           H
ATOM   3799  HA  LEU A 333       5.820  -2.879  -8.069  1.00  0.00           H
ATOM   3800  HB2 LEU A 333       8.761  -3.330  -8.844  1.00  0.00           H
ATOM   3801  HB3 LEU A 333       7.905  -1.902  -9.316  1.00  0.00           H
ATOM   3802  HG  LEU A 333       8.234  -2.697  -6.420  1.00  0.00           H
ATOM   3803 HD11 LEU A 333      10.095  -1.149  -6.237  1.00  0.00           H
ATOM   3804 HD12 LEU A 333      10.462  -2.389  -7.410  1.00  0.00           H
ATOM   3805 HD13 LEU A 333      10.009  -0.772  -7.954  1.00  0.00           H
ATOM   3806 HD21 LEU A 333       7.688  -0.271  -6.005  1.00  0.00           H
ATOM   3807 HD22 LEU A 333       7.502  -0.014  -7.733  1.00  0.00           H
ATOM   3808 HD23 LEU A 333       6.376  -1.045  -6.863  1.00  0.00           H
ATOM   3809  N   ASN A 334       6.707  -4.938 -10.485  1.00 22.33           N
ATOM   3810  CA  ASN A 334       6.473  -5.328 -11.881  1.00 23.39           C
ATOM   3811  C   ASN A 334       4.988  -5.650 -12.134  1.00 23.98           C
ATOM   3812  O   ASN A 334       4.535  -5.561 -13.272  1.00 23.96           O
ATOM   3813  CB  ASN A 334       7.361  -6.513 -12.339  1.00 25.18           C
ATOM   3814  CG  ASN A 334       8.865  -6.271 -12.175  1.00 27.49           C
ATOM   3815  OD1 ASN A 334       9.338  -5.142 -12.307  1.00 28.65           O
ATOM   3816  ND2 ASN A 334       9.622  -7.314 -11.851  1.00 26.16           N
ATOM   3817  H   ASN A 334       7.174  -5.605  -9.883  1.00  0.00           H
ATOM   3818  HA  ASN A 334       6.731  -4.469 -12.496  1.00  0.00           H
ATOM   3819  HB2 ASN A 334       7.075  -7.434 -11.836  1.00  0.00           H
ATOM   3820  HB3 ASN A 334       7.181  -6.698 -13.399  1.00  0.00           H
ATOM   3821 HD21 ASN A 334       9.214  -8.225 -11.720  1.00  0.00           H
ATOM   3822 HD22 ASN A 334      10.654  -7.217 -11.766  1.00  0.00           H
ATOM   3823  N   LEU A 335       4.209  -5.907 -11.070  1.00 23.74           N
ATOM   3824  CA  LEU A 335       2.744  -5.942 -11.065  1.00 22.83           C
ATOM   3825  C   LEU A 335       2.149  -4.578 -11.446  1.00 23.38           C
ATOM   3826  O   LEU A 335       1.176  -4.516 -12.194  1.00 20.24           O
ATOM   3827  CB  LEU A 335       2.252  -6.389  -9.666  1.00 22.39           C
ATOM   3828  CG  LEU A 335       0.716  -6.469  -9.471  1.00 22.32           C
ATOM   3829  CD1 LEU A 335       0.054  -7.488 -10.412  1.00 21.69           C
ATOM   3830  CD2 LEU A 335       0.371  -6.764  -8.004  1.00 20.81           C
ATOM   3831  H   LEU A 335       4.685  -6.016 -10.185  1.00  0.00           H
ATOM   3832  HA  LEU A 335       2.413  -6.655 -11.817  1.00  0.00           H
ATOM   3833  HB2 LEU A 335       2.689  -7.360  -9.430  1.00  0.00           H
ATOM   3834  HB3 LEU A 335       2.649  -5.696  -8.923  1.00  0.00           H
ATOM   3835  HG  LEU A 335       0.277  -5.495  -9.690  1.00  0.00           H
ATOM   3836 HD11 LEU A 335      -1.009  -7.599 -10.197  1.00  0.00           H
ATOM   3837 HD12 LEU A 335       0.130  -7.180 -11.456  1.00  0.00           H
ATOM   3838 HD13 LEU A 335       0.513  -8.471 -10.326  1.00  0.00           H
ATOM   3839 HD21 LEU A 335      -0.709  -6.790  -7.849  1.00  0.00           H
ATOM   3840 HD22 LEU A 335       0.778  -7.721  -7.684  1.00  0.00           H
ATOM   3841 HD23 LEU A 335       0.774  -5.994  -7.344  1.00  0.00           H
ATOM   3842  N   TRP A 336       2.749  -3.480 -10.981  1.00 20.71           N
ATOM   3843  CA  TRP A 336       2.294  -2.131 -11.295  1.00 21.14           C
ATOM   3844  C   TRP A 336       2.874  -1.652 -12.638  1.00 20.82           C
ATOM   3845  O   TRP A 336       2.235  -0.874 -13.339  1.00 21.72           O
ATOM   3846  CB  TRP A 336       2.704  -1.178 -10.166  1.00 19.56           C
ATOM   3847  CG  TRP A 336       2.314  -1.551  -8.760  1.00 21.10           C
ATOM   3848  CD1 TRP A 336       3.080  -1.314  -7.670  1.00 20.91           C
ATOM   3849  CD2 TRP A 336       1.098  -2.201  -8.253  1.00 20.60           C
ATOM   3850  NE1 TRP A 336       2.406  -1.716  -6.535  1.00 21.76           N
ATOM   3851  CE3 TRP A 336      -0.066  -2.764  -8.828  1.00 21.74           C
ATOM   3852  CE2 TRP A 336       1.176  -2.244  -6.829  1.00 18.03           C
ATOM   3853  CZ3 TRP A 336      -1.099  -3.301  -8.031  1.00 18.29           C
ATOM   3854  CZ2 TRP A 336       0.146  -2.749  -6.022  1.00 20.48           C
ATOM   3855  CH2 TRP A 336      -1.006  -3.274  -6.628  1.00 21.36           C
ATOM   3856  H   TRP A 336       3.577  -3.576 -10.407  1.00  0.00           H
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ATOM   3857  HA  TRP A 336       1.212  -2.116 -11.384  1.00  0.00           H
ATOM   3858  HB2 TRP A 336       3.779  -1.003 -10.190  1.00  0.00           H
ATOM   3859  HB3 TRP A 336       2.232  -0.218 -10.368  1.00  0.00           H
ATOM   3860  HD1 TRP A 336       4.052  -0.841  -7.699  1.00  0.00           H
ATOM   3861  HE1 TRP A 336       2.757  -1.634  -5.574  1.00  0.00           H
ATOM   3862  HE3 TRP A 336      -0.175  -2.794  -9.899  1.00  0.00           H
ATOM   3863  HZ3 TRP A 336      -1.966  -3.737  -8.502  1.00  0.00           H
ATOM   3864  HZ2 TRP A 336       0.254  -2.738  -4.950  1.00  0.00           H
ATOM   3865  HH2 TRP A 336      -1.805  -3.668  -6.020  1.00  0.00           H
ATOM   3866  N   ARG A 337       4.026  -2.187 -13.066  1.00 21.65           N
ATOM   3867  CA  ARG A 337       4.570  -1.948 -14.406  1.00 20.04           C
ATOM   3868  C   ARG A 337       3.865  -2.798 -15.486  1.00 18.23           C
ATOM   3869  O   ARG A 337       4.166  -2.610 -16.668  1.00 17.77           O
ATOM   3870  CB  ARG A 337       6.073  -2.300 -14.450  1.00 21.14           C
ATOM   3871  CG  ARG A 337       6.943  -1.468 -13.496  1.00 20.85           C
ATOM   3872  CD  ARG A 337       8.422  -1.872 -13.528  1.00 23.87           C
ATOM   3873  NE  ARG A 337       9.182  -1.060 -12.580  1.00 23.95           N
ATOM   3874  CZ  ARG A 337       9.870  -1.441 -11.502  1.00 25.49           C
ATOM   3875  NH1 ARG A 337      10.090  -2.720 -11.197  1.00 26.97           N
ATOM   3876  NH2 ARG A 337      10.348  -0.500 -10.703  1.00 26.66          N1+
ATOM   3877  H   ARG A 337       4.526  -2.790 -12.425  1.00  0.00           H
ATOM   3878  HA  ARG A 337       4.442  -0.896 -14.670  1.00  0.00           H
ATOM   3879  HB2 ARG A 337       6.205  -3.364 -14.259  1.00  0.00           H
ATOM   3880  HB3 ARG A 337       6.451  -2.144 -15.461  1.00  0.00           H
ATOM   3881  HG2 ARG A 337       6.851  -0.410 -13.747  1.00  0.00           H
ATOM   3882  HG3 ARG A 337       6.578  -1.565 -12.476  1.00  0.00           H
ATOM   3883  HD2 ARG A 337       8.533  -2.930 -13.305  1.00  0.00           H
ATOM   3884  HD3 ARG A 337       8.841  -1.710 -14.522  1.00  0.00           H
ATOM   3885  HE  ARG A 337       9.442  -0.110 -12.951  1.00  0.00           H
ATOM   3886 HH11 ARG A 337       9.767  -3.510 -11.766  1.00  0.00           H
ATOM   3887 HH12 ARG A 337      10.804  -2.914 -10.491  1.00  0.00           H
ATOM   3888 HH21 ARG A 337      10.288   0.506 -11.026  1.00  0.00           H
ATOM   3889 HH22 ARG A 337      11.012  -0.659  -9.947  1.00  0.00           H
ATOM   3890  N   SER A 338       2.962  -3.721 -15.111  1.00 17.15           N
ATOM   3891  CA  SER A 338       2.243  -4.606 -16.028  1.00 19.46           C
ATOM   3892  C   SER A 338       1.198  -3.817 -16.849  1.00 20.12           C
ATOM   3893  O   SER A 338       0.629  -2.861 -16.311  1.00 21.09           O
ATOM   3894  CB  SER A 338       1.549  -5.749 -15.243  1.00 20.32           C
ATOM   3895  OG  SER A 338       0.364  -5.377 -14.558  1.00 21.76           O
ATOM   3896  H   SER A 338       2.754  -3.803 -14.127  1.00  0.00           H
ATOM   3897  HA  SER A 338       3.003  -5.051 -16.669  1.00  0.00           H
ATOM   3898  HB2 SER A 338       1.251  -6.519 -15.952  1.00  0.00           H
ATOM   3899  HB3 SER A 338       2.242  -6.230 -14.550  1.00  0.00           H
ATOM   3900  HG  SER A 338       0.609  -5.001 -13.707  1.00  0.00           H
ATOM   3901  N   PRO A 339       0.923  -4.197 -18.120  1.00 22.35           N
ATOM   3902  CA  PRO A 339      -0.121  -3.593 -18.975  1.00 21.08           C
ATOM   3903  C   PRO A 339      -1.482  -3.403 -18.276  1.00 19.47           C
ATOM   3904  O   PRO A 339      -2.042  -2.307 -18.276  1.00 20.76           O
ATOM   3905  CB  PRO A 339      -0.224  -4.529 -20.185  1.00 20.47           C
ATOM   3906  CG  PRO A 339       1.113  -5.238 -20.273  1.00 21.32           C
ATOM   3907  CD  PRO A 339       1.641  -5.253 -18.842  1.00 19.67           C
ATOM   3908  HA  PRO A 339       0.224  -2.619 -19.320  1.00  0.00           H
ATOM   3909  HB2 PRO A 339      -1.013  -5.268 -20.048  1.00  0.00           H
ATOM   3910  HB3 PRO A 339      -0.440  -3.975 -21.098  1.00  0.00           H
ATOM   3911  HG2 PRO A 339       1.033  -6.234 -20.709  1.00  0.00           H
ATOM   3912  HG3 PRO A 339       1.782  -4.653 -20.905  1.00  0.00           H
ATOM   3913  HD2 PRO A 339       1.431  -6.216 -18.378  1.00  0.00           H
ATOM   3914  HD3 PRO A 339       2.720  -5.095 -18.844  1.00  0.00           H
ATOM   3915  N   ALA A 340      -1.940  -4.445 -17.566  1.00 19.58           N
ATOM   3916  CA  ALA A 340      -3.165  -4.462 -16.773  1.00 19.57           C
ATOM   3917  C   ALA A 340      -3.270  -3.322 -15.751  1.00 19.42           C
ATOM   3918  O   ALA A 340      -4.325  -2.701 -15.648  1.00 17.04           O
ATOM   3919  CB  ALA A 340      -3.311  -5.827 -16.087  1.00 20.76           C
ATOM   3920  H   ALA A 340      -1.422  -5.306 -17.627  1.00  0.00           H
ATOM   3921  HA  ALA A 340      -3.990  -4.325 -17.469  1.00  0.00           H
ATOM   3922  HB1 ALA A 340      -4.219  -5.864 -15.482  1.00  0.00           H
ATOM   3923  HB2 ALA A 340      -3.379  -6.628 -16.822  1.00  0.00           H
ATOM   3924  HB3 ALA A 340      -2.468  -6.039 -15.427  1.00  0.00           H
ATOM   3925  N   TYR A 341      -2.184  -3.006 -15.031  1.00 18.41           N
ATOM   3926  CA  TYR A 341      -2.191  -1.890 -14.088  1.00 20.02           C
ATOM   3927  C   TYR A 341      -1.889  -0.554 -14.787  1.00 20.29           C
ATOM   3928  O   TYR A 341      -2.423   0.470 -14.364  1.00 20.54           O
ATOM   3929  CB  TYR A 341      -1.154  -2.102 -12.977  1.00 19.15           C
ATOM   3930  CG  TYR A 341      -1.301  -1.090 -11.847  1.00 19.29           C
ATOM   3931  CD1 TYR A 341      -2.294  -1.263 -10.864  1.00 18.41           C
ATOM   3932  CD2 TYR A 341      -0.493   0.061 -11.810  1.00 17.75           C
ATOM   3933  CE1 TYR A 341      -2.436  -0.333  -9.813  1.00 19.60           C
ATOM   3934  CE2 TYR A 341      -0.646   0.996 -10.776  1.00 19.82           C
ATOM   3935  CZ  TYR A 341      -1.593   0.790  -9.758  1.00 19.34           C
ATOM   3936  OH  TYR A 341      -1.680   1.682  -8.732  1.00 19.62           O
ATOM   3937  H   TYR A 341      -1.320  -3.503 -15.209  1.00  0.00           H
ATOM   3938  HA  TYR A 341      -3.168  -1.826 -13.612  1.00  0.00           H
ATOM   3939  HB2 TYR A 341      -1.264  -3.101 -12.553  1.00  0.00           H
ATOM   3940  HB3 TYR A 341      -0.144  -2.064 -13.389  1.00  0.00           H
ATOM   3941  HD1 TYR A 341      -2.941  -2.118 -10.931  1.00  0.00           H
ATOM   3942  HD2 TYR A 341       0.232   0.250 -12.587  1.00  0.00           H
ATOM   3943  HE1 TYR A 341      -3.184  -0.479  -9.047  1.00  0.00           H
ATOM   3944  HE2 TYR A 341      -0.025   1.871 -10.788  1.00  0.00           H
ATOM   3945  HH  TYR A 341      -0.965   2.311  -8.814  1.00  0.00           H
ATOM   3946  N   ARG A 342      -1.074  -0.539 -15.851  1.00 20.95           N
ATOM   3947  CA  ARG A 342      -0.715   0.665 -16.604  1.00 21.79           C
ATOM   3948  C   ARG A 342      -1.950   1.330 -17.217  1.00 22.81           C
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ATOM   3949  O   ARG A 342      -2.252   2.484 -16.910  1.00 22.78           O
ATOM   3950  CB  ARG A 342       0.243   0.311 -17.746  1.00 23.26           C
ATOM   3951  CG  ARG A 342       1.681  -0.003 -17.352  1.00 23.00           C
ATOM   3952  CD  ARG A 342       2.383  -0.718 -18.514  1.00 25.52           C
ATOM   3953  NE  ARG A 342       3.826  -0.482 -18.480  1.00 27.12           N
ATOM   3954  CZ  ARG A 342       4.483   0.457 -19.169  1.00 24.20           C
ATOM   3955  NH1 ARG A 342       3.845   1.286 -20.003  1.00 21.44           N
ATOM   3956  NH2 ARG A 342       5.802   0.568 -19.004  1.00 25.12           N1+
ATOM   3957  H   ARG A 342      -0.686  -1.424 -16.162  1.00  0.00           H
ATOM   3958  HA  ARG A 342      -0.242   1.379 -15.929  1.00  0.00           H
ATOM   3959  HB2 ARG A 342      -0.168  -0.531 -18.301  1.00  0.00           H
ATOM   3960  HB3 ARG A 342       0.272   1.137 -18.457  1.00  0.00           H
ATOM   3961  HG2 ARG A 342       2.189   0.927 -17.096  1.00  0.00           H
ATOM   3962  HG3 ARG A 342       1.712  -0.618 -16.453  1.00  0.00           H
ATOM   3963  HD2 ARG A 342       2.216  -1.788 -18.447  1.00  0.00           H
ATOM   3964  HD3 ARG A 342       1.974  -0.433 -19.481  1.00  0.00           H
ATOM   3965  HE  ARG A 342       4.274  -1.167 -17.863  1.00  0.00           H
ATOM   3966 HH11 ARG A 342       2.820   1.222 -20.184  1.00  0.00           H
ATOM   3967 HH12 ARG A 342       4.292   2.008 -20.540  1.00  0.00           H
ATOM   3968 HH21 ARG A 342       6.293  -0.041 -18.364  1.00  0.00           H
ATOM   3969 HH22 ARG A 342       6.349   1.268 -19.482  1.00  0.00           H
ATOM   3970  N   GLU A 343      -2.681   0.574 -18.040  1.00 24.14           N
ATOM   3971  CA  GLU A 343      -3.849   1.044 -18.765  1.00 24.75           C
ATOM   3972  C   GLU A 343      -5.043   1.228 -17.801  1.00 24.10           C
ATOM   3973  O   GLU A 343      -5.918   2.055 -18.071  1.00 24.31           O
ATOM   3974  CB  GLU A 343      -4.179   0.028 -19.882  1.00 25.68           C
ATOM   3975  CG  GLU A 343      -3.288   0.163 -21.145  1.00 30.62           C
ATOM   3976  CD  GLU A 343      -1.906  -0.483 -21.050  1.00 30.71           C
ATOM   3977  OE1 GLU A 343      -1.813  -1.676 -21.404  1.00 32.63           O
ATOM   3978  OE2 GLU A 343      -0.944   0.220 -20.661  1.00 29.45           O1-
ATOM   3979  H   GLU A 343      -2.337  -0.357 -18.273  1.00  0.00           H
ATOM   3980  HA  GLU A 343      -3.631   2.017 -19.210  1.00  0.00           H
ATOM   3981  HB2 GLU A 343      -4.133  -0.992 -19.496  1.00  0.00           H
ATOM   3982  HB3 GLU A 343      -5.212   0.171 -20.202  1.00  0.00           H
ATOM   3983  HG2 GLU A 343      -3.796  -0.312 -21.984  1.00  0.00           H
ATOM   3984  HG3 GLU A 343      -3.170   1.210 -21.423  1.00  0.00           H
ATOM   3985  N   TYR A 344      -5.052   0.540 -16.645  1.00 22.33           N
ATOM   3986  CA  TYR A 344      -5.962   0.808 -15.528  1.00 19.95           C
ATOM   3987  C   TYR A 344      -5.629   2.162 -14.891  1.00 21.16           C
ATOM   3988  O   TYR A 344      -6.516   3.005 -14.778  1.00 19.78           O
ATOM   3989  CB  TYR A 344      -5.890  -0.305 -14.459  1.00 17.99           C
ATOM   3990  CG  TYR A 344      -6.668  -0.033 -13.177  1.00 21.67           C
ATOM   3991  CD1 TYR A 344      -8.071   0.071 -13.223  1.00 21.18           C
ATOM   3992  CD2 TYR A 344      -5.999   0.155 -11.947  1.00 21.43           C
ATOM   3993  CE1 TYR A 344      -8.794   0.401 -12.065  1.00 20.99           C
ATOM   3994  CE2 TYR A 344      -6.730   0.466 -10.782  1.00 21.57           C
ATOM   3995  CZ  TYR A 344      -8.128   0.623 -10.847  1.00 21.53           C
ATOM   3996  OH  TYR A 344      -8.834   1.015  -9.746  1.00 19.87           O
ATOM   3997  H   TYR A 344      -4.317  -0.141 -16.511  1.00  0.00           H
ATOM   3998  HA  TYR A 344      -6.982   0.866 -15.905  1.00  0.00           H
ATOM   3999  HB2 TYR A 344      -6.272  -1.231 -14.888  1.00  0.00           H
ATOM   4000  HB3 TYR A 344      -4.854  -0.498 -14.197  1.00  0.00           H
ATOM   4001  HD1 TYR A 344      -8.591  -0.078 -14.156  1.00  0.00           H
ATOM   4002  HD2 TYR A 344      -4.922   0.078 -11.892  1.00  0.00           H
ATOM   4003  HE1 TYR A 344      -9.862   0.491 -12.125  1.00  0.00           H
ATOM   4004  HE2 TYR A 344      -6.213   0.605  -9.845  1.00  0.00           H
ATOM   4005  HH  TYR A 344      -9.728   1.282  -9.959  1.00  0.00           H
ATOM   4006  N   PHE A 345      -4.364   2.397 -14.514  1.00 20.71           N
ATOM   4007  CA  PHE A 345      -3.926   3.649 -13.911  1.00 20.36           C
ATOM   4008  C   PHE A 345      -4.155   4.833 -14.858  1.00 21.44           C
ATOM   4009  O   PHE A 345      -4.713   5.839 -14.431  1.00 22.30           O
ATOM   4010  CB  PHE A 345      -2.452   3.599 -13.440  1.00 18.78           C
ATOM   4011  CG  PHE A 345      -2.022   4.941 -12.863  1.00 18.84           C
ATOM   4012  CD1 PHE A 345      -2.599   5.392 -11.657  1.00 19.24           C
ATOM   4013  CD2 PHE A 345      -1.237   5.822 -13.639  1.00 17.98           C
ATOM   4014  CE1 PHE A 345      -2.451   6.736 -11.267  1.00 17.82           C
ATOM   4015  CE2 PHE A 345      -1.087   7.163 -13.238  1.00 18.95           C
ATOM   4016  CZ  PHE A 345      -1.707   7.624 -12.062  1.00 18.47           C
ATOM   4017  H   PHE A 345      -3.665   1.664 -14.633  1.00  0.00           H
ATOM   4018  HA  PHE A 345      -4.554   3.812 -13.035  1.00  0.00           H
ATOM   4019  HB2 PHE A 345      -2.326   2.825 -12.682  1.00  0.00           H
ATOM   4020  HB3 PHE A 345      -1.798   3.326 -14.269  1.00  0.00           H
ATOM   4021  HD1 PHE A 345      -3.233   4.733 -11.079  1.00  0.00           H
ATOM   4022  HD2 PHE A 345      -0.834   5.506 -14.592  1.00  0.00           H
ATOM   4023  HE1 PHE A 345      -2.945   7.109 -10.385  1.00  0.00           H
ATOM   4024  HE2 PHE A 345      -0.543   7.861 -13.857  1.00  0.00           H
ATOM   4025  HZ  PHE A 345      -1.629   8.664 -11.784  1.00  0.00           H
ATOM   4026  N   ASP A 346      -3.788   4.725 -16.141  1.00 21.25           N
ATOM   4027  CA  ASP A 346      -3.961   5.838 -17.077  1.00 20.54           C
ATOM   4028  C   ASP A 346      -5.447   6.118 -17.383  1.00 20.57           C
ATOM   4029  O   ASP A 346      -5.818   7.275 -17.567  1.00 18.80           O
ATOM   4030  CB  ASP A 346      -3.130   5.632 -18.358  1.00 21.13           C
ATOM   4031  CG  ASP A 346      -2.548   6.965 -18.816  1.00 21.90           C
ATOM   4032  OD1 ASP A 346      -1.514   7.390 -18.249  1.00 20.23           O
ATOM   4033  OD2 ASP A 346      -3.169   7.605 -19.686  1.00 24.56           O1-
ATOM   4034  H   ASP A 346      -3.295   3.889 -16.452  1.00  0.00           H
ATOM   4035  HA  ASP A 346      -3.572   6.718 -16.561  1.00  0.00           H
ATOM   4036  HB2 ASP A 346      -2.289   4.962 -18.176  1.00  0.00           H
ATOM   4037  HB3 ASP A 346      -3.717   5.185 -19.161  1.00  0.00           H
ATOM   4038  N   THR A 347      -6.336   5.111 -17.270  1.00 20.11           N
ATOM   4039  CA  THR A 347      -7.795   5.301 -17.249  1.00 20.50           C
ATOM   4040  C   THR A 347      -8.252   6.170 -16.045  1.00 19.74           C
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ATOM   4041  O   THR A 347      -9.256   6.870 -16.160  1.00 19.02           O
ATOM   4042  CB  THR A 347      -8.528   3.920 -17.285  1.00 17.98           C
ATOM   4043  OG1 THR A 347      -8.287   3.247 -18.516  1.00 21.15           O
ATOM   4044  CG2 THR A 347     -10.060   3.982 -17.162  1.00 18.73           C
ATOM   4045  H   THR A 347      -5.968   4.193 -17.059  1.00  0.00           H
ATOM   4046  HA  THR A 347      -8.065   5.859 -18.148  1.00  0.00           H
ATOM   4047  HB  THR A 347      -8.169   3.280 -16.484  1.00  0.00           H
ATOM   4048  HG1 THR A 347      -7.366   2.952 -18.480  1.00  0.00           H
ATOM   4049 HG21 THR A 347     -10.514   2.997 -17.258  1.00  0.00           H
ATOM   4050 HG22 THR A 347     -10.358   4.346 -16.181  1.00  0.00           H
ATOM   4051 HG23 THR A 347     -10.503   4.648 -17.903  1.00  0.00           H
ATOM   4052  N   LEU A 348      -7.525   6.171 -14.916  1.00 20.95           N
ATOM   4053  CA  LEU A 348      -7.776   7.042 -13.764  1.00 20.70           C
ATOM   4054  C   LEU A 348      -7.083   8.409 -13.959  1.00 20.77           C
ATOM   4055  O   LEU A 348      -7.639   9.443 -13.580  1.00 22.33           O
ATOM   4056  CB  LEU A 348      -7.194   6.393 -12.476  1.00 19.16           C
ATOM   4057  CG  LEU A 348      -7.726   4.984 -12.118  1.00 19.34           C
ATOM   4058  CD1 LEU A 348      -6.935   4.401 -10.941  1.00 18.78           C
ATOM   4059  CD2 LEU A 348      -9.232   4.928 -11.811  1.00 16.55           C
ATOM   4060  H   LEU A 348      -6.678   5.614 -14.893  1.00  0.00           H
ATOM   4061  HA  LEU A 348      -8.846   7.213 -13.646  1.00  0.00           H
ATOM   4062  HB2 LEU A 348      -6.111   6.331 -12.556  1.00  0.00           H
ATOM   4063  HB3 LEU A 348      -7.328   7.058 -11.625  1.00  0.00           H
ATOM   4064  HG  LEU A 348      -7.552   4.332 -12.970  1.00  0.00           H
ATOM   4065 HD11 LEU A 348      -7.280   3.395 -10.702  1.00  0.00           H
ATOM   4066 HD12 LEU A 348      -5.872   4.334 -11.167  1.00  0.00           H
ATOM   4067 HD13 LEU A 348      -7.045   5.013 -10.046  1.00  0.00           H
ATOM   4068 HD21 LEU A 348      -9.559   3.892 -11.706  1.00  0.00           H
ATOM   4069 HD22 LEU A 348      -9.474   5.434 -10.877  1.00  0.00           H
ATOM   4070 HD23 LEU A 348      -9.824   5.370 -12.608  1.00  0.00           H
ATOM   4071  N   ASP A 349      -5.876   8.421 -14.540  1.00 21.51           N
ATOM   4072  CA  ASP A 349      -4.995   9.590 -14.637  1.00 21.24           C
ATOM   4073  C   ASP A 349      -5.422  10.566 -15.744  1.00 21.96           C
ATOM   4074  O   ASP A 349      -5.463  11.777 -15.514  1.00 19.94           O
ATOM   4075  CB  ASP A 349      -3.549   9.124 -14.922  1.00 18.89           C
ATOM   4076  CG  ASP A 349      -2.509  10.109 -14.409  1.00 19.84           C
ATOM   4077  OD1 ASP A 349      -2.650  10.598 -13.270  1.00 20.50           O
ATOM   4078  OD2 ASP A 349      -1.508  10.378 -15.109  1.00 19.99           O1-
ATOM   4079  H   ASP A 349      -5.468   7.518 -14.770  1.00  0.00           H
ATOM   4080  HA  ASP A 349      -5.045  10.111 -13.679  1.00  0.00           H
ATOM   4081  HB2 ASP A 349      -3.355   8.179 -14.418  1.00  0.00           H
ATOM   4082  HB3 ASP A 349      -3.380   8.944 -15.985  1.00  0.00           H
ATOM   4083  N   HIS A 350      -5.817  10.045 -16.917  1.00 22.62           N
ATOM   4084  CA  HIS A 350      -6.400  10.825 -18.017  1.00 23.51           C
ATOM   4085  C   HIS A 350      -7.883  11.163 -17.764  1.00 22.85           C
ATOM   4086  O   HIS A 350      -8.479  11.908 -18.539  1.00 22.01           O
ATOM   4087  CB  HIS A 350      -6.243  10.094 -19.375  1.00  0.00           C
ATOM   4088  CG  HIS A 350      -5.114  10.624 -20.227  1.00  0.00           C
ATOM   4089  ND1 HIS A 350      -3.940   9.930 -20.466  1.00  0.00           N
ATOM   4090  CD2 HIS A 350      -4.977  11.813 -20.910  1.00  0.00           C
ATOM   4091  CE1 HIS A 350      -3.187  10.678 -21.272  1.00  0.00           C
ATOM   4092  NE2 HIS A 350      -3.753  11.839 -21.583  1.00  0.00           N
ATOM   4093  H   HIS A 350      -5.722   9.041 -17.064  1.00  0.00           H
ATOM   4094  HA  HIS A 350      -5.890  11.780 -18.098  1.00  0.00           H
ATOM   4095  HB2 HIS A 350      -6.130   9.020 -19.257  1.00  0.00           H
ATOM   4096  HB3 HIS A 350      -7.138  10.215 -19.987  1.00  0.00           H
ATOM   4097  HD1 HIS A 350      -3.668   8.964 -20.131  1.00  0.00           H
ATOM   4098  HD2 HIS A 350      -5.665  12.644 -20.971  1.00  0.00           H
ATOM   4099  HE1 HIS A 350      -2.216  10.365 -21.631  1.00  0.00           H
ATOM   4100  N   GLN A 351      -8.477  10.668 -16.665  1.00 22.30           N
ATOM   4101  CA  GLN A 351      -9.743  11.167 -16.135  1.00 23.00           C
ATOM   4102  C   GLN A 351      -9.401  12.391 -15.264  1.00 22.67           C
ATOM   4103  O   GLN A 351      -9.782  13.506 -15.615  1.00 19.82           O
ATOM   4104  CB  GLN A 351     -10.456  10.042 -15.339  1.00 23.52           C
ATOM   4105  CG  GLN A 351     -11.976  10.224 -15.126  1.00 26.12           C
ATOM   4106  CD  GLN A 351     -12.371  10.767 -13.752  1.00 28.38           C
ATOM   4107  OE1 GLN A 351     -11.761  11.691 -13.234  1.00 27.29           O
ATOM   4108  NE2 GLN A 351     -13.392  10.190 -13.133  1.00 27.43           N
ATOM   4109  H   GLN A 351      -7.904  10.084 -16.074  1.00  0.00           H
ATOM   4110  HA  GLN A 351     -10.385  11.484 -16.960  1.00  0.00           H
ATOM   4111  HB2 GLN A 351     -10.341   9.124 -15.913  1.00  0.00           H
ATOM   4112  HB3 GLN A 351      -9.967   9.841 -14.388  1.00  0.00           H
ATOM   4113  HG2 GLN A 351     -12.395  10.875 -15.894  1.00  0.00           H
ATOM   4114  HG3 GLN A 351     -12.462   9.258 -15.266  1.00  0.00           H
ATOM   4115 HE21 GLN A 351     -13.730   9.298 -13.489  1.00  0.00           H
ATOM   4116 HE22 GLN A 351     -13.709  10.527 -12.230  1.00  0.00           H
ATOM   4117  N   GLY A 352      -8.620  12.201 -14.189  1.00 21.90           N
ATOM   4118  CA  GLY A 352      -8.066  13.268 -13.348  1.00 22.88           C
ATOM   4119  C   GLY A 352      -8.508  13.207 -11.880  1.00 23.50           C
ATOM   4120  O   GLY A 352      -7.951  13.904 -11.029  1.00 20.98           O
ATOM   4121  H   GLY A 352      -8.288  11.257 -14.008  1.00  0.00           H
ATOM   4122  HA2 GLY A 352      -6.981  13.169 -13.379  1.00  0.00           H
ATOM   4123  HA3 GLY A 352      -8.311  14.257 -13.737  1.00  0.00           H
ATOM   4124  N   GLY A 353      -9.498  12.355 -11.598  1.00 21.49           N
ATOM   4125  CA  GLY A 353     -10.074  11.874 -10.344  1.00 20.56           C
ATOM   4126  C   GLY A 353      -9.448  12.280  -9.009  1.00 21.34           C
ATOM   4127  O   GLY A 353     -10.119  12.894  -8.178  1.00 20.96           O
ATOM   4128  H   GLY A 353      -9.950  11.972 -12.425  1.00  0.00           H
ATOM   4129  HA2 GLY A 353     -11.143  12.085 -10.334  1.00  0.00           H
ATOM   4130  HA3 GLY A 353      -9.968  10.802 -10.403  1.00  0.00           H
ATOM   4131  N   PHE A 354      -8.159  11.959  -8.819  1.00 21.51           N
ATOM   4132  CA  PHE A 354      -7.316  12.264  -7.654  1.00 21.68           C
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ATOM   4133  C   PHE A 354      -7.421  13.725  -7.193  1.00 22.65           C
ATOM   4134  O   PHE A 354      -7.417  14.016  -5.997  1.00 23.57           O
ATOM   4135  CB  PHE A 354      -5.847  11.907  -7.972  1.00 20.06           C
ATOM   4136  CG  PHE A 354      -5.618  10.464  -8.388  1.00 22.30           C
ATOM   4137  CD1 PHE A 354      -5.505   9.460  -7.406  1.00 22.41           C
ATOM   4138  CD2 PHE A 354      -5.523  10.120  -9.754  1.00 19.69           C
ATOM   4139  CE1 PHE A 354      -5.339   8.115  -7.783  1.00 22.82           C
ATOM   4140  CE2 PHE A 354      -5.348   8.774 -10.132  1.00 19.35           C
ATOM   4141  CZ  PHE A 354      -5.271   7.770  -9.147  1.00 19.73           C
ATOM   4142  H   PHE A 354      -7.709  11.454  -9.569  1.00  0.00           H
ATOM   4143  HA  PHE A 354      -7.657  11.647  -6.825  1.00  0.00           H
ATOM   4144  HB2 PHE A 354      -5.462  12.564  -8.754  1.00  0.00           H
ATOM   4145  HB3 PHE A 354      -5.226  12.107  -7.096  1.00  0.00           H
ATOM   4146  HD1 PHE A 354      -5.553   9.714  -6.357  1.00  0.00           H
ATOM   4147  HD2 PHE A 354      -5.581  10.878 -10.524  1.00  0.00           H
ATOM   4148  HE1 PHE A 354      -5.259   7.349  -7.025  1.00  0.00           H
ATOM   4149  HE2 PHE A 354      -5.268   8.516 -11.180  1.00  0.00           H
ATOM   4150  HZ  PHE A 354      -5.142   6.736  -9.434  1.00  0.00           H
ATOM   4151  N   PHE A 355      -7.545  14.633  -8.163  1.00 22.12           N
ATOM   4152  CA  PHE A 355      -7.643  16.066  -7.959  1.00 21.19           C
ATOM   4153  C   PHE A 355      -9.104  16.521  -7.872  1.00 20.42           C
ATOM   4154  O   PHE A 355      -9.403  17.441  -7.115  1.00 20.48           O
ATOM   4155  CB  PHE A 355      -7.003  16.738  -9.184  1.00 22.36           C
ATOM   4156  CG  PHE A 355      -5.561  16.327  -9.428  1.00 24.02           C
ATOM   4157  CD1 PHE A 355      -4.633  16.332  -8.367  1.00 22.48           C
ATOM   4158  CD2 PHE A 355      -5.145  15.924 -10.712  1.00 24.49           C
ATOM   4159  CE1 PHE A 355      -3.308  15.927  -8.583  1.00 22.98           C
ATOM   4160  CE2 PHE A 355      -3.806  15.553 -10.938  1.00 25.14           C
ATOM   4161  CZ  PHE A 355      -2.884  15.567  -9.874  1.00 26.02           C
ATOM   4162  H   PHE A 355      -7.545  14.296  -9.124  1.00  0.00           H
ATOM   4163  HA  PHE A 355      -7.131  16.363  -7.046  1.00  0.00           H
ATOM   4164  HB2 PHE A 355      -7.589  16.531 -10.083  1.00  0.00           H
ATOM   4165  HB3 PHE A 355      -7.028  17.816  -9.051  1.00  0.00           H
ATOM   4166  HD1 PHE A 355      -4.925  16.657  -7.381  1.00  0.00           H
ATOM   4167  HD2 PHE A 355      -5.852  15.899 -11.526  1.00  0.00           H
ATOM   4168  HE1 PHE A 355      -2.625  15.905  -7.750  1.00  0.00           H
ATOM   4169  HE2 PHE A 355      -3.490  15.246 -11.925  1.00  0.00           H
ATOM   4170  HZ  PHE A 355      -1.853  15.296 -10.047  1.00  0.00           H
ATOM   4171  N   TYR A 356     -10.003  15.873  -8.622  1.00 19.12           N
ATOM   4172  CA  TYR A 356     -11.417  16.229  -8.754  1.00 18.71           C
ATOM   4173  C   TYR A 356     -12.234  15.868  -7.516  1.00 20.13           C
ATOM   4174  O   TYR A 356     -13.230  16.519  -7.220  1.00 17.47           O
ATOM   4175  CB  TYR A 356     -12.026  15.382  -9.885  1.00 17.74           C
ATOM   4176  CG  TYR A 356     -11.603  15.661 -11.307  1.00 21.18           C
ATOM   4177  CD1 TYR A 356     -10.899  16.827 -11.666  1.00 20.84           C
ATOM   4178  CD2 TYR A 356     -11.941  14.720 -12.296  1.00 21.61           C
ATOM   4179  CE1 TYR A 356     -10.468  17.007 -12.990  1.00 22.87           C
ATOM   4180  CE2 TYR A 356     -11.532  14.915 -13.624  1.00 22.71           C
ATOM   4181  CZ  TYR A 356     -10.757  16.038 -13.965  1.00 24.04           C
ATOM   4182  OH  TYR A 356     -10.259  16.171 -15.225  1.00 25.85           O
ATOM   4183  H   TYR A 356      -9.674  15.078  -9.154  1.00  0.00           H
ATOM   4184  HA  TYR A 356     -11.535  17.298  -8.935  1.00  0.00           H
ATOM   4185  HB2 TYR A 356     -11.851  14.323  -9.685  1.00  0.00           H
ATOM   4186  HB3 TYR A 356     -13.102  15.493  -9.873  1.00  0.00           H
ATOM   4187  HD1 TYR A 356     -10.662  17.584 -10.938  1.00  0.00           H
ATOM   4188  HD2 TYR A 356     -12.484  13.822 -12.043  1.00  0.00           H
ATOM   4189  HE1 TYR A 356      -9.899  17.882 -13.249  1.00  0.00           H
ATOM   4190  HE2 TYR A 356     -11.787  14.171 -14.363  1.00  0.00           H
ATOM   4191  HH  TYR A 356     -10.143  15.302 -15.624  1.00  0.00           H
ATOM   4192  N   GLU A 357     -11.848  14.791  -6.841  1.00 19.72           N
ATOM   4193  CA  GLU A 357     -12.397  14.329  -5.586  1.00 19.69           C
ATOM   4194  C   GLU A 357     -11.178  14.267  -4.661  1.00 21.19           C
ATOM   4195  O   GLU A 357     -10.466  15.271  -4.536  1.00 22.16           O
ATOM   4196  CB  GLU A 357     -13.187  13.020  -5.828  1.00 19.32           C
ATOM   4197  CG  GLU A 357     -14.532  13.259  -6.561  1.00 20.09           C
ATOM   4198  CD  GLU A 357     -14.826  12.299  -7.708  1.00 23.06           C
ATOM   4199  OE1 GLU A 357     -14.546  11.085  -7.601  1.00 20.05           O
ATOM   4200  OE2 GLU A 357     -15.376  12.777  -8.725  1.00 23.66           O1-
ATOM   4201  H   GLU A 357     -11.039  14.285  -7.192  1.00  0.00           H
ATOM   4202  HA  GLU A 357     -13.067  15.071  -5.148  1.00  0.00           H
ATOM   4203  HB2 GLU A 357     -12.559  12.321  -6.379  1.00  0.00           H
ATOM   4204  HB3 GLU A 357     -13.413  12.540  -4.878  1.00  0.00           H
ATOM   4205  HG2 GLU A 357     -15.357  13.227  -5.854  1.00  0.00           H
ATOM   4206  HG3 GLU A 357     -14.563  14.264  -6.974  1.00  0.00           H
ATOM   4207  N   ARG A 358     -10.909  13.131  -4.021  1.00 19.68           N
ATOM   4208  CA  ARG A 358      -9.712  12.915  -3.226  1.00 19.97           C
ATOM   4209  C   ARG A 358      -9.428  11.417  -3.212  1.00 20.10           C
ATOM   4210  O   ARG A 358      -9.418  10.807  -2.145  1.00 19.00           O
ATOM   4211  CB  ARG A 358      -9.857  13.573  -1.838  1.00 19.86           C
ATOM   4212  CG  ARG A 358      -8.588  13.534  -0.963  1.00 19.86           C
ATOM   4213  CD  ARG A 358      -8.838  12.974   0.445  1.00 19.26           C
ATOM   4214  NE  ARG A 358      -9.018  11.518   0.406  1.00 20.24           N
ATOM   4215  CZ  ARG A 358      -8.940  10.669   1.435  1.00 19.04           C
ATOM   4216  NH1 ARG A 358      -8.797  11.101   2.687  1.00 17.28           N
ATOM   4217  NH2 ARG A 358      -8.999   9.366   1.201  1.00 18.85           N1+
ATOM   4218  H   ARG A 358     -11.532  12.334  -4.122  1.00  0.00           H
ATOM   4219  HA  ARG A 358      -8.864  13.379  -3.735  1.00  0.00           H
ATOM   4220  HB2 ARG A 358     -10.147  14.616  -1.963  1.00  0.00           H
ATOM   4221  HB3 ARG A 358     -10.688  13.094  -1.319  1.00  0.00           H
ATOM   4222  HG2 ARG A 358      -7.797  12.957  -1.445  1.00  0.00           H
ATOM   4223  HG3 ARG A 358      -8.183  14.543  -0.885  1.00  0.00           H
ATOM   4224  HD2 ARG A 358      -7.959  13.179   1.048  1.00  0.00           H
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ATOM   4225  HD3 ARG A 358      -9.682  13.453   0.938  1.00  0.00           H
ATOM   4226  HE  ARG A 358      -9.159  11.130  -0.542  1.00  0.00           H
ATOM   4227 HH11 ARG A 358      -8.928  12.081   2.959  1.00  0.00           H
ATOM   4228 HH12 ARG A 358      -8.585  10.450   3.440  1.00  0.00           H
ATOM   4229 HH21 ARG A 358      -9.196   8.959   0.274  1.00  0.00           H
ATOM   4230 HH22 ARG A 358      -8.930   8.687   1.959  1.00  0.00           H
ATOM   4231  N   TRP A 359      -9.255  10.819  -4.396  1.00 19.26           N
ATOM   4232  CA  TRP A 359      -9.009   9.387  -4.550  1.00 19.61           C
ATOM   4233  C   TRP A 359      -7.667   9.012  -3.912  1.00 18.49           C
ATOM   4234  O   TRP A 359      -6.672   9.711  -4.110  1.00 21.29           O
ATOM   4235  CB  TRP A 359      -8.969   8.990  -6.040  1.00 19.93           C
ATOM   4236  CG  TRP A 359     -10.173   9.228  -6.901  1.00 23.18           C
ATOM   4237  CD1 TRP A 359     -11.347   9.795  -6.536  1.00 23.43           C
ATOM   4238  CD2 TRP A 359     -10.316   8.903  -8.315  1.00 22.00           C
ATOM   4239  NE1 TRP A 359     -12.190   9.868  -7.626  1.00 26.12           N
ATOM   4240  CE3 TRP A 359      -9.477   8.303  -9.284  1.00 22.65           C
ATOM   4241  CE2 TRP A 359     -11.605   9.332  -8.751  1.00 24.16           C
ATOM   4242  CZ3 TRP A 359      -9.911   8.138 -10.615  1.00 21.38           C
ATOM   4243  CZ2 TRP A 359     -12.029   9.182 -10.080  1.00 24.29           C
ATOM   4244  CH2 TRP A 359     -11.185   8.567 -11.015  1.00 23.99           C
ATOM   4245  H   TRP A 359      -9.279  11.386  -5.229  1.00  0.00           H
ATOM   4246  HA  TRP A 359      -9.810   8.846  -4.047  1.00  0.00           H
ATOM   4247  HB2 TRP A 359      -8.133   9.485  -6.529  1.00  0.00           H
ATOM   4248  HB3 TRP A 359      -8.738   7.926  -6.115  1.00  0.00           H
ATOM   4249  HD1 TRP A 359     -11.574  10.156  -5.545  1.00  0.00           H
ATOM   4250  HE1 TRP A 359     -13.123  10.343  -7.600  1.00  0.00           H
ATOM   4251  HE3 TRP A 359      -8.486   7.976  -9.001  1.00  0.00           H
ATOM   4252  HZ3 TRP A 359      -9.268   7.700 -11.353  1.00  0.00           H
ATOM   4253  HZ2 TRP A 359     -12.993   9.533 -10.388  1.00  0.00           H
ATOM   4254  HH2 TRP A 359     -11.498   8.450 -12.041  1.00  0.00           H
ATOM   4255  N   GLY A 360      -7.649   7.900  -3.181  1.00 20.56           N
ATOM   4256  CA  GLY A 360      -6.483   7.397  -2.483  1.00 19.56           C
ATOM   4257  C   GLY A 360      -5.864   6.250  -3.276  1.00 19.97           C
ATOM   4258  O   GLY A 360      -6.568   5.496  -3.949  1.00 19.92           O
ATOM   4259  H   GLY A 360      -8.523   7.426  -3.000  1.00  0.00           H
ATOM   4260  HA2 GLY A 360      -5.759   8.184  -2.291  1.00  0.00           H
ATOM   4261  HA3 GLY A 360      -6.797   7.020  -1.510  1.00  0.00           H
ATOM   4262  N   ASP A 361      -4.543   6.093  -3.172  1.00 18.87           N
ATOM   4263  CA  ASP A 361      -3.780   5.009  -3.796  1.00 20.81           C
ATOM   4264  C   ASP A 361      -4.129   3.633  -3.196  1.00 20.03           C
ATOM   4265  O   ASP A 361      -4.042   2.631  -3.902  1.00 22.19           O
ATOM   4266  CB  ASP A 361      -2.261   5.274  -3.653  1.00 21.93           C
ATOM   4267  CG  ASP A 361      -1.750   5.283  -2.221  1.00 21.87           C
ATOM   4268  OD1 ASP A 361      -1.914   6.320  -1.545  1.00 25.70           O
ATOM   4269  OD2 ASP A 361      -1.264   4.240  -1.742  1.00 23.34           O1-
ATOM   4270  H   ASP A 361      -4.020   6.756  -2.614  1.00  0.00           H
ATOM   4271  HA  ASP A 361      -4.043   4.980  -4.850  1.00  0.00           H
ATOM   4272  HB2 ASP A 361      -1.712   4.513  -4.205  1.00  0.00           H
ATOM   4273  HB3 ASP A 361      -2.001   6.224  -4.116  1.00  0.00           H
ATOM   4274  N   ALA A 362      -4.541   3.570  -1.923  1.00 20.12           N
ATOM   4275  CA  ALA A 362      -4.905   2.341  -1.220  1.00 19.36           C
ATOM   4276  C   ALA A 362      -6.090   1.584  -1.866  1.00 19.28           C
ATOM   4277  O   ALA A 362      -5.889   0.424  -2.239  1.00 17.72           O
ATOM   4278  CB  ALA A 362      -5.119   2.636   0.267  1.00 20.36           C
ATOM   4279  H   ALA A 362      -4.564   4.437  -1.406  1.00  0.00           H
ATOM   4280  HA  ALA A 362      -4.036   1.685  -1.292  1.00  0.00           H
ATOM   4281  HB1 ALA A 362      -5.071   1.718   0.839  1.00  0.00           H
ATOM   4282  HB2 ALA A 362      -4.326   3.263   0.657  1.00  0.00           H
ATOM   4283  HB3 ALA A 362      -6.064   3.125   0.487  1.00  0.00           H
ATOM   4284  N   PRO A 363      -7.275   2.199  -2.118  1.00 17.22           N
ATOM   4285  CA  PRO A 363      -8.316   1.582  -2.954  1.00 17.69           C
ATOM   4286  C   PRO A 363      -7.888   1.274  -4.400  1.00 17.56           C
ATOM   4287  O   PRO A 363      -8.185   0.177  -4.865  1.00 18.84           O
ATOM   4288  CB  PRO A 363      -9.553   2.485  -2.844  1.00 18.18           C
ATOM   4289  CG  PRO A 363      -9.028   3.826  -2.365  1.00 20.02           C
ATOM   4290  CD  PRO A 363      -7.731   3.501  -1.620  1.00 17.04           C
ATOM   4291  HA  PRO A 363      -8.575   0.623  -2.510  1.00  0.00           H
ATOM   4292  HB2 PRO A 363     -10.121   2.562  -3.773  1.00  0.00           H
ATOM   4293  HB3 PRO A 363     -10.228   2.080  -2.089  1.00  0.00           H
ATOM   4294  HG2 PRO A 363      -8.810   4.453  -3.229  1.00  0.00           H
ATOM   4295  HG3 PRO A 363      -9.741   4.367  -1.743  1.00  0.00           H
ATOM   4296  HD2 PRO A 363      -7.000   4.298  -1.704  1.00  0.00           H
ATOM   4297  HD3 PRO A 363      -7.971   3.395  -0.561  1.00  0.00           H
ATOM   4298  N   VAL A 364      -7.131   2.150  -5.081  1.00 15.81           N
ATOM   4299  CA  VAL A 364      -6.581   1.906  -6.427  1.00 13.67           C
ATOM   4300  C   VAL A 364      -5.665   0.658  -6.461  1.00 15.13           C
ATOM   4301  O   VAL A 364      -5.806  -0.193  -7.338  1.00 12.77           O
ATOM   4302  CB  VAL A 364      -5.876   3.198  -6.933  1.00 16.16           C
ATOM   4303  CG1 VAL A 364      -5.097   3.024  -8.250  1.00 13.85           C
ATOM   4304  CG2 VAL A 364      -6.882   4.352  -7.096  1.00 15.04           C
ATOM   4305  H   VAL A 364      -6.918   3.041  -4.652  1.00  0.00           H
ATOM   4306  HA  VAL A 364      -7.419   1.690  -7.094  1.00  0.00           H
ATOM   4307  HB  VAL A 364      -5.147   3.502  -6.184  1.00  0.00           H
ATOM   4308 HG11 VAL A 364      -4.685   3.974  -8.589  1.00  0.00           H
ATOM   4309 HG12 VAL A 364      -4.260   2.334  -8.149  1.00  0.00           H
ATOM   4310 HG13 VAL A 364      -5.743   2.648  -9.041  1.00  0.00           H
ATOM   4311 HG21 VAL A 364      -6.379   5.273  -7.388  1.00  0.00           H
ATOM   4312 HG22 VAL A 364      -7.623   4.121  -7.862  1.00  0.00           H
ATOM   4313 HG23 VAL A 364      -7.420   4.560  -6.174  1.00  0.00           H
ATOM   4314  N   HIS A 365      -4.783   0.496  -5.461  1.00 14.05           N
ATOM   4315  CA  HIS A 365      -3.933  -0.688  -5.301  1.00 17.18           C
ATOM   4316  C   HIS A 365      -4.765  -1.939  -4.992  1.00 16.98           C
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ATOM   4317  O   HIS A 365     -4.403  -3.023  -5.433  1.00 19.79          O
ATOM   4318  CB  HIS A 365     -2.940  -0.533  -4.130  1.00 16.11          C
ATOM   4319  CG  HIS A 365     -1.799   0.437  -4.289  1.00 19.71          C
ATOM   4320  ND1 HIS A 365     -0.763   0.434  -3.377  1.00 19.57          N1+
ATOM   4321  CD2 HIS A 365     -1.528   1.447  -5.195  1.00 18.63          C
ATOM   4322  CE1 HIS A 365      0.081   1.395  -3.708  1.00 21.02          C
ATOM   4323  NE2 HIS A 365     -0.339   2.039  -4.789  1.00 20.54          N
ATOM   4324  H   HIS A 365     -4.694   1.253  -4.784  1.00  0.00          H
ATOM   4325  HA  HIS A 365     -3.381  -0.865  -6.227  1.00  0.00          H
ATOM   4326  HB2 HIS A 365     -3.472  -0.272  -3.215  1.00  0.00          H
ATOM   4327  HB3 HIS A 365     -2.474  -1.501  -3.930  1.00  0.00          H
ATOM   4328  HD1 HIS A 365     -0.624  -0.221  -2.557  1.00  0.00          H
ATOM   4329  HD2 HIS A 365     -2.081   1.808  -6.051  1.00  0.00          H
ATOM   4330  HE1 HIS A 365      0.979   1.627  -3.149  1.00  0.00          H
ATOM   4331  HE2 HIS A 365      0.114   2.894  -5.146  1.00  0.00          H
ATOM   4332  N   SER A 366     -5.868  -1.801  -4.248  1.00 18.87          N
ATOM   4333  CA  SER A 366     -6.689  -2.925  -3.808  1.00 18.88          C
ATOM   4334  C   SER A 366     -7.602  -3.420  -4.930  1.00 19.48          C
ATOM   4335  O   SER A 366     -7.699  -4.629  -5.131  1.00 17.62          O
ATOM   4336  CB  SER A 366     -7.576  -2.474  -2.644  1.00 18.94          C
ATOM   4337  OG  SER A 366     -6.757  -2.082  -1.564  1.00 19.20          O
ATOM   4338  H   SER A 366     -6.126  -0.871  -3.945  1.00  0.00          H
ATOM   4339  HA  SER A 366     -6.052  -3.752  -3.494  1.00  0.00          H
ATOM   4340  HB2 SER A 366     -8.240  -1.656  -2.927  1.00  0.00          H
ATOM   4341  HB3 SER A 366     -8.212  -3.299  -2.318  1.00  0.00          H
ATOM   4342  HG  SER A 366     -6.239  -1.319  -1.829  1.00  0.00          H
ATOM   4343  N   ILE A 367     -8.230  -2.504  -5.685  1.00 19.28          N
ATOM   4344  CA  ILE A 367     -9.028  -2.809  -6.873  1.00 18.73          C
ATOM   4345  C   ILE A 367     -8.150  -3.504  -7.931  1.00 19.02          C
ATOM   4346  O   ILE A 367     -8.601  -4.449  -8.570  1.00 20.14          O
ATOM   4347  CB  ILE A 367     -9.747  -1.526  -7.389  1.00 16.72          C
ATOM   4348  CG1 ILE A 367    -10.780  -1.006  -6.354  1.00 15.35          C
ATOM   4349  CG2 ILE A 367    -10.445  -1.730  -8.753  1.00 14.85          C
ATOM   4350  CD1 ILE A 367    -11.184   0.462  -6.559  1.00 15.61          C
ATOM   4351  H   ILE A 367     -8.104  -1.517  -5.463  1.00  0.00          H
ATOM   4352  HA  ILE A 367     -9.787  -3.527  -6.578  1.00  0.00          H
ATOM   4353  HB  ILE A 367     -8.983  -0.757  -7.527  1.00  0.00          H
ATOM   4354 HG12 ILE A 367    -11.668  -1.639  -6.365  1.00  0.00          H
ATOM   4355 HG13 ILE A 367    -10.385  -1.093  -5.342  1.00  0.00          H
ATOM   4356 HG21 ILE A 367    -10.980  -0.837  -9.069  1.00  0.00          H
ATOM   4357 HG22 ILE A 367     -9.728  -1.947  -9.545  1.00  0.00          H
ATOM   4358 HG23 ILE A 367    -11.160  -2.553  -8.717  1.00  0.00          H
ATOM   4359 HD11 ILE A 367    -11.858   0.789  -5.766  1.00  0.00          H
ATOM   4360 HD12 ILE A 367    -10.309   1.112  -6.535  1.00  0.00          H
ATOM   4361 HD13 ILE A 367    -11.690   0.623  -7.510  1.00  0.00          H
ATOM   4362  N   ALA A 368     -6.878  -3.104  -8.044  1.00 17.53          N
ATOM   4363  CA  ALA A 368     -5.896  -3.774  -8.877  1.00 16.44          C
ATOM   4364  C   ALA A 368     -5.457  -5.129  -8.294  1.00 18.86          C
ATOM   4365  O   ALA A 368     -5.603  -6.146  -8.963  1.00 20.08          O
ATOM   4366  CB  ALA A 368     -4.677  -2.866  -9.008  1.00 16.29          C
ATOM   4367  H   ALA A 368     -6.590  -2.279  -7.533  1.00  0.00          H
ATOM   4368  HA  ALA A 368     -6.324  -3.947  -9.867  1.00  0.00          H
ATOM   4369  HB1 ALA A 368     -3.891  -3.390  -9.544  1.00  0.00          H
ATOM   4370  HB2 ALA A 368     -4.935  -1.967  -9.567  1.00  0.00          H
ATOM   4371  HB3 ALA A 368     -4.274  -2.561  -8.043  1.00  0.00          H
ATOM   4372  N   ALA A 369     -4.940  -5.180  -7.057  1.00 18.52          N
ATOM   4373  CA  ALA A 369     -4.373  -6.389  -6.442  1.00 20.68          C
ATOM   4374  C   ALA A 369     -5.391  -7.521  -6.240  1.00 20.05          C
ATOM   4375  O   ALA A 369     -5.001  -8.682  -6.178  1.00 18.61          O
ATOM   4376  CB  ALA A 369     -3.743  -6.043  -5.082  1.00 20.85          C
ATOM   4377  H   ALA A 369     -4.851  -4.312  -6.532  1.00  0.00          H
ATOM   4378  HA  ALA A 369     -3.591  -6.772  -7.101  1.00  0.00          H
ATOM   4379  HB1 ALA A 369     -3.378  -6.938  -4.574  1.00  0.00          H
ATOM   4380  HB2 ALA A 369     -2.890  -5.378  -5.194  1.00  0.00          H
ATOM   4381  HB3 ALA A 369     -4.458  -5.556  -4.419  1.00  0.00          H
ATOM   4382  N   ALA A 370     -6.686  -7.200  -6.156  1.00 20.81          N
ATOM   4383  CA  ALA A 370     -7.757  -8.180  -6.061  1.00 23.03          C
ATOM   4384  C   ALA A 370     -8.241  -8.668  -7.440  1.00 24.19          C
ATOM   4385  O   ALA A 370     -8.959  -9.664  -7.481  1.00 25.96          O
ATOM   4386  CB  ALA A 370     -8.944  -7.515  -5.351  1.00 24.55          C
ATOM   4387  H   ALA A 370     -6.936  -6.216  -6.149  1.00  0.00          H
ATOM   4388  HA  ALA A 370     -7.435  -9.046  -5.483  1.00  0.00          H
ATOM   4389  HB1 ALA A 370     -9.806  -8.177  -5.290  1.00  0.00          H
ATOM   4390  HB2 ALA A 370     -8.680  -7.226  -4.333  1.00  0.00          H
ATOM   4391  HB3 ALA A 370     -9.256  -6.617  -5.878  1.00  0.00          H
ATOM   4392  N   LEU A 371     -7.892  -7.998  -8.550  1.00 24.56          N
ATOM   4393  CA  LEU A 371     -8.392  -8.305  -9.898  1.00 24.21          C
ATOM   4394  C   LEU A 371     -7.286  -8.661 -10.896  1.00 24.41          C
ATOM   4395  O   LEU A 371     -7.551  -9.389 -11.850  1.00 21.31          O
ATOM   4396  CB  LEU A 371     -9.229  -7.131 -10.449  1.00 24.83          C
ATOM   4397  CG  LEU A 371    -10.494  -6.775  -9.641  1.00 27.38          C
ATOM   4398  CD1 LEU A 371    -11.239  -5.595 -10.286  1.00 25.79          C
ATOM   4399  CD2 LEU A 371    -11.446  -7.960  -9.434  1.00 27.66          C
ATOM   4400  H   LEU A 371     -7.278  -7.197  -8.450  1.00  0.00          H
ATOM   4401  HA  LEU A 371     -9.025  -9.189  -9.877  1.00  0.00          H
ATOM   4402  HB2 LEU A 371     -8.590  -6.248 -10.520  1.00  0.00          H
ATOM   4403  HB3 LEU A 371     -9.519  -7.348 -11.477  1.00  0.00          H
ATOM   4404  HG  LEU A 371    -10.165  -6.456  -8.655  1.00  0.00          H
ATOM   4405 HD11 LEU A 371    -12.074  -5.268  -9.667  1.00  0.00          H
ATOM   4406 HD12 LEU A 371    -10.577  -4.738 -10.417  1.00  0.00          H
ATOM   4407 HD13 LEU A 371    -11.632  -5.864 -11.267  1.00  0.00          H
ATOM   4408 HD21 LEU A 371    -12.353  -7.635  -8.932  1.00  0.00          H
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ATOM   4409 HD22 LEU A 371     -11.726  -8.426 -10.378  1.00  0.00           H
ATOM   4410 HD23 LEU A 371     -11.007  -8.724  -8.797  1.00  0.00           H
ATOM   4411  N   PHE A 372      -6.071  -8.138 -10.713  1.00 22.29           N
ATOM   4412  CA  PHE A 372      -4.926  -8.312 -11.611  1.00 20.76           C
ATOM   4413  C   PHE A 372      -3.921  -9.307 -11.014  1.00 22.10           C
ATOM   4414  O   PHE A 372      -2.806  -9.441 -11.513  1.00 20.77           O
ATOM   4415  CB  PHE A 372      -4.222  -6.952 -11.830  1.00 20.58           C
ATOM   4416  CG  PHE A 372      -5.081  -5.808 -12.352  1.00 20.46           C
ATOM   4417  CD1 PHE A 372      -6.322  -6.033 -12.990  1.00 19.24           C
ATOM   4418  CD2 PHE A 372      -4.634  -4.485 -12.163  1.00 17.33           C
ATOM   4419  CE1 PHE A 372      -7.147  -4.951 -13.339  1.00 21.85           C
ATOM   4420  CE2 PHE A 372      -5.449  -3.402 -12.537  1.00 20.11           C
ATOM   4421  CZ  PHE A 372      -6.714  -3.634 -13.106  1.00 20.51           C
ATOM   4422  H   PHE A 372      -5.943  -7.463  -9.960  1.00  0.00           H
ATOM   4423  HA  PHE A 372      -5.250  -8.714 -12.571  1.00  0.00           H
ATOM   4424  HB2 PHE A 372      -3.767  -6.630 -10.892  1.00  0.00           H
ATOM   4425  HB3 PHE A 372      -3.390  -7.069 -12.525  1.00  0.00           H
ATOM   4426  HD1 PHE A 372      -6.675  -7.033 -13.195  1.00  0.00           H
ATOM   4427  HD2 PHE A 372      -3.670  -4.301 -11.713  1.00  0.00           H
ATOM   4428  HE1 PHE A 372      -8.112  -5.139 -13.785  1.00  0.00           H
ATOM   4429  HE2 PHE A 372      -5.110  -2.391 -12.377  1.00  0.00           H
ATOM   4430  HZ  PHE A 372      -7.346  -2.802 -13.380  1.00  0.00           H
ATOM   4431  N   LEU A 373      -4.314 -10.019  -9.958  1.00 21.49           N
ATOM   4432  CA  LEU A 373      -3.643 -11.203  -9.458  1.00 22.37           C
ATOM   4433  C   LEU A 373      -4.674 -12.333  -9.398  1.00 22.61           C
ATOM   4434  O   LEU A 373      -5.825 -12.064  -9.034  1.00 21.20           O
ATOM   4435  CB  LEU A 373      -3.094 -10.953  -8.037  1.00 21.57           C
ATOM   4436  CG  LEU A 373      -1.877 -10.013  -7.941  1.00 21.65           C
ATOM   4437  CD1 LEU A 373      -1.533  -9.732  -6.469  1.00 25.02           C
ATOM   4438  CD2 LEU A 373      -0.653 -10.578  -8.677  1.00 24.25           C
ATOM   4439  H   LEU A 373      -5.268  -9.898  -9.646  1.00  0.00           H
ATOM   4440  HA  LEU A 373      -2.841 -11.483 -10.137  1.00  0.00           H
ATOM   4441  HB2 LEU A 373      -3.902 -10.570  -7.415  1.00  0.00           H
ATOM   4442  HB3 LEU A 373      -2.836 -11.910  -7.590  1.00  0.00           H
ATOM   4443  HG  LEU A 373      -2.141  -9.061  -8.404  1.00  0.00           H
ATOM   4444 HD11 LEU A 373      -0.672  -9.071  -6.383  1.00  0.00           H
ATOM   4445 HD12 LEU A 373      -2.365  -9.247  -5.957  1.00  0.00           H
ATOM   4446 HD13 LEU A 373      -1.301 -10.648  -5.926  1.00  0.00           H
ATOM   4447 HD21 LEU A 373       0.209  -9.932  -8.529  1.00  0.00           H
ATOM   4448 HD22 LEU A 373      -0.390 -11.573  -8.322  1.00  0.00           H
ATOM   4449 HD23 LEU A 373      -0.816 -10.634  -9.754  1.00  0.00           H
ATOM   4450  N   PRO A 374      -4.259 -13.597  -9.627  1.00 23.37           N
ATOM   4451  CA  PRO A 374      -5.054 -14.756  -9.233  1.00 23.61           C
ATOM   4452  C   PRO A 374      -4.963 -14.867  -7.701  1.00 24.19           C
ATOM   4453  O   PRO A 374      -3.878 -14.694  -7.141  1.00 25.28           O
ATOM   4454  CB  PRO A 374      -4.399 -15.936  -9.972  1.00 21.86           C
ATOM   4455  CG  PRO A 374      -2.952 -15.531 -10.192  1.00 25.99           C
ATOM   4456  CD  PRO A 374      -2.980 -14.001 -10.221  1.00 23.76           C
ATOM   4457  HA  PRO A 374      -6.089 -14.611  -9.543  1.00  0.00           H
ATOM   4458  HB2 PRO A 374      -4.504 -16.890  -9.455  1.00  0.00           H
ATOM   4459  HB3 PRO A 374      -4.858 -16.044 -10.954  1.00  0.00           H
ATOM   4460  HG2 PRO A 374      -2.359 -15.892  -9.365  1.00  0.00           H
ATOM   4461  HG3 PRO A 374      -2.529 -15.961 -11.099  1.00  0.00           H
ATOM   4462  HD2 PRO A 374      -2.136 -13.585  -9.674  1.00  0.00           H
ATOM   4463  HD3 PRO A 374      -2.926 -13.635 -11.246  1.00  0.00           H
ATOM   4464  N   LYS A 375      -6.084 -15.070  -6.997  1.00 23.78           N
ATOM   4465  CA  LYS A 375      -6.209 -14.757  -5.567  1.00 23.97           C
ATOM   4466  C   LYS A 375      -5.286 -15.533  -4.600  1.00 22.75           C
ATOM   4467  O   LYS A 375      -5.178 -15.148  -3.437  1.00 21.14           O
ATOM   4468  CB  LYS A 375      -7.689 -14.808  -5.134  1.00 23.67           C
ATOM   4469  CG  LYS A 375      -8.330 -16.200  -4.972  1.00 25.99           C
ATOM   4470  CD  LYS A 375      -9.804 -16.082  -4.537  1.00 27.02           C
ATOM   4471  CE  LYS A 375     -10.272 -17.230  -3.630  1.00 27.83           C
ATOM   4472  NZ  LYS A 375     -11.579 -16.938  -3.010  1.00 29.10           N1+
ATOM   4473  H   LYS A 375      -6.954 -15.201  -7.516  1.00  0.00           H
ATOM   4474  HA  LYS A 375      -5.899 -13.714  -5.478  1.00  0.00           H
ATOM   4475  HB2 LYS A 375      -7.760 -14.288  -4.178  1.00  0.00           H
ATOM   4476  HB3 LYS A 375      -8.281 -14.216  -5.832  1.00  0.00           H
ATOM   4477  HG2 LYS A 375      -8.255 -16.768  -5.900  1.00  0.00           H
ATOM   4478  HG3 LYS A 375      -7.769 -16.758  -4.222  1.00  0.00           H
ATOM   4479  HD2 LYS A 375      -9.927 -15.150  -3.993  1.00  0.00           H
ATOM   4480  HD3 LYS A 375     -10.437 -15.993  -5.422  1.00  0.00           H
ATOM   4481  HE2 LYS A 375     -10.326 -18.164  -4.190  1.00  0.00           H
ATOM   4482  HE3 LYS A 375      -9.555 -17.395  -2.826  1.00  0.00           H
ATOM   4483  HZ1 LYS A 375     -11.724 -17.572  -2.227  1.00  0.00           H
ATOM   4484  HZ2 LYS A 375     -11.601 -16.004  -2.617  1.00  0.00           H
ATOM   4485  HZ3 LYS A 375     -12.325 -17.023  -3.680  1.00  0.00           H
ATOM   4486  N   ASP A 376      -4.573 -16.565  -5.079  1.00 22.97           N
ATOM   4487  CA  ASP A 376      -3.432 -17.211  -4.407  1.00 23.49           C
ATOM   4488  C   ASP A 376      -2.317 -16.197  -4.077  1.00 24.05           C
ATOM   4489  O   ASP A 376      -1.687 -16.285  -3.030  1.00 23.37           O
ATOM   4490  CB  ASP A 376      -2.907 -18.406  -5.267  1.00 26.21           C
ATOM   4491  CG  ASP A 376      -1.466 -18.873  -4.993  1.00 25.03           C
ATOM   4492  OD1 ASP A 376      -0.645 -18.860  -5.939  1.00 24.00           O
ATOM   4493  OD2 ASP A 376      -1.163 -19.207  -3.826  1.00 25.73           O1-
ATOM   4494  H   ASP A 376      -4.692 -16.744  -6.064  1.00  0.00           H
ATOM   4495  HA  ASP A 376      -3.777 -17.609  -3.452  1.00  0.00           H
ATOM   4496  HB2 ASP A 376      -3.565 -19.265  -5.143  1.00  0.00           H
ATOM   4497  HB3 ASP A 376      -2.953 -18.139  -6.323  1.00  0.00           H
ATOM   4498  N   LYS A 377      -2.073 -15.222  -4.959  1.00 23.50           N
ATOM   4499  CA  LYS A 377      -0.887 -14.368  -4.915  1.00 22.56           C
ATOM   4500  C   LYS A 377      -1.028 -13.162  -3.970  1.00 21.29           C
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ATOM   4501  O   LYS A 377      -0.103 -12.351  -3.880  1.00 20.97           O
ATOM   4502  CB  LYS A 377      -0.601 -13.830  -6.327  1.00 21.84           C
ATOM   4503  CG  LYS A 377      -0.590 -14.878  -7.452  1.00 23.25           C
ATOM   4504  CD  LYS A 377       0.402 -16.039  -7.306  1.00 21.18           C
ATOM   4505  CE  LYS A 377       0.197 -17.117  -8.389  1.00 22.85           C
ATOM   4506  NZ  LYS A 377       0.836 -18.382  -8.020  1.00 23.32           N1+
ATOM   4507  H   LYS A 377      -2.691 -15.135  -5.763  1.00  0.00           H
ATOM   4508  HA  LYS A 377      -0.041 -14.952  -4.573  1.00  0.00           H
ATOM   4509  HB2 LYS A 377      -1.353 -13.084  -6.575  1.00  0.00           H
ATOM   4510  HB3 LYS A 377       0.341 -13.294  -6.319  1.00  0.00           H
ATOM   4511  HG2 LYS A 377      -1.580 -15.310  -7.509  1.00  0.00           H
ATOM   4512  HG3 LYS A 377      -0.434 -14.362  -8.393  1.00  0.00           H
ATOM   4513  HD2 LYS A 377       1.431 -15.680  -7.302  1.00  0.00           H
ATOM   4514  HD3 LYS A 377       0.232 -16.498  -6.334  1.00  0.00           H
ATOM   4515  HE2 LYS A 377      -0.864 -17.337  -8.503  1.00  0.00           H
ATOM   4516  HE3 LYS A 377       0.572 -16.791  -9.358  1.00  0.00           H
ATOM   4517  HZ1 LYS A 377       0.433 -18.661  -7.107  1.00  0.00           H
ATOM   4518  HZ2 LYS A 377       0.638 -19.101  -8.690  1.00  0.00           H
ATOM   4519  HZ3 LYS A 377       1.867 -18.263  -7.977  1.00  0.00           H
ATOM   4520  N   ILE A 378      -2.162 -13.039  -3.281  1.00 20.46           N
ATOM   4521  CA  ILE A 378      -2.452 -11.991  -2.318  1.00 19.71           C
ATOM   4522  C   ILE A 378      -2.211 -12.634  -0.936  1.00 21.20           C
ATOM   4523  O   ILE A 378      -2.719 -13.724  -0.665  1.00 23.96           O
ATOM   4524  CB  ILE A 378      -3.938 -11.542  -2.474  1.00 19.96           C
ATOM   4525  CG1 ILE A 378      -4.357 -11.298  -3.950  1.00 16.92           C
ATOM   4526  CG2 ILE A 378      -4.195 -10.269  -1.642  1.00 15.66           C
ATOM   4527  CD1 ILE A 378      -5.869 -11.131  -4.151  1.00 19.39           C
ATOM   4528  H   ILE A 378      -2.811 -13.814  -3.312  1.00  0.00           H
ATOM   4529  HA  ILE A 378      -1.797 -11.135  -2.473  1.00  0.00           H
ATOM   4530  HB  ILE A 378      -4.577 -12.338  -2.086  1.00  0.00           H
ATOM   4531 HG12 ILE A 378      -3.834 -10.428  -4.349  1.00  0.00           H
ATOM   4532 HG13 ILE A 378      -4.062 -12.132  -4.586  1.00  0.00           H
ATOM   4533 HG21 ILE A 378      -5.232  -9.945  -1.692  1.00  0.00           H
ATOM   4534 HG22 ILE A 378      -3.963 -10.430  -0.591  1.00  0.00           H
ATOM   4535 HG23 ILE A 378      -3.582  -9.438  -1.990  1.00  0.00           H
ATOM   4536 HD11 ILE A 378      -6.105 -11.078  -5.215  1.00  0.00           H
ATOM   4537 HD12 ILE A 378      -6.418 -11.976  -3.734  1.00  0.00           H
ATOM   4538 HD13 ILE A 378      -6.241 -10.216  -3.694  1.00  0.00           H
ATOM   4539  N   HIS A 379      -1.435 -11.982  -0.065  1.00 20.04           N
ATOM   4540  CA  HIS A 379      -1.075 -12.462   1.268  1.00 20.47           C
ATOM   4541  C   HIS A 379      -1.458 -11.424   2.326  1.00 21.04           C
ATOM   4542  O   HIS A 379      -1.237 -10.231   2.138  1.00 19.94           O
ATOM   4543  CB  HIS A 379       0.426 -12.804   1.312  1.00 21.51           C
ATOM   4544  CG  HIS A 379       0.899 -13.376   2.621  1.00 21.45           C
ATOM   4545  ND1 HIS A 379       0.325 -14.518   3.188  1.00 20.38           N
ATOM   4546  CD2 HIS A 379       1.907 -12.933   3.445  1.00 22.37           C
ATOM   4547  CE1 HIS A 379       0.982 -14.699   4.330  1.00 22.41           C
ATOM   4548  NE2 HIS A 379       1.937 -13.792   4.530  1.00 22.62           N
ATOM   4549  H   HIS A 379      -1.036 -11.089  -0.355  1.00  0.00           H
ATOM   4550  HA  HIS A 379      -1.625 -13.379   1.493  1.00  0.00           H
ATOM   4551  HB2 HIS A 379       0.661 -13.524   0.537  1.00  0.00           H
ATOM   4552  HB3 HIS A 379       1.027 -11.923   1.089  1.00  0.00           H
ATOM   4553  HD2 HIS A 379       2.578 -12.095   3.351  1.00  0.00           H
ATOM   4554  HE1 HIS A 379       0.760 -15.492   5.031  1.00  0.00           H
ATOM   4555  HE2 HIS A 379       2.546 -13.721   5.341  1.00  0.00           H
ATOM   4556  N   TYR A 380      -1.989 -11.885   3.458  1.00 21.37           N
ATOM   4557  CA  TYR A 380      -2.121 -11.108   4.683  1.00 21.69           C
ATOM   4558  C   TYR A 380      -1.117 -11.751   5.643  1.00 20.30           C
ATOM   4559  O   TYR A 380      -1.206 -12.955   5.893  1.00 21.92           O
ATOM   4560  CB  TYR A 380      -3.560 -11.243   5.231  1.00 19.97           C
ATOM   4561  CG  TYR A 380      -3.750 -10.791   6.670  1.00 21.86           C
ATOM   4562  CD1 TYR A 380      -3.851  -9.423   6.991  1.00 18.74           C
ATOM   4563  CD2 TYR A 380      -3.769 -11.749   7.703  1.00 19.94           C
ATOM   4564  CE1 TYR A 380      -3.934  -9.020   8.340  1.00 21.73           C
ATOM   4565  CE2 TYR A 380      -3.852 -11.342   9.046  1.00 22.01           C
ATOM   4566  CZ  TYR A 380      -3.906  -9.979   9.369  1.00 22.98           C
ATOM   4567  OH  TYR A 380      -3.941  -9.613  10.681  1.00 22.49           O
ATOM   4568  H   TYR A 380      -1.948 -12.885   3.605  1.00  0.00           H
ATOM   4569  HA  TYR A 380      -1.887 -10.052   4.539  1.00  0.00           H
ATOM   4570  HB2 TYR A 380      -4.236 -10.666   4.599  1.00  0.00           H
ATOM   4571  HB3 TYR A 380      -3.888 -12.281   5.160  1.00  0.00           H
ATOM   4572  HD1 TYR A 380      -3.840  -8.679   6.208  1.00  0.00           H
ATOM   4573  HD2 TYR A 380      -3.693 -12.801   7.469  1.00  0.00           H
ATOM   4574  HE1 TYR A 380      -4.007  -7.973   8.585  1.00  0.00           H
ATOM   4575  HE2 TYR A 380      -3.875 -12.075   9.836  1.00  0.00           H
ATOM   4576  HH  TYR A 380      -4.363  -8.762  10.848  1.00  0.00           H
ATOM   4577  N   PHE A 381      -0.177 -10.966   6.172  1.00 21.02           N
ATOM   4578  CA  PHE A 381       0.806 -11.432   7.143  1.00 22.01           C
ATOM   4579  C   PHE A 381       0.152 -11.478   8.535  1.00 21.75           C
ATOM   4580  O   PHE A 381       0.153 -10.496   9.279  1.00 21.88           O
ATOM   4581  CB  PHE A 381       1.993 -10.457   7.173  1.00 21.96           C
ATOM   4582  CG  PHE A 381       2.929 -10.532   5.983  1.00 23.44           C
ATOM   4583  CD1 PHE A 381       3.974 -11.479   5.975  1.00 24.95           C
ATOM   4584  CD2 PHE A 381       2.797  -9.630   4.912  1.00 24.30           C
ATOM   4585  CE1 PHE A 381       4.890 -11.516   4.906  1.00 24.65           C
ATOM   4586  CE2 PHE A 381       3.710  -9.670   3.845  1.00 24.16           C
ATOM   4587  CZ  PHE A 381       4.761 -10.606   3.841  1.00 22.13           C
ATOM   4588  H   PHE A 381      -0.173  -9.980   5.929  1.00  0.00           H
ATOM   4589  HA  PHE A 381       1.171 -12.428   6.888  1.00  0.00           H
ATOM   4590  HB2 PHE A 381       1.654  -9.431   7.307  1.00  0.00           H
ATOM   4591  HB3 PHE A 381       2.591 -10.692   8.049  1.00  0.00           H
ATOM   4592  HD1 PHE A 381       4.093 -12.165   6.804  1.00  0.00           H
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ATOM   4593  HD2 PHE A 381       2.012  -8.891   4.912  1.00  0.00           H
ATOM   4594  HE1 PHE A 381       5.693 -12.239   4.914  1.00  0.00           H
ATOM   4595  HE2 PHE A 381       3.616  -8.958   3.046  1.00  0.00           H
ATOM   4596  HZ  PHE A 381       5.467 -10.627   3.025  1.00  0.00           H
ATOM   4597  N   SER A 382      -0.412 -12.638   8.882  1.00 22.55           N
ATOM   4598  CA  SER A 382      -1.033 -12.936  10.170  1.00 23.85           C
ATOM   4599  C   SER A 382      -0.013 -13.207  11.288  1.00 23.18           C
ATOM   4600  O   SER A 382      -0.399 -13.358  12.443  1.00 24.66           O
ATOM   4601  CB  SER A 382      -1.911 -14.187   9.960  1.00 23.74           C
ATOM   4602  OG  SER A 382      -1.201 -15.292   9.416  1.00 23.95           O
ATOM   4603  H   SER A 382      -0.396 -13.390   8.204  1.00  0.00           H
ATOM   4604  HA  SER A 382      -1.644 -12.091  10.491  1.00  0.00           H
ATOM   4605  HB2 SER A 382      -2.385 -14.483  10.898  1.00  0.00           H
ATOM   4606  HB3 SER A 382      -2.713 -13.948   9.269  1.00  0.00           H
ATOM   4607  HG  SER A 382      -0.425 -15.442   9.941  1.00  0.00           H
ATOM   4608  N   ASP A 383       1.264 -13.309  10.925  1.00 25.17           N
ATOM   4609  CA  ASP A 383       2.455 -13.503  11.741  1.00 23.87           C
ATOM   4610  C   ASP A 383       3.088 -12.144  12.103  1.00 23.92           C
ATOM   4611  O   ASP A 383       3.871 -12.079  13.051  1.00 24.24           O
ATOM   4612  CB  ASP A 383       3.488 -14.288  10.881  1.00 23.64           C
ATOM   4613  CG  ASP A 383       3.816 -13.690   9.504  1.00 23.19           C
ATOM   4614  OD1 ASP A 383       2.857 -13.356   8.768  1.00 22.50           O
ATOM   4615  OD2 ASP A 383       5.016 -13.574   9.189  1.00 22.18           O1-
ATOM   4616  H   ASP A 383       1.497 -13.210   9.931  1.00  0.00           H
ATOM   4617  HA  ASP A 383       2.217 -14.048  12.656  1.00  0.00           H
ATOM   4618  HB2 ASP A 383       4.420 -14.398  11.438  1.00  0.00           H
ATOM   4619  HB3 ASP A 383       3.125 -15.300  10.712  1.00  0.00           H
ATOM   4620  N   ILE A 384       2.753 -11.061  11.387  1.00 22.55           N
ATOM   4621  CA  ILE A 384       3.300  -9.731  11.616  1.00 22.33           C
ATOM   4622  C   ILE A 384       2.269  -8.913  12.410  1.00 23.48           C
ATOM   4623  O   ILE A 384       1.102  -8.780  12.039  1.00 25.39           O
ATOM   4624  CB  ILE A 384       3.666  -9.048  10.265  1.00 22.93           C
ATOM   4625  CG1 ILE A 384       4.764  -9.874   9.544  1.00 21.02           C
ATOM   4626  CG2 ILE A 384       4.125  -7.581  10.443  1.00 18.69           C
ATOM   4627  CD1 ILE A 384       5.322  -9.257   8.253  1.00 22.41           C
ATOM   4628  H   ILE A 384       2.063 -11.170  10.657  1.00  0.00           H
ATOM   4629  HA  ILE A 384       4.217  -9.802  12.203  1.00  0.00           H
ATOM   4630  HB  ILE A 384       2.773  -9.029   9.639  1.00  0.00           H
ATOM   4631 HG12 ILE A 384       5.587 -10.069  10.228  1.00  0.00           H
ATOM   4632 HG13 ILE A 384       4.381 -10.865   9.302  1.00  0.00           H
ATOM   4633 HG21 ILE A 384       4.337  -7.105   9.487  1.00  0.00           H
ATOM   4634 HG22 ILE A 384       3.363  -6.962  10.913  1.00  0.00           H
ATOM   4635 HG23 ILE A 384       5.026  -7.530  11.053  1.00  0.00           H
ATOM   4636 HD11 ILE A 384       5.944  -9.981   7.724  1.00  0.00           H
ATOM   4637 HD12 ILE A 384       4.525  -8.950   7.577  1.00  0.00           H
ATOM   4638 HD13 ILE A 384       5.942  -8.388   8.459  1.00  0.00           H
ATOM   4639  N   GLY A 385       2.754  -8.287  13.479  1.00 22.88           N
ATOM   4640  CA  GLY A 385       2.053  -7.327  14.306  1.00 21.82           C
ATOM   4641  C   GLY A 385       2.718  -5.982  14.053  1.00 20.82           C
ATOM   4642  O   GLY A 385       3.947  -5.885  14.024  1.00 19.73           O
ATOM   4643  H   GLY A 385       3.723  -8.448  13.702  1.00  0.00           H
ATOM   4644  HA2 GLY A 385       0.994  -7.304  14.059  1.00  0.00           H
ATOM   4645  HA3 GLY A 385       2.139  -7.593  15.359  1.00  0.00           H
ATOM   4646  N   TYR A 386       1.907  -4.957  13.815  1.00 21.09           N
ATOM   4647  CA  TYR A 386       2.277  -3.699  13.183  1.00 20.61           C
ATOM   4648  C   TYR A 386       1.304  -2.610  13.651  1.00 20.86           C
ATOM   4649  O   TYR A 386       0.206  -2.936  14.093  1.00 21.94           O
ATOM   4650  CB  TYR A 386       2.296  -3.940  11.653  1.00 21.65           C
ATOM   4651  CG  TYR A 386       2.297  -2.714  10.766  1.00 21.23           C
ATOM   4652  CD1 TYR A 386       3.504  -2.113  10.355  1.00 20.92           C
ATOM   4653  CD2 TYR A 386       1.065  -2.179  10.343  1.00 17.77           C
ATOM   4654  CE1 TYR A 386       3.472  -1.001   9.493  1.00 20.13           C
ATOM   4655  CE2 TYR A 386       1.035  -1.056   9.504  1.00 19.71           C
ATOM   4656  CZ  TYR A 386       2.238  -0.482   9.057  1.00 19.65           C
ATOM   4657  OH  TYR A 386       2.192   0.551   8.170  1.00 20.30           O
ATOM   4658  H   TYR A 386       0.915  -5.070  14.025  1.00  0.00           H
ATOM   4659  HA  TYR A 386       3.271  -3.410  13.519  1.00  0.00           H
ATOM   4660  HB2 TYR A 386       3.151  -4.559  11.386  1.00  0.00           H
ATOM   4661  HB3 TYR A 386       1.426  -4.534  11.368  1.00  0.00           H
ATOM   4662  HD1 TYR A 386       4.453  -2.514  10.681  1.00  0.00           H
ATOM   4663  HD2 TYR A 386       0.138  -2.636  10.658  1.00  0.00           H
ATOM   4664  HE1 TYR A 386       4.399  -0.566   9.154  1.00  0.00           H
ATOM   4665  HE2 TYR A 386       0.079  -0.671   9.188  1.00  0.00           H
ATOM   4666  HH  TYR A 386       2.888   0.562   7.514  1.00  0.00           H
ATOM   4667  N   HIS A 387       1.659  -1.327  13.530  1.00 19.49           N
ATOM   4668  CA  HIS A 387       0.758  -0.194  13.747  1.00 20.54           C
ATOM   4669  C   HIS A 387       1.160   0.977  12.853  1.00 18.80           C
ATOM   4670  O   HIS A 387       2.290   1.451  12.955  1.00 18.62           O
ATOM   4671  CB  HIS A 387       0.658   0.148  15.253  1.00 20.00           C
ATOM   4672  CG  HIS A 387       0.033   1.472  15.660  1.00 25.81           C
ATOM   4673  ND1 HIS A 387      -1.254   1.583  16.169  1.00 22.90           N1+
ATOM   4674  CD2 HIS A 387       0.578   2.746  15.698  1.00 23.86           C
ATOM   4675  CE1 HIS A 387      -1.435   2.844  16.532  1.00 24.18           C
ATOM   4676  NE2 HIS A 387      -0.381   3.591  16.227  1.00 25.10           N
ATOM   4677  H   HIS A 387       2.589  -1.123  13.172  1.00  0.00           H
ATOM   4678  HA  HIS A 387      -0.230  -0.498  13.409  1.00  0.00           H
ATOM   4679  HB2 HIS A 387       0.122  -0.649  15.760  1.00  0.00           H
ATOM   4680  HB3 HIS A 387       1.659   0.132  15.673  1.00  0.00           H
ATOM   4681  HD1 HIS A 387      -1.914   0.833  16.484  1.00  0.00           H
ATOM   4682  HD2 HIS A 387       1.561   3.115  15.434  1.00  0.00           H
ATOM   4683  HE1 HIS A 387      -2.314   3.195  17.054  1.00  0.00           H
ATOM   4684  HE2 HIS A 387      -0.261   4.588  16.519  1.00  0.00           H
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ATOM   4685  N   HIS A 388       0.217   1.481  12.048  1.00 18.98           N
ATOM   4686  CA  HIS A 388       0.244   2.805  11.436  1.00 18.64           C
ATOM   4687  C   HIS A 388      -0.856   3.602  12.163  1.00 20.19           C
ATOM   4688  O   HIS A 388      -1.981   3.101  12.219  1.00 20.72           O
ATOM   4689  CB  HIS A 388      -0.151   2.704   9.943  1.00  0.00           C
ATOM   4690  CG  HIS A 388      -0.330   3.954   9.127  1.00  0.00           C
ATOM   4691  ND1 HIS A 388      -1.330   4.022   8.183  1.00  0.00           N
ATOM   4692  CD2 HIS A 388       0.353   5.136   8.985  1.00  0.00           C
ATOM   4693  CE1 HIS A 388      -1.224   5.185   7.516  1.00  0.00           C
ATOM   4694  NE2 HIS A 388      -0.214   5.891   7.989  1.00  0.00           N
ATOM   4695  H   HIS A 388      -0.715   1.075  12.117  1.00  0.00           H
ATOM   4696  HA  HIS A 388       1.231   3.261  11.519  1.00  0.00           H
ATOM   4697  HB2 HIS A 388       0.635   2.095   9.498  1.00  0.00           H
ATOM   4698  HB3 HIS A 388      -1.062   2.108   9.879  1.00  0.00           H
ATOM   4699  HD1 HIS A 388      -2.028   3.315   7.972  1.00  0.00           H
ATOM   4700  HD2 HIS A 388       1.216   5.503   9.518  1.00  0.00           H
ATOM   4701  HE1 HIS A 388      -1.866   5.481   6.701  1.00  0.00           H
ATOM   4702  N   PRO A 389      -0.580   4.786  12.752  1.00 19.60           N
ATOM   4703  CA  PRO A 389      -1.570   5.582  13.497  1.00 19.62           C
ATOM   4704  C   PRO A 389      -2.915   5.787  12.756  1.00 19.23           C
ATOM   4705  O   PRO A 389      -2.877   6.239  11.608  1.00 20.06           O
ATOM   4706  CB  PRO A 389      -0.871   6.929  13.752  1.00 19.61           C
ATOM   4707  CG  PRO A 389       0.618   6.649  13.661  1.00 19.36           C
ATOM   4708  CD  PRO A 389       0.744   5.406  12.792  1.00 19.21           C
ATOM   4709  HA  PRO A 389      -1.713   5.067  14.441  1.00  0.00           H
ATOM   4710  HB2 PRO A 389      -1.134   7.666  12.990  1.00  0.00           H
ATOM   4711  HB3 PRO A 389      -1.136   7.360  14.715  1.00  0.00           H
ATOM   4712  HG2 PRO A 389       1.160   7.499  13.248  1.00  0.00           H
ATOM   4713  HG3 PRO A 389       1.027   6.449  14.650  1.00  0.00           H
ATOM   4714  HD2 PRO A 389       1.059   5.691  11.790  1.00  0.00           H
ATOM   4715  HD3 PRO A 389       1.490   4.727  13.206  1.00  0.00           H
ATOM   4716  N   PRO A 390      -4.094   5.526  13.367  1.00 19.23           N
ATOM   4717  CA  PRO A 390      -4.314   5.042  14.741  1.00 19.78           C
ATOM   4718  C   PRO A 390      -4.432   3.503  14.902  1.00 19.82           C
ATOM   4719  O   PRO A 390      -4.792   3.073  15.996  1.00 20.50           O
ATOM   4720  CB  PRO A 390      -5.673   5.668  15.102  1.00 16.45           C
ATOM   4721  CG  PRO A 390      -6.449   5.637  13.796  1.00 19.09           C
ATOM   4722  CD  PRO A 390      -5.370   5.920  12.752  1.00 19.54           C
ATOM   4723  HA  PRO A 390      -3.570   5.418  15.444  1.00  0.00           H
ATOM   4724  HB2 PRO A 390      -6.205   5.172  15.912  1.00  0.00           H
ATOM   4725  HB3 PRO A 390      -5.522   6.697  15.425  1.00  0.00           H
ATOM   4726  HG2 PRO A 390      -6.872   4.645  13.646  1.00  0.00           H
ATOM   4727  HG3 PRO A 390      -7.270   6.355  13.768  1.00  0.00           H
ATOM   4728  HD2 PRO A 390      -5.566   5.373  11.830  1.00  0.00           H
ATOM   4729  HD3 PRO A 390      -5.346   6.982  12.505  1.00  0.00           H
ATOM   4730  N   TYR A 391      -4.199   2.665  13.878  1.00 21.44           N
ATOM   4731  CA  TYR A 391      -4.662   1.267  13.850  1.00 22.01           C
ATOM   4732  C   TYR A 391      -3.534   0.232  13.786  1.00 21.91           C
ATOM   4733  O   TYR A 391      -2.520   0.419  13.108  1.00 21.23           O
ATOM   4734  CB  TYR A 391      -5.664   1.066  12.693  1.00 25.04           C
ATOM   4735  CG  TYR A 391      -6.988   1.783  12.880  1.00 26.98           C
ATOM   4736  CD1 TYR A 391      -7.688   1.630  14.092  1.00 27.76           C
ATOM   4737  CD2 TYR A 391      -7.535   2.587  11.856  1.00 28.12           C
ATOM   4738  CE1 TYR A 391      -8.907   2.289  14.294  1.00 29.80           C
ATOM   4739  CE2 TYR A 391      -8.770   3.239  12.055  1.00 28.51           C
ATOM   4740  CZ  TYR A 391      -9.451   3.090  13.279  1.00 30.11           C
ATOM   4741  OH  TYR A 391     -10.639   3.710  13.514  1.00 29.73           O
ATOM   4742  H   TYR A 391      -3.712   2.994  13.052  1.00  0.00           H
ATOM   4743  HA  TYR A 391      -5.177   1.042  14.783  1.00  0.00           H
ATOM   4744  HB2 TYR A 391      -5.217   1.370  11.751  1.00  0.00           H
ATOM   4745  HB3 TYR A 391      -5.892   0.006  12.579  1.00  0.00           H
ATOM   4746  HD1 TYR A 391      -7.312   0.991  14.876  1.00  0.00           H
ATOM   4747  HD2 TYR A 391      -7.018   2.704  10.914  1.00  0.00           H
ATOM   4748  HE1 TYR A 391      -9.421   2.161  15.233  1.00  0.00           H
ATOM   4749  HE2 TYR A 391      -9.188   3.852  11.268  1.00  0.00           H
ATOM   4750  HH  TYR A 391     -11.011   4.151  12.732  1.00  0.00           H
ATOM   4751  N   ASP A 392      -3.734  -0.866  14.526  1.00 20.65           N
ATOM   4752  CA  ASP A 392      -2.780  -1.941  14.785  1.00 21.18           C
ATOM   4753  C   ASP A 392      -3.228  -3.207  14.055  1.00 20.89           C
ATOM   4754  O   ASP A 392      -4.419  -3.500  13.988  1.00 20.18           O
ATOM   4755  CB  ASP A 392      -2.683  -2.292  16.299  1.00 22.25           C
ATOM   4756  CG  ASP A 392      -2.330  -1.128  17.213  1.00 21.58           C
ATOM   4757  OD1 ASP A 392      -3.026  -0.088  17.166  1.00 20.66           O
ATOM   4758  OD2 ASP A 392      -1.292  -1.168  17.902  1.00 21.72           O1-
ATOM   4759  H   ASP A 392      -4.604  -0.933  15.046  1.00  0.00           H
ATOM   4760  HA  ASP A 392      -1.803  -1.634  14.434  1.00  0.00           H
ATOM   4761  HB2 ASP A 392      -3.622  -2.718  16.654  1.00  0.00           H
ATOM   4762  HB3 ASP A 392      -1.936  -3.075  16.443  1.00  0.00           H
ATOM   4763  N   ASN A 393      -2.260  -3.981  13.572  1.00 20.94           N
ATOM   4764  CA  ASN A 393      -2.399  -5.389  13.209  1.00 20.94           C
ATOM   4765  C   ASN A 393      -1.792  -6.155  14.390  1.00 23.33           C
ATOM   4766  O   ASN A 393      -0.721  -5.755  14.865  1.00 20.26           O
ATOM   4767  CB  ASN A 393      -1.495  -5.678  11.981  1.00 21.01           C
ATOM   4768  CG  ASN A 393      -2.046  -6.820  11.135  1.00 21.80           C
ATOM   4769  OD1 ASN A 393      -2.996  -6.601  10.396  1.00 21.19           O
ATOM   4770  ND2 ASN A 393      -1.460  -8.011  11.165  1.00 18.99           N
ATOM   4771  H   ASN A 393      -1.310  -3.679  13.785  1.00  0.00           H
ATOM   4772  HA  ASN A 393      -3.442  -5.663  13.032  1.00  0.00           H
ATOM   4773  HB2 ASN A 393      -1.464  -4.804  11.331  1.00  0.00           H
ATOM   4774  HB3 ASN A 393      -0.456  -5.879  12.246  1.00  0.00           H
ATOM   4775 HD21 ASN A 393      -0.582  -8.216  11.644  1.00  0.00           H
ATOM   4776 HD22 ASN A 393      -1.904  -8.766  10.652  1.00  0.00           H
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ATOM   4777  N   CYS A 394     -2.402  -7.248  14.854  1.00 21.34           N
ATOM   4778  CA  CYS A 394     -1.790  -8.122  15.859  1.00 23.77           C
ATOM   4779  C   CYS A 394     -2.193  -9.591  15.647  1.00 23.91           C
ATOM   4780  O   CYS A 394     -3.395  -9.853  15.616  1.00 23.61           O
ATOM   4781  CB  CYS A 394     -2.066  -7.603  17.283  1.00 24.76           C
ATOM   4782  SG  CYS A 394     -1.155  -8.444  18.606  1.00 21.89           S
ATOM   4783  H   CYS A 394     -3.331  -7.496  14.500  1.00  0.00           H
ATOM   4784  HA  CYS A 394     -0.714  -8.043  15.734  1.00  0.00           H
ATOM   4785  HB2 CYS A 394     -1.844  -6.538  17.351  1.00  0.00           H
ATOM   4786  HB3 CYS A 394     -3.122  -7.705  17.518  1.00  0.00           H
ATOM   4787  N   PRO A 395     -1.240 -10.553  15.537  1.00 24.08           N
ATOM   4788  CA  PRO A 395     -1.515 -12.001  15.533  1.00 23.62           C
ATOM   4789  C   PRO A 395     -2.360 -12.428  16.746  1.00 23.97           C
ATOM   4790  O   PRO A 395     -1.999 -12.128  17.884  1.00 22.43           O
ATOM   4791  CB  PRO A 395     -0.134 -12.675  15.593  1.00 22.83           C
ATOM   4792  CG  PRO A 395      0.834 -11.653  15.040  1.00 22.60           C
ATOM   4793  CD  PRO A 395      0.191 -10.305  15.340  1.00 24.08           C
ATOM   4794  HA  PRO A 395     -2.014 -12.251  14.596  1.00  0.00           H
ATOM   4795  HB2 PRO A 395      0.158 -12.909  16.617  1.00  0.00           H
ATOM   4796  HB3 PRO A 395     -0.103 -13.613  15.037  1.00  0.00           H
ATOM   4797  HG2 PRO A 395      1.839 -11.761  15.447  1.00  0.00           H
ATOM   4798  HG3 PRO A 395      0.911 -11.772  13.961  1.00  0.00           H
ATOM   4799  HD2 PRO A 395      0.621  -9.888  16.250  1.00  0.00           H
ATOM   4800  HD3 PRO A 395      0.364  -9.613  14.517  1.00  0.00           H
ATOM   4801  N   LEU A 396     -3.495 -13.097  16.509  1.00 23.38           N
ATOM   4802  CA  LEU A 396     -4.469 -13.464  17.542  1.00 25.21           C
ATOM   4803  C   LEU A 396     -4.395 -14.954  17.910  1.00 27.18           C
ATOM   4804  O   LEU A 396     -5.261 -15.461  18.628  1.00 29.80           O
ATOM   4805  CB  LEU A 396     -5.897 -13.129  17.064  1.00 24.81           C
ATOM   4806  CG  LEU A 396     -6.132 -11.648  16.719  1.00 23.79           C
ATOM   4807  CD1 LEU A 396     -7.575 -11.448  16.256  1.00 23.36           C
ATOM   4808  CD2 LEU A 396     -5.795 -10.713  17.892  1.00 21.88           C
ATOM   4809  H   LEU A 396     -3.728 -13.263  15.543  1.00  0.00           H
ATOM   4810  HA  LEU A 396     -4.276 -12.917  18.466  1.00  0.00           H
ATOM   4811  HB2 LEU A 396     -6.152 -13.742  16.202  1.00  0.00           H
ATOM   4812  HB3 LEU A 396     -6.607 -13.410  17.842  1.00  0.00           H
ATOM   4813  HG  LEU A 396     -5.493 -11.368  15.881  1.00  0.00           H
ATOM   4814 HD11 LEU A 396     -7.762 -10.398  16.024  1.00  0.00           H
ATOM   4815 HD12 LEU A 396     -7.777 -12.026  15.355  1.00  0.00           H
ATOM   4816 HD13 LEU A 396     -8.285 -11.757  17.020  1.00  0.00           H
ATOM   4817 HD21 LEU A 396     -6.111  -9.693  17.682  1.00  0.00           H
ATOM   4818 HD22 LEU A 396     -6.279 -11.026  18.813  1.00  0.00           H
ATOM   4819 HD23 LEU A 396     -4.720 -10.672  18.072  1.00  0.00           H
ATOM   4820  N   ASP A 397     -3.346 -15.660  17.478  1.00 26.31           N
ATOM   4821  CA  ASP A 397     -2.969 -17.016  17.890  1.00 26.97           C
ATOM   4822  C   ASP A 397     -2.422 -16.970  19.340  1.00 27.26           C
ATOM   4823  O   ASP A 397     -2.584 -15.971  20.047  1.00 24.89           O
ATOM   4824  CB  ASP A 397     -1.884 -17.522  16.908  1.00 27.87           C
ATOM   4825  CG  ASP A 397     -0.569 -16.777  17.066  1.00 31.48           C
ATOM   4826  OD1 ASP A 397     -0.538 -15.605  16.660  1.00 33.62           O
ATOM   4827  OD2 ASP A 397      0.334 -17.331  17.722  1.00 32.96           O1-
ATOM   4828  H   ASP A 397     -2.595 -15.149  17.010  1.00  0.00           H
ATOM   4829  HA  ASP A 397     -3.837 -17.670  17.846  1.00  0.00           H
ATOM   4830  HB2 ASP A 397     -1.700 -18.586  17.055  1.00  0.00           H
ATOM   4831  HB3 ASP A 397     -2.217 -17.416  15.876  1.00  0.00           H
ATOM   4832  N   LYS A 398     -1.824 -18.058  19.828  1.00 27.55           N
ATOM   4833  CA  LYS A 398     -1.187 -18.144  21.137  1.00 28.98           C
ATOM   4834  C   LYS A 398      0.156 -18.899  21.041  1.00 28.03           C
ATOM   4835  O   LYS A 398      0.579 -19.497  22.031  1.00 27.56           O
ATOM   4836  CB  LYS A 398     -2.174 -18.720  22.194  1.00 32.65           C
ATOM   4837  CG  LYS A 398     -3.573 -18.056  22.290  1.00 38.44           C
ATOM   4838  CD  LYS A 398     -3.590 -16.660  22.948  1.00 40.86           C
ATOM   4839  CE  LYS A 398     -4.879 -15.859  22.656  1.00 42.41           C
ATOM   4840  NZ  LYS A 398     -4.746 -15.004  21.466  1.00 44.87           N1+
ATOM   4841  H   LYS A 398     -1.682 -18.880  19.226  1.00  0.00           H
ATOM   4842  HA  LYS A 398     -0.898 -17.141  21.459  1.00  0.00           H
ATOM   4843  HB2 LYS A 398     -2.315 -19.777  21.965  1.00  0.00           H
ATOM   4844  HB3 LYS A 398     -1.699 -18.701  23.176  1.00  0.00           H
ATOM   4845  HG2 LYS A 398     -4.038 -18.021  21.306  1.00  0.00           H
ATOM   4846  HG3 LYS A 398     -4.220 -18.709  22.876  1.00  0.00           H
ATOM   4847  HD2 LYS A 398     -3.491 -16.795  24.027  1.00  0.00           H
ATOM   4848  HD3 LYS A 398     -2.714 -16.075  22.660  1.00  0.00           H
ATOM   4849  HE2 LYS A 398     -5.736 -16.523  22.540  1.00  0.00           H
ATOM   4850  HE3 LYS A 398     -5.102 -15.200  23.496  1.00  0.00           H
ATOM   4851  HZ1 LYS A 398     -5.628 -14.584  21.165  1.00  0.00           H
ATOM   4852  HZ2 LYS A 398     -4.105 -14.241  21.706  1.00  0.00           H
ATOM   4853  HZ3 LYS A 398     -4.323 -15.490  20.681  1.00  0.00           H
ATOM   4854  N   GLU A 399      0.830 -18.888  19.881  1.00 29.00           N
ATOM   4855  CA  GLU A 399      1.996 -19.719  19.578  1.00 29.56           C
ATOM   4856  C   GLU A 399      3.053 -18.970  18.751  1.00 27.81           C
ATOM   4857  O   GLU A 399      4.177 -18.774  19.213  1.00 26.43           O
ATOM   4858  CB  GLU A 399      1.584 -21.081  18.968  1.00 34.33           C
ATOM   4859  CG  GLU A 399      0.510 -21.033  17.852  1.00 42.27           C
ATOM   4860  CD  GLU A 399     -0.870 -21.433  18.338  1.00 46.74           C
ATOM   4861  OE1 GLU A 399     -1.664 -20.575  18.795  1.00 49.38           O
ATOM   4862  OE2 GLU A 399     -1.211 -22.634  18.295  1.00 48.28           O1-
ATOM   4863  H   GLU A 399      0.486 -18.303  19.107  1.00  0.00           H
ATOM   4864  HA  GLU A 399      2.510 -19.948  20.515  1.00  0.00           H
ATOM   4865  HB2 GLU A 399      2.473 -21.576  18.576  1.00  0.00           H
ATOM   4866  HB3 GLU A 399      1.241 -21.733  19.774  1.00  0.00           H
ATOM   4867  HG2 GLU A 399      0.449 -20.052  17.383  1.00  0.00           H
ATOM   4868  HG3 GLU A 399      0.786 -21.727  17.058  1.00  0.00           H
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ATOM   4869  N   VAL A 400      2.684 -18.515  17.549  1.00 26.01           N
ATOM   4870  CA  VAL A 400      3.494 -17.748  16.605  1.00 24.53           C
ATOM   4871  C   VAL A 400      3.738 -16.346  17.187  1.00 24.42           C
ATOM   4872  O   VAL A 400      4.866 -15.858  17.123  1.00 22.04           O
ATOM   4873  CB  VAL A 400      2.757 -17.660  15.234  1.00 24.87           C
ATOM   4874  CG1 VAL A 400      3.561 -16.902  14.157  1.00 22.22           C
ATOM   4875  CG2 VAL A 400      2.366 -19.050  14.694  1.00 22.82           C
ATOM   4876  H   VAL A 400      1.674 -18.422  17.413  1.00  0.00           H
ATOM   4877  HA  VAL A 400      4.452 -18.253  16.475  1.00  0.00           H
ATOM   4878  HB  VAL A 400      1.831 -17.101  15.380  1.00  0.00           H
ATOM   4879 HG11 VAL A 400      3.014 -16.863  13.214  1.00  0.00           H
ATOM   4880 HG12 VAL A 400      3.755 -15.866  14.440  1.00  0.00           H
ATOM   4881 HG13 VAL A 400      4.520 -17.382  13.961  1.00  0.00           H
ATOM   4882 HG21 VAL A 400      1.875 -18.968  13.724  1.00  0.00           H
ATOM   4883 HG22 VAL A 400      3.241 -19.688  14.571  1.00  0.00           H
ATOM   4884 HG23 VAL A 400      1.669 -19.563  15.356  1.00  0.00           H
ATOM   4885  N   TYR A 401      2.718 -15.772  17.842  1.00 25.28           N
ATOM   4886  CA  TYR A 401      2.755 -14.547  18.640  1.00 27.50           C
ATOM   4887  C   TYR A 401      3.878 -14.583  19.697  1.00 27.74           C
ATOM   4888  O   TYR A 401      4.706 -13.674  19.792  1.00 28.01           O
ATOM   4889  CB  TYR A 401      1.355 -14.352  19.269  1.00 26.68           C
ATOM   4890  CG  TYR A 401      1.195 -13.210  20.260  1.00 28.89           C
ATOM   4891  CD1 TYR A 401      1.338 -13.448  21.644  1.00 27.82           C
ATOM   4892  CD2 TYR A 401      0.875 -11.913  19.807  1.00 27.03           C
ATOM   4893  CE1 TYR A 401      1.151 -12.402  22.568  1.00 26.44           C
ATOM   4894  CE2 TYR A 401      0.700 -10.867  20.734  1.00 26.20           C
ATOM   4895  CZ  TYR A 401      0.821 -11.112  22.115  1.00 27.15           C
ATOM   4896  OH  TYR A 401      0.592 -10.115  23.016  1.00 23.75           O
ATOM   4897  H   TYR A 401      1.806 -16.235  17.753  1.00  0.00           H
ATOM   4898  HA  TYR A 401      2.947 -13.722  17.958  1.00  0.00           H
ATOM   4899  HB2 TYR A 401      0.626 -14.201  18.474  1.00  0.00           H
ATOM   4900  HB3 TYR A 401      1.044 -15.272  19.765  1.00  0.00           H
ATOM   4901  HD1 TYR A 401      1.593 -14.431  22.011  1.00  0.00           H
ATOM   4902  HD2 TYR A 401      0.759 -11.712  18.750  1.00  0.00           H
ATOM   4903  HE1 TYR A 401      1.259 -12.590  23.626  1.00  0.00           H
ATOM   4904  HE2 TYR A 401      0.457  -9.877  20.385  1.00  0.00           H
ATOM   4905  HH  TYR A 401      0.448  -9.258  22.612  1.00  0.00           H
ATOM   4906  N   ASN A 402      3.938 -15.688  20.452  1.00 27.33           N
ATOM   4907  CA  ASN A 402      4.892 -15.893  21.547  1.00 29.34           C
ATOM   4908  C   ASN A 402      6.293 -16.263  21.036  1.00 27.72           C
ATOM   4909  O   ASN A 402      7.266 -16.096  21.764  1.00 27.54           O
ATOM   4910  CB  ASN A 402      4.411 -17.040  22.472  1.00 30.12           C
ATOM   4911  CG  ASN A 402      3.220 -16.652  23.349  1.00 33.27           C
ATOM   4912  OD1 ASN A 402      3.253 -15.650  24.050  1.00 33.60           O
ATOM   4913  ND2 ASN A 402      2.129 -17.408  23.330  1.00 34.63           N
ATOM   4914  H   ASN A 402      3.283 -16.423  20.239  1.00  0.00           H
ATOM   4915  HA  ASN A 402      4.989 -14.970  22.124  1.00  0.00           H
ATOM   4916  HB2 ASN A 402      4.187 -17.935  21.891  1.00  0.00           H
ATOM   4917  HB3 ASN A 402      5.212 -17.319  23.159  1.00  0.00           H
ATOM   4918 HD21 ASN A 402      2.050 -18.261  22.787  1.00  0.00           H
ATOM   4919 HD22 ASN A 402      1.379 -17.130  23.941  1.00  0.00           H
ATOM   4920  N   SER A 403      6.410 -16.748  19.794  1.00 27.84           N
ATOM   4921  CA  SER A 403      7.679 -17.151  19.187  1.00 28.74           C
ATOM   4922  C   SER A 403      8.367 -15.977  18.459  1.00 28.13           C
ATOM   4923  O   SER A 403      9.493 -16.136  17.992  1.00 27.53           O
ATOM   4924  CB  SER A 403      7.383 -18.231  18.125  1.00 28.94           C
ATOM   4925  OG  SER A 403      6.803 -19.383  18.715  1.00 35.87           O
ATOM   4926  H   SER A 403      5.572 -16.843  19.237  1.00  0.00           H
ATOM   4927  HA  SER A 403      8.366 -17.548  19.937  1.00  0.00           H
ATOM   4928  HB2 SER A 403      6.726 -17.850  17.343  1.00  0.00           H
ATOM   4929  HB3 SER A 403      8.309 -18.536  17.633  1.00  0.00           H
ATOM   4930  HG  SER A 403      5.926 -19.157  19.022  1.00  0.00           H
ATOM   4931  N   ASN A 404      7.701 -14.820  18.327  1.00 25.90           N
ATOM   4932  CA  ASN A 404      8.114 -13.714  17.455  1.00 25.37           C
ATOM   4933  C   ASN A 404      8.094 -12.361  18.168  1.00 25.69           C
ATOM   4934  O   ASN A 404      8.027 -11.327  17.510  1.00 25.02           O
ATOM   4935  CB  ASN A 404      7.355 -13.725  16.104  1.00 26.10           C
ATOM   4936  CG  ASN A 404      7.738 -14.893  15.195  1.00 26.26           C
ATOM   4937  OD1 ASN A 404      8.835 -14.948  14.644  1.00 29.36           O
ATOM   4938  ND2 ASN A 404      6.849 -15.866  15.054  1.00 28.99           N
ATOM   4939  H   ASN A 404      6.778 -14.759  18.739  1.00  0.00           H
ATOM   4940  HA  ASN A 404      9.172 -13.830  17.213  1.00  0.00           H
ATOM   4941  HB2 ASN A 404      6.278 -13.709  16.278  1.00  0.00           H
ATOM   4942  HB3 ASN A 404      7.563 -12.817  15.539  1.00  0.00           H
ATOM   4943 HD21 ASN A 404      5.984 -15.816  15.589  1.00  0.00           H
ATOM   4944 HD22 ASN A 404      7.056 -16.634  14.438  1.00  0.00           H
ATOM   4945  N   ASN A 405      8.177 -12.343  19.506  1.00 25.25           N
ATOM   4946  CA  ASN A 405      8.378 -11.154  20.358  1.00 26.77           C
ATOM   4947  C   ASN A 405      7.272 -10.098  20.164  1.00 26.11           C
ATOM   4948  O   ASN A 405      7.564  -8.905  20.101  1.00 25.19           O
ATOM   4949  CB  ASN A 405      9.759 -10.472  20.128  1.00 28.88           C
ATOM   4950  CG  ASN A 405     10.996 -11.344  20.293  1.00 29.98           C
ATOM   4951  OD1 ASN A 405     11.003 -12.320  21.035  1.00 31.34           O
ATOM   4952  ND2 ASN A 405     12.061 -11.003  19.578  1.00 32.27           N
ATOM   4953  H   ASN A 405      8.261 -13.242  19.961  1.00  0.00           H
ATOM   4954  HA  ASN A 405      8.327 -11.488  21.395  1.00  0.00           H
ATOM   4955  HB2 ASN A 405      9.776 -10.030  19.132  1.00  0.00           H
ATOM   4956  HB3 ASN A 405      9.879  -9.643  20.827  1.00  0.00           H
ATOM   4957 HD21 ASN A 405     12.019 -10.170  18.973  1.00  0.00           H
ATOM   4958 HD22 ASN A 405     12.906 -11.541  19.658  1.00  0.00           H
ATOM   4959  N   CYS A 406      6.019 -10.515  19.960  1.00 25.69           N
ATOM   4960  CA  CYS A 406      4.940  -9.636  19.516  1.00 25.23           C
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ATOM   4961  C   CYS A 406      4.448  -8.694  20.627  1.00 26.10           C
ATOM   4962  O   CYS A 406      3.531  -9.020  21.378  1.00 26.16           O
ATOM   4963  CB  CYS A 406      3.791 -10.510  19.002  1.00 27.05           C
ATOM   4964  SG  CYS A 406      4.115 -11.315  17.407  1.00 25.91           S
ATOM   4965  H   CYS A 406      5.828 -11.508  19.985  1.00  0.00           H
ATOM   4966  HA  CYS A 406      5.283  -9.013  18.693  1.00  0.00           H
ATOM   4967  HB2 CYS A 406      3.552 -11.274  19.741  1.00  0.00           H
ATOM   4968  HB3 CYS A 406      2.885  -9.916  18.878  1.00  0.00           H
ATOM   4969  N   GLU A 407      5.033  -7.491  20.685  1.00 25.27           N
ATOM   4970  CA  GLU A 407      4.731  -6.380  21.594  1.00 25.75           C
ATOM   4971  C   GLU A 407      3.352  -5.730  21.300  1.00 24.42           C
ATOM   4972  O   GLU A 407      3.257  -4.506  21.199  1.00 22.09           O
ATOM   4973  CB  GLU A 407      5.838  -5.309  21.409  1.00 29.18           C
ATOM   4974  CG  GLU A 407      7.287  -5.752  21.705  1.00 35.84           C
ATOM   4975  CD  GLU A 407      8.312  -4.930  20.927  1.00 38.75           C
ATOM   4976  OE1 GLU A 407      9.370  -5.504  20.585  1.00 41.17           O
ATOM   4977  OE2 GLU A 407      8.017  -3.754  20.616  1.00 43.63           O1-
ATOM   4978  H   GLU A 407      5.873  -7.384  20.125  1.00  0.00           H
ATOM   4979  HA  GLU A 407      4.733  -6.742  22.624  1.00  0.00           H
ATOM   4980  HB2 GLU A 407      5.780  -4.940  20.383  1.00  0.00           H
ATOM   4981  HB3 GLU A 407      5.634  -4.441  22.039  1.00  0.00           H
ATOM   4982  HG2 GLU A 407      7.501  -5.664  22.769  1.00  0.00           H
ATOM   4983  HG3 GLU A 407      7.443  -6.796  21.450  1.00  0.00           H
ATOM   4984  N   CYS A 408      2.287  -6.518  21.105  1.00 23.64           N
ATOM   4985  CA  CYS A 408      0.991  -6.047  20.622  1.00 21.06           C
ATOM   4986  C   CYS A 408     -0.192  -6.603  21.404  1.00 21.00           C
ATOM   4987  O   CYS A 408     -0.156  -7.709  21.951  1.00 19.91           O
ATOM   4988  CB  CYS A 408      0.868  -6.198  19.097  1.00 20.88           C
ATOM   4989  SG  CYS A 408      0.789  -7.860  18.369  1.00 22.25           S
ATOM   4990  H   CYS A 408      2.403  -7.516  21.267  1.00  0.00           H
ATOM   4991  HA  CYS A 408      0.943  -4.970  20.807  1.00  0.00           H
ATOM   4992  HB2 CYS A 408      0.017  -5.623  18.733  1.00  0.00           H
ATOM   4993  HB3 CYS A 408      1.744  -5.736  18.669  1.00  0.00           H
ATOM   4994  N   ASP A 409     -1.248  -5.793  21.433  1.00 17.35           N
ATOM   4995  CA  ASP A 409     -2.455  -5.941  22.224  1.00 19.95           C
ATOM   4996  C   ASP A 409     -3.436  -6.822  21.437  1.00 21.68           C
ATOM   4997  O   ASP A 409     -4.141  -6.353  20.542  1.00 21.54           O
ATOM   4998  CB  ASP A 409     -3.085  -4.533  22.439  1.00 20.43           C
ATOM   4999  CG  ASP A 409     -2.079  -3.460  22.843  1.00 23.66           C
ATOM   5000  OD1 ASP A 409     -1.816  -3.307  24.049  1.00 21.49           O
ATOM   5001  OD2 ASP A 409     -1.478  -2.851  21.923  1.00 21.32           O1-
ATOM   5002  H   ASP A 409     -1.138  -4.865  21.036  1.00  0.00           H
ATOM   5003  HA  ASP A 409     -2.211  -6.381  23.193  1.00  0.00           H
ATOM   5004  HB2 ASP A 409     -3.549  -4.167  21.524  1.00  0.00           H
ATOM   5005  HB3 ASP A 409     -3.875  -4.575  23.189  1.00  0.00           H
ATOM   5006  N   GLN A 410     -3.544  -8.109  21.797  1.00 19.59           N
ATOM   5007  CA  GLN A 410     -4.446  -9.093  21.172  1.00 20.13           C
ATOM   5008  C   GLN A 410     -5.952  -8.834  21.437  1.00 21.87           C
ATOM   5009  O   GLN A 410     -6.797  -9.654  21.067  1.00 20.41           O
ATOM   5010  CB  GLN A 410     -4.098 -10.508  21.677  1.00 20.31           C
ATOM   5011  CG  GLN A 410     -2.717 -11.009  21.227  1.00 21.69           C
ATOM   5012  CD  GLN A 410     -2.610 -12.525  21.369  1.00 20.78           C
ATOM   5013  OE1 GLN A 410     -3.096 -13.112  22.335  1.00 24.03           O
ATOM   5014  NE2 GLN A 410     -2.092 -13.209  20.364  1.00 20.56           N
ATOM   5015  H   GLN A 410     -2.873  -8.443  22.475  1.00  0.00           H
ATOM   5016  HA  GLN A 410     -4.304  -9.052  20.090  1.00  0.00           H
ATOM   5017  HB2 GLN A 410     -4.172 -10.553  22.765  1.00  0.00           H
ATOM   5018  HB3 GLN A 410     -4.844 -11.210  21.300  1.00  0.00           H
ATOM   5019  HG2 GLN A 410     -2.537 -10.730  20.187  1.00  0.00           H
ATOM   5020  HG3 GLN A 410     -1.934 -10.534  21.817  1.00  0.00           H
ATOM   5021 HE21 GLN A 410     -1.778 -12.703  19.527  1.00  0.00           H
ATOM   5022 HE22 GLN A 410     -1.946 -14.212  20.389  1.00  0.00           H
ATOM   5023  N   GLY A 411     -6.283  -7.705  22.069  1.00 24.50           N
ATOM   5024  CA  GLY A 411     -7.624  -7.191  22.304  1.00 26.96           C
ATOM   5025  C   GLY A 411     -7.866  -5.857  21.591  1.00 27.55           C
ATOM   5026  O   GLY A 411     -8.973  -5.336  21.693  1.00 30.46           O
ATOM   5027  H   GLY A 411     -5.518  -7.090  22.304  1.00  0.00           H
ATOM   5028  HA2 GLY A 411     -8.393  -7.898  21.989  1.00  0.00           H
ATOM   5029  HA3 GLY A 411     -7.758  -7.034  23.374  1.00  0.00           H
ATOM   5030  N   ASN A 412     -6.880  -5.328  20.844  1.00 27.68           N
ATOM   5031  CA  ASN A 412     -6.946  -4.061  20.099  1.00 25.90           C
ATOM   5032  C   ASN A 412     -6.319  -4.188  18.702  1.00 24.16           C
ATOM   5033  O   ASN A 412     -5.821  -3.209  18.140  1.00 24.85           O
ATOM   5034  CB  ASN A 412     -6.457  -2.836  20.916  1.00 26.56           C
ATOM   5035  CG  ASN A 412     -7.370  -2.458  22.080  1.00 27.79           C
ATOM   5036  OD1 ASN A 412     -7.121  -2.825  23.223  1.00 32.66           O
ATOM   5037  ND2 ASN A 412     -8.434  -1.709  21.816  1.00 25.88           N
ATOM   5038  H   ASN A 412     -5.993  -5.818  20.770  1.00  0.00           H
ATOM   5039  HA  ASN A 412     -7.995  -3.869  19.864  1.00  0.00           H
ATOM   5040  HB2 ASN A 412     -5.455  -3.014  21.301  1.00  0.00           H
ATOM   5041  HB3 ASN A 412     -6.371  -1.959  20.274  1.00  0.00           H
ATOM   5042 HD21 ASN A 412     -8.675  -1.475  20.843  1.00  0.00           H
ATOM   5043 HD22 ASN A 412     -9.055  -1.478  22.569  1.00  0.00           H
ATOM   5044  N   ASP A 413     -6.375  -5.396  18.121  1.00 22.31           N
ATOM   5045  CA  ASP A 413     -6.107  -5.653  16.702  1.00 22.05           C
ATOM   5046  C   ASP A 413     -7.247  -5.025  15.886  1.00 21.82           C
ATOM   5047  O   ASP A 413     -8.412  -5.143  16.266  1.00 21.38           O
ATOM   5048  CB  ASP A 413     -6.052  -7.182  16.435  1.00 20.91           C
ATOM   5049  CG  ASP A 413     -6.190  -7.571  14.962  1.00 19.89           C
ATOM   5050  OD1 ASP A 413     -5.302  -7.178  14.168  1.00 19.55           O
ATOM   5051  OD2 ASP A 413     -7.247  -8.127  14.602  1.00 19.62           O1-
ATOM   5052  H   ASP A 413     -6.894  -6.104  18.612  1.00  0.00           H
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ATOM   5053  HA  ASP A 413      -5.158  -5.200  16.410  1.00  0.00           H
ATOM   5054  HB2 ASP A 413      -5.139  -7.618  16.822  1.00  0.00           H
ATOM   5055  HB3 ASP A 413      -6.876  -7.665  16.959  1.00  0.00           H
ATOM   5056  N   PHE A 414      -6.922  -4.378  14.768  1.00 21.02           N
ATOM   5057  CA  PHE A 414      -7.915  -3.798  13.888  1.00 18.26           C
ATOM   5058  C   PHE A 414      -8.433  -4.822  12.866  1.00 19.44           C
ATOM   5059  O   PHE A 414      -9.547  -4.626  12.387  1.00 21.11           O
ATOM   5060  CB  PHE A 414      -7.291  -2.612  13.128  1.00 18.35           C
ATOM   5061  CG  PHE A 414      -8.303  -1.774  12.366  1.00 17.60           C
ATOM   5062  CD1 PHE A 414      -9.259  -1.017  13.073  1.00 19.23           C
ATOM   5063  CD2 PHE A 414      -8.326  -1.783  10.957  1.00 17.55           C
ATOM   5064  CE1 PHE A 414     -10.223  -0.265  12.377  1.00 20.54           C
ATOM   5065  CE2 PHE A 414      -9.278  -1.017  10.263  1.00 16.66           C
ATOM   5066  CZ  PHE A 414     -10.226  -0.256  10.972  1.00 18.35           C
ATOM   5067  H   PHE A 414      -5.941  -4.308  14.499  1.00  0.00           H
ATOM   5068  HA  PHE A 414      -8.755  -3.427  14.476  1.00  0.00           H
ATOM   5069  HB2 PHE A 414      -6.792  -1.952  13.838  1.00  0.00           H
ATOM   5070  HB3 PHE A 414      -6.514  -2.960  12.445  1.00  0.00           H
ATOM   5071  HD1 PHE A 414      -9.250  -1.006  14.153  1.00  0.00           H
ATOM   5072  HD2 PHE A 414      -7.638  -2.395  10.396  1.00  0.00           H
ATOM   5073  HE1 PHE A 414     -10.950   0.320  12.921  1.00  0.00           H
ATOM   5074  HE2 PHE A 414      -9.290  -1.037   9.185  1.00  0.00           H
ATOM   5075  HZ  PHE A 414     -10.958   0.329  10.440  1.00  0.00           H
ATOM   5076  N   THR A 415      -7.695  -5.895  12.522  1.00 20.19           N
ATOM   5077  CA  THR A 415      -7.959  -6.817  11.400  1.00 20.23           C
ATOM   5078  C   THR A 415      -9.417  -7.315  11.327  1.00 22.22           C
ATOM   5079  O   THR A 415      -9.987  -7.441  10.243  1.00 22.79           O
ATOM   5080  CB  THR A 415      -6.979  -8.020  11.418  1.00 21.37           C
ATOM   5081  OG1 THR A 415      -5.640  -7.590  11.579  1.00 17.64           O
ATOM   5082  CG2 THR A 415      -7.039  -8.880  10.142  1.00 20.76           C
ATOM   5083  H   THR A 415      -6.868  -6.111  13.073  1.00  0.00           H
ATOM   5084  HA  THR A 415      -7.772  -6.246  10.489  1.00  0.00           H
ATOM   5085  HB  THR A 415      -7.214  -8.673  12.255  1.00  0.00           H
ATOM   5086  HG1 THR A 415      -5.501  -7.445  12.534  1.00  0.00           H
ATOM   5087 HG21 THR A 415      -6.445  -9.784  10.256  1.00  0.00           H
ATOM   5088 HG22 THR A 415      -8.047  -9.228   9.924  1.00  0.00           H
ATOM   5089 HG23 THR A 415      -6.672  -8.335   9.272  1.00  0.00           H
ATOM   5090  N   PHE A 416     -10.041  -7.554  12.481  1.00 22.70           N
ATOM   5091  CA  PHE A 416     -11.368  -8.146  12.559  1.00 23.45           C
ATOM   5092  C   PHE A 416     -12.412  -7.186  13.142  1.00 22.80           C
ATOM   5093  O   PHE A 416     -13.508  -7.639  13.467  1.00 25.25           O
ATOM   5094  CB  PHE A 416     -11.268  -9.488  13.309  1.00 20.24           C
ATOM   5095  CG  PHE A 416     -10.316 -10.465  12.640  1.00 20.62           C
ATOM   5096  CD1 PHE A 416     -10.700 -11.148  11.470  1.00 20.38           C
ATOM   5097  CD2 PHE A 416      -9.005 -10.612  13.132  1.00 18.91           C
ATOM   5098  CE1 PHE A 416      -9.765 -11.930  10.769  1.00 19.44           C
ATOM   5099  CE2 PHE A 416      -8.074 -11.411  12.446  1.00 18.21           C
ATOM   5100  CZ  PHE A 416      -8.451 -12.058  11.256  1.00 20.50           C
ATOM   5101  H   PHE A 416      -9.484  -7.463  13.327  1.00  0.00           H
ATOM   5102  HA  PHE A 416     -11.749  -8.377  11.564  1.00  0.00           H
ATOM   5103  HB2 PHE A 416     -10.937  -9.320  14.335  1.00  0.00           H
ATOM   5104  HB3 PHE A 416     -12.252  -9.951  13.368  1.00  0.00           H
ATOM   5105  HD1 PHE A 416     -11.696 -11.036  11.085  1.00  0.00           H
ATOM   5106  HD2 PHE A 416      -8.685 -10.056  14.002  1.00  0.00           H
ATOM   5107  HE1 PHE A 416     -10.042 -12.398   9.838  1.00  0.00           H
ATOM   5108  HE2 PHE A 416      -7.056 -11.473  12.806  1.00  0.00           H
ATOM   5109  HZ  PHE A 416      -7.719 -12.629  10.707  1.00  0.00           H
ATOM   5110  N   GLN A 417     -12.118  -5.882  13.271  1.00 23.60           N
ATOM   5111  CA  GLN A 417     -13.055  -4.858  13.757  1.00 22.99           C
ATOM   5112  C   GLN A 417     -14.107  -4.469  12.694  1.00 22.57           C
ATOM   5113  O   GLN A 417     -14.201  -5.097  11.636  1.00 22.49           O
ATOM   5114  CB  GLN A 417     -12.271  -3.617  14.225  1.00 22.97           C
ATOM   5115  CG  GLN A 417     -11.527  -3.863  15.551  1.00 23.29           C
ATOM   5116  CD  GLN A 417     -11.076  -2.597  16.286  1.00 26.35           C
ATOM   5117  OE1 GLN A 417     -10.465  -2.682  17.344  1.00 25.95           O
ATOM   5118  NE2 GLN A 417     -11.391  -1.409  15.783  1.00 24.11           N
ATOM   5119  H   GLN A 417     -11.199  -5.574  12.961  1.00  0.00           H
ATOM   5120  HA  GLN A 417     -13.617  -5.256  14.599  1.00  0.00           H
ATOM   5121  HB2 GLN A 417     -11.583  -3.262  13.456  1.00  0.00           H
ATOM   5122  HB3 GLN A 417     -12.976  -2.810  14.399  1.00  0.00           H
ATOM   5123  HG2 GLN A 417     -12.186  -4.388  16.241  1.00  0.00           H
ATOM   5124  HG3 GLN A 417     -10.673  -4.517  15.388  1.00  0.00           H
ATOM   5125 HE21 GLN A 417     -11.959  -1.313  14.949  1.00  0.00           H
ATOM   5126 HE22 GLN A 417     -11.110  -0.570  16.293  1.00  0.00           H
ATOM   5127  N   GLY A 418     -14.931  -3.452  12.972  1.00 22.92           N
ATOM   5128  CA  GLY A 418     -16.172  -3.179  12.251  1.00 21.05           C
ATOM   5129  C   GLY A 418     -16.004  -2.135  11.150  1.00 21.18           C
ATOM   5130  O   GLY A 418     -16.692  -2.232  10.140  1.00 21.14           O
ATOM   5131  H   GLY A 418     -14.768  -2.909  13.811  1.00  0.00           H
ATOM   5132  HA2 GLY A 418     -16.593  -4.091  11.825  1.00  0.00           H
ATOM   5133  HA3 GLY A 418     -16.908  -2.798  12.960  1.00  0.00           H
ATOM   5134  N   TYR A 419     -15.039  -1.217  11.279  1.00 20.25           N
ATOM   5135  CA  TYR A 419     -14.627  -0.311  10.201  1.00 21.27           C
ATOM   5136  C   TYR A 419     -13.490  -0.957   9.375  1.00 20.92           C
ATOM   5137  O   TYR A 419     -12.991  -0.384   8.408  1.00 19.73           O
ATOM   5138  CB  TYR A 419     -14.121   1.000  10.842  1.00 21.11           C
ATOM   5139  CG  TYR A 419     -14.121   2.197   9.911  1.00 22.25           C
ATOM   5140  CD1 TYR A 419     -15.311   2.923   9.715  1.00 23.37           C
ATOM   5141  CD2 TYR A 419     -12.945   2.596   9.245  1.00 21.83           C
ATOM   5142  CE1 TYR A 419     -15.317   4.064   8.895  1.00 23.61           C
ATOM   5143  CE2 TYR A 419     -12.960   3.707   8.383  1.00 24.89           C
ATOM   5144  CZ  TYR A 419     -14.147   4.447   8.224  1.00 22.99           C
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ATOM   5145  OH  TYR A 419     -14.165   5.576   7.470  1.00 26.03           O
ATOM   5146  H   TYR A 419     -14.537  -1.143  12.157  1.00  0.00           H
ATOM   5147  HA  TYR A 419     -15.471  -0.090   9.544  1.00  0.00           H
ATOM   5148  HB2 TYR A 419     -14.762   1.265  11.684  1.00  0.00           H
ATOM   5149  HB3 TYR A 419     -13.127   0.869  11.272  1.00  0.00           H
ATOM   5150  HD1 TYR A 419     -16.221   2.620  10.209  1.00  0.00           H
ATOM   5151  HD2 TYR A 419     -12.028   2.053   9.395  1.00  0.00           H
ATOM   5152  HE1 TYR A 419     -16.220   4.648   8.782  1.00  0.00           H
ATOM   5153  HE2 TYR A 419     -12.052   4.001   7.878  1.00  0.00           H
ATOM   5154  HH  TYR A 419     -13.470   5.606   6.791  1.00  0.00           H
ATOM   5155  N   SER A 420     -13.070  -2.165   9.760  1.00 19.72           N
ATOM   5156  CA  SER A 420     -12.020  -2.932   9.121  1.00 19.12           C
ATOM   5157  C   SER A 420     -12.614  -3.840   8.039  1.00 19.14           C
ATOM   5158  O   SER A 420     -13.824  -4.095   7.999  1.00 18.72           O
ATOM   5159  CB  SER A 420     -11.360  -3.798  10.200  1.00 20.59           C
ATOM   5160  OG  SER A 420     -10.201  -4.459   9.742  1.00 18.07           O
ATOM   5161  H   SER A 420     -13.604  -2.621  10.481  1.00  0.00           H
ATOM   5162  HA  SER A 420     -11.276  -2.267   8.691  1.00  0.00           H
ATOM   5163  HB2 SER A 420     -11.080  -3.160  11.039  1.00  0.00           H
ATOM   5164  HB3 SER A 420     -12.039  -4.554  10.584  1.00  0.00           H
ATOM   5165  HG  SER A 420      -9.689  -4.632  10.530  1.00  0.00           H
ATOM   5166  N   CYS A 421     -11.718  -4.351   7.195  1.00 20.98           N
ATOM   5167  CA  CYS A 421     -11.996  -5.256   6.092  1.00 19.83           C
ATOM   5168  C   CYS A 421     -11.049  -6.465   6.081  1.00 21.04           C
ATOM   5169  O   CYS A 421     -10.951  -7.164   5.073  1.00 23.25           O
ATOM   5170  CB  CYS A 421     -12.076  -4.489   4.761  1.00 20.05           C
ATOM   5171  SG  CYS A 421     -13.550  -3.447   4.557  1.00 22.53           S
ATOM   5172  H   CYS A 421     -10.744  -4.121   7.381  1.00  0.00           H
ATOM   5173  HA  CYS A 421     -12.978  -5.703   6.248  1.00  0.00           H
ATOM   5174  HB2 CYS A 421     -11.188  -3.871   4.623  1.00  0.00           H
ATOM   5175  HB3 CYS A 421     -12.077  -5.195   3.933  1.00  0.00           H
ATOM   5176  N   GLY A 422     -10.393  -6.786   7.204  1.00 20.19           N
ATOM   5177  CA  GLY A 422      -9.429  -7.886   7.244  1.00 22.14           C
ATOM   5178  C   GLY A 422     -10.140  -9.226   7.436  1.00 22.26           C
ATOM   5179  O   GLY A 422      -9.743 -10.219   6.826  1.00 19.11           O
ATOM   5180  H   GLY A 422     -10.467  -6.190   8.022  1.00  0.00           H
ATOM   5181  HA2 GLY A 422      -8.839  -7.930   6.327  1.00  0.00           H
ATOM   5182  HA3 GLY A 422      -8.719  -7.721   8.051  1.00  0.00           H
ATOM   5183  N   LYS A 423     -11.280  -9.243   8.149  1.00 24.00           N
ATOM   5184  CA  LYS A 423     -12.211 -10.370   8.140  1.00 25.44           C
ATOM   5185  C   LYS A 423     -12.760 -10.587   6.719  1.00 25.53           C
ATOM   5186  O   LYS A 423     -12.770 -11.715   6.237  1.00 26.66           O
ATOM   5187  CB  LYS A 423     -13.387 -10.158   9.124  1.00 26.73           C
ATOM   5188  CG  LYS A 423     -14.136 -11.484   9.400  1.00 31.23           C
ATOM   5189  CD  LYS A 423     -15.543 -11.371  10.013  1.00 34.49           C
ATOM   5190  CE  LYS A 423     -16.534 -10.451   9.276  1.00 36.84           C
ATOM   5191  NZ  LYS A 423     -16.721 -10.778   7.852  1.00 39.84           N1+
ATOM   5192  H   LYS A 423     -11.529  -8.379   8.612  1.00  0.00           H
ATOM   5193  HA  LYS A 423     -11.653 -11.259   8.436  1.00  0.00           H
ATOM   5194  HB2 LYS A 423     -13.045  -9.719  10.059  1.00  0.00           H
ATOM   5195  HB3 LYS A 423     -14.062  -9.417   8.703  1.00  0.00           H
ATOM   5196  HG2 LYS A 423     -14.224 -12.054   8.478  1.00  0.00           H
ATOM   5197  HG3 LYS A 423     -13.520 -12.112  10.043  1.00  0.00           H
ATOM   5198  HD2 LYS A 423     -15.974 -12.371  10.051  1.00  0.00           H
ATOM   5199  HD3 LYS A 423     -15.449 -11.036  11.046  1.00  0.00           H
ATOM   5200  HE2 LYS A 423     -17.508 -10.497   9.764  1.00  0.00           H
ATOM   5201  HE3 LYS A 423     -16.214  -9.414   9.359  1.00  0.00           H
ATOM   5202  HZ1 LYS A 423     -16.452  -9.935   7.320  1.00  0.00           H
ATOM   5203  HZ2 LYS A 423     -16.213 -11.621   7.514  1.00  0.00           H
ATOM   5204  HZ3 LYS A 423     -17.685 -10.933   7.628  1.00  0.00           H
ATOM   5205  N   GLU A 424     -13.177  -9.505   6.053  1.00 23.69           N
ATOM   5206  CA  GLU A 424     -13.762  -9.474   4.715  1.00 23.47           C
ATOM   5207  C   GLU A 424     -12.779 -10.030   3.672  1.00 23.14           C
ATOM   5208  O   GLU A 424     -13.193 -10.820   2.828  1.00 18.61           O
ATOM   5209  CB  GLU A 424     -14.184  -8.027   4.366  1.00 24.63           C
ATOM   5210  CG  GLU A 424     -15.455  -7.496   5.069  1.00 25.57           C
ATOM   5211  CD  GLU A 424     -15.532  -7.733   6.569  1.00 28.25           C
ATOM   5212  OE1 GLU A 424     -14.597  -7.390   7.324  1.00 27.71           O
ATOM   5213  OE2 GLU A 424     -16.526  -8.344   7.021  1.00 33.30           O1-
ATOM   5214  H   GLU A 424     -13.226  -8.629   6.568  1.00  0.00           H
ATOM   5215  HA  GLU A 424     -14.645 -10.116   4.706  1.00  0.00           H
ATOM   5216  HB2 GLU A 424     -13.367  -7.337   4.546  1.00  0.00           H
ATOM   5217  HB3 GLU A 424     -14.366  -7.961   3.292  1.00  0.00           H
ATOM   5218  HG2 GLU A 424     -15.544  -6.425   4.891  1.00  0.00           H
ATOM   5219  HG3 GLU A 424     -16.332  -7.949   4.607  1.00  0.00           H
ATOM   5220  N   TYR A 425     -11.480  -9.712   3.784  1.00 21.56           N
ATOM   5221  CA  TYR A 425     -10.402 -10.342   3.018  1.00 21.96           C
ATOM   5222  C   TYR A 425     -10.362 -11.864   3.252  1.00 23.23           C
ATOM   5223  O   TYR A 425     -10.469 -12.643   2.302  1.00 21.80           O
ATOM   5224  CB  TYR A 425      -9.037  -9.694   3.353  1.00 21.92           C
ATOM   5225  CG  TYR A 425      -7.877 -10.418   2.693  1.00 20.41           C
ATOM   5226  CD1 TYR A 425      -7.740 -10.359   1.293  1.00 20.32           C
ATOM   5227  CD2 TYR A 425      -7.013 -11.240   3.450  1.00 20.40           C
ATOM   5228  CE1 TYR A 425      -6.776 -11.149   0.648  1.00 17.64           C
ATOM   5229  CE2 TYR A 425      -6.040 -12.025   2.800  1.00 18.10           C
ATOM   5230  CZ  TYR A 425      -5.936 -11.988   1.398  1.00 19.87           C
ATOM   5231  OH  TYR A 425      -5.065 -12.794   0.735  1.00 16.52           O
ATOM   5232  H   TYR A 425     -11.230  -8.995   4.460  1.00  0.00           H
ATOM   5233  HA  TYR A 425     -10.606 -10.187   1.958  1.00  0.00           H
ATOM   5234  HB2 TYR A 425      -9.027  -8.653   3.030  1.00  0.00           H
ATOM   5235  HB3 TYR A 425      -8.874  -9.672   4.430  1.00  0.00           H
ATOM   5236  HD1 TYR A 425      -8.399  -9.735   0.708  1.00  0.00           H
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ATOM   5237  HD2 TYR A 425      -7.115 -11.302   4.525  1.00  0.00           H
ATOM   5238  HE1 TYR A 425      -6.695 -11.130  -0.427  1.00  0.00           H
ATOM   5239  HE2 TYR A 425      -5.405 -12.678   3.380  1.00  0.00           H
ATOM   5240  HH  TYR A 425      -4.268 -13.034   1.191  1.00  0.00           H
ATOM   5241  N   TYR A 426     -10.254 -12.286   4.520  1.00 21.99           N
ATOM   5242  CA  TYR A 426     -10.224 -13.688   4.937  1.00 23.50           C
ATOM   5243  C   TYR A 426     -11.448 -14.486   4.449  1.00 23.34           C
ATOM   5244  O   TYR A 426     -11.306 -15.633   4.028  1.00 24.05           O
ATOM   5245  CB  TYR A 426     -10.108 -13.779   6.474  1.00 22.73           C
ATOM   5246  CG  TYR A 426      -8.716 -14.003   7.034  1.00 23.27           C
ATOM   5247  CD1 TYR A 426      -8.009 -12.959   7.662  1.00 22.47           C
ATOM   5248  CD2 TYR A 426      -8.155 -15.296   7.013  1.00 22.87           C
ATOM   5249  CE1 TYR A 426      -6.776 -13.214   8.286  1.00 21.19           C
ATOM   5250  CE2 TYR A 426      -6.902 -15.543   7.603  1.00 22.99           C
ATOM   5251  CZ  TYR A 426      -6.225 -14.507   8.266  1.00 22.86           C
ATOM   5252  OH  TYR A 426      -5.056 -14.758   8.917  1.00 23.29           O
ATOM   5253  H   TYR A 426     -10.182 -11.576   5.242  1.00  0.00           H
ATOM   5254  HA  TYR A 426      -9.345 -14.150   4.483  1.00  0.00           H
ATOM   5255  HB2 TYR A 426     -10.544 -12.899   6.947  1.00  0.00           H
ATOM   5256  HB3 TYR A 426     -10.708 -14.613   6.837  1.00  0.00           H
ATOM   5257  HD1 TYR A 426      -8.411 -11.962   7.715  1.00  0.00           H
ATOM   5258  HD2 TYR A 426      -8.704 -16.115   6.587  1.00  0.00           H
ATOM   5259  HE1 TYR A 426      -6.265 -12.409   8.792  1.00  0.00           H
ATOM   5260  HE2 TYR A 426      -6.488 -16.540   7.580  1.00  0.00           H
ATOM   5261  HH  TYR A 426      -4.575 -15.502   8.578  1.00  0.00           H
ATOM   5262  N   ASP A 427     -12.639 -13.881   4.501  1.00 22.93           N
ATOM   5263  CA  ASP A 427     -13.919 -14.481   4.117  1.00 24.60           C
ATOM   5264  C   ASP A 427     -14.105 -14.482   2.590  1.00 23.59           C
ATOM   5265  O   ASP A 427     -14.644 -15.453   2.062  1.00 22.45           O
ATOM   5266  CB  ASP A 427     -15.102 -13.721   4.772  1.00 25.71           C
ATOM   5267  CG  ASP A 427     -15.166 -13.804   6.299  1.00 25.52           C
ATOM   5268  OD1 ASP A 427     -14.485 -14.672   6.892  1.00 30.54           O
ATOM   5269  OD2 ASP A 427     -15.903 -12.991   6.901  1.00 26.99          O1-
ATOM   5270  H   ASP A 427     -12.669 -12.952   4.920  1.00  0.00           H
ATOM   5271  HA  ASP A 427     -13.941 -15.520   4.451  1.00  0.00           H
ATOM   5272  HB2 ASP A 427     -15.072 -12.668   4.487  1.00  0.00           H
ATOM   5273  HB3 ASP A 427     -16.046 -14.112   4.393  1.00  0.00           H
ATOM   5274  N   ALA A 428     -13.610 -13.463   1.869  1.00 23.60           N
ATOM   5275  CA  ALA A 428     -13.608 -13.399   0.401  1.00 22.71           C
ATOM   5276  C   ALA A 428     -12.611 -14.400  -0.207  1.00 22.99           C
ATOM   5277  O   ALA A 428     -12.840 -14.950  -1.292  1.00 21.89           O
ATOM   5278  CB  ALA A 428     -13.209 -11.984  -0.050  1.00 22.18           C
ATOM   5279  H   ALA A 428     -13.235 -12.656   2.363  1.00  0.00           H
ATOM   5280  HA  ALA A 428     -14.608 -13.629   0.029  1.00  0.00           H
ATOM   5281  HB1 ALA A 428     -13.149 -11.916  -1.136  1.00  0.00           H
ATOM   5282  HB2 ALA A 428     -13.944 -11.247   0.276  1.00  0.00           H
ATOM   5283  HB3 ALA A 428     -12.238 -11.687   0.349  1.00  0.00           H
ATOM   5284  N   GLN A 429     -11.506 -14.670   0.503  1.00 21.48           N
ATOM   5285  CA  GLN A 429     -10.597 -15.767   0.204  1.00 23.47           C
ATOM   5286  C   GLN A 429     -11.284 -17.109   0.516  1.00 23.16           C
ATOM   5287  O   GLN A 429     -11.405 -17.948  -0.380  1.00 24.44           O
ATOM   5288  CB  GLN A 429      -9.283 -15.623   1.006  1.00 24.04           C
ATOM   5289  CG  GLN A 429      -8.310 -14.549   0.470  1.00 23.93           C
ATOM   5290  CD  GLN A 429      -7.605 -14.954  -0.829  1.00 27.30           C
ATOM   5291  OE1 GLN A 429      -8.128 -15.741  -1.612  1.00 28.29           O
ATOM   5292  NE2 GLN A 429      -6.410 -14.442  -1.074  1.00 21.69           N
ATOM   5293  H   GLN A 429     -11.315 -14.084   1.313  1.00  0.00           H
ATOM   5294  HA  GLN A 429     -10.390 -15.746  -0.861  1.00  0.00           H
ATOM   5295  HB2 GLN A 429      -9.503 -15.413   2.052  1.00  0.00           H
ATOM   5296  HB3 GLN A 429      -8.755 -16.578   1.003  1.00  0.00           H
ATOM   5297  HG2 GLN A 429      -8.825 -13.600   0.317  1.00  0.00           H
ATOM   5298  HG3 GLN A 429      -7.549 -14.363   1.228  1.00  0.00           H
ATOM   5299 HE21 GLN A 429      -5.946 -13.805  -0.423  1.00  0.00           H
ATOM   5300 HE22 GLN A 429      -5.909 -14.726  -1.921  1.00  0.00           H
ATOM   5301  N   GLY A 430     -11.786 -17.260   1.748  1.00 24.56           N
ATOM   5302  CA  GLY A 430     -12.488 -18.436   2.265  1.00 25.89           C
ATOM   5303  C   GLY A 430     -11.729 -19.101   3.422  1.00 27.73           C
ATOM   5304  O   GLY A 430     -11.991 -20.253   3.758  1.00 27.40           O
ATOM   5305  H   GLY A 430     -11.692 -16.476   2.386  1.00  0.00           H
ATOM   5306  HA2 GLY A 430     -13.470 -18.124   2.622  1.00  0.00           H
ATOM   5307  HA3 GLY A 430     -12.659 -19.178   1.483  1.00  0.00           H
ATOM   5308  N   LEU A 431     -10.752 -18.399   4.007  1.00 26.14           N
ATOM   5309  CA  LEU A 431      -9.739 -18.932   4.906  1.00 27.26           C
ATOM   5310  C   LEU A 431     -10.157 -18.820   6.386  1.00 25.34           C
ATOM   5311  O   LEU A 431     -10.921 -17.932   6.793  1.00 25.57           O
ATOM   5312  CB  LEU A 431      -8.451 -18.102   4.690  1.00 26.32           C
ATOM   5313  CG  LEU A 431      -7.726 -18.364   3.353  1.00 26.85           C
ATOM   5314  CD1 LEU A 431      -6.701 -17.254   3.069  1.00 28.01           C
ATOM   5315  CD2 LEU A 431      -7.042 -19.740   3.316  1.00 26.82           C
ATOM   5316  H   LEU A 431     -10.704 -17.410   3.790  1.00  0.00           H
ATOM   5317  HA  LEU A 431      -9.556 -19.983   4.676  1.00  0.00           H
ATOM   5318  HB2 LEU A 431      -8.720 -17.047   4.714  1.00  0.00           H
ATOM   5319  HB3 LEU A 431      -7.747 -18.254   5.511  1.00  0.00           H
ATOM   5320  HG  LEU A 431      -8.461 -18.337   2.547  1.00  0.00           H
ATOM   5321 HD11 LEU A 431      -6.226 -17.392   2.097  1.00  0.00           H
ATOM   5322 HD12 LEU A 431      -7.167 -16.268   3.060  1.00  0.00           H
ATOM   5323 HD13 LEU A 431      -5.911 -17.236   3.822  1.00  0.00           H
ATOM   5324 HD21 LEU A 431      -6.515 -19.886   2.372  1.00  0.00           H
ATOM   5325 HD22 LEU A 431      -6.309 -19.845   4.117  1.00  0.00           H
ATOM   5326 HD23 LEU A 431      -7.758 -20.556   3.405  1.00  0.00           H
ATOM   5327  N   VAL A 432      -9.604 -19.730   7.198  1.00 24.67           N
ATOM   5328  CA  VAL A 432      -9.708 -19.803   8.656  1.00 24.91           C
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ATOM   5329  C   VAL A 432      -8.855 -18.672   9.267  1.00 24.65          C
ATOM   5330  O   VAL A 432      -7.823 -18.307   8.712  1.00 23.35          O
ATOM   5331  CB  VAL A 432      -9.203 -21.199   9.127  1.00 26.40          C
ATOM   5332  CG1 VAL A 432      -9.332 -21.411  10.650  1.00 27.65          C
ATOM   5333  CG2 VAL A 432      -9.918 -22.355   8.395  1.00 27.01          C
ATOM   5334  H   VAL A 432      -8.937 -20.359   6.778  1.00  0.00          H
ATOM   5335  HA  VAL A 432     -10.754 -19.670   8.937  1.00  0.00          H
ATOM   5336  HB  VAL A 432      -8.140 -21.274   8.884  1.00  0.00          H
ATOM   5337 HG11 VAL A 432      -8.997 -22.409  10.934  1.00  0.00          H
ATOM   5338 HG12 VAL A 432      -8.720 -20.708  11.217  1.00  0.00          H
ATOM   5339 HG13 VAL A 432     -10.365 -21.305  10.983  1.00  0.00          H
ATOM   5340 HG21 VAL A 432      -9.569 -23.324   8.754  1.00  0.00          H
ATOM   5341 HG22 VAL A 432     -10.997 -22.316   8.549  1.00  0.00          H
ATOM   5342 HG23 VAL A 432      -9.738 -22.340   7.320  1.00  0.00          H
ATOM   5343  N   LYS A 433      -9.315 -18.105  10.385  1.00 25.23          N
ATOM   5344  CA  LYS A 433      -8.810 -16.876  10.999  1.00 27.01          C
ATOM   5345  C   LYS A 433      -8.228 -17.178  12.402  1.00 28.68          C
ATOM   5346  O   LYS A 433      -8.653 -18.165  13.014  1.00 29.12          O
ATOM   5347  CB  LYS A 433     -10.012 -15.909  11.062  1.00 26.07          C
ATOM   5348  CG  LYS A 433     -10.412 -15.365   9.675  1.00 25.95          C
ATOM   5349  CD  LYS A 433     -11.862 -14.856   9.589  1.00 27.29          C
ATOM   5350  CE  LYS A 433     -12.881 -15.981   9.324  1.00 27.92          C
ATOM   5351  NZ  LYS A 433     -12.942 -16.371   7.904  1.00 27.82          N1+
ATOM   5352  H   LYS A 433     -10.042 -18.579  10.895  1.00  0.00          H
ATOM   5353  HA  LYS A 433      -8.027 -16.440  10.376  1.00  0.00          H
ATOM   5354  HB2 LYS A 433     -10.855 -16.420  11.525  1.00  0.00          H
ATOM   5355  HB3 LYS A 433      -9.787 -15.062  11.710  1.00  0.00          H
ATOM   5356  HG2 LYS A 433      -9.725 -14.554   9.446  1.00  0.00          H
ATOM   5357  HG3 LYS A 433     -10.243 -16.105   8.894  1.00  0.00          H
ATOM   5358  HD2 LYS A 433     -12.107 -14.343  10.518  1.00  0.00          H
ATOM   5359  HD3 LYS A 433     -11.953 -14.094   8.813  1.00  0.00          H
ATOM   5360  HE2 LYS A 433     -12.661 -16.854   9.940  1.00  0.00          H
ATOM   5361  HE3 LYS A 433     -13.878 -15.638   9.605  1.00  0.00          H
ATOM   5362  HZ1 LYS A 433     -13.526 -17.177   7.769  1.00  0.00          H
ATOM   5363  HZ2 LYS A 433     -13.449 -15.607   7.397  1.00  0.00          H
ATOM   5364  HZ3 LYS A 433     -12.042 -16.561   7.474  1.00  0.00          H
ATOM   5365  N   PRO A 434      -7.272 -16.371  12.922  1.00 29.99          N
ATOM   5366  CA  PRO A 434      -6.530 -16.661  14.161  1.00 31.36          C
ATOM   5367  C   PRO A 434      -7.363 -16.508  15.452  1.00 32.47          C
ATOM   5368  O   PRO A 434      -8.281 -15.693  15.528  1.00 33.32          O
ATOM   5369  CB  PRO A 434      -5.323 -15.711  14.123  1.00 31.69          C
ATOM   5370  CG  PRO A 434      -5.783 -14.527  13.286  1.00 29.64          C
ATOM   5371  CD  PRO A 434      -6.789 -15.131  12.307  1.00 30.38          C
ATOM   5372  HA  PRO A 434      -6.168 -17.690  14.107  1.00  0.00          H
ATOM   5373  HB2 PRO A 434      -4.959 -15.417  15.106  1.00  0.00          H
ATOM   5374  HB3 PRO A 434      -4.491 -16.202  13.616  1.00  0.00          H
ATOM   5375  HG2 PRO A 434      -6.289 -13.794  13.915  1.00  0.00          H
ATOM   5376  HG3 PRO A 434      -4.962 -14.013  12.783  1.00  0.00          H
ATOM   5377  HD2 PRO A 434      -7.605 -14.440  12.114  1.00  0.00          H
ATOM   5378  HD3 PRO A 434      -6.293 -15.352  11.361  1.00  0.00          H
ATOM   5379  N   LYS A 435      -7.017 -17.331  16.452  1.00 34.56          N
ATOM   5380  CA  LYS A 435      -7.720 -17.770  17.669  1.00 36.88          C
ATOM   5381  C   LYS A 435      -8.709 -16.872  18.448  1.00 37.85          C
ATOM   5382  O   LYS A 435      -9.442 -17.413  19.274  1.00 39.08          O
ATOM   5383  CB  LYS A 435      -6.744 -18.509  18.614  1.00 38.28          C
ATOM   5384  CG  LYS A 435      -6.173 -19.821  18.048  1.00 40.34          C
ATOM   5385  CD  LYS A 435      -5.185 -20.474  19.026  1.00 42.32          C
ATOM   5386  CE  LYS A 435      -4.622 -21.809  18.514  1.00 43.22          C
ATOM   5387  NZ  LYS A 435      -3.532 -22.274  19.377  1.00 42.23          N1+
ATOM   5388  H   LYS A 435      -6.167 -17.841  16.270  1.00  0.00          H
ATOM   5389  HA  LYS A 435      -8.392 -18.539  17.285  1.00  0.00          H
ATOM   5390  HB2 LYS A 435      -5.932 -17.841  18.894  1.00  0.00          H
ATOM   5391  HB3 LYS A 435      -7.251 -18.744  19.552  1.00  0.00          H
ATOM   5392  HG2 LYS A 435      -6.991 -20.510  17.831  1.00  0.00          H
ATOM   5393  HG3 LYS A 435      -5.666 -19.633  17.101  1.00  0.00          H
ATOM   5394  HD2 LYS A 435      -4.359 -19.780  19.200  1.00  0.00          H
ATOM   5395  HD3 LYS A 435      -5.668 -20.626  19.993  1.00  0.00          H
ATOM   5396  HE2 LYS A 435      -5.398 -22.572  18.449  1.00  0.00          H
ATOM   5397  HE3 LYS A 435      -4.207 -21.679  17.513  1.00  0.00          H
ATOM   5398  HZ1 LYS A 435      -2.956 -22.989  18.930  1.00  0.00          H
ATOM   5399  HZ2 LYS A 435      -2.798 -21.539  19.328  1.00  0.00          H
ATOM   5400  HZ3 LYS A 435      -3.744 -22.493  20.331  1.00  0.00          H
ATOM   5401  N   ASN A 436      -8.781 -15.555  18.227  1.00 38.38          N
ATOM   5402  CA  ASN A 436      -9.766 -14.672  18.871  1.00 38.54          C
ATOM   5403  C   ASN A 436     -10.418 -13.635  17.948  1.00 36.60          C
ATOM   5404  O   ASN A 436     -11.047 -12.697  18.439  1.00 35.38          O
ATOM   5405  CB  ASN A 436      -9.386 -14.191  20.297  1.00 41.89          C
ATOM   5406  CG  ASN A 436      -8.150 -13.296  20.409  1.00 46.16          C
ATOM   5407  OD1 ASN A 436      -7.054 -13.777  20.696  1.00 46.58          O
ATOM   5408  ND2 ASN A 436      -8.333 -11.986  20.276  1.00 48.00          N
ATOM   5409  H   ASN A 436      -8.179 -15.176  17.504  1.00  0.00          H
ATOM   5410  HA  ASN A 436     -10.640 -15.298  19.054  1.00  0.00          H
ATOM   5411  HB2 ASN A 436     -10.231 -13.670  20.748  1.00  0.00          H
ATOM   5412  HB3 ASN A 436      -9.222 -15.063  20.931  1.00  0.00          H
ATOM   5413 HD21 ASN A 436      -9.234 -11.610  20.020  1.00  0.00          H
ATOM   5414 HD22 ASN A 436      -7.574 -11.325  20.452  1.00  0.00          H
ATOM   5415  N   TRP A 437     -10.324 -13.844  16.625  1.00 33.69          N
ATOM   5416  CA  TRP A 437     -10.849 -13.009  15.535  1.00 32.40          C
ATOM   5417  C   TRP A 437     -12.290 -12.500  15.723  1.00 31.88          C
ATOM   5418  O   TRP A 437     -12.592 -11.335  15.478  1.00 31.51          O
ATOM   5419  CB  TRP A 437     -10.698 -13.764  14.194  1.00 31.53          C
ATOM   5420  CG  TRP A 437     -11.581 -14.964  13.970  1.00 29.81          C
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ATOM   5421  CD1 TRP A 437     -11.300 -16.241  14.317  1.00 30.15           C
ATOM   5422  CD2 TRP A 437     -12.900 -15.013  13.340  1.00 29.74           C
ATOM   5423  NE1 TRP A 437     -12.342 -17.066  13.952  1.00 29.97           N
ATOM   5424  CE3 TRP A 437     -13.765 -14.046  12.774  1.00 28.47           C
ATOM   5425  CE2 TRP A 437     -13.361 -16.365  13.347  1.00 28.86           C
ATOM   5426  CZ3 TRP A 437     -15.022 -14.408  12.250  1.00 29.95           C
ATOM   5427  CZ2 TRP A 437     -14.607 -16.740  12.815  1.00 30.78           C
ATOM   5428  CH2 TRP A 437     -15.442 -15.752  12.264  1.00 28.37           C
ATOM   5429  H   TRP A 437      -9.743 -14.623  16.328  1.00  0.00           H
ATOM   5430  HA  TRP A 437     -10.216 -12.121  15.488  1.00  0.00           H
ATOM   5431  HB2 TRP A 437     -10.899 -13.075  13.377  1.00  0.00           H
ATOM   5432  HB3 TRP A 437      -9.657 -14.057  14.055  1.00  0.00           H
ATOM   5433  HD1 TRP A 437     -10.391 -16.565  14.799  1.00  0.00           H
ATOM   5434  HE1 TRP A 437     -12.318 -18.064  14.121  1.00  0.00           H
ATOM   5435  HE3 TRP A 437     -13.454 -13.010  12.756  1.00  0.00           H
ATOM   5436  HZ3 TRP A 437     -15.669 -13.650  11.838  1.00  0.00           H
ATOM   5437  HZ2 TRP A 437     -14.925 -17.772  12.836  1.00  0.00           H
ATOM   5438  HH2 TRP A 437     -16.405 -16.023  11.855  1.00  0.00           H
ATOM   5439  N   LYS A 438     -13.197 -13.386  16.156  1.00 30.82           N
ATOM   5440  CA  LYS A 438     -14.640 -13.143  16.174  1.00 31.39           C
ATOM   5441  C   LYS A 438     -15.022 -12.053  17.197  1.00 29.84           C
ATOM   5442  O   LYS A 438     -15.985 -11.325  16.971  1.00 28.51           O
ATOM   5443  CB  LYS A 438     -15.362 -14.484  16.480  1.00 33.89           C
ATOM   5444  CG  LYS A 438     -16.797 -14.643  15.917  1.00 35.72           C
ATOM   5445  CD  LYS A 438     -17.826 -13.666  16.508  1.00 37.55           C
ATOM   5446  CE  LYS A 438     -19.297 -14.075  16.360  1.00 37.38           C
ATOM   5447  NZ  LYS A 438     -20.159 -13.114  17.067  1.00 33.68           N1+
ATOM   5448  H   LYS A 438     -12.862 -14.323  16.316  1.00  0.00           H
ATOM   5449  HA  LYS A 438     -14.929 -12.796  15.180  1.00  0.00           H
ATOM   5450  HB2 LYS A 438     -14.777 -15.299  16.049  1.00  0.00           H
ATOM   5451  HB3 LYS A 438     -15.364 -14.672  17.555  1.00  0.00           H
ATOM   5452  HG2 LYS A 438     -16.782 -14.554  14.829  1.00  0.00           H
ATOM   5453  HG3 LYS A 438     -17.118 -15.664  16.127  1.00  0.00           H
ATOM   5454  HD2 LYS A 438     -17.605 -13.531  17.568  1.00  0.00           H
ATOM   5455  HD3 LYS A 438     -17.708 -12.696  16.028  1.00  0.00           H
ATOM   5456  HE2 LYS A 438     -19.579 -14.120  15.308  1.00  0.00           H
ATOM   5457  HE3 LYS A 438     -19.459 -15.065  16.789  1.00  0.00           H
ATOM   5458  HZ1 LYS A 438     -21.136 -13.347  17.009  1.00  0.00           H
ATOM   5459  HZ2 LYS A 438     -19.890 -13.161  18.078  1.00  0.00           H
ATOM   5460  HZ3 LYS A 438     -19.993 -12.162  16.771  1.00  0.00           H
ATOM   5461  N   LYS A 439     -14.252 -11.889  18.285  1.00 29.46           N
ATOM   5462  CA  LYS A 439     -14.545 -10.950  19.373  1.00 32.01           C
ATOM   5463  C   LYS A 439     -14.586  -9.474  18.943  1.00 31.47           C
ATOM   5464  O   LYS A 439     -15.245  -8.664  19.593  1.00 31.96           O
ATOM   5465  CB  LYS A 439     -13.512 -11.129  20.508  1.00 33.79           C
ATOM   5466  CG  LYS A 439     -13.624 -12.454  21.293  1.00 37.29           C
ATOM   5467  CD  LYS A 439     -15.017 -12.756  21.886  1.00 37.29           C
ATOM   5468  CE  LYS A 439     -15.591 -11.639  22.781  1.00 40.03           C
ATOM   5469  NZ  LYS A 439     -16.967 -11.945  23.203  1.00 40.12           N1+
ATOM   5470  H   LYS A 439     -13.380 -12.401  18.324  1.00  0.00           H
ATOM   5471  HA  LYS A 439     -15.550 -11.168  19.738  1.00  0.00           H
ATOM   5472  HB2 LYS A 439     -12.504 -11.037  20.096  1.00  0.00           H
ATOM   5473  HB3 LYS A 439     -13.593 -10.298  21.211  1.00  0.00           H
ATOM   5474  HG2 LYS A 439     -13.333 -13.278  20.640  1.00  0.00           H
ATOM   5475  HG3 LYS A 439     -12.885 -12.443  22.095  1.00  0.00           H
ATOM   5476  HD2 LYS A 439     -15.710 -12.971  21.071  1.00  0.00           H
ATOM   5477  HD3 LYS A 439     -14.953 -13.683  22.458  1.00  0.00           H
ATOM   5478  HE2 LYS A 439     -14.960 -11.484  23.657  1.00  0.00           H
ATOM   5479  HE3 LYS A 439     -15.628 -10.693  22.239  1.00  0.00           H
ATOM   5480  HZ1 LYS A 439     -17.380 -11.186  23.719  1.00  0.00           H
ATOM   5481  HZ2 LYS A 439     -17.541 -12.054  22.327  1.00  0.00           H
ATOM   5482  HZ3 LYS A 439     -17.037 -12.812  23.705  1.00  0.00           H
ATOM   5483  N   PHE A 440     -13.929  -9.142  17.833  1.00 29.67           N
ATOM   5484  CA  PHE A 440     -13.863  -7.800  17.273  1.00 30.46           C
ATOM   5485  C   PHE A 440     -15.083  -7.491  16.376  1.00 32.12           C
ATOM   5486  O   PHE A 440     -15.353  -6.325  16.104  1.00 32.41           O
ATOM   5487  CB  PHE A 440     -12.569  -7.726  16.458  1.00 27.41           C
ATOM   5488  CG  PHE A 440     -11.311  -7.834  17.297  1.00 25.90           C
ATOM   5489  CD1 PHE A 440     -10.820  -6.688  17.951  1.00 25.42           C
ATOM   5490  CD2 PHE A 440     -10.624  -9.061  17.427  1.00 24.33           C
ATOM   5491  CE1 PHE A 440      -9.647  -6.759  18.716  1.00 23.50           C
ATOM   5492  CE2 PHE A 440      -9.454  -9.131  18.208  1.00 24.72           C
ATOM   5493  CZ  PHE A 440      -8.962  -7.981  18.849  1.00 23.12           C
ATOM   5494  H   PHE A 440     -13.397  -9.858  17.357  1.00  0.00           H
ATOM   5495  HA  PHE A 440     -13.828  -7.053  18.069  1.00  0.00           H
ATOM   5496  HB2 PHE A 440     -12.562  -8.508  15.702  1.00  0.00           H
ATOM   5497  HB3 PHE A 440     -12.519  -6.775  15.934  1.00  0.00           H
ATOM   5498  HD1 PHE A 440     -11.316  -5.733  17.855  1.00  0.00           H
ATOM   5499  HD2 PHE A 440     -10.973  -9.945  16.919  1.00  0.00           H
ATOM   5500  HE1 PHE A 440      -9.271  -5.856  19.171  1.00  0.00           H
ATOM   5501  HE2 PHE A 440      -8.910 -10.057  18.297  1.00  0.00           H
ATOM   5502  HZ  PHE A 440      -8.047  -8.030  19.417  1.00  0.00           H
ATOM   5503  N   ARG A 441     -15.895  -8.498  16.009  1.00 33.77           N
ATOM   5504  CA  ARG A 441     -17.264  -8.324  15.512  1.00 36.52           C
ATOM   5505  C   ARG A 441     -18.228  -8.785  16.629  1.00 38.32           C
ATOM   5506  O   ARG A 441     -19.165  -9.556  16.391  1.00 39.68           O
ATOM   5507  CB  ARG A 441     -17.502  -9.103  14.190  1.00 36.16           C
ATOM   5508  CG  ARG A 441     -16.592  -8.738  12.994  1.00 36.35           C
ATOM   5509  CD  ARG A 441     -16.636  -7.268  12.510  1.00 37.85           C
ATOM   5510  NE  ARG A 441     -17.241  -7.112  11.169  1.00 37.46           N
ATOM   5511  CZ  ARG A 441     -16.630  -6.922   9.987  1.00 38.15           C
ATOM   5512  NH1 ARG A 441     -15.308  -6.863   9.844  1.00 39.40           N
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ATOM   5513  NH2 ARG A 441     -17.405  -6.824   8.920  1.00 37.27          N1+
ATOM   5514  H   ARG A 441     -15.653  -9.425  16.341  1.00  0.00           H
ATOM   5515  HA  ARG A 441     -17.489  -7.270  15.342  1.00  0.00           H
ATOM   5516  HB2 ARG A 441     -17.395 -10.171  14.387  1.00  0.00           H
ATOM   5517  HB3 ARG A 441     -18.539  -8.961  13.881  1.00  0.00           H
ATOM   5518  HG2 ARG A 441     -15.568  -8.998  13.255  1.00  0.00           H
ATOM   5519  HG3 ARG A 441     -16.841  -9.396  12.163  1.00  0.00           H
ATOM   5520  HD2 ARG A 441     -17.172  -6.628  13.209  1.00  0.00           H
ATOM   5521  HD3 ARG A 441     -15.628  -6.878  12.484  1.00  0.00           H
ATOM   5522  HE  ARG A 441     -18.250  -7.033  11.146  1.00  0.00           H
ATOM   5523 HH11 ARG A 441     -14.732  -6.409  10.560  1.00  0.00           H
ATOM   5524 HH12 ARG A 441     -14.904  -6.909   8.878  1.00  0.00           H
ATOM   5525 HH21 ARG A 441     -17.304  -5.903   8.448  1.00  0.00           H
ATOM   5526 HH22 ARG A 441     -17.121  -7.455   8.130  1.00  0.00           H
ATOM   5527  N   GLU A 442     -17.954  -8.317  17.854  1.00 40.76           N
ATOM   5528  CA  GLU A 442     -18.776  -8.376  19.062  1.00 41.35           C
ATOM   5529  C   GLU A 442     -18.548  -7.102  19.884  1.00 40.88           C
ATOM   5530  O   GLU A 442     -19.506  -6.478  20.329  1.00 41.44           O
ATOM   5531  CB  GLU A 442     -18.544  -9.655  19.896  1.00 43.85           C
ATOM   5532  CG  GLU A 442     -18.881 -10.947  19.143  1.00 47.68           C
ATOM   5533  CD  GLU A 442     -18.864 -12.200  19.997  1.00 49.70           C
ATOM   5534  OE1 GLU A 442     -18.280 -12.179  21.101  1.00 49.65           O
ATOM   5535  OE2 GLU A 442     -19.407 -13.200  19.482  1.00 50.39          O1-
ATOM   5536  H   GLU A 442     -17.163  -7.691  17.910  1.00  0.00           H
ATOM   5537  HA  GLU A 442     -19.824  -8.355  18.753  1.00  0.00           H
ATOM   5538  HB2 GLU A 442     -17.515  -9.696  20.248  1.00  0.00           H
ATOM   5539  HB3 GLU A 442     -19.163  -9.599  20.793  1.00  0.00           H
ATOM   5540  HG2 GLU A 442     -19.874 -10.846  18.707  1.00  0.00           H
ATOM   5541  HG3 GLU A 442     -18.175 -11.098  18.329  1.00  0.00           H
ATOM   5542  N   NMA A 442A    -17.279  -6.713  20.066  1.00  0.00           N
ATOM   5543  CA  NMA A 442A    -16.898  -5.482  20.745  1.00  0.00           C
ATOM   5544  H   NMA A 442A    -16.530  -7.339  19.777  1.00  0.00           H
ATOM   5545 1HA  NMA A 442A    -15.812  -5.387  20.772  1.00  0.00           H
ATOM   5546 2HA  NMA A 442A    -17.303  -4.613  20.224  1.00  0.00           H
ATOM   5547 3HA  NMA A 442A    -17.270  -5.471  21.770  1.00  0.00           H
TER    5548      NMA A 442A
HETATM 5549  O   SPC     5     -1.739  -0.667  20.495  1.00  0.00           O
HETATM 5550  H1  SPC     5     -1.707  -1.514  21.060  1.00  0.00           H
HETATM 5551  H2  SPC     5     -1.582  -0.923  19.528  1.00  0.00           H
HETATM 5552  O   SPC     9     -3.443   8.608  14.878  1.00  0.00           O
HETATM 5553  H1  SPC     9     -2.809   9.367  14.680  1.00  0.00           H
HETATM 5554  H2  SPC     9     -3.158   8.174  15.740  1.00  0.00           H
HETATM 5555  O   SPC    12     -7.827   6.567  17.748  1.00  0.00           O
HETATM 5556  H1  SPC    12     -8.469   6.050  17.166  1.00  0.00           H
HETATM 5557  H2  SPC    12     -7.721   7.497  17.368  1.00  0.00           H
HETATM 5558  O   SPC    13     -3.003   5.289  18.292  1.00  0.00           O
HETATM 5559  H1  SPC    13     -2.674   6.196  18.000  1.00  0.00           H
HETATM 5560  H2  SPC    13     -3.986   5.363  18.519  1.00  0.00           H
HETATM 5561  O   SPC    14      5.037   2.316  22.035  1.00  0.00           O
HETATM 5562  H1  SPC    14      4.143   2.223  22.493  1.00  0.00           H
HETATM 5563  H2  SPC    14      5.383   1.387  21.830  1.00  0.00           H
HETATM 5564  O   SPC    15      2.284   7.505  17.140  1.00  0.00           O
HETATM 5565  H1  SPC    15      3.070   8.027  17.505  1.00  0.00           H
HETATM 5566  H2  SPC    15      1.870   8.061  16.398  1.00  0.00           H
HETATM 5567  O   SPC    17      4.380   9.264  17.533  1.00  0.00           O
HETATM 5568  H1  SPC    17      4.680   9.272  16.570  1.00  0.00           H
HETATM 5569  H2  SPC    17      5.135   8.904  18.100  1.00  0.00           H
HETATM 5570  O   SPC    19     -5.732   2.897  19.686  1.00  0.00           O
HETATM 5571  H1  SPC    19     -6.101   2.630  20.580  1.00  0.00           H
HETATM 5572  H2  SPC    19     -4.927   2.318  19.488  1.00  0.00           H
HETATM 5573  O   SPC    21     -4.926   8.253  18.149  1.00  0.00           O
HETATM 5574  H1  SPC    21     -5.158   7.404  18.645  1.00  0.00           H
HETATM 5575  H2  SPC    21     -5.749   8.560  17.648  1.00  0.00           H
HETATM 5576  O   SPC    22     -7.185   3.101  17.312  1.00  0.00           O
HETATM 5577  H1  SPC    22     -6.385   3.124  16.696  1.00  0.00           H
HETATM 5578  H2  SPC    22     -6.843   3.106  18.262  1.00  0.00           H
HETATM 5579  O   SPC    26      6.413   7.909  18.803  1.00  0.00           O
HETATM 5580  H1  SPC    26      6.420   7.634  19.767  1.00  0.00           H
HETATM 5581  H2  SPC    26      6.211   7.090  18.237  1.00  0.00           H
HETATM 5582  O   SPC    31     -0.170   6.129  16.982  1.00  0.00           O
HETATM 5583  H1  SPC    31      0.686   6.625  17.176  1.00  0.00           H
HETATM 5584  H2  SPC    31     -0.946   6.754  17.146  1.00  0.00           H
HETATM 5585  O   SPC    32      5.825   5.774  17.297  1.00  0.00           O
HETATM 5586  H1  SPC    32      6.571   5.358  16.761  1.00  0.00           H
HETATM 5587  H2  SPC    32      4.942   5.428  16.948  1.00  0.00           H
HETATM 5588  O   SPC    34      1.530   4.758  22.084  1.00  0.00           O
HETATM 5589  H1  SPC    34      1.439   5.323  21.256  1.00  0.00           H
HETATM 5590  H2  SPC    34      0.642   4.305  22.262  1.00  0.00           H
HETATM 5591  O   SPC    35      0.643  -1.938  23.260  1.00  0.00           O
HETATM 5592  H1  SPC    35     -0.118  -2.302  22.691  1.00  0.00           H
HETATM 5593  H2  SPC    35      0.455  -2.208  24.208  1.00  0.00           H
HETATM 5594  O   SPC    37     -1.810   3.342  19.724  1.00  0.00           O
HETATM 5595  H1  SPC    37     -2.434   2.549  19.650  1.00  0.00           H
HETATM 5596  H2  SPC    37     -2.245   4.134  19.265  1.00  0.00           H
HETATM 5597  O   SPC    38      2.100   5.709  19.418  1.00  0.00           O
HETATM 5598  H1  SPC    38      2.999   5.462  19.808  1.00  0.00           H
HETATM 5599  H2  SPC    38      2.237   6.390  18.689  1.00  0.00           H
HETATM 5600  O   SPC    39      4.116   4.719  21.030  1.00  0.00           O
HETATM 5601  H1  SPC    39      3.319   4.792  21.643  1.00  0.00           H
HETATM 5602  H2  SPC    39      4.693   3.953  21.349  1.00  0.00           H
HETATM 5603  O   SPC    41     -5.609   5.608  18.939  1.00  0.00           O
HETATM 5604  H1  SPC    41     -6.500   5.895  18.546  1.00  0.00           H
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HETATM 5605  H2  SPC    41      -5.706   4.673  19.306  1.00  0.00           H
HETATM 5606  O   SPC    44       3.158  -1.892  22.029  1.00  0.00           O
HETATM 5607  H1  SPC    44       3.259  -2.836  21.687  1.00  0.00           H
HETATM 5608  H2  SPC    44       2.286  -1.833  22.536  1.00  0.00           H
HETATM 5609  O   SPC    46       3.381   5.163  16.173  1.00  0.00           O
HETATM 5610  H1  SPC    46       2.914   6.009  16.463  1.00  0.00           H
HETATM 5611  H2  SPC    46       3.537   5.200  15.176  1.00  0.00           H
HETATM 5612  O   SPC    52       2.345   2.085  22.504  1.00  0.00           O
HETATM 5613  H1  SPC    52       1.542   1.477  22.589  1.00  0.00           H
HETATM 5614  H2  SPC    52       2.031   3.042  22.571  1.00  0.00           H
HETATM 5615  O   SPC    53      -7.096   8.999  16.664  1.00  0.00           O
HETATM 5616  H1  SPC    53      -7.510   9.922  16.683  1.00  0.00           H
HETATM 5617  H2  SPC    53      -6.733   8.839  15.734  1.00  0.00           H
HETATM 5618  O   SPC    55      -2.375   7.821  17.387  1.00  0.00           O
HETATM 5619  H1  SPC    55      -1.858   8.694  17.397  1.00  0.00           H
HETATM 5620  H2  SPC    55      -3.308   8.003  17.740  1.00  0.00           H
HETATM 5621  O   SPC    57       5.323  -0.287  21.277  1.00  0.00           O
HETATM 5622  H1  SPC    57       6.119  -0.784  20.906  1.00  0.00           H
HETATM 5623  H2  SPC    57       4.662  -0.956  21.650  1.00  0.00           H
HETATM 5624  O   SPC    59       0.115   0.485  22.136  1.00  0.00           O
HETATM 5625  H1  SPC    59      -0.597   0.189  21.479  1.00  0.00           H
HETATM 5626  H2  SPC    59       0.369  -0.322  22.693  1.00  0.00           H
HETATM 5627  O   SPC    61      -0.647   3.170  22.205  1.00  0.00           O
HETATM 5628  H1  SPC    61      -0.510   2.182  22.355  1.00  0.00           H
HETATM 5629  H2  SPC    61      -1.200   3.293  21.369  1.00  0.00           H
HETATM 5630  O   SPC    62       0.880   3.267  19.208  1.00  0.00           O
HETATM 5631  H1  SPC    62       1.224   4.218  19.230  1.00  0.00           H
HETATM 5632  H2  SPC    62      -0.112   3.278  19.411  1.00  0.00           H
HETATM 5633  O   SPC    65      -3.488   1.217  19.406  1.00  0.00           O
HETATM 5634  H1  SPC    65      -3.412   0.782  18.493  1.00  0.00           H
HETATM 5635  H2  SPC    65      -3.043   0.601  20.073  1.00  0.00           H
HETATM 5636  O   SPC   384       1.248   1.583 -20.839  1.00  0.00           O
HETATM 5637  H1  SPC   384       0.456   0.942 -20.763  1.00  0.00           H
HETATM 5638  H2  SPC   384       0.905   2.442 -21.222  1.00  0.00           H
HETATM 5639  O   SPC   406       6.048   9.547 -15.929  1.00  0.00           O
HETATM 5640  H1  SPC   406       6.116  10.548 -15.875  1.00  0.00           H
HETATM 5641  H2  SPC   406       6.816   9.155 -15.397  1.00  0.00           H
HETATM 5642  O   SPC   447      -0.035   8.426 -16.306  1.00  0.00           O
HETATM 5643  H1  SPC   447      -0.555   8.015 -17.078  1.00  0.00           H
HETATM 5644  H2  SPC   447      -0.582   9.195 -15.937  1.00  0.00           H
HETATM 5645  O   SPC   454      -7.193  21.978   5.501  1.00  0.00           O
HETATM 5646  H1  SPC   454      -7.353  21.025   5.785  1.00  0.00           H
HETATM 5647  H2  SPC   454      -7.595  22.592   6.194  1.00  0.00           H
HETATM 5648  O   SPC   455       5.540  27.070  -7.206  1.00  0.00           O
HETATM 5649  H1  SPC   455       6.422  27.306  -7.637  1.00  0.00           H
HETATM 5650  H2  SPC   455       5.660  26.199  -6.705  1.00  0.00           H
HETATM 5651  O   SPC   457       4.548  21.794  -0.179  1.00  0.00           O
HETATM 5652  H1  SPC   457       4.173  21.084  -0.800  1.00  0.00           H
HETATM 5653  H2  SPC   457       3.795  22.391   0.133  1.00  0.00           H
HETATM 5654  O   SPC   458      -0.518  17.288   2.767  1.00  0.00           O
HETATM 5655  H1  SPC   458      -0.648  16.296   2.883  1.00  0.00           H
HETATM 5656  H2  SPC   458      -0.267  17.468   1.804  1.00  0.00           H
HETATM 5657  O   SPC   459       5.961  23.398  -8.473  1.00  0.00           O
HETATM 5658  H1  SPC   459       5.586  22.469  -8.615  1.00  0.00           H
HETATM 5659  H2  SPC   459       5.298  24.069  -8.845  1.00  0.00           H
HETATM 5660  O   SPC   460      -0.209  25.880  -5.169  1.00  0.00           O
HETATM 5661  H1  SPC   460       0.193  25.069  -4.716  1.00  0.00           H
HETATM 5662  H2  SPC   460      -1.199  25.904  -4.954  1.00  0.00           H
HETATM 5663  O   SPC   461      -3.143  18.191   6.810  1.00  0.00           O
HETATM 5664  H1  SPC   461      -3.068  18.191   5.804  1.00  0.00           H
HETATM 5665  H2  SPC   461      -3.820  18.891   7.089  1.00  0.00           H
HETATM 5666  O   SPC   462      -8.188  23.247   7.749  1.00  0.00           O
HETATM 5667  H1  SPC   462      -8.895  23.930   7.945  1.00  0.00           H
HETATM 5668  H2  SPC   462      -8.505  22.343   8.075  1.00  0.00           H
HETATM 5669  O   SPC   463       8.173  23.191   0.970  1.00  0.00           O
HETATM 5670  H1  SPC   463       8.817  22.595   1.483  1.00  0.00           H
HETATM 5671  H2  SPC   463       8.623  23.476   0.109  1.00  0.00           H
HETATM 5672  O   SPC   464       4.839  23.142  -4.255  1.00  0.00           O
HETATM 5673  H1  SPC   464       4.175  23.844  -3.952  1.00  0.00           H
HETATM 5674  H2  SPC   464       5.429  22.910  -3.468  1.00  0.00           H
HETATM 5675  O   SPC   466      -3.511  23.287   7.304  1.00  0.00           O
HETATM 5676  H1  SPC   466      -4.060  23.119   6.472  1.00  0.00           H
HETATM 5677  H2  SPC   466      -2.717  23.855   7.040  1.00  0.00           H
HETATM 5678  O   SPC   467      -0.826  19.636   7.057  1.00  0.00           O
HETATM 5679  H1  SPC   467      -0.957  20.363   7.748  1.00  0.00           H
HETATM 5680  H2  SPC   467      -1.658  19.062   7.039  1.00  0.00           H
HETATM 5681  O   SPC   468       7.815  28.439  -0.989  1.00  0.00           O
HETATM 5682  H1  SPC   468       8.514  27.767  -0.695  1.00  0.00           H
HETATM 5683  H2  SPC   468       7.746  28.412  -1.998  1.00  0.00           H
HETATM 5684  O   SPC   469       7.864  28.293  -3.704  1.00  0.00           O
HETATM 5685  H1  SPC   469       7.908  27.397  -4.174  1.00  0.00           H
HETATM 5686  H2  SPC   469       8.788  28.703  -3.718  1.00  0.00           H
HETATM 5687  O   SPC   470      -3.853  23.943   0.100  1.00  0.00           O
HETATM 5688  H1  SPC   470      -4.046  24.026  -0.883  1.00  0.00           H
HETATM 5689  H2  SPC   470      -4.716  24.076   0.614  1.00  0.00           H
HETATM 5690  O   SPC   471       3.419  26.320   0.728  1.00  0.00           O
HETATM 5691  H1  SPC   471       4.293  26.829   0.709  1.00  0.00           H
HETATM 5692  H2  SPC   471       2.872  26.576  -0.085  1.00  0.00           H
HETATM 5693  O   SPC   472      -5.310  19.349   4.513  1.00  0.00           O
HETATM 5694  H1  SPC   472      -4.380  18.994   4.364  1.00  0.00           H
HETATM 5695  H2  SPC   472      -5.420  20.198   3.985  1.00  0.00           H
HETATM 5696  O   SPC   473       5.949  27.368   0.666  1.00  0.00           O
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HETATM 5697  H1  SPC   473       6.504  27.936   0.038  1.00  0.00           H
HETATM 5698  H2  SPC   473       6.572  26.746   1.166  1.00  0.00           H
HETATM 5699  O   SPC   475       3.319  25.079  -3.242  1.00  0.00           O
HETATM 5700  H1  SPC   475       2.812  25.934  -3.426  1.00  0.00           H
HETATM 5701  H2  SPC   475       4.015  25.267  -2.535  1.00  0.00           H
HETATM 5702  O   SPC   476      -3.597  26.508  -7.216  1.00  0.00           O
HETATM 5703  H1  SPC   476      -3.254  25.957  -7.985  1.00  0.00           H
HETATM 5704  H2  SPC   476      -4.175  27.244  -7.573  1.00  0.00           H
HETATM 5705  O   SPC   477      -1.918  25.225   1.546  1.00  0.00           O
HETATM 5706  H1  SPC   477      -2.609  24.837   0.918  1.00  0.00           H
HETATM 5707  H2  SPC   477      -2.301  25.210   2.485  1.00  0.00           H
HETATM 5708  O   SPC   478       6.718  24.014   7.001  1.00  0.00           O
HETATM 5709  H1  SPC   478       7.559  24.389   7.418  1.00  0.00           H
HETATM 5710  H2  SPC   478       5.926  24.362   7.517  1.00  0.00           H
HETATM 5711  O   SPC   479       6.093  24.665  -6.088  1.00  0.00           O
HETATM 5712  H1  SPC   479       6.106  24.137  -6.953  1.00  0.00           H
HETATM 5713  H2  SPC   479       5.636  24.103  -5.381  1.00  0.00           H
HETATM 5714  O   SPC   480      -4.742  22.927   4.872  1.00  0.00           O
HETATM 5715  H1  SPC   480      -4.198  22.205   4.421  1.00  0.00           H
HETATM 5716  H2  SPC   480      -5.693  22.596   4.987  1.00  0.00           H
HETATM 5717  O   SPC   481       7.674  25.693   1.920  1.00  0.00           O
HETATM 5718  H1  SPC   481       7.158  25.715   2.787  1.00  0.00           H
HETATM 5719  H2  SPC   481       7.810  24.726   1.650  1.00  0.00           H
HETATM 5720  O   SPC   483       0.972  25.154   6.995  1.00  0.00           O
HETATM 5721  H1  SPC   483       1.535  24.600   7.624  1.00  0.00           H
HETATM 5722  H2  SPC   483       1.396  25.134   6.080  1.00  0.00           H
HETATM 5723  O   SPC   484       4.027  26.365   6.010  1.00  0.00           O
HETATM 5724  H1  SPC   484       3.926  27.350   6.175  1.00  0.00           H
HETATM 5725  H2  SPC   484       4.232  25.914   6.890  1.00  0.00           H
HETATM 5726  O   SPC   485       2.936  23.676   1.113  1.00  0.00           O
HETATM 5727  H1  SPC   485       3.142  24.645   0.905  1.00  0.00           H
HETATM 5728  H2  SPC   485       1.935  23.557   1.123  1.00  0.00           H
HETATM 5729  O   SPC   486       6.384  21.297   1.678  1.00  0.00           O
HETATM 5730  H1  SPC   486       7.099  21.942   1.363  1.00  0.00           H
HETATM 5731  H2  SPC   486       5.634  21.307   0.993  1.00  0.00           H
HETATM 5732  O   SPC   487       2.173  24.994   4.535  1.00  0.00           O
HETATM 5733  H1  SPC   487       2.925  25.491   4.992  1.00  0.00           H
HETATM 5734  H2  SPC   487       1.803  25.581   3.794  1.00  0.00           H
HETATM 5735  O   SPC   488       1.423  22.494   3.720  1.00  0.00           O
HETATM 5736  H1  SPC   488       1.784  23.380   4.057  1.00  0.00           H
HETATM 5737  H2  SPC   488       1.046  22.638   2.797  1.00  0.00           H
HETATM 5738  O   SPC   490      -2.325  21.950   1.251  1.00  0.00           O
HETATM 5739  H1  SPC   490      -2.922  22.645   0.822  1.00  0.00           H
HETATM 5740  H2  SPC   490      -1.374  22.288   1.223  1.00  0.00           H
HETATM 5741  O   SPC   491       5.116  23.497   2.777  1.00  0.00           O
HETATM 5742  H1  SPC   491       5.567  22.672   2.410  1.00  0.00           H
HETATM 5743  H2  SPC   491       4.228  23.602   2.303  1.00  0.00           H
HETATM 5744  O   SPC   492      -2.644  18.531   4.076  1.00  0.00           O
HETATM 5745  H1  SPC   492      -1.769  18.121   3.774  1.00  0.00           H
HETATM 5746  H2  SPC   492      -2.581  19.538   3.979  1.00  0.00           H
HETATM 5747  O   SPC   493      -0.282  24.774  -7.724  1.00  0.00           O
HETATM 5748  H1  SPC   493      -0.195  25.356  -6.901  1.00  0.00           H
HETATM 5749  H2  SPC   493       0.455  25.009  -8.375  1.00  0.00           H
HETATM 5750  O   SPC   494      -1.373  24.326   6.045  1.00  0.00           O
HETATM 5751  H1  SPC   494      -0.572  24.779   6.469  1.00  0.00           H
HETATM 5752  H2  SPC   494      -1.098  23.397   5.757  1.00  0.00           H
HETATM 5753  O   SPC   495      -2.857  25.586  -4.652  1.00  0.00           O
HETATM 5754  H1  SPC   495      -3.255  24.708  -4.350  1.00  0.00           H
HETATM 5755  H2  SPC   495      -3.299  25.870  -5.515  1.00  0.00           H
HETATM 5756  O   SPC   497       6.282  23.033  -1.933  1.00  0.00           O
HETATM 5757  H1  SPC   497       6.138  24.023  -1.783  1.00  0.00           H
HETATM 5758  H2  SPC   497       5.743  22.524  -1.246  1.00  0.00           H
HETATM 5759  O   SPC   498      -7.184  19.345   6.407  1.00  0.00           O
HETATM 5760  H1  SPC   498      -6.529  19.295   5.634  1.00  0.00           H
HETATM 5761  H2  SPC   498      -7.527  18.407   6.587  1.00  0.00           H
HETATM 5762  O   SPC   499      -3.055  24.904   3.971  1.00  0.00           O
HETATM 5763  H1  SPC   499      -3.811  24.294   4.242  1.00  0.00           H
HETATM 5764  H2  SPC   499      -2.374  24.912   4.717  1.00  0.00           H
HETATM 5765  O   SPC   500      -8.641  20.642   8.403  1.00  0.00           O
HETATM 5766  H1  SPC   500      -8.136  20.103   7.714  1.00  0.00           H
HETATM 5767  H2  SPC   500      -8.134  20.593   9.279  1.00  0.00           H
HETATM 5768  O   SPC   502      -2.644  24.537  -9.045  1.00  0.00           O
HETATM 5769  H1  SPC   502      -2.383  24.309  -9.999  1.00  0.00           H
HETATM 5770  H2  SPC   502      -1.793  24.601  -8.498  1.00  0.00           H
HETATM 5771  O   SPC   503       2.795  20.413   4.986  1.00  0.00           O
HETATM 5772  H1  SPC   503       2.558  19.577   4.474  1.00  0.00           H
HETATM 5773  H2  SPC   503       2.404  21.207   4.500  1.00  0.00           H
HETATM 5774  O   SPC   504      -8.813  24.135   1.317  1.00  0.00           O
HETATM 5775  H1  SPC   504      -9.164  23.632   0.519  1.00  0.00           H
HETATM 5776  H2  SPC   504      -7.813  24.213   1.246  1.00  0.00           H
HETATM 5777  O   SPC   505       0.726  24.103  -1.299  1.00  0.00           O
HETATM 5778  H1  SPC   505       1.089  25.044  -1.251  1.00  0.00           H
HETATM 5779  H2  SPC   505       0.720  23.816  -2.266  1.00  0.00           H
HETATM 5780  O   SPC   506       1.366  26.523   2.472  1.00  0.00           O
HETATM 5781  H1  SPC   506       0.620  26.920   1.923  1.00  0.00           H
HETATM 5782  H2  SPC   506       2.198  26.490   1.899  1.00  0.00           H
HETATM 5783  O   SPC   507       3.499  21.074   7.591  1.00  0.00           O
HETATM 5784  H1  SPC   507       2.888  20.498   8.157  1.00  0.00           H
HETATM 5785  H2  SPC   507       3.334  20.851   6.617  1.00  0.00           H
HETATM 5786  O   SPC   508      -5.100  23.653 -10.140  1.00  0.00           O
HETATM 5787  H1  SPC   508      -5.086  23.536 -11.141  1.00  0.00           H
HETATM 5788  H2  SPC   508      -4.215  24.037  -9.853  1.00  0.00           H
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HETATM 5789  O   SPC   509     -0.699  21.774   5.255  1.00  0.00          O
HETATM 5790  H1  SPC   509      0.161  21.958   4.752  1.00  0.00          H
HETATM 5791  H2  SPC   509     -0.549  20.998   5.884  1.00  0.00          H
HETATM 5792  O   SPC   510      2.642  23.559   8.438  1.00  0.00          O
HETATM 5793  H1  SPC   510      2.982  22.676   8.080  1.00  0.00          H
HETATM 5794  H2  SPC   510      3.421  24.195   8.522  1.00  0.00          H
HETATM 5795  O   SPC   511      1.073  23.756  -4.071  1.00  0.00          O
HETATM 5796  H1  SPC   511      2.026  24.033  -3.883  1.00  0.00          H
HETATM 5797  H2  SPC   511      1.065  23.075  -4.815  1.00  0.00          H
HETATM 5798  O   SPC   512     -2.873  21.198   3.768  1.00  0.00          O
HETATM 5799  H1  SPC   512     -2.107  21.520   4.350  1.00  0.00          H
HETATM 5800  H2  SPC   512     -2.707  21.511   2.818  1.00  0.00          H
HETATM 5801  O   SPC   513      8.204  25.916  -4.939  1.00  0.00          O
HETATM 5802  H1  SPC   513      8.731  25.195  -4.467  1.00  0.00          H
HETATM 5803  H2  SPC   513      7.416  25.480  -5.403  1.00  0.00          H
HETATM 5804  O   SPC   514      7.365  23.510   4.445  1.00  0.00          O
HETATM 5805  H1  SPC   514      7.094  23.711   5.402  1.00  0.00          H
HETATM 5806  H2  SPC   514      6.549  23.603   3.859  1.00  0.00          H
HETATM 5807  O   SPC   515     -6.014  24.147   1.726  1.00  0.00          O
HETATM 5808  H1  SPC   515     -6.096  23.207   2.089  1.00  0.00          H
HETATM 5809  H2  SPC   515     -5.990  24.788   2.498  1.00  0.00          H
HETATM 5810  O   SPC   516      0.122  23.361   1.204  1.00  0.00          O
HETATM 5811  H1  SPC   516      0.314  23.505   0.217  1.00  0.00          H
HETATM 5812  H2  SPC   516     -0.473  24.115   1.518  1.00  0.00          H
HETATM 5813  O   SPC   520     -4.888  19.871  12.196  1.00  0.00          O
HETATM 5814  H1  SPC   520     -4.286  20.429  12.789  1.00  0.00          H
HETATM 5815  H2  SPC   520     -4.834  18.907  12.507  1.00  0.00          H
HETATM 5816  O   SPC   522      4.822  25.366   8.544  1.00  0.00          O
HETATM 5817  H1  SPC   522      5.389  26.197   8.407  1.00  0.00          H
HETATM 5818  H2  SPC   522      4.873  25.102   9.520  1.00  0.00          H
HETATM 5819  O   SPC   523      5.090  20.730  12.068  1.00  0.00          O
HETATM 5820  H1  SPC   523      4.118  20.835  12.317  1.00  0.00          H
HETATM 5821  H2  SPC   523      5.223  21.162  11.164  1.00  0.00          H
HETATM 5822  O   SPC   525      0.265  12.185  18.483  1.00  0.00          O
HETATM 5823  H1  SPC   525     -0.031  12.378  19.421  1.00  0.00          H
HETATM 5824  H2  SPC   525      0.093  13.009  17.914  1.00  0.00          H
HETATM 5825  O   SPC   531      5.239  21.893   9.600  1.00  0.00          O
HETATM 5826  H1  SPC   531      6.208  21.626   9.512  1.00  0.00          H
HETATM 5827  H2  SPC   531      4.728  21.552   8.797  1.00  0.00          H
HETATM 5828  O   SPC   534     -6.475  16.353   9.491  1.00  0.00          O
HETATM 5829  H1  SPC   534     -7.399  16.596   9.819  1.00  0.00          H
HETATM 5830  H2  SPC   534     -5.997  15.877  10.247  1.00  0.00          H
HETATM 5831  O   SPC   542      3.560  23.654  13.409  1.00  0.00          O
HETATM 5832  H1  SPC   542      3.211  24.443  13.918  1.00  0.00          H
HETATM 5833  H2  SPC   542      3.959  22.994  14.069  1.00  0.00          H
HETATM 5834  O   SPC   543      0.922  18.578  15.476  1.00  0.00          O
HETATM 5835  H1  SPC   543      0.962  17.596  15.690  1.00  0.00          H
HETATM 5836  H2  SPC   543      1.863  18.937  15.437  1.00  0.00          H
HETATM 5837  O   SPC   546      4.017  18.089   9.954  1.00  0.00          O
HETATM 5838  H1  SPC   546      3.277  18.706   9.646  1.00  0.00          H
HETATM 5839  H2  SPC   546      4.281  17.505   9.170  1.00  0.00          H
HETATM 5840  O   SPC   547      6.776  20.144  14.182  1.00  0.00          O
HETATM 5841  H1  SPC   547      6.212  20.493  13.417  1.00  0.00          H
HETATM 5842  H2  SPC   547      6.506  19.186  14.351  1.00  0.00          H
HETATM 5843  O   SPC   551      6.908  18.757  11.450  1.00  0.00          O
HETATM 5844  H1  SPC   551      6.571  17.811  11.517  1.00  0.00          H
HETATM 5845  H2  SPC   551      6.148  19.384  11.671  1.00  0.00          H
HETATM 5846  O   SPC   557      4.170  15.719  15.830  1.00  0.00          O
HETATM 5847  H1  SPC   557      4.717  16.405  15.337  1.00  0.00          H
HETATM 5848  H2  SPC   557      4.787  15.015  16.198  1.00  0.00          H
HETATM 5849  O   SPC   559     -0.223  14.330  16.936  1.00  0.00          O
HETATM 5850  H1  SPC   559      0.418  14.969  16.487  1.00  0.00          H
HETATM 5851  H2  SPC   559     -1.087  14.333  16.415  1.00  0.00          H
HETATM 5852  O   SPC   560     -6.873  20.715  10.468  1.00  0.00          O
HETATM 5853  H1  SPC   560     -6.272  20.349  11.194  1.00  0.00          H
HETATM 5854  H2  SPC   560     -6.373  21.443   9.979  1.00  0.00          H
HETATM 5855  O   SPC   562      0.006  19.865  11.038  1.00  0.00          O
HETATM 5856  H1  SPC   562     -0.358  19.666  11.959  1.00  0.00          H
HETATM 5857  H2  SPC   562      0.010  20.862  10.899  1.00  0.00          H
HETATM 5858  O   SPC   565     -2.939  21.104  13.635  1.00  0.00          O
HETATM 5859  H1  SPC   565     -2.631  21.919  14.127  1.00  0.00          H
HETATM 5860  H2  SPC   565     -2.192  20.422  13.633  1.00  0.00          H
HETATM 5861  O   SPC   566     -6.214  11.648  13.995  1.00  0.00          O
HETATM 5862  H1  SPC   566     -6.324  12.599  13.677  1.00  0.00          H
HETATM 5863  H2  SPC   566     -6.768  11.532  14.833  1.00  0.00          H
HETATM 5864  O   SPC   568      4.697  13.782  12.069  1.00  0.00          O
HETATM 5865  H1  SPC   568      4.751  13.360  12.985  1.00  0.00          H
HETATM 5866  H2  SPC   568      3.926  13.360  11.570  1.00  0.00          H
HETATM 5867  O   SPC   572      5.736  17.517  14.357  1.00  0.00          O
HETATM 5868  H1  SPC   572      5.432  17.273  13.421  1.00  0.00          H
HETATM 5869  H2  SPC   572      6.471  16.872  14.621  1.00  0.00          H
HETATM 5870  O   SPC   575      4.901  12.530  14.529  1.00  0.00          O
HETATM 5871  H1  SPC   575      5.442  12.880  15.306  1.00  0.00          H
HETATM 5872  H2  SPC   575      3.921  12.713  14.715  1.00  0.00          H
HETATM 5873  O   SPC   577     -3.761  11.216  12.890  1.00  0.00          O
HETATM 5874  H1  SPC   577     -4.670  11.328  13.320  1.00  0.00          H
HETATM 5875  H2  SPC   577     -3.725  10.317  12.424  1.00  0.00          H
HETATM 5876  O   SPC   583     -3.267  19.857   9.993  1.00  0.00          O
HETATM 5877  H1  SPC   583     -3.889  19.766   9.203  1.00  0.00          H
HETATM 5878  H2  SPC   583     -3.827  19.899  10.835  1.00  0.00          H
HETATM 5879  O   SPC   587     -2.211  14.155   9.507  1.00  0.00          O
HETATM 5880  H1  SPC   587     -2.179  13.543   8.706  1.00  0.00          H
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HETATM 5881  H2  SPC   587     -2.733  14.984   9.255  1.00  0.00          H
HETATM 5882  O   SPC   591     -1.717  10.856  14.580  1.00  0.00          O
HETATM 5883  H1  SPC   591     -0.973  11.496  14.339  1.00  0.00          H
HETATM 5884  H2  SPC   591     -2.515  11.077  13.996  1.00  0.00          H
HETATM 5885  O   SPC   593     -4.260  12.864  10.800  1.00  0.00          O
HETATM 5886  H1  SPC   593     -3.455  13.272  10.344  1.00  0.00          H
HETATM 5887  H2  SPC   593     -3.942  12.308  11.583  1.00  0.00          H
HETATM 5888  O   SPC   596      2.637  18.791  12.337  1.00  0.00          O
HETATM 5889  H1  SPC   596      3.166  18.493  11.531  1.00  0.00          H
HETATM 5890  H2  SPC   596      2.255  19.708  12.147  1.00  0.00          H
HETATM 5891  O   SPC   597      4.520  21.775  15.100  1.00  0.00          O
HETATM 5892  H1  SPC   597      3.983  20.921  15.133  1.00  0.00          H
HETATM 5893  H2  SPC   597      5.495  21.535  15.130  1.00  0.00          H
HETATM 5894  O   SPC   598      4.918  24.178  11.036  1.00  0.00          O
HETATM 5895  H1  SPC   598      4.958  23.309  10.518  1.00  0.00          H
HETATM 5896  H2  SPC   598      4.370  24.030  11.873  1.00  0.00          H
HETATM 5897  O   SPC   599      7.479  15.514  14.797  1.00  0.00          O
HETATM 5898  H1  SPC   599      8.359  15.929  15.072  1.00  0.00          H
HETATM 5899  H2  SPC   599      7.586  15.069  13.892  1.00  0.00          H
HETATM 5900  O   SPC   600     -7.064  14.116  16.366  1.00  0.00          O
HETATM 5901  H1  SPC   600     -6.086  13.838  16.359  1.00  0.00          H
HETATM 5902  H2  SPC   600     -7.183  14.837  17.051  1.00  0.00          H
HETATM 5903  O   SPC   601     -6.166  10.982  10.037  1.00  0.00          O
HETATM 5904  H1  SPC   601     -5.550  11.760  10.222  1.00  0.00          H
HETATM 5905  H2  SPC   601     -5.618  10.218   9.672  1.00  0.00          H
HETATM 5906  O   SPC   607      7.363  14.305  12.378  1.00  0.00          O
HETATM 5907  H1  SPC   607      6.399  14.091  12.164  1.00  0.00          H
HETATM 5908  H2  SPC   607      7.719  14.935  11.674  1.00  0.00          H
HETATM 5909  O   SPC   612      2.320  13.052  15.052  1.00  0.00          O
HETATM 5910  H1  SPC   612      2.293  12.425  15.848  1.00  0.00          H
HETATM 5911  H2  SPC   612      2.003  13.964  15.344  1.00  0.00          H
HETATM 5912  O   SPC   614     -4.923  20.015   7.805  1.00  0.00          O
HETATM 5913  H1  SPC   614     -5.110  20.948   8.147  1.00  0.00          H
HETATM 5914  H2  SPC   614     -5.766  19.666   7.372  1.00  0.00          H
HETATM 5915  O   SPC   617      0.868  17.520   7.466  1.00  0.00          O
HETATM 5916  H1  SPC   617      0.243  18.259   7.168  1.00  0.00          H
HETATM 5917  H2  SPC   617      1.147  16.985   6.664  1.00  0.00          H
HETATM 5918  O   SPC   625      8.221  11.875  17.176  1.00  0.00          O
HETATM 5919  H1  SPC   625      7.403  12.428  16.975  1.00  0.00          H
HETATM 5920  H2  SPC   625      8.756  11.766  16.325  1.00  0.00          H
HETATM 5921  O   SPC   626      6.313  13.907  16.568  1.00  0.00          O
HETATM 5922  H1  SPC   626      6.769  14.439  15.833  1.00  0.00          H
HETATM 5923  H2  SPC   626      6.541  14.342  17.448  1.00  0.00          H
HETATM 5924  O   SPC   628     -1.684  16.548  13.144  1.00  0.00          O
HETATM 5925  H1  SPC   628     -0.688  16.391  13.210  1.00  0.00          H
HETATM 5926  H2  SPC   628     -1.903  16.761  12.178  1.00  0.00          H
HETATM 5927  O   SPC   630      1.529  15.769  15.358  1.00  0.00          O
HETATM 5928  H1  SPC   630      1.388  15.966  14.375  1.00  0.00          H
HETATM 5929  H2  SPC   630      2.521  15.834  15.563  1.00  0.00          H
HETATM 5930  O   SPC   631     -8.998  16.847  10.437  1.00  0.00          O
HETATM 5931  H1  SPC   631     -9.026  17.622  11.074  1.00  0.00          H
HETATM 5932  H2  SPC   631     -9.541  17.080   9.614  1.00  0.00          H
HETATM 5933  O   SPC   633     -3.734  16.346   8.776  1.00  0.00          O
HETATM 5934  H1  SPC   633     -4.735  16.355   8.911  1.00  0.00          H
HETATM 5935  H2  SPC   633     -3.510  16.948   7.995  1.00  0.00          H
HETATM 5936  O   SPC   634      1.581   9.327  15.305  1.00  0.00          O
HETATM 5937  H1  SPC   634      1.530   9.643  14.344  1.00  0.00          H
HETATM 5938  H2  SPC   634      1.826  10.114  15.886  1.00  0.00          H
HETATM 5939  O   SPC   639      7.741  15.927  18.052  1.00  0.00          O
HETATM 5940  H1  SPC   639      7.413  16.652  18.661  1.00  0.00          H
HETATM 5941  H2  SPC   639      8.293  16.346  17.315  1.00  0.00          H
HETATM 5942  O   SPC   641     -0.184  13.122  11.086  1.00  0.00          O
HETATM 5943  H1  SPC   641     -0.453  12.155  10.965  1.00  0.00          H
HETATM 5944  H2  SPC   641     -0.818  13.696  10.545  1.00  0.00          H
HETATM 5945  O   SPC   642     -7.098  14.258  13.610  1.00  0.00          O
HETATM 5946  H1  SPC   642     -7.122  14.371  14.614  1.00  0.00          H
HETATM 5947  H2  SPC   642     -7.974  13.849  13.310  1.00  0.00          H
HETATM 5948  O   SPC   643     -2.186  14.342  14.965  1.00  0.00          O
HETATM 5949  H1  SPC   643     -2.257  15.182  14.412  1.00  0.00          H
HETATM 5950  H2  SPC   643     -1.513  13.729  14.524  1.00  0.00          H
HETATM 5951  O   SPC   646     -4.491  13.393  16.332  1.00  0.00          O
HETATM 5952  H1  SPC   646     -3.667  13.705  15.840  1.00  0.00          H
HETATM 5953  H2  SPC   646     -4.290  12.505  16.775  1.00  0.00          H
HETATM 5954  O   SPC   647     -0.137  12.941  13.801  1.00  0.00          O
HETATM 5955  H1  SPC   647      0.818  12.896  14.127  1.00  0.00          H
HETATM 5956  H2  SPC   647     -0.131  13.089  12.800  1.00  0.00          H
HETATM 5957  O   SPC   648      2.803  15.041   9.599  1.00  0.00          O
HETATM 5958  H1  SPC   648      1.928  15.509   9.790  1.00  0.00          H
HETATM 5959  H2  SPC   648      2.759  14.109   9.980  1.00  0.00          H
HETATM 5960  O   SPC   649     -3.950  10.972  17.546  1.00  0.00          O
HETATM 5961  H1  SPC   649     -2.966  10.762  17.481  1.00  0.00          H
HETATM 5962  H2  SPC   649     -4.431  10.157  17.887  1.00  0.00          H
HETATM 5963  O   SPC   651      3.553  19.189  14.839  1.00  0.00          O
HETATM 5964  H1  SPC   651      3.154  19.075  13.914  1.00  0.00          H
HETATM 5965  H2  SPC   651      4.369  18.601  14.902  1.00  0.00          H
HETATM 5966  O   SPC   658      0.669  22.429  10.067  1.00  0.00          O
HETATM 5967  H1  SPC   658     -0.177  22.296   9.530  1.00  0.00          H
HETATM 5968  H2  SPC   658      1.332  22.939   9.499  1.00  0.00          H
HETATM 5969  O   SPC   666     -7.853  16.860   7.104  1.00  0.00          O
HETATM 5970  H1  SPC   666     -8.790  16.958   7.475  1.00  0.00          H
HETATM 5971  H2  SPC   666     -7.240  16.565   7.851  1.00  0.00          H
HETATM 5972  O   SPC   670     -1.660  21.676   8.747  1.00  0.00          O
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HETATM 5973  H1  SPC   670      -2.316  22.283   8.279  1.00  0.00          H
HETATM 5974  H2  SPC   670      -2.179  21.044   9.344  1.00  0.00          H
HETATM 5975  O   SPC   676      -6.060   8.965  14.149  1.00  0.00          O
HETATM 5976  H1  SPC   676      -5.094   8.720  14.332  1.00  0.00          H
HETATM 5977  H2  SPC   676      -6.105   9.954  13.943  1.00  0.00          H
HETATM 5978  O   SPC   679      -4.414  17.312  12.930  1.00  0.00          O
HETATM 5979  H1  SPC   679      -4.850  16.538  12.449  1.00  0.00          H
HETATM 5980  H2  SPC   679      -3.508  17.018  13.253  1.00  0.00          H
HETATM 5981  O   SPC   686       1.880  19.458   9.094  1.00  0.00          O
HETATM 5982  H1  SPC   686       1.533  18.733   8.480  1.00  0.00          H
HETATM 5983  H2  SPC   686       1.184  19.627   9.810  1.00  0.00          H
HETATM 5984  O   SPC   687       2.429  11.259  17.064  1.00  0.00          O
HETATM 5985  H1  SPC   687       3.118  10.648  17.479  1.00  0.00          H
HETATM 5986  H2  SPC   687       1.739  11.503  17.763  1.00  0.00          H
HETATM 5987  O   SPC   688      -5.683  22.490   8.727  1.00  0.00          O
HETATM 5988  H1  SPC   688      -6.502  22.963   8.374  1.00  0.00          H
HETATM 5989  H2  SPC   688      -4.859  22.952   8.363  1.00  0.00          H
HETATM 5990  O   SPC   691       0.476  16.440   9.980  1.00  0.00          O
HETATM 5991  H1  SPC   691      -0.444  16.755  10.259  1.00  0.00          H
HETATM 5992  H2  SPC   691       0.649  16.772   9.041  1.00  0.00          H
HETATM 5993  O   SPC   692      -1.298  10.281  17.205  1.00  0.00          O
HETATM 5994  H1  SPC   692      -1.331  10.499  16.216  1.00  0.00          H
HETATM 5995  H2  SPC   692      -0.662  10.923  17.657  1.00  0.00          H
HETATM 5996  O   SPC   693      -8.039  11.526  16.077  1.00  0.00          O
HETATM 5997  H1  SPC   693      -7.851  12.489  16.318  1.00  0.00          H
HETATM 5998  H2  SPC   693      -8.974  11.457  15.701  1.00  0.00          H
HETATM 5999  O   SPC   697       7.498  24.565  11.932  1.00  0.00          O
HETATM 6000  H1  SPC   697       7.755  23.671  12.326  1.00  0.00          H
HETATM 6001  H2  SPC   697       6.537  24.519  11.626  1.00  0.00          H
HETATM 6002  O   SPC   698      -5.459  15.122  11.667  1.00  0.00          O
HETATM 6003  H1  SPC   698      -6.096  14.862  12.412  1.00  0.00          H
HETATM 6004  H2  SPC   698      -5.018  14.280  11.319  1.00  0.00          H
HETATM 6005  O   SPC   703       5.154  16.551  11.886  1.00  0.00          O
HETATM 6006  H1  SPC   703       4.878  15.579  11.872  1.00  0.00          H
HETATM 6007  H2  SPC   703       4.669  17.034  11.139  1.00  0.00          H
HETATM 6008  O   SPC   706      -2.019  17.395  10.597  1.00  0.00          O
HETATM 6009  H1  SPC   706      -2.150  18.391  10.501  1.00  0.00          H
HETATM 6010  H2  SPC   706      -2.691  16.933   9.998  1.00  0.00          H
HETATM 6011  O   SPC   707      -0.945  19.234  13.601  1.00  0.00          O
HETATM 6012  H1  SPC   707      -0.248  19.146  14.331  1.00  0.00          H
HETATM 6013  H2  SPC   707      -1.379  18.333  13.473  1.00  0.00          H
HETATM 6014  O   SPC   709       2.406  21.565  12.044  1.00  0.00          O
HETATM 6015  H1  SPC   709       2.703  22.383  12.557  1.00  0.00          H
HETATM 6016  H2  SPC   709       1.777  21.862  11.309  1.00  0.00          H
HETATM 6017  O   SPC   712       1.091  16.533  12.733  1.00  0.00          O
HETATM 6018  H1  SPC   712       0.915  16.264  11.776  1.00  0.00          H
HETATM 6019  H2  SPC   712       1.606  17.403  12.720  1.00  0.00          H
HETATM 6020  O   SPC  1025       7.537  20.564 -14.094  1.00  0.00          O
HETATM 6021  H1  SPC  1025       8.249  19.850 -14.139  1.00  0.00          H
HETATM 6022  H2  SPC  1025       6.965  20.501 -14.919  1.00  0.00          H
HETATM 6023  O   SPC  1030       1.517  24.980  -9.838  1.00  0.00          O
HETATM 6024  H1  SPC  1030       1.012  25.296 -10.645  1.00  0.00          H
HETATM 6025  H2  SPC  1030       1.908  24.076 -10.036  1.00  0.00          H
HETATM 6026  O   SPC  1049       3.904  18.264 -16.075  1.00  0.00          O
HETATM 6027  H1  SPC  1049       4.690  18.890 -16.158  1.00  0.00          H
HETATM 6028  H2  SPC  1049       3.055  18.806 -16.201  1.00  0.00          H
HETATM 6029  O   SPC  1052       4.487  21.620 -12.330  1.00  0.00          O
HETATM 6030  H1  SPC  1052       3.667  21.035 -12.306  1.00  0.00          H
HETATM 6031  H2  SPC  1052       4.811  21.687 -13.276  1.00  0.00          H
HETATM 6032  O   SPC  1058       6.053  20.118 -16.513  1.00  0.00          O
HETATM 6033  H1  SPC  1058       5.690  20.747 -17.205  1.00  0.00          H
HETATM 6034  H2  SPC  1058       6.960  19.786 -16.816  1.00  0.00          H
HETATM 6035  O   SPC  1061       3.135  15.620 -15.644  1.00  0.00          O
HETATM 6036  H1  SPC  1061       3.427  16.590 -15.625  1.00  0.00          H
HETATM 6037  H2  SPC  1061       2.661  15.454 -16.511  1.00  0.00          H
HETATM 6038  O   SPC  1083       8.130   8.780 -14.341  1.00  0.00          O
HETATM 6039  H1  SPC  1083       8.542   8.047 -13.787  1.00  0.00          H
HETATM 6040  H2  SPC  1083       8.798   9.541 -14.398  1.00  0.00          H
HETATM 6041  O   SPC  1095       0.049  22.140 -12.587  1.00  0.00          O
HETATM 6042  H1  SPC  1095       0.870  21.570 -12.696  1.00  0.00          H
HETATM 6043  H2  SPC  1095      -0.280  22.405 -13.507  1.00  0.00          H
HETATM 6044  O   SPC  1096       9.232  15.092 -17.131  1.00  0.00          O
HETATM 6045  H1  SPC  1096       8.398  15.590 -17.409  1.00  0.00          H
HETATM 6046  H2  SPC  1096       9.944  15.767 -16.892  1.00  0.00          H
HETATM 6047  O   SPC  1097       7.098  16.787 -17.606  1.00  0.00          O
HETATM 6048  H1  SPC  1097       6.122  17.012 -17.571  1.00  0.00          H
HETATM 6049  H2  SPC  1097       7.633  17.633 -17.473  1.00  0.00          H
HETATM 6050  O   SPC  1101      -0.841   9.797 -19.175  1.00  0.00          O
HETATM 6051  H1  SPC  1101      -1.043   8.836 -18.921  1.00  0.00          H
HETATM 6052  H2  SPC  1101      -1.710  10.286 -19.260  1.00  0.00          H
HETATM 6053  O   SPC  1102       8.534  19.077 -16.997  1.00  0.00          O
HETATM 6054  H1  SPC  1102       8.728  18.782 -16.044  1.00  0.00          H
HETATM 6055  H2  SPC  1102       9.408  19.357 -17.414  1.00  0.00          H
HETATM 6056  O   SPC  1109       7.208  21.697 -11.617  1.00  0.00          O
HETATM 6057  H1  SPC  1109       7.481  21.300 -12.506  1.00  0.00          H
HETATM 6058  H2  SPC  1109       6.202  21.758 -11.598  1.00  0.00          H
HETATM 6059  O   SPC  1111       1.800  19.922 -16.407  1.00  0.00          O
HETATM 6060  H1  SPC  1111       1.627  20.798 -15.953  1.00  0.00          H
HETATM 6061  H2  SPC  1111       1.271  19.928 -17.276  1.00  0.00          H
HETATM 6062  O   SPC  1113      -2.006  23.802 -11.567  1.00  0.00          O
HETATM 6063  H1  SPC  1113      -1.240  23.252 -11.928  1.00  0.00          H
HETATM 6064  H2  SPC  1113      -2.777  23.744 -12.213  1.00  0.00          H
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HETATM 6065  O   SPC  1128      4.185  25.363  -9.020  1.00  0.00           O
HETATM 6066  H1  SPC  1128      3.211  25.472  -9.252  1.00  0.00           H
HETATM 6067  H2  SPC  1128      4.487  26.155  -8.477  1.00  0.00           H
HETATM 6068  O   SPC  1147     -0.553  27.353   0.568  1.00  0.00           O
HETATM 6069  H1  SPC  1147     -1.069  26.539   0.882  1.00  0.00           H
HETATM 6070  H2  SPC  1147     -1.182  28.132   0.520  1.00  0.00           H
HETATM 6071  O   SPC  1155      5.518  25.688  -1.636  1.00  0.00           O
HETATM 6072  H1  SPC  1155      5.639  26.103  -0.727  1.00  0.00           H
HETATM 6073  H2  SPC  1155      5.473  26.435  -2.322  1.00  0.00           H
HETATM 6074  O   SPC  1178      3.720  28.360  -5.618  1.00  0.00           O
HETATM 6075  H1  SPC  1178      4.358  27.862  -6.227  1.00  0.00           H
HETATM 6076  H2  SPC  1178      3.534  29.260  -6.019  1.00  0.00           H
HETATM 6077  O   SPC  1184      5.685  25.929   3.885  1.00  0.00           O
HETATM 6078  H1  SPC  1184      5.352  25.106   3.400  1.00  0.00           H
HETATM 6079  H2  SPC  1184      5.069  26.105   4.668  1.00  0.00           H
HETATM 6080  O   SPC  1190      6.367  27.483   7.882  1.00  0.00           O
HETATM 6081  H1  SPC  1190      6.544  27.733   6.919  1.00  0.00           H
HETATM 6082  H2  SPC  1190      7.138  27.811   8.445  1.00  0.00           H
HETATM 6083  O   SPC  1196      1.789  27.288  -3.904  1.00  0.00           O
HETATM 6084  H1  SPC  1196      2.426  27.741  -4.545  1.00  0.00           H
HETATM 6085  H2  SPC  1196      1.004  26.926  -4.430  1.00  0.00           H
HETATM 6086  O   SPC  1211      9.194  30.634  -0.145  1.00  0.00           O
HETATM 6087  H1  SPC  1211      8.626  29.878  -0.502  1.00  0.00           H
HETATM 6088  H2  SPC  1211      8.709  31.056   0.630  1.00  0.00           H
HETATM 6089  O   SPC  1220      7.776  31.457   2.092  1.00  0.00           O
HETATM 6090  H1  SPC  1220      7.197  32.275   2.095  1.00  0.00           H
HETATM 6091  H2  SPC  1220      7.202  30.656   2.342  1.00  0.00           H
HETATM 6092  O   SPC  1223      5.227  27.719  -3.364  1.00  0.00           O
HETATM 6093  H1  SPC  1223      4.623  27.991  -4.124  1.00  0.00           H
HETATM 6094  H2  SPC  1223      6.148  28.101  -3.528  1.00  0.00           H
HETATM 6095  O   SPC  1228      6.294  29.336   2.790  1.00  0.00           O
HETATM 6096  H1  SPC  1228      5.962  28.634   2.148  1.00  0.00           H
HETATM 6097  H2  SPC  1228      6.375  28.926   3.707  1.00  0.00           H
HETATM 6098  O   SPC  1230      1.542  26.768  -1.183  1.00  0.00           O
HETATM 6099  H1  SPC  1230      1.533  27.136  -2.125  1.00  0.00           H
HETATM 6100  H2  SPC  1230      0.734  27.115  -0.685  1.00  0.00           H
HETATM 6101  O   SPC  1254      6.955  27.987   5.212  1.00  0.00           O
HETATM 6102  H1  SPC  1254      6.693  27.146   4.718  1.00  0.00           H
HETATM 6103  H2  SPC  1254      7.949  28.140   5.095  1.00  0.00           H
HETATM 6104  O   SPC  1358      8.573  28.270   9.371  1.00  0.00           O
HETATM 6105  H1  SPC  1358      8.850  27.469   9.931  1.00  0.00           H
HETATM 6106  H2  SPC  1358      8.627  29.093   9.940  1.00  0.00           H
HETATM 6107  O   SPC  3122     23.201   9.278  -2.747  1.00  0.00           O
HETATM 6108  H1  SPC  3122     23.876   8.896  -3.380  1.00  0.00           H
HETATM 6109  H2  SPC  3122     23.076   8.625  -1.976  1.00  0.00           H
HETATM 6110  O   SPC  3135     23.456  11.284   0.815  1.00  0.00           O
HETATM 6111  H1  SPC  3135     23.068  11.494  -0.092  1.00  0.00           H
HETATM 6112  H2  SPC  3135     23.646  10.295   0.867  1.00  0.00           H
HETATM 6113  O   SPC  3137     20.502   8.891  -3.272  1.00  0.00           O
HETATM 6114  H1  SPC  3137     20.217   9.336  -4.132  1.00  0.00           H
HETATM 6115  H2  SPC  3137     21.486   9.057  -3.129  1.00  0.00           H
HETATM 6116  O   SPC  3144     24.231   8.634   1.412  1.00  0.00           O
HETATM 6117  H1  SPC  3144     24.051   8.702   2.409  1.00  0.00           H
HETATM 6118  H2  SPC  3144     25.161   8.285   1.283  1.00  0.00           H
HETATM 6119  O   SPC  3156     22.913   7.599  -0.723  1.00  0.00           O
HETATM 6120  H1  SPC  3156     23.322   7.938   0.136  1.00  0.00           H
HETATM 6121  H2  SPC  3156     22.405   6.748  -0.524  1.00  0.00           H
HETATM 6122  O   SPC  3162     24.000   8.997   4.059  1.00  0.00           O
HETATM 6123  H1  SPC  3162     24.132   9.998   4.002  1.00  0.00           H
HETATM 6124  H2  SPC  3162     23.878   8.737   5.026  1.00  0.00           H
HETATM 6125  O   SPC  3189     10.851   7.598  17.458  1.00  0.00           O
HETATM 6126  H1  SPC  3189     10.532   6.691  17.769  1.00  0.00           H
HETATM 6127  H2  SPC  3189     10.070   8.242  17.514  1.00  0.00           H
HETATM 6128  O   SPC  3194     13.269   8.811  17.405  1.00  0.00           O
HETATM 6129  H1  SPC  3194     12.414   8.269  17.314  1.00  0.00           H
HETATM 6130  H2  SPC  3194     13.372   9.074  18.367  1.00  0.00           H
HETATM 6131  O   SPC  3212      9.603   5.230  18.177  1.00  0.00           O
HETATM 6132  H1  SPC  3212      8.941   5.008  17.451  1.00  0.00           H
HETATM 6133  H2  SPC  3212      9.400   4.671  18.983  1.00  0.00           H
HETATM 6134  O   SPC  3266      8.631   9.161  17.663  1.00  0.00           O
HETATM 6135  H1  SPC  3266      7.823   8.720  18.080  1.00  0.00           H
HETATM 6136  H2  SPC  3266      8.463  10.155  17.607  1.00  0.00           H
HETATM 6137  O   SPC  3271     15.907   8.703  16.430  1.00  0.00           O
HETATM 6138  H1  SPC  3271     16.262   9.649  16.360  1.00  0.00           H
HETATM 6139  H2  SPC  3271     14.948   8.743  16.749  1.00  0.00           H
HETATM 6140  O   SPC  3671     16.188   8.352 -15.269  1.00  0.00           O
HETATM 6141  H1  SPC  3671     15.406   7.772 -14.995  1.00  0.00           H
HETATM 6142  H2  SPC  3671     16.498   8.886 -14.467  1.00  0.00           H
HETATM 6143  O   SPC  3690     12.513  10.258 -13.007  1.00  0.00           O
HETATM 6144  H1  SPC  3690     13.291  10.662 -13.506  1.00  0.00           H
HETATM 6145  H2  SPC  3690     12.865   9.881 -12.129  1.00  0.00           H
HETATM 6146  O   SPC  3693     18.991   8.212 -12.040  1.00  0.00           O
HETATM 6147  H1  SPC  3693     19.031   7.900 -11.081  1.00  0.00           H
HETATM 6148  H2  SPC  3693     19.116   7.409 -12.642  1.00  0.00           H
HETATM 6149  O   SPC  3704     19.042   6.022 -13.646  1.00  0.00           O
HETATM 6150  H1  SPC  3704     18.854   6.282 -14.603  1.00  0.00           H
HETATM 6151  H2  SPC  3704     18.452   5.248 -13.403  1.00  0.00           H
HETATM 6152  O   SPC  3725     16.487   4.849 -14.681  1.00  0.00           O
HETATM 6153  H1  SPC  3725     15.756   5.495 -14.424  1.00  0.00           H
HETATM 6154  H2  SPC  3725     17.115   5.316 -15.317  1.00  0.00           H
HETATM 6155  O   SPC  3734     14.250   6.487 -14.657  1.00  0.00           O
HETATM 6156  H1  SPC  3734     13.423   6.933 -14.273  1.00  0.00           H
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HETATM 6157  H2  SPC  3734      13.957   5.667 -15.169  1.00  0.00           H
HETATM 6158  O   SPC  3757      18.872   4.379  -9.105  1.00  0.00           O
HETATM 6159  H1  SPC  3757      19.113   3.596  -8.501  1.00  0.00           H
HETATM 6160  H2  SPC  3757      17.989   4.178  -9.545  1.00  0.00           H
HETATM 6161  O   SPC  3761      19.311   7.126  -9.440  1.00  0.00           O
HETATM 6162  H1  SPC  3761      19.033   6.159  -9.319  1.00  0.00           H
HETATM 6163  H2  SPC  3761      20.307   7.179  -9.351  1.00  0.00           H
HETATM 6164  O   SPC  3778      14.086   3.911 -15.705  1.00  0.00           O
HETATM 6165  H1  SPC  3778      13.666   3.078 -15.342  1.00  0.00           H
HETATM 6166  H2  SPC  3778      15.047   3.957 -15.400  1.00  0.00           H
HETATM 6167  O   SPC  3781      12.019   7.662 -13.748  1.00  0.00           O
HETATM 6168  H1  SPC  3781      12.185   8.623 -13.484  1.00  0.00           H
HETATM 6169  H2  SPC  3781      11.073   7.420 -13.501  1.00  0.00           H
HETATM 6170  O   SPC  3783      18.042   6.627 -16.161  1.00  0.00           O
HETATM 6171  H1  SPC  3783      18.372   6.844 -17.081  1.00  0.00           H
HETATM 6172  H2  SPC  3783      17.370   7.335 -15.883  1.00  0.00           H
HETATM 6173  O   SPC  3785      18.648   9.553  -7.913  1.00  0.00           O
HETATM 6174  H1  SPC  3785      17.668   9.761  -7.769  1.00  0.00           H
HETATM 6175  H2  SPC  3785      18.726   8.688  -8.426  1.00  0.00           H
HETATM 6176  O   SPC  3790      17.752  22.392   1.274  1.00  0.00           O
HETATM 6177  H1  SPC  3790      18.224  21.494   1.241  1.00  0.00           H
HETATM 6178  H2  SPC  3790      17.969  22.835   2.156  1.00  0.00           H
HETATM 6179  O   SPC  3794       9.252  22.226   8.284  1.00  0.00           O
HETATM 6180  H1  SPC  3794       9.102  23.218   8.164  1.00  0.00           H
HETATM 6181  H2  SPC  3794       8.574  21.866   8.941  1.00  0.00           H
HETATM 6182  O   SPC  3796      22.468  11.766  -1.838  1.00  0.00           O
HETATM 6183  H1  SPC  3796      22.820  10.853  -2.092  1.00  0.00           H
HETATM 6184  H2  SPC  3796      21.900  12.100  -2.602  1.00  0.00           H
HETATM 6185  O   SPC  3798      18.959  19.954   1.288  1.00  0.00           O
HETATM 6186  H1  SPC  3798      19.876  19.715   1.659  1.00  0.00           H
HETATM 6187  H2  SPC  3798      18.444  19.101   1.173  1.00  0.00           H
HETATM 6188  O   SPC  3799      15.430  28.622  -0.642  1.00  0.00           O
HETATM 6189  H1  SPC  3799      14.803  29.076   0.004  1.00  0.00           H
HETATM 6190  H2  SPC  3799      15.917  27.882  -0.160  1.00  0.00           H
HETATM 6191  O   SPC  3800      13.319  22.630   8.615  1.00  0.00           O
HETATM 6192  H1  SPC  3800      12.803  22.954   7.806  1.00  0.00           H
HETATM 6193  H2  SPC  3800      14.291  22.878   8.487  1.00  0.00           H
HETATM 6194  O   SPC  3803      16.145  20.275   8.416  1.00  0.00           O
HETATM 6195  H1  SPC  3803      15.283  20.202   8.938  1.00  0.00           H
HETATM 6196  H2  SPC  3803      16.531  19.342   8.331  1.00  0.00           H
HETATM 6197  O   SPC  3808      11.284  23.562   2.582  1.00  0.00           O
HETATM 6198  H1  SPC  3808      10.617  22.807   2.449  1.00  0.00           H
HETATM 6199  H2  SPC  3808      11.731  23.744   1.693  1.00  0.00           H
HETATM 6200  O   SPC  3810      15.001  22.548   1.117  1.00  0.00           O
HETATM 6201  H1  SPC  3810      14.709  22.800   0.186  1.00  0.00           H
HETATM 6202  H2  SPC  3810      15.997  22.380   1.111  1.00  0.00           H
HETATM 6203  O   SPC  3811       8.187  21.795  -3.497  1.00  0.00           O
HETATM 6204  H1  SPC  3811       7.538  22.199  -2.835  1.00  0.00           H
HETATM 6205  H2  SPC  3811       8.960  22.431  -3.612  1.00  0.00           H
HETATM 6206  O   SPC  3812      13.736  25.600   3.197  1.00  0.00           O
HETATM 6207  H1  SPC  3812      13.658  25.752   2.199  1.00  0.00           H
HETATM 6208  H2  SPC  3812      13.977  24.630   3.358  1.00  0.00           H
HETATM 6209  O   SPC  3813      13.891  24.282  -4.096  1.00  0.00           O
HETATM 6210  H1  SPC  3813      13.951  23.351  -4.493  1.00  0.00           H
HETATM 6211  H2  SPC  3813      13.486  24.893  -4.786  1.00  0.00           H
HETATM 6212  O   SPC  3814      14.461  23.620  -1.498  1.00  0.00           O
HETATM 6213  H1  SPC  3814      15.434  23.841  -1.345  1.00  0.00           H
HETATM 6214  H2  SPC  3814      14.222  23.877  -2.449  1.00  0.00           H
HETATM 6215  O   SPC  3815      16.143  10.596  -7.503  1.00  0.00           O
HETATM 6216  H1  SPC  3815      16.274  11.572  -7.292  1.00  0.00           H
HETATM 6217  H2  SPC  3815      15.652  10.520  -8.389  1.00  0.00           H
HETATM 6218  O   SPC  3818      19.638  10.342  -5.425  1.00  0.00           O
HETATM 6219  H1  SPC  3818      19.363  10.045  -6.353  1.00  0.00           H
HETATM 6220  H2  SPC  3818      18.840  10.752  -4.968  1.00  0.00           H
HETATM 6221  O   SPC  3822      21.571  14.336  -0.872  1.00  0.00           O
HETATM 6222  H1  SPC  3822      22.193  13.570  -1.078  1.00  0.00           H
HETATM 6223  H2  SPC  3822      20.662  14.111  -1.260  1.00  0.00           H
HETATM 6224  O   SPC  3823      13.474  26.011   0.537  1.00  0.00           O
HETATM 6225  H1  SPC  3823      13.263  26.663  -0.206  1.00  0.00           H
HETATM 6226  H2  SPC  3823      12.980  25.148   0.350  1.00  0.00           H
HETATM 6227  O   SPC  3825       9.976  27.605  -6.160  1.00  0.00           O
HETATM 6228  H1  SPC  3825      10.257  28.278  -5.464  1.00  0.00           H
HETATM 6229  H2  SPC  3825       9.359  26.932  -5.725  1.00  0.00           H
HETATM 6230  O   SPC  3826      12.121  25.690  -5.835  1.00  0.00           O
HETATM 6231  H1  SPC  3826      11.607  24.880  -6.154  1.00  0.00           H
HETATM 6232  H2  SPC  3826      11.685  26.510  -6.224  1.00  0.00           H
HETATM 6233  O   SPC  3827      11.389  20.800  -4.515  1.00  0.00           O
HETATM 6234  H1  SPC  3827      11.276  20.939  -5.508  1.00  0.00           H
HETATM 6235  H2  SPC  3827      10.724  20.112  -4.202  1.00  0.00           H
HETATM 6236  O   SPC  3829      11.460  26.216  -3.246  1.00  0.00           O
HETATM 6237  H1  SPC  3829      12.155  26.571  -2.599  1.00  0.00           H
HETATM 6238  H2  SPC  3829      11.909  26.037  -4.134  1.00  0.00           H
HETATM 6239  O   SPC  3831      16.667  13.269  -6.723  1.00  0.00           O
HETATM 6240  H1  SPC  3831      17.589  13.198  -6.306  1.00  0.00           H
HETATM 6241  H2  SPC  3831      16.762  13.688  -7.639  1.00  0.00           H
HETATM 6242  O   SPC  3832      15.149  27.290   4.698  1.00  0.00           O
HETATM 6243  H1  SPC  3832      14.597  26.691   4.094  1.00  0.00           H
HETATM 6244  H2  SPC  3832      14.981  27.007   5.649  1.00  0.00           H
HETATM 6245  O   SPC  3839      12.097  23.463   6.319  1.00  0.00           O
HETATM 6246  H1  SPC  3839      12.206  22.649   5.729  1.00  0.00           H
HETATM 6247  H2  SPC  3839      11.240  23.926   6.056  1.00  0.00           H
HETATM 6248  O   SPC  3843      11.349  26.602   4.008  1.00  0.00           O
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HETATM 6249  H1  SPC  3843      12.274  26.250   3.792  1.00  0.00          H
HETATM 6250  H2  SPC  3843      10.798  25.839   4.376  1.00  0.00          H
HETATM 6251  O   SPC  3845      19.154  13.638  -1.856  1.00  0.00          O
HETATM 6252  H1  SPC  3845      18.869  12.833  -2.393  1.00  0.00          H
HETATM 6253  H2  SPC  3845      18.495  14.386  -2.014  1.00  0.00          H
HETATM 6254  O   SPC  3847      11.759  21.518  -7.204  1.00  0.00          O
HETATM 6255  H1  SPC  3847      11.687  21.276  -8.185  1.00  0.00          H
HETATM 6256  H2  SPC  3847      12.730  21.656  -6.979  1.00  0.00          H
HETATM 6257  O   SPC  3848      12.139  23.736  -0.015  1.00  0.00          O
HETATM 6258  H1  SPC  3848      12.876  23.526  -0.675  1.00  0.00          H
HETATM 6259  H2  SPC  3848      11.256  23.765  -0.507  1.00  0.00          H
HETATM 6260  O   SPC  3850      16.480  17.712  -6.323  1.00  0.00          O
HETATM 6261  H1  SPC  3850      16.035  18.616  -6.287  1.00  0.00          H
HETATM 6262  H2  SPC  3850      16.483  17.399  -7.287  1.00  0.00          H
HETATM 6263  O   SPC  3851      18.375  23.868   3.604  1.00  0.00          O
HETATM 6264  H1  SPC  3851      19.365  23.977   3.710  1.00  0.00          H
HETATM 6265  H2  SPC  3851      17.969  24.777   3.403  1.00  0.00          H
HETATM 6266  O   SPC  3853       9.897  24.060  -3.828  1.00  0.00          O
HETATM 6267  H1  SPC  3853      10.557  24.780  -3.558  1.00  0.00          H
HETATM 6268  H2  SPC  3853      10.116  23.768  -4.774  1.00  0.00          H
HETATM 6269  O   SPC  3855      16.274  23.729   5.496  1.00  0.00          O
HETATM 6270  H1  SPC  3855      17.146  23.784   4.993  1.00  0.00          H
HETATM 6271  H2  SPC  3855      15.563  23.406   4.850  1.00  0.00          H
HETATM 6272  O   SPC  3858      21.293  12.252  -4.362  1.00  0.00          O
HETATM 6273  H1  SPC  3858      20.732  11.487  -4.718  1.00  0.00          H
HETATM 6274  H2  SPC  3858      22.039  12.428  -5.007  1.00  0.00          H
HETATM 6275  O   SPC  3859      17.633  15.854  -2.280  1.00  0.00          O
HETATM 6276  H1  SPC  3859      17.258  15.683  -3.207  1.00  0.00          H
HETATM 6277  H2  SPC  3859      18.232  16.656  -2.325  1.00  0.00          H
HETATM 6278  O   SPC  3860      24.365  11.644   3.368  1.00  0.00          O
HETATM 6279  H1  SPC  3860      23.976  11.565   2.436  1.00  0.00          H
HETATM 6280  H2  SPC  3860      24.987  12.428   3.390  1.00  0.00          H
HETATM 6281  O   SPC  3862       9.653  24.181  -1.082  1.00  0.00          O
HETATM 6282  H1  SPC  3862       9.652  25.161  -0.833  1.00  0.00          H
HETATM 6283  H2  SPC  3862       9.614  24.099  -2.088  1.00  0.00          H
HETATM 6284  O   SPC  3863      14.441  22.964   3.682  1.00  0.00          O
HETATM 6285  H1  SPC  3863      13.758  22.289   3.992  1.00  0.00          H
HETATM 6286  H2  SPC  3863      14.665  22.768   2.711  1.00  0.00          H
HETATM 6287  O   SPC  3864      18.943  13.477  -5.278  1.00  0.00          O
HETATM 6288  H1  SPC  3864      19.798  13.196  -4.824  1.00  0.00          H
HETATM 6289  H2  SPC  3864      18.655  14.369  -4.916  1.00  0.00          H
HETATM 6290  O   SPC  3870      12.150  21.616   4.308  1.00  0.00          O
HETATM 6291  H1  SPC  3870      11.926  22.422   3.741  1.00  0.00          H
HETATM 6292  H2  SPC  3870      11.738  20.804   3.866  1.00  0.00          H
HETATM 6293  O   SPC  3872      16.006  22.921   8.108  1.00  0.00          O
HETATM 6294  H1  SPC  3872      16.209  23.265   7.179  1.00  0.00          H
HETATM 6295  H2  SPC  3872      16.174  21.920   8.123  1.00  0.00          H
HETATM 6296  O   SPC  3873      13.079  27.659  -1.631  1.00  0.00          O
HETATM 6297  H1  SPC  3873      14.040  27.964  -1.544  1.00  0.00          H
HETATM 6298  H2  SPC  3873      12.480  28.465  -1.515  1.00  0.00          H
HETATM 6299  O   SPC  3874      12.396  26.188   8.525  1.00  0.00          O
HETATM 6300  H1  SPC  3874      11.650  26.654   8.029  1.00  0.00          H
HETATM 6301  H2  SPC  3874      13.138  25.981   7.872  1.00  0.00          H
HETATM 6302  O   SPC  3876      14.173  25.295   6.571  1.00  0.00          O
HETATM 6303  H1  SPC  3876      13.403  24.664   6.399  1.00  0.00          H
HETATM 6304  H2  SPC  3876      15.027  24.840   6.286  1.00  0.00          H
HETATM 6305  O   SPC  3877       7.802  21.101  10.309  1.00  0.00          O
HETATM 6306  H1  SPC  3877       7.655  20.130  10.551  1.00  0.00          H
HETATM 6307  H2  SPC  3877       8.027  21.602  11.158  1.00  0.00          H
HETATM 6308  O   SPC  3879       8.968  24.955   8.212  1.00  0.00          O
HETATM 6309  H1  SPC  3879       9.016  25.290   9.163  1.00  0.00          H
HETATM 6310  H2  SPC  3879       9.452  25.618   7.624  1.00  0.00          H
HETATM 6311  O   SPC  3881       9.533  26.669   0.149  1.00  0.00          O
HETATM 6312  H1  SPC  3881       8.915  26.304   0.862  1.00  0.00          H
HETATM 6313  H2  SPC  3881      10.245  27.227   0.601  1.00  0.00          H
HETATM 6314  O   SPC  3883      16.187  26.235   0.617  1.00  0.00          O
HETATM 6315  H1  SPC  3883      16.598  25.493   0.069  1.00  0.00          H
HETATM 6316  H2  SPC  3883      15.182  26.111   0.620  1.00  0.00          H
HETATM 6317  O   SPC  3888      10.347  23.694  -6.493  1.00  0.00          O
HETATM 6318  H1  SPC  3888       9.653  23.933  -7.191  1.00  0.00          H
HETATM 6319  H2  SPC  3888      10.832  22.858  -6.798  1.00  0.00          H
HETATM 6320  O   SPC  3890      16.991  15.513  -4.864  1.00  0.00          O
HETATM 6321  H1  SPC  3890      16.650  14.755  -5.434  1.00  0.00          H
HETATM 6322  H2  SPC  3890      16.820  16.383  -5.358  1.00  0.00          H
HETATM 6323  O   SPC  3891      17.133  24.045  -0.805  1.00  0.00          O
HETATM 6324  H1  SPC  3891      17.841  24.027  -1.515  1.00  0.00          H
HETATM 6325  H2  SPC  3891      17.414  23.426  -0.053  1.00  0.00          H
HETATM 6326  O   SPC  3895      13.858  21.829  -5.177  1.00  0.00          O
HETATM 6327  H1  SPC  3895      13.043  21.361  -4.803  1.00  0.00          H
HETATM 6328  H2  SPC  3895      14.470  21.143  -5.596  1.00  0.00          H
HETATM 6329  O   SPC  3898       9.945  24.395   4.759  1.00  0.00          O
HETATM 6330  H1  SPC  3898      10.430  24.104   3.919  1.00  0.00          H
HETATM 6331  H2  SPC  3898       8.977  24.115   4.680  1.00  0.00          H
HETATM 6332  O   SPC  3899      17.259  26.260   3.142  1.00  0.00          O
HETATM 6333  H1  SPC  3899      16.907  26.334   2.197  1.00  0.00          H
HETATM 6334  H2  SPC  3899      16.604  26.705   3.766  1.00  0.00          H
HETATM 6335  O   SPC  3903      13.952  20.579  12.660  1.00  0.00          O
HETATM 6336  H1  SPC  3903      13.927  21.589  12.692  1.00  0.00          H
HETATM 6337  H2  SPC  3903      13.183  20.220  13.209  1.00  0.00          H
HETATM 6338  O   SPC  3911       9.356  19.532  15.185  1.00  0.00          O
HETATM 6339  H1  SPC  3911       8.427  19.674  14.818  1.00  0.00          H
HETATM 6340  H2  SPC  3911       9.726  20.433  15.465  1.00  0.00          H
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HETATM 6341  O   SPC  3923      9.450  16.923  16.104  1.00  0.00          O
HETATM 6342  H1  SPC  3923      9.515  17.891  15.812  1.00  0.00          H
HETATM 6343  H2  SPC  3923     10.377  16.587  16.327  1.00  0.00          H
HETATM 6344  O   SPC  3942      8.349  22.111  12.800  1.00  0.00          O
HETATM 6345  H1  SPC  3942      7.950  21.448  13.447  1.00  0.00          H
HETATM 6346  H2  SPC  3942      9.327  22.232  13.018  1.00  0.00          H
HETATM 6347  O   SPC  3960      9.341  26.070  10.717  1.00  0.00          O
HETATM 6348  H1  SPC  3960     10.266  25.733  10.944  1.00  0.00          H
HETATM 6349  H2  SPC  3960      8.663  25.559  11.274  1.00  0.00          H
HETATM 6350  O   SPC  3961     11.842  24.839  10.791  1.00  0.00          O
HETATM 6351  H1  SPC  3961     11.560  23.933  10.458  1.00  0.00          H
HETATM 6352  H2  SPC  3961     12.143  25.395   9.997  1.00  0.00          H
HETATM 6353  O   SPC  3963     13.861  20.271   9.908  1.00  0.00          O
HETATM 6354  H1  SPC  3963     13.635  21.134   9.435  1.00  0.00          H
HETATM 6355  H2  SPC  3963     13.955  20.454  10.897  1.00  0.00          H
HETATM 6356  O   SPC  3965     13.685  23.362  12.310  1.00  0.00          O
HETATM 6357  H1  SPC  3965     14.573  23.264  11.830  1.00  0.00          H
HETATM 6358  H2  SPC  3965     13.160  24.095  11.855  1.00  0.00          H
HETATM 6359  O   SPC  3970     18.880   9.457  14.236  1.00  0.00          O
HETATM 6360  H1  SPC  3970     19.756   9.759  14.618  1.00  0.00          H
HETATM 6361  H2  SPC  3970     19.009   9.256  13.254  1.00  0.00          H
HETATM 6362  O   SPC  3978     11.803  15.552  16.846  1.00  0.00          O
HETATM 6363  H1  SPC  3978     12.475  14.885  16.484  1.00  0.00          H
HETATM 6364  H2  SPC  3978     11.129  15.042  17.404  1.00  0.00          H
HETATM 6365  O   SPC  3991     11.197  19.488  11.178  1.00  0.00          O
HETATM 6366  H1  SPC  3991     11.149  20.413  10.779  1.00  0.00          H
HETATM 6367  H2  SPC  3991     11.281  19.568  12.179  1.00  0.00          H
HETATM 6368  O   SPC  3992     10.367  22.007  15.468  1.00  0.00          O
HETATM 6369  H1  SPC  3992     10.745  22.162  14.543  1.00  0.00          H
HETATM 6370  H2  SPC  3992     10.570  22.805  16.038  1.00  0.00          H
HETATM 6371  O   SPC  3996     11.142  22.425  12.878  1.00  0.00          O
HETATM 6372  H1  SPC  3996     12.053  22.848  12.978  1.00  0.00          H
HETATM 6373  H2  SPC  3996     10.983  22.273  11.892  1.00  0.00          H
HETATM 6374  O   SPC  4004     15.917  16.607  14.875  1.00  0.00          O
HETATM 6375  H1  SPC  4004     16.607  17.075  15.431  1.00  0.00          H
HETATM 6376  H2  SPC  4004     15.785  17.141  14.022  1.00  0.00          H
HETATM 6377  O   SPC  4008     17.147  11.089  15.871  1.00  0.00          O
HETATM 6378  H1  SPC  4008     17.740  10.724  15.145  1.00  0.00          H
HETATM 6379  H2  SPC  4008     16.855  12.022  15.622  1.00  0.00          H
HETATM 6380  O   SPC  4015     16.265  13.843  15.577  1.00  0.00          O
HETATM 6381  H1  SPC  4015     16.592  14.031  16.506  1.00  0.00          H
HETATM 6382  H2  SPC  4015     16.132  14.723  15.100  1.00  0.00          H
HETATM 6383  O   SPC  4018     13.491  13.651  15.906  1.00  0.00          O
HETATM 6384  H1  SPC  4018     14.479  13.585  15.720  1.00  0.00          H
HETATM 6385  H2  SPC  4018     13.118  12.716  16.019  1.00  0.00          H
HETATM 6386  O   SPC  4019     12.411  11.167  16.143  1.00  0.00          O
HETATM 6387  H1  SPC  4019     12.701  10.293  16.553  1.00  0.00          H
HETATM 6388  H2  SPC  4019     11.420  11.137  15.974  1.00  0.00          H
HETATM 6389  O   SPC  4040     15.921  22.816  10.865  1.00  0.00          O
HETATM 6390  H1  SPC  4040     15.986  23.063   9.888  1.00  0.00          H
HETATM 6391  H2  SPC  4040     16.545  22.052  11.042  1.00  0.00          H
HETATM 6392  O   SPC  4047     11.859  19.308  13.972  1.00  0.00          O
HETATM 6393  H1  SPC  4047     12.427  18.717  14.568  1.00  0.00          H
HETATM 6394  H2  SPC  4047     10.943  19.391  14.389  1.00  0.00          H
HETATM 6395  O   SPC  4049     13.288  17.558  15.547  1.00  0.00          O
HETATM 6396  H1  SPC  4049     12.787  16.904  16.132  1.00  0.00          H
HETATM 6397  H2  SPC  4049     14.208  17.190  15.368  1.00  0.00          H
HETATM 6398  O   SPC  4057     11.175  22.116  10.145  1.00  0.00          O
HETATM 6399  H1  SPC  4057     10.430  22.085   9.459  1.00  0.00          H
HETATM 6400  H2  SPC  4057     12.048  22.252   9.648  1.00  0.00          H
HETATM 6401  O   SPC  4065      9.798  14.089  18.019  1.00  0.00          O
HETATM 6402  H1  SPC  4065      9.419  13.164  17.901  1.00  0.00          H
HETATM 6403  H2  SPC  4065      9.037  14.727  18.194  1.00  0.00          H
HETATM 6404  O   SPC  4072     15.581  18.296  12.794  1.00  0.00          O
HETATM 6405  H1  SPC  4072     15.129  19.198  12.793  1.00  0.00          H
HETATM 6406  H2  SPC  4072     15.705  17.999  11.831  1.00  0.00          H
HETATM 6407  O   SPC  4392      9.398  22.434 -10.130  1.00  0.00          O
HETATM 6408  H1  SPC  4392      8.610  22.157 -10.702  1.00  0.00          H
HETATM 6409  H2  SPC  4392      9.120  23.214  -9.556  1.00  0.00          H
HETATM 6410  O   SPC  4394     11.854  16.769 -12.284  1.00  0.00          O
HETATM 6411  H1  SPC  4394     11.982  16.023 -12.953  1.00  0.00          H
HETATM 6412  H2  SPC  4394     10.882  17.068 -12.335  1.00  0.00          H
HETATM 6413  O   SPC  4398     18.599  12.021  -9.360  1.00  0.00          O
HETATM 6414  H1  SPC  4398     18.804  11.173  -8.855  1.00  0.00          H
HETATM 6415  H2  SPC  4398     18.062  11.786 -10.182  1.00  0.00          H
HETATM 6416  O   SPC  4400     14.793  11.050 -14.403  1.00  0.00          O
HETATM 6417  H1  SPC  4400     14.772  10.542 -15.268  1.00  0.00          H
HETATM 6418  H2  SPC  4400     15.601  10.750 -13.878  1.00  0.00          H
HETATM 6419  O   SPC  4410     14.243  20.471  -9.033  1.00  0.00          O
HETATM 6420  H1  SPC  4410     14.682  19.971  -9.793  1.00  0.00          H
HETATM 6421  H2  SPC  4410     13.319  20.749  -9.332  1.00  0.00          H
HETATM 6422  O   SPC  4411      8.473  24.418  -8.371  1.00  0.00          O
HETATM 6423  H1  SPC  4411      8.337  25.418  -8.360  1.00  0.00          H
HETATM 6424  H2  SPC  4411      7.568  23.972  -8.468  1.00  0.00          H
HETATM 6425  O   SPC  4416     16.326  16.897  -8.917  1.00  0.00          O
HETATM 6426  H1  SPC  4416     15.471  16.891  -9.450  1.00  0.00          H
HETATM 6427  H2  SPC  4416     16.757  15.985  -8.994  1.00  0.00          H
HETATM 6428  O   SPC  4423     15.514  20.272  -6.677  1.00  0.00          O
HETATM 6429  H1  SPC  4423     16.405  20.702  -6.837  1.00  0.00          H
HETATM 6430  H2  SPC  4423     14.995  20.275  -7.550  1.00  0.00          H
HETATM 6431  O   SPC  4433     13.596  12.641  -9.614  1.00  0.00          O
HETATM 6432  H1  SPC  4433     13.215  12.643  -8.682  1.00  0.00          H
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HETATM 6433  H2  SPC  4433      14.014  11.730  -9.786  1.00  0.00           H
HETATM 6434  O   SPC  4458      12.543  19.455 -12.043  1.00  0.00           O
HETATM 6435  H1  SPC  4458      13.536  19.454 -11.862  1.00  0.00           H
HETATM 6436  H2  SPC  4458      12.234  18.497 -12.139  1.00  0.00           H
HETATM 6437  O   SPC  4466      11.321  19.629 -17.203  1.00  0.00           O
HETATM 6438  H1  SPC  4466      11.356  19.814 -16.206  1.00  0.00           H
HETATM 6439  H2  SPC  4466      12.016  20.188 -17.657  1.00  0.00           H
HETATM 6440  O   SPC  4479      11.700  14.883 -14.414  1.00  0.00           O
HETATM 6441  H1  SPC  4479      11.579  15.620 -15.093  1.00  0.00           H
HETATM 6442  H2  SPC  4479      10.952  14.214 -14.534  1.00  0.00           H
HETATM 6443  O   SPC  4481      17.124   9.885 -13.184  1.00  0.00           O
HETATM 6444  H1  SPC  4481      17.028  10.642 -12.520  1.00  0.00           H
HETATM 6445  H2  SPC  4481      17.844   9.260 -12.841  1.00  0.00           H
HETATM 6446  O   SPC  4484      10.087  10.669 -14.283  1.00  0.00           O
HETATM 6447  H1  SPC  4484      10.955  10.545 -13.780  1.00  0.00           H
HETATM 6448  H2  SPC  4484      10.044  11.616 -14.626  1.00  0.00           H
HETATM 6449  O   SPC  4485      11.711  21.046  -9.926  1.00  0.00           O
HETATM 6450  H1  SPC  4485      11.879  20.492 -10.756  1.00  0.00           H
HETATM 6451  H2  SPC  4485      10.860  21.581 -10.067  1.00  0.00           H
HETATM 6452  O   SPC  4491      14.129  13.702 -13.660  1.00  0.00           O
HETATM 6453  H1  SPC  4491      14.284  12.781 -14.044  1.00  0.00           H
HETATM 6454  H2  SPC  4491      13.252  14.061 -14.010  1.00  0.00           H
HETATM 6455  O   SPC  4519      15.113  14.100 -11.218  1.00  0.00           O
HETATM 6456  H1  SPC  4519      14.785  14.017 -12.177  1.00  0.00           H
HETATM 6457  H2  SPC  4519      14.475  13.581 -10.619  1.00  0.00           H
HETATM 6458  O   SPC  4533      14.180  16.615 -10.764  1.00  0.00           O
HETATM 6459  H1  SPC  4533      13.262  16.661 -11.187  1.00  0.00           H
HETATM 6460  H2  SPC  4533      14.556  15.690 -10.928  1.00  0.00           H
HETATM 6461  O   SPC  4538      15.175  19.068 -11.209  1.00  0.00           O
HETATM 6462  H1  SPC  4538      14.830  18.130 -11.036  1.00  0.00           H
HETATM 6463  H2  SPC  4538      16.145  19.011 -11.454  1.00  0.00           H
HETATM 6464  O   SPC  4549       8.174  27.235  -8.228  1.00  0.00           O
HETATM 6465  H1  SPC  4549       8.867  27.450  -7.523  1.00  0.00           H
HETATM 6466  H2  SPC  4549       8.467  27.636  -9.099  1.00  0.00           H
HETATM 6467  O   SPC  4562      17.072  14.283  -9.228  1.00  0.00           O
HETATM 6468  H1  SPC  4562      17.774  13.557  -9.314  1.00  0.00           H
HETATM 6469  H2  SPC  4562      16.419  14.191  -9.993  1.00  0.00           H
HETATM 6470  O   SPC  4578       9.501  13.276 -15.139  1.00  0.00           O
HETATM 6471  H1  SPC  4578       9.458  13.863 -15.963  1.00  0.00           H
HETATM 6472  H2  SPC  4578       8.578  12.907 -14.970  1.00  0.00           H
HETATM 6473  O   SPC  4583      10.966  16.995 -16.130  1.00  0.00           O
HETATM 6474  H1  SPC  4583      10.356  17.439 -15.456  1.00  0.00           H
HETATM 6475  H2  SPC  4583      11.357  17.713 -16.718  1.00  0.00           H
HETATM 6476  O   SPC  4591      11.342  19.920 -14.523  1.00  0.00           O
HETATM 6477  H1  SPC  4591      11.822  19.936 -13.636  1.00  0.00           H
HETATM 6478  H2  SPC  4591      10.504  19.359 -14.420  1.00  0.00           H
HETATM 6479  O   SPC  4593      16.680  11.797 -11.325  1.00  0.00           O
HETATM 6480  H1  SPC  4593      16.036  11.249 -10.758  1.00  0.00           H
HETATM 6481  H2  SPC  4593      16.243  12.682 -11.528  1.00  0.00           H
HETATM 6482  O   SPC  4595       9.631  28.468   4.880  1.00  0.00           O
HETATM 6483  H1  SPC  4595      10.297  27.777   4.557  1.00  0.00           H
HETATM 6484  H2  SPC  4595       9.763  29.311   4.337  1.00  0.00           H
HETATM 6485  O   SPC  4603      15.023  29.553   3.154  1.00  0.00           O
HETATM 6486  H1  SPC  4603      15.011  28.757   3.778  1.00  0.00           H
HETATM 6487  H2  SPC  4603      15.923  29.988   3.207  1.00  0.00           H
HETATM 6488  O   SPC  4655      10.156  27.319   7.324  1.00  0.00           O
HETATM 6489  H1  SPC  4655      10.006  27.799   6.448  1.00  0.00           H
HETATM 6490  H2  SPC  4655       9.609  27.778   8.039  1.00  0.00           H
HETATM 6491  O   SPC  4664      11.103  28.214   1.813  1.00  0.00           O
HETATM 6492  H1  SPC  4664      11.236  27.560   2.573  1.00  0.00           H
HETATM 6493  H2  SPC  4664      10.658  29.044   2.181  1.00  0.00           H
HETATM 6494  O   SPC  4699      13.362  29.552   1.007  1.00  0.00           O
HETATM 6495  H1  SPC  4699      13.957  29.642   1.822  1.00  0.00           H
HETATM 6496  H2  SPC  4699      12.577  28.963   1.250  1.00  0.00           H
HETATM 6497  O   SPC  4716      10.539  28.792  -3.603  1.00  0.00           O
HETATM 6498  H1  SPC  4716      10.846  27.848  -3.415  1.00  0.00           H
HETATM 6499  H2  SPC  4716      10.939  29.401  -2.905  1.00  0.00           H
HETATM 6500  O   SPC  4729      11.605  29.928  -1.196  1.00  0.00           O
HETATM 6501  H1  SPC  4729      12.307  30.071  -0.485  1.00  0.00           H
HETATM 6502  H2  SPC  4729      10.718  30.262  -0.839  1.00  0.00           H
HETATM 6503  O   SPC  4733      10.130  30.486   3.081  1.00  0.00           O
HETATM 6504  H1  SPC  4733       9.262  30.873   2.731  1.00  0.00           H
HETATM 6505  H2  SPC  4733      10.852  31.175   2.983  1.00  0.00           H
HETATM 6506  O   SPC  A25J    -18.142   6.717   7.996  1.00  0.00           O
HETATM 6507  H1  SPC  A25J    -17.880   6.406   7.069  1.00  0.00           H
HETATM 6508  H2  SPC  A25J    -19.085   7.052   7.956  1.00  0.00           H
HETATM 6509  O   SPC  A25P    -18.345  -2.602   8.072  1.00  0.00           O
HETATM 6510  H1  SPC  A25P    -17.875  -3.434   7.752  1.00  0.00           H
HETATM 6511  H2  SPC  A25P    -17.878  -2.286   8.909  1.00  0.00           H
HETATM 6512  O   SPC  A25R    -17.541   2.564   7.371  1.00  0.00           O
HETATM 6513  H1  SPC  A25R    -16.698   2.878   7.815  1.00  0.00           H
HETATM 6514  H2  SPC  A25R    -17.572   2.949   6.439  1.00  0.00           H
HETATM 6515  O   SPC  A25S    -18.834  -2.926   3.343  1.00  0.00           O
HETATM 6516  H1  SPC  A25S    -19.807  -3.020   3.123  1.00  0.00           H
HETATM 6517  H2  SPC  A25S    -18.416  -2.273   2.695  1.00  0.00           H
HETATM 6518  O   SPC  A26K    -16.980  -4.104   4.946  1.00  0.00           O
HETATM 6519  H1  SPC  A26K    -16.113  -3.975   4.454  1.00  0.00           H
HETATM 6520  H2  SPC  A26K    -17.727  -3.714   4.384  1.00  0.00           H
HETATM 6521  O   SPC  A26V    -17.976   6.088   5.285  1.00  0.00           O
HETATM 6522  H1  SPC  A26V    -18.435   6.348   4.413  1.00  0.00           H
HETATM 6523  H2  SPC  A26V    -17.661   5.133   5.198  1.00  0.00           H
HETATM 6524  O   SPC  A278    -16.564  -4.652   7.528  1.00  0.00           O
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HETATM 6525  H1  SPC  A278     -15.596  -4.439   7.721  1.00  0.00          H
HETATM 6526  H2  SPC  A278     -16.725  -4.517   6.533  1.00  0.00          H
HETATM 6527  O   SPC  A27A     -17.033   3.499   4.782  1.00  0.00          O
HETATM 6528  H1  SPC  A27A     -16.399   3.908   4.111  1.00  0.00          H
HETATM 6529  H2  SPC  A27A     -17.019   2.498   4.655  1.00  0.00          H
HETATM 6530  O   SPC  A281    -14.511   4.702  12.630  1.00  0.00          O
HETATM 6531  H1  SPC  A281    -14.390   5.698  12.512  1.00  0.00          H
HETATM 6532  H2  SPC  A281    -14.263   4.457  13.580  1.00  0.00          H
HETATM 6533  O   SPC  A287     -8.741   8.941  13.373  1.00  0.00          O
HETATM 6534  H1  SPC  A287     -7.805   8.722  13.681  1.00  0.00          H
HETATM 6535  H2  SPC  A287     -8.673   9.507  12.535  1.00  0.00          H
HETATM 6536  O   SPC  A28N    -10.664   0.938  17.118  1.00  0.00          O
HETATM 6537  H1  SPC  A28N    -11.007   0.998  18.059  1.00  0.00          H
HETATM 6538  H2  SPC  A28N     -9.669   0.756  17.151  1.00  0.00          H
HETATM 6539  O   SPC  A291     -9.251   4.826  16.121  1.00  0.00          O
HETATM 6540  H1  SPC  A291     -9.516   4.456  15.224  1.00  0.00          H
HETATM 6541  H2  SPC  A291     -8.612   4.180  16.562  1.00  0.00          H
HETATM 6542  O   SPC  A298    -13.780   4.012  15.143  1.00  0.00          O
HETATM 6543  H1  SPC  A298    -13.262   3.146  15.162  1.00  0.00          H
HETATM 6544  H2  SPC  A298    -13.148   4.770  15.370  1.00  0.00          H
HETATM 6545  O   SPC  A29N    -18.206   0.573   9.114  1.00  0.00          O
HETATM 6546  H1  SPC  A29N    -18.049   1.326   8.456  1.00  0.00          H
HETATM 6547  H2  SPC  A29N    -18.456  -0.252   8.602  1.00  0.00          H
HETATM 6548  O   SPC  A2AC    -12.135   1.782  14.910  1.00  0.00          O
HETATM 6549  H1  SPC  A2AC    -11.558   2.404  14.362  1.00  0.00          H
HETATM 6550  H2  SPC  A2AC    -11.626   1.519  15.743  1.00  0.00          H
HETATM 6551  O   SPC  A2AJ    -17.803   5.870  10.655  1.00  0.00          O
HETATM 6552  H1  SPC  A2AJ    -17.434   6.727  11.018  1.00  0.00          H
HETATM 6553  H2  SPC  A2AJ    -17.955   5.979   9.664  1.00  0.00          H
HETATM 6554  O   SPC  A2AP    -11.856   5.946  15.462  1.00  0.00          O
HETATM 6555  H1  SPC  A2AP    -11.712   6.706  14.814  1.00  0.00          H
HETATM 6556  H2  SPC  A2AP    -10.972   5.703  15.878  1.00  0.00          H
HETATM 6557  O   SPC  A2BE    -17.633   0.989  11.792  1.00  0.00          O
HETATM 6558  H1  SPC  A2BE    -17.573   1.986  11.936  1.00  0.00          H
HETATM 6559  H2  SPC  A2BE    -17.895   0.814  10.830  1.00  0.00          H
HETATM 6560  O   SPC  A2BQ    -16.241   2.686  14.840  1.00  0.00          O
HETATM 6561  H1  SPC  A2BQ    -16.704   3.109  14.050  1.00  0.00          H
HETATM 6562  H2  SPC  A2BQ    -15.442   3.249  15.088  1.00  0.00          H
HETATM 6563  O   SPC  A2BS    -17.067   3.759  12.338  1.00  0.00          O
HETATM 6564  H1  SPC  A2BS    -16.089   4.017  12.351  1.00  0.00          H
HETATM 6565  H2  SPC  A2BS    -17.557   4.430  11.761  1.00  0.00          H
HETATM 6566  O   SPC  A2BV    -16.227   0.109  13.945  1.00  0.00          O
HETATM 6567  H1  SPC  A2BV    -16.791   0.259  13.117  1.00  0.00          H
HETATM 6568  H2  SPC  A2BV    -16.252   0.961  14.491  1.00  0.00          H
HETATM 6569  O   SPC  A2OW    -18.006   8.929   4.991  1.00  0.00          O
HETATM 6570  H1  SPC  A2OW    -18.396   9.038   4.059  1.00  0.00          H
HETATM 6571  H2  SPC  A2OW    -17.963   7.942   5.192  1.00  0.00          H
HETATM 6572  O   SPC  A2QF    -17.399  10.522   7.092  1.00  0.00          O
HETATM 6573  H1  SPC  A2QF    -17.579   9.904   6.308  1.00  0.00          H
HETATM 6574  H2  SPC  A2QF    -17.838  11.402   6.909  1.00  0.00          H
HETATM 6575  O   SPC  A2QT    -10.823  19.671   7.004  1.00  0.00          O
HETATM 6576  H1  SPC  A2QT    -10.209  20.205   7.603  1.00  0.00          H
HETATM 6577  H2  SPC  A2QT    -11.582  20.263   6.698  1.00  0.00          H
HETATM 6578  O   SPC  A2R4    -11.358   7.980  13.538  1.00  0.00          O
HETATM 6579  H1  SPC  A2R4    -10.352   8.056  13.510  1.00  0.00          H
HETATM 6580  H2  SPC  A2R4    -11.748   8.845  13.188  1.00  0.00          H
HETATM 6581  O   SPC  A2RI     -8.531  10.648  11.281  1.00  0.00          O
HETATM 6582  H1  SPC  A2RI     -9.309  10.903  10.689  1.00  0.00          H
HETATM 6583  H2  SPC  A2RI     -7.669  10.754  10.754  1.00  0.00          H
HETATM 6584  O   SPC  A2RJ    -10.879  11.684  10.298  1.00  0.00          O
HETATM 6585  H1  SPC  A2RJ    -10.696  12.676  10.337  1.00  0.00          H
HETATM 6586  H2  SPC  A2RJ    -11.742  11.532   9.794  1.00  0.00          H
HETATM 6587  O   SPC  A2RY    -16.717   8.848   9.164  1.00  0.00          O
HETATM 6588  H1  SPC  A2RY    -16.911   9.578   8.491  1.00  0.00          H
HETATM 6589  H2  SPC  A2RY    -17.088   7.984   8.801  1.00  0.00          H
HETATM 6590  O   SPC  A2S2    -14.711   9.551  10.936  1.00  0.00          O
HETATM 6591  H1  SPC  A2S2    -14.494   8.724  11.474  1.00  0.00          H
HETATM 6592  H2  SPC  A2S2    -15.511   9.347  10.350  1.00  0.00          H
HETATM 6593  O   SPC  A2S9    -10.241  14.355  10.764  1.00  0.00          O
HETATM 6594  H1  SPC  A2S9     -9.918  13.889  11.601  1.00  0.00          H
HETATM 6595  H2  SPC  A2S9     -9.723  15.216  10.660  1.00  0.00          H
HETATM 6596  O   SPC  A2T8    -12.045  15.297   8.846  1.00  0.00          O
HETATM 6597  H1  SPC  A2T8    -12.660  14.592   8.467  1.00  0.00          H
HETATM 6598  H2  SPC  A2T8    -11.525  14.897   9.613  1.00  0.00          H
HETATM 6599  O   SPC  A2TA    -10.304  10.954  14.520  1.00  0.00          O
HETATM 6600  H1  SPC  A2TA     -9.742  10.155  14.260  1.00  0.00          H
HETATM 6601  H2  SPC  A2TA    -11.220  10.840  14.116  1.00  0.00          H
HETATM 6602  O   SPC  A2TV    -12.231  10.344  12.424  1.00  0.00          O
HETATM 6603  H1  SPC  A2TV    -13.166  10.234  12.066  1.00  0.00          H
HETATM 6604  H2  SPC  A2TV    -11.672  10.811  11.725  1.00  0.00          H
HETATM 6605  O   SPC  A2UG    -13.575  13.282   7.741  1.00  0.00          O
HETATM 6606  H1  SPC  A2UG    -14.552  13.396   7.548  1.00  0.00          H
HETATM 6607  H2  SPC  A2UG    -13.449  12.419   8.256  1.00  0.00          H
HETATM 6608  O   SPC  A2UN     -9.240  12.816  12.816  1.00  0.00          O
HETATM 6609  H1  SPC  A2UN     -8.838  12.098  12.228  1.00  0.00          H
HETATM 6610  H2  SPC  A2UN     -9.748  12.358  13.559  1.00  0.00          H
HETATM 6611  O   SPC  A2V9    -10.330  17.252   8.141  1.00  0.00          O
HETATM 6612  H1  SPC  A2V9    -11.093  16.600   8.296  1.00  0.00          H
HETATM 6613  H2  SPC  A2V9    -10.700  18.093   7.717  1.00  0.00          H
HETATM 6614  O   SPC  A2W8    -13.237  11.007   9.163  1.00  0.00          O
HETATM 6615  H1  SPC  A2W8    -13.895  10.618   9.828  1.00  0.00          H
HETATM 6616  H2  SPC  A2W8    -12.829  10.244   8.643  1.00  0.00          H
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HETATM 6617  O   SPC  A4YB     2.474  12.573  10.850  1.00  0.00          O
HETATM 6618  H1  SPC  A4YB     1.519  12.862  11.022  1.00  0.00          H
HETATM 6619  H2  SPC  A4YB     2.470  11.907  10.093  1.00  0.00          H
HETATM 6620  O   SPC  A4YC    -9.812  18.379   4.800  1.00  0.00          O
HETATM 6621  H1  SPC  A4YC   -10.529  17.674   4.708  1.00  0.00          H
HETATM 6622  H2  SPC  A4YC   -10.026  18.941   5.611  1.00  0.00          H
HETATM 6623  O   SPC  A4YD    -9.909   7.958  -0.982  1.00  0.00          O
HETATM 6624  H1  SPC  A4YD    -9.763   7.149  -0.386  1.00  0.00          H
HETATM 6625  H2  SPC  A4YD   -10.856   8.280  -0.855  1.00  0.00          H
HETATM 6626  O   SPC  A4YE    -0.849   8.703   8.675  1.00  0.00          O
HETATM 6627  H1  SPC  A4YE    -1.601   9.116   8.160  1.00  0.00          H
HETATM 6628  H2  SPC  A4YE    -1.197   7.888   9.064  1.00  0.00          H
HETATM 6629  O   SPC  A4YF    -7.968   0.505  17.360  1.00  0.00          O
HETATM 6630  H1  SPC  A4YF    -7.144  -0.034  17.121  1.00  0.00          H
HETATM 6631  H2  SPC  A4YF    -7.718   1.485  17.348  1.00  0.00          H
HETATM 6632  O   SPC  A4YG     2.144  18.934  -3.864  1.00  0.00          O
HETATM 6633  H1  SPC  A4YG     2.792  18.254  -4.230  1.00  0.00          H
HETATM 6634  H2  SPC  A4YG     1.294  18.884  -4.402  1.00  0.00          H
HETATM 6635  O   SPC  A4YH     2.129  10.771   8.405  1.00  0.00          O
HETATM 6636  H1  SPC  A4YH     2.843  11.257   7.916  1.00  0.00          H
HETATM 6637  H2  SPC  A4YH     1.399  10.723   7.761  1.00  0.00          H
HETATM 6638  O   SPC  A4YJ     3.024   3.304  -3.183  1.00  0.00          O
HETATM 6639  H1  SPC  A4YJ     3.339   2.800  -3.993  1.00  0.00          H
HETATM 6640  H2  SPC  A4YJ     3.473   4.208  -3.173  1.00  0.00          H
HETATM 6641  O   SPC  A4YK   -13.578  -0.392  13.885  1.00  0.00          O
HETATM 6642  H1  SPC  A4YK   -13.079   0.427  14.203  1.00  0.00          H
HETATM 6643  H2  SPC  A4YK   -14.571  -0.212  13.976  1.00  0.00          H
HETATM 6644  O   SPC  A4YL     9.066  18.068   3.288  1.00  0.00          O
HETATM 6645  H1  SPC  A4YL     9.863  18.639   3.019  1.00  0.00          H
HETATM 6646  H2  SPC  A4YL     8.433  18.010   2.498  1.00  0.00          H
HETATM 6647  O   SPC  A4YM     4.318  16.366   7.853  1.00  0.00          O
HETATM 6648  H1  SPC  A4YM     4.202  15.967   6.940  1.00  0.00          H
HETATM 6649  H2  SPC  A4YM     3.777  15.816   8.513  1.00  0.00          H
HETATM 6650  O   SPC  A4YN   -12.247   5.568   5.676  1.00  0.00          O
HETATM 6651  H1  SPC  A4YN   -12.057   4.610   5.419  1.00  0.00          H
HETATM 6652  H2  SPC  A4YN   -12.102   6.157   4.876  1.00  0.00          H
HETATM 6653  O   SPC  A4YO     5.917   6.130   2.274  1.00  0.00          O
HETATM 6654  H1  SPC  A4YO     6.291   5.565   3.014  1.00  0.00          H
HETATM 6655  H2  SPC  A4YO     5.681   7.039   2.640  1.00  0.00          H
HETATM 6656  O   SPC  A4YP    -3.290   8.950  11.465  1.00  0.00          O
HETATM 6657  H1  SPC  A4YP    -3.128   7.975  11.662  1.00  0.00          H
HETATM 6658  H2  SPC  A4YP    -3.830   9.012  10.610  1.00  0.00          H
HETATM 6659  O   SPC  A4YQ     3.882  19.840  -1.886  1.00  0.00          O
HETATM 6660  H1  SPC  A4YQ     3.229  19.611  -2.622  1.00  0.00          H
HETATM 6661  H2  SPC  A4YQ     4.738  19.318  -2.032  1.00  0.00          H
HETATM 6662  O   SPC  A4YS     1.610  10.346  12.797  1.00  0.00          O
HETATM 6663  H1  SPC  A4YS     0.792  10.219  12.221  1.00  0.00          H
HETATM 6664  H2  SPC  A4YS     2.233  10.984  12.335  1.00  0.00          H
HETATM 6665  O   SPC  A4YT     4.655  20.994  -8.542  1.00  0.00          O
HETATM 6666  H1  SPC  A4YT     4.859  20.278  -9.223  1.00  0.00          H
HETATM 6667  H2  SPC  A4YT     3.657  21.005  -8.372  1.00  0.00          H
HETATM 6668  O   SPC  A4YU    -5.628  -0.790  16.823  1.00  0.00          O
HETATM 6669  H1  SPC  A4YU    -5.733  -1.694  17.264  1.00  0.00          H
HETATM 6670  H2  SPC  A4YU    -4.695  -0.448  17.016  1.00  0.00          H
HETATM 6671  O   SPC  A4YV    -1.059  22.575 -15.090  1.00  0.00          O
HETATM 6672  H1  SPC  A4YV    -1.236  21.596 -14.916  1.00  0.00          H
HETATM 6673  H2  SPC  A4YV    -0.599  22.647 -15.996  1.00  0.00          H
HETATM 6674  O   SPC  A4YY   -11.943   4.767  11.453  1.00  0.00          O
HETATM 6675  H1  SPC  A4YY   -12.037   5.434  10.703  1.00  0.00          H
HETATM 6676  H2  SPC  A4YY   -12.867   4.476  11.733  1.00  0.00          H
HETATM 6677  O   SPC  A4YZ     2.024   8.145   8.435  1.00  0.00          O
HETATM 6678  H1  SPC  A4YZ     2.792   7.653   8.763  1.00  0.00          H
HETATM 6679  H2  SPC  A4YZ     2.217   9.114   8.525  1.00  0.00          H
HETATM 6680  O   SPC  A4Z0     2.038  18.167   3.415  1.00  0.00          O
HETATM 6681  H1  SPC  A4Z0     1.061  18.076   3.175  1.00  0.00          H
HETATM 6682  H2  SPC  A4Z0     2.583  18.110   2.570  1.00  0.00          H
HETATM 6683  O   SPC  A4Z2    -4.562   8.916   9.117  1.00  0.00          O
HETATM 6684  H1  SPC  A4Z2    -3.954   9.314   8.415  1.00  0.00          H
HETATM 6685  H2  SPC  A4Z2    -5.007   8.109   8.719  1.00  0.00          H
HETATM 6686  O   SPC  A4Z3     7.159  18.589   1.467  1.00  0.00          O
HETATM 6687  H1  SPC  A4Z3     6.792  19.518   1.333  1.00  0.00          H
HETATM 6688  H2  SPC  A4Z3     7.089  18.089   0.583  1.00  0.00          H
HETATM 6689  O   SPC  A4Z5    -0.668  10.243  10.954  1.00  0.00          O
HETATM 6690  H1  SPC  A4Z5    -1.527   9.897  11.245  1.00  0.00          H
HETATM 6691  H2  SPC  A4Z5    -0.513   9.793  10.108  1.00  0.00          H
HETATM 6692  O   SPC  A4Z6   -13.700   7.297  12.160  1.00  0.00          O
HETATM 6693  H1  SPC  A4Z6   -13.373   7.073  11.228  1.00  0.00          H
HETATM 6694  H2  SPC  A4Z6   -12.899   7.384  12.768  1.00  0.00          H
HETATM 6695  O   SPC  A4Z7    -9.114  -1.199  19.176  1.00  0.00          O
HETATM 6696  H1  SPC  A4Z7    -9.622  -1.857  18.601  1.00  0.00          H
HETATM 6697  H2  SPC  A4Z7    -8.609  -0.571  18.568  1.00  0.00          H
HETATM 6698  O   SPC  A4Z8     5.057  20.958  -5.829  1.00  0.00          O
HETATM 6699  H1  SPC  A4Z8     4.793  21.805  -5.343  1.00  0.00          H
HETATM 6700  H2  SPC  A4Z8     4.856  21.068  -6.814  1.00  0.00          H
HETATM 6701  O   SPC  A4Z9     2.045  20.918  -7.780  1.00  0.00          O
HETATM 6702  H1  SPC  A4Z9     2.055  19.941  -7.530  1.00  0.00          H
HETATM 6703  H2  SPC  A4Z9     1.364  21.397  -7.207  1.00  0.00          H
HETATM 6704  O   SPC  A4ZA    -0.949  14.456   4.198  1.00  0.00          O
HETATM 6705  H1  SPC  A4ZA    -0.710  13.555   4.505  1.00  0.00          H
HETATM 6706  H2  SPC  A4ZA    -1.865  14.528   4.498  1.00  0.00          H
HETATM 6707  O   SPC  A4ZB     0.139  22.399  -6.417  1.00  0.00          O
HETATM 6708  H1  SPC  A4ZB    -0.765  22.243  -5.984  1.00  0.00          H
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HETATM 6709  H2  SPC  A4ZB       0.071  23.231  -6.986  1.00  0.00          H
HETATM 6710  O   SPC  A4ZC     -12.811   6.769   9.668  1.00  0.00          O
HETATM 6711  H1  SPC  A4ZC     -12.425   7.556   9.168  1.00  0.00          H
HETATM 6712  H2  SPC  A4ZC     -13.417   6.264   9.037  1.00  0.00          H
HETATM 6713  C1  MMA A 901      -7.564   7.200   7.611  1.00 38.63          C
HETATM 6714  C2  MMA A 901      -6.853   8.267   6.789  1.00 39.79          C
HETATM 6715  O1  MMA A 901      -8.676   7.773   8.242  1.00 38.68          O
HETATM 6716  C3  MMA A 901      -7.712   8.671   5.601  1.00 38.55          C
HETATM 6717  C7  MMA A 901      -9.217   6.907   9.229  1.00 39.29          C
HETATM 6718  O2  MMA A 901      -5.628   7.677   6.407  1.00 42.66          O
HETATM 6719  C4  MMA A 901      -8.187   7.464   4.809  1.00 38.26          C
HETATM 6720  O3  MMA A 901      -7.043   9.619   4.789  1.00 36.39          O
HETATM 6721  C5  MMA A 901      -8.770   6.388   5.739  1.00 38.04          C
HETATM 6722  O4  MMA A 901      -9.154   7.957   3.905  1.00 36.12          O
HETATM 6723  C6  MMA A 901      -8.983   5.080   5.004  1.00 39.02          C
HETATM 6724  O5  MMA A 901      -7.895   6.093   6.829  1.00 38.49          O
HETATM 6725  O6  MMA A 901      -7.795   4.761   4.320  1.00 37.72          O
HETATM 6726  H1  MMA A 901      -6.876   6.812   8.376  1.00  0.00          H
HETATM 6727  H2  MMA A 901      -6.694   9.156   7.415  1.00  0.00          H
HETATM 6728  H3  MMA A 901      -8.582   9.193   6.014  1.00  0.00          H
HETATM 6729  H71 MMA A 901      -9.932   7.481   9.819  1.00  0.00          H
HETATM 6730  H72 MMA A 901      -9.712   6.044   8.773  1.00  0.00          H
HETATM 6731  H73 MMA A 901      -8.426   6.550   9.901  1.00  0.00          H
HETATM 6732  HO2 MMA A 901      -5.089   8.293   5.879  1.00  0.00          H
HETATM 6733  H4  MMA A 901      -7.339   7.024   4.273  1.00  0.00          H
HETATM 6734  HO3 MMA A 901      -6.529   9.185   4.089  1.00  0.00          H
HETATM 6735  H5  MMA A 901      -9.734   6.734   6.136  1.00  0.00          H
HETATM 6736  HO4 MMA A 901      -9.678   7.255   3.461  1.00  0.00          H
HETATM 6737  H61 MMA A 901      -9.256   4.313   5.739  1.00  0.00          H
HETATM 6738  H62 MMA A 901      -9.821   5.196   4.308  1.00  0.00          H
HETATM 6739  HO6 MMA A 901      -7.912   3.922   3.845  1.00  0.00          H
HETATM 6740  PB  GDP A 904      -2.369   8.943   5.776  1.00 26.19          P
HETATM 6741  O1B GDP A 904      -3.588   8.640   4.876  1.00 27.84          O
HETATM 6742  O2B GDP A 904      -1.491   7.714   5.975  1.00 26.32          O1-
HETATM 6743  O3B GDP A 904      -2.694   9.671   7.088  1.00 26.19          O1-
HETATM 6744  O3A GDP A 904      -1.525  10.025   4.867  1.00 25.44          O
HETATM 6745  PA  GDP A 904      -0.082  10.682   5.196  1.00 25.23          P
HETATM 6746  O1A GDP A 904       0.605   9.841   6.261  1.00 25.43          O
HETATM 6747  O2A GDP A 904      -0.178  12.159   5.419  1.00 26.02          O1-
HETATM 6748  O5' GDP A 904       0.622  10.530   3.760  1.00 25.21          O
HETATM 6749  C5' GDP A 904       0.862   9.268   3.166  1.00 23.27          C
HETATM 6750  C4' GDP A 904       2.352   9.195   2.786  1.00 23.57          C
HETATM 6751  O4' GDP A 904       2.651  10.266   1.890  1.00 24.01          O
HETATM 6752  C3' GDP A 904       3.304   9.352   3.974  1.00 23.80          C
HETATM 6753  O3' GDP A 904       4.421   8.502   3.787  1.00 22.36          O
HETATM 6754  C2' GDP A 904       3.750  10.808   3.908  1.00 23.31          C
HETATM 6755  O2' GDP A 904       5.068  10.875   4.421  1.00 21.65          O
HETATM 6756  C1' GDP A 904       3.650  11.100   2.404  1.00 24.11          C
HETATM 6757  N9  GDP A 904       3.246  12.519   2.128  1.00 24.67          N
HETATM 6758  C8  GDP A 904       2.031  13.131   2.340  1.00 24.89          C
HETATM 6759  N7  GDP A 904       1.982  14.386   1.992  1.00 24.52          N
HETATM 6760  C5  GDP A 904       3.255  14.642   1.505  1.00 24.90          C
HETATM 6761  C6  GDP A 904       3.816  15.867   1.013  1.00 26.54          C
HETATM 6762  O6  GDP A 904       3.289  16.985   0.995  1.00 27.33          O
HETATM 6763  N1  GDP A 904       5.127  15.700   0.570  1.00 26.79          N
HETATM 6764  C2  GDP A 904       5.842  14.517   0.678  1.00 25.66          C
HETATM 6765  N2  GDP A 904       7.115  14.565   0.294  1.00 26.54          N
HETATM 6766  N3  GDP A 904       5.343  13.396   1.167  1.00 26.00          N
HETATM 6767  C4  GDP A 904       4.037  13.504   1.567  1.00 24.67          C
HETATM 6768 H5'1 GDP A 904       0.603   8.451   3.841  1.00  0.00          H
HETATM 6769 H5'2 GDP A 904       0.230   9.137   2.287  1.00  0.00          H
HETATM 6770  H4' GDP A 904       2.525   8.246   2.274  1.00  0.00          H
HETATM 6771  H3' GDP A 904       2.850   9.118   4.936  1.00  0.00          H
HETATM 6772  HO3 GDP A 904       5.165   9.110   3.850  1.00  0.00          H
HETATM 6773  H2' GDP A 904       3.065  11.446   4.466  1.00  0.00          H
HETATM 6774  HO2 GDP A 904       5.153  11.722   4.884  1.00  0.00          H
HETATM 6775  H1' GDP A 904       4.589  10.932   1.875  1.00  0.00          H
HETATM 6776  H8  GDP A 904       1.166  12.633   2.747  1.00  0.00          H
HETATM 6777  HN1 GDP A 904       5.601  16.510   0.150  1.00  0.00          H
HETATM 6778  HN2 GDP A 904       7.785  13.892   0.663  1.00  0.00          H
HETATM 6779  H1  GDP A 904       7.453  15.423  -0.139  1.00  0.00          H
HETATM 6780 MN1   MN A 909       0.415   7.809   7.002  1.00 24.77         Mn2+
HETATM 6781  C1  0MA   2      -3.546   6.673   4.062  0.00  0.00          C1+
HETATM 6782  C2  0MA   2      -2.268   6.744   3.239  0.00  0.00          C
HETATM 6783  O2  0MA   2      -1.717   5.470   3.426  0.00  0.00          O
HETATM 6784  C3  0MA   2      -2.555   7.031   1.764  0.00  0.00          C
HETATM 6785  O3  0MA   2      -1.362   6.790   1.068  0.00  0.00          O
HETATM 6786  C4  0MA   2      -3.722   6.152   1.335  0.00  0.00          C
HETATM 6787  O4  0MA   2      -4.078   6.320  -0.011  0.00  0.00          O
HETATM 6788  C5  0MA   2      -4.951   6.613   2.106  0.00  0.00          C
HETATM 6789  O5  0MA   2      -4.699   6.494   3.558  0.00  0.00          O
HETATM 6790  C6  0MA   2      -6.221   5.849   1.795  0.00  0.00          C
HETATM 6791  O6  0MA   2      -7.299   6.705   2.044  0.00  0.00          O
HETATM 6792  H1  0MA   2      -3.465   6.367   5.099  0.00  0.00          H
HETATM 6793  H2  0MA   2      -1.626   7.520   3.655  0.00  0.00          H
HETATM 6794  H2O 0MA   2      -0.805   5.563   3.776  0.00  0.00          H
HETATM 6795  H3  0MA   2      -2.871   8.083   1.660  0.00  0.00          H
HETATM 6796  H3O 0MA   2      -1.508   6.828   0.092  0.00  0.00          H
HETATM 6797  H4  0MA   2      -3.461   5.111   1.576  0.00  0.00          H
HETATM 6798  H4O 0MA   2      -3.259   6.306  -0.568  0.00  0.00          H
HETATM 6799  H5  0MA   2      -5.127   7.675   1.919  0.00  0.00          H
HETATM 6800  H61 0MA   2      -6.262   4.937   2.406  0.00  0.00          H
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HETATM 6801  H62 0MA     2      -6.161   5.568   0.737  0.00  0.00           H
HETATM 6802  H6O 0MA     2      -8.130   6.348   1.646  0.00  0.00           H
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(d) The Cartesian coordinates (in the PDB format) of the M06-2X:OPLS2005 optimized oxocarbenium ion intermediate **2A** (**WT_Mn**).

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REMARK 888
REMARK 888 WRITTEN BY MAESTRO (A PRODUCT OF SCHRODINGER, LLC)
TITLE     TS12 (WT_Mn)
MODEL        1
ATOM      1  CH3 ACE A 103      -7.073 -19.247 -19.446  1.00  0.00          C
ATOM      2  C   ACE A 103      -5.987 -18.209 -19.681  1.00  0.00          C
ATOM      3  O   ACE A 103      -5.286 -18.267 -20.692  1.00  0.00          O
ATOM      4 1H   ACE A 103      -8.053 -18.769 -19.438  1.00  0.00          H
ATOM      5 2H   ACE A 103      -7.062 -20.010 -20.224  1.00  0.00          H
ATOM      6 3H   ACE A 103      -6.931 -19.730 -18.479  1.00  0.00          H
ATOM      7  N   LYS A 104      -5.848 -17.263 -18.751  1.00 36.95          N
ATOM      8  CA  LYS A 104      -4.837 -16.218 -18.730  1.00 37.33          C
ATOM      9  C   LYS A 104      -4.817 -15.614 -17.327  1.00 36.73          C
ATOM     10  O   LYS A 104      -5.646 -14.742 -17.038  1.00 37.03          O
ATOM     11  CB  LYS A 104      -5.121 -15.131 -19.804  1.00 38.20          C
ATOM     12  CG  LYS A 104      -4.012 -14.058 -19.931  1.00 40.08          C
ATOM     13  CD  LYS A 104      -4.497 -12.590 -19.902  1.00 40.86          C
ATOM     14  CE  LYS A 104      -4.389 -11.887 -18.531  1.00 41.37          C
ATOM     15  NZ  LYS A 104      -5.543 -12.128 -17.647  1.00 44.72          N1+
ATOM     16  HA  LYS A 104      -3.868 -16.677 -18.933  1.00  0.00          H
ATOM     17  HB2 LYS A 104      -5.246 -15.608 -20.777  1.00  0.00          H
ATOM     18  HB3 LYS A 104      -6.086 -14.665 -19.598  1.00  0.00          H
ATOM     19  HG2 LYS A 104      -3.225 -14.206 -19.188  1.00  0.00          H
ATOM     20  HG3 LYS A 104      -3.510 -14.231 -20.884  1.00  0.00          H
ATOM     21  HD2 LYS A 104      -3.846 -12.033 -20.578  1.00  0.00          H
ATOM     22  HD3 LYS A 104      -5.496 -12.487 -20.331  1.00  0.00          H
ATOM     23  HE2 LYS A 104      -3.466 -12.168 -18.028  1.00  0.00          H
ATOM     24  HE3 LYS A 104      -4.322 -10.809 -18.684  1.00  0.00          H
ATOM     25  HZ1 LYS A 104      -5.378 -11.653 -16.759  1.00  0.00          H
ATOM     26  HZ2 LYS A 104      -6.386 -11.727 -18.048  1.00  0.00          H
ATOM     27  HZ3 LYS A 104      -5.679 -13.123 -17.457  1.00  0.00          H
ATOM     28  H2  LYS A 104      -6.426 -17.369 -17.896  1.00  0.00          H
ATOM     29  N   THR A 105      -3.824 -15.955 -16.495  1.00 34.30          N
ATOM     30  CA  THR A 105      -3.615 -15.238 -15.242  1.00 33.23          C
ATOM     31  C   THR A 105      -2.977 -13.879 -15.591  1.00 32.56          C
ATOM     32  O   THR A 105      -2.174 -13.767 -16.522  1.00 32.13          O
ATOM     33  CB  THR A 105      -2.761 -16.050 -14.222  1.00 32.21          C
ATOM     34  OG1 THR A 105      -1.364 -15.789 -14.199  1.00 35.33          O
ATOM     35  CG2 THR A 105      -2.996 -17.567 -14.251  1.00 33.79          C
ATOM     36  H   THR A 105      -3.103 -16.599 -16.786  1.00  0.00          H
ATOM     37  HA  THR A 105      -4.597 -15.085 -14.793  1.00  0.00          H
ATOM     38  HB  THR A 105      -3.112 -15.704 -13.250  1.00  0.00          H
ATOM     39  HG1 THR A 105      -0.931 -16.174 -14.990  1.00  0.00          H
ATOM     40 HG21 THR A 105      -2.530 -18.052 -13.393  1.00  0.00          H
ATOM     41 HG22 THR A 105      -4.062 -17.797 -14.225  1.00  0.00          H
ATOM     42 HG23 THR A 105      -2.577 -18.019 -15.151  1.00  0.00          H
ATOM     43  N   THR A 106      -3.328 -12.826 -14.857  1.00 30.71          N
ATOM     44  CA  THR A 106      -2.700 -11.513 -14.987  1.00 29.71          C
ATOM     45  C   THR A 106      -1.382 -11.472 -14.166  1.00 28.38          C
ATOM     46  O   THR A 106      -0.628 -10.503 -14.253  1.00 26.84          O
ATOM     47  CB  THR A 106      -3.744 -10.442 -14.581  1.00 29.60          C
ATOM     48  OG1 THR A 106      -4.835 -10.514 -15.496  1.00 29.62          O
ATOM     49  CG2 THR A 106      -3.250  -8.990 -14.682  1.00 29.22          C
ATOM     50  H   THR A 106      -3.963 -13.005 -14.062  1.00  0.00          H
ATOM     51  HA  THR A 106      -2.415 -11.328 -16.024  1.00  0.00          H
ATOM     52  HB  THR A 106      -4.111 -10.643 -13.575  1.00  0.00          H
ATOM     53  HG1 THR A 106      -5.364  -9.725 -15.373  1.00  0.00          H
ATOM     54 HG21 THR A 106      -4.045  -8.275 -14.482  1.00  0.00          H
ATOM     55 HG22 THR A 106      -2.450  -8.777 -13.975  1.00  0.00          H
ATOM     56 HG23 THR A 106      -2.865  -8.770 -15.672  1.00  0.00          H
ATOM     57  N   MET A 107      -1.015 -12.574 -13.483  1.00 27.33          N
ATOM     58  CA  MET A 107       0.317 -12.781 -12.913  1.00 27.87          C
ATOM     59  C   MET A 107       1.352 -13.006 -14.026  1.00 27.83          C
ATOM     60  O   MET A 107       2.527 -12.727 -13.818  1.00 28.87          O
ATOM     61  CB  MET A 107       0.332 -14.020 -11.985  1.00 25.92          C
ATOM     62  CG  MET A 107       1.123 -13.818 -10.680  1.00 26.21          C
ATOM     63  SD  MET A 107       2.936 -13.713 -10.776  1.00 27.25          S
ATOM     64  CE  MET A 107       3.440 -15.156  -9.793  1.00 24.40          C
ATOM     65  H   MET A 107      -1.625 -13.380 -13.551  1.00  0.00          H
ATOM     66  HA  MET A 107       0.590 -11.890 -12.347  1.00  0.00          H
ATOM     67  HB2 MET A 107      -0.690 -14.271 -11.713  1.00  0.00          H
ATOM     68  HB3 MET A 107       0.698 -14.909 -12.504  1.00  0.00          H
ATOM     69  HG2 MET A 107       0.754 -12.933 -10.162  1.00  0.00          H
ATOM     70  HG3 MET A 107       0.904 -14.662 -10.037  1.00  0.00          H
ATOM     71  HE1 MET A 107       4.518 -15.293  -9.854  1.00  0.00          H
ATOM     72  HE2 MET A 107       3.179 -15.027  -8.744  1.00  0.00          H
ATOM     73  HE3 MET A 107       2.967 -16.067 -10.160  1.00  0.00          H
ATOM     74  N   ASP A 108       0.960 -13.476 -15.216  1.00 28.14          N
ATOM     75  CA  ASP A 108       1.891 -13.843 -16.294  1.00 28.57          C
ATOM     76  C   ASP A 108       2.498 -12.652 -17.054  1.00 28.39          C
ATOM     77  O   ASP A 108       3.269 -12.830 -17.996  1.00 28.31          O
ATOM     78  CB  ASP A 108       1.264 -14.889 -17.237  1.00 29.94          C
ATOM     79  CG  ASP A 108       1.173 -16.235 -16.530  1.00 31.66          C
ATOM     80  OD1 ASP A 108       2.261 -16.769 -16.207  1.00 31.67          O
ATOM     81  OD2 ASP A 108       0.030 -16.651 -16.228  1.00 33.98          O1-
ATOM     82  H   ASP A 108      -0.007 -13.761 -15.333  1.00  0.00          H
ATOM     83  HA  ASP A 108       2.752 -14.300 -15.821  1.00  0.00          H
ATOM     84  HB2 ASP A 108       0.279 -14.575 -17.580  1.00  0.00          H
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ATOM     85  HB3 ASP A 108       1.877 -15.037 -18.126  1.00  0.00           H
ATOM     86  N   TYR A 109       2.259 -11.428 -16.571  1.00 29.03           N
ATOM     87  CA  TYR A 109       3.067 -10.249 -16.879  1.00 29.95           C
ATOM     88  C   TYR A 109       4.203 -10.066 -15.839  1.00 29.37           C
ATOM     89  O   TYR A 109       4.986  -9.125 -15.960  1.00 30.93           O
ATOM     90  CB  TYR A 109       2.155  -9.004 -16.826  1.00 32.34           C
ATOM     91  CG  TYR A 109       0.970  -9.026 -17.782  1.00 34.77           C
ATOM     92  CD1 TYR A 109      -0.346  -8.917 -17.284  1.00 34.89           C
ATOM     93  CD2 TYR A 109       1.174  -9.174 -19.171  1.00 35.80           C
ATOM     94  CE1 TYR A 109      -1.445  -8.989 -18.163  1.00 34.99           C
ATOM     95  CE2 TYR A 109       0.073  -9.244 -20.049  1.00 35.75           C
ATOM     96  CZ  TYR A 109      -1.238  -9.164 -19.541  1.00 36.34           C
ATOM     97  OH  TYR A 109      -2.317  -9.266 -20.368  1.00 36.60           O
ATOM     98  H   TYR A 109       1.580 -11.365 -15.826  1.00  0.00           H
ATOM     99  HA  TYR A 109       3.521 -10.332 -17.868  1.00  0.00           H
ATOM    100  HB2 TYR A 109       1.787  -8.860 -15.809  1.00  0.00           H
ATOM    101  HB3 TYR A 109       2.746  -8.117 -17.058  1.00  0.00           H
ATOM    102  HD1 TYR A 109      -0.521  -8.801 -16.223  1.00  0.00           H
ATOM    103  HD2 TYR A 109       2.174  -9.261 -19.569  1.00  0.00           H
ATOM    104  HE1 TYR A 109      -2.454  -8.923 -17.789  1.00  0.00           H
ATOM    105  HE2 TYR A 109       0.248  -9.379 -21.106  1.00  0.00           H
ATOM    106  HH  TYR A 109      -2.094  -9.265 -21.288  1.00  0.00           H
ATOM    107  N   ILE A 110       4.287 -10.931 -14.815  1.00 28.23           N
ATOM    108  CA  ILE A 110       5.174 -10.860 -13.653  1.00 27.12           C
ATOM    109  C   ILE A 110       5.956 -12.177 -13.455  1.00 28.39           C
ATOM    110  O   ILE A 110       7.111 -12.106 -13.019  1.00 27.18           O
ATOM    111  CB  ILE A 110       4.382 -10.431 -12.376  1.00 26.29           C
ATOM    112  CG1 ILE A 110       3.594  -9.114 -12.560  1.00 26.10           C
ATOM    113  CG2 ILE A 110       5.269 -10.332 -11.119  1.00 24.77           C
ATOM    114  CD1 ILE A 110       2.111  -9.326 -12.898  1.00 26.96           C
ATOM    115  H   ILE A 110       3.575 -11.655 -14.763  1.00  0.00           H
ATOM    116  HA  ILE A 110       5.928 -10.094 -13.842  1.00  0.00           H
ATOM    117  HB  ILE A 110       3.659 -11.213 -12.147  1.00  0.00           H
ATOM    118 HG12 ILE A 110       3.633  -8.542 -11.635  1.00  0.00           H
ATOM    119 HG13 ILE A 110       4.070  -8.482 -13.311  1.00  0.00           H
ATOM    120 HG21 ILE A 110       4.697  -9.996 -10.254  1.00  0.00           H
ATOM    121 HG22 ILE A 110       5.694 -11.296 -10.842  1.00  0.00           H
ATOM    122 HG23 ILE A 110       6.089  -9.633 -11.271  1.00  0.00           H
ATOM    123 HD11 ILE A 110       1.610  -8.386 -13.124  1.00  0.00           H
ATOM    124 HD12 ILE A 110       1.980  -9.976 -13.760  1.00  0.00           H
ATOM    125 HD13 ILE A 110       1.583  -9.787 -12.063  1.00  0.00           H
ATOM    126  N   THR A 111       5.368 -13.351 -13.762  1.00 28.11           N
ATOM    127  CA  THR A 111       5.938 -14.705 -13.623  1.00 29.58           C
ATOM    128  C   THR A 111       7.457 -14.895 -13.876  1.00 30.49           C
ATOM    129  O   THR A 111       8.098 -15.513 -13.021  1.00 30.80           O
ATOM    130  CB  THR A 111       5.031 -15.829 -14.202  1.00 29.32           C
ATOM    131  OG1 THR A 111       4.733 -15.626 -15.565  1.00 32.94           O
ATOM    132  CG2 THR A 111       3.736 -16.047 -13.413  1.00 28.93           C
ATOM    133  H   THR A 111       4.399 -13.326 -14.065  1.00  0.00           H
ATOM    134  HA  THR A 111       5.870 -14.849 -12.544  1.00  0.00           H
ATOM    135  HB  THR A 111       5.580 -16.772 -14.151  1.00  0.00           H
ATOM    136  HG1 THR A 111       3.925 -16.116 -15.794  1.00  0.00           H
ATOM    137 HG21 THR A 111       3.171 -16.894 -13.804  1.00  0.00           H
ATOM    138 HG22 THR A 111       3.946 -16.262 -12.367  1.00  0.00           H
ATOM    139 HG23 THR A 111       3.083 -15.181 -13.453  1.00  0.00           H
ATOM    140  N   PRO A 112       8.089 -14.331 -14.939  1.00 32.29           N
ATOM    141  CA  PRO A 112       9.557 -14.266 -15.086  1.00 33.46           C
ATOM    142  C   PRO A 112      10.357 -13.805 -13.847  1.00 35.96           C
ATOM    143  O   PRO A 112      11.382 -14.405 -13.531  1.00 35.45           O
ATOM    144  CB  PRO A 112       9.799 -13.319 -16.270  1.00 33.51           C
ATOM    145  CG  PRO A 112       8.556 -13.467 -17.129  1.00 31.85           C
ATOM    146  CD  PRO A 112       7.437 -13.788 -16.138  1.00 31.36           C
ATOM    147  HA  PRO A 112       9.891 -15.270 -15.353  1.00  0.00           H
ATOM    148  HB2 PRO A 112       9.877 -12.284 -15.933  1.00  0.00           H
ATOM    149  HB3 PRO A 112      10.714 -13.558 -16.813  1.00  0.00           H
ATOM    150  HG2 PRO A 112       8.343 -12.584 -17.733  1.00  0.00           H
ATOM    151  HG3 PRO A 112       8.684 -14.308 -17.812  1.00  0.00           H
ATOM    152  HD2 PRO A 112       6.889 -12.876 -15.912  1.00  0.00           H
ATOM    153  HD3 PRO A 112       6.734 -14.495 -16.578  1.00  0.00           H
ATOM    154  N   SER A 113       9.885 -12.792 -13.103  1.00 36.66           N
ATOM    155  CA  SER A 113      10.554 -12.299 -11.890  1.00 35.89           C
ATOM    156  C   SER A 113      10.359 -13.249 -10.682  1.00 36.89           C
ATOM    157  O   SER A 113      11.084 -13.151  -9.693  1.00 37.22           O
ATOM    158  CB  SER A 113      10.077 -10.853 -11.595  1.00 35.80           C
ATOM    159  OG  SER A 113       8.717 -10.723 -11.199  1.00 33.01           O
ATOM    160  H   SER A 113       8.981 -12.396 -13.341  1.00  0.00           H
ATOM    161  HA  SER A 113      11.627 -12.253 -12.085  1.00  0.00           H
ATOM    162  HB2 SER A 113      10.697 -10.428 -10.802  1.00  0.00           H
ATOM    163  HB3 SER A 113      10.252 -10.225 -12.471  1.00  0.00           H
ATOM    164  HG  SER A 113       8.154 -11.139 -11.853  1.00  0.00           H
ATOM    165  N   PHE A 114       9.439 -14.217 -10.792  1.00 37.03           N
ATOM    166  CA  PHE A 114       9.173 -15.276  -9.822  1.00 38.15           C
ATOM    167  C   PHE A 114       9.865 -16.594 -10.213  1.00 40.29           C
ATOM    168  O   PHE A 114       9.690 -17.594  -9.515  1.00 41.86           O
ATOM    169  CB  PHE A 114       7.644 -15.493  -9.714  1.00 37.24           C
ATOM    170  CG  PHE A 114       7.011 -14.617  -8.655  1.00 37.59           C
ATOM    171  CD1 PHE A 114       6.921 -13.224  -8.854  1.00 37.08           C
ATOM    172  CD2 PHE A 114       6.538 -15.191  -7.457  1.00 36.59           C
ATOM    173  CE1 PHE A 114       6.385 -12.407  -7.845  1.00 37.47           C
ATOM    174  CE2 PHE A 114       6.007 -14.373  -6.447  1.00 35.73           C
ATOM    175  CZ  PHE A 114       5.943 -12.985  -6.642  1.00 36.89           C
ATOM    176  H   PHE A 114       8.929 -14.282 -11.666  1.00  0.00           H
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ATOM    177  HA  PHE A 114       9.564 -15.005  -8.838  1.00  0.00           H
ATOM    178  HB2 PHE A 114       7.146 -15.301 -10.661  1.00  0.00           H
ATOM    179  HB3 PHE A 114       7.392 -16.527  -9.477  1.00  0.00           H
ATOM    180  HD1 PHE A 114       7.271 -12.776  -9.773  1.00  0.00           H
ATOM    181  HD2 PHE A 114       6.579 -16.258  -7.300  1.00  0.00           H
ATOM    182  HE1 PHE A 114       6.315 -11.340  -7.994  1.00  0.00           H
ATOM    183  HE2 PHE A 114       5.659 -14.803  -5.520  1.00  0.00           H
ATOM    184  HZ  PHE A 114       5.548 -12.364  -5.859  1.00  0.00           H
ATOM    185  N   ALA A 115      10.686 -16.612 -11.275  1.00 -1.00           N
ATOM    186  CA  ALA A 115      11.513 -17.761 -11.657  1.00 -1.00           C
ATOM    187  C   ALA A 115      12.817 -17.816 -10.834  1.00 -1.00           C
ATOM    188  O   ALA A 115      13.480 -18.848 -10.791  1.00 -1.00           O
ATOM    189  CB  ALA A 115      11.897 -17.614 -13.138  1.00 -1.00           C
ATOM    190  H   ALA A 115      10.749 -15.778 -11.847  1.00 -1.00           H
ATOM    191  HA  ALA A 115      10.959 -18.691 -11.516  1.00 -1.00           H
ATOM    192  HB1 ALA A 115      12.445 -18.491 -13.486  1.00 -1.00           H
ATOM    193  HB2 ALA A 115      11.013 -17.512 -13.767  1.00 -1.00           H
ATOM    194  HB3 ALA A 115      12.532 -16.745 -13.311  1.00 -1.00           H
ATOM    195  N   ASN A 116      13.162 -16.724 -10.141  1.00 -1.00           N
ATOM    196  CA  ASN A 116      14.372 -16.477  -9.339  1.00 -1.00           C
ATOM    197  C   ASN A 116      14.371 -17.250  -7.988  1.00 -1.00           C
ATOM    198  O   ASN A 116      15.002 -16.838  -7.009  1.00 -1.00           O
ATOM    199  CB  ASN A 116      14.410 -14.941  -9.130  1.00 -1.00           C
ATOM    200  CG  ASN A 116      15.693 -14.385  -8.508  1.00 -1.00           C
ATOM    201  OD1 ASN A 116      16.786 -14.575  -9.028  1.00 -1.00           O
ATOM    202  ND2 ASN A 116      15.569 -13.708  -7.374  1.00 -1.00           N
ATOM    203  H   ASN A 116      12.516 -15.952 -10.220  1.00 -1.00           H
ATOM    204  HA  ASN A 116      15.247 -16.792  -9.911  1.00 -1.00           H
ATOM    205  HB2 ASN A 116      14.315 -14.446 -10.098  1.00 -1.00           H
ATOM    206  HB3 ASN A 116      13.541 -14.620  -8.556  1.00 -1.00           H
ATOM    207 HD21 ASN A 116      16.378 -13.274  -6.948  1.00 -1.00           H
ATOM    208 HD22 ASN A 116      14.645 -13.637  -6.939  1.00 -1.00           H
ATOM    209  N   LYS A 117      13.674 -18.394  -7.927  1.00 -1.00           N
ATOM    210  CA  LYS A 117      13.443 -19.278  -6.778  1.00 -1.00           C
ATOM    211  C   LYS A 117      14.719 -20.021  -6.321  1.00 -1.00           C
ATOM    212  O   LYS A 117      14.797 -21.249  -6.311  1.00 -1.00           O
ATOM    213  CB  LYS A 117      12.303 -20.257  -7.142  1.00 -1.00           C
ATOM    214  CG  LYS A 117      10.907 -19.614  -7.046  1.00 -1.00           C
ATOM    215  CD  LYS A 117       9.813 -20.492  -7.684  1.00 -1.00           C
ATOM    216  CE  LYS A 117       8.363 -20.102  -7.336  1.00 -1.00           C
ATOM    217  NZ  LYS A 117       8.065 -18.698  -7.637  1.00 -1.00          N1+
ATOM    218  H   LYS A 117      13.323 -18.719  -8.821  1.00 -1.00           H
ATOM    219  HA  LYS A 117      13.128 -18.667  -5.934  1.00 -1.00           H
ATOM    220  HB2 LYS A 117      12.475 -20.669  -8.138  1.00 -1.00           H
ATOM    221  HB3 LYS A 117      12.308 -21.111  -6.462  1.00 -1.00           H
ATOM    222  HG2 LYS A 117      10.694 -19.432  -5.995  1.00 -1.00           H
ATOM    223  HG3 LYS A 117      10.922 -18.633  -7.519  1.00 -1.00           H
ATOM    224  HD2 LYS A 117       9.944 -20.486  -8.767  1.00 -1.00           H
ATOM    225  HD3 LYS A 117       9.962 -21.528  -7.374  1.00 -1.00           H
ATOM    226  HE2 LYS A 117       7.676 -20.720  -7.916  1.00 -1.00           H
ATOM    227  HE3 LYS A 117       8.136 -20.297  -6.289  1.00 -1.00           H
ATOM    228  HZ1 LYS A 117       7.038 -18.604  -7.813  1.00 -1.00           H
ATOM    229  HZ2 LYS A 117       8.274 -18.102  -6.837  1.00 -1.00           H
ATOM    230  HZ3 LYS A 117       8.571 -18.366  -8.453  1.00 -1.00           H
ATOM    231  N   ALA A 118      15.735 -19.237  -5.963  1.00 -1.00           N
ATOM    232  CA  ALA A 118      17.001 -19.631  -5.364  1.00 -1.00           C
ATOM    233  C   ALA A 118      17.640 -18.457  -4.609  1.00 -1.00           C
ATOM    234  O   ALA A 118      18.327 -18.669  -3.612  1.00 -1.00           O
ATOM    235  CB  ALA A 118      17.944 -20.231  -6.419  1.00 -1.00           C
ATOM    236  H   ALA A 118      15.543 -18.248  -6.087  1.00 -1.00           H
ATOM    237  HA  ALA A 118      16.786 -20.401  -4.620  1.00 -1.00           H
ATOM    238  HB1 ALA A 118      18.896 -20.520  -5.971  1.00 -1.00           H
ATOM    239  HB2 ALA A 118      17.512 -21.125  -6.871  1.00 -1.00           H
ATOM    240  HB3 ALA A 118      18.153 -19.520  -7.218  1.00 -1.00           H
ATOM    241  N   GLY A 119      17.410 -17.214  -5.056  1.00 49.69           N
ATOM    242  CA  GLY A 119      18.046 -16.013  -4.521  1.00 48.49           C
ATOM    243  C   GLY A 119      17.032 -15.050  -3.902  1.00 47.46           C
ATOM    244  O   GLY A 119      15.839 -15.353  -3.813  1.00 48.38           O
ATOM    245  H   GLY A 119      16.807 -17.084  -5.860  1.00 -1.00           H
ATOM    246  HA2 GLY A 119      18.817 -16.244  -3.785  1.00  0.00           H
ATOM    247  HA3 GLY A 119      18.544 -15.506  -5.349  1.00  0.00           H
ATOM    248  N   LYS A 120      17.512 -13.874  -3.478  1.00 45.71           N
ATOM    249  CA  LYS A 120      16.677 -12.703  -3.200  1.00 42.69           C
ATOM    250  C   LYS A 120      16.312 -12.080  -4.565  1.00 40.13           C
ATOM    251  O   LYS A 120      17.155 -12.119  -5.468  1.00 39.70           O
ATOM    252  CB  LYS A 120      17.514 -11.623  -2.461  1.00 44.31           C
ATOM    253  CG  LYS A 120      17.862 -11.867  -0.978  1.00 45.11           C
ATOM    254  CD  LYS A 120      18.779 -10.736  -0.449  1.00 45.84           C
ATOM    255  CE  LYS A 120      18.934 -10.644   1.084  1.00 46.18           C
ATOM    256  NZ  LYS A 120      17.851  -9.870   1.705  1.00 44.91          N1+
ATOM    257  H   LYS A 120      18.480 -13.677  -3.679  1.00  0.00           H
ATOM    258  HA  LYS A 120      15.793 -12.983  -2.624  1.00  0.00           H
ATOM    259  HB2 LYS A 120      18.432 -11.433  -3.021  1.00  0.00           H
ATOM    260  HB3 LYS A 120      16.961 -10.680  -2.499  1.00  0.00           H
ATOM    261  HG2 LYS A 120      16.943 -11.923  -0.395  1.00  0.00           H
ATOM    262  HG3 LYS A 120      18.356 -12.832  -0.857  1.00  0.00           H
ATOM    263  HD2 LYS A 120      19.768 -10.883  -0.886  1.00  0.00           H
ATOM    264  HD3 LYS A 120      18.442  -9.770  -0.831  1.00  0.00           H
ATOM    265  HE2 LYS A 120      18.981 -11.635   1.537  1.00  0.00           H
ATOM    266  HE3 LYS A 120      19.870 -10.140   1.328  1.00  0.00           H
ATOM    267  HZ1 LYS A 120      17.284 -10.498   2.318  1.00  0.00           H
ATOM    268  HZ2 LYS A 120      18.157  -9.060   2.242  1.00  0.00           H
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ATOM    269  HZ3 LYS A 120      17.176  -9.566   1.017  1.00  0.00           H
ATOM    270  N   PRO A 121      15.127 -11.460  -4.730  1.00 37.16           N
ATOM    271  CA  PRO A 121      14.872 -10.563  -5.863  1.00 35.52           C
ATOM    272  C   PRO A 121      15.552  -9.201  -5.605  1.00 33.34           C
ATOM    273  O   PRO A 121      16.075  -8.956  -4.513  1.00 31.34           O
ATOM    274  CB  PRO A 121      13.346 -10.428  -5.887  1.00 35.26           C
ATOM    275  CG  PRO A 121      12.923 -10.591  -4.433  1.00 37.08           C
ATOM    276  CD  PRO A 121      13.971 -11.535  -3.833  1.00 36.33           C
ATOM    277  HA  PRO A 121      15.236 -10.977  -6.805  1.00  0.00           H
ATOM    278  HB2 PRO A 121      13.006  -9.488  -6.319  1.00  0.00           H
ATOM    279  HB3 PRO A 121      12.918 -11.233  -6.486  1.00  0.00           H
ATOM    280  HG2 PRO A 121      12.974  -9.620  -3.940  1.00  0.00           H
ATOM    281  HG3 PRO A 121      11.904 -10.966  -4.325  1.00  0.00           H
ATOM    282  HD2 PRO A 121      14.222 -11.236  -2.814  1.00  0.00           H
ATOM    283  HD3 PRO A 121      13.593 -12.558  -3.808  1.00  0.00           H
ATOM    284  N   LYS A 122      15.507  -8.282  -6.579  1.00 31.90           N
ATOM    285  CA  LYS A 122      15.881  -6.891  -6.339  1.00 31.10           C
ATOM    286  C   LYS A 122      14.691  -6.255  -5.595  1.00 29.95           C
ATOM    287  O   LYS A 122      13.657  -5.973  -6.200  1.00 31.41           O
ATOM    288  CB  LYS A 122      16.133  -6.148  -7.675  1.00 33.97           C
ATOM    289  CG  LYS A 122      17.145  -6.832  -8.617  1.00 35.41           C
ATOM    290  CD  LYS A 122      17.778  -5.893  -9.670  1.00 40.19           C
ATOM    291  CE  LYS A 122      16.957  -5.626 -10.951  1.00 42.24           C
ATOM    292  NZ  LYS A 122      15.739  -4.841 -10.709  1.00 43.94           N1+
ATOM    293  H   LYS A 122      15.028  -8.495  -7.442  1.00  0.00           H
ATOM    294  HA  LYS A 122      16.785  -6.836  -5.728  1.00  0.00           H
ATOM    295  HB2 LYS A 122      15.198  -5.995  -8.207  1.00  0.00           H
ATOM    296  HB3 LYS A 122      16.505  -5.152  -7.427  1.00  0.00           H
ATOM    297  HG2 LYS A 122      17.955  -7.230  -8.004  1.00  0.00           H
ATOM    298  HG3 LYS A 122      16.688  -7.695  -9.104  1.00  0.00           H
ATOM    299  HD2 LYS A 122      18.083  -4.954  -9.205  1.00  0.00           H
ATOM    300  HD3 LYS A 122      18.712  -6.357  -9.990  1.00  0.00           H
ATOM    301  HE2 LYS A 122      17.575  -5.068 -11.656  1.00  0.00           H
ATOM    302  HE3 LYS A 122      16.681  -6.561 -11.441  1.00  0.00           H
ATOM    303  HZ1 LYS A 122      15.384  -4.434 -11.559  1.00  0.00           H
ATOM    304  HZ2 LYS A 122      15.007  -5.518 -10.399  1.00  0.00           H
ATOM    305  HZ3 LYS A 122      15.908  -4.112 -10.022  1.00  0.00           H
ATOM    306  N   ALA A 123      14.827  -6.057  -4.285  1.00 25.55           N
ATOM    307  CA  ALA A 123      13.825  -5.469  -3.407  1.00 25.13           C
ATOM    308  C   ALA A 123      14.481  -4.395  -2.544  1.00 23.88           C
ATOM    309  O   ALA A 123      15.680  -4.471  -2.275  1.00 23.84           O
ATOM    310  CB  ALA A 123      13.169  -6.567  -2.561  1.00 23.35           C
ATOM    311  H   ALA A 123      15.711  -6.278  -3.847  1.00  0.00           H
ATOM    312  HA  ALA A 123      13.057  -4.984  -4.006  1.00  0.00           H
ATOM    313  HB1 ALA A 123      12.305  -6.174  -2.024  1.00  0.00           H
ATOM    314  HB2 ALA A 123      12.829  -7.399  -3.175  1.00  0.00           H
ATOM    315  HB3 ALA A 123      13.858  -6.971  -1.822  1.00  0.00           H
ATOM    316  N   CYS A 124      13.689  -3.425  -2.093  1.00 25.75           N
ATOM    317  CA  CYS A 124      14.091  -2.325  -1.226  1.00 23.52           C
ATOM    318  C   CYS A 124      12.976  -2.056  -0.214  1.00 23.67           C
ATOM    319  O   CYS A 124      11.827  -2.450  -0.433  1.00 24.40           O
ATOM    320  CB  CYS A 124      14.466  -1.089  -2.077  1.00 22.25           C
ATOM    321  SG  CYS A 124      13.028  -0.382  -2.956  1.00 23.91           S
ATOM    322  H   CYS A 124      12.713  -3.420  -2.359  1.00  0.00           H
ATOM    323  HA  CYS A 124      14.971  -2.628  -0.656  1.00  0.00           H
ATOM    324  HB2 CYS A 124      14.902  -0.312  -1.449  1.00  0.00           H
ATOM    325  HB3 CYS A 124      15.229  -1.358  -2.804  1.00  0.00           H
ATOM    326  HG  CYS A 124      12.508   0.220  -1.881  1.00  0.00           H
ATOM    327  N   TYR A 125      13.277  -1.294   0.839  1.00 21.36           N
ATOM    328  CA  TYR A 125      12.258  -0.512   1.532  1.00 22.40           C
ATOM    329  C   TYR A 125      12.075   0.773   0.711  1.00 21.88           C
ATOM    330  O   TYR A 125      13.061   1.325   0.215  1.00 20.40           O
ATOM    331  CB  TYR A 125      12.720  -0.111   2.946  1.00 21.32           C
ATOM    332  CG  TYR A 125      13.247  -1.228   3.826  1.00 22.30           C
ATOM    333  CD1 TYR A 125      12.373  -2.099   4.510  1.00 20.05           C
ATOM    334  CD2 TYR A 125      14.639  -1.374   3.980  1.00 18.10           C
ATOM    335  CE1 TYR A 125      12.899  -3.121   5.327  1.00 20.76           C
ATOM    336  CE2 TYR A 125      15.159  -2.392   4.792  1.00 18.47           C
ATOM    337  CZ  TYR A 125      14.292  -3.276   5.459  1.00 18.41           C
ATOM    338  OH  TYR A 125      14.802  -4.280   6.226  1.00 19.18           O
ATOM    339  H   TYR A 125      14.246  -0.996   0.949  1.00  0.00           H
ATOM    340  HA  TYR A 125      11.331  -1.064   1.589  1.00  0.00           H
ATOM    341  HB2 TYR A 125      13.498   0.639   2.871  1.00  0.00           H
ATOM    342  HB3 TYR A 125      11.899   0.381   3.470  1.00  0.00           H
ATOM    343  HD1 TYR A 125      11.303  -1.987   4.419  1.00  0.00           H
ATOM    344  HD2 TYR A 125      15.320  -0.700   3.482  1.00  0.00           H
ATOM    345  HE1 TYR A 125      12.234  -3.786   5.857  1.00  0.00           H
ATOM    346  HE2 TYR A 125      16.229  -2.474   4.889  1.00  0.00           H
ATOM    347  HH  TYR A 125      15.758  -4.280   6.200  1.00  0.00           H
ATOM    348  N   VAL A 126      10.837   1.243   0.559  1.00 22.88           N
ATOM    349  CA  VAL A 126      10.512   2.515  -0.064  1.00 20.05           C
ATOM    350  C   VAL A 126       9.735   3.355   0.952  1.00 20.90           C
ATOM    351  O   VAL A 126       8.844   2.861   1.651  1.00 19.39           O
ATOM    352  CB  VAL A 126       9.812   2.334  -1.435  1.00 21.97           C
ATOM    353  CG1 VAL A 126       8.409   1.717  -1.357  1.00 21.20           C
ATOM    354  CG2 VAL A 126       9.760   3.656  -2.221  1.00 17.14           C
ATOM    355  H   VAL A 126      10.069   0.746   1.011  1.00  0.00           H
ATOM    356  HA  VAL A 126      11.441   3.040  -0.271  1.00  0.00           H
ATOM    357  HB  VAL A 126      10.430   1.644  -2.011  1.00  0.00           H
ATOM    358 HG11 VAL A 126       8.009   1.543  -2.356  1.00  0.00           H
ATOM    359 HG12 VAL A 126       8.434   0.763  -0.834  1.00  0.00           H
ATOM    360 HG13 VAL A 126       7.705   2.369  -0.840  1.00  0.00           H
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ATOM    361 HG21 VAL A 126       9.353   3.508  -3.221  1.00  0.00          H
ATOM    362 HG22 VAL A 126       9.136   4.400  -1.725  1.00  0.00          H
ATOM    363 HG23 VAL A 126      10.757   4.085  -2.337  1.00  0.00          H
ATOM    364  N   THR A 127      10.085   4.634   1.020  1.00 20.50          N
ATOM    365  CA  THR A 127       9.519   5.608   1.921  1.00 20.93          C
ATOM    366  C   THR A 127       9.374   6.918   1.146  1.00 21.13          C
ATOM    367  O   THR A 127      10.372   7.591   0.906  1.00 23.81          O
ATOM    368  CB  THR A 127      10.430   5.682   3.172  1.00 22.06          C
ATOM    369  OG1 THR A 127      10.276   4.515   3.962  1.00 22.71          O
ATOM    370  CG2 THR A 127      10.146   6.869   4.089  1.00 19.49          C
ATOM    371  H   THR A 127      10.892   4.933   0.476  1.00  0.00          H
ATOM    372  HA  THR A 127       8.517   5.305   2.226  1.00  0.00          H
ATOM    373  HB  THR A 127      11.473   5.747   2.855  1.00  0.00          H
ATOM    374  HG1 THR A 127       9.336   4.343   4.048  1.00  0.00          H
ATOM    375 HG21 THR A 127      10.835   6.859   4.927  1.00  0.00          H
ATOM    376 HG22 THR A 127      10.324   7.807   3.568  1.00  0.00          H
ATOM    377 HG23 THR A 127       9.123   6.869   4.465  1.00  0.00          H
ATOM    378  N   LEU A 128       8.145   7.316   0.801  1.00 20.38          N
ATOM    379  CA  LEU A 128       7.843   8.690   0.414  1.00 18.73          C
ATOM    380  C   LEU A 128       7.575   9.439   1.719  1.00 18.52          C
ATOM    381  O   LEU A 128       6.799   8.960   2.547  1.00 17.90          O
ATOM    382  CB  LEU A 128       6.592   8.702  -0.481  1.00 18.41          C
ATOM    383  CG  LEU A 128       6.094  10.093  -0.941  1.00 18.76          C
ATOM    384  CD1 LEU A 128       7.209  11.024  -1.447  1.00 18.77          C
ATOM    385  CD2 LEU A 128       4.996   9.915  -1.993  1.00 14.06          C
ATOM    386  H   LEU A 128       7.355   6.761   1.122  1.00  0.00          H
ATOM    387  HA  LEU A 128       8.677   9.139  -0.110  1.00  0.00          H
ATOM    388  HB2 LEU A 128       6.808   8.097  -1.363  1.00  0.00          H
ATOM    389  HB3 LEU A 128       5.776   8.197   0.036  1.00  0.00          H
ATOM    390  HG  LEU A 128       5.639  10.599  -0.091  1.00  0.00          H
ATOM    391 HD11 LEU A 128       6.796  11.930  -1.892  1.00  0.00          H
ATOM    392 HD12 LEU A 128       7.850  11.361  -0.634  1.00  0.00          H
ATOM    393 HD13 LEU A 128       7.847  10.537  -2.183  1.00  0.00          H
ATOM    394 HD21 LEU A 128       4.633  10.871  -2.353  1.00  0.00          H
ATOM    395 HD22 LEU A 128       5.346   9.347  -2.856  1.00  0.00          H
ATOM    396 HD23 LEU A 128       4.146   9.387  -1.567  1.00  0.00          H
ATOM    397  N   VAL A 129       8.274  10.549   1.945  1.00 18.42          N
ATOM    398  CA  VAL A 129       8.297  11.243   3.219  1.00 18.44          C
ATOM    399  C   VAL A 129       8.519  12.745   3.013  1.00 18.85          C
ATOM    400  O   VAL A 129       9.117  13.160   2.020  1.00 19.12          O
ATOM    401  CB  VAL A 129       9.273  10.501   4.171  1.00 19.71          C
ATOM    402  CG1 VAL A 129      10.735  10.556   3.687  1.00 19.20          C
ATOM    403  CG2 VAL A 129       9.125  10.911   5.640  1.00 16.64          C
ATOM    404  H   VAL A 129       8.948  10.869   1.250  1.00  0.00          H
ATOM    405  HA  VAL A 129       7.305  11.169   3.645  1.00  0.00          H
ATOM    406  HB  VAL A 129       8.967   9.457   4.159  1.00  0.00          H
ATOM    407 HG11 VAL A 129      11.372   9.886   4.258  1.00  0.00          H
ATOM    408 HG12 VAL A 129      10.826  10.248   2.646  1.00  0.00          H
ATOM    409 HG13 VAL A 129      11.141  11.566   3.763  1.00  0.00          H
ATOM    410 HG21 VAL A 129       9.599  10.198   6.309  1.00  0.00          H
ATOM    411 HG22 VAL A 129       9.573  11.881   5.833  1.00  0.00          H
ATOM    412 HG23 VAL A 129       8.072  10.950   5.915  1.00  0.00          H
ATOM    413  N   ARG A 130       8.031  13.559   3.952  1.00 21.17          N
ATOM    414  CA  ARG A 130       8.364  14.973   4.078  1.00 21.51          C
ATOM    415  C   ARG A 130       9.571  15.101   5.022  1.00 21.74          C
ATOM    416  O   ARG A 130       9.722  14.304   5.948  1.00 18.71          O
ATOM    417  CB  ARG A 130       7.174  15.687   4.760  1.00 24.72          C
ATOM    418  CG  ARG A 130       5.940  15.761   3.853  1.00 26.46          C
ATOM    419  CD  ARG A 130       4.662  16.258   4.542  1.00 30.21          C
ATOM    420  NE  ARG A 130       3.950  15.138   5.175  1.00 33.85          N
ATOM    421  CZ  ARG A 130       2.632  14.904   5.271  1.00 35.23          C
ATOM    422  NH1 ARG A 130       1.723  15.772   4.825  1.00 35.12          N
ATOM    423  NH2 ARG A 130       2.229  13.777   5.847  1.00 31.29          N1+
ATOM    424  H   ARG A 130       7.475  13.152   4.695  1.00  0.00          H
ATOM    425  HA  ARG A 130       8.589  15.418   3.106  1.00  0.00          H
ATOM    426  HB2 ARG A 130       6.923  15.193   5.699  1.00  0.00          H
ATOM    427  HB3 ARG A 130       7.455  16.701   5.024  1.00  0.00          H
ATOM    428  HG2 ARG A 130       6.170  16.404   3.003  1.00  0.00          H
ATOM    429  HG3 ARG A 130       5.747  14.773   3.440  1.00  0.00          H
ATOM    430  HD2 ARG A 130       4.865  17.059   5.253  1.00  0.00          H
ATOM    431  HD3 ARG A 130       4.020  16.676   3.774  1.00  0.00          H
ATOM    432  HE  ARG A 130       4.582  14.327   5.402  1.00  0.00          H
ATOM    433 HH11 ARG A 130       1.993  16.620   4.313  1.00  0.00          H
ATOM    434 HH12 ARG A 130       0.759  15.450   4.695  1.00  0.00          H
ATOM    435 HH21 ARG A 130       2.918  13.150   6.326  1.00  0.00          H
ATOM    436 HH22 ARG A 130       1.271  13.416   5.831  1.00  0.00          H
ATOM    437  N   ASN A 131      10.373  16.166   4.893  1.00 21.83          N
ATOM    438  CA  ASN A 131      11.494  16.485   5.802  1.00 20.92          C
ATOM    439  C   ASN A 131      11.022  16.720   7.256  1.00 21.34          C
ATOM    440  O   ASN A 131      11.739  16.455   8.225  1.00 20.83          O
ATOM    441  CB  ASN A 131      12.312  17.699   5.298  1.00 24.29          C
ATOM    442  CG  ASN A 131      13.152  17.399   4.054  1.00 24.72          C
ATOM    443  OD1 ASN A 131      13.979  16.493   4.055  1.00 26.89          O
ATOM    444  ND2 ASN A 131      12.931  18.108   2.954  1.00 26.08          N
ATOM    445  H   ASN A 131      10.123  16.832   4.159  1.00  0.00          H
ATOM    446  HA  ASN A 131      12.143  15.615   5.822  1.00  0.00          H
ATOM    447  HB2 ASN A 131      11.663  18.557   5.123  1.00  0.00          H
ATOM    448  HB3 ASN A 131      13.021  18.011   6.068  1.00  0.00          H
ATOM    449 HD21 ASN A 131      12.198  18.831   2.911  1.00  0.00          H
ATOM    450 HD22 ASN A 131      13.567  18.022   2.158  1.00  0.00          H
ATOM    451  N   LYS A 132       9.751  17.115   7.392  1.00 21.47          N
ATOM    452  CA  LYS A 132       8.963  17.255   8.613  1.00 21.50          C
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ATOM    453  C   LYS A 132      8.720  15.903   9.307  1.00 20.13           C
ATOM    454  O   LYS A 132      8.610  15.841  10.530  1.00 20.64           O
ATOM    455  CB  LYS A 132      7.585  17.841   8.220  1.00 18.17           C
ATOM    456  CG  LYS A 132      7.642  19.254   7.609  1.00 -1.00          C
ATOM    457  CD  LYS A 132      7.631  19.255   6.077  1.00 -1.00          C
ATOM    458  CE  LYS A 132      7.888  20.631   5.456  1.00 -1.00          C
ATOM    459  NZ  LYS A 132      7.901  20.531   3.989  1.00 -1.00          N1+
ATOM    460  H   LYS A 132      9.265  17.273   6.523  1.00  0.00           H
ATOM    461  HA  LYS A 132      9.476  17.922   9.309  1.00  0.00           H
ATOM    462  HB2 LYS A 132      7.048  17.163   7.554  1.00  0.00           H
ATOM    463  HB3 LYS A 132      6.960  17.885   9.109  1.00  0.00           H
ATOM    464  HG2 LYS A 132      6.784  19.830   7.960  1.00 -1.00          H
ATOM    465  HG3 LYS A 132      8.527  19.767   7.981  1.00 -1.00          H
ATOM    466  HD2 LYS A 132      8.409  18.586   5.721  1.00 -1.00          H
ATOM    467  HD3 LYS A 132      6.678  18.859   5.722  1.00 -1.00          H
ATOM    468  HE2 LYS A 132      7.131  21.343   5.782  1.00 -1.00          H
ATOM    469  HE3 LYS A 132      8.856  21.015   5.781  1.00 -1.00          H
ATOM    470  HZ1 LYS A 132      7.005  20.692   3.546  1.00 -1.00          H
ATOM    471  HZ2 LYS A 132      8.551  21.203   3.567  1.00 -1.00          H
ATOM    472  HZ3 LYS A 132      8.256  19.623   3.698  1.00 -1.00          H
ATOM    473  N   GLU A 133      8.640  14.812   8.536  1.00 20.07           N
ATOM    474  CA  GLU A 133      8.267  13.485   9.008  1.00 17.67           C
ATOM    475  C   GLU A 133      9.493  12.612   9.295  1.00 18.46           C
ATOM    476  O   GLU A 133      9.300  11.474   9.715  1.00 15.28           O
ATOM    477  CB  GLU A 133      7.380  12.807   7.952  1.00 17.59           C
ATOM    478  CG  GLU A 133      5.904  13.179   8.147  1.00 20.24           C
ATOM    479  CD  GLU A 133      5.058  12.800   6.954  1.00 23.42           C
ATOM    480  OE1 GLU A 133      3.934  12.292   7.135  1.00 24.54           O
ATOM    481  OE2 GLU A 133      5.455  13.101   5.808  1.00 22.56           O1-
ATOM    482  H   GLU A 133      8.849  14.892   7.546  1.00  0.00           H
ATOM    483  HA  GLU A 133      7.707  13.541   9.940  1.00  0.00           H
ATOM    484  HB2 GLU A 133      7.720  13.064   6.951  1.00  0.00           H
ATOM    485  HB3 GLU A 133      7.444  11.722   8.019  1.00  0.00           H
ATOM    486  HG2 GLU A 133      5.505  12.705   9.045  1.00  0.00           H
ATOM    487  HG3 GLU A 133      5.807  14.253   8.292  1.00  0.00           H
ATOM    488  N   LEU A 134     10.732  13.135   9.213  1.00 18.65           N
ATOM    489  CA  LEU A 134     11.951  12.496   9.747  1.00 19.98           C
ATOM    490  C   LEU A 134     11.737  12.065  11.204  1.00 18.99           C
ATOM    491  O   LEU A 134     11.950  10.918  11.587  1.00 19.26           O
ATOM    492  CB  LEU A 134     13.149  13.474   9.668  1.00 19.11           C
ATOM    493  CG  LEU A 134     14.480  12.978  10.289  1.00 23.22           C
ATOM    494  CD1 LEU A 134     15.056  11.765   9.542  1.00 21.36           C
ATOM    495  CD2 LEU A 134     15.491  14.130  10.383  1.00 21.65           C
ATOM    496  H   LEU A 134     10.812  14.058   8.809  1.00  0.00           H
ATOM    497  HA  LEU A 134     12.161  11.612   9.143  1.00  0.00           H
ATOM    498  HB2 LEU A 134     13.320  13.761   8.638  1.00  0.00           H
ATOM    499  HB3 LEU A 134     12.880  14.403  10.162  1.00  0.00           H
ATOM    500  HG  LEU A 134     14.314  12.663  11.318  1.00  0.00           H
ATOM    501 HD11 LEU A 134     15.980  11.415  10.001  1.00  0.00           H
ATOM    502 HD12 LEU A 134     14.366  10.921   9.545  1.00  0.00           H
ATOM    503 HD13 LEU A 134     15.278  12.003   8.505  1.00  0.00           H
ATOM    504 HD21 LEU A 134     16.503  13.776  10.567  1.00  0.00           H
ATOM    505 HD22 LEU A 134     15.503  14.735   9.476  1.00  0.00           H
ATOM    506 HD23 LEU A 134     15.262  14.797  11.208  1.00  0.00           H
ATOM    507  N   LYS A 135     11.223  13.023  11.974  1.00 17.87           N
ATOM    508  CA  LYS A 135     10.947  13.006  13.395  1.00 18.77           C
ATOM    509  C   LYS A 135      9.881  11.964  13.803  1.00 18.88           C
ATOM    510  O   LYS A 135      9.767  11.642  14.986  1.00 18.40           O
ATOM    511  CB  LYS A 135     10.531  14.445  13.772  1.00 18.36           C
ATOM    512  CG  LYS A 135     11.602  15.520  13.474  1.00 19.77           C
ATOM    513  CD  LYS A 135     11.562  16.203  12.082  1.00 16.28           C
ATOM    514  CE  LYS A 135     12.921  16.857  11.762  1.00 18.85           C
ATOM    515  NZ  LYS A 135     13.009  17.515  10.446  1.00 18.17           N1+
ATOM    516  H   LYS A 135     11.011  13.890  11.507  1.00  0.00           H
ATOM    517  HA  LYS A 135     11.869  12.750  13.917  1.00  0.00           H
ATOM    518  HB2 LYS A 135      9.606  14.727  13.282  1.00  0.00           H
ATOM    519  HB3 LYS A 135     10.316  14.456  14.842  1.00  0.00           H
ATOM    520  HG2 LYS A 135     11.482  16.314  14.208  1.00  0.00           H
ATOM    521  HG3 LYS A 135     12.589  15.096  13.667  1.00  0.00           H
ATOM    522  HD2 LYS A 135     11.301  15.502  11.295  1.00  0.00           H
ATOM    523  HD3 LYS A 135     10.768  16.952  12.074  1.00  0.00           H
ATOM    524  HE2 LYS A 135     13.155  17.596  12.523  1.00  0.00           H
ATOM    525  HE3 LYS A 135     13.707  16.111  11.817  1.00  0.00           H
ATOM    526  HZ1 LYS A 135     14.010  17.688  10.252  1.00  0.00           H
ATOM    527  HZ2 LYS A 135     12.633  16.979   9.673  1.00  0.00           H
ATOM    528  HZ3 LYS A 135     12.531  18.416  10.485  1.00  0.00           H
ATOM    529  N   GLY A 136      9.160  11.389  12.834  1.00 19.43           N
ATOM    530  CA  GLY A 136      8.228  10.280  12.995  1.00 17.22           C
ATOM    531  C   GLY A 136      8.735   9.020  12.282  1.00 19.59           C
ATOM    532  O   GLY A 136      8.538   7.911  12.773  1.00 18.34           O
ATOM    533  H   GLY A 136      9.326  11.717  11.892  1.00  0.00           H
ATOM    534  HA2 GLY A 136      8.028  10.055  14.045  1.00  0.00           H
ATOM    535  HA3 GLY A 136      7.280  10.570  12.546  1.00  0.00           H
ATOM    536  N   LEU A 137      9.424   9.157  11.142  1.00 18.36           N
ATOM    537  CA  LEU A 137     10.035   8.075  10.368  1.00 21.19           C
ATOM    538  C   LEU A 137     11.129   7.337  11.143  1.00 22.14           C
ATOM    539  O   LEU A 137     11.305   6.133  10.963  1.00 24.02           O
ATOM    540  CB  LEU A 137     10.614   8.648   9.059  1.00 21.04           C
ATOM    541  CG  LEU A 137     11.208   7.608   8.087  1.00 21.35           C
ATOM    542  CD1 LEU A 137     10.136   6.657   7.525  1.00 23.22           C
ATOM    543  CD2 LEU A 137     11.989   8.315   6.978  1.00 20.28           C
ATOM    544  H   LEU A 137      9.508  10.090  10.741  1.00  0.00           H
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ATOM    545  HA  LEU A 137       9.262   7.344  10.156  1.00  0.00           H
ATOM    546  HB2 LEU A 137       9.852   9.217   8.531  1.00  0.00           H
ATOM    547  HB3 LEU A 137      11.390   9.369   9.316  1.00  0.00           H
ATOM    548  HG  LEU A 137      11.940   6.998   8.610  1.00  0.00           H
ATOM    549 HD11 LEU A 137      10.587   5.885   6.901  1.00  0.00           H
ATOM    550 HD12 LEU A 137       9.600   6.132   8.311  1.00  0.00           H
ATOM    551 HD13 LEU A 137       9.398   7.194   6.928  1.00  0.00           H
ATOM    552 HD21 LEU A 137      12.497   7.600   6.341  1.00  0.00           H
ATOM    553 HD22 LEU A 137      11.337   8.904   6.341  1.00  0.00           H
ATOM    554 HD23 LEU A 137      12.756   8.975   7.387  1.00  0.00           H
ATOM    555  N   LEU A 138     11.833   8.032  12.039  1.00 21.78           N
ATOM    556  CA  LEU A 138     12.820   7.444  12.934  1.00 22.46           C
ATOM    557  C   LEU A 138     12.230   6.351  13.851  1.00 21.43           C
ATOM    558  O   LEU A 138     12.961   5.418  14.175  1.00 22.46           O
ATOM    559  CB  LEU A 138     13.522   8.560  13.727  1.00 19.96           C
ATOM    560  CG  LEU A 138     14.464   9.437  12.865  1.00 22.18           C
ATOM    561 CD1 LEU A 138     14.680  10.806  13.522  1.00 21.53           C
ATOM    562 CD2 LEU A 138     15.809   8.760  12.574  1.00 21.97           C
ATOM    563  H   LEU A 138     11.701   9.041  12.065  1.00  0.00           H
ATOM    564  HA  LEU A 138     13.561   6.943  12.311  1.00  0.00           H
ATOM    565  HB2 LEU A 138     12.756   9.185  14.190  1.00  0.00           H
ATOM    566  HB3 LEU A 138     14.083   8.132  14.557  1.00  0.00           H
ATOM    567  HG  LEU A 138     14.003   9.615  11.895  1.00  0.00           H
ATOM    568 HD11 LEU A 138     15.431  11.396  12.996  1.00  0.00           H
ATOM    569 HD12 LEU A 138     13.758  11.386  13.532  1.00  0.00           H
ATOM    570 HD13 LEU A 138     14.994  10.700  14.557  1.00  0.00           H
ATOM    571 HD21 LEU A 138     16.408   9.367  11.893  1.00  0.00           H
ATOM    572 HD22 LEU A 138     16.380   8.637  13.489  1.00  0.00           H
ATOM    573 HD23 LEU A 138     15.679   7.786  12.103  1.00  0.00           H
ATOM    574  N   SER A 139     10.918   6.388  14.157  1.00 20.82           N
ATOM    575  CA  SER A 139     10.185   5.305  14.824  1.00 20.60           C
ATOM    576  C   SER A 139     10.112   4.076  13.908  1.00 21.37           C
ATOM    577  O   SER A 139     10.442   2.969  14.334  1.00 21.68           O
ATOM    578  CB  SER A 139      8.746   5.766  15.191  1.00 19.65           C
ATOM    579  OG  SER A 139      7.986   4.774  15.878  1.00 22.99           O
ATOM    580  H   SER A 139     10.375   7.167  13.809  1.00  0.00           H
ATOM    581  HA  SER A 139     10.727   5.032  15.731  1.00  0.00           H
ATOM    582  HB2 SER A 139      8.785   6.669  15.803  1.00  0.00           H
ATOM    583  HB3 SER A 139      8.183   6.023  14.295  1.00  0.00           H
ATOM    584  HG  SER A 139      7.781   4.072  15.253  1.00  0.00           H
ATOM    585  N   SER A 140      9.723   4.284  12.640  1.00 20.33           N
ATOM    586  CA  SER A 140      9.575   3.245  11.630  1.00 20.38           C
ATOM    587  C   SER A 140     10.927   2.561  11.388  1.00 20.79           C
ATOM    588  O   SER A 140     11.008   1.336  11.456  1.00 19.68           O
ATOM    589  CB  SER A 140      9.061   3.867  10.313  1.00 18.81           C
ATOM    590  OG  SER A 140      8.010   4.804  10.510  1.00 20.17           O
ATOM    591  H   SER A 140      9.492   5.218  12.335  1.00  0.00           H
ATOM    592  HA  SER A 140      8.859   2.510  11.999  1.00  0.00           H
ATOM    593  HB2 SER A 140      9.860   4.352   9.753  1.00  0.00           H
ATOM    594  HB3 SER A 140      8.691   3.065   9.674  1.00  0.00           H
ATOM    595  HG  SER A 140      7.532   4.840   9.677  1.00  0.00           H
ATOM    596  N   ILE A 141     11.989   3.359  11.189  1.00 20.52           N
ATOM    597  CA  ILE A 141     13.360   2.895  11.013  1.00 22.74           C
ATOM    598  C   ILE A 141     13.837   2.107  12.243  1.00 22.91           C
ATOM    599  O   ILE A 141     14.177   0.940  12.078  1.00 25.89           O
ATOM    600  CB  ILE A 141     14.321   4.058  10.635  1.00 21.78           C
ATOM    601 CG1 ILE A 141     13.928   4.720   9.290  1.00 21.69           C
ATOM    602 CG2 ILE A 141     15.781   3.561  10.554  1.00 19.44           C
ATOM    603 CD1 ILE A 141     14.585   6.089   9.050  1.00 20.88           C
ATOM    604  H   ILE A 141     11.822   4.363  11.173  1.00  0.00           H
ATOM    605  HA  ILE A 141     13.358   2.190  10.183  1.00  0.00           H
ATOM    606  HB  ILE A 141     14.261   4.814  11.418  1.00  0.00           H
ATOM    607 HG12 ILE A 141     14.174   4.051   8.463  1.00  0.00           H
ATOM    608 HG13 ILE A 141     12.849   4.856   9.233  1.00  0.00           H
ATOM    609 HG21 ILE A 141     16.451   4.324  10.174  1.00  0.00           H
ATOM    610 HG22 ILE A 141     16.175   3.256  11.523  1.00  0.00           H
ATOM    611 HG23 ILE A 141     15.862   2.698   9.892  1.00  0.00           H
ATOM    612 HD11 ILE A 141     14.255   6.508   8.099  1.00  0.00           H
ATOM    613 HD12 ILE A 141     14.320   6.801   9.832  1.00  0.00           H
ATOM    614 HD13 ILE A 141     15.671   6.026   9.001  1.00  0.00           H
ATOM    615  N   LYS A 142     13.846   2.701  13.453  1.00 22.93           N
ATOM    616  CA  LYS A 142     14.364   2.055  14.667  1.00 24.30           C
ATOM    617  C   LYS A 142     13.660   0.730  15.019  1.00 23.46           C
ATOM    618  O   LYS A 142     14.305  -0.159  15.577  1.00 20.35           O
ATOM    619  CB  LYS A 142     14.363   3.014  15.889  1.00 26.67           C
ATOM    620  CG  LYS A 142     15.711   3.713  16.184  1.00 31.03           C
ATOM    621  CD  LYS A 142     15.966   5.031  15.430  1.00 35.34           C
ATOM    622  CE  LYS A 142     17.329   5.652  15.806  1.00 39.87           C
ATOM    623  NZ  LYS A 142     17.534   6.982  15.207  1.00 41.29          N1+
ATOM    624  H   LYS A 142     13.464   3.638  13.545  1.00  0.00           H
ATOM    625  HA  LYS A 142     15.396   1.774  14.448  1.00  0.00           H
ATOM    626  HB2 LYS A 142     13.536   3.721  15.852  1.00  0.00           H
ATOM    627  HB3 LYS A 142     14.145   2.425  16.784  1.00  0.00           H
ATOM    628  HG2 LYS A 142     15.736   3.936  17.252  1.00  0.00           H
ATOM    629  HG3 LYS A 142     16.532   3.015  16.016  1.00  0.00           H
ATOM    630  HD2 LYS A 142     15.910   4.853  14.355  1.00  0.00           H
ATOM    631  HD3 LYS A 142     15.165   5.733  15.669  1.00  0.00           H
ATOM    632  HE2 LYS A 142     17.409   5.760  16.889  1.00  0.00           H
ATOM    633  HE3 LYS A 142     18.140   4.992  15.499  1.00  0.00           H
ATOM    634  HZ1 LYS A 142     18.492   7.301  15.297  1.00  0.00           H
ATOM    635  HZ2 LYS A 142     17.311   6.994  14.227  1.00  0.00           H
ATOM    636  HZ3 LYS A 142     16.924   7.670  15.679  1.00  0.00           H
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ATOM    637  N   TYR A 143      12.376   0.574  14.670  1.00 22.06           N
ATOM    638  CA  TYR A 143      11.678  -0.701  14.788  1.00 22.59           C
ATOM    639  C   TYR A 143      12.096  -1.669  13.661  1.00 21.72           C
ATOM    640  O   TYR A 143      12.658  -2.720  13.972  1.00 22.10           O
ATOM    641  CB  TYR A 143      10.143  -0.492  14.824  1.00 20.02           C
ATOM    642  CG  TYR A 143       9.526  -0.639  16.211  1.00 21.94           C
ATOM    643  CD1 TYR A 143       9.758  -1.820  16.945  1.00 23.77           C
ATOM    644  CD2 TYR A 143       8.693   0.358  16.766  1.00 22.49           C
ATOM    645  CE1 TYR A 143       9.121  -2.037  18.177  1.00 22.37           C
ATOM    646  CE2 TYR A 143       8.033   0.128  17.996  1.00 23.21           C
ATOM    647  CZ  TYR A 143       8.226  -1.085  18.690  1.00 22.87           C
ATOM    648  OH  TYR A 143       7.548  -1.357  19.844  1.00 21.97           O
ATOM    649  H   TYR A 143      11.883   1.360  14.260  1.00  0.00           H
ATOM    650  HA  TYR A 143      11.992  -1.169  15.722  1.00  0.00           H
ATOM    651  HB2 TYR A 143       9.863   0.466  14.386  1.00  0.00           H
ATOM    652  HB3 TYR A 143       9.647  -1.238  14.203  1.00  0.00           H
ATOM    653  HD1 TYR A 143      10.395  -2.598  16.556  1.00  0.00           H
ATOM    654  HD2 TYR A 143       8.533   1.289  16.242  1.00  0.00           H
ATOM    655  HE1 TYR A 143       9.298  -2.958  18.712  1.00  0.00           H
ATOM    656  HE2 TYR A 143       7.368   0.874  18.404  1.00  0.00           H
ATOM    657  HH  TYR A 143       7.760  -2.263  20.166  1.00  0.00           H
ATOM    658  N   VAL A 144      11.891  -1.322  12.375  1.00 22.79           N
ATOM    659  CA  VAL A 144      12.208  -2.145  11.188  1.00 22.01           C
ATOM    660  C   VAL A 144      13.663  -2.656  11.177  1.00 23.35           C
ATOM    661  O   VAL A 144      13.927  -3.801  10.804  1.00 21.03           O
ATOM    662  CB  VAL A 144      11.838  -1.365   9.889  1.00 21.23           C
ATOM    663  CG1 VAL A 144      12.331  -2.012   8.576  1.00 23.80           C
ATOM    664  CG2 VAL A 144      10.323  -1.106   9.757  1.00 17.15           C
ATOM    665  H   VAL A 144      11.528  -0.392  12.183  1.00  0.00           H
ATOM    666  HA  VAL A 144      11.590  -3.041  11.241  1.00  0.00           H
ATOM    667  HB  VAL A 144      12.335  -0.396   9.960  1.00  0.00           H
ATOM    668 HG11 VAL A 144      11.994  -1.446   7.707  1.00  0.00           H
ATOM    669 HG12 VAL A 144      13.419  -2.050   8.510  1.00  0.00           H
ATOM    670 HG13 VAL A 144      11.959  -3.031   8.466  1.00  0.00           H
ATOM    671 HG21 VAL A 144      10.135  -0.297   9.051  1.00  0.00           H
ATOM    672 HG22 VAL A 144       9.803  -1.982   9.374  1.00  0.00           H
ATOM    673 HG23 VAL A 144       9.855  -0.830  10.701  1.00  0.00           H
ATOM    674  N   GLU A 145      14.597  -1.821  11.643  1.00 23.20           N
ATOM    675  CA  GLU A 145      16.023  -2.094  11.716  1.00 23.64           C
ATOM    676  C   GLU A 145      16.357  -3.348  12.526  1.00 24.71           C
ATOM    677  O   GLU A 145      17.193  -4.157  12.132  1.00 23.64           O
ATOM    678  CB  GLU A 145      16.716  -0.876  12.350  1.00 25.26           C
ATOM    679  CG  GLU A 145      17.400  -0.026  11.277  1.00 25.70           C
ATOM    680  CD  GLU A 145      18.692  -0.678  10.809  1.00 24.54           C
ATOM    681  OE1 GLU A 145      19.454  -1.151  11.677  1.00 27.65           O
ATOM    682  OE2 GLU A 145      18.938  -0.716   9.590  1.00 28.24           O1-
ATOM    683  H   GLU A 145      14.300  -0.876  11.881  1.00  0.00           H
ATOM    684  HA  GLU A 145      16.365  -2.237  10.698  1.00  0.00           H
ATOM    685  HB2 GLU A 145      16.031  -0.280  12.945  1.00  0.00           H
ATOM    686  HB3 GLU A 145      17.454  -1.184  13.091  1.00  0.00           H
ATOM    687  HG2 GLU A 145      16.737   0.143  10.428  1.00  0.00           H
ATOM    688  HG3 GLU A 145      17.622   0.952  11.684  1.00  0.00           H
ATOM    689  N   ASN A 146      15.714  -3.476  13.682  1.00 25.05           N
ATOM    690  CA  ASN A 146      16.034  -4.507  14.661  1.00 28.02           C
ATOM    691  C   ASN A 146      15.022  -5.650  14.537  1.00 26.91           C
ATOM    692  O   ASN A 146      15.397  -6.806  14.714  1.00 26.71           O
ATOM    693  CB  ASN A 146      16.010  -3.888  16.075  1.00 31.59           C
ATOM    694  CG  ASN A 146      17.013  -2.733  16.228  1.00 35.43           C
ATOM    695  OD1 ASN A 146      18.204  -2.862  15.944  1.00 38.91           O
ATOM    696  ND2 ASN A 146      16.547  -1.542  16.582  1.00 38.29           N
ATOM    697  H   ASN A 146      14.968  -2.820  13.880  1.00  0.00           H
ATOM    698  HA  ASN A 146      17.029  -4.924  14.486  1.00  0.00           H
ATOM    699  HB2 ASN A 146      15.003  -3.548  16.324  1.00  0.00           H
ATOM    700  HB3 ASN A 146      16.262  -4.654  16.811  1.00  0.00           H
ATOM    701 HD21 ASN A 146      15.545  -1.361  16.612  1.00  0.00           H
ATOM    702 HD22 ASN A 146      17.181  -0.775  16.710  1.00  0.00           H
ATOM    703  N   LYS A 147      13.771  -5.350  14.147  1.00 25.17           N
ATOM    704  CA  LYS A 147      12.717  -6.339  13.927  1.00 25.56           C
ATOM    705  C   LYS A 147      12.928  -7.150  12.637  1.00 23.80           C
ATOM    706  O   LYS A 147      12.405  -8.264  12.554  1.00 24.25           O
ATOM    707  CB  LYS A 147      11.344  -5.630  13.865  1.00 26.51           C
ATOM    708  CG  LYS A 147      10.893  -5.060  15.226  1.00 27.65           C
ATOM    709  CD  LYS A 147      10.327  -6.142  16.156  1.00 29.92           C
ATOM    710  CE  LYS A 147      10.186  -5.737  17.629  1.00 29.66           C
ATOM    711  NZ  LYS A 147       9.873  -6.889  18.488  1.00 34.14           N1+
ATOM    712  H   LYS A 147      13.516  -4.376  14.019  1.00  0.00           H
ATOM    713  HA  LYS A 147      12.732  -7.048  14.754  1.00  0.00           H
ATOM    714  HB2 LYS A 147      11.379  -4.833  13.121  1.00  0.00           H
ATOM    715  HB3 LYS A 147      10.576  -6.319  13.507  1.00  0.00           H
ATOM    716  HG2 LYS A 147      11.724  -4.547  15.712  1.00  0.00           H
ATOM    717  HG3 LYS A 147      10.130  -4.304  15.053  1.00  0.00           H
ATOM    718  HD2 LYS A 147       9.356  -6.453  15.779  1.00  0.00           H
ATOM    719  HD3 LYS A 147      10.977  -7.007  16.110  1.00  0.00           H
ATOM    720  HE2 LYS A 147      11.110  -5.290  17.996  1.00  0.00           H
ATOM    721  HE3 LYS A 147       9.398  -4.996  17.748  1.00  0.00           H
ATOM    722  HZ1 LYS A 147       9.811  -6.496  19.447  1.00  0.00           H
ATOM    723  HZ2 LYS A 147       8.941  -7.238  18.303  1.00  0.00           H
ATOM    724  HZ3 LYS A 147      10.578  -7.631  18.411  1.00  0.00           H
ATOM    725  N   ILE A 148      13.722  -6.649  11.674  1.00 24.02           N
ATOM    726  CA  ILE A 148      14.157  -7.387  10.489  1.00 21.98           C
ATOM    727  C   ILE A 148      15.584  -7.057  10.014  1.00 23.64           C
ATOM    728  O   ILE A 148      16.381  -7.983   9.879  1.00 24.28           O
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ATOM    729  CB  ILE A 148      13.076  -7.441   9.376  1.00 21.36           C
ATOM    730  CG1 ILE A 148      13.525  -8.319   8.182  1.00 23.00           C
ATOM    731  CG2 ILE A 148      12.628  -6.042   8.915  1.00 19.78           C
ATOM    732  CD1 ILE A 148      12.395  -9.102   7.510  1.00 19.41           C
ATOM    733  H   ILE A 148      14.078  -5.709  11.789  1.00  0.00           H
ATOM    734  HA  ILE A 148      14.250  -8.423  10.817  1.00  0.00           H
ATOM    735  HB  ILE A 148      12.207  -7.923   9.820  1.00  0.00           H
ATOM    736 HG12 ILE A 148      14.061  -7.717   7.446  1.00  0.00           H
ATOM    737 HG13 ILE A 148      14.238  -9.065   8.532  1.00  0.00           H
ATOM    738 HG21 ILE A 148      11.886  -6.109   8.129  1.00  0.00           H
ATOM    739 HG22 ILE A 148      12.177  -5.476   9.730  1.00  0.00           H
ATOM    740 HG23 ILE A 148      13.455  -5.456   8.513  1.00  0.00           H
ATOM    741 HD11 ILE A 148      12.767  -9.653   6.647  1.00  0.00           H
ATOM    742 HD12 ILE A 148      11.970  -9.832   8.198  1.00  0.00           H
ATOM    743 HD13 ILE A 148      11.590  -8.457   7.173  1.00  0.00           H
ATOM    744  N   ASN A 149      15.900  -5.788   9.711  1.00 22.03           N
ATOM    745  CA  ASN A 149      17.016  -5.389   8.823  1.00 24.97           C
ATOM    746  C   ASN A 149      18.400  -5.943   9.212  1.00 27.08           C
ATOM    747  O   ASN A 149      19.139  -6.410   8.351  1.00 26.94           O
ATOM    748  CB  ASN A 149      17.083  -3.850   8.693  1.00 24.58           C
ATOM    749  CG  ASN A 149      17.762  -3.353   7.414  1.00 26.06           C
ATOM    750  OD1 ASN A 149      17.562  -3.917   6.339  1.00 24.50           O
ATOM    751  ND2 ASN A 149      18.550  -2.290   7.499  1.00 25.60           N
ATOM    752  H   ASN A 149      15.188  -5.088   9.891  1.00  0.00           H
ATOM    753  HA  ASN A 149      16.764  -5.817   7.850  1.00  0.00           H
ATOM    754  HB2 ASN A 149      16.080  -3.422   8.708  1.00  0.00           H
ATOM    755  HB3 ASN A 149      17.634  -3.445   9.540  1.00  0.00           H
ATOM    756 HD21 ASN A 149      18.690  -1.763   8.383  1.00  0.00           H
ATOM    757 HD22 ASN A 149      18.982  -1.898   6.661  1.00  0.00           H
ATOM    758  N   LYS A 150      18.734  -5.957  10.507  1.00 30.35           N
ATOM    759  CA  LYS A 150      20.004  -6.489  11.010  1.00 31.86           C
ATOM    760  C   LYS A 150      20.082  -8.029  10.989  1.00 30.69           C
ATOM    761  O   LYS A 150      21.166  -8.580  11.169  1.00 31.66           O
ATOM    762  CB  LYS A 150      20.201  -6.023  12.466  1.00 34.31           C
ATOM    763  CG  LYS A 150      20.573  -4.539  12.582  1.00 37.03           C
ATOM    764  CD  LYS A 150      20.899  -4.161  14.033  1.00 39.82           C
ATOM    765  CE  LYS A 150      21.217  -2.675  14.217  1.00 41.88           C
ATOM    766  NZ  LYS A 150      20.018  -1.847  14.042  1.00 43.28           N1+
ATOM    767  H   LYS A 150      18.104  -5.494  11.158  1.00  0.00           H
ATOM    768  HA  LYS A 150      20.824  -6.116  10.393  1.00  0.00           H
ATOM    769  HB2 LYS A 150      19.306  -6.238  13.052  1.00  0.00           H
ATOM    770  HB3 LYS A 150      21.004  -6.603  12.924  1.00  0.00           H
ATOM    771  HG2 LYS A 150      21.437  -4.326  11.948  1.00  0.00           H
ATOM    772  HG3 LYS A 150      19.763  -3.922  12.192  1.00  0.00           H
ATOM    773  HD2 LYS A 150      20.076  -4.453  14.689  1.00  0.00           H
ATOM    774  HD3 LYS A 150      21.762  -4.746  14.359  1.00  0.00           H
ATOM    775  HE2 LYS A 150      21.595  -2.513  15.226  1.00  0.00           H
ATOM    776  HE3 LYS A 150      21.999  -2.351  13.529  1.00  0.00           H
ATOM    777  HZ1 LYS A 150      20.186  -0.903  14.334  1.00  0.00           H
ATOM    778  HZ2 LYS A 150      19.780  -1.757  13.029  1.00  0.00           H
ATOM    779  HZ3 LYS A 150      19.233  -2.246  14.550  1.00  0.00           H
ATOM    780  N   LYS A 151      18.953  -8.721  10.798  1.00 29.61           N
ATOM    781  CA  LYS A 151      18.886 -10.172  10.642  1.00 28.95           C
ATOM    782  C   LYS A 151      18.808 -10.509   9.140  1.00 28.12           C
ATOM    783  O   LYS A 151      19.471 -11.439   8.687  1.00 26.36           O
ATOM    784  CB  LYS A 151      17.611 -10.700  11.351  1.00 30.41           C
ATOM    785  CG  LYS A 151      17.555 -10.378  12.865  1.00 32.64           C
ATOM    786  CD  LYS A 151      16.268 -10.835  13.585  1.00 35.44           C
ATOM    787  CE  LYS A 151      15.023 -10.052  13.137  1.00 35.31           C
ATOM    788  NZ  LYS A 151      13.816 -10.368  13.913  1.00 36.53           N1+
ATOM    789  H   LYS A 151      18.112  -8.194  10.592  1.00  0.00           H
ATOM    790  HA  LYS A 151      19.766 -10.660  11.067  1.00  0.00           H
ATOM    791  HB2 LYS A 151      16.726 -10.307  10.854  1.00  0.00           H
ATOM    792  HB3 LYS A 151      17.563 -11.782  11.219  1.00  0.00           H
ATOM    793  HG2 LYS A 151      18.415 -10.845  13.348  1.00  0.00           H
ATOM    794  HG3 LYS A 151      17.677  -9.306  13.025  1.00  0.00           H
ATOM    795  HD2 LYS A 151      16.116 -11.905  13.435  1.00  0.00           H
ATOM    796  HD3 LYS A 151      16.406 -10.692  14.658  1.00  0.00           H
ATOM    797  HE2 LYS A 151      15.203  -8.979  13.198  1.00  0.00           H
ATOM    798  HE3 LYS A 151      14.806 -10.281  12.094  1.00  0.00           H
ATOM    799  HZ1 LYS A 151      13.029 -10.012  13.385  1.00  0.00           H
ATOM    800  HZ2 LYS A 151      13.687 -11.368  14.059  1.00  0.00           H
ATOM    801  HZ3 LYS A 151      13.771  -9.890  14.831  1.00  0.00           H
ATOM    802  N   PHE A 152      18.016  -9.750   8.365  1.00 26.10           N
ATOM    803  CA  PHE A 152      17.742  -9.971   6.944  1.00 27.49           C
ATOM    804  C   PHE A 152      17.755  -8.614   6.214  1.00 27.68           C
ATOM    805  O   PHE A 152      16.713  -7.957   6.173  1.00 27.95           O
ATOM    806  CB  PHE A 152      16.415 -10.745   6.775  1.00 28.65           C
ATOM    807  CG  PHE A 152      16.343 -12.058   7.540  1.00 30.27           C
ATOM    808  CD1 PHE A 152      17.050 -13.190   7.084  1.00 29.39           C
ATOM    809  CD2 PHE A 152      15.622 -12.127   8.750  1.00 29.26           C
ATOM    810  CE1 PHE A 152      17.032 -14.385   7.829  1.00 29.40           C
ATOM    811  CE2 PHE A 152      15.634 -13.311   9.509  1.00 30.84           C
ATOM    812  CZ  PHE A 152      16.326 -14.445   9.045  1.00 29.38           C
ATOM    813  H   PHE A 152      17.512  -8.988   8.809  1.00  0.00           H
ATOM    814  HA  PHE A 152      18.516 -10.608   6.519  1.00  0.00           H
ATOM    815  HB2 PHE A 152      15.574 -10.122   7.072  1.00  0.00           H
ATOM    816  HB3 PHE A 152      16.258 -10.947   5.716  1.00  0.00           H
ATOM    817  HD1 PHE A 152      17.628 -13.138   6.173  1.00  0.00           H
ATOM    818  HD2 PHE A 152      15.083 -11.265   9.116  1.00  0.00           H
ATOM    819  HE1 PHE A 152      17.581 -15.247   7.480  1.00  0.00           H
ATOM    820  HE2 PHE A 152      15.115 -13.348  10.452  1.00  0.00           H
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ATOM    821  HZ  PHE A 152      16.323 -15.354   9.629  1.00  0.00           H
ATOM    822  N   PRO A 153      18.911  -8.150   5.685  1.00 27.92           N
ATOM    823  CA  PRO A 153      19.065  -6.774   5.193  1.00 26.86           C
ATOM    824  C   PRO A 153      18.492  -6.521   3.789  1.00 25.61           C
ATOM    825  O   PRO A 153      18.493  -7.415   2.930  1.00 23.81           O
ATOM    826  CB  PRO A 153      20.582  -6.530   5.211  1.00 28.24           C
ATOM    827  CG  PRO A 153      21.195  -7.908   5.013  1.00 29.29           C
ATOM    828  CD  PRO A 153      20.196  -8.855   5.682  1.00 28.25           C
ATOM    829  HA  PRO A 153      18.583  -6.095   5.892  1.00  0.00           H
ATOM    830  HB2 PRO A 153      20.922  -5.806   4.469  1.00  0.00           H
ATOM    831  HB3 PRO A 153      20.867  -6.143   6.191  1.00  0.00           H
ATOM    832  HG2 PRO A 153      21.257  -8.129   3.946  1.00  0.00           H
ATOM    833  HG3 PRO A 153      22.199  -7.990   5.431  1.00  0.00           H
ATOM    834  HD2 PRO A 153      20.144  -9.808   5.154  1.00  0.00           H
ATOM    835  HD3 PRO A 153      20.496  -9.051   6.714  1.00  0.00           H
ATOM    836  N   TYR A 154      18.074  -5.265   3.570  1.00 23.90           N
ATOM    837  CA  TYR A 154      17.642  -4.645   2.313  1.00 25.51           C
ATOM    838  C   TYR A 154      18.068  -3.161   2.273  1.00 24.53           C
ATOM    839  O   TYR A 154      18.275  -2.579   3.342  1.00 23.72           O
ATOM    840  CB  TYR A 154      16.124  -4.841   2.089  1.00 24.29           C
ATOM    841  CG  TYR A 154      15.761  -6.224   1.588  1.00 25.02           C
ATOM    842  CD1 TYR A 154      16.070  -6.587   0.261  1.00 24.50           C
ATOM    843  CD2 TYR A 154      15.172  -7.165   2.455  1.00 23.16           C
ATOM    844  CE1 TYR A 154      15.834  -7.896  -0.189  1.00 26.82           C
ATOM    845  CE2 TYR A 154      14.939  -8.478   2.007  1.00 25.35           C
ATOM    846  CZ  TYR A 154      15.291  -8.844   0.692  1.00 26.98           C
ATOM    847  OH  TYR A 154      15.230 -10.142   0.295  1.00 26.94           O
ATOM    848  H   TYR A 154      18.104  -4.626   4.361  1.00  0.00           H
ATOM    849  HA  TYR A 154      18.185  -5.147   1.511  1.00  0.00           H
ATOM    850  HB2 TYR A 154      15.578  -4.624   3.008  1.00  0.00           H
ATOM    851  HB3 TYR A 154      15.747  -4.121   1.361  1.00  0.00           H
ATOM    852  HD1 TYR A 154      16.520  -5.874  -0.412  1.00  0.00           H
ATOM    853  HD2 TYR A 154      14.941  -6.898   3.478  1.00  0.00           H
ATOM    854  HE1 TYR A 154      16.098  -8.173  -1.201  1.00  0.00           H
ATOM    855  HE2 TYR A 154      14.530  -9.202   2.695  1.00  0.00           H
ATOM    856  HH  TYR A 154      14.880 -10.743   0.989  1.00  0.00           H
ATOM    857  N   PRO A 155      18.204  -2.532   1.083  1.00 24.68           N
ATOM    858  CA  PRO A 155      18.446  -1.085   0.948  1.00 23.85           C
ATOM    859  C   PRO A 155      17.151  -0.278   1.171  1.00 24.27           C
ATOM    860  O   PRO A 155      16.053  -0.818   1.005  1.00 23.44           O
ATOM    861  CB  PRO A 155      18.947  -0.916  -0.494  1.00 23.62           C
ATOM    862  CG  PRO A 155      18.303  -2.060  -1.261  1.00 23.92           C
ATOM    863  CD  PRO A 155      18.159  -3.178  -0.231  1.00 24.00           C
ATOM    864  HA  PRO A 155      19.209  -0.761   1.655  1.00  0.00           H
ATOM    865  HB2 PRO A 155      18.723   0.060  -0.930  1.00  0.00           H
ATOM    866  HB3 PRO A 155      20.030  -1.028  -0.528  1.00  0.00           H
ATOM    867  HG2 PRO A 155      17.320  -1.750  -1.616  1.00  0.00           H
ATOM    868  HG3 PRO A 155      18.884  -2.360  -2.133  1.00  0.00           H
ATOM    869  HD2 PRO A 155      17.228  -3.718  -0.387  1.00  0.00           H
ATOM    870  HD3 PRO A 155      18.987  -3.880  -0.325  1.00  0.00           H
ATOM    871  N   TRP A 156      17.268   1.005   1.539  1.00 23.62           N
ATOM    872  CA  TRP A 156      16.140   1.892   1.830  1.00 24.34           C
ATOM    873  C   TRP A 156      16.156   3.100   0.882  1.00 24.58           C
ATOM    874  O   TRP A 156      17.049   3.943   0.949  1.00 24.78           O
ATOM    875  CB  TRP A 156      16.171   2.304   3.320  1.00 22.47           C
ATOM    876  CG  TRP A 156      14.843   2.605   3.958  1.00 23.60           C
ATOM    877  CD1 TRP A 156      13.828   3.313   3.404  1.00 23.21           C
ATOM    878  CD2 TRP A 156      14.343   2.153   5.257  1.00 24.20           C
ATOM    879  NE1 TRP A 156      12.747   3.323   4.261  1.00 23.02           N
ATOM    880  CE3 TRP A 156      14.871   1.373   6.315  1.00 22.06           C
ATOM    881  CE2 TRP A 156      13.006   2.626   5.415  1.00 24.32           C
ATOM    882  CZ3 TRP A 156      14.100   1.069   7.457  1.00 23.14           C
ATOM    883  CZ2 TRP A 156      12.236   2.350   6.553  1.00 23.17           C
ATOM    884  CH2 TRP A 156      12.781   1.553   7.574  1.00 23.12           C
ATOM    885  H   TRP A 156      18.205   1.390   1.640  1.00  0.00           H
ATOM    886  HA  TRP A 156      15.210   1.354   1.660  1.00  0.00           H
ATOM    887  HB2 TRP A 156      16.605   1.488   3.899  1.00  0.00           H
ATOM    888  HB3 TRP A 156      16.834   3.153   3.479  1.00  0.00           H
ATOM    889  HD1 TRP A 156      13.860   3.790   2.434  1.00  0.00           H
ATOM    890  HE1 TRP A 156      11.852   3.791   4.048  1.00  0.00           H
ATOM    891  HE3 TRP A 156      15.876   0.984   6.233  1.00  0.00           H
ATOM    892  HZ3 TRP A 156      14.522   0.452   8.237  1.00  0.00           H
ATOM    893  HZ2 TRP A 156      11.232   2.737   6.624  1.00  0.00           H
ATOM    894  HH2 TRP A 156      12.182   1.310   8.437  1.00  0.00           H
ATOM    895  N   VAL A 157      15.148   3.190   0.012  1.00 24.62           N
ATOM    896  CA  VAL A 157      14.937   4.288  -0.918  1.00 22.16           C
ATOM    897  C   VAL A 157      13.980   5.287  -0.241  1.00 21.82           C
ATOM    898  O   VAL A 157      12.797   5.005  -0.029  1.00 22.52           O
ATOM    899  CB  VAL A 157      14.313   3.712  -2.220  1.00 20.88           C
ATOM    900  CG1 VAL A 157      13.898   4.813  -3.211  1.00 19.19           C
ATOM    901  CG2 VAL A 157      15.276   2.727  -2.912  1.00 20.83           C
ATOM    902  H   VAL A 157      14.416   2.482   0.043  1.00  0.00           H
ATOM    903  HA  VAL A 157      15.881   4.782  -1.160  1.00  0.00           H
ATOM    904  HB  VAL A 157      13.412   3.152  -1.963  1.00  0.00           H
ATOM    905 HG11 VAL A 157      13.671   4.404  -4.194  1.00  0.00           H
ATOM    906 HG12 VAL A 157      13.007   5.338  -2.872  1.00  0.00           H
ATOM    907 HG13 VAL A 157      14.688   5.552  -3.335  1.00  0.00           H
ATOM    908 HG21 VAL A 157      14.808   2.269  -3.783  1.00  0.00           H
ATOM    909 HG22 VAL A 157      16.184   3.226  -3.251  1.00  0.00           H
ATOM    910 HG23 VAL A 157      15.575   1.911  -2.255  1.00  0.00           H
ATOM    911  N   PHE A 158      14.497   6.466   0.095  1.00 22.60           N
ATOM    912  CA  PHE A 158      13.743   7.582   0.638  1.00 21.72           C
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ATOM    913  C   PHE A 158      13.425   8.526  -0.533  1.00 21.85           C
ATOM    914  O   PHE A 158      14.314   8.908  -1.297  1.00 21.79           O
ATOM    915  CB  PHE A 158      14.619   8.300   1.684  1.00 22.82           C
ATOM    916  CG  PHE A 158      14.993   7.422   2.866  1.00 22.97           C
ATOM    917  CD1 PHE A 158      14.034   7.112   3.853  1.00 20.44           C
ATOM    918  CD2 PHE A 158      16.285   6.864   2.950  1.00 23.38           C
ATOM    919  CE1 PHE A 158      14.366   6.238   4.908  1.00 23.63           C
ATOM    920  CE2 PHE A 158      16.611   5.998   4.007  1.00 22.41           C
ATOM    921  CZ  PHE A 158      15.657   5.691   4.993  1.00 21.10           C
ATOM    922  H   PHE A 158      15.481   6.648  -0.110  1.00  0.00           H
ATOM    923  HA  PHE A 158      12.830   7.236   1.120  1.00  0.00           H
ATOM    924  HB2 PHE A 158      15.523   8.698   1.222  1.00  0.00           H
ATOM    925  HB3 PHE A 158      14.081   9.153   2.088  1.00  0.00           H
ATOM    926  HD1 PHE A 158      13.035   7.513   3.781  1.00  0.00           H
ATOM    927  HD2 PHE A 158      17.024   7.076   2.189  1.00  0.00           H
ATOM    928  HE1 PHE A 158      13.625   5.936   5.631  1.00  0.00           H
ATOM    929  HE2 PHE A 158      17.592   5.554   4.050  1.00  0.00           H
ATOM    930  HZ  PHE A 158      15.895   4.999   5.786  1.00  0.00           H
ATOM    931  N   LEU A 159      12.147   8.882  -0.679  1.00 22.19           N
ATOM    932  CA  LEU A 159      11.580   9.733  -1.719  1.00 20.94           C
ATOM    933  C   LEU A 159      10.938  10.964  -1.053  1.00 21.28           C
ATOM    934  O   LEU A 159      10.418  10.863   0.060  1.00 22.09           O
ATOM    935  CB  LEU A 159      10.542   8.929  -2.540  1.00 22.79           C
ATOM    936  CG  LEU A 159      11.072   7.628  -3.185  1.00 22.80           C
ATOM    937  CD1 LEU A 159       9.936   6.798  -3.803  1.00 23.75           C
ATOM    938  CD2 LEU A 159      12.159   7.909  -4.231  1.00 19.61           C
ATOM    939  H   LEU A 159      11.475   8.507  -0.009  1.00  0.00           H
ATOM    940  HA  LEU A 159      12.364  10.065  -2.391  1.00  0.00           H
ATOM    941  HB2 LEU A 159       9.702   8.666  -1.904  1.00  0.00           H
ATOM    942  HB3 LEU A 159      10.131   9.579  -3.311  1.00  0.00           H
ATOM    943  HG  LEU A 159      11.509   7.011  -2.400  1.00  0.00           H
ATOM    944 HD11 LEU A 159      10.312   5.845  -4.175  1.00  0.00           H
ATOM    945 HD12 LEU A 159       9.158   6.581  -3.071  1.00  0.00           H
ATOM    946 HD13 LEU A 159       9.472   7.307  -4.645  1.00  0.00           H
ATOM    947 HD21 LEU A 159      12.482   6.993  -4.727  1.00  0.00           H
ATOM    948 HD22 LEU A 159      11.793   8.587  -5.001  1.00  0.00           H
ATOM    949 HD23 LEU A 159      13.043   8.358  -3.782  1.00  0.00           H
ATOM    950  N   ASN A 160      10.975  12.127  -1.709  1.00 21.67           N
ATOM    951  CA  ASN A 160      10.531  13.424  -1.180  1.00 21.59           C
ATOM    952  C   ASN A 160      10.010  14.296  -2.332  1.00 22.22           C
ATOM    953  O   ASN A 160      10.130  13.925  -3.497  1.00 22.40           O
ATOM    954  CB  ASN A 160      11.701  14.059  -0.394  1.00 21.73           C
ATOM    955  CG  ASN A 160      11.364  15.146   0.632  1.00 20.70           C
ATOM    956  OD1 ASN A 160      10.378  15.875   0.522  1.00 17.56           O
ATOM    957  ND2 ASN A 160      12.202  15.266   1.654  1.00 20.24           N
ATOM    958  H   ASN A 160      11.441  12.154  -2.608  1.00  0.00           H
ATOM    959  HA  ASN A 160       9.691  13.254  -0.506  1.00  0.00           H
ATOM    960  HB2 ASN A 160      12.162  13.268   0.181  1.00  0.00           H
ATOM    961  HB3 ASN A 160      12.471  14.418  -1.077  1.00  0.00           H
ATOM    962 HD21 ASN A 160      13.001  14.650   1.721  1.00  0.00           H
ATOM    963 HD22 ASN A 160      12.099  16.020   2.315  1.00  0.00           H
ATOM    964  N   ASP A 161       9.448  15.465  -2.021  1.00 22.62           N
ATOM    965  CA  ASP A 161       8.964  16.471  -2.975  1.00 21.64           C
ATOM    966  C   ASP A 161       9.663  17.827  -2.743  1.00 24.09           C
ATOM    967  O   ASP A 161       9.666  18.689  -3.623  1.00 24.64           O
ATOM    968  CB  ASP A 161       7.416  16.512  -2.966  1.00 22.24           C
ATOM    969  CG  ASP A 161       6.751  17.499  -2.009  1.00 22.54           C
ATOM    970  OD1 ASP A 161       6.872  17.315  -0.778  1.00 19.79           O
ATOM    971  OD2 ASP A 161       6.054  18.407  -2.524  1.00 25.86           O1-
ATOM    972  H   ASP A 161       9.476  15.719  -1.036  1.00  0.00           H
ATOM    973  HA  ASP A 161       9.263  16.170  -3.981  1.00  0.00           H
ATOM    974  HB2 ASP A 161       7.079  16.742  -3.975  1.00  0.00           H
ATOM    975  HB3 ASP A 161       7.015  15.519  -2.763  1.00  0.00           H
ATOM    976  N   GLU A 162      10.328  17.990  -1.599  1.00 25.03           N
ATOM    977  CA  GLU A 162      11.448  18.900  -1.402  1.00 25.78           C
ATOM    978  C   GLU A 162      12.736  18.095  -1.674  1.00 26.36           C
ATOM    979  O   GLU A 162      12.681  16.862  -1.727  1.00 26.47           O
ATOM    980  CB  GLU A 162      11.454  19.273   0.092  1.00 28.39           C
ATOM    981  CG  GLU A 162      10.348  20.274   0.453  1.00 34.38           C
ATOM    982  CD  GLU A 162      10.318  20.591   1.933  1.00 38.51           C
ATOM    983  OE1 GLU A 162      10.874  19.836   2.762  1.00 40.07           O
ATOM    984  OE2 GLU A 162       9.662  21.584   2.313  1.00 39.26           O1-
ATOM    985  H   GLU A 162      10.316  17.213  -0.951  1.00  0.00           H
ATOM    986  HA  GLU A 162      11.393  19.782  -2.040  1.00  0.00           H
ATOM    987  HB2 GLU A 162      11.354  18.368   0.693  1.00  0.00           H
ATOM    988  HB3 GLU A 162      12.410  19.709   0.385  1.00  0.00           H
ATOM    989  HG2 GLU A 162      10.488  21.200  -0.106  1.00  0.00           H
ATOM    990  HG3 GLU A 162       9.372  19.879   0.168  1.00  0.00           H
ATOM    991  N   PRO A 163      13.916  18.740  -1.756  1.00 25.77           N
ATOM    992  CA  PRO A 163      15.185  18.028  -1.594  1.00 25.31           C
ATOM    993  C   PRO A 163      15.342  17.589  -0.123  1.00 24.48           C
ATOM    994  O   PRO A 163      14.774  18.202   0.786  1.00 23.95           O
ATOM    995  CB  PRO A 163      16.254  19.038  -2.036  1.00 25.46           C
ATOM    996  CG  PRO A 163      15.631  20.403  -1.774  1.00 26.93           C
ATOM    997  CD  PRO A 163      14.122  20.180  -1.916  1.00 25.47           C
ATOM    998  HA  PRO A 163      15.209  17.148  -2.241  1.00  0.00           H
ATOM    999  HB2 PRO A 163      17.208  18.911  -1.523  1.00  0.00           H
ATOM   1000  HB3 PRO A 163      16.437  18.920  -3.106  1.00  0.00           H
ATOM   1001  HG2 PRO A 163      15.858  20.705  -0.751  1.00  0.00           H
ATOM   1002  HG3 PRO A 163      16.006  21.180  -2.440  1.00  0.00           H
ATOM   1003  HD2 PRO A 163      13.572  20.780  -1.190  1.00  0.00           H
ATOM   1004  HD3 PRO A 163      13.782  20.469  -2.909  1.00  0.00           H
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ATOM   1005  N   PHE A 164      16.100  16.518   0.123  1.00 23.91           N
ATOM   1006  CA  PHE A 164      16.336  16.011   1.472  1.00 22.65           C
ATOM   1007  C   PHE A 164      17.345  16.909   2.188  1.00 22.61           C
ATOM   1008  O   PHE A 164      18.457  17.106   1.685  1.00 20.34           O
ATOM   1009  CB  PHE A 164      16.897  14.580   1.406  1.00 21.23           C
ATOM   1010  CG  PHE A 164      15.803  13.540   1.329  1.00 21.71           C
ATOM   1011  CD1 PHE A 164      15.039  13.262   2.480  1.00 21.29           C
ATOM   1012  CD2 PHE A 164      15.525  12.872   0.121  1.00 20.13           C
ATOM   1013  CE1 PHE A 164      14.006  12.312   2.429  1.00 22.86           C
ATOM   1014  CE2 PHE A 164      14.505  11.907   0.080  1.00 22.82           C
ATOM   1015  CZ  PHE A 164      13.746  11.627   1.231  1.00 20.54           C
ATOM   1016  H   PHE A 164      16.576  16.074  -0.659  1.00  0.00           H
ATOM   1017  HA  PHE A 164      15.401  16.008   2.030  1.00  0.00           H
ATOM   1018  HB2 PHE A 164      17.595  14.465   0.576  1.00  0.00           H
ATOM   1019  HB3 PHE A 164      17.470  14.355   2.307  1.00  0.00           H
ATOM   1020  HD1 PHE A 164      15.229  13.790   3.404  1.00  0.00           H
ATOM   1021  HD2 PHE A 164      16.084  13.096  -0.778  1.00  0.00           H
ATOM   1022  HE1 PHE A 164      13.409  12.115   3.304  1.00  0.00           H
ATOM   1023  HE2 PHE A 164      14.284  11.399  -0.845  1.00  0.00           H
ATOM   1024  HZ  PHE A 164      12.936  10.915   1.186  1.00  0.00           H
ATOM   1025  N   THR A 165      16.951  17.442   3.349  1.00 23.48           N
ATOM   1026  CA  THR A 165      17.765  18.262   4.236  1.00 23.94           C
ATOM   1027  C   THR A 165      18.903  17.419   4.838  1.00 26.62           C
ATOM   1028  O   THR A 165      18.740  16.223   5.095  1.00 21.92           O
ATOM   1029  CB  THR A 165      16.832  18.868   5.319  1.00 25.32           C
ATOM   1030  OG1 THR A 165      16.051  17.878   5.970  1.00 27.19           O
ATOM   1031  CG2 THR A 165      15.879  19.931   4.752  1.00 25.62           C
ATOM   1032  H   THR A 165      16.038  17.204   3.728  1.00  0.00           H
ATOM   1033  HA  THR A 165      18.211  19.073   3.658  1.00  0.00           H
ATOM   1034  HB  THR A 165      17.447  19.350   6.082  1.00  0.00           H
ATOM   1035  HG1 THR A 165      16.357  17.786   6.887  1.00  0.00           H
ATOM   1036 HG21 THR A 165      15.246  20.350   5.534  1.00  0.00           H
ATOM   1037 HG22 THR A 165      16.434  20.755   4.303  1.00  0.00           H
ATOM   1038 HG23 THR A 165      15.227  19.521   3.981  1.00  0.00           H
ATOM   1039  N   GLU A 166      20.084  18.020   5.014  1.00 27.49           N
ATOM   1040  CA  GLU A 166      21.316  17.346   5.431  1.00 30.60           C
ATOM   1041  C   GLU A 166      21.177  16.610   6.773  1.00 29.25           C
ATOM   1042  O   GLU A 166      21.651  15.483   6.903  1.00 31.53           O
ATOM   1043  CB  GLU A 166      22.516  18.324   5.402  1.00 34.11           C
ATOM   1044  CG  GLU A 166      22.584  19.290   4.188  1.00 40.02           C
ATOM   1045  CD  GLU A 166      22.200  18.646   2.859  1.00 44.19           C
ATOM   1046  OE1 GLU A 166      21.114  18.993   2.354  1.00 48.52           O
ATOM   1047  OE2 GLU A 166      22.859  17.675   2.439  1.00 46.29           O1-
ATOM   1048  H   GLU A 166      20.209  18.913   4.553  1.00  0.00           H
ATOM   1049  HA  GLU A 166      21.527  16.574   4.698  1.00  0.00           H
ATOM   1050  HB2 GLU A 166      22.524  18.923   6.314  1.00  0.00           H
ATOM   1051  HB3 GLU A 166      23.435  17.736   5.429  1.00  0.00           H
ATOM   1052  HG2 GLU A 166      21.928  20.144   4.356  1.00  0.00           H
ATOM   1053  HG3 GLU A 166      23.590  19.698   4.092  1.00  0.00           H
ATOM   1054  N   GLU A 167      20.432  17.206   7.715  1.00 29.61           N
ATOM   1055  CA  GLU A 167      20.013  16.621   8.988  1.00 30.74           C
ATOM   1056  C   GLU A 167      19.231  15.300   8.828  1.00 29.24           C
ATOM   1057  O   GLU A 167      19.452  14.378   9.610  1.00 26.20           O
ATOM   1058  CB  GLU A 167      19.323  17.718   9.851  1.00 33.76           C
ATOM   1059  CG  GLU A 167      17.990  17.393  10.570  1.00 39.85           C
ATOM   1060  CD  GLU A 167      16.746  17.528   9.695  1.00 43.67           C
ATOM   1061  OE1 GLU A 167      16.890  17.744   8.470  1.00 45.84           O
ATOM   1062  OE2 GLU A 167      15.637  17.503  10.277  1.00 45.11           O1-
ATOM   1063  H   GLU A 167      20.008  18.083   7.459  1.00  0.00           H
ATOM   1064  HA  GLU A 167      20.934  16.342   9.505  1.00  0.00           H
ATOM   1065  HB2 GLU A 167      20.037  18.020  10.617  1.00  0.00           H
ATOM   1066  HB3 GLU A 167      19.173  18.625   9.262  1.00  0.00           H
ATOM   1067  HG2 GLU A 167      18.007  16.409  11.038  1.00  0.00           H
ATOM   1068  HG3 GLU A 167      17.872  18.106  11.386  1.00  0.00           H
ATOM   1069  N   PHE A 168      18.376  15.181   7.800  1.00 26.92           N
ATOM   1070  CA  PHE A 168      17.618  13.977   7.451  1.00 25.65           C
ATOM   1071  C   PHE A 168      18.573  12.828   7.144  1.00 24.16           C
ATOM   1072  O   PHE A 168      18.491  11.756   7.740  1.00 21.85           O
ATOM   1073  CB  PHE A 168      16.683  14.249   6.243  1.00 25.88           C
ATOM   1074  CG  PHE A 168      15.514  13.290   6.078  1.00 25.83           C
ATOM   1075  CD1 PHE A 168      15.708  11.926   5.762  1.00 27.41           C
ATOM   1076  CD2 PHE A 168      14.205  13.781   6.235  1.00 26.00           C
ATOM   1077  CE1 PHE A 168      14.606  11.052   5.690  1.00 27.73           C
ATOM   1078  CE2 PHE A 168      13.101  12.912   6.149  1.00 24.69           C
ATOM   1079  CZ  PHE A 168      13.306  11.543   5.909  1.00 24.72           C
ATOM   1080  H   PHE A 168      18.229  16.000   7.224  1.00  0.00           H
ATOM   1081  HA  PHE A 168      17.023  13.686   8.309  1.00  0.00           H
ATOM   1082  HB2 PHE A 168      16.282  15.258   6.328  1.00  0.00           H
ATOM   1083  HB3 PHE A 168      17.235  14.241   5.303  1.00  0.00           H
ATOM   1084  HD1 PHE A 168      16.700  11.533   5.588  1.00  0.00           H
ATOM   1085  HD2 PHE A 168      14.058  14.830   6.448  1.00  0.00           H
ATOM   1086  HE1 PHE A 168      14.757  10.006   5.460  1.00  0.00           H
ATOM   1087  HE2 PHE A 168      12.098  13.287   6.285  1.00  0.00           H
ATOM   1088  HZ  PHE A 168      12.459  10.880   5.869  1.00  0.00           H
ATOM   1089  N   LYS A 169      19.511  13.086   6.232  1.00 24.01           N
ATOM   1090  CA  LYS A 169      20.467  12.116   5.726  1.00 26.45           C
ATOM   1091  C   LYS A 169      21.465  11.717   6.831  1.00 26.84           C
ATOM   1092  O   LYS A 169      21.734  10.527   6.999  1.00 27.09           O
ATOM   1093  CB  LYS A 169      21.145  12.725   4.482  1.00 29.03           C
ATOM   1094  CG  LYS A 169      20.119  13.002   3.354  1.00 31.88           C
ATOM   1095  CD  LYS A 169      20.659  13.729   2.114  1.00 35.09           C
ATOM   1096  CE  LYS A 169      21.092  15.165   2.433  1.00 37.28           C
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ATOM   1097  NZ  LYS A 169      21.213  16.037   1.259  1.00 38.69          N1+
ATOM   1098  H   LYS A 169      19.542  14.028   5.863  1.00  0.00           H
ATOM   1099  HA  LYS A 169      19.924  11.218   5.428  1.00  0.00           H
ATOM   1100  HB2 LYS A 169      21.678  13.634   4.760  1.00  0.00           H
ATOM   1101  HB3 LYS A 169      21.895  12.028   4.109  1.00  0.00           H
ATOM   1102  HG2 LYS A 169      19.702  12.050   3.035  1.00  0.00           H
ATOM   1103  HG3 LYS A 169      19.272  13.573   3.734  1.00  0.00           H
ATOM   1104  HD2 LYS A 169      21.486  13.166   1.679  1.00  0.00           H
ATOM   1105  HD3 LYS A 169      19.871  13.740   1.360  1.00  0.00           H
ATOM   1106  HE2 LYS A 169      20.367  15.634   3.093  1.00  0.00           H
ATOM   1107  HE3 LYS A 169      22.052  15.151   2.949  1.00  0.00           H
ATOM   1108  HZ1 LYS A 169      21.893  16.770   1.535  1.00  0.00           H
ATOM   1109  HZ2 LYS A 169      21.533  15.522   0.436  1.00  0.00           H
ATOM   1110  HZ3 LYS A 169      20.336  16.509   1.086  1.00  0.00           H
ATOM   1111  N   GLU A 170      21.908  12.674   7.663  1.00 26.50           N
ATOM   1112  CA  GLU A 170      22.747  12.451   8.846  1.00 27.91           C
ATOM   1113  C   GLU A 170      22.002  11.587   9.893  1.00 26.70           C
ATOM   1114  O   GLU A 170      22.557  10.609  10.401  1.00 25.68           O
ATOM   1115  CB  GLU A 170      23.155  13.824   9.455  1.00 30.74           C
ATOM   1116  CG  GLU A 170      24.640  13.949   9.858  1.00 38.58           C
ATOM   1117  CD  GLU A 170      25.069  12.894  10.859  1.00 44.74           C
ATOM   1118  OE1 GLU A 170      24.366  12.702  11.876  1.00 47.54           O
ATOM   1119  OE2 GLU A 170      26.003  12.119  10.556  1.00 48.23          O1-
ATOM   1120  H   GLU A 170      21.652  13.635   7.450  1.00  0.00           H
ATOM   1121  HA  GLU A 170      23.637  11.914   8.515  1.00  0.00           H
ATOM   1122  HB2 GLU A 170      22.976  14.625   8.745  1.00  0.00           H
ATOM   1123  HB3 GLU A 170      22.530  14.072  10.316  1.00  0.00           H
ATOM   1124  HG2 GLU A 170      25.273  13.875   8.974  1.00  0.00           H
ATOM   1125  HG3 GLU A 170      24.828  14.929  10.296  1.00  0.00           H
ATOM   1126  N   ALA A 171      20.730  11.904  10.179  1.00 23.76           N
ATOM   1127  CA  ALA A 171      19.908  11.224  11.176  1.00 23.64           C
ATOM   1128  C   ALA A 171      19.481   9.818  10.730  1.00 23.90           C
ATOM   1129  O   ALA A 171      19.374   8.931  11.580  1.00 22.94           O
ATOM   1130  CB  ALA A 171      18.640  12.044  11.439  1.00 23.80           C
ATOM   1131  H   ALA A 171      20.340  12.738   9.743  1.00  0.00           H
ATOM   1132  HA  ALA A 171      20.482  11.140  12.100  1.00  0.00           H
ATOM   1133  HB1 ALA A 171      17.977  11.552  12.152  1.00  0.00           H
ATOM   1134  HB2 ALA A 171      18.883  13.027  11.844  1.00  0.00           H
ATOM   1135  HB3 ALA A 171      18.084  12.194  10.515  1.00  0.00           H
ATOM   1136  N   VAL A 172      19.264   9.602   9.425  1.00 24.62           N
ATOM   1137  CA  VAL A 172      19.078   8.292   8.800  1.00 25.76           C
ATOM   1138  C   VAL A 172      20.375   7.463   8.906  1.00 26.15           C
ATOM   1139  O   VAL A 172      20.313   6.298   9.300  1.00 25.46           O
ATOM   1140  CB  VAL A 172      18.578   8.477   7.342  1.00 25.40           C
ATOM   1141  CG1 VAL A 172      18.740   7.239   6.444  1.00 25.21           C
ATOM   1142  CG2 VAL A 172      17.096   8.897   7.330  1.00 22.74           C
ATOM   1143  H   VAL A 172      19.262  10.414   8.809  1.00  0.00           H
ATOM   1144  HA  VAL A 172      18.310   7.754   9.357  1.00  0.00           H
ATOM   1145  HB  VAL A 172      19.160   9.274   6.877  1.00  0.00           H
ATOM   1146 HG11 VAL A 172      18.327   7.427   5.456  1.00  0.00           H
ATOM   1147 HG12 VAL A 172      19.785   6.965   6.295  1.00  0.00           H
ATOM   1148 HG13 VAL A 172      18.215   6.380   6.854  1.00  0.00           H
ATOM   1149 HG21 VAL A 172      16.764   9.114   6.315  1.00  0.00           H
ATOM   1150 HG22 VAL A 172      16.455   8.105   7.715  1.00  0.00           H
ATOM   1151 HG23 VAL A 172      16.911   9.786   7.931  1.00  0.00           H
ATOM   1152  N   THR A 173      21.547   8.086   8.711  1.00 26.81           N
ATOM   1153  CA  THR A 173      22.885   7.505   8.920  1.00 28.03           C
ATOM   1154  C   THR A 173      23.244   7.521  10.440  1.00 27.32           C
ATOM   1155  O   THR A 173      24.398   7.657  10.851  1.00 26.39           O
ATOM   1156  CB  THR A 173      23.916   8.308   8.066  1.00 27.81           C
ATOM   1157  OG1 THR A 173      23.424   8.495   6.748  1.00 30.64           O
ATOM   1158  CG2 THR A 173      25.268   7.600   7.868  1.00 27.52           C
ATOM   1159  H   THR A 173      21.519   9.054   8.410  1.00  0.00           H
ATOM   1160  HA  THR A 173      22.875   6.467   8.582  1.00  0.00           H
ATOM   1161  HB  THR A 173      24.086   9.293   8.505  1.00  0.00           H
ATOM   1162  HG1 THR A 173      22.733   9.163   6.788  1.00  0.00           H
ATOM   1163 HG21 THR A 173      25.920   8.184   7.217  1.00  0.00           H
ATOM   1164 HG22 THR A 173      25.806   7.455   8.803  1.00  0.00           H
ATOM   1165 HG23 THR A 173      25.136   6.620   7.407  1.00  0.00           H
ATOM   1166  N   LYS A 174      22.228   7.427  11.302  1.00 27.78           N
ATOM   1167  CA  LYS A 174      22.247   7.206  12.743  1.00 31.22           C
ATOM   1168  C   LYS A 174      20.923   6.538  13.159  1.00 30.61           C
ATOM   1169  O   LYS A 174      20.370   6.774  14.239  1.00 30.04           O
ATOM   1170  CB  LYS A 174      22.665   8.488  13.506  1.00 32.27           C
ATOM   1171  CG  LYS A 174      24.050   8.360  14.176  1.00 36.69           C
ATOM   1172  CD  LYS A 174      24.774   9.706  14.358  1.00 39.08           C
ATOM   1173  CE  LYS A 174      25.752  10.039  13.215  1.00 41.57           C
ATOM   1174  NZ  LYS A 174      25.080  10.128  11.917  1.00 43.16          N1+
ATOM   1175  H   LYS A 174      21.312   7.407  10.870  1.00  0.00           H
ATOM   1176  HA  LYS A 174      22.991   6.429  12.926  1.00  0.00           H
ATOM   1177  HB2 LYS A 174      22.645   9.337  12.821  1.00  0.00           H
ATOM   1178  HB3 LYS A 174      21.936   8.749  14.273  1.00  0.00           H
ATOM   1179  HG2 LYS A 174      23.916   7.882  15.147  1.00  0.00           H
ATOM   1180  HG3 LYS A 174      24.699   7.689  13.610  1.00  0.00           H
ATOM   1181  HD2 LYS A 174      24.057  10.518  14.494  1.00  0.00           H
ATOM   1182  HD3 LYS A 174      25.351   9.669  15.283  1.00  0.00           H
ATOM   1183  HE2 LYS A 174      26.221  11.006  13.407  1.00  0.00           H
ATOM   1184  HE3 LYS A 174      26.554   9.303  13.150  1.00  0.00           H
ATOM   1185  HZ1 LYS A 174      25.669  10.675  11.268  1.00  0.00           H
ATOM   1186  HZ2 LYS A 174      24.782   9.253  11.500  1.00  0.00           H
ATOM   1187  HZ3 LYS A 174      24.322  10.809  11.966  1.00  0.00           H
ATOM   1188  N   ALA A 175      20.379   5.727  12.247  1.00 28.23           N
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ATOM   1189  CA  ALA A 175      19.133   5.006  12.370  1.00 26.89           C
ATOM   1190  C   ALA A 175      19.246   3.687  11.616  1.00 26.79           C
ATOM   1191  O   ALA A 175      19.187   2.642  12.255  1.00 27.40           O
ATOM   1192  CB  ALA A 175      17.944   5.890  11.959  1.00 24.63           C
ATOM   1193  H   ALA A 175      20.907   5.545  11.399  1.00  0.00           H
ATOM   1194  HA  ALA A 175      19.006   4.736  13.418  1.00  0.00           H
ATOM   1195  HB1 ALA A 175      16.996   5.427  12.228  1.00  0.00           H
ATOM   1196  HB2 ALA A 175      17.989   6.865  12.437  1.00  0.00           H
ATOM   1197  HB3 ALA A 175      17.934   6.063  10.883  1.00  0.00           H
ATOM   1198  N   VAL A 176      19.437   3.755  10.292  1.00 27.12           N
ATOM   1199  CA  VAL A 176      19.587   2.610   9.394  1.00 25.91           C
ATOM   1200  C   VAL A 176      21.029   2.063   9.509  1.00 26.78           C
ATOM   1201  O   VAL A 176      21.959   2.817   9.807  1.00 26.76           O
ATOM   1202  CB  VAL A 176      19.295   3.070   7.929  1.00 24.16           C
ATOM   1203  CG1 VAL A 176      19.353   1.916   6.909  1.00 25.45           C
ATOM   1204  CG2 VAL A 176      17.930   3.765   7.779  1.00 19.93           C
ATOM   1205  H   VAL A 176      19.614   4.660   9.868  1.00  0.00           H
ATOM   1206  HA  VAL A 176      18.866   1.846   9.677  1.00  0.00           H
ATOM   1207  HB  VAL A 176      20.055   3.798   7.638  1.00  0.00           H
ATOM   1208 HG11 VAL A 176      18.910   2.188   5.951  1.00  0.00           H
ATOM   1209 HG12 VAL A 176      20.381   1.641   6.691  1.00  0.00           H
ATOM   1210 HG13 VAL A 176      18.826   1.029   7.264  1.00  0.00           H
ATOM   1211 HG21 VAL A 176      17.775   4.080   6.748  1.00  0.00           H
ATOM   1212 HG22 VAL A 176      17.114   3.088   8.029  1.00  0.00           H
ATOM   1213 HG23 VAL A 176      17.850   4.656   8.399  1.00  0.00           H
ATOM   1214  N   SER A 177      21.209   0.763   9.248  1.00 24.88           N
ATOM   1215  CA  SER A 177      22.486   0.055   9.212  1.00 26.57           C
ATOM   1216  C   SER A 177      22.649  -0.825   7.956  1.00 27.23           C
ATOM   1217  O   SER A 177      23.410  -1.791   7.944  1.00 28.95           O
ATOM   1218  CB  SER A 177      22.826  -0.547  10.595  1.00 24.99           C
ATOM   1219  OG  SER A 177      21.985  -1.611  11.010  1.00 23.21           O
ATOM   1220  H   SER A 177      20.367   0.178   9.166  1.00  0.00           H
ATOM   1221  HA  SER A 177      23.258   0.809   9.045  1.00  0.00           H
ATOM   1222  HB2 SER A 177      23.849  -0.924  10.577  1.00  0.00           H
ATOM   1223  HB3 SER A 177      22.800   0.237  11.352  1.00  0.00           H
ATOM   1224  HG  SER A 177      21.059  -1.331  10.980  1.00  0.00           H
ATOM   1225  N   SER A 178      21.985  -0.425   6.868  1.00 26.97           N
ATOM   1226  CA  SER A 178      22.127  -0.919   5.505  1.00 26.31           C
ATOM   1227  C   SER A 178      22.321   0.281   4.551  1.00 26.98           C
ATOM   1228  O   SER A 178      22.590   1.395   5.008  1.00 27.69           O
ATOM   1229  CB  SER A 178      20.956  -1.877   5.187  1.00 26.87           C
ATOM   1230  OG  SER A 178      19.702  -1.214   5.204  1.00 26.69           O
ATOM   1231  H   SER A 178      21.422   0.408   6.949  1.00  0.00           H
ATOM   1232  HA  SER A 178      23.052  -1.495   5.436  1.00  0.00           H
ATOM   1233  HB2 SER A 178      21.096  -2.320   4.200  1.00  0.00           H
ATOM   1234  HB3 SER A 178      20.938  -2.709   5.893  1.00  0.00           H
ATOM   1235  HG  SER A 178      19.135  -1.614   4.538  1.00  0.00           H
ATOM   1236  N   GLU A 179      22.246   0.055   3.232  1.00 28.23           N
ATOM   1237  CA  GLU A 179      22.424   1.074   2.196  1.00 30.32           C
ATOM   1238  C   GLU A 179      21.152   1.942   2.090  1.00 29.86           C
ATOM   1239  O   GLU A 179      20.047   1.475   2.381  1.00 29.62           O
ATOM   1240  CB  GLU A 179      22.730   0.343   0.870  1.00 30.92           C
ATOM   1241  CG  GLU A 179      23.319   1.231  -0.251  1.00 36.26           C
ATOM   1242  CD  GLU A 179      22.445   1.310  -1.494  1.00 40.60           C
ATOM   1243  OE1 GLU A 179      21.234   1.586  -1.371  1.00 42.26           O
ATOM   1244  OE2 GLU A 179      22.975   1.111  -2.608  1.00 41.15           O1-
ATOM   1245  H   GLU A 179      21.910  -0.838   2.919  1.00  0.00           H
ATOM   1246  HA  GLU A 179      23.272   1.704   2.471  1.00  0.00           H
ATOM   1247  HB2 GLU A 179      23.453  -0.451   1.058  1.00  0.00           H
ATOM   1248  HB3 GLU A 179      21.832  -0.169   0.522  1.00  0.00           H
ATOM   1249  HG2 GLU A 179      23.495   2.249   0.095  1.00  0.00           H
ATOM   1250  HG3 GLU A 179      24.294   0.845  -0.550  1.00  0.00           H
ATOM   1251  N   VAL A 180      21.324   3.217   1.730  1.00 28.50           N
ATOM   1252  CA  VAL A 180      20.297   4.248   1.724  1.00 27.87           C
ATOM   1253  C   VAL A 180      20.419   5.089   0.446  1.00 27.26           C
ATOM   1254  O   VAL A 180      21.539   5.405   0.035  1.00 25.36           O
ATOM   1255  CB  VAL A 180      20.340   5.076   3.042  1.00 28.46           C
ATOM   1256  CG1 VAL A 180      19.951   4.233   4.270  1.00 25.72           C
ATOM   1257  CG2 VAL A 180      21.691   5.773   3.303  1.00 29.12           C
ATOM   1258  H   VAL A 180      22.215   3.501   1.354  1.00  0.00           H
ATOM   1259  HA  VAL A 180      19.331   3.752   1.673  1.00  0.00           H
ATOM   1260  HB  VAL A 180      19.591   5.863   2.939  1.00  0.00           H
ATOM   1261 HG11 VAL A 180      19.815   4.853   5.154  1.00  0.00           H
ATOM   1262 HG12 VAL A 180      19.023   3.691   4.095  1.00  0.00           H
ATOM   1263 HG13 VAL A 180      20.717   3.494   4.508  1.00  0.00           H
ATOM   1264 HG21 VAL A 180      21.645   6.395   4.198  1.00  0.00           H
ATOM   1265 HG22 VAL A 180      22.493   5.049   3.449  1.00  0.00           H
ATOM   1266 HG23 VAL A 180      21.978   6.423   2.478  1.00  0.00           H
ATOM   1267  N   LYS A 181      19.288   5.491  -0.145  1.00 26.75           N
ATOM   1268  CA  LYS A 181      19.197   6.393  -1.294  1.00 27.00           C
ATOM   1269  C   LYS A 181      18.131   7.461  -1.024  1.00 26.79           C
ATOM   1270  O   LYS A 181      17.123   7.176  -0.379  1.00 26.53           O
ATOM   1271  CB  LYS A 181      18.966   5.621  -2.609  1.00 28.69           C
ATOM   1272  CG  LYS A 181      20.084   4.612  -2.923  1.00 31.19           C
ATOM   1273  CD  LYS A 181      20.095   4.130  -4.382  1.00 35.82           C
ATOM   1274  CE  LYS A 181      21.236   3.142  -4.654  1.00 35.27           C
ATOM   1275  NZ  LYS A 181      20.942   1.816  -4.112  1.00 36.42           N1+
ATOM   1276  H   LYS A 181      18.404   5.180   0.252  1.00  0.00           H
ATOM   1277  HA  LYS A 181      20.143   6.930  -1.388  1.00  0.00           H
ATOM   1278  HB2 LYS A 181      18.001   5.111  -2.588  1.00  0.00           H
ATOM   1279  HB3 LYS A 181      18.907   6.350  -3.419  1.00  0.00           H
ATOM   1280  HG2 LYS A 181      21.049   5.071  -2.703  1.00  0.00           H
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ATOM   1281  HG3 LYS A 181      19.995   3.761  -2.248  1.00  0.00           H
ATOM   1282  HD2 LYS A 181      19.137   3.686  -4.661  1.00  0.00           H
ATOM   1283  HD3 LYS A 181      20.235   4.992  -5.035  1.00  0.00           H
ATOM   1284  HE2 LYS A 181      21.397   3.034  -5.728  1.00  0.00           H
ATOM   1285  HE3 LYS A 181      22.170   3.502  -4.222  1.00  0.00           H
ATOM   1286  HZ1 LYS A 181      21.816   1.355  -3.833  1.00  0.00           H
ATOM   1287  HZ2 LYS A 181      20.468   1.854  -3.216  1.00  0.00           H
ATOM   1288  HZ3 LYS A 181      20.426   1.271  -4.821  1.00  0.00           H
ATOM   1289  N   PHE A 182      18.367   8.684  -1.504  1.00 25.47           N
ATOM   1290  CA  PHE A 182      17.626   9.900  -1.187  1.00 24.54           C
ATOM   1291  C   PHE A 182      17.285  10.621  -2.498  1.00 23.94           C
ATOM   1292  O   PHE A 182      18.151  11.289  -3.071  1.00 25.57           O
ATOM   1293  CB  PHE A 182      18.497  10.786  -0.268  1.00 24.23           C
ATOM   1294  CG  PHE A 182      18.894  10.180   1.065  1.00 25.85           C
ATOM   1295  CD1 PHE A 182      17.968  10.116   2.127  1.00 25.40           C
ATOM   1296  CD2 PHE A 182      20.207   9.697   1.247  1.00 27.19           C
ATOM   1297  CE1 PHE A 182      18.360   9.577   3.368  1.00 27.01           C
ATOM   1298  CE2 PHE A 182      20.599   9.168   2.489  1.00 25.63           C
ATOM   1299  CZ  PHE A 182      19.678   9.109   3.549  1.00 26.56           C
ATOM   1300  H   PHE A 182      19.187   8.797  -2.110  1.00  0.00           H
ATOM   1301  HA  PHE A 182      16.699   9.665  -0.664  1.00  0.00           H
ATOM   1302  HB2 PHE A 182      19.411  11.072  -0.792  1.00  0.00           H
ATOM   1303  HB3 PHE A 182      17.983  11.723  -0.062  1.00  0.00           H
ATOM   1304  HD1 PHE A 182      16.960  10.485   1.995  1.00  0.00           H
ATOM   1305  HD2 PHE A 182      20.921   9.737   0.436  1.00  0.00           H
ATOM   1306  HE1 PHE A 182      17.648   9.523   4.177  1.00  0.00           H
ATOM   1307  HE2 PHE A 182      21.609   8.810   2.627  1.00  0.00           H
ATOM   1308  HZ  PHE A 182      19.995   8.705   4.497  1.00  0.00           H
ATOM   1309  N   GLY A 183      16.048  10.502  -2.985  1.00 24.28           N
ATOM   1310  CA  GLY A 183      15.605  11.078  -4.255  1.00 21.73           C
ATOM   1311  C   GLY A 183      14.446  12.056  -4.087  1.00 22.11           C
ATOM   1312  O   GLY A 183      13.642  11.918  -3.166  1.00 22.30           O
ATOM   1313  H   GLY A 183      15.366   9.957  -2.457  1.00  0.00           H
ATOM   1314  HA2 GLY A 183      16.421  11.561  -4.790  1.00  0.00           H
ATOM   1315  HA3 GLY A 183      15.251  10.275  -4.900  1.00  0.00           H
ATOM   1316  N   ILE A 184      14.312  13.019  -5.004  1.00 24.31           N
ATOM   1317  CA  ILE A 184      13.097  13.815  -5.149  1.00 25.05           C
ATOM   1318  C   ILE A 184      12.200  13.095  -6.174  1.00 27.69           C
ATOM   1319  O   ILE A 184      12.689  12.408  -7.077  1.00 27.87           O
ATOM   1320  CB  ILE A 184      13.460  15.256  -5.621  1.00 25.38           C
ATOM   1321  CG1 ILE A 184      12.341  16.257  -5.263  1.00 25.06           C
ATOM   1322  CG2 ILE A 184      13.844  15.379  -7.114  1.00 20.90           C
ATOM   1323  CD1 ILE A 184      12.755  17.726  -5.404  1.00 26.79           C
ATOM   1324  H   ILE A 184      14.991  13.061  -5.761  1.00  0.00           H
ATOM   1325  HA  ILE A 184      12.586  13.878  -4.188  1.00  0.00           H
ATOM   1326  HB  ILE A 184      14.328  15.560  -5.036  1.00  0.00           H
ATOM   1327 HG12 ILE A 184      11.456  16.073  -5.873  1.00  0.00           H
ATOM   1328 HG13 ILE A 184      12.029  16.097  -4.230  1.00  0.00           H
ATOM   1329 HG21 ILE A 184      14.277  16.353  -7.327  1.00  0.00           H
ATOM   1330 HG22 ILE A 184      14.576  14.632  -7.412  1.00  0.00           H
ATOM   1331 HG23 ILE A 184      12.980  15.268  -7.770  1.00  0.00           H
ATOM   1332 HD11 ILE A 184      11.950  18.368  -5.058  1.00  0.00           H
ATOM   1333 HD12 ILE A 184      13.642  17.951  -4.811  1.00  0.00           H
ATOM   1334 HD13 ILE A 184      12.961  17.997  -6.440  1.00  0.00           H
ATOM   1335  N   LEU A 185      10.886  13.264  -6.055  1.00 28.44           N
ATOM   1336  CA  LEU A 185       9.907  12.884  -7.063  1.00 29.84           C
ATOM   1337  C   LEU A 185       9.714  14.065  -8.039  1.00 29.59           C
ATOM   1338  O   LEU A 185       9.629  15.202  -7.561  1.00 31.09           O
ATOM   1339  CB  LEU A 185       8.552  12.647  -6.368  1.00 30.35           C
ATOM   1340  CG  LEU A 185       8.535  11.509  -5.327  1.00 31.80           C
ATOM   1341  CD1 LEU A 185       7.101  11.301  -4.836  1.00 29.02           C
ATOM   1342  CD2 LEU A 185       9.154  10.208  -5.855  1.00 32.61           C
ATOM   1343  H   LEU A 185      10.543  13.778  -5.246  1.00  0.00           H
ATOM   1344  HA  LEU A 185      10.229  11.975  -7.565  1.00  0.00           H
ATOM   1345  HB2 LEU A 185       8.209  13.567  -5.889  1.00  0.00           H
ATOM   1346  HB3 LEU A 185       7.812  12.425  -7.140  1.00  0.00           H
ATOM   1347  HG  LEU A 185       9.126  11.803  -4.460  1.00  0.00           H
ATOM   1348 HD11 LEU A 185       6.996  10.389  -4.252  1.00  0.00           H
ATOM   1349 HD12 LEU A 185       6.791  12.142  -4.217  1.00  0.00           H
ATOM   1350 HD13 LEU A 185       6.402  11.241  -5.666  1.00  0.00           H
ATOM   1351 HD21 LEU A 185       8.862   9.352  -5.253  1.00  0.00           H
ATOM   1352 HD22 LEU A 185       8.864  10.006  -6.882  1.00  0.00           H
ATOM   1353 HD23 LEU A 185      10.243  10.262  -5.838  1.00  0.00           H
ATOM   1354  N   PRO A 186       9.616  13.822  -9.369  1.00 28.92           N
ATOM   1355  CA  PRO A 186       9.293  14.828 -10.395  1.00 29.13           C
ATOM   1356  C   PRO A 186       8.098  15.732 -10.033  1.00 28.44           C
ATOM   1357  O   PRO A 186       6.971  15.261  -9.849  1.00 28.12           O
ATOM   1358  CB  PRO A 186       9.028  14.026 -11.679  1.00 30.26           C
ATOM   1359  CG  PRO A 186       9.793  12.729 -11.500  1.00 28.14           C
ATOM   1360  CD  PRO A 186       9.861  12.519  -9.992  1.00 28.20           C
ATOM   1361  HA  PRO A 186      10.189  15.436 -10.531  1.00  0.00           H
ATOM   1362  HB2 PRO A 186       7.967  13.802 -11.797  1.00  0.00           H
ATOM   1363  HB3 PRO A 186       9.357  14.562 -12.569  1.00  0.00           H
ATOM   1364  HG2 PRO A 186       9.329  11.888 -12.016  1.00  0.00           H
ATOM   1365  HG3 PRO A 186      10.803  12.843 -11.898  1.00  0.00           H
ATOM   1366  HD2 PRO A 186       9.086  11.825  -9.674  1.00  0.00           H
ATOM   1367  HD3 PRO A 186      10.833  12.104  -9.716  1.00  0.00           H
ATOM   1368  N   LYS A 187       8.356  17.041  -9.948  1.00 28.27           N
ATOM   1369  CA  LYS A 187       7.419  18.079  -9.527  1.00 28.97           C
ATOM   1370  C   LYS A 187       6.311  18.328 -10.566  1.00 26.32           C
ATOM   1371  O   LYS A 187       5.241  18.828 -10.217  1.00 25.20           O
ATOM   1372  CB  LYS A 187       8.198  19.381  -9.275  1.00 32.18           C
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ATOM   1373  CG  LYS A 187       9.070  19.354  -8.002  1.00 34.77           C
ATOM   1374  CD  LYS A 187       8.412  19.960  -6.746  1.00 38.08           C
ATOM   1375  CE  LYS A 187       7.619  18.962  -5.885  1.00 37.86           C
ATOM   1376  NZ  LYS A 187       7.046  19.630  -4.702  1.00 39.41           N1+
ATOM   1377  H   LYS A 187       9.245  17.349 -10.322  1.00  0.00           H
ATOM   1378  HA  LYS A 187       6.964  17.760  -8.597  1.00  0.00           H
ATOM   1379  HB2 LYS A 187       8.833  19.577 -10.142  1.00  0.00           H
ATOM   1380  HB3 LYS A 187       7.519  20.234  -9.232  1.00  0.00           H
ATOM   1381  HG2 LYS A 187       9.467  18.356  -7.802  1.00  0.00           H
ATOM   1382  HG3 LYS A 187       9.945  19.959  -8.225  1.00  0.00           H
ATOM   1383  HD2 LYS A 187       9.205  20.377  -6.126  1.00  0.00           H
ATOM   1384  HD3 LYS A 187       7.787  20.811  -7.024  1.00  0.00           H
ATOM   1385  HE2 LYS A 187       6.805  18.528  -6.461  1.00  0.00           H
ATOM   1386  HE3 LYS A 187       8.258  18.133  -5.585  1.00  0.00           H
ATOM   1387  HZ1 LYS A 187       6.701  19.004  -3.968  1.00  0.00           H
ATOM   1388  HZ2 LYS A 187       7.696  20.283  -4.258  1.00  0.00           H
ATOM   1389  HZ3 LYS A 187       6.247  20.188  -5.028  1.00  0.00           H
ATOM   1390  N   GLU A 188       6.557  17.916 -11.814  1.00 26.19           N
ATOM   1391  CA  GLU A 188       5.656  17.892 -12.964  1.00 25.89           C
ATOM   1392  C   GLU A 188       4.450  16.991 -12.675  1.00 25.60           C
ATOM   1393  O   GLU A 188       3.300  17.431 -12.675  1.00 25.35           O
ATOM   1394  CB  GLU A 188       6.385  17.363 -14.236  1.00 28.34           C
ATOM   1395  CG  GLU A 188       7.715  16.608 -14.036  1.00 32.78           C
ATOM   1396  CD  GLU A 188       8.872  17.535 -13.719  1.00 33.60           C
ATOM   1397  OE1 GLU A 188       9.380  17.472 -12.585  1.00 31.32           O
ATOM   1398  OE2 GLU A 188       9.219  18.363 -14.590  1.00 35.45           O1-
ATOM   1399  H   GLU A 188       7.515  17.606 -11.976  1.00  0.00           H
ATOM   1400  HA  GLU A 188       5.288  18.903 -13.147  1.00  0.00           H
ATOM   1401  HB2 GLU A 188       5.726  16.725 -14.827  1.00  0.00           H
ATOM   1402  HB3 GLU A 188       6.573  18.207 -14.893  1.00  0.00           H
ATOM   1403  HG2 GLU A 188       7.609  15.843 -13.270  1.00  0.00           H
ATOM   1404  HG3 GLU A 188       7.969  16.074 -14.951  1.00  0.00           H
ATOM   1405  N   HIS A 189       4.739  15.716 -12.391  1.00 23.36           N
ATOM   1406  CA  HIS A 189       3.751  14.664 -12.159  1.00 23.70           C
ATOM   1407  C   HIS A 189       3.104  14.820 -10.772  1.00 22.66           C
ATOM   1408  O   HIS A 189       1.956  14.424 -10.568  1.00 23.19           O
ATOM   1409  CB  HIS A 189       4.428  13.285 -12.282  1.00 22.55           C
ATOM   1410  CG  HIS A 189       5.243  13.071 -13.543  1.00 24.25           C
ATOM   1411  ND1 HIS A 189       4.971  13.687 -14.760  1.00 24.12           N
ATOM   1412  CD2 HIS A 189       6.337  12.269 -13.783  1.00 22.85           C
ATOM   1413  CE1 HIS A 189       5.890  13.280 -15.635  1.00 22.58           C
ATOM   1414  NE2 HIS A 189       6.737  12.400 -15.115  1.00 24.93           N
ATOM   1415  H   HIS A 189       5.714  15.449 -12.416  1.00  0.00           H
ATOM   1416  HA  HIS A 189       2.978  14.747 -12.922  1.00  0.00           H
ATOM   1417  HB2 HIS A 189       5.085  13.105 -11.429  1.00  0.00           H
ATOM   1418  HB3 HIS A 189       3.664  12.507 -12.240  1.00  0.00           H
ATOM   1419  HD1 HIS A 189       4.246  14.389 -14.978  1.00  0.00           H
ATOM   1420  HD2 HIS A 189       6.864  11.607 -13.106  1.00  0.00           H
ATOM   1421  HE1 HIS A 189       5.942  13.629 -16.659  1.00  0.00           H
ATOM   1422  N   TRP A 190       3.797  15.520  -9.867  1.00 21.90           N
ATOM   1423  CA  TRP A 190       3.318  16.034  -8.590  1.00 22.07           C
ATOM   1424  C   TRP A 190       2.577  17.387  -8.769  1.00 22.09           C
ATOM   1425  O   TRP A 190       2.464  18.172  -7.828  1.00 23.25           O
ATOM   1426  CB  TRP A 190       4.563  16.243  -7.712  1.00 20.63           C
ATOM   1427  CG  TRP A 190       4.374  16.310  -6.234  1.00 20.86           C
ATOM   1428  CD1 TRP A 190       4.390  17.443  -5.499  1.00 20.30           C
ATOM   1429  CD2 TRP A 190       4.255  15.215  -5.281  1.00 20.57           C
ATOM   1430  NE1 TRP A 190       4.327  17.122  -4.162  1.00 22.97           N
ATOM   1431  CE3 TRP A 190       4.234  13.806  -5.382  1.00 20.34           C
ATOM   1432  CE2 TRP A 190       4.193  15.768  -3.969  1.00 21.62           C
ATOM   1433  CZ3 TRP A 190       4.167  12.997  -4.231  1.00 20.80           C
ATOM   1434  CZ2 TRP A 190       4.103  14.975  -2.817  1.00 20.94           C
ATOM   1435  CH2 TRP A 190       4.095  13.579  -2.948  1.00 23.55           C
ATOM   1436  H   TRP A 190       4.735  15.793 -10.138  1.00  0.00           H
ATOM   1437  HA  TRP A 190       2.652  15.300  -8.136  1.00  0.00           H
ATOM   1438  HB2 TRP A 190       5.287  15.445  -7.879  1.00  0.00           H
ATOM   1439  HB3 TRP A 190       5.050  17.165  -8.016  1.00  0.00           H
ATOM   1440  HD1 TRP A 190       4.508  18.432  -5.919  1.00  0.00           H
ATOM   1441  HE1 TRP A 190       4.697  17.745  -3.425  1.00  0.00           H
ATOM   1442  HE3 TRP A 190       4.302  13.346  -6.357  1.00  0.00           H
ATOM   1443  HZ3 TRP A 190       4.180  11.923  -4.339  1.00  0.00           H
ATOM   1444  HZ2 TRP A 190       4.072  15.435  -1.843  1.00  0.00           H
ATOM   1445  HH2 TRP A 190       4.049  12.968  -2.059  1.00  0.00           H
ATOM   1446  N   SER A 191       2.046  17.665  -9.964  1.00 23.12           N
ATOM   1447  CA  SER A 191       1.177  18.785 -10.298  1.00 23.81           C
ATOM   1448  C   SER A 191      -0.008  18.262 -11.126  1.00 24.41           C
ATOM   1449  O   SER A 191      -0.218  17.048 -11.204  1.00 24.90           O
ATOM   1450  CB  SER A 191       2.001  19.972 -10.854  1.00 25.10           C
ATOM   1451  OG  SER A 191       2.236  19.931 -12.253  1.00 24.23           O
ATOM   1452  H   SER A 191       2.166  16.984 -10.701  1.00  0.00           H
ATOM   1453  HA  SER A 191       0.724  19.138  -9.372  1.00  0.00           H
ATOM   1454  HB2 SER A 191       1.482  20.903 -10.624  1.00  0.00           H
ATOM   1455  HB3 SER A 191       2.957  20.038 -10.339  1.00  0.00           H
ATOM   1456  HG  SER A 191       2.604  19.065 -12.463  1.00  0.00           H
ATOM   1457  N   TYR A 192      -0.815  19.164 -11.688  1.00 24.18           N
ATOM   1458  CA  TYR A 192      -2.033  18.858 -12.432  1.00 22.22           C
ATOM   1459  C   TYR A 192      -1.687  18.973 -13.926  1.00 21.91           C
ATOM   1460  O   TYR A 192      -1.416  20.090 -14.364  1.00 20.67           O
ATOM   1461  CB  TYR A 192      -3.086  19.952 -12.105  1.00 22.43           C
ATOM   1462  CG  TYR A 192      -3.371  20.137 -10.626  1.00 24.33           C
ATOM   1463  CD1 TYR A 192      -4.451  19.475 -10.011  1.00 24.83           C
ATOM   1464  CD2 TYR A 192      -2.529  20.964  -9.854  1.00 24.09           C
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ATOM   1465  CE1 TYR A 192      -4.643  19.589  -8.620  1.00 24.93           C
ATOM   1466  CE2 TYR A 192      -2.718  21.070  -8.468  1.00 24.35           C
ATOM   1467  CZ  TYR A 192      -3.756  20.352  -7.846  1.00 24.98           C
ATOM   1468  OH  TYR A 192      -3.881  20.360  -6.492  1.00 28.04           O
ATOM   1469  H   TYR A 192      -0.524  20.134 -11.707  1.00  0.00           H
ATOM   1470  HA  TYR A 192      -2.436  17.880 -12.168  1.00  0.00           H
ATOM   1471  HB2 TYR A 192      -2.778  20.928 -12.485  1.00  0.00           H
ATOM   1472  HB3 TYR A 192      -4.020  19.723 -12.622  1.00  0.00           H
ATOM   1473  HD1 TYR A 192      -5.112  18.853 -10.595  1.00  0.00           H
ATOM   1474  HD2 TYR A 192      -1.711  21.497 -10.317  1.00  0.00           H
ATOM   1475  HE1 TYR A 192      -5.449  19.066  -8.132  1.00  0.00           H
ATOM   1476  HE2 TYR A 192      -2.042  21.683  -7.893  1.00  0.00           H
ATOM   1477  HH  TYR A 192      -3.314  21.026  -6.079  1.00  0.00           H
ATOM   1478  N   PRO A 193      -1.672  17.885 -14.724  1.00 22.36           N
ATOM   1479  CA  PRO A 193      -1.556  17.961 -16.188  1.00 24.02           C
ATOM   1480  C   PRO A 193      -2.607  18.871 -16.851  1.00 24.39           C
ATOM   1481  O   PRO A 193      -3.698  19.091 -16.324  1.00 24.70           O
ATOM   1482  CB  PRO A 193      -1.746  16.520 -16.677  1.00 24.46           C
ATOM   1483  CG  PRO A 193      -1.382  15.641 -15.497  1.00 25.42           C
ATOM   1484  CD  PRO A 193      -1.639  16.499 -14.261  1.00 24.13           C
ATOM   1485  HA  PRO A 193      -0.553  18.318 -16.431  1.00  0.00           H
ATOM   1486  HB2 PRO A 193      -2.787  16.332 -16.940  1.00  0.00           H
ATOM   1487  HB3 PRO A 193      -1.147  16.300 -17.561  1.00  0.00           H
ATOM   1488  HG2 PRO A 193      -1.953  14.712 -15.483  1.00  0.00           H
ATOM   1489  HG3 PRO A 193      -0.323  15.389 -15.557  1.00  0.00           H
ATOM   1490  HD2 PRO A 193      -2.586  16.220 -13.806  1.00  0.00           H
ATOM   1491  HD3 PRO A 193      -0.856  16.355 -13.521  1.00  0.00           H
ATOM   1492  N   GLU A 194      -2.296  19.364 -18.045  1.00 22.73           N
ATOM   1493  CA  GLU A 194      -3.108  20.298 -18.817  1.00 23.46           C
ATOM   1494  C   GLU A 194      -4.347  19.618 -19.449  1.00 23.36           C
ATOM   1495  O   GLU A 194      -5.186  20.312 -20.018  1.00 21.68           O
ATOM   1496  CB  GLU A 194      -2.201  20.915 -19.912  1.00 25.61           C
ATOM   1497  CG  GLU A 194      -1.185  21.972 -19.397  1.00 28.09           C
ATOM   1498  CD  GLU A 194      -0.179  21.468 -18.364  1.00 32.73           C
ATOM   1499  OE1 GLU A 194       0.094  22.210 -17.397  1.00 31.59           O
ATOM   1500  OE2 GLU A 194       0.246  20.294 -18.474  1.00 33.69           O1-
ATOM   1501  H   GLU A 194      -1.307  19.340 -18.314  1.00  0.00           H
ATOM   1502  HA  GLU A 194      -3.473  21.091 -18.162  1.00  0.00           H
ATOM   1503  HB2 GLU A 194      -1.670  20.126 -20.447  1.00  0.00           H
ATOM   1504  HB3 GLU A 194      -2.823  21.405 -20.661  1.00  0.00           H
ATOM   1505  HG2 GLU A 194      -0.615  22.368 -20.237  1.00  0.00           H
ATOM   1506  HG3 GLU A 194      -1.724  22.816 -18.967  1.00  0.00           H
ATOM   1507  N   TRP A 195      -4.496  18.289 -19.316  1.00 22.03           N
ATOM   1508  CA  TRP A 195      -5.711  17.554 -19.680  1.00 22.35           C
ATOM   1509  C   TRP A 195      -6.742  17.530 -18.532  1.00 22.75           C
ATOM   1510  O   TRP A 195      -7.892  17.156 -18.757  1.00 21.13           O
ATOM   1511  CB  TRP A 195      -5.361  16.091 -20.056  1.00 22.81           C
ATOM   1512  CG  TRP A 195      -4.745  15.168 -19.035  1.00 23.84           C
ATOM   1513  CD1 TRP A 195      -5.391  14.613 -17.982  1.00 25.41           C
ATOM   1514  CD2 TRP A 195      -3.402  14.590 -19.017  1.00 23.39           C
ATOM   1515  NE1 TRP A 195      -4.541  13.765 -17.304  1.00 26.41           N
ATOM   1516  CE3 TRP A 195      -2.255  14.713 -19.836  1.00 23.41           C
ATOM   1517  CE2 TRP A 195      -3.323  13.659 -17.935  1.00 24.13           C
ATOM   1518  CZ3 TRP A 195      -1.101  13.936 -19.601  1.00 26.61           C
ATOM   1519  CZ2 TRP A 195      -2.189  12.865 -17.703  1.00 24.83           C
ATOM   1520  CH2 TRP A 195      -1.070  13.007 -18.542  1.00 23.38           C
ATOM   1521  H   TRP A 195      -3.764  17.789 -18.836  1.00  0.00           H
ATOM   1522  HA  TRP A 195      -6.186  18.026 -20.542  1.00  0.00           H
ATOM   1523  HB2 TRP A 195      -6.273  15.598 -20.397  1.00  0.00           H
ATOM   1524  HB3 TRP A 195      -4.710  16.094 -20.930  1.00  0.00           H
ATOM   1525  HD1 TRP A 195      -6.432  14.786 -17.744  1.00  0.00           H
ATOM   1526  HE1 TRP A 195      -4.854  13.153 -16.543  1.00  0.00           H
ATOM   1527  HE3 TRP A 195      -2.278  15.386 -20.679  1.00  0.00           H
ATOM   1528  HZ3 TRP A 195      -0.251  14.023 -20.262  1.00  0.00           H
ATOM   1529  HZ2 TRP A 195      -2.186  12.136 -16.905  1.00  0.00           H
ATOM   1530  HH2 TRP A 195      -0.205  12.376 -18.396  1.00  0.00           H
ATOM   1531  N   ILE A 196      -6.348  17.894 -17.302  1.00 22.64           N
ATOM   1532  CA  ILE A 196      -7.204  17.864 -16.119  1.00 24.40           C
ATOM   1533  C   ILE A 196      -8.161  19.066 -16.192  1.00 23.38           C
ATOM   1534  O   ILE A 196      -7.738  20.190 -16.475  1.00 23.92           O
ATOM   1535  CB  ILE A 196      -6.314  17.971 -14.838  1.00 23.65           C
ATOM   1536  CG1 ILE A 196      -5.235  16.868 -14.747  1.00 23.75           C
ATOM   1537  CG2 ILE A 196      -7.091  18.044 -13.506  1.00 25.15           C
ATOM   1538  CD1 ILE A 196      -5.758  15.446 -14.529  1.00 22.43           C
ATOM   1539  H   ILE A 196      -5.415  18.270 -17.190  1.00  0.00           H
ATOM   1540  HA  ILE A 196      -7.774  16.934 -16.106  1.00  0.00           H
ATOM   1541  HB  ILE A 196      -5.779  18.919 -14.908  1.00  0.00           H
ATOM   1542 HG12 ILE A 196      -4.621  16.857 -15.644  1.00  0.00           H
ATOM   1543 HG13 ILE A 196      -4.564  17.125 -13.930  1.00  0.00           H
ATOM   1544 HG21 ILE A 196      -6.408  18.100 -12.659  1.00  0.00           H
ATOM   1545 HG22 ILE A 196      -7.728  18.925 -13.451  1.00  0.00           H
ATOM   1546 HG23 ILE A 196      -7.716  17.163 -13.368  1.00  0.00           H
ATOM   1547 HD11 ILE A 196      -4.935  14.730 -14.519  1.00  0.00           H
ATOM   1548 HD12 ILE A 196      -6.277  15.360 -13.581  1.00  0.00           H
ATOM   1549 HD13 ILE A 196      -6.442  15.140 -15.320  1.00  0.00           H
ATOM   1550  N   ASN A 197      -9.442  18.856 -15.864  1.00 22.81           N
ATOM   1551  CA  ASN A 197     -10.412  19.922 -15.617  1.00 22.80           C
ATOM   1552  C   ASN A 197     -10.020  20.639 -14.307  1.00 21.04           C
ATOM   1553  O   ASN A 197     -10.476  20.310 -13.210  1.00 21.74           O
ATOM   1554  CB  ASN A 197     -11.846  19.330 -15.575  1.00  0.00           C
ATOM   1555  CG  ASN A 197     -12.917  20.311 -15.086  1.00  0.00           C
ATOM   1556  OD1 ASN A 197     -13.469  20.119 -14.013  1.00  0.00           O
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ATOM   1557  ND2 ASN A 197     -13.217  21.384 -15.806  1.00  0.00           N
ATOM   1558  H   ASN A 197      -9.725  17.897 -15.665  1.00  0.00           H
ATOM   1559  HA  ASN A 197     -10.366  20.641 -16.438  1.00  0.00           H
ATOM   1560  HB2 ASN A 197     -12.128  18.959 -16.560  1.00  0.00           H
ATOM   1561  HB3 ASN A 197     -11.874  18.466 -14.912  1.00  0.00           H
ATOM   1562 HD22 ASN A 197     -13.842  22.055 -15.354  1.00  0.00           H
ATOM   1563 HD21 ASN A 197     -12.822  21.566 -16.712  1.00  0.00           H
ATOM   1564  N   GLN A 198      -9.172  21.663 -14.433  1.00 20.33           N
ATOM   1565  CA  GLN A 198      -8.759  22.577 -13.369  1.00 20.78           C
ATOM   1566  C   GLN A 198      -9.869  23.610 -13.053  1.00 22.61           C
ATOM   1567  O   GLN A 198      -9.582  24.766 -12.756  1.00 19.79           O
ATOM   1568  CB  GLN A 198      -7.397  23.217 -13.741  1.00 22.47           C
ATOM   1569  CG  GLN A 198      -6.285  22.151 -13.927  1.00 22.31           C
ATOM   1570  CD  GLN A 198      -4.856  22.693 -13.842  1.00 23.01           C
ATOM   1571  OE1 GLN A 198      -4.507  23.403 -12.899  1.00 21.95           O
ATOM   1572  NE2 GLN A 198      -4.002  22.328 -14.791  1.00 23.94           N
ATOM   1573  H   GLN A 198      -8.744  21.779 -15.344  1.00  0.00           H
ATOM   1574  HA  GLN A 198      -8.610  22.026 -12.446  1.00  0.00           H
ATOM   1575  HB2 GLN A 198      -7.489  23.822 -14.645  1.00  0.00           H
ATOM   1576  HB3 GLN A 198      -7.108  23.909 -12.948  1.00  0.00           H
ATOM   1577  HG2 GLN A 198      -6.373  21.389 -13.152  1.00  0.00           H
ATOM   1578  HG3 GLN A 198      -6.420  21.633 -14.875  1.00  0.00           H
ATOM   1579 HE21 GLN A 198      -4.290  21.699 -15.530  1.00  0.00           H
ATOM   1580 HE22 GLN A 198      -3.040  22.669 -14.803  1.00  0.00           H
ATOM   1581  N   THR A 199     -11.133  23.159 -13.060  1.00 22.32           N
ATOM   1582  CA  THR A 199     -12.270  23.796 -12.412  1.00 22.52           C
ATOM   1583  C   THR A 199     -12.667  22.832 -11.282  1.00 21.34           C
ATOM   1584  O   THR A 199     -12.444  23.188 -10.132  1.00 21.66           O
ATOM   1585  CB  THR A 199     -13.393  24.216 -13.405  1.00 21.15           C
ATOM   1586  OG1 THR A 199     -14.313  23.196 -13.736  1.00 24.02           O
ATOM   1587  CG2 THR A 199     -12.869  24.853 -14.702  1.00 20.12           C
ATOM   1588  H   THR A 199     -11.263  22.179 -13.273  1.00  0.00           H
ATOM   1589  HA  THR A 199     -11.933  24.717 -11.931  1.00  0.00           H
ATOM   1590  HB  THR A 199     -13.989  24.976 -12.894  1.00  0.00           H
ATOM   1591  HG1 THR A 199     -14.910  23.153 -12.975  1.00  0.00           H
ATOM   1592 HG21 THR A 199     -13.690  25.248 -15.301  1.00  0.00           H
ATOM   1593 HG22 THR A 199     -12.194  25.680 -14.480  1.00  0.00           H
ATOM   1594 HG23 THR A 199     -12.324  24.135 -15.313  1.00  0.00           H
ATOM   1595  N   LYS A 200     -13.085  21.577 -11.541  1.00 21.45           N
ATOM   1596  CA  LYS A 200     -13.453  20.607 -10.493  1.00 22.36           C
ATOM   1597  C   LYS A 200     -12.243  20.267  -9.600  1.00 21.80           C
ATOM   1598  O   LYS A 200     -12.378  20.136  -8.384  1.00 21.82           O
ATOM   1599  CB  LYS A 200     -14.052  19.329 -11.127  1.00 23.43           C
ATOM   1600  CG  LYS A 200     -14.708  18.350 -10.127  1.00 27.52           C
ATOM   1601  CD  LYS A 200     -15.216  17.064 -10.806  1.00 27.63           C
ATOM   1602  CE  LYS A 200     -15.708  15.998  -9.804  1.00 27.92           C
ATOM   1603  NZ  LYS A 200     -15.718  14.649 -10.404  1.00 31.29           N1+
ATOM   1604  H   LYS A 200     -13.308  21.325 -12.501  1.00  0.00           H
ATOM   1605  HA  LYS A 200     -14.217  21.065  -9.865  1.00  0.00           H
ATOM   1606  HB2 LYS A 200     -14.817  19.631 -11.844  1.00  0.00           H
ATOM   1607  HB3 LYS A 200     -13.280  18.814 -11.701  1.00  0.00           H
ATOM   1608  HG2 LYS A 200     -13.987  18.085  -9.353  1.00  0.00           H
ATOM   1609  HG3 LYS A 200     -15.528  18.856  -9.614  1.00  0.00           H
ATOM   1610  HD2 LYS A 200     -16.010  17.314 -11.512  1.00  0.00           H
ATOM   1611  HD3 LYS A 200     -14.400  16.663 -11.409  1.00  0.00           H
ATOM   1612  HE2 LYS A 200     -15.060  15.966  -8.930  1.00  0.00           H
ATOM   1613  HE3 LYS A 200     -16.701  16.247  -9.425  1.00  0.00           H
ATOM   1614  HZ1 LYS A 200     -15.671  13.916  -9.659  1.00  0.00           H
ATOM   1615  HZ2 LYS A 200     -16.541  14.484 -10.956  1.00  0.00           H
ATOM   1616  HZ3 LYS A 200     -14.894  14.496 -10.961  1.00  0.00           H
ATOM   1617  N   ALA A 201     -11.036  20.222 -10.185  1.00 21.18           N
ATOM   1618  CA  ALA A 201      -9.779  20.107  -9.449  1.00 21.35           C
ATOM   1619  C   ALA A 201      -9.365  21.406  -8.725  1.00 21.94           C
ATOM   1620  O   ALA A 201      -8.352  21.391  -8.030  1.00 19.69           O
ATOM   1621  CB  ALA A 201      -8.653  19.681 -10.410  1.00 16.72           C
ATOM   1622  H   ALA A 201     -11.005  20.352 -11.192  1.00  0.00           H
ATOM   1623  HA  ALA A 201      -9.891  19.345  -8.679  1.00  0.00           H
ATOM   1624  HB1 ALA A 201      -7.669  19.774  -9.951  1.00  0.00           H
ATOM   1625  HB2 ALA A 201      -8.763  18.645 -10.722  1.00  0.00           H
ATOM   1626  HB3 ALA A 201      -8.636  20.281 -11.311  1.00  0.00           H
ATOM   1627  N   ALA A 202     -10.109  22.513  -8.862  1.00 20.87           N
ATOM   1628  CA  ALA A 202      -9.945  23.768  -8.127  1.00 22.47           C
ATOM   1629  C   ALA A 202     -11.085  23.937  -7.103  1.00 22.33           C
ATOM   1630  O   ALA A 202     -10.814  24.221  -5.938  1.00 22.37           O
ATOM   1631  CB  ALA A 202      -9.942  24.953  -9.108  1.00 19.99           C
ATOM   1632  H   ALA A 202     -10.954  22.447  -9.424  1.00  0.00           H
ATOM   1633  HA  ALA A 202      -8.992  23.781  -7.603  1.00  0.00           H
ATOM   1634  HB1 ALA A 202      -9.727  25.884  -8.583  1.00  0.00           H
ATOM   1635  HB2 ALA A 202      -9.175  24.829  -9.873  1.00  0.00           H
ATOM   1636  HB3 ALA A 202     -10.895  25.087  -9.617  1.00  0.00           H
ATOM   1637  N   GLU A 203     -12.346  23.708  -7.506  1.00 22.02           N
ATOM   1638  CA  GLU A 203     -13.579  23.806  -6.716  1.00 23.59           C
ATOM   1639  C   GLU A 203     -13.502  22.942  -5.443  1.00 23.77           C
ATOM   1640  O   GLU A 203     -13.695  23.415  -4.319  1.00 22.97           O
ATOM   1641  CB  GLU A 203     -14.779  23.349  -7.586  1.00 24.19           C
ATOM   1642  CG  GLU A 203     -15.132  24.236  -8.811  1.00 28.14           C
ATOM   1643  CD  GLU A 203     -15.775  23.445  -9.959  1.00 30.24           C
ATOM   1644  OE1 GLU A 203     -16.440  22.431  -9.660  1.00 31.20           O
ATOM   1645  OE2 GLU A 203     -15.540  23.820 -11.132  1.00 32.85           O1-
ATOM   1646  H   GLU A 203     -12.479  23.502  -8.499  1.00  0.00           H
ATOM   1647  HA  GLU A 203     -13.722  24.845  -6.416  1.00  0.00           H
ATOM   1648  HB2 GLU A 203     -14.585  22.330  -7.925  1.00  0.00           H
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ATOM   1649  HB3 GLU A 203     -15.675  23.269  -6.969  1.00  0.00          H
ATOM   1650  HG2 GLU A 203     -15.816  25.030  -8.516  1.00  0.00          H
ATOM   1651  HG3 GLU A 203     -14.246  24.733  -9.202  1.00  0.00          H
ATOM   1652  N   ILE A 204     -13.138  21.668  -5.624  1.00 23.93          N
ATOM   1653  CA  ILE A 204     -13.123  20.646  -4.583  1.00 24.60          C
ATOM   1654  C   ILE A 204     -11.781  20.683  -3.801  1.00 24.13          C
ATOM   1655  O   ILE A 204     -11.569  19.864  -2.906  1.00 26.89          O
ATOM   1656  CB  ILE A 204     -13.448  19.269  -5.251  1.00 24.83          C
ATOM   1657  CG1 ILE A 204     -14.700  19.332  -6.175  1.00 27.64          C
ATOM   1658  CG2 ILE A 204     -13.631  18.107  -4.252  1.00 22.97          C
ATOM   1659  CD1 ILE A 204     -16.008  19.749  -5.485  1.00 28.38          C
ATOM   1660  H   ILE A 204     -12.974  21.356  -6.576  1.00  0.00          H
ATOM   1661  HA  ILE A 204     -13.909  20.861  -3.856  1.00  0.00          H
ATOM   1662  HB  ILE A 204     -12.604  19.002  -5.892  1.00  0.00          H
ATOM   1663 HG12 ILE A 204     -14.530  20.005  -7.014  1.00  0.00          H
ATOM   1664 HG13 ILE A 204     -14.858  18.361  -6.642  1.00  0.00          H
ATOM   1665 HG21 ILE A 204     -14.029  17.223  -4.747  1.00  0.00          H
ATOM   1666 HG22 ILE A 204     -12.694  17.804  -3.792  1.00  0.00          H
ATOM   1667 HG23 ILE A 204     -14.324  18.376  -3.456  1.00  0.00          H
ATOM   1668 HD11 ILE A 204     -16.829  19.767  -6.202  1.00  0.00          H
ATOM   1669 HD12 ILE A 204     -16.281  19.062  -4.686  1.00  0.00          H
ATOM   1670 HD13 ILE A 204     -15.939  20.749  -5.058  1.00  0.00          H
ATOM   1671  N   ARG A 205     -10.904  21.679  -4.036  1.00 23.13          N
ATOM   1672  CA  ARG A 205      -9.792  22.015  -3.131  1.00 25.14          C
ATOM   1673  C   ARG A 205     -10.338  22.769  -1.904  1.00 25.07          C
ATOM   1674  O   ARG A 205      -9.750  22.688  -0.826  1.00 22.75          O
ATOM   1675  CB  ARG A 205      -8.774  22.984  -3.789  1.00 25.21          C
ATOM   1676  CG  ARG A 205      -8.185  22.561  -5.143  1.00 29.73          C
ATOM   1677  CD  ARG A 205      -6.888  21.734  -5.097  1.00 29.20          C
ATOM   1678  NE  ARG A 205      -5.704  22.526  -5.477  1.00 29.90          N
ATOM   1679  CZ  ARG A 205      -5.344  22.951  -6.698  1.00 28.96          C
ATOM   1680  NH1 ARG A 205      -6.133  22.835  -7.763  1.00 29.65          N
ATOM   1681  NH2 ARG A 205      -4.147  23.502  -6.847  1.00 28.01          N1+
ATOM   1682  H   ARG A 205     -11.139  22.345  -4.763  1.00  0.00          H
ATOM   1683  HA  ARG A 205      -9.281  21.108  -2.806  1.00  0.00          H
ATOM   1684  HB2 ARG A 205      -9.256  23.952  -3.936  1.00  0.00          H
ATOM   1685  HB3 ARG A 205      -7.956  23.190  -3.096  1.00  0.00          H
ATOM   1686  HG2 ARG A 205      -8.943  22.032  -5.715  1.00  0.00          H
ATOM   1687  HG3 ARG A 205      -7.982  23.477  -5.695  1.00  0.00          H
ATOM   1688  HD2 ARG A 205      -6.730  21.304  -4.107  1.00  0.00          H
ATOM   1689  HD3 ARG A 205      -6.955  20.890  -5.785  1.00  0.00          H
ATOM   1690  HE  ARG A 205      -4.991  22.677  -4.729  1.00  0.00          H
ATOM   1691 HH11 ARG A 205      -7.002  22.288  -7.741  1.00  0.00          H
ATOM   1692 HH12 ARG A 205      -5.813  23.133  -8.702  1.00  0.00          H
ATOM   1693 HH21 ARG A 205      -3.424  23.246  -6.150  1.00  0.00          H
ATOM   1694 HH22 ARG A 205      -3.788  23.861  -7.731  1.00  0.00          H
ATOM   1695  N   ALA A 206     -11.427  23.531  -2.087  1.00 24.01          N
ATOM   1696  CA  ALA A 206     -12.047  24.362  -1.064  1.00 24.47          C
ATOM   1697  C   ALA A 206     -13.184  23.590  -0.385  1.00 24.30          C
ATOM   1698  O   ALA A 206     -13.147  23.419   0.830  1.00 25.49          O
ATOM   1699  CB  ALA A 206     -12.629  25.620  -1.733  1.00 23.88          C
ATOM   1700  H   ALA A 206     -11.861  23.524  -3.002  1.00  0.00          H
ATOM   1701  HA  ALA A 206     -11.317  24.662  -0.307  1.00  0.00          H
ATOM   1702  HB1 ALA A 206     -13.122  26.258  -0.999  1.00  0.00          H
ATOM   1703  HB2 ALA A 206     -11.840  26.212  -2.197  1.00  0.00          H
ATOM   1704  HB3 ALA A 206     -13.360  25.384  -2.508  1.00  0.00          H
ATOM   1705  N   ASP A 207     -14.174  23.107  -1.159  1.00 23.97          N
ATOM   1706  CA  ASP A 207     -15.399  22.435  -0.675  1.00 24.82          C
ATOM   1707  C   ASP A 207     -15.095  21.277   0.300  1.00 24.07          C
ATOM   1708  O   ASP A 207     -15.702  21.147   1.364  1.00 24.77          O
ATOM   1709  CB  ASP A 207     -16.311  22.040  -1.885  1.00 25.95          C
ATOM   1710  CG  ASP A 207     -16.888  20.621  -1.899  1.00 28.75          C
ATOM   1711  OD1 ASP A 207     -18.109  20.439  -1.704  1.00 30.03          O
ATOM   1712  OD2 ASP A 207     -16.125  19.639  -2.057  1.00 31.14          O1-
ATOM   1713  H   ASP A 207     -14.110  23.287  -2.155  1.00  0.00          H
ATOM   1714  HA  ASP A 207     -15.946  23.173  -0.086  1.00  0.00          H
ATOM   1715  HB2 ASP A 207     -17.144  22.741  -1.949  1.00  0.00          H
ATOM   1716  HB3 ASP A 207     -15.769  22.151  -2.823  1.00  0.00          H
ATOM   1717  N   ALA A 208     -14.110  20.454  -0.073  1.00 23.20          N
ATOM   1718  CA  ALA A 208     -13.765  19.216   0.602  1.00 22.76          C
ATOM   1719  C   ALA A 208     -13.053  19.444   1.944  1.00 22.38          C
ATOM   1720  O   ALA A 208     -13.029  18.532   2.773  1.00 24.01          O
ATOM   1721  CB  ALA A 208     -12.872  18.401  -0.330  1.00 19.96          C
ATOM   1722  H   ALA A 208     -13.719  20.617  -0.989  1.00  0.00          H
ATOM   1723  HA  ALA A 208     -14.680  18.660   0.786  1.00  0.00          H
ATOM   1724  HB1 ALA A 208     -12.562  17.474   0.142  1.00  0.00          H
ATOM   1725  HB2 ALA A 208     -13.399  18.139  -1.247  1.00  0.00          H
ATOM   1726  HB3 ALA A 208     -11.980  18.954  -0.604  1.00  0.00          H
ATOM   1727  N   ALA A 209     -12.559  20.667   2.204  1.00 22.75          N
ATOM   1728  CA  ALA A 209     -12.015  21.105   3.493  1.00 22.99          C
ATOM   1729  C   ALA A 209     -13.099  21.151   4.584  1.00 24.29          C
ATOM   1730  O   ALA A 209     -12.786  21.088   5.773  1.00 25.18          O
ATOM   1731  CB  ALA A 209     -11.411  22.508   3.339  1.00 23.91          C
ATOM   1732  H   ALA A 209     -12.697  21.385   1.499  1.00  0.00          H
ATOM   1733  HA  ALA A 209     -11.239  20.406   3.800  1.00  0.00          H
ATOM   1734  HB1 ALA A 209     -10.820  22.777   4.216  1.00  0.00          H
ATOM   1735  HB2 ALA A 209     -10.758  22.573   2.470  1.00  0.00          H
ATOM   1736  HB3 ALA A 209     -12.181  23.271   3.222  1.00  0.00          H
ATOM   1737  N   THR A 210     -14.365  21.208   4.167  1.00 22.25          N
ATOM   1738  CA  THR A 210     -15.567  21.158   4.980  1.00 22.42          C
ATOM   1739  C   THR A 210     -16.401  19.901   4.651  1.00 21.18          C
ATOM   1740  O   THR A 210     -17.597  19.880   4.935  1.00 19.00          O
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ATOM   1741  CB  THR A 210     -16.323  22.508   4.830  1.00 24.82           C
ATOM   1742  OG1 THR A 210     -16.431  22.922   3.476  1.00 24.17           O
ATOM   1743  CG2 THR A 210     -15.634  23.654   5.584  1.00 24.26           C
ATOM   1744  H   THR A 210     -14.525  21.352   3.175  1.00  0.00           H
ATOM   1745  HA  THR A 210     -15.303  21.039   6.032  1.00  0.00           H
ATOM   1746  HB  THR A 210     -17.333  22.404   5.230  1.00  0.00           H
ATOM   1747  HG1 THR A 210     -16.661  22.183   2.921  1.00  0.00           H
ATOM   1748 HG21 THR A 210     -16.204  24.579   5.495  1.00  0.00           H
ATOM   1749 HG22 THR A 210     -15.537  23.426   6.645  1.00  0.00           H
ATOM   1750 HG23 THR A 210     -14.634  23.845   5.192  1.00  0.00           H
ATOM   1751  N   LYS A 211     -15.784  18.840   4.094  1.00 20.79           N
ATOM   1752  CA  LYS A 211     -16.426  17.540   3.882  1.00 22.47           C
ATOM   1753  C   LYS A 211     -15.640  16.378   4.505  1.00 22.13           C
ATOM   1754  O   LYS A 211     -16.264  15.487   5.078  1.00 22.26           O
ATOM   1755  CB  LYS A 211     -16.734  17.253   2.391  1.00 24.94           C
ATOM   1756  CG  LYS A 211     -17.636  18.291   1.686  1.00 30.95           C
ATOM   1757  CD  LYS A 211     -18.733  17.677   0.797  1.00 35.72           C
ATOM   1758  CE  LYS A 211     -18.241  16.936  -0.460  1.00 40.53           C
ATOM   1759  NZ  LYS A 211     -17.935  17.843  -1.576  1.00 39.99           N1+
ATOM   1760  H   LYS A 211     -14.795  18.923   3.893  1.00  0.00           H
ATOM   1761  HA  LYS A 211     -17.387  17.525   4.402  1.00  0.00           H
ATOM   1762  HB2 LYS A 211     -15.807  17.119   1.836  1.00  0.00           H
ATOM   1763  HB3 LYS A 211     -17.225  16.279   2.354  1.00  0.00           H
ATOM   1764  HG2 LYS A 211     -18.138  18.900   2.439  1.00  0.00           H
ATOM   1765  HG3 LYS A 211     -17.032  18.989   1.107  1.00  0.00           H
ATOM   1766  HD2 LYS A 211     -19.315  16.985   1.408  1.00  0.00           H
ATOM   1767  HD3 LYS A 211     -19.436  18.461   0.506  1.00  0.00           H
ATOM   1768  HE2 LYS A 211     -17.379  16.304  -0.245  1.00  0.00           H
ATOM   1769  HE3 LYS A 211     -19.036  16.271  -0.800  1.00  0.00           H
ATOM   1770  HZ1 LYS A 211     -17.993  17.435  -2.490  1.00  0.00           H
ATOM   1771  HZ2 LYS A 211     -18.478  18.715  -1.568  1.00  0.00           H
ATOM   1772  HZ3 LYS A 211     -17.019  18.314  -1.525  1.00  0.00           H
ATOM   1773  N   TYR A 212     -14.306  16.320   4.362  1.00 21.51           N
ATOM   1774  CA  TYR A 212     -13.540  15.127   4.739  1.00 22.30           C
ATOM   1775  C   TYR A 212     -12.053  15.379   5.008  1.00 19.69           C
ATOM   1776  O   TYR A 212     -11.474  16.343   4.507  1.00 19.22           O
ATOM   1777  CB  TYR A 212     -13.781  13.981   3.726  1.00 22.78           C
ATOM   1778  CG  TYR A 212     -13.594  14.341   2.258  1.00 23.36           C
ATOM   1779  CD1 TYR A 212     -12.310  14.586   1.733  1.00 23.83           C
ATOM   1780  CD2 TYR A 212     -14.715  14.413   1.406  1.00 26.25           C
ATOM   1781  CE1 TYR A 212     -12.151  14.856   0.362  1.00 23.80           C
ATOM   1782  CE2 TYR A 212     -14.552  14.677   0.034  1.00 24.56           C
ATOM   1783  CZ  TYR A 212     -13.265  14.879  -0.494  1.00 23.94           C
ATOM   1784  OH  TYR A 212     -13.094  15.098  -1.829  1.00 25.44           O
ATOM   1785  H   TYR A 212     -13.797  17.052   3.875  1.00  0.00           H
ATOM   1786  HA  TYR A 212     -13.934  14.797   5.699  1.00  0.00           H
ATOM   1787  HB2 TYR A 212     -13.123  13.140   3.950  1.00  0.00           H
ATOM   1788  HB3 TYR A 212     -14.787  13.583   3.865  1.00  0.00           H
ATOM   1789  HD1 TYR A 212     -11.437  14.547   2.369  1.00  0.00           H
ATOM   1790  HD2 TYR A 212     -15.704  14.248   1.806  1.00  0.00           H
ATOM   1791  HE1 TYR A 212     -11.167  15.042  -0.030  1.00  0.00           H
ATOM   1792  HE2 TYR A 212     -15.416  14.702  -0.611  1.00  0.00           H
ATOM   1793  HH  TYR A 212     -13.887  14.947  -2.322  1.00  0.00           H
ATOM   1794  N   ILE A 213     -11.441  14.462   5.769  1.00 19.76           N
ATOM   1795  CA  ILE A 213     -10.012  14.261   6.027  1.00 18.38           C
ATOM   1796  C   ILE A 213      -9.154  14.306   4.740  1.00 19.12           C
ATOM   1797  O   ILE A 213      -9.386  13.533   3.805  1.00 20.73           O
ATOM   1798  CB  ILE A 213      -9.843  12.976   6.899  1.00 18.18           C
ATOM   1799  CG1 ILE A 213      -8.393  12.534   7.203  1.00 16.52           C
ATOM   1800  CG2 ILE A 213     -10.605  11.760   6.344  1.00 15.90           C
ATOM   1801  CD1 ILE A 213      -7.523  13.579   7.907  1.00 15.33           C
ATOM   1802  H   ILE A 213     -12.048  13.779   6.208  1.00  0.00           H
ATOM   1803  HA  ILE A 213      -9.707  15.101   6.647  1.00  0.00           H
ATOM   1804  HB  ILE A 213     -10.296  13.204   7.865  1.00  0.00           H
ATOM   1805 HG12 ILE A 213      -8.422  11.655   7.849  1.00  0.00           H
ATOM   1806 HG13 ILE A 213      -7.904  12.200   6.290  1.00  0.00           H
ATOM   1807 HG21 ILE A 213     -10.476  10.914   7.016  1.00  0.00           H
ATOM   1808 HG22 ILE A 213     -11.678  11.927   6.256  1.00  0.00           H
ATOM   1809 HG23 ILE A 213     -10.232  11.463   5.364  1.00  0.00           H
ATOM   1810 HD11 ILE A 213      -6.591  13.130   8.251  1.00  0.00           H
ATOM   1811 HD12 ILE A 213      -7.246  14.382   7.229  1.00  0.00           H
ATOM   1812 HD13 ILE A 213      -8.025  14.005   8.775  1.00  0.00           H
ATOM   1813  N   TYR A 214      -8.197  15.244   4.685  1.00 17.70           N
ATOM   1814  CA  TYR A 214      -7.246  15.502   3.598  1.00 17.21           C
ATOM   1815  C   TYR A 214      -7.938  16.042   2.326  1.00 16.96           C
ATOM   1816  O   TYR A 214      -7.452  15.884   1.207  1.00 18.78           O
ATOM   1817  CB  TYR A 214      -6.272  14.321   3.331  1.00 16.51           C
ATOM   1818  CG  TYR A 214      -5.416  13.849   4.482  1.00 22.99           C
ATOM   1819  CD1 TYR A 214      -4.433  14.651   5.071  1.00 22.50           C
ATOM   1820  CD2 TYR A 214      -5.501  12.517   4.887  1.00 22.11           C
ATOM   1821  CE1 TYR A 214      -3.552  14.129   6.013  1.00 25.16           C
ATOM   1822  CE2 TYR A 214      -4.633  11.978   5.827  1.00 24.75           C
ATOM   1823  CZ  TYR A 214      -3.632  12.781   6.379  1.00 24.22           C
ATOM   1824  OH  TYR A 214      -2.741  12.313   7.281  1.00 26.19           O
ATOM   1825  H   TYR A 214      -8.087  15.831   5.512  1.00  0.00           H
ATOM   1826  HA  TYR A 214      -6.641  16.339   3.950  1.00  0.00           H
ATOM   1827  HB2 TYR A 214      -6.850  13.472   2.973  1.00  0.00           H
ATOM   1828  HB3 TYR A 214      -5.606  14.591   2.504  1.00  0.00           H
ATOM   1829  HD1 TYR A 214      -4.342  15.697   4.785  1.00  0.00           H
ATOM   1830  HD2 TYR A 214      -6.247  11.859   4.448  1.00  0.00           H
ATOM   1831  HE1 TYR A 214      -2.797  14.752   6.485  1.00  0.00           H
ATOM   1832  HE2 TYR A 214      -4.726  10.936   6.120  1.00  0.00           H
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ATOM   1833 HH  TYR A 214      -2.717  11.328   7.242  1.00  0.00          H
ATOM   1834 N   GLY A 215      -9.068  16.731   2.494  1.00 19.32          N
ATOM   1835 CA  GLY A 215      -9.894  17.272   1.422  1.00 20.66          C
ATOM   1836 C   GLY A 215      -9.579  18.748   1.193  1.00 20.07          C
ATOM   1837 O   GLY A 215      -9.599  19.209   0.053  1.00 23.01          O
ATOM   1838 H   GLY A 215      -9.389  16.880   3.446  1.00  0.00          H
ATOM   1839 HA2 GLY A 215      -9.764  16.721   0.490  1.00  0.00          H
ATOM   1840 HA3 GLY A 215     -10.937  17.178   1.720  1.00  0.00          H
ATOM   1841 N   GLY A 216      -9.108  19.442   2.232  1.00 20.86          N
ATOM   1842 CA  GLY A 216      -8.518  20.772   2.148  1.00 19.87          C
ATOM   1843 C   GLY A 216      -6.995  20.659   2.043  1.00 20.78          C
ATOM   1844 O   GLY A 216      -6.262  21.558   2.454  1.00 20.29          O
ATOM   1845 H   GLY A 216      -9.166  19.014   3.158  1.00  0.00          H
ATOM   1846 HA2 GLY A 216      -8.908  21.340   1.303  1.00  0.00          H
ATOM   1847 HA3 GLY A 216      -8.765  21.329   3.052  1.00  0.00          H
ATOM   1848 N   SER A 217      -6.500  19.529   1.526  1.00 19.48          N
ATOM   1849 CA  SER A 217      -5.105  19.298   1.215  1.00 20.05          C
ATOM   1850 C   SER A 217      -4.910  19.520  -0.287  1.00 20.74          C
ATOM   1851 O   SER A 217      -5.735  19.111  -1.114  1.00 20.42          O
ATOM   1852 CB  SER A 217      -4.745  17.833   1.520  1.00 20.42          C
ATOM   1853 OG  SER A 217      -3.340  17.667   1.489  1.00 20.14          O
ATOM   1854 H   SER A 217      -7.164  18.852   1.181  1.00  0.00          H
ATOM   1855 HA  SER A 217      -4.462  19.966   1.791  1.00  0.00          H
ATOM   1856 HB2 SER A 217      -5.104  17.533   2.504  1.00  0.00          H
ATOM   1857 HB3 SER A 217      -5.209  17.158   0.800  1.00  0.00          H
ATOM   1858 HG  SER A 217      -3.005  17.947   2.340  1.00  0.00          H
ATOM   1859 N   GLU A 218      -3.772  20.125  -0.614  1.00 21.33          N
ATOM   1860 CA  GLU A 218      -3.215  20.212  -1.945  1.00 22.53          C
ATOM   1861 C   GLU A 218      -2.455  18.898  -2.225  1.00 21.12          C
ATOM   1862 O   GLU A 218      -2.873  18.089  -3.056  1.00 21.10          O
ATOM   1863 CB  GLU A 218      -2.258  21.426  -1.911  1.00 25.65          C
ATOM   1864 CG  GLU A 218      -1.599  21.816  -3.232  1.00 26.70          C
ATOM   1865 CD  GLU A 218      -2.575  22.369  -4.251  1.00 27.03          C
ATOM   1866 OE1 GLU A 218      -3.611  22.972  -3.901  1.00 26.49          O
ATOM   1867 OE2 GLU A 218      -2.308  22.200  -5.456  1.00 26.09          O1-
ATOM   1868 H   GLU A 218      -3.196  20.485   0.140  1.00  0.00          H
ATOM   1869 HA  GLU A 218      -4.002  20.357  -2.689  1.00  0.00          H
ATOM   1870 HB2 GLU A 218      -2.807  22.294  -1.555  1.00  0.00          H
ATOM   1871 HB3 GLU A 218      -1.463  21.277  -1.181  1.00  0.00          H
ATOM   1872 HG2 GLU A 218      -0.883  22.605  -3.027  1.00  0.00          H
ATOM   1873 HG3 GLU A 218      -1.036  20.984  -3.654  1.00  0.00          H
ATOM   1874 N   SER A 219      -1.362  18.663  -1.485  1.00 19.74          N
ATOM   1875 CA  SER A 219      -0.335  17.685  -1.816  1.00 18.94          C
ATOM   1876 C   SER A 219      -0.745  16.218  -1.613  1.00 18.73          C
ATOM   1877 O   SER A 219      -0.149  15.347  -2.244  1.00 18.43          O
ATOM   1878 CB  SER A 219       0.933  18.024  -1.011  1.00 17.41          C
ATOM   1879 OG  SER A 219       0.787  17.843   0.389  1.00 21.92          O
ATOM   1880 H   SER A 219      -1.119  19.323  -0.763  1.00  0.00          H
ATOM   1881 HA  SER A 219      -0.097  17.798  -2.871  1.00  0.00          H
ATOM   1882 HB2 SER A 219       1.749  17.384  -1.352  1.00  0.00          H
ATOM   1883 HB3 SER A 219       1.257  19.047  -1.211  1.00  0.00          H
ATOM   1884 HG  SER A 219       1.663  17.560   0.668  1.00  0.00          H
ATOM   1885 N   TYR A 220      -1.788  15.922  -0.816  1.00 20.35          N
ATOM   1886 CA  TYR A 220      -2.291  14.560  -0.615  1.00 20.31          C
ATOM   1887 C   TYR A 220      -2.813  13.943  -1.931  1.00 21.43          C
ATOM   1888 O   TYR A 220      -2.692  12.741  -2.157  1.00 21.25          O
ATOM   1889 CB  TYR A 220      -3.398  14.551   0.466  1.00 18.66          C
ATOM   1890 CG  TYR A 220      -3.801  13.207   1.033  1.00 19.79          C
ATOM   1891 CD1 TYR A 220      -3.082  12.713   2.126  1.00 20.92          C
ATOM   1892 CD2 TYR A 220      -4.916  12.490   0.597  1.00 19.71          C
ATOM   1893 CE1 TYR A 220      -3.436  11.524   2.744  1.00 21.76          C
ATOM   1894 CE2 TYR A 220      -5.299  11.304   1.217  1.00 20.40          C
ATOM   1895 CZ  TYR A 220      -4.552  10.820   2.289  1.00 22.36          C
ATOM   1896 OH  TYR A 220      -4.939   9.662   2.888  1.00 20.26          O
ATOM   1897 H   TYR A 220      -2.241  16.676  -0.311  1.00  0.00          H
ATOM   1898 HA  TYR A 220      -1.458  13.952  -0.254  1.00  0.00          H
ATOM   1899 HB2 TYR A 220      -2.996  15.142   1.290  1.00  0.00          H
ATOM   1900 HB3 TYR A 220      -4.270  15.081   0.070  1.00  0.00          H
ATOM   1901 HD1 TYR A 220      -2.233  13.275   2.509  1.00  0.00          H
ATOM   1902 HD2 TYR A 220      -5.496  12.863  -0.243  1.00  0.00          H
ATOM   1903 HE1 TYR A 220      -2.871  11.158   3.593  1.00  0.00          H
ATOM   1904 HE2 TYR A 220      -6.158  10.739   0.875  1.00  0.00          H
ATOM   1905 HH  TYR A 220      -4.330   9.443   3.633  1.00  0.00          H
ATOM   1906 N   ARG A 221      -3.319  14.785  -2.839  1.00 19.98          N
ATOM   1907 CA  ARG A 221      -3.860  14.392  -4.135  1.00 19.09          C
ATOM   1908 C   ARG A 221      -2.731  14.084  -5.134  1.00 20.19          C
ATOM   1909 O   ARG A 221      -2.847  13.154  -5.930  1.00 18.27          O
ATOM   1910 CB  ARG A 221      -4.683  15.575  -4.670  1.00 19.12          C
ATOM   1911 CG  ARG A 221      -5.851  15.965  -3.749  1.00 16.39          C
ATOM   1912 CD  ARG A 221      -6.540  17.261  -4.185  1.00 17.18          C
ATOM   1913 NE  ARG A 221      -7.992  17.155  -4.001  1.00 19.14          N
ATOM   1914 CZ  ARG A 221      -8.753  17.814  -3.124  1.00 18.73          C
ATOM   1915 NH1 ARG A 221      -8.241  18.642  -2.213  1.00 18.23          N
ATOM   1916 NH2 ARG A 221     -10.062  17.617  -3.166  1.00 17.55          N1+
ATOM   1917 H   ARG A 221      -3.293  15.772  -2.617  1.00  0.00          H
ATOM   1918 HA  ARG A 221      -4.495  13.509  -4.027  1.00  0.00          H
ATOM   1919 HB2 ARG A 221      -4.039  16.441  -4.836  1.00  0.00          H
ATOM   1920 HB3 ARG A 221      -5.086  15.301  -5.645  1.00  0.00          H
ATOM   1921 HG2 ARG A 221      -6.559  15.136  -3.702  1.00  0.00          H
ATOM   1922 HG3 ARG A 221      -5.504  16.113  -2.726  1.00  0.00          H
ATOM   1923 HD2 ARG A 221      -6.119  18.119  -3.660  1.00  0.00          H
ATOM   1924 HD3 ARG A 221      -6.361  17.454  -5.242  1.00  0.00          H
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ATOM   1925  HE  ARG A 221      -8.459  16.539  -4.666  1.00  0.00           H
ATOM   1926 HH11 ARG A 221      -7.235  18.762  -2.065  1.00  0.00           H
ATOM   1927 HH12 ARG A 221      -8.836  19.020  -1.464  1.00  0.00           H
ATOM   1928 HH21 ARG A 221     -10.442  16.866  -3.753  1.00  0.00           H
ATOM   1929 HH22 ARG A 221     -10.717  18.325  -2.816  1.00  0.00           H
ATOM   1930  N   HIS A 222      -1.620  14.832  -5.058  1.00 19.92           N
ATOM   1931  CA  HIS A 222      -0.409  14.619  -5.856  1.00 20.24           C
ATOM   1932  C   HIS A 222       0.313  13.362  -5.370  1.00 19.44           C
ATOM   1933  O   HIS A 222       0.709  12.525  -6.178  1.00 21.15           O
ATOM   1934  CB  HIS A 222       0.540  15.822  -5.701  1.00 18.79           C
ATOM   1935  CG  HIS A 222      -0.036  17.107  -6.209  1.00 19.64           C
ATOM   1936  ND1 HIS A 222      -0.169  18.231  -5.392  1.00 22.12           N
ATOM   1937  CD2 HIS A 222      -0.545  17.395  -7.455  1.00 20.71           C
ATOM   1938  CE1 HIS A 222      -0.802  19.119  -6.143  1.00 20.00           C
ATOM   1939  NE2 HIS A 222      -1.056  18.675  -7.371  1.00 22.40           N
ATOM   1940  H   HIS A 222      -1.586  15.538  -4.337  1.00  0.00           H
ATOM   1941  HA  HIS A 222      -0.678  14.487  -6.906  1.00  0.00           H
ATOM   1942  HB2 HIS A 222       0.839  15.958  -4.661  1.00  0.00           H
ATOM   1943  HB3 HIS A 222       1.464  15.640  -6.246  1.00  0.00           H
ATOM   1944  HD2 HIS A 222      -0.611  16.799  -8.353  1.00  0.00           H
ATOM   1945  HE1 HIS A 222      -1.098  20.092  -5.791  1.00  0.00           H
ATOM   1946  HE2 HIS A 222      -1.595  19.173  -8.072  1.00  0.00           H
ATOM   1947  N   MET A 223       0.403  13.209  -4.044  1.00 20.38           N
ATOM   1948  CA  MET A 223       0.879  12.029  -3.337  1.00 21.04           C
ATOM   1949  C   MET A 223       0.101  10.775  -3.751  1.00 21.36           C
ATOM   1950  O   MET A 223       0.720   9.825  -4.223  1.00 20.45           O
ATOM   1951  CB  MET A 223       0.839  12.317  -1.826  1.00 20.16           C
ATOM   1952  CG  MET A 223       1.443  11.233  -0.926  1.00 21.68           C
ATOM   1953  SD  MET A 223       0.359   9.841  -0.504  1.00 24.24           S
ATOM   1954  CE  MET A 223      -0.920  10.695   0.447  1.00 23.61           C
ATOM   1955  H   MET A 223       0.096  13.990  -3.471  1.00  0.00           H
ATOM   1956  HA  MET A 223       1.912  11.860  -3.629  1.00  0.00           H
ATOM   1957  HB2 MET A 223       1.412  13.228  -1.649  1.00  0.00           H
ATOM   1958  HB3 MET A 223      -0.172  12.552  -1.508  1.00  0.00           H
ATOM   1959  HG2 MET A 223       2.357  10.846  -1.371  1.00  0.00           H
ATOM   1960  HG3 MET A 223       1.742  11.697   0.010  1.00  0.00           H
ATOM   1961  HE1 MET A 223      -1.603   9.971   0.886  1.00  0.00           H
ATOM   1962  HE2 MET A 223      -0.480  11.284   1.251  1.00  0.00           H
ATOM   1963  HE3 MET A 223      -1.509  11.355  -0.185  1.00  0.00           H
ATOM   1964  N   CYS A 224      -1.236  10.786  -3.657  1.00 20.63           N
ATOM   1965  CA  CYS A 224      -2.072   9.635  -4.005  1.00 20.63           C
ATOM   1966  C   CYS A 224      -2.060   9.314  -5.510  1.00 19.25           C
ATOM   1967  O   CYS A 224      -2.143   8.140  -5.865  1.00 18.72           O
ATOM   1968  CB  CYS A 224      -3.519   9.852  -3.537  1.00 18.88           C
ATOM   1969  SG  CYS A 224      -3.584   9.736  -1.726  1.00 21.25           S
ATOM   1970  H   CYS A 224      -1.690  11.581  -3.216  1.00  0.00           H
ATOM   1971  HA  CYS A 224      -1.673   8.756  -3.492  1.00  0.00           H
ATOM   1972  HB2 CYS A 224      -3.923  10.808  -3.873  1.00  0.00           H
ATOM   1973  HB3 CYS A 224      -4.161   9.071  -3.944  1.00  0.00           H
ATOM   1974  HG  CYS A 224      -3.028  10.937  -1.512  1.00  0.00           H
ATOM   1975  N   ARG A 225      -1.872  10.309  -6.394  1.00 20.13           N
ATOM   1976  CA  ARG A 225      -1.617  10.081  -7.820  1.00 18.90           C
ATOM   1977  C   ARG A 225      -0.249   9.398  -8.001  1.00 18.94           C
ATOM   1978  O   ARG A 225      -0.146   8.382  -8.689  1.00 18.24           O
ATOM   1979  CB  ARG A 225      -1.658  11.418  -8.603  1.00 19.79           C
ATOM   1980  CG  ARG A 225      -1.393  11.264 -10.118  1.00 22.48           C
ATOM   1981  CD  ARG A 225      -1.326  12.597 -10.874  1.00 21.79           C
ATOM   1982  NE  ARG A 225      -1.132  12.366 -12.308  1.00 21.49           N
ATOM   1983  CZ  ARG A 225      -0.405  13.026 -13.211  1.00 23.17           C
ATOM   1984 NH1 ARG A 225       0.352  14.068 -12.867  1.00 23.34           N
ATOM   1985 NH2 ARG A 225      -0.445  12.628 -14.480  1.00 25.08           N1+
ATOM   1986  H   ARG A 225      -1.858  11.263  -6.052  1.00  0.00           H
ATOM   1987  HA  ARG A 225      -2.392   9.419  -8.214  1.00  0.00           H
ATOM   1988  HB2 ARG A 225      -2.634  11.883  -8.463  1.00  0.00           H
ATOM   1989  HB3 ARG A 225      -0.932  12.115  -8.186  1.00  0.00           H
ATOM   1990  HG2 ARG A 225      -0.453  10.743 -10.298  1.00  0.00           H
ATOM   1991  HG3 ARG A 225      -2.174  10.638 -10.553  1.00  0.00           H
ATOM   1992  HD2 ARG A 225      -2.271  13.121 -10.753  1.00  0.00           H
ATOM   1993  HD3 ARG A 225      -0.532  13.225 -10.471  1.00  0.00           H
ATOM   1994  HE  ARG A 225      -1.775  11.610 -12.697  1.00  0.00           H
ATOM   1995 HH11 ARG A 225       0.518  14.292 -11.886  1.00  0.00           H
ATOM   1996 HH12 ARG A 225       0.848  14.621 -13.548  1.00  0.00           H
ATOM   1997 HH21 ARG A 225      -0.941  11.721 -14.719  1.00  0.00           H
ATOM   1998 HH22 ARG A 225       0.016  13.066 -15.257  1.00  0.00           H
ATOM   1999  N   TYR A 226       0.803   9.934  -7.366  1.00 16.90           N
ATOM   2000  CA  TYR A 226       2.171   9.444  -7.506  1.00 18.14           C
ATOM   2001  C   TYR A 226       2.331   8.029  -6.915  1.00 17.98           C
ATOM   2002  O   TYR A 226       2.902   7.149  -7.562  1.00 18.92           O
ATOM   2003  CB  TYR A 226       3.171  10.433  -6.867  1.00 15.96           C
ATOM   2004  CG  TYR A 226       4.565  10.300  -7.453  1.00 20.33           C
ATOM   2005  CD1 TYR A 226       5.013  11.211  -8.437  1.00 18.06           C
ATOM   2006  CD2 TYR A 226       5.383   9.211  -7.087  1.00 19.81           C
ATOM   2007  CE1 TYR A 226       6.228  10.980  -9.111  1.00 20.94           C
ATOM   2008  CE2 TYR A 226       6.587   8.978  -7.770  1.00 22.35           C
ATOM   2009  CZ  TYR A 226       6.986   9.832  -8.812  1.00 20.61           C
ATOM   2010  OH  TYR A 226       8.077   9.515  -9.561  1.00 24.39           O
ATOM   2011  H   TYR A 226       0.657  10.777  -6.813  1.00  0.00           H
ATOM   2012  HA  TYR A 226       2.368   9.398  -8.575  1.00  0.00           H
ATOM   2013  HB2 TYR A 226       2.843  11.457  -7.042  1.00  0.00           H
ATOM   2014  HB3 TYR A 226       3.209  10.311  -5.784  1.00  0.00           H
ATOM   2015  HD1 TYR A 226       4.405  12.058  -8.722  1.00  0.00           H
ATOM   2016  HD2 TYR A 226       5.074   8.518  -6.318  1.00  0.00           H
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ATOM   2017  HE1 TYR A 226       6.548  11.649  -9.898  1.00  0.00           H
ATOM   2018  HE2 TYR A 226       7.194   8.125  -7.510  1.00  0.00           H
ATOM   2019  HH  TYR A 226       8.086   8.599  -9.825  1.00  0.00           H
ATOM   2020  N   GLN A 227       1.756   7.793  -5.729  1.00 19.29           N
ATOM   2021  CA  GLN A 227       1.734   6.507  -5.036  1.00 19.24           C
ATOM   2022  C   GLN A 227       0.763   5.515  -5.694  1.00 21.01           C
ATOM   2023  O   GLN A 227       0.803   4.332  -5.370  1.00 21.37           O
ATOM   2024  CB  GLN A 227       1.280   6.714  -3.575  1.00 19.57           C
ATOM   2025  CG  GLN A 227       2.280   7.467  -2.679  1.00 16.42           C
ATOM   2026  CD  GLN A 227       3.415   6.594  -2.147  1.00 20.53           C
ATOM   2027  OE1 GLN A 227       4.014   5.808  -2.874  1.00 21.69           O
ATOM   2028  NE2 GLN A 227       3.716   6.706  -0.860  1.00 19.47           N
ATOM   2029  H   GLN A 227       1.303   8.575  -5.253  1.00  0.00           H
ATOM   2030  HA  GLN A 227       2.729   6.061  -5.069  1.00  0.00           H
ATOM   2031  HB2 GLN A 227       0.326   7.243  -3.561  1.00  0.00           H
ATOM   2032  HB3 GLN A 227       1.072   5.748  -3.112  1.00  0.00           H
ATOM   2033  HG2 GLN A 227       2.699   8.327  -3.199  1.00  0.00           H
ATOM   2034  HG3 GLN A 227       1.728   7.859  -1.828  1.00  0.00           H
ATOM   2035 HE21 GLN A 227       3.196   7.344  -0.275  1.00  0.00           H
ATOM   2036 HE22 GLN A 227       4.454   6.140  -0.468  1.00  0.00           H
ATOM   2037  N   SER A 228      -0.091   5.943  -6.629  1.00 19.57           N
ATOM   2038  CA  SER A 228      -0.805   5.025  -7.504  1.00 20.36           C
ATOM   2039  C   SER A 228       0.082   4.711  -8.720  1.00 20.27           C
ATOM   2040  O   SER A 228       0.285   3.539  -9.032  1.00 23.07           O
ATOM   2041  CB  SER A 228      -2.107   5.670  -8.006  1.00 16.62           C
ATOM   2042  OG  SER A 228      -3.015   5.829  -6.941  1.00 18.44           O
ATOM   2043  H   SER A 228      -0.132   6.932  -6.834  1.00  0.00           H
ATOM   2044  HA  SER A 228      -1.056   4.092  -6.997  1.00  0.00           H
ATOM   2045  HB2 SER A 228      -1.936   6.639  -8.468  1.00  0.00           H
ATOM   2046  HB3 SER A 228      -2.575   5.029  -8.755  1.00  0.00           H
ATOM   2047  HG  SER A 228      -2.734   6.601  -6.443  1.00  0.00           H
ATOM   2048  N   GLY A 229       0.601   5.733  -9.409  1.00 19.50           N
ATOM   2049  CA  GLY A 229       0.961   5.614 -10.816  1.00 20.20           C
ATOM   2050  C   GLY A 229       2.395   5.913 -11.224  1.00 19.94           C
ATOM   2051  O   GLY A 229       2.708   5.740 -12.402  1.00 17.43           O
ATOM   2052  H   GLY A 229       0.402   6.678  -9.086  1.00  0.00           H
ATOM   2053  HA2 GLY A 229       0.634   4.673 -11.255  1.00  0.00           H
ATOM   2054  HA3 GLY A 229       0.390   6.382 -11.313  1.00  0.00           H
ATOM   2055  N   PHE A 230       3.244   6.419 -10.322  1.00 19.02           N
ATOM   2056  CA  PHE A 230       4.527   7.019 -10.701  1.00 20.56           C
ATOM   2057  C   PHE A 230       5.723   6.515  -9.886  1.00 21.40           C
ATOM   2058  O   PHE A 230       6.863   6.807 -10.245  1.00 24.25           O
ATOM   2059  CB  PHE A 230       4.433   8.556 -10.737  1.00 21.77           C
ATOM   2060  CG  PHE A 230       3.532   9.163 -11.799  1.00 22.64           C
ATOM   2061  CD1 PHE A 230       4.101   9.635 -12.999  1.00 24.17           C
ATOM   2062  CD2 PHE A 230       2.138   9.274 -11.598  1.00 24.47           C
ATOM   2063  CE1 PHE A 230       3.285  10.208 -13.991  1.00 25.11           C
ATOM   2064  CE2 PHE A 230       1.321   9.825 -12.604  1.00 23.94           C
ATOM   2065  CZ  PHE A 230       1.894  10.284 -13.802  1.00 26.08           C
ATOM   2066  H   PHE A 230       2.917   6.567  -9.372  1.00  0.00           H
ATOM   2067  HA  PHE A 230       4.779   6.727 -11.716  1.00  0.00           H
ATOM   2068  HB2 PHE A 230       4.130   8.920  -9.762  1.00  0.00           H
ATOM   2069  HB3 PHE A 230       5.430   8.963 -10.904  1.00  0.00           H
ATOM   2070  HD1 PHE A 230       5.166   9.559 -13.172  1.00  0.00           H
ATOM   2071  HD2 PHE A 230       1.680   8.914 -10.689  1.00  0.00           H
ATOM   2072  HE1 PHE A 230       3.727  10.569 -14.908  1.00  0.00           H
ATOM   2073  HE2 PHE A 230       0.250   9.887 -12.475  1.00  0.00           H
ATOM   2074  HZ  PHE A 230       1.263  10.675 -14.586  1.00  0.00           H
ATOM   2075  N   PHE A 231       5.502   5.762  -8.799  1.00 19.26           N
ATOM   2076  CA  PHE A 231       6.590   5.217  -7.979  1.00 21.27           C
ATOM   2077  C   PHE A 231       7.246   3.990  -8.642  1.00 20.88           C
ATOM   2078  O   PHE A 231       8.438   3.779  -8.467  1.00 21.71           O
ATOM   2079  CB  PHE A 231       6.088   4.911  -6.548  1.00 18.61           C
ATOM   2080  CG  PHE A 231       5.168   3.717  -6.340  1.00 18.09           C
ATOM   2081  CD1 PHE A 231       5.660   2.568  -5.685  1.00 16.51           C
ATOM   2082  CD2 PHE A 231       3.824   3.751  -6.765  1.00 15.34           C
ATOM   2083  CE1 PHE A 231       4.817   1.468  -5.449  1.00 15.19           C
ATOM   2084  CE2 PHE A 231       2.985   2.643  -6.537  1.00 15.58           C
ATOM   2085  CZ  PHE A 231       3.475   1.512  -5.863  1.00 17.00           C
ATOM   2086  H   PHE A 231       4.549   5.575  -8.526  1.00  0.00           H
ATOM   2087  HA  PHE A 231       7.376   5.968  -7.890  1.00  0.00           H
ATOM   2088  HB2 PHE A 231       6.964   4.773  -5.912  1.00  0.00           H
ATOM   2089  HB3 PHE A 231       5.590   5.793  -6.144  1.00  0.00           H
ATOM   2090  HD1 PHE A 231       6.686   2.522  -5.354  1.00  0.00           H
ATOM   2091  HD2 PHE A 231       3.420   4.619  -7.264  1.00  0.00           H
ATOM   2092  HE1 PHE A 231       5.205   0.589  -4.954  1.00  0.00           H
ATOM   2093  HE2 PHE A 231       1.963   2.655  -6.887  1.00  0.00           H
ATOM   2094  HZ  PHE A 231       2.822   0.673  -5.676  1.00  0.00           H
ATOM   2095  N   TRP A 232       6.507   3.262  -9.490  1.00 20.84           N
ATOM   2096  CA  TRP A 232       6.986   2.188 -10.372  1.00 21.29           C
ATOM   2097  C   TRP A 232       7.421   2.754 -11.742  1.00 22.43           C
ATOM   2098  O   TRP A 232       7.358   2.068 -12.760  1.00 24.91           O
ATOM   2099  CB  TRP A 232       5.840   1.170 -10.572  1.00 20.84           C
ATOM   2100  CG  TRP A 232       4.488   1.731 -10.910  1.00 22.17           C
ATOM   2101  CD1 TRP A 232       3.571   2.090  -9.989  1.00 22.45           C
ATOM   2102  CD2 TRP A 232       3.867   1.985 -12.211  1.00 25.05           C
ATOM   2103  NE1 TRP A 232       2.435   2.550 -10.614  1.00 24.51           N
ATOM   2104  CE3 TRP A 232       4.272   1.837 -13.559  1.00 25.82           C
ATOM   2105  CE2 TRP A 232       2.543   2.473 -11.989  1.00 26.33           C
ATOM   2106  CZ3 TRP A 232       3.413   2.164 -14.628  1.00 27.28           C
ATOM   2107  CZ2 TRP A 232       1.664   2.770 -13.049  1.00 26.19           C
ATOM   2108  CH2 TRP A 232       2.108   2.626 -14.375  1.00 25.91           C
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ATOM   2109  H   TRP A 232       5.542   3.530  -9.611  1.00  0.00           H
ATOM   2110  HA  TRP A 232       7.852   1.684  -9.939  1.00  0.00           H
ATOM   2111  HB2 TRP A 232       6.103   0.418 -11.316  1.00  0.00           H
ATOM   2112  HB3 TRP A 232       5.731   0.608  -9.644  1.00  0.00           H
ATOM   2113  HD1 TRP A 232       3.725   1.990  -8.926  1.00  0.00           H
ATOM   2114  HE1 TRP A 232       1.611   2.845 -10.086  1.00  0.00           H
ATOM   2115  HE3 TRP A 232       5.256   1.456 -13.777  1.00  0.00           H
ATOM   2116  HZ3 TRP A 232       3.756   2.044 -15.644  1.00  0.00           H
ATOM   2117  HZ2 TRP A 232       0.659   3.113 -12.860  1.00  0.00           H
ATOM   2118  HH2 TRP A 232       1.448   2.865 -15.195  1.00  0.00           H
ATOM   2119  N   ARG A 233       7.834   4.023 -11.770  1.00 22.95           N
ATOM   2120  CA  ARG A 233       8.538   4.675 -12.863  1.00 23.34           C
ATOM   2121  C   ARG A 233       9.428   5.793 -12.304  1.00 23.57           C
ATOM   2122  O   ARG A 233       9.493   6.878 -12.885  1.00 24.36           O
ATOM   2123  CB  ARG A 233       7.616   5.032 -14.054  1.00 23.72           C
ATOM   2124  CG  ARG A 233       6.326   5.783 -13.690  1.00 23.64           C
ATOM   2125  CD  ARG A 233       5.534   6.212 -14.934  1.00 22.56           C
ATOM   2126  NE  ARG A 233       4.117   6.479 -14.635  1.00 23.96           N
ATOM   2127  CZ  ARG A 233       3.265   7.232 -15.342  1.00 23.37           C
ATOM   2128  NH1 ARG A 233       3.686   8.045 -16.313  1.00 24.58           N
ATOM   2129  NH2 ARG A 233       1.965   7.140 -15.071  1.00 27.02           N1+
ATOM   2130  H   ARG A 233       7.888   4.493 -10.878  1.00  0.00           H
ATOM   2131  HA  ARG A 233       9.254   3.956 -13.260  1.00  0.00           H
ATOM   2132  HB2 ARG A 233       8.184   5.613 -14.782  1.00  0.00           H
ATOM   2133  HB3 ARG A 233       7.348   4.108 -14.569  1.00  0.00           H
ATOM   2134  HG2 ARG A 233       5.712   5.143 -13.056  1.00  0.00           H
ATOM   2135  HG3 ARG A 233       6.584   6.668 -13.107  1.00  0.00           H
ATOM   2136  HD2 ARG A 233       6.013   7.073 -15.392  1.00  0.00           H
ATOM   2137  HD3 ARG A 233       5.552   5.417 -15.680  1.00  0.00           H
ATOM   2138  HE  ARG A 233       3.730   5.973 -13.830  1.00  0.00           H
ATOM   2139 HH11 ARG A 233       4.644   8.424 -16.287  1.00  0.00           H
ATOM   2140 HH12 ARG A 233       3.013   8.540 -16.882  1.00  0.00           H
ATOM   2141 HH21 ARG A 233       1.641   6.594 -14.286  1.00  0.00           H
ATOM   2142 HH22 ARG A 233       1.225   7.668 -15.591  1.00  0.00           H
ATOM   2143  N   HIS A 234      10.081   5.544 -11.159  1.00 23.15           N
ATOM   2144  CA  HIS A 234      11.060   6.431 -10.529  1.00 24.03           C
ATOM   2145  C   HIS A 234      12.417   5.721 -10.555  1.00 25.68           C
ATOM   2146  O   HIS A 234      12.496   4.522 -10.281  1.00 24.39           O
ATOM   2147  CB  HIS A 234      10.650   6.726  -9.072  1.00 21.56           C
ATOM   2148  CG  HIS A 234      11.532   7.755  -8.412  1.00 23.59           C
ATOM   2149  ND1 HIS A 234      12.719   7.427  -7.743  1.00 24.32           N
ATOM   2150  CD2 HIS A 234      11.367   9.122  -8.378  1.00 21.93           C
ATOM   2151  CE1 HIS A 234      13.227   8.595  -7.364  1.00 24.17           C
ATOM   2152  NE2 HIS A 234      12.458   9.631  -7.695  1.00 23.23           N
ATOM   2153  H   HIS A 234      10.088   4.582 -10.833  1.00  0.00           H
ATOM   2154  HA  HIS A 234      11.141   7.376 -11.071  1.00  0.00           H
ATOM   2155  HB2 HIS A 234       9.629   7.105  -9.056  1.00  0.00           H
ATOM   2156  HB3 HIS A 234      10.650   5.817  -8.470  1.00  0.00           H
ATOM   2157  HD2 HIS A 234      10.601   9.750  -8.807  1.00  0.00           H
ATOM   2158  HE1 HIS A 234      14.165   8.704  -6.840  1.00  0.00           H
ATOM   2159  HE2 HIS A 234      12.676  10.613  -7.532  1.00  0.00           H
ATOM   2160  N   GLU A 235      13.486   6.456 -10.858  1.00 26.94           N
ATOM   2161  CA  GLU A 235      14.849   5.992 -11.082  1.00 29.85           C
ATOM   2162  C   GLU A 235      15.462   5.184  -9.922  1.00 27.43           C
ATOM   2163  O   GLU A 235      16.256   4.274 -10.167  1.00 27.58           O
ATOM   2164  CB  GLU A 235      15.727   7.207 -11.452  1.00 32.61           C
ATOM   2165  CG  GLU A 235      15.849   8.329 -10.389  1.00 40.85           C
ATOM   2166  CD  GLU A 235      14.739   9.372 -10.404  1.00 45.22           C
ATOM   2167  OE1 GLU A 235      13.656   9.133 -10.975  1.00 46.95           O
ATOM   2168  OE2 GLU A 235      14.996  10.464  -9.850  1.00 48.79           O1-
ATOM   2169  H   GLU A 235      13.363   7.471 -10.972  1.00  0.00           H
ATOM   2170  HA  GLU A 235      14.817   5.324 -11.945  1.00  0.00           H
ATOM   2171  HB2 GLU A 235      16.727   6.837 -11.675  1.00  0.00           H
ATOM   2172  HB3 GLU A 235      15.373   7.637 -12.389  1.00  0.00           H
ATOM   2173  HG2 GLU A 235      15.938   7.926  -9.382  1.00  0.00           H
ATOM   2174  HG3 GLU A 235      16.780   8.865 -10.565  1.00  0.00           H
ATOM   2175  N   LEU A 236      15.079   5.475  -8.671  1.00 26.47           N
ATOM   2176  CA  LEU A 236      15.542   4.734  -7.496  1.00 26.49           C
ATOM   2177  C   LEU A 236      14.691   3.476  -7.249  1.00 26.64           C
ATOM   2178  O   LEU A 236      15.041   2.686  -6.379  1.00 25.30           O
ATOM   2179  CB  LEU A 236      15.452   5.618  -6.231  1.00 24.84           C
ATOM   2180  CG  LEU A 236      16.388   6.844  -6.184  1.00 24.56           C
ATOM   2181  CD1 LEU A 236      16.195   7.614  -4.872  1.00 23.65           C
ATOM   2182  CD2 LEU A 236      17.863   6.453  -6.320  1.00 22.45           C
ATOM   2183  H   LEU A 236      14.384   6.203  -8.538  1.00  0.00           H
ATOM   2184  HA  LEU A 236      16.569   4.392  -7.631  1.00  0.00           H
ATOM   2185  HB2 LEU A 236      14.420   5.938  -6.083  1.00  0.00           H
ATOM   2186  HB3 LEU A 236      15.699   4.997  -5.368  1.00  0.00           H
ATOM   2187  HG  LEU A 236      16.139   7.511  -7.010  1.00  0.00           H
ATOM   2188 HD11 LEU A 236      16.823   8.504  -4.854  1.00  0.00           H
ATOM   2189 HD12 LEU A 236      15.160   7.928  -4.744  1.00  0.00           H
ATOM   2190 HD13 LEU A 236      16.465   7.009  -4.006  1.00  0.00           H
ATOM   2191 HD21 LEU A 236      18.526   7.303  -6.152  1.00  0.00           H
ATOM   2192 HD22 LEU A 236      18.120   5.677  -5.604  1.00  0.00           H
ATOM   2193 HD23 LEU A 236      18.079   6.069  -7.312  1.00  0.00           H
ATOM   2194  N   LEU A 237      13.599   3.266  -7.999  1.00 25.05           N
ATOM   2195  CA  LEU A 237      12.708   2.119  -7.867  1.00 27.46           C
ATOM   2196  C   LEU A 237      12.728   1.222  -9.107  1.00 27.75           C
ATOM   2197  O   LEU A 237      12.486   0.025  -8.959  1.00 28.17           O
ATOM   2198  CB  LEU A 237      11.282   2.564  -7.471  1.00 25.77           C
ATOM   2199  CG  LEU A 237      10.846   2.005  -6.098  1.00 26.56           C
ATOM   2200  CD1 LEU A 237      11.663   2.600  -4.944  1.00 26.59           C
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ATOM   2201  CD2 LEU A 237       9.350   2.217  -5.852  1.00 27.15           C
ATOM   2202  H   LEU A 237      13.368   3.947  -8.717  1.00  0.00           H
ATOM   2203  HA  LEU A 237      13.082   1.462  -7.084  1.00  0.00           H
ATOM   2204  HB2 LEU A 237      11.195   3.651  -7.474  1.00  0.00           H
ATOM   2205  HB3 LEU A 237      10.572   2.226  -8.229  1.00  0.00           H
ATOM   2206  HG  LEU A 237      11.023   0.930  -6.106  1.00  0.00           H
ATOM   2207 HD11 LEU A 237      11.382   2.151  -3.995  1.00  0.00           H
ATOM   2208 HD12 LEU A 237      12.729   2.414  -5.062  1.00  0.00           H
ATOM   2209 HD13 LEU A 237      11.518   3.677  -4.870  1.00  0.00           H
ATOM   2210 HD21 LEU A 237       9.029   1.736  -4.928  1.00  0.00           H
ATOM   2211 HD22 LEU A 237       9.108   3.278  -5.788  1.00  0.00           H
ATOM   2212 HD23 LEU A 237       8.760   1.795  -6.665  1.00  0.00           H
ATOM   2213  N   GLU A 238      13.114   1.718 -10.294  1.00 28.09           N
ATOM   2214  CA  GLU A 238      13.386   0.891 -11.486  1.00 29.19           C
ATOM   2215  C   GLU A 238      14.681   0.069 -11.328  1.00 29.11           C
ATOM   2216  O   GLU A 238      14.897  -0.923 -12.026  1.00 28.86           O
ATOM   2217  CB  GLU A 238      13.428   1.763 -12.765  1.00 32.53           C
ATOM   2218  CG  GLU A 238      12.140   2.572 -13.074  1.00 39.05           C
ATOM   2219  CD  GLU A 238      10.855   1.819 -12.767  1.00 42.35           C
ATOM   2220  OE1 GLU A 238      10.376   1.054 -13.627  1.00 44.53           O
ATOM   2221  OE2 GLU A 238      10.390   1.901 -11.610  1.00 42.36           O1-
ATOM   2222  H   GLU A 238      13.109   2.728 -10.403  1.00  0.00           H
ATOM   2223  HA  GLU A 238      12.608   0.142 -11.604  1.00  0.00           H
ATOM   2224  HB2 GLU A 238      14.273   2.451 -12.713  1.00  0.00           H
ATOM   2225  HB3 GLU A 238      13.625   1.110 -13.616  1.00  0.00           H
ATOM   2226  HG2 GLU A 238      12.128   3.497 -12.506  1.00  0.00           H
ATOM   2227  HG3 GLU A 238      12.117   2.871 -14.120  1.00  0.00           H
ATOM   2228  N   GLU A 239      15.485   0.419 -10.319  1.00 30.17           N
ATOM   2229  CA  GLU A 239      16.543  -0.381  -9.720  1.00 30.22           C
ATOM   2230  C   GLU A 239      15.992  -1.711  -9.128  1.00 30.36           C
ATOM   2231  O   GLU A 239      16.684  -2.732  -9.134  1.00 29.89           O
ATOM   2232  CB  GLU A 239      17.229   0.539  -8.677  1.00 31.52           C
ATOM   2233  CG  GLU A 239      18.541   0.023  -8.052  1.00 34.59           C
ATOM   2234  CD  GLU A 239      19.225   1.072  -7.170  1.00 35.31           C
ATOM   2235  OE1 GLU A 239      19.290   2.254  -7.569  1.00 38.54           O
ATOM   2236  OE2 GLU A 239      19.694   0.689  -6.073  1.00 36.01           O1-
ATOM   2237  H   GLU A 239      15.235   1.272  -9.841  1.00  0.00           H
ATOM   2238  HA  GLU A 239      17.262  -0.628 -10.502  1.00  0.00           H
ATOM   2239  HB2 GLU A 239      17.444   1.495  -9.157  1.00  0.00           H
ATOM   2240  HB3 GLU A 239      16.529   0.773  -7.874  1.00  0.00           H
ATOM   2241  HG2 GLU A 239      18.353  -0.874  -7.463  1.00  0.00           H
ATOM   2242  HG3 GLU A 239      19.244  -0.254  -8.836  1.00  0.00           H
ATOM   2243  N   TYR A 240      14.715  -1.757  -8.714  1.00 29.40           N
ATOM   2244  CA  TYR A 240      14.091  -2.829  -7.937  1.00 26.76           C
ATOM   2245  C   TYR A 240      12.864  -3.429  -8.641  1.00 26.94           C
ATOM   2246  O   TYR A 240      12.198  -2.792  -9.456  1.00 26.38           O
ATOM   2247  CB  TYR A 240      13.769  -2.314  -6.519  1.00 25.17           C
ATOM   2248  CG  TYR A 240      15.012  -1.858  -5.777  1.00 22.76           C
ATOM   2249  CD1 TYR A 240      15.950  -2.801  -5.314  1.00 23.97           C
ATOM   2250  CD2 TYR A 240      15.280  -0.484  -5.620  1.00 23.51           C
ATOM   2251  CE1 TYR A 240      17.154  -2.383  -4.726  1.00 21.82           C
ATOM   2252  CE2 TYR A 240      16.493  -0.060  -5.050  1.00 21.33           C
ATOM   2253  CZ  TYR A 240      17.434  -1.012  -4.620  1.00 21.91           C
ATOM   2254  OH  TYR A 240      18.649  -0.610  -4.171  1.00 23.59           O
ATOM   2255  H   TYR A 240      14.126  -0.944  -8.873  1.00  0.00           H
ATOM   2256  HA  TYR A 240      14.801  -3.644  -7.823  1.00  0.00           H
ATOM   2257  HB2 TYR A 240      13.046  -1.497  -6.565  1.00  0.00           H
ATOM   2258  HB3 TYR A 240      13.294  -3.098  -5.931  1.00  0.00           H
ATOM   2259  HD1 TYR A 240      15.771  -3.851  -5.435  1.00  0.00           H
ATOM   2260  HD2 TYR A 240      14.574   0.254  -5.964  1.00  0.00           H
ATOM   2261  HE1 TYR A 240      17.881  -3.109  -4.395  1.00  0.00           H
ATOM   2262  HE2 TYR A 240      16.710   0.997  -4.981  1.00  0.00           H
ATOM   2263  HH  TYR A 240      19.066  -0.108  -4.896  1.00  0.00           H
ATOM   2264  N   ASP A 241      12.575  -4.694  -8.337  1.00 27.29           N
ATOM   2265  CA  ASP A 241      11.455  -5.490  -8.848  1.00 26.93           C
ATOM   2266  C   ASP A 241      10.357  -5.610  -7.787  1.00 26.42           C
ATOM   2267  O   ASP A 241       9.216  -5.914  -8.123  1.00 27.05           O
ATOM   2268  CB  ASP A 241      11.935  -6.926  -9.158  1.00 27.77           C
ATOM   2269  CG  ASP A 241      12.821  -6.986 -10.385  1.00 27.65           C
ATOM   2270  OD1 ASP A 241      12.288  -7.344 -11.453  1.00 25.77           O
ATOM   2271  OD2 ASP A 241      14.017  -6.639 -10.251  1.00 26.65           O1-
ATOM   2272  H   ASP A 241      13.143  -5.160  -7.631  1.00  0.00           H
ATOM   2273  HA  ASP A 241      11.022  -5.050  -9.748  1.00  0.00           H
ATOM   2274  HB2 ASP A 241      12.494  -7.342  -8.322  1.00  0.00           H
ATOM   2275  HB3 ASP A 241      11.085  -7.589  -9.327  1.00  0.00           H
ATOM   2276  N   TRP A 242      10.685  -5.381  -6.511  1.00 24.04           N
ATOM   2277  CA  TRP A 242       9.786  -5.420  -5.364  1.00 24.23           C
ATOM   2278  C   TRP A 242      10.035  -4.201  -4.473  1.00 23.82           C
ATOM   2279  O   TRP A 242      11.087  -3.567  -4.556  1.00 22.71           O
ATOM   2280  CB  TRP A 242       9.940  -6.726  -4.556  1.00 23.96           C
ATOM   2281  CG  TRP A 242       9.697  -8.068  -5.183  1.00 23.75           C
ATOM   2282  CD1 TRP A 242      10.397  -8.610  -6.204  1.00 26.08           C
ATOM   2283  CD2 TRP A 242       8.776  -9.114  -4.746  1.00 25.48           C
ATOM   2284  NE1 TRP A 242       9.994  -9.912  -6.416  1.00 23.93           N
ATOM   2285  CE3 TRP A 242       7.763  -9.200  -3.763  1.00 25.82           C
ATOM   2286  CE2 TRP A 242       9.067 -10.304  -5.479  1.00 25.93           C
ATOM   2287  CZ3 TRP A 242       7.132 -10.424  -3.469  1.00 26.34           C
ATOM   2288  CZ2 TRP A 242       8.463 -11.533  -5.183  1.00 26.43           C
ATOM   2289  CH2 TRP A 242       7.507 -11.593  -4.156  1.00 24.99           C
ATOM   2290  H   TRP A 242      11.637  -5.107  -6.310  1.00  0.00           H
ATOM   2291  HA  TRP A 242       8.762  -5.319  -5.711  1.00  0.00           H
ATOM   2292  HB2 TRP A 242      10.949  -6.759  -4.155  1.00  0.00           H
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ATOM   2293  HB3 TRP A 242       9.292  -6.673  -3.684  1.00  0.00           H
ATOM   2294  HD1 TRP A 242      11.197  -8.103  -6.716  1.00  0.00           H
ATOM   2295  HE1 TRP A 242      10.440 -10.525  -7.091  1.00  0.00           H
ATOM   2296  HE3 TRP A 242       7.494  -8.319  -3.200  1.00  0.00           H
ATOM   2297  HZ3 TRP A 242       6.367 -10.469  -2.707  1.00  0.00           H
ATOM   2298  HZ2 TRP A 242       8.716 -12.421  -5.745  1.00  0.00           H
ATOM   2299  HH2 TRP A 242       7.032 -12.535  -3.925  1.00  0.00           H
ATOM   2300  N   TYR A 243       9.076  -3.905  -3.597  1.00 22.84           N
ATOM   2301  CA  TYR A 243       9.096  -2.804  -2.650  1.00 21.90           C
ATOM   2302  C   TYR A 243       8.480  -3.250  -1.324  1.00 22.39           C
ATOM   2303  O   TYR A 243       7.482  -3.974  -1.316  1.00 22.11           O
ATOM   2304  CB  TYR A 243       8.408  -1.562  -3.253  1.00 22.85           C
ATOM   2305  CG  TYR A 243       6.883  -1.601  -3.360  1.00 20.92           C
ATOM   2306  CD1 TYR A 243       6.248  -2.423  -4.315  1.00 18.97           C
ATOM   2307  CD2 TYR A 243       6.086  -0.820  -2.496  1.00 20.38           C
ATOM   2308  CE1 TYR A 243       4.850  -2.418  -4.450  1.00 18.11           C
ATOM   2309  CE2 TYR A 243       4.683  -0.830  -2.614  1.00 20.28           C
ATOM   2310  CZ  TYR A 243       4.067  -1.617  -3.601  1.00 19.55           C
ATOM   2311  OH  TYR A 243       2.713  -1.599  -3.743  1.00 19.44           O
ATOM   2312  H   TYR A 243       8.239  -4.490  -3.566  1.00  0.00           H
ATOM   2313  HA  TYR A 243      10.137  -2.539  -2.456  1.00  0.00           H
ATOM   2314  HB2 TYR A 243       8.691  -0.700  -2.654  1.00  0.00           H
ATOM   2315  HB3 TYR A 243       8.822  -1.359  -4.240  1.00  0.00           H
ATOM   2316  HD1 TYR A 243       6.819  -3.075  -4.951  1.00  0.00           H
ATOM   2317  HD2 TYR A 243       6.544  -0.214  -1.733  1.00  0.00           H
ATOM   2318  HE1 TYR A 243       4.388  -3.050  -5.197  1.00  0.00           H
ATOM   2319  HE2 TYR A 243       4.075  -0.225  -1.957  1.00  0.00           H
ATOM   2320  HH  TYR A 243       2.262  -1.198  -2.971  1.00  0.00           H
ATOM   2321  N   TRP A 244       9.059  -2.808  -0.205  1.00 20.85           N
ATOM   2322  CA  TRP A 244       8.401  -2.764   1.091  1.00 20.48           C
ATOM   2323  C   TRP A 244       8.063  -1.289   1.311  1.00 21.37           C
ATOM   2324  O   TRP A 244       8.958  -0.488   1.578  1.00 18.99           O
ATOM   2325  CB  TRP A 244       9.351  -3.249   2.202  1.00 20.36           C
ATOM   2326  CG  TRP A 244       8.729  -3.624   3.512  1.00 22.78           C
ATOM   2327  CD1 TRP A 244       7.538  -3.217   4.014  1.00 24.36           C
ATOM   2328  CD2 TRP A 244       9.267  -4.565   4.480  1.00 23.95           C
ATOM   2329  NE1 TRP A 244       7.313  -3.838   5.224  1.00 23.22           N
ATOM   2330  CE3 TRP A 244      10.438  -5.353   4.532  1.00 24.80           C
ATOM   2331  CE2 TRP A 244       8.345  -4.686   5.562  1.00 24.71           C
ATOM   2332  CZ3 TRP A 244      10.674  -6.232   5.603  1.00 26.03           C
ATOM   2333  CZ2 TRP A 244       8.572  -5.554   6.642  1.00 26.18           C
ATOM   2334  CH2 TRP A 244       9.735  -6.343   6.645  1.00 24.87           C
ATOM   2335  H   TRP A 244       9.964  -2.350  -0.281  1.00  0.00           H
ATOM   2336  HA  TRP A 244       7.523  -3.399   1.107  1.00  0.00           H
ATOM   2337  HB2 TRP A 244       9.865  -4.139   1.856  1.00  0.00           H
ATOM   2338  HB3 TRP A 244      10.144  -2.545   2.422  1.00  0.00           H
ATOM   2339  HD1 TRP A 244       6.855  -2.535   3.528  1.00  0.00           H
ATOM   2340  HE1 TRP A 244       6.431  -3.755   5.718  1.00  0.00           H
ATOM   2341  HE3 TRP A 244      11.161  -5.280   3.734  1.00  0.00           H
ATOM   2342  HZ3 TRP A 244      11.579  -6.821   5.614  1.00  0.00           H
ATOM   2343  HZ2 TRP A 244       7.854  -5.644   7.442  1.00  0.00           H
ATOM   2344  HH2 TRP A 244       9.913  -7.035   7.450  1.00  0.00           H
ATOM   2345  N   ARG A 245       6.793  -0.900   1.182  1.00 21.39           N
ATOM   2346  CA  ARG A 245       6.372   0.454   1.518  1.00 21.27           C
ATOM   2347  C   ARG A 245       6.314   0.587   3.044  1.00 18.90           C
ATOM   2348  O   ARG A 245       5.531  -0.102   3.699  1.00 20.72           O
ATOM   2349  CB  ARG A 245       5.009   0.785   0.888  1.00 22.80           C
ATOM   2350  CG  ARG A 245       4.507   2.197   1.249  1.00 24.05           C
ATOM   2351  CD  ARG A 245       3.550   2.756   0.207  1.00 22.81           C
ATOM   2352  NE  ARG A 245       2.802   3.839   0.831  1.00 24.70           N
ATOM   2353  CZ  ARG A 245       1.580   4.193   0.395  1.00 24.50           C
ATOM   2354  NH1 ARG A 245       1.238   3.881  -0.847  1.00 21.87           N
ATOM   2355  NH2 ARG A 245       0.772   4.864   1.206  1.00 25.57           N1+
ATOM   2356  H   ARG A 245       6.095  -1.615   0.977  1.00  0.00           H
ATOM   2357  HA  ARG A 245       7.095   1.163   1.119  1.00  0.00           H
ATOM   2358  HB2 ARG A 245       5.119   0.717  -0.191  1.00  0.00           H
ATOM   2359  HB3 ARG A 245       4.255   0.046   1.167  1.00  0.00           H
ATOM   2360  HG2 ARG A 245       4.037   2.167   2.236  1.00  0.00           H
ATOM   2361  HG3 ARG A 245       5.357   2.882   1.330  1.00  0.00           H
ATOM   2362  HD2 ARG A 245       4.130   3.106  -0.651  1.00  0.00           H
ATOM   2363  HD3 ARG A 245       2.873   1.960  -0.108  1.00  0.00           H
ATOM   2364  HE  ARG A 245       3.039   4.113   1.771  1.00  0.00           H
ATOM   2365 HH11 ARG A 245       1.925   3.556  -1.526  1.00  0.00           H
ATOM   2366 HH12 ARG A 245       0.266   4.047  -1.184  1.00  0.00           H
ATOM   2367 HH21 ARG A 245       0.962   4.924   2.205  1.00  0.00           H
ATOM   2368 HH22 ARG A 245      -0.139   5.208   0.912  1.00  0.00           H
ATOM   2369  N   VAL A 246       7.143   1.484   3.583  1.00 18.37           N
ATOM   2370  CA  VAL A 246       7.185   1.856   4.985  1.00 17.88           C
ATOM   2371  C   VAL A 246       6.870   3.359   5.036  1.00 17.66           C
ATOM   2372  O   VAL A 246       7.549   4.178   4.410  1.00 16.95           O
ATOM   2373  CB  VAL A 246       8.565   1.499   5.605  1.00 20.27           C
ATOM   2374  CG1 VAL A 246       8.605   1.812   7.113  1.00 18.44           C
ATOM   2375  CG2 VAL A 246       8.959   0.025   5.373  1.00 22.05           C
ATOM   2376  H   VAL A 246       7.769   1.988   2.955  1.00  0.00           H
ATOM   2377  HA  VAL A 246       6.411   1.316   5.536  1.00  0.00           H
ATOM   2378  HB  VAL A 246       9.329   2.108   5.117  1.00  0.00           H
ATOM   2379 HG11 VAL A 246       9.549   1.500   7.557  1.00  0.00           H
ATOM   2380 HG12 VAL A 246       8.497   2.880   7.299  1.00  0.00           H
ATOM   2381 HG13 VAL A 246       7.808   1.294   7.646  1.00  0.00           H
ATOM   2382 HG21 VAL A 246       9.912  -0.211   5.848  1.00  0.00           H
ATOM   2383 HG22 VAL A 246       8.209  -0.660   5.769  1.00  0.00           H
ATOM   2384 HG23 VAL A 246       9.078  -0.199   4.312  1.00  0.00           H
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ATOM   2385  N   GLU A 247      5.823   3.720   5.777  1.00 18.37           N
ATOM   2386  CA  GLU A 247      5.406   5.097   6.029  1.00 17.71           C
ATOM   2387  C   GLU A 247      6.046   5.605   7.345  1.00 18.77           C
ATOM   2388  O   GLU A 247      6.575   4.804   8.129  1.00 19.80           O
ATOM   2389  CB  GLU A 247      3.859   5.084   6.151  1.00 17.17           C
ATOM   2390  CG  GLU A 247      3.186   5.293   4.789  1.00 16.44           C
ATOM   2391  CD  GLU A 247      1.784   5.884   4.837  1.00 20.59           C
ATOM   2392  OE1 GLU A 247      1.619   6.843   5.638  1.00 21.32           O
ATOM   2393  OE2 GLU A 247      0.940   5.454   4.019  1.00 23.91           O1-
ATOM   2394  H   GLU A 247      5.315   2.989   6.251  1.00  0.00           H
ATOM   2395  HA  GLU A 247      5.742   5.754   5.226  1.00  0.00           H
ATOM   2396  HB2 GLU A 247      3.508   4.148   6.590  1.00  0.00           H
ATOM   2397  HB3 GLU A 247      3.546   5.847   6.866  1.00  0.00           H
ATOM   2398  HG2 GLU A 247      3.764   6.026   4.223  1.00  0.00           H
ATOM   2399  HG3 GLU A 247      3.220   4.352   4.243  1.00  0.00           H
ATOM   2400  N   PRO A 248      6.017   6.928   7.619  1.00 19.92           N
ATOM   2401  CA  PRO A 248      6.496   7.494   8.884  1.00 20.59           C
ATOM   2402  C   PRO A 248      5.520   7.223  10.043  1.00 20.76           C
ATOM   2403  O   PRO A 248      4.317   7.076   9.822  1.00 20.31           O
ATOM   2404  CB  PRO A 248      6.647   8.996   8.611  1.00 22.82           C
ATOM   2405  CG  PRO A 248      5.649   9.287   7.504  1.00 21.16           C
ATOM   2406  CD  PRO A 248      5.546   7.982   6.719  1.00 20.35           C
ATOM   2407  HA  PRO A 248      7.462   7.059   9.119  1.00  0.00           H
ATOM   2408  HB2 PRO A 248      6.492   9.625   9.490  1.00  0.00           H
ATOM   2409  HB3 PRO A 248      7.650   9.200   8.240  1.00  0.00           H
ATOM   2410  HG2 PRO A 248      4.681   9.536   7.937  1.00  0.00           H
ATOM   2411  HG3 PRO A 248      5.950  10.120   6.871  1.00  0.00           H
ATOM   2412  HD2 PRO A 248      4.521   7.825   6.382  1.00  0.00           H
ATOM   2413  HD3 PRO A 248      6.191   8.025   5.840  1.00  0.00           H
ATOM   2414  N   ASP A 249      6.052   7.141  11.272  1.00 20.20           N
ATOM   2415  CA  ASP A 249      5.336   6.956  12.543  1.00 19.81           C
ATOM   2416  C   ASP A 249      4.883   5.503  12.770  1.00 20.04           C
ATOM   2417  O   ASP A 249      3.980   5.248  13.566  1.00 20.11           O
ATOM   2418  CB  ASP A 249      4.250   8.039  12.818  1.00  0.00           C
ATOM   2419  CG  ASP A 249      4.749   9.198  13.678  1.00  0.00           C
ATOM   2420  OD1 ASP A 249      5.137   9.077  14.839  1.00  0.00           O
ATOM   2421  OD2 ASP A 249      4.715  10.388  13.024  1.00  0.00           O
ATOM   2422  H   ASP A 249      7.058   7.214  11.358  1.00  0.00           H
ATOM   2423  HA  ASP A 249      6.105   7.070  13.308  1.00  0.00           H
ATOM   2424  HB2 ASP A 249      3.794   8.422  11.906  1.00  0.00           H
ATOM   2425  HB3 ASP A 249      3.420   7.622  13.385  1.00  0.00           H
ATOM   2426  HD2 ASP A 249      4.887  11.122  13.625  1.00  0.00           H
ATOM   2427  N   ILE A 250      5.498   4.540  12.073  1.00 19.14           N
ATOM   2428  CA  ILE A 250      5.152   3.122  12.123  1.00 20.37           C
ATOM   2429  C   ILE A 250      5.846   2.443  13.318  1.00 19.83           C
ATOM   2430  O   ILE A 250      6.877   2.897  13.825  1.00 20.11           O
ATOM   2431  CB  ILE A 250      5.498   2.472  10.735  1.00 21.38           C
ATOM   2432  CG1 ILE A 250      4.244   2.394   9.842  1.00 23.63           C
ATOM   2433  CG2 ILE A 250      6.171   1.078  10.748  1.00 22.17           C
ATOM   2434  CD1 ILE A 250      3.561   3.732   9.555  1.00 20.80           C
ATOM   2435  H   ILE A 250      6.306   4.795  11.516  1.00  0.00           H
ATOM   2436  HA  ILE A 250      4.079   3.039  12.296  1.00  0.00           H
ATOM   2437  HB  ILE A 250      6.201   3.113  10.214  1.00  0.00           H
ATOM   2438 HG12 ILE A 250      4.512   1.945   8.886  1.00  0.00           H
ATOM   2439 HG13 ILE A 250      3.514   1.728  10.304  1.00  0.00           H
ATOM   2440 HG21 ILE A 250      6.401   0.747   9.735  1.00  0.00           H
ATOM   2441 HG22 ILE A 250      7.116   1.080  11.291  1.00  0.00           H
ATOM   2442 HG23 ILE A 250      5.526   0.322  11.196  1.00  0.00           H
ATOM   2443 HD11 ILE A 250      2.766   3.595   8.824  1.00  0.00           H
ATOM   2444 HD12 ILE A 250      3.121   4.168  10.451  1.00  0.00           H
ATOM   2445 HD13 ILE A 250      4.256   4.461   9.152  1.00  0.00           H
ATOM   2446  N   LYS A 251      5.241   1.332  13.747  1.00 20.52           N
ATOM   2447  CA  LYS A 251      5.734   0.375  14.724  1.00 20.36           C
ATOM   2448  C   LYS A 251      5.635  -1.007  14.056  1.00 21.67           C
ATOM   2449  O   LYS A 251      4.622  -1.287  13.410  1.00 19.23           O
ATOM   2450  CB  LYS A 251      4.863   0.441  16.004  1.00 20.47           C
ATOM   2451  CG  LYS A 251      4.649   1.858  16.593  1.00 20.09           C
ATOM   2452  CD  LYS A 251      3.484   1.935  17.594  1.00 22.23           C
ATOM   2453  CE  LYS A 251      3.846   1.578  19.038  1.00 20.07           C
ATOM   2454  NZ  LYS A 251      2.630   1.322  19.831  1.00 21.10           N1+
ATOM   2455  H   LYS A 251      4.387   1.059  13.271  1.00  0.00           H
ATOM   2456  HA  LYS A 251      6.774   0.590  14.958  1.00  0.00           H
ATOM   2457  HB2 LYS A 251      3.892   0.003  15.774  1.00  0.00           H
ATOM   2458  HB3 LYS A 251      5.294  -0.210  16.767  1.00  0.00           H
ATOM   2459  HG2 LYS A 251      5.571   2.240  17.031  1.00  0.00           H
ATOM   2460  HG3 LYS A 251      4.397   2.554  15.795  1.00  0.00           H
ATOM   2461  HD2 LYS A 251      3.088   2.951  17.596  1.00  0.00           H
ATOM   2462  HD3 LYS A 251      2.667   1.305  17.252  1.00  0.00           H
ATOM   2463  HE2 LYS A 251      4.500   0.709  19.060  1.00  0.00           H
ATOM   2464  HE3 LYS A 251      4.405   2.400  19.484  1.00  0.00           H
ATOM   2465  HZ1 LYS A 251      1.960   2.086  19.685  1.00  0.00           H
ATOM   2466  HZ2 LYS A 251      2.160   0.469  19.533  1.00  0.00           H
ATOM   2467  HZ3 LYS A 251      2.824   1.281  20.828  1.00  0.00           H
ATOM   2468  N   LEU A 252      6.652  -1.862  14.213  1.00 19.01           N
ATOM   2469  CA  LEU A 252      6.580  -3.299  13.950  1.00 20.86           C
ATOM   2470  C   LEU A 252      6.746  -3.951  15.317  1.00 19.45           C
ATOM   2471  O   LEU A 252      7.794  -3.800  15.934  1.00 21.96           O
ATOM   2472  CB  LEU A 252      7.738  -3.775  13.036  1.00 21.87           C
ATOM   2473  CG  LEU A 252      7.394  -3.877  11.537  1.00 22.64           C
ATOM   2474  CD1 LEU A 252      8.658  -4.225  10.742  1.00 23.58           C
ATOM   2475  CD2 LEU A 252      6.320  -4.941  11.262  1.00 23.00           C
ATOM   2476  H   LEU A 252      7.398  -1.598  14.846  1.00  0.00           H
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ATOM   2477  HA  LEU A 252       5.611  -3.589  13.547  1.00  0.00           H
ATOM   2478  HB2 LEU A 252       8.605  -3.130  13.180  1.00  0.00           H
ATOM   2479  HB3 LEU A 252       8.077  -4.767  13.350  1.00  0.00           H
ATOM   2480  HG  LEU A 252       7.028  -2.907  11.196  1.00  0.00           H
ATOM   2481 HD11 LEU A 252       8.474  -4.216   9.666  1.00  0.00           H
ATOM   2482 HD12 LEU A 252       9.451  -3.515  10.952  1.00  0.00           H
ATOM   2483 HD13 LEU A 252       9.035  -5.214  11.007  1.00  0.00           H
ATOM   2484 HD21 LEU A 252       6.154  -5.076  10.194  1.00  0.00           H
ATOM   2485 HD22 LEU A 252       6.616  -5.908  11.673  1.00  0.00           H
ATOM   2486 HD23 LEU A 252       5.359  -4.685  11.700  1.00  0.00           H
ATOM   2487  N   TYR A 253      5.719  -4.641  15.800  1.00 20.60           N
ATOM   2488  CA  TYR A 253      5.698  -5.198  17.144  1.00 20.37           C
ATOM   2489  C   TYR A 253      6.317  -6.597  17.150  1.00 19.45           C
ATOM   2490  O   TYR A 253      7.096  -6.918  18.041  1.00 22.46           O
ATOM   2491  CB  TYR A 253      4.231  -5.342  17.573  1.00 19.57           C
ATOM   2492  CG  TYR A 253      3.474  -4.033  17.696  1.00 20.14           C
ATOM   2493  CD1 TYR A 253      3.956  -3.025  18.552  1.00 20.07           C
ATOM   2494  CD2 TYR A 253      2.238  -3.855  17.041  1.00 19.83           C
ATOM   2495  CE1 TYR A 253      3.181  -1.880  18.791  1.00 20.33           C
ATOM   2496  CE2 TYR A 253      1.463  -2.710  17.285  1.00 19.82           C
ATOM   2497  CZ  TYR A 253      1.929  -1.721  18.171  1.00 18.82           C
ATOM   2498  OH  TYR A 253      1.160  -0.629  18.448  1.00 18.72           O
ATOM   2499  H   TYR A 253      4.922  -4.817  15.197  1.00  0.00           H
ATOM   2500  HA  TYR A 253      6.245  -4.566  17.848  1.00  0.00           H
ATOM   2501  HB2 TYR A 253      3.692  -6.012  16.902  1.00  0.00           H
ATOM   2502  HB3 TYR A 253      4.194  -5.823  18.550  1.00  0.00           H
ATOM   2503  HD1 TYR A 253      4.888  -3.146  19.088  1.00  0.00           H
ATOM   2504  HD2 TYR A 253      1.828  -4.629  16.411  1.00  0.00           H
ATOM   2505  HE1 TYR A 253      3.541  -1.172  19.514  1.00  0.00           H
ATOM   2506  HE2 TYR A 253      0.494  -2.625  16.817  1.00  0.00           H
ATOM   2507  HH  TYR A 253      0.218  -0.830  18.271  1.00  0.00           H
ATOM   2508  N   CYS A 254      5.994  -7.430  16.157  1.00 22.80           N
ATOM   2509  CA  CYS A 254      6.539  -8.779  16.048  1.00 23.68           C
ATOM   2510  C   CYS A 254      7.853  -8.703  15.274  1.00 22.63           C
ATOM   2511  O   CYS A 254      7.957  -7.999  14.266  1.00 23.04           O
ATOM   2512  CB  CYS A 254      5.573  -9.677  15.265  1.00 23.53           C
ATOM   2513  SG  CYS A 254      3.929  -9.847  16.015  1.00 25.59           S
ATOM   2514  H   CYS A 254      5.455  -7.071  15.381  1.00  0.00           H
ATOM   2515  HA  CYS A 254      6.711  -9.211  17.033  1.00  0.00           H
ATOM   2516  HB2 CYS A 254      5.446  -9.296  14.252  1.00  0.00           H
ATOM   2517  HB3 CYS A 254      5.994 -10.679  15.152  1.00  0.00           H
ATOM   2518  N   ASP A 255      8.852  -9.434  15.766  1.00 22.72           N
ATOM   2519  CA  ASP A 255     10.121  -9.701  15.110  1.00 23.70           C
ATOM   2520  C   ASP A 255      9.848 -10.645  13.950  1.00 24.37           C
ATOM   2521  O   ASP A 255      9.390 -11.766  14.151  1.00 24.71           O
ATOM   2522  CB  ASP A 255     11.089 -10.395  16.095  1.00 25.02           C
ATOM   2523  CG  ASP A 255     12.028  -9.409  16.749  1.00 25.86           C
ATOM   2524  OD1 ASP A 255     11.659  -8.855  17.812  1.00 25.31           O
ATOM   2525  OD2 ASP A 255     13.104  -9.219  16.143  1.00 30.23           O1-
ATOM   2526  H   ASP A 255      8.608 -10.073  16.525  1.00  0.00           H
ATOM   2527  HA  ASP A 255     10.551  -8.775  14.724  1.00  0.00           H
ATOM   2528  HB2 ASP A 255     10.553 -10.952  16.863  1.00  0.00           H
ATOM   2529  HB3 ASP A 255     11.707 -11.135  15.589  1.00  0.00           H
ATOM   2530  N   ILE A 256     10.135 -10.186  12.736  1.00 23.24           N
ATOM   2531  CA  ILE A 256      9.968 -10.956  11.520  1.00 25.08           C
ATOM   2532  C   ILE A 256     11.300 -11.711  11.394  1.00 24.17           C
ATOM   2533  O   ILE A 256     12.370 -11.104  11.287  1.00 23.01           O
ATOM   2534  CB  ILE A 256      9.724  -9.988  10.332  1.00 24.13           C
ATOM   2535  CG1 ILE A 256      8.592  -8.970  10.633  1.00 24.74           C
ATOM   2536  CG2 ILE A 256      9.399 -10.781   9.049  1.00 23.47           C
ATOM   2537  CD1 ILE A 256      8.485  -7.827   9.620  1.00 24.32           C
ATOM   2538  H   ILE A 256     10.569  -9.277  12.642  1.00  0.00           H
ATOM   2539  HA  ILE A 256      9.125 -11.647  11.610  1.00  0.00           H
ATOM   2540  HB  ILE A 256     10.639  -9.424  10.160  1.00  0.00           H
ATOM   2541 HG12 ILE A 256      7.643  -9.497  10.704  1.00  0.00           H
ATOM   2542 HG13 ILE A 256      8.729  -8.495  11.604  1.00  0.00           H
ATOM   2543 HG21 ILE A 256      9.300 -10.122   8.191  1.00  0.00           H
ATOM   2544 HG22 ILE A 256     10.178 -11.502   8.799  1.00  0.00           H
ATOM   2545 HG23 ILE A 256      8.463 -11.334   9.144  1.00  0.00           H
ATOM   2546 HD11 ILE A 256      7.671  -7.154   9.886  1.00  0.00           H
ATOM   2547 HD12 ILE A 256      9.405  -7.243   9.604  1.00  0.00           H
ATOM   2548 HD13 ILE A 256      8.283  -8.191   8.614  1.00  0.00           H
ATOM   2549  N   ASN A 257     11.240 -13.035  11.538  1.00 25.64           N
ATOM   2550  CA  ASN A 257     12.402 -13.909  11.724  1.00 27.73           C
ATOM   2551  C   ASN A 257     12.635 -14.773  10.481  1.00 27.85           C
ATOM   2552  O   ASN A 257     13.109 -15.904  10.561  1.00 27.48           O
ATOM   2553  CB  ASN A 257     12.271 -14.724  13.031  1.00 29.60           C
ATOM   2554  CG  ASN A 257     12.374 -13.840  14.276  1.00 31.61           C
ATOM   2555  OD1 ASN A 257     13.297 -13.032  14.399  1.00 33.94           O
ATOM   2556  ND2 ASN A 257     11.406 -13.918  15.179  1.00 33.79           N
ATOM   2557  H   ASN A 257     10.325 -13.446  11.670  1.00  0.00           H
ATOM   2558  HA  ASN A 257     13.311 -13.312  11.810  1.00  0.00           H
ATOM   2559  HB2 ASN A 257     11.337 -15.288  13.036  1.00  0.00           H
ATOM   2560  HB3 ASN A 257     13.073 -15.460  13.100  1.00  0.00           H
ATOM   2561 HD21 ASN A 257     10.556 -14.458  14.989  1.00  0.00           H
ATOM   2562 HD22 ASN A 257     11.437 -13.348  16.006  1.00  0.00           H
ATOM   2563  N   TYR A 258     12.338 -14.198   9.316  1.00 29.16           N
ATOM   2564  CA  TYR A 258     12.630 -14.695   7.986  1.00 29.16           C
ATOM   2565  C   TYR A 258     12.796 -13.480   7.065  1.00 28.34           C
ATOM   2566  O   TYR A 258     12.292 -12.395   7.364  1.00 28.39           O
ATOM   2567  CB  TYR A 258     11.570 -15.720   7.528  1.00 29.46           C
ATOM   2568  CG  TYR A 258     10.161 -15.170   7.390  1.00 30.02           C
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ATOM   2569  CD1 TYR A 258       9.307 -15.118   8.512  1.00 31.04          C
ATOM   2570  CD2 TYR A 258       9.704 -14.694   6.143  1.00 30.30          C
ATOM   2571  CE1 TYR A 258       8.012 -14.582   8.391  1.00 29.83          C
ATOM   2572  CE2 TYR A 258       8.403 -14.171   6.020  1.00 30.49          C
ATOM   2573  CZ  TYR A 258       7.562 -14.109   7.144  1.00 31.23          C
ATOM   2574  OH  TYR A 258       6.315 -13.584   7.014  1.00 30.56          O
ATOM   2575  H   TYR A 258      11.983 -13.250   9.326  1.00  0.00          H
ATOM   2576  HA  TYR A 258      13.598 -15.198   8.024  1.00  0.00          H
ATOM   2577  HB2 TYR A 258      11.869 -16.144   6.569  1.00  0.00          H
ATOM   2578  HB3 TYR A 258      11.550 -16.561   8.222  1.00  0.00          H
ATOM   2579  HD1 TYR A 258       9.643 -15.481   9.472  1.00  0.00          H
ATOM   2580  HD2 TYR A 258      10.347 -14.721   5.277  1.00  0.00          H
ATOM   2581  HE1 TYR A 258       7.361 -14.535   9.253  1.00  0.00          H
ATOM   2582  HE2 TYR A 258       8.043 -13.817   5.067  1.00  0.00          H
ATOM   2583  HH  TYR A 258       5.803 -13.577   7.852  1.00  0.00          H
ATOM   2584  N   ASP A 259      13.492 -13.656   5.939  1.00 26.74          N
ATOM   2585  CA  ASP A 259      13.635 -12.637   4.903  1.00 25.98          C
ATOM   2586  C   ASP A 259      12.372 -12.701   4.031  1.00 26.85          C
ATOM   2587  O   ASP A 259      12.137 -13.708   3.359  1.00 26.32          O
ATOM   2588  CB  ASP A 259      14.898 -12.964   4.078  1.00 24.33          C
ATOM   2589  CG  ASP A 259      15.209 -11.967   2.966  1.00 23.76          C
ATOM   2590  OD1 ASP A 259      14.362 -11.716   2.079  1.00 24.79          O
ATOM   2591  OD2 ASP A 259      16.339 -11.438   2.972  1.00 24.27          O1-
ATOM   2592  H   ASP A 259      13.858 -14.571   5.738  1.00  0.00          H
ATOM   2593  HA  ASP A 259      13.744 -11.646   5.349  1.00  0.00          H
ATOM   2594  HB2 ASP A 259      15.759 -12.996   4.739  1.00  0.00          H
ATOM   2595  HB3 ASP A 259      14.836 -13.965   3.659  1.00  0.00          H
ATOM   2596  N   VAL A 260      11.535 -11.659   4.096  1.00 27.13          N
ATOM   2597  CA  VAL A 260      10.207 -11.619   3.488  1.00 26.80          C
ATOM   2598  C   VAL A 260      10.230 -11.787   1.957  1.00 26.31          C
ATOM   2599  O   VAL A 260       9.451 -12.574   1.428  1.00 25.15          O
ATOM   2600  CB  VAL A 260       9.445 -10.341   3.933  1.00 27.92          C
ATOM   2601  CG1 VAL A 260       9.188 -10.347   5.449  1.00 27.39          C
ATOM   2602  CG2 VAL A 260      10.101  -9.012   3.511  1.00 30.01          C
ATOM   2603  H   VAL A 260      11.763 -10.918   4.739  1.00  0.00          H
ATOM   2604  HA  VAL A 260       9.660 -12.479   3.877  1.00  0.00          H
ATOM   2605  HB  VAL A 260       8.463 -10.375   3.457  1.00  0.00          H
ATOM   2606 HG11 VAL A 260       8.595  -9.485   5.756  1.00  0.00          H
ATOM   2607 HG12 VAL A 260       8.637 -11.237   5.756  1.00  0.00          H
ATOM   2608 HG13 VAL A 260      10.119 -10.326   6.016  1.00  0.00          H
ATOM   2609 HG21 VAL A 260       9.512  -8.164   3.862  1.00  0.00          H
ATOM   2610 HG22 VAL A 260      11.108  -8.901   3.913  1.00  0.00          H
ATOM   2611 HG23 VAL A 260      10.154  -8.912   2.428  1.00  0.00          H
ATOM   2612  N   PHE A 261      11.140 -11.120   1.237  1.00 25.12          N
ATOM   2613  CA  PHE A 261      11.169 -11.161  -0.228  1.00 24.42          C
ATOM   2614  C   PHE A 261      11.853 -12.434  -0.738  1.00 26.37          C
ATOM   2615  O   PHE A 261      11.473 -12.942  -1.790  1.00 26.96          O
ATOM   2616  CB  PHE A 261      11.911  -9.937  -0.780  1.00 24.90          C
ATOM   2617  CG  PHE A 261      11.185  -8.635  -0.528  1.00 24.87          C
ATOM   2618  CD1 PHE A 261       9.982  -8.373  -1.210  1.00 23.69          C
ATOM   2619  CD2 PHE A 261      11.691  -7.696   0.394  1.00 24.07          C
ATOM   2620  CE1 PHE A 261       9.268  -7.190  -0.953  1.00 23.05          C
ATOM   2621  CE2 PHE A 261      10.979  -6.513   0.652  1.00 26.09          C
ATOM   2622  CZ  PHE A 261       9.761  -6.273  -0.012  1.00 24.79          C
ATOM   2623  H   PHE A 261      11.830 -10.565   1.722  1.00  0.00          H
ATOM   2624  HA  PHE A 261      10.149 -11.157  -0.618  1.00  0.00          H
ATOM   2625  HB2 PHE A 261      12.914  -9.880  -0.375  1.00  0.00          H
ATOM   2626  HB3 PHE A 261      12.028 -10.034  -1.858  1.00  0.00          H
ATOM   2627  HD1 PHE A 261       9.601  -9.091  -1.919  1.00  0.00          H
ATOM   2628  HD2 PHE A 261      12.617  -7.878   0.914  1.00  0.00          H
ATOM   2629  HE1 PHE A 261       8.334  -6.987  -1.458  1.00  0.00          H
ATOM   2630  HE2 PHE A 261      11.365  -5.797   1.362  1.00  0.00          H
ATOM   2631  HZ  PHE A 261       9.186  -5.391   0.206  1.00  0.00          H
ATOM   2632  N   LYS A 262      12.787 -13.014   0.032  1.00 25.29          N
ATOM   2633  CA  LYS A 262      13.322 -14.348  -0.221  1.00 27.76          C
ATOM   2634  C   LYS A 262      12.247 -15.430   0.002  1.00 27.08          C
ATOM   2635  O   LYS A 262      12.370 -16.487  -0.606  1.00 27.65          O
ATOM   2636  CB  LYS A 262      14.516 -14.587   0.728  1.00 27.98          C
ATOM   2637  CG  LYS A 262      15.218 -15.965   0.714  1.00 31.68          C
ATOM   2638  CD  LYS A 262      16.082 -16.260  -0.527  1.00 35.77          C
ATOM   2639  CE  LYS A 262      15.601 -17.462  -1.364  1.00 38.98          C
ATOM   2640  NZ  LYS A 262      14.469 -17.111  -2.226  1.00 38.71          N1+
ATOM   2641  H   LYS A 262      13.107 -12.531   0.875  1.00  0.00          H
ATOM   2642  HA  LYS A 262      13.662 -14.397  -1.257  1.00  0.00          H
ATOM   2643  HB2 LYS A 262      15.261 -13.805   0.579  1.00  0.00          H
ATOM   2644  HB3 LYS A 262      14.131 -14.448   1.733  1.00  0.00          H
ATOM   2645  HG2 LYS A 262      15.879 -15.984   1.582  1.00  0.00          H
ATOM   2646  HG3 LYS A 262      14.510 -16.773   0.907  1.00  0.00          H
ATOM   2647  HD2 LYS A 262      16.193 -15.366  -1.141  1.00  0.00          H
ATOM   2648  HD3 LYS A 262      17.091 -16.490  -0.182  1.00  0.00          H
ATOM   2649  HE2 LYS A 262      16.407 -17.813  -2.006  1.00  0.00          H
ATOM   2650  HE3 LYS A 262      15.323 -18.304  -0.728  1.00  0.00          H
ATOM   2651  HZ1 LYS A 262      14.103 -17.966  -2.697  1.00  0.00          H
ATOM   2652  HZ2 LYS A 262      13.669 -16.790  -1.686  1.00  0.00          H
ATOM   2653  HZ3 LYS A 262      14.727 -16.435  -2.938  1.00  0.00          H
ATOM   2654  N   TRP A 263      11.241 -15.190   0.854  1.00 26.32          N
ATOM   2655  CA  TRP A 263      10.185 -16.138   1.212  1.00 26.06          C
ATOM   2656  C   TRP A 263       8.955 -15.989   0.292  1.00 28.00          C
ATOM   2657  O   TRP A 263       8.460 -16.994  -0.222  1.00 26.85          O
ATOM   2658  CB  TRP A 263       9.778 -15.851   2.674  1.00 25.69          C
ATOM   2659  CG  TRP A 263       8.727 -16.726   3.291  1.00 24.08          C
ATOM   2660  CD1 TRP A 263       8.953 -17.900   3.924  1.00 24.32          C
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ATOM   2661  CD2 TRP A 263       7.288 -16.490   3.386  1.00 24.24           C
ATOM   2662  NE1 TRP A 263       7.756 -18.412   4.385  1.00 24.75           N
ATOM   2663  CE3 TRP A 263       6.420 -15.461   2.956  1.00 25.60           C
ATOM   2664  CE2 TRP A 263       6.695 -17.580   4.091  1.00 24.89           C
ATOM   2665  CZ3 TRP A 263       5.033 -15.514   3.202  1.00 24.08           C
ATOM   2666  CZ2 TRP A 263       5.313 -17.648   4.344  1.00 24.80           C
ATOM   2667  CH2 TRP A 263       4.479 -16.608   3.893  1.00 25.33           C
ATOM   2668  H   TRP A 263      11.270 -14.313   1.361  1.00  0.00           H
ATOM   2669  HA  TRP A 263      10.557 -17.162   1.139  1.00  0.00           H
ATOM   2670  HB2 TRP A 263      10.667 -15.952   3.297  1.00  0.00           H
ATOM   2671  HB3 TRP A 263       9.454 -14.818   2.797  1.00  0.00           H
ATOM   2672  HD1 TRP A 263       9.930 -18.344   4.053  1.00  0.00           H
ATOM   2673  HE1 TRP A 263       7.684 -19.253   4.941  1.00  0.00           H
ATOM   2674  HE3 TRP A 263       6.831 -14.613   2.438  1.00  0.00           H
ATOM   2675  HZ3 TRP A 263       4.394 -14.707   2.870  1.00  0.00           H
ATOM   2676  HZ2 TRP A 263       4.892 -18.487   4.877  1.00  0.00           H
ATOM   2677  HH2 TRP A 263       3.417 -16.643   4.085  1.00  0.00           H
ATOM   2678  N   MET A 264       8.470 -14.757   0.061  1.00 26.69           N
ATOM   2679  CA  MET A 264       7.254 -14.428  -0.705  1.00 27.66           C
ATOM   2680  C   MET A 264       7.328 -14.926  -2.160  1.00 28.61           C
ATOM   2681  O   MET A 264       6.341 -15.395  -2.728  1.00 28.17           O
ATOM   2682  CB  MET A 264       7.048 -12.894  -0.717  1.00 26.75           C
ATOM   2683  CG  MET A 264       6.486 -12.283   0.578  1.00 27.80           C
ATOM   2684  SD  MET A 264       4.699 -12.457   0.807  1.00 32.27           S
ATOM   2685  CE  MET A 264       4.118 -11.130  -0.283  1.00 29.89           C
ATOM   2686  H   MET A 264       8.925 -13.982   0.542  1.00  0.00           H
ATOM   2687  HA  MET A 264       6.394 -14.909  -0.234  1.00  0.00           H
ATOM   2688  HB2 MET A 264       7.996 -12.410  -0.958  1.00  0.00           H
ATOM   2689  HB3 MET A 264       6.378 -12.619  -1.531  1.00  0.00           H
ATOM   2690  HG2 MET A 264       6.975 -12.709   1.449  1.00  0.00           H
ATOM   2691  HG3 MET A 264       6.720 -11.219   0.605  1.00  0.00           H
ATOM   2692  HE1 MET A 264       3.031 -11.148  -0.348  1.00  0.00           H
ATOM   2693  HE2 MET A 264       4.431 -10.161   0.104  1.00  0.00           H
ATOM   2694  HE3 MET A 264       4.517 -11.235  -1.289  1.00  0.00           H
ATOM   2695  N   GLN A 265       8.534 -14.850  -2.734  1.00 28.33           N
ATOM   2696  CA  GLN A 265       8.886 -15.235  -4.094  1.00 30.41           C
ATOM   2697  C   GLN A 265       8.729 -16.752  -4.339  1.00 30.83           C
ATOM   2698  O   GLN A 265       8.360 -17.159  -5.443  1.00 30.37           O
ATOM   2699  CB  GLN A 265      10.340 -14.769  -4.297  1.00 27.86           C
ATOM   2700  CG  GLN A 265      10.917 -14.916  -5.716  1.00 30.57           C
ATOM   2701  CD  GLN A 265      12.436 -14.810  -5.684  1.00 32.16           C
ATOM   2702  OE1 GLN A 265      13.026 -13.859  -6.187  1.00 31.72           O
ATOM   2703  NE2 GLN A 265      13.096 -15.792  -5.093  1.00 32.89           N
ATOM   2704  H   GLN A 265       9.274 -14.455  -2.172  1.00  0.00           H
ATOM   2705  HA  GLN A 265       8.234 -14.702  -4.787  1.00  0.00           H
ATOM   2706  HB2 GLN A 265      10.417 -13.713  -4.033  1.00  0.00           H
ATOM   2707  HB3 GLN A 265      10.970 -15.296  -3.577  1.00  0.00           H
ATOM   2708  HG2 GLN A 265      10.669 -15.886  -6.149  1.00  0.00           H
ATOM   2709  HG3 GLN A 265      10.503 -14.160  -6.384  1.00  0.00           H
ATOM   2710 HE21 GLN A 265      12.564 -16.604  -4.708  1.00  0.00           H
ATOM   2711 HE22 GLN A 265      14.098 -15.835  -5.203  1.00  0.00           H
ATOM   2712  N   GLU A 266       8.971 -17.590  -3.319  1.00 31.44           N
ATOM   2713  CA  GLU A 266       8.902 -19.050  -3.432  1.00 33.01           C
ATOM   2714  C   GLU A 266       7.481 -19.521  -3.111  1.00 32.66           C
ATOM   2715  O   GLU A 266       6.962 -20.417  -3.770  1.00 32.48           O
ATOM   2716  CB  GLU A 266       9.858 -19.766  -2.444  1.00 34.36           C
ATOM   2717  CG  GLU A 266      11.151 -19.035  -2.056  1.00 44.11           C
ATOM   2718  CD  GLU A 266      12.109 -18.716  -3.196  1.00 48.33           C
ATOM   2719  OE1 GLU A 266      13.272 -19.168  -3.141  1.00 49.69           O
ATOM   2720  OE2 GLU A 266      11.811 -17.811  -3.998  1.00 50.67           O1-
ATOM   2721  H   GLU A 266       9.320 -17.198  -2.457  1.00  0.00           H
ATOM   2722  HA  GLU A 266       9.161 -19.355  -4.443  1.00  0.00           H
ATOM   2723  HB2 GLU A 266       9.346 -19.987  -1.505  1.00  0.00           H
ATOM   2724  HB3 GLU A 266      10.116 -20.742  -2.858  1.00  0.00           H
ATOM   2725  HG2 GLU A 266      10.881 -18.112  -1.555  1.00  0.00           H
ATOM   2726  HG3 GLU A 266      11.689 -19.630  -1.318  1.00  0.00           H
ATOM   2727  N   ASN A 267       6.853 -18.882  -2.114  1.00 29.70           N
ATOM   2728  CA  ASN A 267       5.505 -19.182  -1.619  1.00 28.37           C
ATOM   2729  C   ASN A 267       4.408 -18.656  -2.554  1.00 26.52           C
ATOM   2730  O   ASN A 267       3.226 -18.893  -2.295  1.00 27.70           O
ATOM   2731  CB  ASN A 267       5.301 -18.543  -0.225  1.00 29.57           C
ATOM   2732  CG  ASN A 267       5.969 -19.342   0.889  1.00 30.12           C
ATOM   2733  OD1 ASN A 267       5.369 -20.240   1.467  1.00 32.14           O
ATOM   2734  ND2 ASN A 267       7.209 -19.016   1.222  1.00 27.84           N
ATOM   2735  H   ASN A 267       7.370 -18.144  -1.651  1.00  0.00           H
ATOM   2736  HA  ASN A 267       5.374 -20.265  -1.551  1.00  0.00           H
ATOM   2737  HB2 ASN A 267       5.642 -17.507  -0.210  1.00  0.00           H
ATOM   2738  HB3 ASN A 267       4.241 -18.504   0.033  1.00  0.00           H
ATOM   2739 HD21 ASN A 267       7.683 -18.252   0.748  1.00  0.00           H
ATOM   2740 HD22 ASN A 267       7.597 -19.413   2.064  1.00  0.00           H
ATOM   2741  N   GLU A 268       4.784 -17.942  -3.625  1.00 28.56           N
ATOM   2742  CA  GLU A 268       3.944 -17.487  -4.729  1.00 29.03           C
ATOM   2743  C   GLU A 268       3.015 -16.359  -4.262  1.00 27.53           C
ATOM   2744  O   GLU A 268       1.800 -16.465  -4.391  1.00 29.81           O
ATOM   2745  CB  GLU A 268       3.216 -18.683  -5.405  1.00 31.12           C
ATOM   2746  CG  GLU A 268       4.106 -19.458  -6.393  1.00 34.99           C
ATOM   2747  CD  GLU A 268       4.382 -18.644  -7.647  1.00 36.24           C
ATOM   2748  OE1 GLU A 268       3.389 -18.124  -8.201  1.00 38.70           O
ATOM   2749  OE2 GLU A 268       5.575 -18.507  -7.991  1.00 37.35           O1-
ATOM   2750  H   GLU A 268       5.774 -17.761  -3.706  1.00  0.00           H
ATOM   2751  HA  GLU A 268       4.606 -17.017  -5.456  1.00  0.00           H
ATOM   2752  HB2 GLU A 268       2.799 -19.380  -4.682  1.00  0.00           H
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ATOM   2753  HB3 GLU A 268       2.340 -18.318  -5.933  1.00  0.00           H
ATOM   2754  HG2 GLU A 268       5.042 -19.752  -5.917  1.00  0.00           H
ATOM   2755  HG3 GLU A 268       3.608 -20.378  -6.698  1.00  0.00           H
ATOM   2756  N   LYS A 269       3.560 -15.319  -3.628  1.00 25.71           N
ATOM   2757  CA  LYS A 269       2.804 -14.209  -3.060  1.00 25.50           C
ATOM   2758  C   LYS A 269       3.412 -12.916  -3.621  1.00 24.82           C
ATOM   2759  O   LYS A 269       4.597 -12.666  -3.427  1.00 25.11           O
ATOM   2760  CB  LYS A 269       2.824 -14.320  -1.518  1.00 23.34           C
ATOM   2761  CG  LYS A 269       2.294 -15.656  -0.933  1.00 24.75           C
ATOM   2762  CD  LYS A 269       0.785 -15.911  -1.138  1.00 23.23           C
ATOM   2763  CE  LYS A 269       0.367 -17.397  -1.183  1.00 22.16           C
ATOM   2764  NZ  LYS A 269       0.665 -18.016  -2.484  1.00 22.20           N1+
ATOM   2765  H   LYS A 269       4.568 -15.291  -3.492  1.00  0.00           H
ATOM   2766  HA  LYS A 269       1.768 -14.236  -3.387  1.00  0.00           H
ATOM   2767  HB2 LYS A 269       3.857 -14.204  -1.192  1.00  0.00           H
ATOM   2768  HB3 LYS A 269       2.277 -13.481  -1.089  1.00  0.00           H
ATOM   2769  HG2 LYS A 269       2.873 -16.478  -1.346  1.00  0.00           H
ATOM   2770  HG3 LYS A 269       2.505 -15.679   0.137  1.00  0.00           H
ATOM   2771  HD2 LYS A 269       0.233 -15.443  -0.324  1.00  0.00           H
ATOM   2772  HD3 LYS A 269       0.431 -15.407  -2.035  1.00  0.00           H
ATOM   2773  HE2 LYS A 269       0.839 -17.969  -0.384  1.00  0.00           H
ATOM   2774  HE3 LYS A 269      -0.709 -17.474  -1.021  1.00  0.00           H
ATOM   2775  HZ1 LYS A 269      -0.113 -18.593  -2.863  1.00  0.00           H
ATOM   2776  HZ2 LYS A 269       0.787 -17.303  -3.196  1.00  0.00           H
ATOM   2777  HZ3 LYS A 269       1.523 -18.558  -2.459  1.00  0.00           H
ATOM   2778  N   VAL A 270       2.622 -12.142  -4.373  1.00 24.36           N
ATOM   2779  CA  VAL A 270       3.050 -10.999  -5.189  1.00 23.54           C
ATOM   2780  C   VAL A 270       2.632  -9.673  -4.520  1.00 22.50           C
ATOM   2781  O   VAL A 270       3.247  -8.638  -4.779  1.00 23.72           O
ATOM   2782  CB  VAL A 270       2.411 -11.131  -6.609  1.00 23.18           C
ATOM   2783  CG1 VAL A 270       2.898 -10.059  -7.603  1.00 22.05           C
ATOM   2784  CG2 VAL A 270       2.638 -12.505  -7.277  1.00 23.42           C
ATOM   2785  H   VAL A 270       1.631 -12.369  -4.400  1.00  0.00           H
ATOM   2786  HA  VAL A 270       4.133 -10.965  -5.275  1.00  0.00           H
ATOM   2787  HB  VAL A 270       1.333 -11.008  -6.490  1.00  0.00           H
ATOM   2788 HG11 VAL A 270       2.467 -10.206  -8.594  1.00  0.00           H
ATOM   2789 HG12 VAL A 270       2.639  -9.050  -7.289  1.00  0.00           H
ATOM   2790 HG13 VAL A 270       3.979 -10.110  -7.723  1.00  0.00           H
ATOM   2791 HG21 VAL A 270       1.916 -12.657  -8.077  1.00  0.00           H
ATOM   2792 HG22 VAL A 270       3.617 -12.568  -7.745  1.00  0.00           H
ATOM   2793 HG23 VAL A 270       2.552 -13.355  -6.602  1.00  0.00           H
ATOM   2794  N   TYR A 271       1.623  -9.700  -3.641  1.00 21.55           N
ATOM   2795  CA  TYR A 271       1.153  -8.561  -2.866  1.00 22.01           C
ATOM   2796  C   TYR A 271       0.892  -9.055  -1.443  1.00 20.85           C
ATOM   2797  O   TYR A 271      -0.008  -9.867  -1.236  1.00 21.84           O
ATOM   2798  CB  TYR A 271      -0.071  -7.921  -3.556  1.00 19.56           C
ATOM   2799  CG  TYR A 271      -0.610  -6.673  -2.876  1.00 18.54           C
ATOM   2800  CD1 TYR A 271      -0.142  -5.398  -3.256  1.00 18.88           C
ATOM   2801  CD2 TYR A 271      -1.575  -6.783  -1.852  1.00 19.17           C
ATOM   2802  CE1 TYR A 271      -0.633  -4.246  -2.613  1.00 16.85           C
ATOM   2803  CE2 TYR A 271      -2.061  -5.629  -1.211  1.00 18.66           C
ATOM   2804  CZ  TYR A 271      -1.598  -4.357  -1.594  1.00 18.55           C
ATOM   2805  OH  TYR A 271      -2.082  -3.241  -0.976  1.00 19.00           O
ATOM   2806  H   TYR A 271       1.157 -10.582  -3.462  1.00  0.00           H
ATOM   2807  HA  TYR A 271       1.939  -7.806  -2.812  1.00  0.00           H
ATOM   2808  HB2 TYR A 271       0.189  -7.658  -4.582  1.00  0.00           H
ATOM   2809  HB3 TYR A 271      -0.879  -8.651  -3.631  1.00  0.00           H
ATOM   2810  HD1 TYR A 271       0.596  -5.294  -4.039  1.00  0.00           H
ATOM   2811  HD2 TYR A 271      -1.939  -7.752  -1.543  1.00  0.00           H
ATOM   2812  HE1 TYR A 271      -0.263  -3.275  -2.902  1.00  0.00           H
ATOM   2813  HE2 TYR A 271      -2.791  -5.723  -0.420  1.00  0.00           H
ATOM   2814  HH  TYR A 271      -1.543  -2.449  -1.141  1.00  0.00           H
ATOM   2815  N   GLY A 272       1.688  -8.601  -0.475  1.00 20.02           N
ATOM   2816  CA  GLY A 272       1.573  -8.942   0.931  1.00 19.98           C
ATOM   2817  C   GLY A 272       1.318  -7.682   1.747  1.00 19.55           C
ATOM   2818  O   GLY A 272       2.077  -6.720   1.630  1.00 20.95           O
ATOM   2819  H   GLY A 272       2.453  -7.969  -0.699  1.00  0.00           H
ATOM   2820  HA2 GLY A 272       0.812  -9.690   1.105  1.00  0.00           H
ATOM   2821  HA3 GLY A 272       2.511  -9.385   1.250  1.00  0.00           H
ATOM   2822  N   PHE A 273       0.277  -7.689   2.581  1.00 19.12           N
ATOM   2823  CA  PHE A 273      -0.186  -6.547   3.368  1.00 19.96           C
ATOM   2824  C   PHE A 273      -0.495  -6.972   4.817  1.00 20.73           C
ATOM   2825  O   PHE A 273      -0.305  -8.132   5.196  1.00 21.45           O
ATOM   2826  CB  PHE A 273      -1.351  -5.837   2.627  1.00 20.09           C
ATOM   2827  CG  PHE A 273      -2.668  -6.597   2.677  1.00 21.22           C
ATOM   2828  CD1 PHE A 273      -2.895  -7.686   1.811  1.00 20.84           C
ATOM   2829  CD2 PHE A 273      -3.629  -6.276   3.658  1.00 20.08           C
ATOM   2830  CE1 PHE A 273      -4.036  -8.493   1.978  1.00 20.71           C
ATOM   2831  CE2 PHE A 273      -4.754  -7.099   3.839  1.00 20.46           C
ATOM   2832  CZ  PHE A 273      -4.953  -8.210   3.005  1.00 22.49           C
ATOM   2833  H   PHE A 273      -0.297  -8.528   2.633  1.00  0.00           H
ATOM   2834  HA  PHE A 273       0.631  -5.829   3.444  1.00  0.00           H
ATOM   2835  HB2 PHE A 273      -1.503  -4.844   3.054  1.00  0.00           H
ATOM   2836  HB3 PHE A 273      -1.079  -5.656   1.586  1.00  0.00           H
ATOM   2837  HD1 PHE A 273      -2.172  -7.939   1.049  1.00  0.00           H
ATOM   2838  HD2 PHE A 273      -3.481  -5.433   4.316  1.00  0.00           H
ATOM   2839  HE1 PHE A 273      -4.196  -9.344   1.335  1.00  0.00           H
ATOM   2840  HE2 PHE A 273      -5.455  -6.890   4.632  1.00  0.00           H
ATOM   2841  HZ  PHE A 273      -5.817  -8.836   3.146  1.00  0.00           H
ATOM   2842  N   THR A 274      -0.976  -6.029   5.632  1.00 20.67           N
ATOM   2843  CA  THR A 274      -1.466  -6.244   6.990  1.00 19.86           C
ATOM   2844  C   THR A 274      -2.853  -5.595   7.134  1.00 23.58           C
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ATOM   2845  O   THR A 274      -3.873  -6.208   6.821  1.00 27.01           O
ATOM   2846  CB  THR A 274      -0.404  -5.815   8.037  1.00 23.05           C
ATOM   2847  OG1 THR A 274       0.096  -4.512   7.775  1.00 20.98           O
ATOM   2848  CG2 THR A 274       0.763  -6.797   8.194  1.00 20.44           C
ATOM   2849  H   THR A 274      -1.145  -5.112   5.245  1.00  0.00           H
ATOM   2850  HA  THR A 274      -1.656  -7.309   7.148  1.00  0.00           H
ATOM   2851  HB  THR A 274      -0.895  -5.747   9.002  1.00  0.00           H
ATOM   2852  HG1 THR A 274       0.780  -4.596   7.121  1.00  0.00           H
ATOM   2853 HG21 THR A 274       1.484  -6.449   8.935  1.00  0.00           H
ATOM   2854 HG22 THR A 274       0.399  -7.769   8.530  1.00  0.00           H
ATOM   2855 HG23 THR A 274       1.292  -6.957   7.256  1.00  0.00           H
ATOM   2856  N   VAL A 275      -2.902  -4.339   7.583  1.00 21.17           N
ATOM   2857  CA  VAL A 275      -4.136  -3.631   7.910  1.00 19.25           C
ATOM   2858  C   VAL A 275      -4.962  -3.364   6.627  1.00 18.02           C
ATOM   2859  O   VAL A 275      -4.420  -3.040   5.568  1.00 19.67           O
ATOM   2860  CB  VAL A 275      -3.790  -2.315   8.661  1.00 17.62           C
ATOM   2861  CG1 VAL A 275      -5.038  -1.683   9.306  1.00 17.33           C
ATOM   2862  CG2 VAL A 275      -2.725  -2.508   9.763  1.00 17.17           C
ATOM   2863  H   VAL A 275      -2.016  -3.894   7.780  1.00  0.00           H
ATOM   2864  HA  VAL A 275      -4.709  -4.281   8.576  1.00  0.00           H
ATOM   2865  HB  VAL A 275      -3.379  -1.620   7.929  1.00  0.00           H
ATOM   2866 HG11 VAL A 275      -4.794  -0.788   9.877  1.00  0.00           H
ATOM   2867 HG12 VAL A 275      -5.790  -1.398   8.568  1.00  0.00           H
ATOM   2868 HG13 VAL A 275      -5.494  -2.384  10.003  1.00  0.00           H
ATOM   2869 HG21 VAL A 275      -2.537  -1.579  10.303  1.00  0.00           H
ATOM   2870 HG22 VAL A 275      -3.052  -3.250  10.493  1.00  0.00           H
ATOM   2871 HG23 VAL A 275      -1.769  -2.837   9.358  1.00  0.00           H
ATOM   2872  N   SER A 276      -6.284  -3.509   6.726  1.00 18.71           N
ATOM   2873  CA  SER A 276      -7.259  -3.347   5.655  1.00 19.95           C
ATOM   2874  C   SER A 276      -8.525  -2.724   6.253  1.00 18.73           C
ATOM   2875  O   SER A 276      -8.882  -3.030   7.391  1.00 22.68           O
ATOM   2876  CB  SER A 276      -7.422  -4.678   4.897  1.00 18.49           C
ATOM   2877  OG  SER A 276      -7.579  -5.765   5.789  1.00 20.03           O
ATOM   2878  H   SER A 276      -6.696  -3.731   7.622  1.00  0.00           H
ATOM   2879  HA  SER A 276      -6.871  -2.610   4.949  1.00  0.00           H
ATOM   2880  HB2 SER A 276      -8.278  -4.636   4.221  1.00  0.00           H
ATOM   2881  HB3 SER A 276      -6.544  -4.869   4.284  1.00  0.00           H
ATOM   2882  HG  SER A 276      -6.767  -5.854   6.274  1.00  0.00           H
ATOM   2883  N   ILE A 277      -9.155  -1.790   5.539  1.00 19.56           N
ATOM   2884  CA  ILE A 277     -10.057  -0.790   6.095  1.00 18.81           C
ATOM   2885  C   ILE A 277     -11.145  -0.409   5.078  1.00 17.40           C
ATOM   2886  O   ILE A 277     -11.022  -0.696   3.885  1.00 17.52           O
ATOM   2887  CB  ILE A 277      -9.199   0.380   6.676  1.00 16.88           C
ATOM   2888  CG1 ILE A 277      -9.989   1.336   7.592  1.00 21.77           C
ATOM   2889  CG2 ILE A 277      -8.470   1.171   5.582  1.00 21.13           C
ATOM   2890  CD1 ILE A 277      -9.106   2.234   8.472  1.00 19.17           C
ATOM   2891  H   ILE A 277      -8.913  -1.672   4.556  1.00  0.00           H
ATOM   2892  HA  ILE A 277     -10.599  -1.250   6.918  1.00  0.00           H
ATOM   2893  HB  ILE A 277      -8.426  -0.070   7.301  1.00  0.00           H
ATOM   2894 HG12 ILE A 277     -10.657   1.965   7.006  1.00  0.00           H
ATOM   2895 HG13 ILE A 277     -10.628   0.741   8.239  1.00  0.00           H
ATOM   2896 HG21 ILE A 277      -7.763   1.879   6.008  1.00  0.00           H
ATOM   2897 HG22 ILE A 277      -7.911   0.527   4.903  1.00  0.00           H
ATOM   2898 HG23 ILE A 277      -9.183   1.743   4.993  1.00  0.00           H
ATOM   2899 HD11 ILE A 277      -9.720   2.836   9.141  1.00  0.00           H
ATOM   2900 HD12 ILE A 277      -8.428   1.643   9.087  1.00  0.00           H
ATOM   2901 HD13 ILE A 277      -8.505   2.925   7.880  1.00  0.00           H
ATOM   2902  N   HIS A 278     -12.199   0.250   5.567  1.00 17.40           N
ATOM   2903  CA  HIS A 278     -13.217   0.952   4.793  1.00 18.62           C
ATOM   2904  C   HIS A 278     -12.645   2.285   4.292  1.00 20.19           C
ATOM   2905  O   HIS A 278     -11.924   2.963   5.029  1.00 22.16           O
ATOM   2906  CB  HIS A 278     -14.387   1.311   5.737  1.00 19.60           C
ATOM   2907  CG  HIS A 278     -15.585   0.424   5.623  1.00 19.20           C
ATOM   2908  ND1 HIS A 278     -16.606   0.684   4.703  1.00 19.72           N
ATOM   2909  CD2 HIS A 278     -15.913  -0.694   6.353  1.00 19.63           C
ATOM   2910  CE1 HIS A 278     -17.511  -0.261   4.923  1.00 18.30           C
ATOM   2911  NE2 HIS A 278     -17.159  -1.091   5.902  1.00 20.42           N
ATOM   2912  H   HIS A 278     -12.236   0.386   6.570  1.00  0.00           H
ATOM   2913  HA  HIS A 278     -13.557   0.342   3.954  1.00  0.00           H
ATOM   2914  HB2 HIS A 278     -14.064   1.321   6.777  1.00  0.00           H
ATOM   2915  HB3 HIS A 278     -14.751   2.326   5.565  1.00  0.00           H
ATOM   2916  HD2 HIS A 278     -15.390  -1.203   7.148  1.00  0.00           H
ATOM   2917  HE1 HIS A 278     -18.443  -0.335   4.381  1.00  0.00           H
ATOM   2918  HE2 HIS A 278     -17.723  -1.846   6.288  1.00  0.00           H
ATOM   2919  N   GLU A 279     -13.010   2.707   3.078  1.00 18.56           N
ATOM   2920  CA  GLU A 279     -12.812   4.074   2.605  1.00 20.35           C
ATOM   2921  C   GLU A 279     -14.101   4.883   2.815  1.00 20.15           C
ATOM   2922  O   GLU A 279     -15.191   4.319   2.931  1.00 21.21           O
ATOM   2923  CB  GLU A 279     -12.440   4.077   1.099  1.00 18.12           C
ATOM   2924  CG  GLU A 279     -11.916   5.419   0.530  1.00 19.55           C
ATOM   2925  CD  GLU A 279     -10.803   6.064   1.353  1.00 21.45           C
ATOM   2926  OE1 GLU A 279     -11.088   6.566   2.462  1.00 21.73           O
ATOM   2927  OE2 GLU A 279      -9.651   6.101   0.872  1.00 20.95           O1-
ATOM   2928  H   GLU A 279     -13.582   2.088   2.512  1.00  0.00           H
ATOM   2929  HA  GLU A 279     -12.020   4.521   3.194  1.00  0.00           H
ATOM   2930  HB2 GLU A 279     -11.679   3.329   0.902  1.00  0.00           H
ATOM   2931  HB3 GLU A 279     -13.301   3.758   0.510  1.00  0.00           H
ATOM   2932  HG2 GLU A 279     -11.553   5.263  -0.485  1.00  0.00           H
ATOM   2933  HG3 GLU A 279     -12.728   6.138   0.435  1.00  0.00           H
ATOM   2934  N   TYR A 280     -13.973   6.212   2.830  1.00 20.93           N
ATOM   2935  CA  TYR A 280     -15.109   7.129   2.835  1.00 21.95           C
ATOM   2936  C   TYR A 280     -15.562   7.280   1.375  1.00 20.59           C
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ATOM   2937  O   TYR A 280     -14.817   7.808   0.542  1.00 20.61           O
ATOM   2938  CB  TYR A 280     -14.669   8.526   3.312  1.00 23.30           C
ATOM   2939  CG  TYR A 280     -13.914   8.587   4.618  1.00 26.62           C
ATOM   2940  CD1 TYR A 280     -14.593   8.523   5.851  1.00 30.13           C
ATOM   2941  CD2 TYR A 280     -12.516   8.734   4.593  1.00 30.20           C
ATOM   2942  CE1 TYR A 280     -13.874   8.618   7.056  1.00 31.13           C
ATOM   2943  CE2 TYR A 280     -11.805   8.815   5.797  1.00 32.21           C
ATOM   2944  CZ  TYR A 280     -12.475   8.758   7.028  1.00 32.49           C
ATOM   2945  OH  TYR A 280     -11.765   8.853   8.188  1.00 34.99           O
ATOM   2946  H   TYR A 280     -13.038   6.591   2.682  1.00  0.00           H
ATOM   2947  HA  TYR A 280     -15.914   6.755   3.470  1.00  0.00           H
ATOM   2948  HB2 TYR A 280     -14.043   9.009   2.566  1.00  0.00           H
ATOM   2949  HB3 TYR A 280     -15.553   9.155   3.415  1.00  0.00           H
ATOM   2950  HD1 TYR A 280     -15.665   8.398   5.883  1.00  0.00           H
ATOM   2951  HD2 TYR A 280     -11.980   8.779   3.654  1.00  0.00           H
ATOM   2952  HE1 TYR A 280     -14.406   8.560   7.994  1.00  0.00           H
ATOM   2953  HE2 TYR A 280     -10.739   8.930   5.759  1.00  0.00           H
ATOM   2954  HH  TYR A 280     -10.824   8.816   8.027  1.00  0.00           H
ATOM   2955  N   GLU A 281     -16.787   6.851   1.077  1.00 22.29           N
ATOM   2956  CA  GLU A 281     -17.539   7.030  -0.166  1.00 20.70           C
ATOM   2957  C   GLU A 281     -17.414   8.444  -0.774  1.00 20.87           C
ATOM   2958  O   GLU A 281     -17.135   8.579  -1.965  1.00 18.87           O
ATOM   2959  CB  GLU A 281     -18.997   6.550   0.066  1.00 21.60           C
ATOM   2960  CG  GLU A 281     -19.918   7.451   0.930  1.00 27.54           C
ATOM   2961  CD  GLU A 281     -19.305   7.771   2.286  1.00 30.84           C
ATOM   2962  OE1 GLU A 281     -18.960   6.816   3.011  1.00 32.62           O
ATOM   2963  OE2 GLU A 281     -18.937   8.944   2.500  1.00 35.66           O1-
ATOM   2964  H   GLU A 281     -17.357   6.542   1.867  1.00  0.00           H
ATOM   2965  HA  GLU A 281     -17.084   6.345  -0.883  1.00  0.00           H
ATOM   2966  HB2 GLU A 281     -19.473   6.424  -0.907  1.00  0.00           H
ATOM   2967  HB3 GLU A 281     -18.978   5.553   0.507  1.00  0.00           H
ATOM   2968  HG2 GLU A 281     -20.147   8.383   0.413  1.00  0.00           H
ATOM   2969  HG3 GLU A 281     -20.872   6.952   1.102  1.00  0.00           H
ATOM   2970  N   VAL A 282     -17.540   9.488   0.059  1.00 20.46           N
ATOM   2971  CA  VAL A 282     -17.458  10.900  -0.306  1.00 20.98           C
ATOM   2972  C   VAL A 282     -16.077  11.339  -0.858  1.00 20.93           C
ATOM   2973  O   VAL A 282     -16.009  12.362  -1.543  1.00 18.59           O
ATOM   2974  CB  VAL A 282     -17.921  11.744   0.919  1.00 21.34           C
ATOM   2975  CG1 VAL A 282     -16.982  11.645   2.139  1.00 22.74           C
ATOM   2976  CG2 VAL A 282     -18.242  13.209   0.571  1.00 22.47           C
ATOM   2977  H   VAL A 282     -17.868   9.281   1.008  1.00  0.00           H
ATOM   2978  HA  VAL A 282     -18.177  11.051  -1.113  1.00  0.00           H
ATOM   2979  HB  VAL A 282     -18.874  11.320   1.243  1.00  0.00           H
ATOM   2980 HG11 VAL A 282     -17.340  12.259   2.965  1.00  0.00           H
ATOM   2981 HG12 VAL A 282     -16.943  10.623   2.509  1.00  0.00           H
ATOM   2982 HG13 VAL A 282     -15.962  11.948   1.912  1.00  0.00           H
ATOM   2983 HG21 VAL A 282     -18.658  13.732   1.433  1.00  0.00           H
ATOM   2984 HG22 VAL A 282     -17.358  13.754   0.249  1.00  0.00           H
ATOM   2985 HG23 VAL A 282     -18.977  13.264  -0.232  1.00  0.00           H
ATOM   2986  N   THR A 283     -14.991  10.581  -0.625  1.00 19.91           N
ATOM   2987  CA  THR A 283     -13.668  10.880  -1.191  1.00 18.39           C
ATOM   2988  C   THR A 283     -13.493  10.267  -2.599  1.00 19.45           C
ATOM   2989  O   THR A 283     -12.594  10.687  -3.327  1.00 20.36           O
ATOM   2990  CB  THR A 283     -12.542  10.369  -0.245  1.00 20.55           C
ATOM   2991  OG1 THR A 283     -12.469   8.962  -0.100  1.00 18.62           O
ATOM   2992  CG2 THR A 283     -12.559  11.013   1.144  1.00 17.56           C
ATOM   2993  H   THR A 283     -15.110   9.714  -0.114  1.00  0.00           H
ATOM   2994  HA  THR A 283     -13.545  11.960  -1.293  1.00  0.00           H
ATOM   2995  HB  THR A 283     -11.593  10.653  -0.700  1.00  0.00           H
ATOM   2996  HG1 THR A 283     -13.306   8.611   0.211  1.00  0.00           H
ATOM   2997 HG21 THR A 283     -11.799  10.580   1.796  1.00  0.00           H
ATOM   2998 HG22 THR A 283     -12.335  12.071   1.055  1.00  0.00           H
ATOM   2999 HG23 THR A 283     -13.525  10.929   1.637  1.00  0.00           H
ATOM   3000  N   ILE A 284     -14.357   9.317  -2.995  1.00 16.54           N
ATOM   3001  CA  ILE A 284     -14.237   8.478  -4.189  1.00 16.06           C
ATOM   3002  C   ILE A 284     -15.451   8.435  -5.171  1.00 16.32           C
ATOM   3003  O   ILE A 284     -15.540   7.420  -5.872  1.00 18.94           O
ATOM   3004  CB  ILE A 284     -13.743   7.064  -3.741  1.00 14.12           C
ATOM   3005  CG1 ILE A 284     -14.768   6.314  -2.859  1.00 16.19           C
ATOM   3006  CG2 ILE A 284     -12.372   7.110  -3.048  1.00 14.01           C
ATOM   3007  CD1 ILE A 284     -14.408   4.844  -2.615  1.00 12.12           C
ATOM   3008  H   ILE A 284     -15.126   9.089  -2.375  1.00  0.00           H
ATOM   3009  HA  ILE A 284     -13.451   8.895  -4.819  1.00  0.00           H
ATOM   3010  HB  ILE A 284     -13.599   6.472  -4.640  1.00  0.00           H
ATOM   3011 HG12 ILE A 284     -14.869   6.818  -1.898  1.00  0.00           H
ATOM   3012 HG13 ILE A 284     -15.756   6.348  -3.318  1.00  0.00           H
ATOM   3013 HG21 ILE A 284     -11.889   6.134  -3.033  1.00  0.00           H
ATOM   3014 HG22 ILE A 284     -11.700   7.807  -3.542  1.00  0.00           H
ATOM   3015 HG23 ILE A 284     -12.470   7.422  -2.015  1.00  0.00           H
ATOM   3016 HD11 ILE A 284     -15.191   4.351  -2.042  1.00  0.00           H
ATOM   3017 HD12 ILE A 284     -14.289   4.304  -3.554  1.00  0.00           H
ATOM   3018 HD13 ILE A 284     -13.484   4.743  -2.046  1.00  0.00           H
ATOM   3019  N   PRO A 285     -16.367   9.441  -5.292  1.00 17.10           N
ATOM   3020  CA  PRO A 285     -17.554   9.418  -6.179  1.00 18.10           C
ATOM   3021  C   PRO A 285     -17.418   8.846  -7.601  1.00 18.61           C
ATOM   3022  O   PRO A 285     -18.361   8.217  -8.085  1.00 21.16           O
ATOM   3023  CB  PRO A 285     -18.057  10.865  -6.253  1.00 19.30           C
ATOM   3024  CG  PRO A 285     -17.645  11.467  -4.930  1.00 19.72           C
ATOM   3025  CD  PRO A 285     -16.380  10.703  -4.543  1.00 17.67           C
ATOM   3026  HA  PRO A 285     -18.298   8.814  -5.658  1.00  0.00           H
ATOM   3027  HB2 PRO A 285     -17.564  11.405  -7.063  1.00  0.00           H
ATOM   3028  HB3 PRO A 285     -19.133  10.923  -6.424  1.00  0.00           H
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ATOM   3029  HG2 PRO A 285     -17.492  12.545  -4.977  1.00  0.00           H
ATOM   3030  HG3 PRO A 285     -18.422  11.276  -4.188  1.00  0.00           H
ATOM   3031  HD2 PRO A 285     -15.475  11.266  -4.761  1.00  0.00           H
ATOM   3032  HD3 PRO A 285     -16.432  10.529  -3.475  1.00  0.00           H
ATOM   3033  N   THR A 286     -16.275   9.037  -8.272  1.00 19.69           N
ATOM   3034  CA  THR A 286     -16.056   8.545  -9.626  1.00 19.30           C
ATOM   3035  C   THR A 286     -14.895   7.537  -9.735  1.00 20.60           C
ATOM   3036  O   THR A 286     -14.661   7.040 -10.836  1.00 18.78           O
ATOM   3037  CB  THR A 286     -16.105   9.710 -10.661  1.00 21.39           C
ATOM   3038  OG1 THR A 286     -15.058  10.654 -10.537  1.00 21.34           O
ATOM   3039  CG2 THR A 286     -17.427  10.492 -10.654  1.00 19.97           C
ATOM   3040  H   THR A 286     -15.581   9.696  -7.897  1.00  0.00           H
ATOM   3041  HA  THR A 286     -16.896   7.913  -9.908  1.00  0.00           H
ATOM   3042  HB  THR A 286     -15.998   9.266 -11.653  1.00  0.00           H
ATOM   3043  HG1 THR A 286     -15.118  11.092  -9.677  1.00  0.00           H
ATOM   3044 HG21 THR A 286     -17.464  11.204 -11.478  1.00  0.00           H
ATOM   3045 HG22 THR A 286     -18.280   9.824 -10.759  1.00  0.00           H
ATOM   3046 HG23 THR A 286     -17.557  11.051  -9.726  1.00  0.00           H
ATOM   3047  N   LEU A 287     -14.229   7.141  -8.632  1.00 19.85           N
ATOM   3048  CA  LEU A 287     -13.073   6.218  -8.621  1.00 20.60           C
ATOM   3049  C   LEU A 287     -13.500   4.829  -9.109  1.00 20.95           C
ATOM   3050  O   LEU A 287     -12.986   4.322 -10.108  1.00 18.74           O
ATOM   3051  CB  LEU A 287     -12.476   6.117  -7.192  1.00 19.84           C
ATOM   3052  CG  LEU A 287     -11.036   5.544  -7.060  1.00 24.19           C
ATOM   3053  CD1 LEU A 287     -10.535   5.706  -5.619  1.00 17.69           C
ATOM   3054  CD2 LEU A 287     -10.876   4.068  -7.469  1.00 20.76           C
ATOM   3055  H   LEU A 287     -14.517   7.547  -7.748  1.00  0.00           H
ATOM   3056  HA  LEU A 287     -12.310   6.596  -9.300  1.00  0.00           H
ATOM   3057  HB2 LEU A 287     -12.464   7.122  -6.771  1.00  0.00           H
ATOM   3058  HB3 LEU A 287     -13.143   5.543  -6.550  1.00  0.00           H
ATOM   3059  HG  LEU A 287     -10.377   6.133  -7.697  1.00  0.00           H
ATOM   3060 HD11 LEU A 287      -9.482   5.438  -5.529  1.00  0.00           H
ATOM   3061 HD12 LEU A 287     -10.632   6.735  -5.281  1.00  0.00           H
ATOM   3062 HD13 LEU A 287     -11.094   5.070  -4.932  1.00  0.00           H
ATOM   3063 HD21 LEU A 287      -9.908   3.674  -7.159  1.00  0.00           H
ATOM   3064 HD22 LEU A 287     -11.641   3.436  -7.018  1.00  0.00           H
ATOM   3065 HD23 LEU A 287     -10.914   3.942  -8.550  1.00  0.00           H
ATOM   3066  N   TRP A 288     -14.492   4.238  -8.429  1.00 18.96           N
ATOM   3067  CA  TRP A 288     -15.028   2.921  -8.759  1.00 20.78           C
ATOM   3068  C   TRP A 288     -15.725   2.942 -10.128  1.00 21.73           C
ATOM   3069  O   TRP A 288     -15.624   1.979 -10.878  1.00 21.01           O
ATOM   3070  CB  TRP A 288     -16.021   2.469  -7.676  1.00 16.55           C
ATOM   3071  CG  TRP A 288     -16.699   1.165  -7.976  1.00 19.20           C
ATOM   3072  CD1 TRP A 288     -17.984   1.029  -8.369  1.00 17.19           C
ATOM   3073  CD2 TRP A 288     -16.139  -0.185  -7.945  1.00 18.61           C
ATOM   3074  NE1 TRP A 288     -18.252  -0.301  -8.604  1.00 18.83           N
ATOM   3075  CE3 TRP A 288     -14.877  -0.732  -7.615  1.00 16.92           C
ATOM   3076  CE2 TRP A 288     -17.160  -1.102  -8.338  1.00 18.36           C
ATOM   3077  CZ3 TRP A 288     -14.647  -2.123  -7.664  1.00 21.22           C
ATOM   3078  CZ2 TRP A 288     -16.943  -2.490  -8.389  1.00 20.24           C
ATOM   3079  CH2 TRP A 288     -15.679  -3.002  -8.046  1.00 22.41           C
ATOM   3080  H   TRP A 288     -14.853   4.725  -7.621  1.00  0.00           H
ATOM   3081  HA  TRP A 288     -14.203   2.207  -8.799  1.00  0.00           H
ATOM   3082  HB2 TRP A 288     -15.509   2.364  -6.719  1.00  0.00           H
ATOM   3083  HB3 TRP A 288     -16.791   3.228  -7.532  1.00  0.00           H
ATOM   3084  HD1 TRP A 288     -18.674   1.849  -8.513  1.00  0.00           H
ATOM   3085  HE1 TRP A 288     -19.152  -0.618  -8.984  1.00  0.00           H
ATOM   3086  HE3 TRP A 288     -14.077  -0.076  -7.306  1.00  0.00           H
ATOM   3087  HZ3 TRP A 288     -13.674  -2.516  -7.405  1.00  0.00           H
ATOM   3088  HZ2 TRP A 288     -17.741  -3.155  -8.679  1.00  0.00           H
ATOM   3089  HH2 TRP A 288     -15.496  -4.066  -8.079  1.00  0.00           H
ATOM   3090  N   GLN A 289     -16.379   4.057 -10.476  1.00 23.21           N
ATOM   3091  CA  GLN A 289     -17.043   4.259 -11.760  1.00 24.00           C
ATOM   3092  C   GLN A 289     -16.018   4.230 -12.910  1.00 23.78           C
ATOM   3093  O   GLN A 289     -16.190   3.474 -13.858  1.00 21.70           O
ATOM   3094  CB  GLN A 289     -17.836   5.579 -11.691  1.00 26.05           C
ATOM   3095  CG  GLN A 289     -18.766   5.827 -12.896  1.00 30.79           C
ATOM   3096  CD  GLN A 289     -19.778   6.963 -12.703  1.00 32.56           C
ATOM   3097  OE1 GLN A 289     -20.550   7.254 -13.605  1.00 33.91           O
ATOM   3098  NE2 GLN A 289     -19.827   7.620 -11.547  1.00 33.71           N
ATOM   3099  H   GLN A 289     -16.351   4.822  -9.822  1.00  0.00           H
ATOM   3100  HA  GLN A 289     -17.743   3.434 -11.909  1.00  0.00           H
ATOM   3101  HB2 GLN A 289     -18.430   5.558 -10.777  1.00  0.00           H
ATOM   3102  HB3 GLN A 289     -17.150   6.421 -11.607  1.00  0.00           H
ATOM   3103  HG2 GLN A 289     -18.180   6.037 -13.793  1.00  0.00           H
ATOM   3104  HG3 GLN A 289     -19.336   4.923 -13.114  1.00  0.00           H
ATOM   3105 HE21 GLN A 289     -19.241   7.380 -10.763  1.00  0.00           H
ATOM   3106 HE22 GLN A 289     -20.521   8.346 -11.462  1.00  0.00           H
ATOM   3107  N   THR A 290     -14.897   4.947 -12.766  1.00 23.31           N
ATOM   3108  CA  THR A 290     -13.812   4.983 -13.749  1.00 22.84           C
ATOM   3109  C   THR A 290     -13.037   3.641 -13.774  1.00 22.38           C
ATOM   3110  O   THR A 290     -12.511   3.258 -14.817  1.00 22.84           O
ATOM   3111  CB  THR A 290     -12.882   6.173 -13.398  1.00 24.30           C
ATOM   3112  OG1 THR A 290     -13.658   7.357 -13.285  1.00 25.09           O
ATOM   3113  CG2 THR A 290     -11.812   6.469 -14.451  1.00 22.40           C
ATOM   3114  H   THR A 290     -14.788   5.525 -11.941  1.00  0.00           H
ATOM   3115  HA  THR A 290     -14.243   5.145 -14.740  1.00  0.00           H
ATOM   3116  HB  THR A 290     -12.391   5.993 -12.439  1.00  0.00           H
ATOM   3117  HG1 THR A 290     -14.103   7.303 -12.438  1.00  0.00           H
ATOM   3118 HG21 THR A 290     -11.227   7.350 -14.188  1.00  0.00           H
ATOM   3119 HG22 THR A 290     -11.110   5.644 -14.541  1.00  0.00           H
ATOM   3120 HG23 THR A 290     -12.247   6.641 -15.436  1.00  0.00           H
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ATOM   3121  N   SER A 291     -13.032   2.881 -12.666  1.00 19.88           N
ATOM   3122  CA  SER A 291     -12.501   1.517 -12.615  1.00 20.14           C
ATOM   3123  C   SER A 291     -13.456   0.528 -13.319  1.00 20.06           C
ATOM   3124  O   SER A 291     -13.007  -0.419 -13.964  1.00 19.13           O
ATOM   3125  CB  SER A 291     -12.329   1.084 -11.143  1.00 19.42           C
ATOM   3126  OG  SER A 291     -11.414   1.932 -10.463  1.00 19.96           O
ATOM   3127  H   SER A 291     -13.452   3.262 -11.828  1.00  0.00           H
ATOM   3128  HA  SER A 291     -11.540   1.489 -13.132  1.00  0.00           H
ATOM   3129  HB2 SER A 291     -13.279   1.067 -10.613  1.00  0.00           H
ATOM   3130  HB3 SER A 291     -11.947   0.062 -11.103  1.00  0.00           H
ATOM   3131  HG  SER A 291     -11.786   2.813 -10.437  1.00  0.00           H
ATOM   3132  N   MET A 292     -14.773   0.776 -13.274  1.00 22.05           N
ATOM   3133  CA  MET A 292     -15.791   0.062 -14.043  1.00 23.75           C
ATOM   3134  C   MET A 292     -15.561   0.315 -15.545  1.00 23.08           C
ATOM   3135  O   MET A 292     -15.528  -0.634 -16.314  1.00 23.18           O
ATOM   3136  CB  MET A 292     -17.210   0.496 -13.595  1.00 23.46           C
ATOM   3137  CG  MET A 292     -18.148  -0.661 -13.201  1.00 23.79           C
ATOM   3138  SD  MET A 292     -18.980  -1.528 -14.564  1.00 24.01           S
ATOM   3139  CE  MET A 292     -17.843  -2.916 -14.838  1.00 23.71           C
ATOM   3140  H   MET A 292     -15.090   1.539 -12.685  1.00  0.00           H
ATOM   3141  HA  MET A 292     -15.656  -1.002 -13.847  1.00  0.00           H
ATOM   3142  HB2 MET A 292     -17.128   1.130 -12.715  1.00  0.00           H
ATOM   3143  HB3 MET A 292     -17.690   1.133 -14.339  1.00  0.00           H
ATOM   3144  HG2 MET A 292     -17.641  -1.378 -12.552  1.00  0.00           H
ATOM   3145  HG3 MET A 292     -18.946  -0.242 -12.587  1.00  0.00           H
ATOM   3146  HE1 MET A 292     -18.241  -3.586 -15.600  1.00  0.00           H
ATOM   3147  HE2 MET A 292     -16.873  -2.564 -15.182  1.00  0.00           H
ATOM   3148  HE3 MET A 292     -17.700  -3.487 -13.920  1.00  0.00           H
ATOM   3149  N   ASP A 293     -15.253   1.551 -15.958  1.00 25.20           N
ATOM   3150  CA  ASP A 293     -14.838   1.926 -17.326  1.00 24.42           C
ATOM   3151  C   ASP A 293     -13.362   1.582 -17.646  1.00 24.19           C
ATOM   3152  O   ASP A 293     -12.786   2.050 -18.636  1.00 22.66           O
ATOM   3153  CB  ASP A 293     -15.172   3.411 -17.607  1.00 25.99           C
ATOM   3154  CG  ASP A 293     -16.680   3.613 -17.683  1.00 25.87           C
ATOM   3155  OD1 ASP A 293     -17.359   3.645 -16.633  1.00 25.88           O
ATOM   3156  OD2 ASP A 293     -17.260   3.501 -18.782  1.00 26.97           O1-
ATOM   3157  H   ASP A 293     -15.388   2.311 -15.294  1.00  0.00           H
ATOM   3158  HA  ASP A 293     -15.405   1.325 -18.035  1.00  0.00           H
ATOM   3159  HB2 ASP A 293     -14.754   4.060 -16.838  1.00  0.00           H
ATOM   3160  HB3 ASP A 293     -14.749   3.737 -18.558  1.00  0.00           H
ATOM   3161  N   PHE A 294     -12.769   0.679 -16.858  1.00 22.53           N
ATOM   3162  CA  PHE A 294     -11.684  -0.205 -17.262  1.00 21.67           C
ATOM   3163  C   PHE A 294     -12.265  -1.621 -17.432  1.00 22.37           C
ATOM   3164  O   PHE A 294     -12.150  -2.185 -18.511  1.00 23.42           O
ATOM   3165  CB  PHE A 294     -10.549  -0.179 -16.224  1.00 21.57           C
ATOM   3166  CG  PHE A 294      -9.386  -1.089 -16.562  1.00 21.32           C
ATOM   3167  CD1 PHE A 294      -8.435  -0.702 -17.530  1.00 23.19           C
ATOM   3168  CD2 PHE A 294      -9.267  -2.342 -15.923  1.00 21.72           C
ATOM   3169  CE1 PHE A 294      -7.349  -1.546 -17.823  1.00 21.37           C
ATOM   3170  CE2 PHE A 294      -8.190  -3.189 -16.234  1.00 24.26           C
ATOM   3171  CZ  PHE A 294      -7.215  -2.777 -17.156  1.00 21.92           C
ATOM   3172  H   PHE A 294     -13.300   0.392 -16.048  1.00  0.00           H
ATOM   3173  HA  PHE A 294     -11.271   0.099 -18.223  1.00  0.00           H
ATOM   3174  HB2 PHE A 294     -10.165   0.838 -16.124  1.00  0.00           H
ATOM   3175  HB3 PHE A 294     -10.911  -0.450 -15.235  1.00  0.00           H
ATOM   3176  HD1 PHE A 294      -8.515   0.246 -18.041  1.00  0.00           H
ATOM   3177  HD2 PHE A 294      -9.999  -2.664 -15.198  1.00  0.00           H
ATOM   3178  HE1 PHE A 294      -6.609  -1.251 -18.553  1.00  0.00           H
ATOM   3179  HE2 PHE A 294      -8.095  -4.154 -15.763  1.00  0.00           H
ATOM   3180  HZ  PHE A 294      -6.363  -3.411 -17.346  1.00  0.00           H
ATOM   3181  N   ILE A 295     -12.949  -2.184 -16.426  1.00 24.85           N
ATOM   3182  CA  ILE A 295     -13.509  -3.548 -16.445  1.00 26.88           C
ATOM   3183  C   ILE A 295     -14.604  -3.783 -17.530  1.00 27.94           C
ATOM   3184  O   ILE A 295     -14.822  -4.921 -17.935  1.00 27.36           O
ATOM   3185  CB  ILE A 295     -13.964  -3.906 -14.994  1.00 28.74           C
ATOM   3186  CG1 ILE A 295     -12.791  -3.880 -13.976  1.00 30.86           C
ATOM   3187  CG2 ILE A 295     -14.744  -5.232 -14.859  1.00 29.65           C
ATOM   3188  CD1 ILE A 295     -11.712  -4.959 -14.188  1.00 31.32           C
ATOM   3189  H   ILE A 295     -13.017  -1.673 -15.553  1.00  0.00           H
ATOM   3190  HA  ILE A 295     -12.699  -4.222 -16.729  1.00  0.00           H
ATOM   3191  HB  ILE A 295     -14.653  -3.122 -14.680  1.00  0.00           H
ATOM   3192 HG12 ILE A 295     -12.304  -2.907 -13.980  1.00  0.00           H
ATOM   3193 HG13 ILE A 295     -13.193  -3.988 -12.968  1.00  0.00           H
ATOM   3194 HG21 ILE A 295     -14.948  -5.469 -13.815  1.00  0.00           H
ATOM   3195 HG22 ILE A 295     -15.706  -5.190 -15.369  1.00  0.00           H
ATOM   3196 HG23 ILE A 295     -14.186  -6.066 -15.288  1.00  0.00           H
ATOM   3197 HD11 ILE A 295     -10.931  -4.874 -13.432  1.00  0.00           H
ATOM   3198 HD12 ILE A 295     -12.124  -5.965 -14.116  1.00  0.00           H
ATOM   3199 HD13 ILE A 295     -11.224  -4.868 -15.158  1.00  0.00           H
ATOM   3200  N   LYS A 296     -15.251  -2.730 -18.053  1.00 27.30           N
ATOM   3201  CA  LYS A 296     -16.154  -2.781 -19.215  1.00 29.16           C
ATOM   3202  C   LYS A 296     -15.379  -2.867 -20.549  1.00 29.60           C
ATOM   3203  O   LYS A 296     -15.967  -3.204 -21.573  1.00 30.49           O
ATOM   3204  CB  LYS A 296     -16.914  -1.433 -19.327  1.00 30.80           C
ATOM   3205  CG  LYS A 296     -18.015  -1.118 -18.299  1.00 35.46           C
ATOM   3206  CD  LYS A 296     -18.428   0.359 -18.452  1.00 37.53           C
ATOM   3207  CE  LYS A 296     -19.314   0.936 -17.340  1.00 39.57           C
ATOM   3208  NZ  LYS A 296     -19.427   2.400 -17.473  1.00 42.84           N1+
ATOM   3209  H   LYS A 296     -15.124  -1.837 -17.584  1.00  0.00           H
ATOM   3210  HA  LYS A 296     -16.845  -3.622 -19.141  1.00  0.00           H
ATOM   3211  HB2 LYS A 296     -16.171  -0.633 -19.317  1.00  0.00           H
ATOM   3212  HB3 LYS A 296     -17.387  -1.363 -20.310  1.00  0.00           H
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ATOM   3213  HG2 LYS A 296     -18.871  -1.778 -18.447  1.00  0.00          H
ATOM   3214  HG3 LYS A 296     -17.659  -1.310 -17.291  1.00  0.00          H
ATOM   3215  HD2 LYS A 296     -17.521   0.956 -18.490  1.00  0.00          H
ATOM   3216  HD3 LYS A 296     -18.909   0.502 -19.421  1.00  0.00          H
ATOM   3217  HE2 LYS A 296     -20.303   0.480 -17.371  1.00  0.00          H
ATOM   3218  HE3 LYS A 296     -18.884   0.723 -16.362  1.00  0.00          H
ATOM   3219  HZ1 LYS A 296     -20.190   2.819 -16.976  1.00  0.00          H
ATOM   3220  HZ2 LYS A 296     -18.557   2.850 -17.105  1.00  0.00          H
ATOM   3221  HZ3 LYS A 296     -19.370   2.707 -18.435  1.00  0.00          H
ATOM   3222  N   LYS A 297    -14.116  -2.434 -20.546  1.00 28.79          N
ATOM   3223  CA  LYS A 297    -13.324  -2.060 -21.714  1.00 30.07          C
ATOM   3224  C   LYS A 297    -12.158  -3.035 -21.923  1.00 29.13          C
ATOM   3225  O   LYS A 297    -11.797  -3.300 -23.065  1.00 30.10          O
ATOM   3226  CB  LYS A 297    -12.807  -0.631 -21.425  1.00 31.69          C
ATOM   3227  CG  LYS A 297    -11.885   0.018 -22.477  1.00 36.08          C
ATOM   3228  CD  LYS A 297    -11.425   1.416 -22.028  1.00 40.63          C
ATOM   3229  CE  LYS A 297    -10.322   1.390 -20.948  1.00 42.81          C
ATOM   3230  NZ  LYS A 297    -10.409   2.572 -20.076  1.00 42.47          N1+
ATOM   3231  H   LYS A 297    -13.673  -2.305 -19.644  1.00  0.00          H
ATOM   3232  HA  LYS A 297    -13.934  -2.057 -22.619  1.00  0.00          H
ATOM   3233  HB2 LYS A 297    -13.671   0.019 -21.279  1.00  0.00          H
ATOM   3234  HB3 LYS A 297    -12.284  -0.639 -20.472  1.00  0.00          H
ATOM   3235  HG2 LYS A 297    -11.012  -0.607 -22.678  1.00  0.00          H
ATOM   3236  HG3 LYS A 297    -12.426   0.092 -23.421  1.00  0.00          H
ATOM   3237  HD2 LYS A 297    -11.056   1.966 -22.895  1.00  0.00          H
ATOM   3238  HD3 LYS A 297    -12.300   1.966 -21.677  1.00  0.00          H
ATOM   3239  HE2 LYS A 297    -10.399   0.509 -20.313  1.00  0.00          H
ATOM   3240  HE3 LYS A 297     -9.336   1.339 -21.414  1.00  0.00          H
ATOM   3241  HZ1 LYS A 297     -9.593   2.643 -19.456  1.00  0.00          H
ATOM   3242  HZ2 LYS A 297    -10.438   3.417 -20.620  1.00  0.00          H
ATOM   3243  HZ3 LYS A 297    -11.250   2.502 -19.502  1.00  0.00          H
ATOM   3244  N   ASN A 298    -11.588  -3.549 -20.829  1.00 28.47          N
ATOM   3245  CA  ASN A 298    -10.402  -4.402 -20.783  1.00 26.71          C
ATOM   3246  C   ASN A 298    -10.687  -5.684 -19.978  1.00 25.72          C
ATOM   3247  O   ASN A 298    -10.186  -5.818 -18.854  1.00 23.38          O
ATOM   3248  CB  ASN A 298     -9.204  -3.605 -20.206  1.00 27.91          C
ATOM   3249  CG  ASN A 298     -8.604  -2.597 -21.181  1.00 28.07          C
ATOM   3250  OD1 ASN A 298     -8.867  -1.395 -21.104  1.00 30.60          O
ATOM   3251  ND2 ASN A 298     -7.756  -3.081 -22.077  1.00 28.22          N
ATOM   3252  H   ASN A 298    -11.921  -3.225 -19.927  1.00  0.00          H
ATOM   3253  HA  ASN A 298    -10.131  -4.722 -21.790  1.00  0.00          H
ATOM   3254  HB2 ASN A 298     -9.490  -3.096 -19.285  1.00  0.00          H
ATOM   3255  HB3 ASN A 298     -8.406  -4.293 -19.929  1.00  0.00          H
ATOM   3256 HD21 ASN A 298     -7.606  -4.117 -22.092  1.00  0.00          H
ATOM   3257 HD22 ASN A 298     -7.295  -2.504 -22.753  1.00  0.00          H
ATOM   3258  N   PRO A 299    -11.510  -6.630 -20.488  1.00 25.00          N
ATOM   3259  CA  PRO A 299    -11.782  -7.900 -19.801  1.00 25.78          C
ATOM   3260  C   PRO A 299    -10.624  -8.916 -19.872  1.00 25.64          C
ATOM   3261  O   PRO A 299    -10.591  -9.833 -19.055  1.00 25.28          O
ATOM   3262  CB  PRO A 299    -13.040  -8.448 -20.492  1.00 26.77          C
ATOM   3263  CG  PRO A 299    -12.966  -7.892 -21.906  1.00 25.54          C
ATOM   3264  CD  PRO A 299    -12.277  -6.537 -21.735  1.00 25.40          C
ATOM   3265  HA  PRO A 299    -11.998  -7.717 -18.746  1.00  0.00          H
ATOM   3266  HB2 PRO A 299    -13.108  -9.537 -20.471  1.00  0.00          H
ATOM   3267  HB3 PRO A 299    -13.925  -8.056 -19.990  1.00  0.00          H
ATOM   3268  HG2 PRO A 299    -12.336  -8.538 -22.520  1.00  0.00          H
ATOM   3269  HG3 PRO A 299    -13.939  -7.814 -22.391  1.00  0.00          H
ATOM   3270  HD2 PRO A 299    -11.661  -6.287 -22.600  1.00  0.00          H
ATOM   3271  HD3 PRO A 299    -13.033  -5.760 -21.628  1.00  0.00          H
ATOM   3272  N   GLU A 300     -9.675  -8.777 -20.806  1.00 27.36          N
ATOM   3273  CA  GLU A 300     -8.483  -9.611 -20.945  1.00 30.62          C
ATOM   3274  C   GLU A 300     -7.477  -9.351 -19.809  1.00 31.01          C
ATOM   3275  O   GLU A 300     -6.838 -10.288 -19.327  1.00 30.85          O
ATOM   3276  CB  GLU A 300     -7.848  -9.346 -22.341  1.00 33.91          C
ATOM   3277  CG  GLU A 300     -7.122  -7.992 -22.588  1.00 38.15          C
ATOM   3278  CD  GLU A 300     -8.030  -6.774 -22.462  1.00 41.20          C
ATOM   3279  OE1 GLU A 300     -9.243  -6.932 -22.702  1.00 42.55          O
ATOM   3280  OE2 GLU A 300     -7.547  -5.720 -22.008  1.00 42.55          O1-
ATOM   3281  H   GLU A 300     -9.736  -8.004 -21.487  1.00  0.00          H
ATOM   3282  HA  GLU A 300     -8.793 -10.656 -20.893  1.00  0.00          H
ATOM   3283  HB2 GLU A 300     -7.122 -10.138 -22.528  1.00  0.00          H
ATOM   3284  HB3 GLU A 300     -8.612  -9.480 -23.108  1.00  0.00          H
ATOM   3285  HG2 GLU A 300     -6.269  -7.870 -21.922  1.00  0.00          H
ATOM   3286  HG3 GLU A 300     -6.715  -7.979 -23.598  1.00  0.00          H
ATOM   3287  N   TYR A 301     -7.350  -8.098 -19.355  1.00 29.28          N
ATOM   3288  CA  TYR A 301     -6.435  -7.680 -18.293  1.00 27.29          C
ATOM   3289  C   TYR A 301     -6.956  -8.029 -16.883  1.00 26.08          C
ATOM   3290  O   TYR A 301     -6.181  -8.024 -15.925  1.00 25.20          O
ATOM   3291  CB  TYR A 301     -6.225  -6.152 -18.396  1.00 25.45          C
ATOM   3292  CG  TYR A 301     -5.307  -5.624 -19.501  1.00 24.93          C
ATOM   3293  CD1 TYR A 301     -4.319  -6.425 -20.121  1.00 25.31          C
ATOM   3294  CD2 TYR A 301     -5.413  -4.269 -19.887  1.00 23.92          C
ATOM   3295  CE1 TYR A 301     -3.453  -5.872 -21.085  1.00 25.27          C
ATOM   3296  CE2 TYR A 301     -4.525  -3.709 -20.823  1.00 26.82          C
ATOM   3297  CZ  TYR A 301     -3.537  -4.507 -21.417  1.00 25.82          C
ATOM   3298  OH  TYR A 301     -2.647  -3.954 -22.289  1.00 26.18          O
ATOM   3299  H   TYR A 301     -7.850  -7.374 -19.860  1.00  0.00          H
ATOM   3300  HA  TYR A 301     -5.486  -8.207 -18.385  1.00  0.00          H
ATOM   3301  HB2 TYR A 301     -7.196  -5.663 -18.485  1.00  0.00          H
ATOM   3302  HB3 TYR A 301     -5.811  -5.783 -17.459  1.00  0.00          H
ATOM   3303  HD1 TYR A 301     -4.198  -7.467 -19.879  1.00  0.00          H
ATOM   3304  HD2 TYR A 301     -6.178  -3.636 -19.474  1.00  0.00          H
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ATOM   3305  HE1 TYR A 301      -2.699  -6.488 -21.550  1.00  0.00           H
ATOM   3306  HE2 TYR A 301      -4.607  -2.667 -21.090  1.00  0.00           H
ATOM   3307  HH  TYR A 301      -2.362  -3.064 -21.998  1.00  0.00           H
ATOM   3308  N   LEU A 302      -8.231  -8.410 -16.748  1.00 26.08           N
ATOM   3309  CA  LEU A 302      -8.800  -9.016 -15.546  1.00 25.64           C
ATOM   3310  C   LEU A 302      -8.296 -10.471 -15.445  1.00 26.50           C
ATOM   3311  O   LEU A 302      -8.123 -11.148 -16.461  1.00 26.41           O
ATOM   3312  CB  LEU A 302     -10.343  -8.957 -15.688  1.00 26.41           C
ATOM   3313  CG  LEU A 302     -11.202  -9.630 -14.593  1.00 28.11           C
ATOM   3314  CD1 LEU A 302     -10.948  -9.065 -13.190  1.00 26.19           C
ATOM   3315  CD2 LEU A 302     -12.694  -9.523 -14.945  1.00 28.85           C
ATOM   3316  H   LEU A 302      -8.764  -8.505 -17.603  1.00  0.00           H
ATOM   3317  HA  LEU A 302      -8.482  -8.451 -14.667  1.00  0.00           H
ATOM   3318  HB2 LEU A 302     -10.642  -7.913 -15.783  1.00  0.00           H
ATOM   3319  HB3 LEU A 302     -10.613  -9.425 -16.632  1.00  0.00           H
ATOM   3320  HG  LEU A 302     -10.963 -10.693 -14.576  1.00  0.00           H
ATOM   3321 HD11 LEU A 302     -11.582  -9.559 -12.454  1.00  0.00           H
ATOM   3322 HD12 LEU A 302      -9.919  -9.233 -12.878  1.00  0.00           H
ATOM   3323 HD13 LEU A 302     -11.147  -7.995 -13.144  1.00  0.00           H
ATOM   3324 HD21 LEU A 302     -13.311 -10.044 -14.213  1.00  0.00           H
ATOM   3325 HD22 LEU A 302     -13.021  -8.483 -14.984  1.00  0.00           H
ATOM   3326 HD23 LEU A 302     -12.897  -9.970 -15.919  1.00  0.00           H
ATOM   3327  N   ASP A 303      -8.024 -10.943 -14.224  1.00 26.14           N
ATOM   3328  CA  ASP A 303      -7.716 -12.344 -13.940  1.00 26.40           C
ATOM   3329  C   ASP A 303      -9.033 -13.091 -13.695  1.00 26.12           C
ATOM   3330  O   ASP A 303      -9.947 -12.560 -13.057  1.00 26.00           O
ATOM   3331  CB  ASP A 303      -6.869 -12.438 -12.654  1.00 24.91           C
ATOM   3332  CG  ASP A 303      -6.076 -13.734 -12.610  1.00 24.80           C
ATOM   3333  OD1 ASP A 303      -6.686 -14.812 -12.423  1.00 24.92           O
ATOM   3334  OD2 ASP A 303      -4.847 -13.631 -12.799  1.00 22.64           O1-
ATOM   3335  H   ASP A 303      -8.123 -10.334 -13.419  1.00  0.00           H
ATOM   3336  HA  ASP A 303      -7.172 -12.786 -14.778  1.00  0.00           H
ATOM   3337  HB2 ASP A 303      -6.155 -11.615 -12.615  1.00  0.00           H
ATOM   3338  HB3 ASP A 303      -7.472 -12.354 -11.749  1.00  0.00           H
ATOM   3339  N   GLU A 304      -9.133 -14.330 -14.173  1.00 27.08           N
ATOM   3340  CA  GLU A 304     -10.281 -15.212 -13.988  1.00 27.05           C
ATOM   3341  C   GLU A 304     -10.357 -15.767 -12.547  1.00 26.35           C
ATOM   3342  O   GLU A 304     -11.447 -16.088 -12.074  1.00 25.01           O
ATOM   3343  CB  GLU A 304     -10.156 -16.353 -15.022  1.00 29.55           C
ATOM   3344  CG  GLU A 304      -8.878 -17.217 -14.910  1.00 34.94           C
ATOM   3345  CD  GLU A 304      -8.417 -17.784 -16.246  1.00 38.80           C
ATOM   3346  OE1 GLU A 304      -9.288 -18.197 -17.038  1.00 40.86           O
ATOM   3347  OE2 GLU A 304      -7.187 -17.779 -16.464  1.00 37.70           O1-
ATOM   3348  H   GLU A 304      -8.322 -14.735 -14.623  1.00  0.00           H
ATOM   3349  HA  GLU A 304     -11.197 -14.655 -14.189  1.00  0.00           H
ATOM   3350  HB2 GLU A 304     -11.024 -17.011 -14.956  1.00  0.00           H
ATOM   3351  HB3 GLU A 304     -10.211 -15.915 -16.020  1.00  0.00           H
ATOM   3352  HG2 GLU A 304      -8.047 -16.627 -14.532  1.00  0.00           H
ATOM   3353  HG3 GLU A 304      -9.027 -18.039 -14.211  1.00  0.00           H
ATOM   3354  N   ASN A 305      -9.233 -15.821 -11.817  1.00 25.29           N
ATOM   3355  CA  ASN A 305      -9.102 -16.425 -10.483  1.00 24.94           C
ATOM   3356  C   ASN A 305      -9.126 -15.321  -9.400  1.00 25.14           C
ATOM   3357  O   ASN A 305      -8.537 -15.477  -8.327  1.00 24.32           O
ATOM   3358  CB  ASN A 305      -7.737 -17.153 -10.359  1.00 26.38           C
ATOM   3359  CG  ASN A 305      -7.369 -18.099 -11.497  1.00 26.41           C
ATOM   3360  OD1 ASN A 305      -7.673 -19.286 -11.441  1.00 28.64           O
ATOM   3361  ND2 ASN A 305      -6.682 -17.580 -12.509  1.00 27.76           N
ATOM   3362  H   ASN A 305      -8.369 -15.455 -12.233  1.00  0.00           H
ATOM   3363  HA  ASN A 305      -9.910 -17.135 -10.300  1.00  0.00           H
ATOM   3364  HB2 ASN A 305      -6.948 -16.419 -10.293  1.00  0.00           H
ATOM   3365  HB3 ASN A 305      -7.702 -17.720  -9.429  1.00  0.00           H
ATOM   3366 HD21 ASN A 305      -6.531 -16.559 -12.540  1.00  0.00           H
ATOM   3367 HD22 ASN A 305      -6.508 -18.130 -13.339  1.00  0.00           H
ATOM   3368  N   ASN A 306      -9.747 -14.177  -9.708  1.00 24.92           N
ATOM   3369  CA  ASN A 306      -9.760 -12.930  -8.937  1.00 24.17           C
ATOM   3370  C   ASN A 306     -10.445 -13.012  -7.552  1.00 23.07           C
ATOM   3371  O   ASN A 306     -11.080 -14.000  -7.180  1.00 22.07           O
ATOM   3372  CB  ASN A 306     -10.402 -11.798  -9.783  1.00 24.78           C
ATOM   3373  CG  ASN A 306     -11.865 -12.024 -10.171  1.00 23.30           C
ATOM   3374  OD1 ASN A 306     -12.759 -11.883  -9.341  1.00 23.64           O
ATOM   3375  ND2 ASN A 306     -12.126 -12.366 -11.425  1.00 30.14           N
ATOM   3376  H   ASN A 306     -10.193 -14.176 -10.614  1.00  0.00           H
ATOM   3377  HA  ASN A 306      -8.716 -12.663  -8.757  1.00  0.00           H
ATOM   3378  HB2 ASN A 306     -10.368 -10.861  -9.236  1.00  0.00           H
ATOM   3379  HB3 ASN A 306      -9.798 -11.621 -10.674  1.00  0.00           H
ATOM   3380 HD21 ASN A 306     -11.355 -12.448 -12.100  1.00  0.00           H
ATOM   3381 HD22 ASN A 306     -13.066 -12.586 -11.704  1.00  0.00           H
ATOM   3382  N   LEU A 307     -10.333 -11.915  -6.797  1.00 22.52           N
ATOM   3383  CA  LEU A 307     -10.906 -11.672  -5.482  1.00 20.85           C
ATOM   3384  C   LEU A 307     -11.891 -10.483  -5.570  1.00 21.65           C
ATOM   3385  O   LEU A 307     -11.924  -9.628  -4.683  1.00 22.08           O
ATOM   3386  CB  LEU A 307      -9.737 -11.421  -4.495  1.00 21.68           C
ATOM   3387  CG  LEU A 307     -10.101 -11.451  -2.993  1.00 24.57           C
ATOM   3388  CD1 LEU A 307     -10.260 -12.873  -2.456  1.00 25.54           C
ATOM   3389  CD2 LEU A 307      -9.061 -10.688  -2.165  1.00 24.54           C
ATOM   3390  H   LEU A 307      -9.799 -11.133  -7.184  1.00  0.00           H
ATOM   3391  HA  LEU A 307     -11.474 -12.544  -5.155  1.00  0.00           H
ATOM   3392  HB2 LEU A 307      -8.939 -12.141  -4.675  1.00  0.00           H
ATOM   3393  HB3 LEU A 307      -9.296 -10.454  -4.736  1.00  0.00           H
ATOM   3394  HG  LEU A 307     -11.056 -10.957  -2.840  1.00  0.00           H
ATOM   3395 HD11 LEU A 307     -10.476 -12.855  -1.389  1.00  0.00           H
ATOM   3396 HD12 LEU A 307     -11.078 -13.395  -2.950  1.00  0.00           H
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ATOM   3397 HD13 LEU A 307      -9.344 -13.446  -2.592  1.00  0.00           H
ATOM   3398 HD21 LEU A 307      -9.338 -10.681  -1.113  1.00  0.00           H
ATOM   3399 HD22 LEU A 307      -8.077 -11.149  -2.248  1.00  0.00           H
ATOM   3400 HD23 LEU A 307      -8.974  -9.650  -2.489  1.00  0.00           H
ATOM   3401  N   MET A 308     -12.735 -10.414  -6.615  1.00 20.81           N
ATOM   3402  CA  MET A 308     -13.786  -9.390  -6.780  1.00 22.78           C
ATOM   3403  C   MET A 308     -14.760  -9.327  -5.579  1.00 22.78           C
ATOM   3404  O   MET A 308     -15.279  -8.261  -5.248  1.00 22.72           O
ATOM   3405  CB  MET A 308     -14.536  -9.637  -8.111  1.00 21.26           C
ATOM   3406  CG  MET A 308     -15.669  -8.648  -8.438  1.00 20.59           C
ATOM   3407  SD  MET A 308     -15.164  -6.926  -8.698  1.00 23.31           S
ATOM   3408  CE  MET A 308     -14.743  -6.972 -10.465  1.00 20.96           C
ATOM   3409  H   MET A 308     -12.640 -11.111  -7.349  1.00  0.00           H
ATOM   3410  HA  MET A 308     -13.287  -8.421  -6.834  1.00  0.00           H
ATOM   3411  HB2 MET A 308     -13.823  -9.615  -8.934  1.00  0.00           H
ATOM   3412  HB3 MET A 308     -14.952 -10.646  -8.102  1.00  0.00           H
ATOM   3413  HG2 MET A 308     -16.199  -8.987  -9.329  1.00  0.00           H
ATOM   3414  HG3 MET A 308     -16.409  -8.663  -7.641  1.00  0.00           H
ATOM   3415  HE1 MET A 308     -14.328  -6.015 -10.780  1.00  0.00           H
ATOM   3416  HE2 MET A 308     -14.009  -7.749 -10.674  1.00  0.00           H
ATOM   3417  HE3 MET A 308     -15.629  -7.174 -11.066  1.00  0.00           H
ATOM   3418  N   SER A 309     -14.941 -10.450  -4.879  1.00 22.41           N
ATOM   3419  CA  SER A 309     -15.730 -10.610  -3.665  1.00 23.60           C
ATOM   3420  C   SER A 309     -15.171  -9.851  -2.442  1.00 22.97           C
ATOM   3421  O   SER A 309     -15.893  -9.677  -1.462  1.00 22.64           O
ATOM   3422  CB  SER A 309     -15.811 -12.125  -3.390  1.00 24.95           C
ATOM   3423  OG  SER A 309     -14.520 -12.731  -3.377  1.00 30.97           O
ATOM   3424  H   SER A 309     -14.437 -11.277  -5.167  1.00  0.00           H
ATOM   3425  HA  SER A 309     -16.736 -10.226  -3.849  1.00  0.00           H
ATOM   3426  HB2 SER A 309     -16.305 -12.305  -2.433  1.00  0.00           H
ATOM   3427  HB3 SER A 309     -16.425 -12.609  -4.151  1.00  0.00           H
ATOM   3428  HG  SER A 309     -14.599 -13.602  -3.014  1.00  0.00           H
ATOM   3429  N   PHE A 310     -13.917  -9.372  -2.485  1.00 22.04           N
ATOM   3430  CA  PHE A 310     -13.368  -8.474  -1.468  1.00 21.22           C
ATOM   3431  C   PHE A 310     -13.793  -7.025  -1.753  1.00 21.27           C
ATOM   3432  O   PHE A 310     -13.971  -6.259  -0.810  1.00 20.91           O
ATOM   3433  CB  PHE A 310     -11.823  -8.551  -1.484  1.00 20.01           C
ATOM   3434  CG  PHE A 310     -11.100  -7.560  -0.584  1.00 20.57           C
ATOM   3435  CD1 PHE A 310     -11.290  -7.605   0.811  1.00 21.24           C
ATOM   3436  CD2 PHE A 310     -10.275  -6.561  -1.144  1.00 21.25           C
ATOM   3437  CE1 PHE A 310     -10.659  -6.660   1.640  1.00 21.69           C
ATOM   3438  CE2 PHE A 310      -9.656  -5.608  -0.313  1.00 21.89           C
ATOM   3439  CZ  PHE A 310      -9.845  -5.659   1.081  1.00 21.34           C
ATOM   3440  H   PHE A 310     -13.356  -9.558  -3.311  1.00  0.00           H
ATOM   3441  HA  PHE A 310     -13.729  -8.753  -0.476  1.00  0.00           H
ATOM   3442  HB2 PHE A 310     -11.524  -9.546  -1.163  1.00  0.00           H
ATOM   3443  HB3 PHE A 310     -11.448  -8.425  -2.500  1.00  0.00           H
ATOM   3444  HD1 PHE A 310     -11.936  -8.352   1.248  1.00  0.00           H
ATOM   3445  HD2 PHE A 310     -10.118  -6.512  -2.212  1.00  0.00           H
ATOM   3446  HE1 PHE A 310     -10.800  -6.703   2.706  1.00  0.00           H
ATOM   3447  HE2 PHE A 310      -9.012  -4.855  -0.741  1.00  0.00           H
ATOM   3448  HZ  PHE A 310      -9.353  -4.942   1.721  1.00  0.00           H
ATOM   3449  N   LEU A 311     -13.968  -6.647  -3.026  1.00 20.63           N
ATOM   3450  CA  LEU A 311     -14.217  -5.267  -3.440  1.00 22.79           C
ATOM   3451  C   LEU A 311     -15.712  -4.956  -3.550  1.00 24.02           C
ATOM   3452  O   LEU A 311     -16.095  -3.790  -3.497  1.00 26.14           O
ATOM   3453  CB  LEU A 311     -13.684  -5.072  -4.878  1.00 23.27           C
ATOM   3454  CG  LEU A 311     -12.197  -5.393  -5.100  1.00 24.44           C
ATOM   3455  CD1 LEU A 311     -11.888  -5.269  -6.597  1.00 21.83           C
ATOM   3456  CD2 LEU A 311     -11.273  -4.495  -4.262  1.00 24.33           C
ATOM   3457  H   LEU A 311     -13.892  -7.347  -3.750  1.00  0.00           H
ATOM   3458  HA  LEU A 311     -13.755  -4.555  -2.752  1.00  0.00           H
ATOM   3459  HB2 LEU A 311     -14.268  -5.687  -5.567  1.00  0.00           H
ATOM   3460  HB3 LEU A 311     -13.864  -4.040  -5.186  1.00  0.00           H
ATOM   3461  HG  LEU A 311     -12.007  -6.429  -4.816  1.00  0.00           H
ATOM   3462 HD11 LEU A 311     -10.848  -5.495  -6.807  1.00  0.00           H
ATOM   3463 HD12 LEU A 311     -12.492  -5.960  -7.185  1.00  0.00           H
ATOM   3464 HD13 LEU A 311     -12.083  -4.263  -6.969  1.00  0.00           H
ATOM   3465 HD21 LEU A 311     -10.230  -4.770  -4.413  1.00  0.00           H
ATOM   3466 HD22 LEU A 311     -11.381  -3.444  -4.526  1.00  0.00           H
ATOM   3467 HD23 LEU A 311     -11.470  -4.593  -3.194  1.00  0.00           H
ATOM   3468  N   SER A 312     -16.559  -5.961  -3.778  1.00 24.95           N
ATOM   3469  CA  SER A 312     -17.886  -5.768  -4.331  1.00 24.03           C
ATOM   3470  C   SER A 312     -18.941  -6.555  -3.557  1.00 25.46           C
ATOM   3471  O   SER A 312     -18.676  -7.642  -3.047  1.00 23.59           O
ATOM   3472  CB  SER A 312     -17.822  -6.069  -5.840  1.00 22.48           C
ATOM   3473  OG  SER A 312     -19.060  -5.837  -6.485  1.00 23.27           O
ATOM   3474  H   SER A 312     -16.195  -6.907  -3.787  1.00  0.00           H
ATOM   3475  HA  SER A 312     -18.172  -4.721  -4.220  1.00  0.00           H
ATOM   3476  HB2 SER A 312     -17.064  -5.445  -6.318  1.00  0.00           H
ATOM   3477  HB3 SER A 312     -17.519  -7.103  -5.996  1.00  0.00           H
ATOM   3478  HG  SER A 312     -19.247  -4.893  -6.395  1.00  0.00           H
ATOM   3479  N   ASN A 313     -20.150  -5.984  -3.489  1.00 27.59           N
ATOM   3480  CA  ASN A 313     -21.309  -6.545  -2.790  1.00 30.50           C
ATOM   3481  C   ASN A 313     -22.031  -7.525  -3.730  1.00 30.83           C
ATOM   3482  O   ASN A 313     -22.538  -8.553  -3.288  1.00 32.14           O
ATOM   3483  CB  ASN A 313     -22.340  -5.429  -2.458  1.00 29.50           C
ATOM   3484  CG  ASN A 313     -21.744  -4.169  -1.829  1.00 31.80           C
ATOM   3485  OD1 ASN A 313     -21.397  -4.149  -0.655  1.00 30.49           O
ATOM   3486  ND2 ASN A 313     -21.592  -3.113  -2.622  1.00 31.11           N
ATOM   3487  H   ASN A 313     -20.266  -5.088  -3.940  1.00  0.00           H
ATOM   3488  HA  ASN A 313     -20.993  -7.054  -1.877  1.00  0.00           H
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ATOM   3489  HB2 ASN A 313     -22.908  -5.134  -3.343  1.00  0.00          H
ATOM   3490  HB3 ASN A 313     -23.080  -5.828  -1.763  1.00  0.00          H
ATOM   3491 HD21 ASN A 313     -21.903  -3.163  -3.597  1.00  0.00          H
ATOM   3492 HD22 ASN A 313     -21.160  -2.267  -2.269  1.00  0.00          H
ATOM   3493  N   ASP A 314     -22.104  -7.185  -5.025  1.00 32.03          N
ATOM   3494  CA  ASP A 314     -22.820  -7.928  -6.064  1.00 31.57          C
ATOM   3495  C   ASP A 314     -21.844  -8.771  -6.909  1.00 32.42          C
ATOM   3496  O   ASP A 314     -22.268  -9.749  -7.522  1.00 29.58          O
ATOM   3497  CB  ASP A 314     -23.525  -6.908  -7.001  1.00 33.24          C
ATOM   3498  CG  ASP A 314     -22.582  -6.047  -7.832  1.00 33.93          C
ATOM   3499  OD1 ASP A 314     -22.006  -5.092  -7.276  1.00 33.28          O
ATOM   3500  OD2 ASP A 314     -22.357  -6.378  -9.013  1.00 35.28          O1-
ATOM   3501  H   ASP A 314     -21.665  -6.320  -5.315  1.00  0.00          H
ATOM   3502  HA  ASP A 314     -23.567  -8.589  -5.621  1.00  0.00          H
ATOM   3503  HB2 ASP A 314     -24.184  -7.445  -7.684  1.00  0.00          H
ATOM   3504  HB3 ASP A 314     -24.171  -6.251  -6.419  1.00  0.00          H
ATOM   3505  N   ASN A 315     -20.564  -8.380  -6.966  1.00 31.75          N
ATOM   3506  CA  ASN A 315     -19.483  -8.908  -7.801  1.00 32.79          C
ATOM   3507  C   ASN A 315     -19.354  -8.131  -9.117  1.00 31.79          C
ATOM   3508  O   ASN A 315     -19.575  -8.670 -10.205  1.00 30.01          O
ATOM   3509  CB  ASN A 315     -19.378 -10.450  -7.928  1.00 34.98          C
ATOM   3510  CG  ASN A 315     -19.119 -11.142  -6.592  1.00 39.86          C
ATOM   3511  OD1 ASN A 315     -17.979 -11.273  -6.159  1.00 41.48          O
ATOM   3512  ND2 ASN A 315     -20.174 -11.586  -5.920  1.00 39.98          N
ATOM   3513  H   ASN A 315     -20.339  -7.524  -6.471  1.00  0.00          H
ATOM   3514  HA  ASN A 315     -18.591  -8.627  -7.246  1.00  0.00          H
ATOM   3515  HB2 ASN A 315     -20.248 -10.879  -8.423  1.00  0.00          H
ATOM   3516  HB3 ASN A 315     -18.536 -10.695  -8.578  1.00  0.00          H
ATOM   3517 HD21 ASN A 315     -21.101 -11.394  -6.278  1.00  0.00          H
ATOM   3518 HD22 ASN A 315     -20.037 -12.000  -5.013  1.00  0.00          H
ATOM   3519  N   GLY A 316     -19.026  -6.841  -9.025  1.00 29.91          N
ATOM   3520  CA  GLY A 316     -18.421  -6.049 -10.088  1.00 28.90          C
ATOM   3521  C   GLY A 316     -19.168  -4.791 -10.521  1.00 29.49          C
ATOM   3522  O   GLY A 316     -18.616  -4.061 -11.340  1.00 31.30          O
ATOM   3523  H   GLY A 316     -19.003  -6.438  -8.084  1.00  0.00          H
ATOM   3524  HA2 GLY A 316     -17.451  -5.711  -9.728  1.00  0.00          H
ATOM   3525  HA3 GLY A 316     -18.216  -6.651 -10.975  1.00  0.00          H
ATOM   3526  N   LYS A 317     -20.388  -4.514 -10.035  1.00 28.46          N
ATOM   3527  CA  LYS A 317     -21.094  -3.275 -10.376  1.00 29.26          C
ATOM   3528  C   LYS A 317     -20.988  -2.256  -9.227  1.00 28.45          C
ATOM   3529  O   LYS A 317     -20.743  -1.080  -9.490  1.00 29.61          O
ATOM   3530  CB  LYS A 317     -22.580  -3.553 -10.708  1.00 30.65          C
ATOM   3531  CG  LYS A 317     -22.832  -4.181 -12.104  1.00 32.56          C
ATOM   3532  CD  LYS A 317     -23.149  -5.693 -12.118  1.00 33.46          C
ATOM   3533  CE  LYS A 317     -21.918  -6.619 -12.211  1.00 35.75          C
ATOM   3534  NZ  LYS A 317     -21.916  -7.628 -11.141  1.00 33.98          N1+
ATOM   3535  H   LYS A 317     -20.834  -5.135  -9.357  1.00  0.00          H
ATOM   3536  HA  LYS A 317     -20.654  -2.789 -11.250  1.00  0.00          H
ATOM   3537  HB2 LYS A 317     -23.072  -4.115  -9.916  1.00  0.00          H
ATOM   3538  HB3 LYS A 317     -23.092  -2.589 -10.709  1.00  0.00          H
ATOM   3539  HG2 LYS A 317     -23.708  -3.678 -12.517  1.00  0.00          H
ATOM   3540  HG3 LYS A 317     -22.024  -3.941 -12.798  1.00  0.00          H
ATOM   3541  HD2 LYS A 317     -23.775  -5.938 -11.258  1.00  0.00          H
ATOM   3542  HD3 LYS A 317     -23.779  -5.896 -12.986  1.00  0.00          H
ATOM   3543  HE2 LYS A 317     -21.891  -7.126 -13.177  1.00  0.00          H
ATOM   3544  HE3 LYS A 317     -20.996  -6.045 -12.156  1.00  0.00          H
ATOM   3545  HZ1 LYS A 317     -21.010  -8.081 -11.024  1.00  0.00          H
ATOM   3546  HZ2 LYS A 317     -22.087  -7.121 -10.241  1.00  0.00          H
ATOM   3547  HZ3 LYS A 317     -22.641  -8.316 -11.234  1.00  0.00          H
ATOM   3548  N   THR A 318     -21.130  -2.673  -7.965  1.00 28.25          N
ATOM   3549  CA  THR A 318     -21.055  -1.819  -6.778  1.00 25.97          C
ATOM   3550  C   THR A 318     -19.749  -2.102  -6.012  1.00 24.96          C
ATOM   3551  O   THR A 318     -19.287  -3.243  -5.978  1.00 24.07          O
ATOM   3552  CB  THR A 318     -22.298  -2.096  -5.886  1.00 27.38          C
ATOM   3553  OG1 THR A 318     -22.311  -3.405  -5.335  1.00 30.36          O
ATOM   3554  CG2 THR A 318     -23.636  -1.865  -6.606  1.00 28.55          C
ATOM   3555  H   THR A 318     -21.354  -3.662  -7.790  1.00  0.00          H
ATOM   3556  HA  THR A 318     -21.064  -0.765  -7.062  1.00  0.00          H
ATOM   3557  HB  THR A 318     -22.259  -1.404  -5.042  1.00  0.00          H
ATOM   3558  HG1 THR A 318     -22.248  -4.035  -6.078  1.00  0.00          H
ATOM   3559 HG21 THR A 318     -24.473  -1.967  -5.915  1.00  0.00          H
ATOM   3560 HG22 THR A 318     -23.681  -0.864  -7.035  1.00  0.00          H
ATOM   3561 HG23 THR A 318     -23.789  -2.581  -7.414  1.00  0.00          H
ATOM   3562  N   TYR A 319     -19.172  -1.079  -5.373  1.00 22.19          N
ATOM   3563  CA  TYR A 319     -18.038  -1.197  -4.456  1.00 21.55          C
ATOM   3564  C   TYR A 319     -18.615  -1.349  -3.038  1.00 20.73          C
ATOM   3565  O   TYR A 319     -19.650  -0.748  -2.737  1.00 22.78          O
ATOM   3566  CB  TYR A 319     -17.225   0.122  -4.524  1.00 17.02          C
ATOM   3567  CG  TYR A 319     -15.808   0.125  -3.958  1.00 18.70          C
ATOM   3568  CD1 TYR A 319     -14.958  -0.993  -4.100  1.00 15.33          C
ATOM   3569  CD2 TYR A 319     -15.309   1.282  -3.322  1.00 16.65          C
ATOM   3570  CE1 TYR A 319     -13.681  -1.004  -3.510  1.00 16.26          C
ATOM   3571  CE2 TYR A 319     -14.013   1.289  -2.769  1.00 16.78          C
ATOM   3572  CZ  TYR A 319     -13.215   0.133  -2.829  1.00 15.64          C
ATOM   3573  OH  TYR A 319     -12.003   0.114  -2.212  1.00 14.07          O
ATOM   3574  H   TYR A 319     -19.624  -0.179  -5.399  1.00  0.00          H
ATOM   3575  HA  TYR A 319     -17.432  -2.056  -4.740  1.00  0.00          H
ATOM   3576  HB2 TYR A 319     -17.129   0.420  -5.560  1.00  0.00          H
ATOM   3577  HB3 TYR A 319     -17.790   0.928  -4.052  1.00  0.00          H
ATOM   3578  HD1 TYR A 319     -15.270  -1.858  -4.661  1.00  0.00          H
ATOM   3579  HD2 TYR A 319     -15.919   2.169  -3.252  1.00  0.00          H
ATOM   3580  HE1 TYR A 319     -13.062  -1.887  -3.588  1.00  0.00          H
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ATOM   3581  HE2 TYR A 319     -13.641   2.165  -2.259  1.00  0.00           H
ATOM   3582  HH  TYR A 319     -11.851  -0.727  -1.775  1.00  0.00           H
ATOM   3583  N   ASN A 320     -17.981  -2.146  -2.171  1.00 18.73           N
ATOM   3584  CA  ASN A 320     -18.380  -2.309  -0.761  1.00 19.06           C
ATOM   3585  C   ASN A 320     -17.623  -1.346   0.180  1.00 16.51           C
ATOM   3586  O   ASN A 320     -17.947  -1.292   1.365  1.00 16.08           O
ATOM   3587  CB  ASN A 320     -18.166  -3.771  -0.279  1.00 19.10           C
ATOM   3588  CG  ASN A 320     -16.732  -4.300  -0.304  1.00 19.82           C
ATOM   3589  OD1 ASN A 320     -15.775  -3.551  -0.474  1.00 21.01           O
ATOM   3590  ND2 ASN A 320     -16.555  -5.607  -0.188  1.00 17.92           N
ATOM   3591  H   ASN A 320     -17.159  -2.660  -2.491  1.00  0.00           H
ATOM   3592  HA  ASN A 320     -19.442  -2.088  -0.645  1.00  0.00           H
ATOM   3593  HB2 ASN A 320     -18.547  -3.882   0.736  1.00  0.00           H
ATOM   3594  HB3 ASN A 320     -18.774  -4.432  -0.896  1.00  0.00           H
ATOM   3595 HD21 ASN A 320     -17.320  -6.256  -0.094  1.00  0.00           H
ATOM   3596 HD22 ASN A 320     -15.592  -5.942  -0.268  1.00  0.00           H
ATOM   3597  N   LEU A 321     -16.622  -0.623  -0.348  1.00 16.54           N
ATOM   3598  CA  LEU A 321     -15.753   0.370   0.295  1.00 16.81           C
ATOM   3599  C   LEU A 321     -14.430  -0.189   0.854  1.00 19.47           C
ATOM   3600  O   LEU A 321     -13.605   0.593   1.328  1.00 17.04           O
ATOM   3601  CB  LEU A 321     -16.480   1.364   1.240  1.00 17.52           C
ATOM   3602  CG  LEU A 321     -17.669   2.146   0.633  1.00 19.03           C
ATOM   3603  CD1 LEU A 321     -18.489   2.835   1.733  1.00 18.92           C
ATOM   3604  CD2 LEU A 321     -17.216   3.183  -0.403  1.00 19.85           C
ATOM   3605  H   LEU A 321     -16.407  -0.829  -1.312  1.00  0.00           H
ATOM   3606  HA  LEU A 321     -15.407   0.979  -0.534  1.00  0.00           H
ATOM   3607  HB2 LEU A 321     -16.825   0.812   2.111  1.00  0.00           H
ATOM   3608  HB3 LEU A 321     -15.761   2.080   1.638  1.00  0.00           H
ATOM   3609  HG  LEU A 321     -18.338   1.441   0.139  1.00  0.00           H
ATOM   3610 HD11 LEU A 321     -19.394   3.289   1.330  1.00  0.00           H
ATOM   3611 HD12 LEU A 321     -18.796   2.128   2.504  1.00  0.00           H
ATOM   3612 HD13 LEU A 321     -17.917   3.627   2.218  1.00  0.00           H
ATOM   3613 HD21 LEU A 321     -18.067   3.724  -0.817  1.00  0.00           H
ATOM   3614 HD22 LEU A 321     -16.538   3.914   0.041  1.00  0.00           H
ATOM   3615 HD23 LEU A 321     -16.703   2.709  -1.235  1.00  0.00           H
ATOM   3616  N   CYS A 322     -14.195  -1.507   0.799  1.00 19.78           N
ATOM   3617  CA  CYS A 322     -13.033  -2.152   1.417  1.00 21.80           C
ATOM   3618  C   CYS A 322     -11.752  -1.983   0.588  1.00 21.81           C
ATOM   3619  O   CYS A 322     -11.779  -2.050  -0.644  1.00 21.18           O
ATOM   3620  CB  CYS A 322     -13.280  -3.666   1.545  1.00 20.40           C
ATOM   3621  SG  CYS A 322     -14.431  -4.155   2.860  1.00 21.81           S
ATOM   3622  H   CYS A 322     -14.874  -2.116   0.349  1.00  0.00           H
ATOM   3623  HA  CYS A 322     -12.872  -1.719   2.404  1.00  0.00           H
ATOM   3624  HB2 CYS A 322     -13.605  -4.088   0.596  1.00  0.00           H
ATOM   3625  HB3 CYS A 322     -12.342  -4.177   1.765  1.00  0.00           H
ATOM   3626  N   HIS A 323     -10.617  -1.801   1.269  1.00 21.47           N
ATOM   3627  CA  HIS A 323      -9.285  -1.739   0.681  1.00 21.03           C
ATOM   3628  C   HIS A 323      -8.212  -2.259   1.646  1.00 21.77           C
ATOM   3629  O   HIS A 323      -8.425  -2.330   2.858  1.00 21.97           O
ATOM   3630  CB  HIS A 323      -8.996  -0.332   0.130  1.00 19.56           C
ATOM   3631  CG  HIS A 323      -8.917   0.781   1.138  1.00 20.31           C
ATOM   3632  ND1 HIS A 323     -10.017   1.484   1.585  1.00 18.55           N
ATOM   3633  CD2 HIS A 323      -7.844   1.311   1.813  1.00 19.48           C
ATOM   3634  CE1 HIS A 323      -9.568   2.438   2.400  1.00 19.82           C
ATOM   3635  NE2 HIS A 323      -8.253   2.399   2.580  1.00 17.55           N
ATOM   3636  H   HIS A 323     -10.662  -1.633   2.274  1.00  0.00           H
ATOM   3637  HA  HIS A 323      -9.272  -2.429  -0.165  1.00  0.00           H
ATOM   3638  HB2 HIS A 323      -8.035  -0.331  -0.376  1.00  0.00           H
ATOM   3639  HB3 HIS A 323      -9.731  -0.065  -0.628  1.00  0.00           H
ATOM   3640  HD1 HIS A 323     -10.991   1.300   1.367  1.00  0.00           H
ATOM   3641  HD2 HIS A 323      -6.814   1.001   1.786  1.00  0.00           H
ATOM   3642  HE1 HIS A 323     -10.204   3.159   2.888  1.00  0.00           H
ATOM   3643  N   PHE A 324      -7.047  -2.606   1.099  1.00 20.35           N
ATOM   3644  CA  PHE A 324      -5.791  -2.896   1.781  1.00 21.54           C
ATOM   3645  C   PHE A 324      -5.132  -1.534   2.047  1.00 21.67           C
ATOM   3646  O   PHE A 324      -5.050  -0.710   1.135  1.00 19.86           O
ATOM   3647  CB  PHE A 324      -4.889  -3.701   0.813  1.00 21.99           C
ATOM   3648  CG  PHE A 324      -5.515  -4.946   0.192  1.00 23.32           C
ATOM   3649  CD1 PHE A 324      -6.245  -5.858   0.980  1.00 23.40           C
ATOM   3650  CD2 PHE A 324      -5.357  -5.202  -1.187  1.00 21.47           C
ATOM   3651  CE1 PHE A 324      -6.803  -7.011   0.398  1.00 23.76           C
ATOM   3652  CE2 PHE A 324      -5.923  -6.352  -1.772  1.00 21.69           C
ATOM   3653  CZ  PHE A 324      -6.646  -7.260  -0.978  1.00 21.06           C
ATOM   3654  H   PHE A 324      -6.944  -2.478   0.087  1.00  0.00           H
ATOM   3655  HA  PHE A 324      -5.959  -3.440   2.707  1.00  0.00           H
ATOM   3656  HB2 PHE A 324      -4.554  -3.056  -0.002  1.00  0.00           H
ATOM   3657  HB3 PHE A 324      -3.979  -4.008   1.331  1.00  0.00           H
ATOM   3658  HD1 PHE A 324      -6.373  -5.689   2.037  1.00  0.00           H
ATOM   3659  HD2 PHE A 324      -4.779  -4.520  -1.795  1.00  0.00           H
ATOM   3660  HE1 PHE A 324      -7.360  -7.695   1.017  1.00  0.00           H
ATOM   3661  HE2 PHE A 324      -5.798  -6.544  -2.828  1.00  0.00           H
ATOM   3662  HZ  PHE A 324      -7.080  -8.144  -1.422  1.00  0.00           H
ATOM   3663  N   TRP A 325      -4.726  -1.255   3.292  1.00 22.91           N
ATOM   3664  CA  TRP A 325      -4.222   0.052   3.709  1.00 25.28           C
ATOM   3665  C   TRP A 325      -2.719   0.080   3.359  1.00 26.42           C
ATOM   3666  O   TRP A 325      -1.909  -0.609   3.983  1.00 30.29           O
ATOM   3667  CB  TRP A 325      -4.486   0.200   5.234  1.00 24.63           C
ATOM   3668  CG  TRP A 325      -4.788   1.569   5.788  1.00 24.92           C
ATOM   3669  CD1 TRP A 325      -5.313   2.617   5.111  1.00 22.73           C
ATOM   3670  CD2 TRP A 325      -4.586   2.054   7.155  1.00 22.74           C
ATOM   3671  NE1 TRP A 325      -5.472   3.690   5.965  1.00 25.68           N
ATOM   3672  CE3 TRP A 325      -4.041   1.497   8.334  1.00 22.84           C
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ATOM   3673  CE2 TRP A 325      -5.019   3.411   7.232  1.00 24.25           C
ATOM   3674  CZ3 TRP A 325      -3.937   2.241   9.525  1.00 20.89           C
ATOM   3675  CZ2 TRP A 325      -4.927   4.166   8.414  1.00 22.79           C
ATOM   3676  CH2 TRP A 325      -4.381   3.575   9.567  1.00 24.61           C
ATOM   3677  H   TRP A 325      -4.682  -1.998   3.986  1.00  0.00           H
ATOM   3678  HA  TRP A 325      -4.753   0.826   3.156  1.00  0.00           H
ATOM   3679  HB2 TRP A 325      -5.352  -0.399   5.516  1.00  0.00           H
ATOM   3680  HB3 TRP A 325      -3.656  -0.216   5.805  1.00  0.00           H
ATOM   3681  HD1 TRP A 325      -5.610   2.607   4.073  1.00  0.00           H
ATOM   3682  HE1 TRP A 325      -5.972   4.532   5.680  1.00  0.00           H
ATOM   3683  HE3 TRP A 325      -3.673   0.488   8.305  1.00  0.00           H
ATOM   3684  HZ3 TRP A 325      -3.495   1.792  10.403  1.00  0.00           H
ATOM   3685  HZ2 TRP A 325      -5.247   5.195   8.425  1.00  0.00           H
ATOM   3686  HH2 TRP A 325      -4.274   4.149  10.474  1.00  0.00           H
ATOM   3687  N   SER A 326      -2.363   0.819   2.300  1.00 24.03           N
ATOM   3688  CA  SER A 326      -1.119   0.713   1.531  1.00 22.71           C
ATOM   3689  C   SER A 326       0.169   1.164   2.256  1.00 21.08           C
ATOM   3690  O   SER A 326       1.272   1.022   1.737  1.00 19.92           O
ATOM   3691  CB  SER A 326      -1.327   1.479   0.207  1.00 22.45           C
ATOM   3692  OG  SER A 326      -1.811   2.798   0.417  1.00 23.98           O
ATOM   3693  H   SER A 326      -3.058   1.402   1.858  1.00  0.00           H
ATOM   3694  HA  SER A 326      -0.989  -0.342   1.290  1.00  0.00           H
ATOM   3695  HB2 SER A 326      -0.393   1.524  -0.356  1.00  0.00           H
ATOM   3696  HB3 SER A 326      -2.029   0.938  -0.428  1.00  0.00           H
ATOM   3697  HG  SER A 326      -1.716   3.283  -0.416  1.00  0.00           H
ATOM   3698  N   ASN A 327       0.061   1.642   3.497  1.00 18.51           N
ATOM   3699  CA  ASN A 327       1.139   1.971   4.433  1.00 18.42           C
ATOM   3700  C   ASN A 327       2.016   0.770   4.873  1.00 19.32           C
ATOM   3701  O   ASN A 327       3.029   0.963   5.554  1.00 18.72           O
ATOM   3702  CB  ASN A 327       0.515   2.677   5.667  1.00 18.64           C
ATOM   3703  CG  ASN A 327      -0.725   2.010   6.233  1.00 18.91           C
ATOM   3704  OD1 ASN A 327      -1.832   2.340   5.852  1.00 17.18           O
ATOM   3705  ND2 ASN A 327      -0.553   1.079   7.211  1.00 16.88           N
ATOM   3706  H   ASN A 327      -0.893   1.721   3.828  1.00  0.00           H
ATOM   3707  HA  ASN A 327       1.808   2.656   3.914  1.00  0.00           H
ATOM   3708  HB2 ASN A 327       1.267   2.831   6.449  1.00  0.00           H
ATOM   3709  HB3 ASN A 327       0.192   3.655   5.309  1.00  0.00           H
ATOM   3710 HD21 ASN A 327       0.374   0.742   7.455  1.00  0.00           H
ATOM   3711 HD22 ASN A 327      -1.346   0.482   7.391  1.00  0.00           H
ATOM   3712  N   PHE A 328       1.625  -0.457   4.510  1.00 18.00           N
ATOM   3713  CA  PHE A 328       2.401  -1.681   4.633  1.00 19.94           C
ATOM   3714  C   PHE A 328       2.068  -2.559   3.432  1.00 20.27           C
ATOM   3715  O   PHE A 328       1.045  -3.245   3.438  1.00 20.85           O
ATOM   3716  CB  PHE A 328       2.140  -2.376   5.980  1.00 20.17           C
ATOM   3717  CG  PHE A 328       3.075  -3.532   6.302  1.00 21.71           C
ATOM   3718  CD1 PHE A 328       2.794  -4.836   5.842  1.00 20.89           C
ATOM   3719  CD2 PHE A 328       4.235  -3.303   7.069  1.00 21.40           C
ATOM   3720  CE1 PHE A 328       3.655  -5.902   6.164  1.00 23.81           C
ATOM   3721  CE2 PHE A 328       5.083  -4.372   7.414  1.00 23.59           C
ATOM   3722  CZ  PHE A 328       4.793  -5.671   6.958  1.00 20.62           C
ATOM   3723  H   PHE A 328       0.777  -0.534   3.959  1.00  0.00           H
ATOM   3724  HA  PHE A 328       3.462  -1.430   4.588  1.00  0.00           H
ATOM   3725  HB2 PHE A 328       2.235  -1.646   6.772  1.00  0.00           H
ATOM   3726  HB3 PHE A 328       1.106  -2.720   6.027  1.00  0.00           H
ATOM   3727  HD1 PHE A 328       1.924  -5.026   5.229  1.00  0.00           H
ATOM   3728  HD2 PHE A 328       4.476  -2.306   7.402  1.00  0.00           H
ATOM   3729  HE1 PHE A 328       3.442  -6.899   5.805  1.00  0.00           H
ATOM   3730  HE2 PHE A 328       5.961  -4.192   8.016  1.00  0.00           H
ATOM   3731  HZ  PHE A 328       5.448  -6.494   7.205  1.00  0.00           H
ATOM   3732  N   GLU A 329       2.929  -2.525   2.417  1.00 21.96           N
ATOM   3733  CA  GLU A 329       2.882  -3.388   1.248  1.00 21.09           C
ATOM   3734  C   GLU A 329       4.286  -3.954   1.091  1.00 20.76           C
ATOM   3735  O   GLU A 329       5.207  -3.180   0.842  1.00 20.35           O
ATOM   3736  CB  GLU A 329       2.470  -2.577   0.008  1.00 20.27           C
ATOM   3737  CG  GLU A 329       1.029  -2.063   0.100  1.00 21.97           C
ATOM   3738  CD  GLU A 329       0.624  -1.214  -1.088  1.00 23.07           C
ATOM   3739  OE1 GLU A 329       1.484  -0.600  -1.750  1.00 20.27           O
ATOM   3740  OE2 GLU A 329      -0.588  -1.160  -1.389  1.00 25.60           O1-
ATOM   3741  H   GLU A 329       3.744  -1.935   2.495  1.00  0.00           H
ATOM   3742  HA  GLU A 329       2.173  -4.205   1.388  1.00  0.00           H
ATOM   3743  HB2 GLU A 329       3.154  -1.739  -0.134  1.00  0.00           H
ATOM   3744  HB3 GLU A 329       2.568  -3.197  -0.885  1.00  0.00           H
ATOM   3745  HG2 GLU A 329       0.342  -2.903   0.199  1.00  0.00           H
ATOM   3746  HG3 GLU A 329       0.912  -1.460   0.994  1.00  0.00           H
ATOM   3747  N   ILE A 330       4.444  -5.269   1.245  1.00 20.01           N
ATOM   3748  CA  ILE A 330       5.595  -6.048   0.802  1.00 21.19           C
ATOM   3749  C   ILE A 330       5.082  -6.638  -0.519  1.00 21.93           C
ATOM   3750  O   ILE A 330       4.325  -7.610  -0.516  1.00 20.27           O
ATOM   3751  CB  ILE A 330       5.895  -7.161   1.854  1.00 20.93           C
ATOM   3752  CG1 ILE A 330       6.373  -6.544   3.189  1.00 21.73           C
ATOM   3753  CG2 ILE A 330       6.921  -8.215   1.377  1.00 18.92           C
ATOM   3754  CD1 ILE A 330       6.412  -7.523   4.371  1.00 23.49           C
ATOM   3755  H   ILE A 330       3.597  -5.809   1.427  1.00  0.00           H
ATOM   3756  HA  ILE A 330       6.479  -5.433   0.633  1.00  0.00           H
ATOM   3757  HB  ILE A 330       4.959  -7.682   2.037  1.00  0.00           H
ATOM   3758 HG12 ILE A 330       7.364  -6.117   3.044  1.00  0.00           H
ATOM   3759 HG13 ILE A 330       5.732  -5.710   3.475  1.00  0.00           H
ATOM   3760 HG21 ILE A 330       6.949  -9.071   2.048  1.00  0.00           H
ATOM   3761 HG22 ILE A 330       6.696  -8.615   0.390  1.00  0.00           H
ATOM   3762 HG23 ILE A 330       7.926  -7.800   1.349  1.00  0.00           H
ATOM   3763 HD11 ILE A 330       6.827  -7.045   5.253  1.00  0.00           H
ATOM   3764 HD12 ILE A 330       5.414  -7.855   4.640  1.00  0.00           H
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ATOM   3765 HD13 ILE A 330       7.022  -8.401   4.171  1.00  0.00           H
ATOM   3766  N   ALA A 331       5.402  -5.995  -1.641  1.00 21.39           N
ATOM   3767  CA  ALA A 331       4.791  -6.276  -2.931  1.00 22.41           C
ATOM   3768  C   ALA A 331       5.799  -6.159  -4.069  1.00 21.44           C
ATOM   3769  O   ALA A 331       6.871  -5.574  -3.918  1.00 20.66           O
ATOM   3770  CB  ALA A 331       3.522  -5.427  -3.111  1.00 21.06           C
ATOM   3771  H   ALA A 331       6.052  -5.210  -1.600  1.00  0.00           H
ATOM   3772  HA  ALA A 331       4.485  -7.323  -2.945  1.00  0.00           H
ATOM   3773  HB1 ALA A 331       3.076  -5.575  -4.095  1.00  0.00           H
ATOM   3774  HB2 ALA A 331       2.769  -5.675  -2.363  1.00  0.00           H
ATOM   3775  HB3 ALA A 331       3.739  -4.367  -2.999  1.00  0.00           H
ATOM   3776  N   ASN A 332       5.459  -6.761  -5.206  1.00 22.89           N
ATOM   3777  CA  ASN A 332       6.225  -6.733  -6.445  1.00 20.34           C
ATOM   3778  C   ASN A 332       5.831  -5.453  -7.213  1.00 21.01           C
ATOM   3779  O   ASN A 332       4.647  -5.151  -7.345  1.00 20.20           O
ATOM   3780  CB  ASN A 332       5.820  -7.988  -7.237  1.00 21.25           C
ATOM   3781  CG  ASN A 332       6.646  -8.203  -8.500  1.00 19.39           C
ATOM   3782  OD1 ASN A 332       6.312  -7.644  -9.534  1.00 19.86           O
ATOM   3783  ND2 ASN A 332       7.697  -9.013  -8.459  1.00 20.38           N
ATOM   3784  H   ASN A 332       4.553  -7.220  -5.234  1.00  0.00           H
ATOM   3785  HA  ASN A 332       7.292  -6.772  -6.238  1.00  0.00           H
ATOM   3786  HB2 ASN A 332       5.906  -8.875  -6.608  1.00  0.00           H
ATOM   3787  HB3 ASN A 332       4.771  -7.917  -7.528  1.00  0.00           H
ATOM   3788 HD21 ASN A 332       8.047  -9.386  -7.585  1.00  0.00           H
ATOM   3789 HD22 ASN A 332       8.181  -9.229  -9.322  1.00  0.00           H
ATOM   3790  N   LEU A 333       6.817  -4.708  -7.727  1.00 20.23           N
ATOM   3791  CA  LEU A 333       6.630  -3.473  -8.495  1.00 22.19           C
ATOM   3792  C   LEU A 333       6.283  -3.782  -9.955  1.00 22.56           C
ATOM   3793  O   LEU A 333       5.612  -2.980 -10.604  1.00 23.16           O
ATOM   3794  CB  LEU A 333       7.954  -2.666  -8.536  1.00 20.41           C
ATOM   3795  CG  LEU A 333       8.335  -1.970  -7.220  1.00 19.24           C
ATOM   3796  CD1 LEU A 333       9.807  -1.543  -7.211  1.00 21.42           C
ATOM   3797  CD2 LEU A 333       7.425  -0.760  -6.942  1.00 20.07           C
ATOM   3798  H   LEU A 333       7.760  -5.095  -7.704  1.00  0.00           H
ATOM   3799  HA  LEU A 333       5.820  -2.879  -8.069  1.00  0.00           H
ATOM   3800  HB2 LEU A 333       8.761  -3.330  -8.844  1.00  0.00           H
ATOM   3801  HB3 LEU A 333       7.905  -1.902  -9.316  1.00  0.00           H
ATOM   3802  HG  LEU A 333       8.234  -2.697  -6.420  1.00  0.00           H
ATOM   3803 HD11 LEU A 333      10.095  -1.149  -6.237  1.00  0.00           H
ATOM   3804 HD12 LEU A 333      10.462  -2.389  -7.410  1.00  0.00           H
ATOM   3805 HD13 LEU A 333      10.009  -0.772  -7.954  1.00  0.00           H
ATOM   3806 HD21 LEU A 333       7.688  -0.271  -6.005  1.00  0.00           H
ATOM   3807 HD22 LEU A 333       7.502  -0.014  -7.733  1.00  0.00           H
ATOM   3808 HD23 LEU A 333       6.376  -1.045  -6.863  1.00  0.00           H
ATOM   3809  N   ASN A 334       6.707  -4.938 -10.485  1.00 22.33           N
ATOM   3810  CA  ASN A 334       6.473  -5.328 -11.881  1.00 23.39           C
ATOM   3811  C   ASN A 334       4.988  -5.650 -12.134  1.00 23.98           C
ATOM   3812  O   ASN A 334       4.535  -5.561 -13.272  1.00 23.96           O
ATOM   3813  CB  ASN A 334       7.361  -6.513 -12.339  1.00 25.18           C
ATOM   3814  CG  ASN A 334       8.865  -6.271 -12.175  1.00 27.49           C
ATOM   3815  OD1 ASN A 334       9.338  -5.142 -12.307  1.00 28.65           O
ATOM   3816  ND2 ASN A 334       9.622  -7.314 -11.851  1.00 26.16           N
ATOM   3817  H   ASN A 334       7.174  -5.605  -9.883  1.00  0.00           H
ATOM   3818  HA  ASN A 334       6.731  -4.469 -12.496  1.00  0.00           H
ATOM   3819  HB2 ASN A 334       7.075  -7.434 -11.836  1.00  0.00           H
ATOM   3820  HB3 ASN A 334       7.181  -6.698 -13.399  1.00  0.00           H
ATOM   3821 HD21 ASN A 334       9.214  -8.225 -11.720  1.00  0.00           H
ATOM   3822 HD22 ASN A 334      10.654  -7.217 -11.766  1.00  0.00           H
ATOM   3823  N   LEU A 335       4.209  -5.907 -11.070  1.00 23.74           N
ATOM   3824  CA  LEU A 335       2.744  -5.942 -11.065  1.00 22.83           C
ATOM   3825  C   LEU A 335       2.149  -4.578 -11.446  1.00 23.38           C
ATOM   3826  O   LEU A 335       1.176  -4.516 -12.194  1.00 20.24           O
ATOM   3827  CB  LEU A 335       2.252  -6.389  -9.666  1.00 22.39           C
ATOM   3828  CG  LEU A 335       0.716  -6.469  -9.471  1.00 22.32           C
ATOM   3829  CD1 LEU A 335       0.054  -7.488 -10.412  1.00 21.69           C
ATOM   3830  CD2 LEU A 335       0.371  -6.764  -8.004  1.00 20.81           C
ATOM   3831  H   LEU A 335       4.685  -6.016 -10.185  1.00  0.00           H
ATOM   3832  HA  LEU A 335       2.413  -6.655 -11.817  1.00  0.00           H
ATOM   3833  HB2 LEU A 335       2.689  -7.360  -9.430  1.00  0.00           H
ATOM   3834  HB3 LEU A 335       2.649  -5.696  -8.923  1.00  0.00           H
ATOM   3835  HG  LEU A 335       0.277  -5.495  -9.690  1.00  0.00           H
ATOM   3836 HD11 LEU A 335      -1.009  -7.599 -10.197  1.00  0.00           H
ATOM   3837 HD12 LEU A 335       0.130  -7.180 -11.456  1.00  0.00           H
ATOM   3838 HD13 LEU A 335       0.513  -8.471 -10.326  1.00  0.00           H
ATOM   3839 HD21 LEU A 335      -0.709  -6.790  -7.849  1.00  0.00           H
ATOM   3840 HD22 LEU A 335       0.778  -7.721  -7.684  1.00  0.00           H
ATOM   3841 HD23 LEU A 335       0.774  -5.994  -7.344  1.00  0.00           H
ATOM   3842  N   TRP A 336       2.749  -3.480 -10.981  1.00 20.71           N
ATOM   3843  CA  TRP A 336       2.294  -2.131 -11.295  1.00 21.14           C
ATOM   3844  C   TRP A 336       2.874  -1.652 -12.638  1.00 20.82           C
ATOM   3845  O   TRP A 336       2.235  -0.874 -13.339  1.00 21.72           O
ATOM   3846  CB  TRP A 336       2.704  -1.178 -10.166  1.00 19.56           C
ATOM   3847  CG  TRP A 336       2.314  -1.551  -8.760  1.00 21.10           C
ATOM   3848  CD1 TRP A 336       3.080  -1.314  -7.670  1.00 20.91           C
ATOM   3849  CD2 TRP A 336       1.098  -2.201  -8.253  1.00 20.60           C
ATOM   3850  NE1 TRP A 336       2.406  -1.716  -6.535  1.00 21.76           N
ATOM   3851  CE3 TRP A 336      -0.066  -2.764  -8.828  1.00 21.74           C
ATOM   3852  CE2 TRP A 336       1.176  -2.244  -6.829  1.00 18.03           C
ATOM   3853  CZ3 TRP A 336      -1.099  -3.301  -8.031  1.00 18.29           C
ATOM   3854  CZ2 TRP A 336       0.146  -2.749  -6.022  1.00 20.48           C
ATOM   3855  CH2 TRP A 336      -1.006  -3.274  -6.628  1.00 21.36           C
ATOM   3856  H   TRP A 336       3.577  -3.576 -10.407  1.00  0.00           H
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ATOM   3857  HA  TRP A 336       1.212  -2.116 -11.384  1.00  0.00           H
ATOM   3858  HB2 TRP A 336       3.779  -1.003 -10.190  1.00  0.00           H
ATOM   3859  HB3 TRP A 336       2.232  -0.218 -10.368  1.00  0.00           H
ATOM   3860  HD1 TRP A 336       4.052  -0.841  -7.699  1.00  0.00           H
ATOM   3861  HE1 TRP A 336       2.757  -1.634  -5.574  1.00  0.00           H
ATOM   3862  HE3 TRP A 336      -0.175  -2.794  -9.899  1.00  0.00           H
ATOM   3863  HZ3 TRP A 336      -1.966  -3.737  -8.502  1.00  0.00           H
ATOM   3864  HZ2 TRP A 336       0.254  -2.738  -4.950  1.00  0.00           H
ATOM   3865  HH2 TRP A 336      -1.805  -3.668  -6.020  1.00  0.00           H
ATOM   3866  N   ARG A 337       4.026  -2.187 -13.066  1.00 21.65           N
ATOM   3867  CA  ARG A 337       4.570  -1.948 -14.406  1.00 20.04           C
ATOM   3868  C   ARG A 337       3.865  -2.798 -15.486  1.00 18.23           C
ATOM   3869  O   ARG A 337       4.166  -2.610 -16.668  1.00 17.77           O
ATOM   3870  CB  ARG A 337       6.073  -2.300 -14.450  1.00 21.14           C
ATOM   3871  CG  ARG A 337       6.943  -1.468 -13.496  1.00 20.85           C
ATOM   3872  CD  ARG A 337       8.422  -1.872 -13.528  1.00 23.87           C
ATOM   3873  NE  ARG A 337       9.182  -1.060 -12.580  1.00 23.95           N
ATOM   3874  CZ  ARG A 337       9.870  -1.441 -11.502  1.00 25.49           C
ATOM   3875  NH1 ARG A 337      10.090  -2.720 -11.197  1.00 26.97           N
ATOM   3876  NH2 ARG A 337      10.348  -0.500 -10.703  1.00 26.66           N1+
ATOM   3877  H   ARG A 337       4.526  -2.790 -12.425  1.00  0.00           H
ATOM   3878  HA  ARG A 337       4.442  -0.896 -14.670  1.00  0.00           H
ATOM   3879  HB2 ARG A 337       6.205  -3.364 -14.259  1.00  0.00           H
ATOM   3880  HB3 ARG A 337       6.451  -2.144 -15.461  1.00  0.00           H
ATOM   3881  HG2 ARG A 337       6.851  -0.410 -13.747  1.00  0.00           H
ATOM   3882  HG3 ARG A 337       6.578  -1.565 -12.476  1.00  0.00           H
ATOM   3883  HD2 ARG A 337       8.533  -2.930 -13.305  1.00  0.00           H
ATOM   3884  HD3 ARG A 337       8.841  -1.710 -14.522  1.00  0.00           H
ATOM   3885  HE  ARG A 337       9.442  -0.110 -12.951  1.00  0.00           H
ATOM   3886 HH11 ARG A 337       9.767  -3.510 -11.766  1.00  0.00           H
ATOM   3887 HH12 ARG A 337      10.804  -2.914 -10.491  1.00  0.00           H
ATOM   3888 HH21 ARG A 337      10.288   0.506 -11.026  1.00  0.00           H
ATOM   3889 HH22 ARG A 337      11.012  -0.659  -9.947  1.00  0.00           H
ATOM   3890  N   SER A 338       2.962  -3.721 -15.111  1.00 17.15           N
ATOM   3891  CA  SER A 338       2.243  -4.606 -16.028  1.00 19.46           C
ATOM   3892  C   SER A 338       1.198  -3.817 -16.849  1.00 20.12           C
ATOM   3893  O   SER A 338       0.629  -2.861 -16.311  1.00 21.09           O
ATOM   3894  CB  SER A 338       1.549  -5.749 -15.243  1.00 20.32           C
ATOM   3895  OG  SER A 338       0.364  -5.377 -14.558  1.00 21.76           O
ATOM   3896  H   SER A 338       2.754  -3.803 -14.127  1.00  0.00           H
ATOM   3897  HA  SER A 338       3.003  -5.051 -16.669  1.00  0.00           H
ATOM   3898  HB2 SER A 338       1.251  -6.519 -15.952  1.00  0.00           H
ATOM   3899  HB3 SER A 338       2.242  -6.230 -14.550  1.00  0.00           H
ATOM   3900  HG  SER A 338       0.609  -5.001 -13.707  1.00  0.00           H
ATOM   3901  N   PRO A 339       0.923  -4.197 -18.120  1.00 22.35           N
ATOM   3902  CA  PRO A 339      -0.121  -3.593 -18.975  1.00 21.08           C
ATOM   3903  C   PRO A 339      -1.482  -3.403 -18.276  1.00 19.47           C
ATOM   3904  O   PRO A 339      -2.042  -2.307 -18.276  1.00 20.76           O
ATOM   3905  CB  PRO A 339      -0.224  -4.529 -20.185  1.00 20.47           C
ATOM   3906  CG  PRO A 339       1.113  -5.238 -20.273  1.00 21.32           C
ATOM   3907  CD  PRO A 339       1.641  -5.253 -18.842  1.00 19.67           C
ATOM   3908  HA  PRO A 339       0.224  -2.619 -19.320  1.00  0.00           H
ATOM   3909  HB2 PRO A 339      -1.013  -5.268 -20.048  1.00  0.00           H
ATOM   3910  HB3 PRO A 339      -0.440  -3.975 -21.098  1.00  0.00           H
ATOM   3911  HG2 PRO A 339       1.033  -6.234 -20.709  1.00  0.00           H
ATOM   3912  HG3 PRO A 339       1.782  -4.653 -20.905  1.00  0.00           H
ATOM   3913  HD2 PRO A 339       1.431  -6.216 -18.378  1.00  0.00           H
ATOM   3914  HD3 PRO A 339       2.720  -5.095 -18.844  1.00  0.00           H
ATOM   3915  N   ALA A 340      -1.940  -4.445 -17.566  1.00 19.58           N
ATOM   3916  CA  ALA A 340      -3.165  -4.462 -16.773  1.00 19.57           C
ATOM   3917  C   ALA A 340      -3.270  -3.322 -15.751  1.00 19.42           C
ATOM   3918  O   ALA A 340      -4.325  -2.701 -15.648  1.00 17.04           O
ATOM   3919  CB  ALA A 340      -3.311  -5.827 -16.087  1.00 20.76           C
ATOM   3920  H   ALA A 340      -1.422  -5.306 -17.627  1.00  0.00           H
ATOM   3921  HA  ALA A 340      -3.990  -4.325 -17.469  1.00  0.00           H
ATOM   3922  HB1 ALA A 340      -4.219  -5.864 -15.482  1.00  0.00           H
ATOM   3923  HB2 ALA A 340      -3.379  -6.628 -16.822  1.00  0.00           H
ATOM   3924  HB3 ALA A 340      -2.468  -6.039 -15.427  1.00  0.00           H
ATOM   3925  N   TYR A 341      -2.184  -3.006 -15.031  1.00 18.41           N
ATOM   3926  CA  TYR A 341      -2.191  -1.890 -14.088  1.00 20.02           C
ATOM   3927  C   TYR A 341      -1.889  -0.554 -14.787  1.00 20.29           C
ATOM   3928  O   TYR A 341      -2.423   0.470 -14.364  1.00 20.54           O
ATOM   3929  CB  TYR A 341      -1.154  -2.102 -12.977  1.00 19.15           C
ATOM   3930  CG  TYR A 341      -1.301  -1.090 -11.847  1.00 19.29           C
ATOM   3931  CD1 TYR A 341      -2.294  -1.263 -10.864  1.00 18.41           C
ATOM   3932  CD2 TYR A 341      -0.493   0.061 -11.810  1.00 17.75           C
ATOM   3933  CE1 TYR A 341      -2.436  -0.333  -9.813  1.00 19.60           C
ATOM   3934  CE2 TYR A 341      -0.646   0.996 -10.776  1.00 19.82           C
ATOM   3935  CZ  TYR A 341      -1.593   0.790  -9.758  1.00 19.34           C
ATOM   3936  OH  TYR A 341      -1.680   1.682  -8.732  1.00 19.62           O
ATOM   3937  H   TYR A 341      -1.320  -3.503 -15.209  1.00  0.00           H
ATOM   3938  HA  TYR A 341      -3.168  -1.826 -13.612  1.00  0.00           H
ATOM   3939  HB2 TYR A 341      -1.264  -3.101 -12.553  1.00  0.00           H
ATOM   3940  HB3 TYR A 341      -0.144  -2.064 -13.389  1.00  0.00           H
ATOM   3941  HD1 TYR A 341      -2.941  -2.118 -10.931  1.00  0.00           H
ATOM   3942  HD2 TYR A 341       0.232   0.250 -12.587  1.00  0.00           H
ATOM   3943  HE1 TYR A 341      -3.184  -0.479  -9.047  1.00  0.00           H
ATOM   3944  HE2 TYR A 341      -0.025   1.871 -10.788  1.00  0.00           H
ATOM   3945  HH  TYR A 341      -0.965   2.311  -8.814  1.00  0.00           H
ATOM   3946  N   ARG A 342      -1.074  -0.539 -15.851  1.00 20.95           N
ATOM   3947  CA  ARG A 342      -0.715   0.665 -16.604  1.00 21.79           C
ATOM   3948  C   ARG A 342      -1.950   1.330 -17.217  1.00 22.81           C
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ATOM   3949  O   ARG A 342      -2.252   2.484 -16.910  1.00 22.78           O
ATOM   3950  CB  ARG A 342       0.243   0.311 -17.746  1.00 23.26           C
ATOM   3951  CG  ARG A 342       1.681  -0.003 -17.352  1.00 23.00           C
ATOM   3952  CD  ARG A 342       2.383  -0.718 -18.514  1.00 25.52           C
ATOM   3953  NE  ARG A 342       3.826  -0.482 -18.480  1.00 27.12           N
ATOM   3954  CZ  ARG A 342       4.483   0.457 -19.169  1.00 24.20           C
ATOM   3955  NH1 ARG A 342       3.845   1.286 -20.003  1.00 21.44           N
ATOM   3956  NH2 ARG A 342       5.802   0.568 -19.004  1.00 25.12           N1+
ATOM   3957  H   ARG A 342      -0.686  -1.424 -16.162  1.00  0.00           H
ATOM   3958  HA  ARG A 342      -0.242   1.379 -15.929  1.00  0.00           H
ATOM   3959  HB2 ARG A 342      -0.168  -0.531 -18.301  1.00  0.00           H
ATOM   3960  HB3 ARG A 342       0.272   1.137 -18.457  1.00  0.00           H
ATOM   3961  HG2 ARG A 342       2.189   0.927 -17.096  1.00  0.00           H
ATOM   3962  HG3 ARG A 342       1.712  -0.618 -16.453  1.00  0.00           H
ATOM   3963  HD2 ARG A 342       2.216  -1.788 -18.447  1.00  0.00           H
ATOM   3964  HD3 ARG A 342       1.974  -0.433 -19.481  1.00  0.00           H
ATOM   3965  HE  ARG A 342       4.274  -1.167 -17.863  1.00  0.00           H
ATOM   3966 HH11 ARG A 342       2.820   1.222 -20.184  1.00  0.00           H
ATOM   3967 HH12 ARG A 342       4.292   2.008 -20.540  1.00  0.00           H
ATOM   3968 HH21 ARG A 342       6.293  -0.041 -18.364  1.00  0.00           H
ATOM   3969 HH22 ARG A 342       6.349   1.268 -19.482  1.00  0.00           H
ATOM   3970  N   GLU A 343      -2.681   0.574 -18.040  1.00 24.14           N
ATOM   3971  CA  GLU A 343      -3.849   1.044 -18.765  1.00 24.75           C
ATOM   3972  C   GLU A 343      -5.043   1.228 -17.801  1.00 24.10           C
ATOM   3973  O   GLU A 343      -5.918   2.055 -18.071  1.00 24.31           O
ATOM   3974  CB  GLU A 343      -4.179   0.028 -19.882  1.00 25.68           C
ATOM   3975  CG  GLU A 343      -3.288   0.163 -21.145  1.00 30.62           C
ATOM   3976  CD  GLU A 343      -1.906  -0.483 -21.050  1.00 30.71           C
ATOM   3977  OE1 GLU A 343      -1.813  -1.676 -21.404  1.00 32.63           O
ATOM   3978  OE2 GLU A 343      -0.944   0.220 -20.661  1.00 29.45           O1-
ATOM   3979  H   GLU A 343      -2.337  -0.357 -18.273  1.00  0.00           H
ATOM   3980  HA  GLU A 343      -3.631   2.017 -19.210  1.00  0.00           H
ATOM   3981  HB2 GLU A 343      -4.133  -0.992 -19.496  1.00  0.00           H
ATOM   3982  HB3 GLU A 343      -5.212   0.171 -20.202  1.00  0.00           H
ATOM   3983  HG2 GLU A 343      -3.796  -0.312 -21.984  1.00  0.00           H
ATOM   3984  HG3 GLU A 343      -3.170   1.210 -21.423  1.00  0.00           H
ATOM   3985  N   TYR A 344      -5.052   0.540 -16.645  1.00 22.33           N
ATOM   3986  CA  TYR A 344      -5.962   0.808 -15.528  1.00 19.95           C
ATOM   3987  C   TYR A 344      -5.629   2.162 -14.891  1.00 21.16           C
ATOM   3988  O   TYR A 344      -6.516   3.005 -14.778  1.00 19.78           O
ATOM   3989  CB  TYR A 344      -5.890  -0.305 -14.459  1.00 17.99           C
ATOM   3990  CG  TYR A 344      -6.668  -0.033 -13.177  1.00 21.67           C
ATOM   3991  CD1 TYR A 344      -8.071   0.071 -13.223  1.00 21.18           C
ATOM   3992  CD2 TYR A 344      -5.999   0.155 -11.947  1.00 21.43           C
ATOM   3993  CE1 TYR A 344      -8.794   0.401 -12.065  1.00 20.99           C
ATOM   3994  CE2 TYR A 344      -6.730   0.466 -10.782  1.00 21.57           C
ATOM   3995  CZ  TYR A 344      -8.128   0.623 -10.847  1.00 21.53           C
ATOM   3996  OH  TYR A 344      -8.834   1.015  -9.746  1.00 19.87           O
ATOM   3997  H   TYR A 344      -4.317  -0.141 -16.511  1.00  0.00           H
ATOM   3998  HA  TYR A 344      -6.982   0.866 -15.905  1.00  0.00           H
ATOM   3999  HB2 TYR A 344      -6.272  -1.231 -14.888  1.00  0.00           H
ATOM   4000  HB3 TYR A 344      -4.854  -0.498 -14.197  1.00  0.00           H
ATOM   4001  HD1 TYR A 344      -8.591  -0.078 -14.156  1.00  0.00           H
ATOM   4002  HD2 TYR A 344      -4.922   0.078 -11.892  1.00  0.00           H
ATOM   4003  HE1 TYR A 344      -9.862   0.491 -12.125  1.00  0.00           H
ATOM   4004  HE2 TYR A 344      -6.213   0.605  -9.845  1.00  0.00           H
ATOM   4005  HH  TYR A 344      -9.728   1.282  -9.959  1.00  0.00           H
ATOM   4006  N   PHE A 345      -4.364   2.397 -14.514  1.00 20.71           N
ATOM   4007  CA  PHE A 345      -3.926   3.649 -13.911  1.00 20.36           C
ATOM   4008  C   PHE A 345      -4.155   4.833 -14.858  1.00 21.44           C
ATOM   4009  O   PHE A 345      -4.713   5.839 -14.431  1.00 22.30           O
ATOM   4010  CB  PHE A 345      -2.452   3.599 -13.440  1.00 18.78           C
ATOM   4011  CG  PHE A 345      -2.022   4.941 -12.863  1.00 18.84           C
ATOM   4012  CD1 PHE A 345      -2.599   5.392 -11.657  1.00 19.24           C
ATOM   4013  CD2 PHE A 345      -1.237   5.822 -13.639  1.00 17.98           C
ATOM   4014  CE1 PHE A 345      -2.451   6.736 -11.267  1.00 17.82           C
ATOM   4015  CE2 PHE A 345      -1.087   7.163 -13.238  1.00 18.95           C
ATOM   4016  CZ  PHE A 345      -1.707   7.624 -12.062  1.00 18.47           C
ATOM   4017  H   PHE A 345      -3.665   1.664 -14.633  1.00  0.00           H
ATOM   4018  HA  PHE A 345      -4.554   3.812 -13.035  1.00  0.00           H
ATOM   4019  HB2 PHE A 345      -2.326   2.825 -12.682  1.00  0.00           H
ATOM   4020  HB3 PHE A 345      -1.798   3.326 -14.269  1.00  0.00           H
ATOM   4021  HD1 PHE A 345      -3.233   4.733 -11.079  1.00  0.00           H
ATOM   4022  HD2 PHE A 345      -0.834   5.506 -14.592  1.00  0.00           H
ATOM   4023  HE1 PHE A 345      -2.945   7.109 -10.385  1.00  0.00           H
ATOM   4024  HE2 PHE A 345      -0.543   7.861 -13.857  1.00  0.00           H
ATOM   4025  HZ  PHE A 345      -1.629   8.664 -11.784  1.00  0.00           H
ATOM   4026  N   ASP A 346      -3.788   4.725 -16.141  1.00 21.25           N
ATOM   4027  CA  ASP A 346      -3.961   5.838 -17.077  1.00 20.54           C
ATOM   4028  C   ASP A 346      -5.447   6.118 -17.383  1.00 20.57           C
ATOM   4029  O   ASP A 346      -5.818   7.275 -17.567  1.00 18.80           O
ATOM   4030  CB  ASP A 346      -3.130   5.632 -18.358  1.00 21.13           C
ATOM   4031  CG  ASP A 346      -2.548   6.965 -18.816  1.00 21.90           C
ATOM   4032  OD1 ASP A 346      -1.514   7.390 -18.249  1.00 20.23           O
ATOM   4033  OD2 ASP A 346      -3.169   7.605 -19.686  1.00 24.56           O1-
ATOM   4034  H   ASP A 346      -3.295   3.889 -16.452  1.00  0.00           H
ATOM   4035  HA  ASP A 346      -3.572   6.718 -16.561  1.00  0.00           H
ATOM   4036  HB2 ASP A 346      -2.289   4.962 -18.176  1.00  0.00           H
ATOM   4037  HB3 ASP A 346      -3.717   5.185 -19.161  1.00  0.00           H
ATOM   4038  N   THR A 347      -6.336   5.111 -17.270  1.00 20.11           N
ATOM   4039  CA  THR A 347      -7.795   5.301 -17.249  1.00 20.50           C
ATOM   4040  C   THR A 347      -8.252   6.170 -16.045  1.00 19.74           C
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ATOM   4041  O   THR A 347      -9.256   6.870 -16.160  1.00 19.02           O
ATOM   4042  CB  THR A 347      -8.528   3.920 -17.285  1.00 17.98           C
ATOM   4043  OG1 THR A 347      -8.287   3.247 -18.516  1.00 21.15           O
ATOM   4044  CG2 THR A 347     -10.060   3.982 -17.162  1.00 18.73           C
ATOM   4045  H   THR A 347      -5.968   4.193 -17.059  1.00  0.00           H
ATOM   4046  HA  THR A 347      -8.065   5.859 -18.148  1.00  0.00           H
ATOM   4047  HB  THR A 347      -8.169   3.280 -16.484  1.00  0.00           H
ATOM   4048  HG1 THR A 347      -7.366   2.952 -18.480  1.00  0.00           H
ATOM   4049 HG21 THR A 347     -10.514   2.997 -17.258  1.00  0.00           H
ATOM   4050 HG22 THR A 347     -10.358   4.346 -16.181  1.00  0.00           H
ATOM   4051 HG23 THR A 347     -10.503   4.648 -17.903  1.00  0.00           H
ATOM   4052  N   LEU A 348      -7.525   6.171 -14.916  1.00 20.95           N
ATOM   4053  CA  LEU A 348      -7.776   7.042 -13.764  1.00 20.70           C
ATOM   4054  C   LEU A 348      -7.083   8.409 -13.959  1.00 20.77           C
ATOM   4055  O   LEU A 348      -7.639   9.443 -13.580  1.00 22.33           O
ATOM   4056  CB  LEU A 348      -7.194   6.393 -12.476  1.00 19.16           C
ATOM   4057  CG  LEU A 348      -7.726   4.984 -12.118  1.00 19.34           C
ATOM   4058  CD1 LEU A 348      -6.935   4.401 -10.941  1.00 18.78           C
ATOM   4059  CD2 LEU A 348      -9.232   4.928 -11.811  1.00 16.55           C
ATOM   4060  H   LEU A 348      -6.678   5.614 -14.893  1.00  0.00           H
ATOM   4061  HA  LEU A 348      -8.846   7.213 -13.646  1.00  0.00           H
ATOM   4062  HB2 LEU A 348      -6.111   6.331 -12.556  1.00  0.00           H
ATOM   4063  HB3 LEU A 348      -7.328   7.058 -11.625  1.00  0.00           H
ATOM   4064  HG  LEU A 348      -7.552   4.332 -12.970  1.00  0.00           H
ATOM   4065 HD11 LEU A 348      -7.280   3.395 -10.702  1.00  0.00           H
ATOM   4066 HD12 LEU A 348      -5.872   4.334 -11.167  1.00  0.00           H
ATOM   4067 HD13 LEU A 348      -7.045   5.013 -10.046  1.00  0.00           H
ATOM   4068 HD21 LEU A 348      -9.559   3.892 -11.706  1.00  0.00           H
ATOM   4069 HD22 LEU A 348      -9.474   5.434 -10.877  1.00  0.00           H
ATOM   4070 HD23 LEU A 348      -9.824   5.370 -12.608  1.00  0.00           H
ATOM   4071  N   ASP A 349      -5.876   8.421 -14.540  1.00 21.51           N
ATOM   4072  CA  ASP A 349      -4.995   9.590 -14.637  1.00 21.24           C
ATOM   4073  C   ASP A 349      -5.422  10.566 -15.744  1.00 21.96           C
ATOM   4074  O   ASP A 349      -5.463  11.777 -15.514  1.00 19.94           O
ATOM   4075  CB  ASP A 349      -3.549   9.124 -14.922  1.00 18.89           C
ATOM   4076  CG  ASP A 349      -2.509  10.109 -14.409  1.00 19.84           C
ATOM   4077  OD1 ASP A 349      -2.650  10.598 -13.270  1.00 20.50           O
ATOM   4078  OD2 ASP A 349      -1.508  10.378 -15.109  1.00 19.99           O1-
ATOM   4079  H   ASP A 349      -5.468   7.518 -14.770  1.00  0.00           H
ATOM   4080  HA  ASP A 349      -5.045  10.111 -13.679  1.00  0.00           H
ATOM   4081  HB2 ASP A 349      -3.355   8.179 -14.418  1.00  0.00           H
ATOM   4082  HB3 ASP A 349      -3.380   8.944 -15.985  1.00  0.00           H
ATOM   4083  N   HIS A 350      -5.817  10.045 -16.917  1.00 22.62           N
ATOM   4084  CA  HIS A 350      -6.400  10.825 -18.017  1.00 23.51           C
ATOM   4085  C   HIS A 350      -7.883  11.163 -17.764  1.00 22.85           C
ATOM   4086  O   HIS A 350      -8.479  11.908 -18.539  1.00 22.01           O
ATOM   4087  CB  HIS A 350      -6.243  10.094 -19.375  1.00  0.00           C
ATOM   4088  CG  HIS A 350      -5.114  10.624 -20.227  1.00  0.00           C
ATOM   4089  ND1 HIS A 350      -3.940   9.930 -20.466  1.00  0.00           N
ATOM   4090  CD2 HIS A 350      -4.977  11.813 -20.910  1.00  0.00           C
ATOM   4091  CE1 HIS A 350      -3.187  10.678 -21.272  1.00  0.00           C
ATOM   4092  NE2 HIS A 350      -3.753  11.839 -21.583  1.00  0.00           N
ATOM   4093  H   HIS A 350      -5.722   9.041 -17.064  1.00  0.00           H
ATOM   4094  HA  HIS A 350      -5.890  11.780 -18.098  1.00  0.00           H
ATOM   4095  HB2 HIS A 350      -6.130   9.020 -19.257  1.00  0.00           H
ATOM   4096  HB3 HIS A 350      -7.138  10.215 -19.987  1.00  0.00           H
ATOM   4097  HD1 HIS A 350      -3.668   8.964 -20.131  1.00  0.00           H
ATOM   4098  HD2 HIS A 350      -5.665  12.644 -20.971  1.00  0.00           H
ATOM   4099  HE1 HIS A 350      -2.216  10.365 -21.631  1.00  0.00           H
ATOM   4100  N   GLN A 351      -8.477  10.668 -16.665  1.00 22.30           N
ATOM   4101  CA  GLN A 351      -9.743  11.167 -16.135  1.00 23.00           C
ATOM   4102  C   GLN A 351      -9.401  12.391 -15.264  1.00 22.67           C
ATOM   4103  O   GLN A 351      -9.782  13.506 -15.615  1.00 19.82           O
ATOM   4104  CB  GLN A 351     -10.456  10.042 -15.339  1.00 23.52           C
ATOM   4105  CG  GLN A 351     -11.976  10.224 -15.126  1.00 26.12           C
ATOM   4106  CD  GLN A 351     -12.371  10.767 -13.752  1.00 28.38           C
ATOM   4107  OE1 GLN A 351     -11.761  11.691 -13.234  1.00 27.29           O
ATOM   4108  NE2 GLN A 351     -13.392  10.190 -13.133  1.00 27.43           N
ATOM   4109  H   GLN A 351      -7.904  10.084 -16.074  1.00  0.00           H
ATOM   4110  HA  GLN A 351     -10.385  11.484 -16.960  1.00  0.00           H
ATOM   4111  HB2 GLN A 351     -10.341   9.124 -15.913  1.00  0.00           H
ATOM   4112  HB3 GLN A 351      -9.967   9.841 -14.388  1.00  0.00           H
ATOM   4113  HG2 GLN A 351     -12.395  10.875 -15.894  1.00  0.00           H
ATOM   4114  HG3 GLN A 351     -12.462   9.258 -15.266  1.00  0.00           H
ATOM   4115 HE21 GLN A 351     -13.730   9.298 -13.489  1.00  0.00           H
ATOM   4116 HE22 GLN A 351     -13.709  10.527 -12.230  1.00  0.00           H
ATOM   4117  N   GLY A 352      -8.620  12.201 -14.189  1.00 21.90           N
ATOM   4118  CA  GLY A 352      -8.066  13.268 -13.348  1.00 22.88           C
ATOM   4119  C   GLY A 352      -8.508  13.207 -11.880  1.00 23.50           C
ATOM   4120  O   GLY A 352      -7.951  13.904 -11.029  1.00 20.98           O
ATOM   4121  H   GLY A 352      -8.288  11.257 -14.008  1.00  0.00           H
ATOM   4122  HA2 GLY A 352      -6.981  13.169 -13.379  1.00  0.00           H
ATOM   4123  HA3 GLY A 352      -8.311  14.257 -13.737  1.00  0.00           H
ATOM   4124  N   GLY A 353      -9.498  12.355 -11.598  1.00 21.49           N
ATOM   4125  CA  GLY A 353     -10.074  11.874 -10.344  1.00 20.56           C
ATOM   4126  C   GLY A 353      -9.448  12.280  -9.009  1.00 21.34           C
ATOM   4127  O   GLY A 353     -10.119  12.894  -8.178  1.00 20.96           O
ATOM   4128  H   GLY A 353      -9.950  11.972 -12.425  1.00  0.00           H
ATOM   4129  HA2 GLY A 353     -11.143  12.085 -10.334  1.00  0.00           H
ATOM   4130  HA3 GLY A 353      -9.968  10.802 -10.403  1.00  0.00           H
ATOM   4131  N   PHE A 354      -8.159  11.959  -8.819  1.00 21.51           N
ATOM   4132  CA  PHE A 354      -7.316  12.264  -7.654  1.00 21.68           C
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ATOM   4133  C   PHE A 354      -7.421  13.725  -7.193  1.00 22.65           C
ATOM   4134  O   PHE A 354      -7.417  14.016  -5.997  1.00 23.57           O
ATOM   4135  CB  PHE A 354      -5.847  11.907  -7.972  1.00 20.06           C
ATOM   4136  CG  PHE A 354      -5.618  10.464  -8.388  1.00 22.30           C
ATOM   4137  CD1 PHE A 354      -5.505   9.460  -7.406  1.00 22.41           C
ATOM   4138  CD2 PHE A 354      -5.523  10.120  -9.754  1.00 19.69           C
ATOM   4139  CE1 PHE A 354      -5.339   8.115  -7.783  1.00 22.82           C
ATOM   4140  CE2 PHE A 354      -5.348   8.774 -10.132  1.00 19.35           C
ATOM   4141  CZ  PHE A 354      -5.271   7.770  -9.147  1.00 19.73           C
ATOM   4142  H   PHE A 354      -7.709  11.454  -9.569  1.00  0.00           H
ATOM   4143  HA  PHE A 354      -7.657  11.647  -6.825  1.00  0.00           H
ATOM   4144  HB2 PHE A 354      -5.462  12.564  -8.754  1.00  0.00           H
ATOM   4145  HB3 PHE A 354      -5.226  12.107  -7.096  1.00  0.00           H
ATOM   4146  HD1 PHE A 354      -5.553   9.714  -6.357  1.00  0.00           H
ATOM   4147  HD2 PHE A 354      -5.581  10.878 -10.524  1.00  0.00           H
ATOM   4148  HE1 PHE A 354      -5.259   7.349  -7.025  1.00  0.00           H
ATOM   4149  HE2 PHE A 354      -5.268   8.516 -11.180  1.00  0.00           H
ATOM   4150  HZ  PHE A 354      -5.142   6.736  -9.434  1.00  0.00           H
ATOM   4151  N   PHE A 355      -7.545  14.633  -8.163  1.00 22.12           N
ATOM   4152  CA  PHE A 355      -7.643  16.066  -7.959  1.00 21.19           C
ATOM   4153  C   PHE A 355      -9.104  16.521  -7.872  1.00 20.42           C
ATOM   4154  O   PHE A 355      -9.403  17.441  -7.115  1.00 20.48           O
ATOM   4155  CB  PHE A 355      -7.003  16.738  -9.184  1.00 22.36           C
ATOM   4156  CG  PHE A 355      -5.561  16.327  -9.428  1.00 24.02           C
ATOM   4157  CD1 PHE A 355      -4.633  16.332  -8.367  1.00 22.48           C
ATOM   4158  CD2 PHE A 355      -5.145  15.924 -10.712  1.00 24.49           C
ATOM   4159  CE1 PHE A 355      -3.308  15.927  -8.583  1.00 22.98           C
ATOM   4160  CE2 PHE A 355      -3.806  15.553 -10.938  1.00 25.14           C
ATOM   4161  CZ  PHE A 355      -2.884  15.567  -9.874  1.00 26.02           C
ATOM   4162  H   PHE A 355      -7.545  14.296  -9.124  1.00  0.00           H
ATOM   4163  HA  PHE A 355      -7.131  16.363  -7.046  1.00  0.00           H
ATOM   4164  HB2 PHE A 355      -7.589  16.531 -10.083  1.00  0.00           H
ATOM   4165  HB3 PHE A 355      -7.028  17.816  -9.051  1.00  0.00           H
ATOM   4166  HD1 PHE A 355      -4.925  16.657  -7.381  1.00  0.00           H
ATOM   4167  HD2 PHE A 355      -5.852  15.899 -11.526  1.00  0.00           H
ATOM   4168  HE1 PHE A 355      -2.625  15.905  -7.750  1.00  0.00           H
ATOM   4169  HE2 PHE A 355      -3.490  15.246 -11.925  1.00  0.00           H
ATOM   4170  HZ  PHE A 355      -1.853  15.296 -10.047  1.00  0.00           H
ATOM   4171  N   TYR A 356     -10.003  15.873  -8.622  1.00 19.12           N
ATOM   4172  CA  TYR A 356     -11.417  16.229  -8.754  1.00 18.71           C
ATOM   4173  C   TYR A 356     -12.234  15.868  -7.516  1.00 20.13           C
ATOM   4174  O   TYR A 356     -13.230  16.519  -7.220  1.00 17.47           O
ATOM   4175  CB  TYR A 356     -12.026  15.382  -9.885  1.00 17.74           C
ATOM   4176  CG  TYR A 356     -11.603  15.661 -11.307  1.00 21.18           C
ATOM   4177  CD1 TYR A 356     -10.899  16.827 -11.666  1.00 20.84           C
ATOM   4178  CD2 TYR A 356     -11.941  14.720 -12.296  1.00 21.61           C
ATOM   4179  CE1 TYR A 356     -10.468  17.007 -12.990  1.00 22.87           C
ATOM   4180  CE2 TYR A 356     -11.532  14.915 -13.624  1.00 22.71           C
ATOM   4181  CZ  TYR A 356     -10.757  16.038 -13.965  1.00 24.04           C
ATOM   4182  OH  TYR A 356     -10.259  16.171 -15.225  1.00 25.85           O
ATOM   4183  H   TYR A 356      -9.674  15.078  -9.154  1.00  0.00           H
ATOM   4184  HA  TYR A 356     -11.535  17.298  -8.935  1.00  0.00           H
ATOM   4185  HB2 TYR A 356     -11.851  14.323  -9.685  1.00  0.00           H
ATOM   4186  HB3 TYR A 356     -13.102  15.493  -9.873  1.00  0.00           H
ATOM   4187  HD1 TYR A 356     -10.662  17.584 -10.938  1.00  0.00           H
ATOM   4188  HD2 TYR A 356     -12.484  13.822 -12.043  1.00  0.00           H
ATOM   4189  HE1 TYR A 356      -9.899  17.882 -13.249  1.00  0.00           H
ATOM   4190  HE2 TYR A 356     -11.787  14.171 -14.363  1.00  0.00           H
ATOM   4191  HH  TYR A 356     -10.143  15.302 -15.624  1.00  0.00           H
ATOM   4192  N   GLU A 357     -11.848  14.791  -6.841  1.00 19.72           N
ATOM   4193  CA  GLU A 357     -12.397  14.329  -5.586  1.00 19.69           C
ATOM   4194  C   GLU A 357     -11.178  14.267  -4.661  1.00 21.19           C
ATOM   4195  O   GLU A 357     -10.466  15.271  -4.536  1.00 22.16           O
ATOM   4196  CB  GLU A 357     -13.187  13.020  -5.828  1.00 19.32           C
ATOM   4197  CG  GLU A 357     -14.532  13.259  -6.561  1.00 20.09           C
ATOM   4198  CD  GLU A 357     -14.826  12.299  -7.708  1.00 23.06           C
ATOM   4199  OE1 GLU A 357     -14.546  11.085  -7.601  1.00 20.05           O
ATOM   4200  OE2 GLU A 357     -15.376  12.777  -8.725  1.00 23.66           O1-
ATOM   4201  H   GLU A 357     -11.039  14.285  -7.192  1.00  0.00           H
ATOM   4202  HA  GLU A 357     -13.067  15.071  -5.148  1.00  0.00           H
ATOM   4203  HB2 GLU A 357     -12.559  12.321  -6.379  1.00  0.00           H
ATOM   4204  HB3 GLU A 357     -13.413  12.540  -4.878  1.00  0.00           H
ATOM   4205  HG2 GLU A 357     -15.357  13.227  -5.854  1.00  0.00           H
ATOM   4206  HG3 GLU A 357     -14.563  14.264  -6.974  1.00  0.00           H
ATOM   4207  N   ARG A 358     -10.909  13.131  -4.021  1.00 19.68           N
ATOM   4208  CA  ARG A 358      -9.712  12.915  -3.226  1.00 19.97           C
ATOM   4209  C   ARG A 358      -9.428  11.417  -3.212  1.00 20.10           C
ATOM   4210  O   ARG A 358      -9.418  10.807  -2.145  1.00 19.00           O
ATOM   4211  CB  ARG A 358      -9.857  13.573  -1.838  1.00 19.86           C
ATOM   4212  CG  ARG A 358      -8.588  13.534  -0.963  1.00 19.86           C
ATOM   4213  CD  ARG A 358      -8.838  12.974   0.445  1.00 19.26           C
ATOM   4214  NE  ARG A 358      -9.018  11.518   0.406  1.00 20.24           N
ATOM   4215  CZ  ARG A 358      -8.940  10.669   1.435  1.00 19.04           C
ATOM   4216  NH1 ARG A 358      -8.797  11.101   2.687  1.00 17.28           N
ATOM   4217  NH2 ARG A 358      -8.999   9.366   1.201  1.00 18.85           N1+
ATOM   4218  H   ARG A 358     -11.532  12.334  -4.122  1.00  0.00           H
ATOM   4219  HA  ARG A 358      -8.864  13.379  -3.735  1.00  0.00           H
ATOM   4220  HB2 ARG A 358     -10.147  14.616  -1.963  1.00  0.00           H
ATOM   4221  HB3 ARG A 358     -10.688  13.094  -1.319  1.00  0.00           H
ATOM   4222  HG2 ARG A 358      -7.797  12.957  -1.445  1.00  0.00           H
ATOM   4223  HG3 ARG A 358      -8.183  14.543  -0.885  1.00  0.00           H
ATOM   4224  HD2 ARG A 358      -7.959  13.179   1.048  1.00  0.00           H
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ATOM   4225  HD3 ARG A 358      -9.682  13.453   0.938  1.00  0.00           H
ATOM   4226  HE  ARG A 358      -9.159  11.130  -0.542  1.00  0.00           H
ATOM   4227 HH11 ARG A 358      -8.928  12.081   2.959  1.00  0.00           H
ATOM   4228 HH12 ARG A 358      -8.585  10.450   3.440  1.00  0.00           H
ATOM   4229 HH21 ARG A 358      -9.196   8.959   0.274  1.00  0.00           H
ATOM   4230 HH22 ARG A 358      -8.930   8.687   1.959  1.00  0.00           H
ATOM   4231  N   TRP A 359      -9.255  10.819  -4.396  1.00 19.26           N
ATOM   4232  CA  TRP A 359      -9.009   9.387  -4.550  1.00 19.61           C
ATOM   4233  C   TRP A 359      -7.667   9.012  -3.912  1.00 18.49           C
ATOM   4234  O   TRP A 359      -6.672   9.711  -4.110  1.00 21.29           O
ATOM   4235  CB  TRP A 359      -8.969   8.990  -6.040  1.00 19.93           C
ATOM   4236  CG  TRP A 359     -10.173   9.228  -6.901  1.00 23.18           C
ATOM   4237  CD1 TRP A 359     -11.347   9.795  -6.536  1.00 23.43           C
ATOM   4238  CD2 TRP A 359     -10.316   8.903  -8.315  1.00 22.00           C
ATOM   4239  NE1 TRP A 359     -12.190   9.868  -7.626  1.00 26.12           N
ATOM   4240  CE3 TRP A 359      -9.477   8.303  -9.284  1.00 22.65           C
ATOM   4241  CE2 TRP A 359     -11.605   9.332  -8.751  1.00 24.16           C
ATOM   4242  CZ3 TRP A 359      -9.911   8.138 -10.615  1.00 21.38           C
ATOM   4243  CZ2 TRP A 359     -12.029   9.182 -10.080  1.00 24.29           C
ATOM   4244  CH2 TRP A 359     -11.185   8.567 -11.015  1.00 23.99           C
ATOM   4245  H   TRP A 359      -9.279  11.386  -5.229  1.00  0.00           H
ATOM   4246  HA  TRP A 359      -9.810   8.846  -4.047  1.00  0.00           H
ATOM   4247  HB2 TRP A 359      -8.133   9.485  -6.529  1.00  0.00           H
ATOM   4248  HB3 TRP A 359      -8.738   7.926  -6.115  1.00  0.00           H
ATOM   4249  HD1 TRP A 359     -11.574  10.156  -5.545  1.00  0.00           H
ATOM   4250  HE1 TRP A 359     -13.123  10.343  -7.600  1.00  0.00           H
ATOM   4251  HE3 TRP A 359      -8.486   7.976  -9.001  1.00  0.00           H
ATOM   4252  HZ3 TRP A 359      -9.268   7.700 -11.353  1.00  0.00           H
ATOM   4253  HZ2 TRP A 359     -12.993   9.533 -10.388  1.00  0.00           H
ATOM   4254  HH2 TRP A 359     -11.498   8.450 -12.041  1.00  0.00           H
ATOM   4255  N   GLY A 360      -7.649   7.900  -3.181  1.00 20.56           N
ATOM   4256  CA  GLY A 360      -6.483   7.397  -2.483  1.00 19.56           C
ATOM   4257  C   GLY A 360      -5.864   6.250  -3.276  1.00 19.97           C
ATOM   4258  O   GLY A 360      -6.568   5.496  -3.949  1.00 19.92           O
ATOM   4259  H   GLY A 360      -8.523   7.426  -3.000  1.00  0.00           H
ATOM   4260  HA2 GLY A 360      -5.759   8.184  -2.291  1.00  0.00           H
ATOM   4261  HA3 GLY A 360      -6.797   7.020  -1.510  1.00  0.00           H
ATOM   4262  N   ASP A 361      -4.543   6.093  -3.172  1.00 18.87           N
ATOM   4263  CA  ASP A 361      -3.780   5.009  -3.796  1.00 20.81           C
ATOM   4264  C   ASP A 361      -4.129   3.633  -3.196  1.00 20.03           C
ATOM   4265  O   ASP A 361      -4.042   2.631  -3.902  1.00 22.19           O
ATOM   4266  CB  ASP A 361      -2.261   5.274  -3.653  1.00 21.93           C
ATOM   4267  CG  ASP A 361      -1.750   5.283  -2.221  1.00 21.87           C
ATOM   4268  OD1 ASP A 361      -1.914   6.320  -1.545  1.00 25.70           O
ATOM   4269  OD2 ASP A 361      -1.264   4.240  -1.742  1.00 23.34           O1-
ATOM   4270  H   ASP A 361      -4.020   6.756  -2.614  1.00  0.00           H
ATOM   4271  HA  ASP A 361      -4.043   4.980  -4.850  1.00  0.00           H
ATOM   4272  HB2 ASP A 361      -1.712   4.513  -4.205  1.00  0.00           H
ATOM   4273  HB3 ASP A 361      -2.001   6.224  -4.116  1.00  0.00           H
ATOM   4274  N   ALA A 362      -4.541   3.570  -1.923  1.00 20.12           N
ATOM   4275  CA  ALA A 362      -4.905   2.341  -1.220  1.00 19.36           C
ATOM   4276  C   ALA A 362      -6.090   1.584  -1.866  1.00 19.28           C
ATOM   4277  O   ALA A 362      -5.889   0.424  -2.239  1.00 17.72           O
ATOM   4278  CB  ALA A 362      -5.119   2.636   0.267  1.00 20.36           C
ATOM   4279  H   ALA A 362      -4.564   4.437  -1.406  1.00  0.00           H
ATOM   4280  HA  ALA A 362      -4.036   1.685  -1.292  1.00  0.00           H
ATOM   4281  HB1 ALA A 362      -5.071   1.718   0.839  1.00  0.00           H
ATOM   4282  HB2 ALA A 362      -4.326   3.263   0.657  1.00  0.00           H
ATOM   4283  HB3 ALA A 362      -6.064   3.125   0.487  1.00  0.00           H
ATOM   4284  N   PRO A 363      -7.275   2.199  -2.118  1.00 17.22           N
ATOM   4285  CA  PRO A 363      -8.316   1.582  -2.954  1.00 17.69           C
ATOM   4286  C   PRO A 363      -7.888   1.274  -4.400  1.00 17.56           C
ATOM   4287  O   PRO A 363      -8.185   0.177  -4.865  1.00 18.84           O
ATOM   4288  CB  PRO A 363      -9.553   2.485  -2.844  1.00 18.18           C
ATOM   4289  CG  PRO A 363      -9.028   3.826  -2.365  1.00 20.02           C
ATOM   4290  CD  PRO A 363      -7.731   3.501  -1.620  1.00 17.04           C
ATOM   4291  HA  PRO A 363      -8.575   0.623  -2.510  1.00  0.00           H
ATOM   4292  HB2 PRO A 363     -10.121   2.562  -3.773  1.00  0.00           H
ATOM   4293  HB3 PRO A 363     -10.228   2.080  -2.089  1.00  0.00           H
ATOM   4294  HG2 PRO A 363      -8.810   4.453  -3.229  1.00  0.00           H
ATOM   4295  HG3 PRO A 363      -9.741   4.367  -1.743  1.00  0.00           H
ATOM   4296  HD2 PRO A 363      -7.000   4.298  -1.704  1.00  0.00           H
ATOM   4297  HD3 PRO A 363      -7.971   3.395  -0.561  1.00  0.00           H
ATOM   4298  N   VAL A 364      -7.131   2.150  -5.081  1.00 15.81           N
ATOM   4299  CA  VAL A 364      -6.581   1.906  -6.427  1.00 13.67           C
ATOM   4300  C   VAL A 364      -5.665   0.658  -6.461  1.00 15.13           C
ATOM   4301  O   VAL A 364      -5.806  -0.193  -7.338  1.00 12.77           O
ATOM   4302  CB  VAL A 364      -5.876   3.198  -6.933  1.00 16.16           C
ATOM   4303  CG1 VAL A 364      -5.097   3.024  -8.250  1.00 13.85           C
ATOM   4304  CG2 VAL A 364      -6.882   4.352  -7.096  1.00 15.04           C
ATOM   4305  H   VAL A 364      -6.918   3.041  -4.652  1.00  0.00           H
ATOM   4306  HA  VAL A 364      -7.419   1.690  -7.094  1.00  0.00           H
ATOM   4307  HB  VAL A 364      -5.147   3.502  -6.184  1.00  0.00           H
ATOM   4308 HG11 VAL A 364      -4.685   3.974  -8.589  1.00  0.00           H
ATOM   4309 HG12 VAL A 364      -4.260   2.334  -8.149  1.00  0.00           H
ATOM   4310 HG13 VAL A 364      -5.743   2.648  -9.041  1.00  0.00           H
ATOM   4311 HG21 VAL A 364      -6.379   5.273  -7.388  1.00  0.00           H
ATOM   4312 HG22 VAL A 364      -7.623   4.121  -7.862  1.00  0.00           H
ATOM   4313 HG23 VAL A 364      -7.420   4.560  -6.174  1.00  0.00           H
ATOM   4314  N   HIS A 365      -4.783   0.496  -5.461  1.00 14.05           N
ATOM   4315  CA  HIS A 365      -3.933  -0.688  -5.301  1.00 17.18           C
ATOM   4316  C   HIS A 365      -4.765  -1.939  -4.992  1.00 16.98           C
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ATOM   4317  O   HIS A 365     -4.403  -3.023  -5.433  1.00 19.79          O
ATOM   4318  CB  HIS A 365     -2.940  -0.533  -4.130  1.00 16.11          C
ATOM   4319  CG  HIS A 365     -1.799   0.437  -4.289  1.00 19.71          C
ATOM   4320  ND1 HIS A 365     -0.763   0.434  -3.377  1.00 19.57          N1+
ATOM   4321  CD2 HIS A 365     -1.528   1.447  -5.195  1.00 18.63          C
ATOM   4322  CE1 HIS A 365      0.081   1.395  -3.708  1.00 21.02          C
ATOM   4323  NE2 HIS A 365     -0.339   2.039  -4.789  1.00 20.54          N
ATOM   4324  H   HIS A 365     -4.694   1.253  -4.784  1.00  0.00          H
ATOM   4325  HA  HIS A 365     -3.381  -0.865  -6.227  1.00  0.00          H
ATOM   4326  HB2 HIS A 365     -3.472  -0.272  -3.215  1.00  0.00          H
ATOM   4327  HB3 HIS A 365     -2.474  -1.501  -3.930  1.00  0.00          H
ATOM   4328  HD1 HIS A 365     -0.624  -0.221  -2.557  1.00  0.00          H
ATOM   4329  HD2 HIS A 365     -2.081   1.808  -6.051  1.00  0.00          H
ATOM   4330  HE1 HIS A 365      0.979   1.627  -3.149  1.00  0.00          H
ATOM   4331  HE2 HIS A 365      0.114   2.894  -5.146  1.00  0.00          H
ATOM   4332  N   SER A 366     -5.868  -1.801  -4.248  1.00 18.87          N
ATOM   4333  CA  SER A 366     -6.689  -2.925  -3.808  1.00 18.88          C
ATOM   4334  C   SER A 366     -7.602  -3.420  -4.930  1.00 19.48          C
ATOM   4335  O   SER A 366     -7.699  -4.629  -5.131  1.00 17.62          O
ATOM   4336  CB  SER A 366     -7.576  -2.474  -2.644  1.00 18.94          C
ATOM   4337  OG  SER A 366     -6.757  -2.082  -1.564  1.00 19.20          O
ATOM   4338  H   SER A 366     -6.126  -0.871  -3.945  1.00  0.00          H
ATOM   4339  HA  SER A 366     -6.052  -3.752  -3.494  1.00  0.00          H
ATOM   4340  HB2 SER A 366     -8.240  -1.656  -2.927  1.00  0.00          H
ATOM   4341  HB3 SER A 366     -8.212  -3.299  -2.318  1.00  0.00          H
ATOM   4342  HG  SER A 366     -6.239  -1.319  -1.829  1.00  0.00          H
ATOM   4343  N   ILE A 367     -8.230  -2.504  -5.685  1.00 19.28          N
ATOM   4344  CA  ILE A 367     -9.028  -2.809  -6.873  1.00 18.73          C
ATOM   4345  C   ILE A 367     -8.150  -3.504  -7.931  1.00 19.02          C
ATOM   4346  O   ILE A 367     -8.601  -4.449  -8.570  1.00 20.14          O
ATOM   4347  CB  ILE A 367     -9.747  -1.526  -7.389  1.00 16.72          C
ATOM   4348  CG1 ILE A 367    -10.780  -1.006  -6.354  1.00 15.35          C
ATOM   4349  CG2 ILE A 367    -10.445  -1.730  -8.753  1.00 14.85          C
ATOM   4350  CD1 ILE A 367    -11.184   0.462  -6.559  1.00 15.61          C
ATOM   4351  H   ILE A 367     -8.104  -1.517  -5.463  1.00  0.00          H
ATOM   4352  HA  ILE A 367     -9.787  -3.527  -6.578  1.00  0.00          H
ATOM   4353  HB  ILE A 367     -8.983  -0.757  -7.527  1.00  0.00          H
ATOM   4354 HG12 ILE A 367    -11.668  -1.639  -6.365  1.00  0.00          H
ATOM   4355 HG13 ILE A 367    -10.385  -1.093  -5.342  1.00  0.00          H
ATOM   4356 HG21 ILE A 367    -10.980  -0.837  -9.069  1.00  0.00          H
ATOM   4357 HG22 ILE A 367     -9.728  -1.947  -9.545  1.00  0.00          H
ATOM   4358 HG23 ILE A 367    -11.160  -2.553  -8.717  1.00  0.00          H
ATOM   4359 HD11 ILE A 367    -11.858   0.789  -5.766  1.00  0.00          H
ATOM   4360 HD12 ILE A 367    -10.309   1.112  -6.535  1.00  0.00          H
ATOM   4361 HD13 ILE A 367    -11.690   0.623  -7.510  1.00  0.00          H
ATOM   4362  N   ALA A 368     -6.878  -3.104  -8.044  1.00 17.53          N
ATOM   4363  CA  ALA A 368     -5.896  -3.774  -8.877  1.00 16.44          C
ATOM   4364  C   ALA A 368     -5.457  -5.129  -8.294  1.00 18.86          C
ATOM   4365  O   ALA A 368     -5.603  -6.146  -8.963  1.00 20.08          O
ATOM   4366  CB  ALA A 368     -4.677  -2.866  -9.008  1.00 16.29          C
ATOM   4367  H   ALA A 368     -6.590  -2.279  -7.533  1.00  0.00          H
ATOM   4368  HA  ALA A 368     -6.324  -3.947  -9.867  1.00  0.00          H
ATOM   4369  HB1 ALA A 368     -3.891  -3.390  -9.544  1.00  0.00          H
ATOM   4370  HB2 ALA A 368     -4.935  -1.967  -9.567  1.00  0.00          H
ATOM   4371  HB3 ALA A 368     -4.274  -2.561  -8.043  1.00  0.00          H
ATOM   4372  N   ALA A 369     -4.940  -5.180  -7.057  1.00 18.52          N
ATOM   4373  CA  ALA A 369     -4.373  -6.389  -6.442  1.00 20.68          C
ATOM   4374  C   ALA A 369     -5.391  -7.521  -6.240  1.00 20.05          C
ATOM   4375  O   ALA A 369     -5.001  -8.682  -6.178  1.00 18.61          O
ATOM   4376  CB  ALA A 369     -3.743  -6.043  -5.082  1.00 20.85          C
ATOM   4377  H   ALA A 369     -4.851  -4.312  -6.532  1.00  0.00          H
ATOM   4378  HA  ALA A 369     -3.591  -6.772  -7.101  1.00  0.00          H
ATOM   4379  HB1 ALA A 369     -3.378  -6.938  -4.574  1.00  0.00          H
ATOM   4380  HB2 ALA A 369     -2.890  -5.378  -5.194  1.00  0.00          H
ATOM   4381  HB3 ALA A 369     -4.458  -5.556  -4.419  1.00  0.00          H
ATOM   4382  N   ALA A 370     -6.686  -7.200  -6.156  1.00 20.81          N
ATOM   4383  CA  ALA A 370     -7.757  -8.180  -6.061  1.00 23.03          C
ATOM   4384  C   ALA A 370     -8.241  -8.668  -7.440  1.00 24.19          C
ATOM   4385  O   ALA A 370     -8.959  -9.664  -7.481  1.00 25.96          O
ATOM   4386  CB  ALA A 370     -8.944  -7.515  -5.351  1.00 24.55          C
ATOM   4387  H   ALA A 370     -6.936  -6.216  -6.149  1.00  0.00          H
ATOM   4388  HA  ALA A 370     -7.435  -9.046  -5.483  1.00  0.00          H
ATOM   4389  HB1 ALA A 370     -9.806  -8.177  -5.290  1.00  0.00          H
ATOM   4390  HB2 ALA A 370     -8.680  -7.226  -4.333  1.00  0.00          H
ATOM   4391  HB3 ALA A 370     -9.256  -6.617  -5.878  1.00  0.00          H
ATOM   4392  N   LEU A 371     -7.892  -7.998  -8.550  1.00 24.56          N
ATOM   4393  CA  LEU A 371     -8.392  -8.305  -9.898  1.00 24.21          C
ATOM   4394  C   LEU A 371     -7.286  -8.661 -10.896  1.00 24.41          C
ATOM   4395  O   LEU A 371     -7.551  -9.389 -11.850  1.00 21.31          O
ATOM   4396  CB  LEU A 371     -9.229  -7.131 -10.449  1.00 24.83          C
ATOM   4397  CG  LEU A 371    -10.494  -6.775  -9.641  1.00 27.38          C
ATOM   4398  CD1 LEU A 371    -11.239  -5.595 -10.286  1.00 25.79          C
ATOM   4399  CD2 LEU A 371    -11.446  -7.960  -9.434  1.00 27.66          C
ATOM   4400  H   LEU A 371     -7.278  -7.197  -8.450  1.00  0.00          H
ATOM   4401  HA  LEU A 371     -9.025  -9.189  -9.877  1.00  0.00          H
ATOM   4402  HB2 LEU A 371     -8.590  -6.248 -10.520  1.00  0.00          H
ATOM   4403  HB3 LEU A 371     -9.519  -7.348 -11.477  1.00  0.00          H
ATOM   4404  HG  LEU A 371    -10.165  -6.456  -8.655  1.00  0.00          H
ATOM   4405 HD11 LEU A 371    -12.074  -5.268  -9.667  1.00  0.00          H
ATOM   4406 HD12 LEU A 371    -10.577  -4.738 -10.417  1.00  0.00          H
ATOM   4407 HD13 LEU A 371    -11.632  -5.864 -11.267  1.00  0.00          H
ATOM   4408 HD21 LEU A 371    -12.353  -7.635  -8.932  1.00  0.00          H
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ATOM   4409 HD22 LEU A 371     -11.726  -8.426 -10.378  1.00  0.00          H
ATOM   4410 HD23 LEU A 371     -11.007  -8.724  -8.797  1.00  0.00          H
ATOM   4411  N   PHE A 372      -6.071  -8.138 -10.713  1.00 22.29          N
ATOM   4412  CA  PHE A 372      -4.926  -8.312 -11.611  1.00 20.76          C
ATOM   4413  C   PHE A 372      -3.921  -9.307 -11.014  1.00 22.10          C
ATOM   4414  O   PHE A 372      -2.806  -9.441 -11.513  1.00 20.77          O
ATOM   4415  CB  PHE A 372      -4.222  -6.952 -11.830  1.00 20.58          C
ATOM   4416  CG  PHE A 372      -5.081  -5.808 -12.352  1.00 20.46          C
ATOM   4417  CD1 PHE A 372      -6.322  -6.033 -12.990  1.00 19.24          C
ATOM   4418  CD2 PHE A 372      -4.634  -4.485 -12.163  1.00 17.33          C
ATOM   4419  CE1 PHE A 372      -7.147  -4.951 -13.339  1.00 21.85          C
ATOM   4420  CE2 PHE A 372      -5.449  -3.402 -12.537  1.00 20.11          C
ATOM   4421  CZ  PHE A 372      -6.714  -3.634 -13.106  1.00 20.51          C
ATOM   4422  H   PHE A 372      -5.943  -7.463  -9.960  1.00  0.00          H
ATOM   4423  HA  PHE A 372      -5.250  -8.714 -12.571  1.00  0.00          H
ATOM   4424  HB2 PHE A 372      -3.767  -6.630 -10.892  1.00  0.00          H
ATOM   4425  HB3 PHE A 372      -3.390  -7.069 -12.525  1.00  0.00          H
ATOM   4426  HD1 PHE A 372      -6.675  -7.033 -13.195  1.00  0.00          H
ATOM   4427  HD2 PHE A 372      -3.670  -4.301 -11.713  1.00  0.00          H
ATOM   4428  HE1 PHE A 372      -8.112  -5.139 -13.785  1.00  0.00          H
ATOM   4429  HE2 PHE A 372      -5.110  -2.391 -12.377  1.00  0.00          H
ATOM   4430  HZ  PHE A 372      -7.346  -2.802 -13.380  1.00  0.00          H
ATOM   4431  N   LEU A 373      -4.314 -10.019  -9.958  1.00 21.49          N
ATOM   4432  CA  LEU A 373      -3.643 -11.203  -9.458  1.00 22.37          C
ATOM   4433  C   LEU A 373      -4.674 -12.333  -9.398  1.00 22.61          C
ATOM   4434  O   LEU A 373      -5.825 -12.064  -9.034  1.00 21.20          O
ATOM   4435  CB  LEU A 373      -3.094 -10.953  -8.037  1.00 21.57          C
ATOM   4436  CG  LEU A 373      -1.877 -10.013  -7.941  1.00 21.65          C
ATOM   4437  CD1 LEU A 373      -1.533  -9.732  -6.469  1.00 25.02          C
ATOM   4438  CD2 LEU A 373      -0.653 -10.578  -8.677  1.00 24.25          C
ATOM   4439  H   LEU A 373      -5.268  -9.898  -9.646  1.00  0.00          H
ATOM   4440  HA  LEU A 373      -2.841 -11.483 -10.137  1.00  0.00          H
ATOM   4441  HB2 LEU A 373      -3.902 -10.570  -7.415  1.00  0.00          H
ATOM   4442  HB3 LEU A 373      -2.836 -11.910  -7.590  1.00  0.00          H
ATOM   4443  HG  LEU A 373      -2.141  -9.061  -8.404  1.00  0.00          H
ATOM   4444 HD11 LEU A 373      -0.672  -9.071  -6.383  1.00  0.00          H
ATOM   4445 HD12 LEU A 373      -2.365  -9.247  -5.957  1.00  0.00          H
ATOM   4446 HD13 LEU A 373      -1.301 -10.648  -5.926  1.00  0.00          H
ATOM   4447 HD21 LEU A 373       0.209  -9.932  -8.529  1.00  0.00          H
ATOM   4448 HD22 LEU A 373      -0.390 -11.573  -8.322  1.00  0.00          H
ATOM   4449 HD23 LEU A 373      -0.816 -10.634  -9.754  1.00  0.00          H
ATOM   4450  N   PRO A 374      -4.259 -13.597  -9.627  1.00 23.37          N
ATOM   4451  CA  PRO A 374      -5.054 -14.756  -9.233  1.00 23.61          C
ATOM   4452  C   PRO A 374      -4.963 -14.867  -7.701  1.00 24.19          C
ATOM   4453  O   PRO A 374      -3.878 -14.694  -7.141  1.00 25.28          O
ATOM   4454  CB  PRO A 374      -4.399 -15.936  -9.972  1.00 21.86          C
ATOM   4455  CG  PRO A 374      -2.952 -15.531 -10.192  1.00 25.99          C
ATOM   4456  CD  PRO A 374      -2.980 -14.001 -10.221  1.00 23.76          C
ATOM   4457  HA  PRO A 374      -6.089 -14.611  -9.543  1.00  0.00          H
ATOM   4458  HB2 PRO A 374      -4.504 -16.890  -9.455  1.00  0.00          H
ATOM   4459  HB3 PRO A 374      -4.858 -16.044 -10.954  1.00  0.00          H
ATOM   4460  HG2 PRO A 374      -2.359 -15.892  -9.365  1.00  0.00          H
ATOM   4461  HG3 PRO A 374      -2.529 -15.961 -11.099  1.00  0.00          H
ATOM   4462  HD2 PRO A 374      -2.136 -13.585  -9.674  1.00  0.00          H
ATOM   4463  HD3 PRO A 374      -2.926 -13.635 -11.246  1.00  0.00          H
ATOM   4464  N   LYS A 375      -6.084 -15.070  -6.997  1.00 23.78          N
ATOM   4465  CA  LYS A 375      -6.209 -14.757  -5.567  1.00 23.97          C
ATOM   4466  C   LYS A 375      -5.286 -15.533  -4.600  1.00 22.75          C
ATOM   4467  O   LYS A 375      -5.178 -15.148  -3.437  1.00 21.14          O
ATOM   4468  CB  LYS A 375      -7.689 -14.808  -5.134  1.00 23.67          C
ATOM   4469  CG  LYS A 375      -8.330 -16.200  -4.972  1.00 25.99          C
ATOM   4470  CD  LYS A 375      -9.804 -16.082  -4.537  1.00 27.02          C
ATOM   4471  CE  LYS A 375     -10.272 -17.230  -3.630  1.00 27.83          C
ATOM   4472  NZ  LYS A 375     -11.579 -16.938  -3.010  1.00 29.10          N1+
ATOM   4473  H   LYS A 375      -6.954 -15.201  -7.516  1.00  0.00          H
ATOM   4474  HA  LYS A 375      -5.899 -13.714  -5.478  1.00  0.00          H
ATOM   4475  HB2 LYS A 375      -7.760 -14.288  -4.178  1.00  0.00          H
ATOM   4476  HB3 LYS A 375      -8.281 -14.216  -5.832  1.00  0.00          H
ATOM   4477  HG2 LYS A 375      -8.255 -16.768  -5.900  1.00  0.00          H
ATOM   4478  HG3 LYS A 375      -7.769 -16.758  -4.222  1.00  0.00          H
ATOM   4479  HD2 LYS A 375      -9.927 -15.150  -3.993  1.00  0.00          H
ATOM   4480  HD3 LYS A 375     -10.437 -15.993  -5.422  1.00  0.00          H
ATOM   4481  HE2 LYS A 375     -10.326 -18.164  -4.190  1.00  0.00          H
ATOM   4482  HE3 LYS A 375      -9.555 -17.395  -2.826  1.00  0.00          H
ATOM   4483  HZ1 LYS A 375     -11.724 -17.572  -2.227  1.00  0.00          H
ATOM   4484  HZ2 LYS A 375     -11.601 -16.004  -2.617  1.00  0.00          H
ATOM   4485  HZ3 LYS A 375     -12.325 -17.023  -3.680  1.00  0.00          H
ATOM   4486  N   ASP A 376      -4.573 -16.565  -5.079  1.00 22.97          N
ATOM   4487  CA  ASP A 376      -3.432 -17.211  -4.407  1.00 23.49          C
ATOM   4488  C   ASP A 376      -2.317 -16.197  -4.077  1.00 24.05          C
ATOM   4489  O   ASP A 376      -1.687 -16.285  -3.030  1.00 23.37          O
ATOM   4490  CB  ASP A 376      -2.907 -18.406  -5.267  1.00 26.21          C
ATOM   4491  CG  ASP A 376      -1.466 -18.873  -4.993  1.00 25.03          C
ATOM   4492  OD1 ASP A 376      -0.645 -18.860  -5.939  1.00 24.00          O
ATOM   4493  OD2 ASP A 376      -1.163 -19.207  -3.826  1.00 25.73          O1-
ATOM   4494  H   ASP A 376      -4.692 -16.744  -6.064  1.00  0.00          H
ATOM   4495  HA  ASP A 376      -3.777 -17.609  -3.452  1.00  0.00          H
ATOM   4496  HB2 ASP A 376      -3.565 -19.265  -5.143  1.00  0.00          H
ATOM   4497  HB3 ASP A 376      -2.953 -18.139  -6.323  1.00  0.00          H
ATOM   4498  N   LYS A 377      -2.073 -15.222  -4.959  1.00 23.50          N
ATOM   4499  CA  LYS A 377      -0.887 -14.368  -4.915  1.00 22.56          C
ATOM   4500  C   LYS A 377      -1.028 -13.162  -3.970  1.00 21.29          C
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ATOM   4501  O   LYS A 377      -0.103 -12.351  -3.880  1.00 20.97           O
ATOM   4502  CB  LYS A 377      -0.601 -13.830  -6.327  1.00 21.84           C
ATOM   4503  CG  LYS A 377      -0.590 -14.878  -7.452  1.00 23.25           C
ATOM   4504  CD  LYS A 377       0.402 -16.039  -7.306  1.00 21.18           C
ATOM   4505  CE  LYS A 377       0.197 -17.117  -8.389  1.00 22.85           C
ATOM   4506  NZ  LYS A 377       0.836 -18.382  -8.020  1.00 23.32           N1+
ATOM   4507  H   LYS A 377      -2.691 -15.135  -5.763  1.00  0.00           H
ATOM   4508  HA  LYS A 377      -0.041 -14.952  -4.573  1.00  0.00           H
ATOM   4509  HB2 LYS A 377      -1.353 -13.084  -6.575  1.00  0.00           H
ATOM   4510  HB3 LYS A 377       0.341 -13.294  -6.319  1.00  0.00           H
ATOM   4511  HG2 LYS A 377      -1.580 -15.310  -7.509  1.00  0.00           H
ATOM   4512  HG3 LYS A 377      -0.434 -14.362  -8.393  1.00  0.00           H
ATOM   4513  HD2 LYS A 377       1.431 -15.680  -7.302  1.00  0.00           H
ATOM   4514  HD3 LYS A 377       0.232 -16.498  -6.334  1.00  0.00           H
ATOM   4515  HE2 LYS A 377      -0.864 -17.337  -8.503  1.00  0.00           H
ATOM   4516  HE3 LYS A 377       0.572 -16.791  -9.358  1.00  0.00           H
ATOM   4517  HZ1 LYS A 377       0.433 -18.661  -7.107  1.00  0.00           H
ATOM   4518  HZ2 LYS A 377       0.638 -19.101  -8.690  1.00  0.00           H
ATOM   4519  HZ3 LYS A 377       1.867 -18.263  -7.977  1.00  0.00           H
ATOM   4520  N   ILE A 378      -2.162 -13.039  -3.281  1.00 20.46           N
ATOM   4521  CA  ILE A 378      -2.452 -11.991  -2.318  1.00 19.71           C
ATOM   4522  C   ILE A 378      -2.211 -12.634  -0.936  1.00 21.20           C
ATOM   4523  O   ILE A 378      -2.719 -13.724  -0.665  1.00 23.96           O
ATOM   4524  CB  ILE A 378      -3.938 -11.542  -2.474  1.00 19.96           C
ATOM   4525  CG1 ILE A 378      -4.357 -11.298  -3.950  1.00 16.92           C
ATOM   4526  CG2 ILE A 378      -4.195 -10.269  -1.642  1.00 15.66           C
ATOM   4527  CD1 ILE A 378      -5.869 -11.131  -4.151  1.00 19.39           C
ATOM   4528  H   ILE A 378      -2.811 -13.814  -3.312  1.00  0.00           H
ATOM   4529  HA  ILE A 378      -1.797 -11.135  -2.473  1.00  0.00           H
ATOM   4530  HB  ILE A 378      -4.577 -12.338  -2.086  1.00  0.00           H
ATOM   4531 HG12 ILE A 378      -3.834 -10.428  -4.349  1.00  0.00           H
ATOM   4532 HG13 ILE A 378      -4.062 -12.132  -4.586  1.00  0.00           H
ATOM   4533 HG21 ILE A 378      -5.232  -9.945  -1.692  1.00  0.00           H
ATOM   4534 HG22 ILE A 378      -3.963 -10.430  -0.591  1.00  0.00           H
ATOM   4535 HG23 ILE A 378      -3.582  -9.438  -1.990  1.00  0.00           H
ATOM   4536 HD11 ILE A 378      -6.105 -11.078  -5.215  1.00  0.00           H
ATOM   4537 HD12 ILE A 378      -6.418 -11.976  -3.734  1.00  0.00           H
ATOM   4538 HD13 ILE A 378      -6.241 -10.216  -3.694  1.00  0.00           H
ATOM   4539  N   HIS A 379      -1.435 -11.982  -0.065  1.00 20.04           N
ATOM   4540  CA  HIS A 379      -1.075 -12.462   1.268  1.00 20.47           C
ATOM   4541  C   HIS A 379      -1.458 -11.424   2.326  1.00 21.04           C
ATOM   4542  O   HIS A 379      -1.237 -10.231   2.138  1.00 19.94           O
ATOM   4543  CB  HIS A 379       0.426 -12.804   1.312  1.00 21.51           C
ATOM   4544  CG  HIS A 379       0.899 -13.376   2.621  1.00 21.45           C
ATOM   4545  ND1 HIS A 379       0.325 -14.518   3.188  1.00 20.38           N
ATOM   4546  CD2 HIS A 379       1.907 -12.933   3.445  1.00 22.37           C
ATOM   4547  CE1 HIS A 379       0.982 -14.699   4.330  1.00 22.41           C
ATOM   4548  NE2 HIS A 379       1.937 -13.792   4.530  1.00 22.62           N
ATOM   4549  H   HIS A 379      -1.036 -11.089  -0.355  1.00  0.00           H
ATOM   4550  HA  HIS A 379      -1.625 -13.379   1.493  1.00  0.00           H
ATOM   4551  HB2 HIS A 379       0.661 -13.524   0.537  1.00  0.00           H
ATOM   4552  HB3 HIS A 379       1.027 -11.923   1.089  1.00  0.00           H
ATOM   4553  HD2 HIS A 379       2.578 -12.095   3.351  1.00  0.00           H
ATOM   4554  HE1 HIS A 379       0.760 -15.492   5.031  1.00  0.00           H
ATOM   4555  HE2 HIS A 379       2.546 -13.721   5.341  1.00  0.00           H
ATOM   4556  N   TYR A 380      -1.989 -11.885   3.458  1.00 21.37           N
ATOM   4557  CA  TYR A 380      -2.121 -11.108   4.683  1.00 21.69           C
ATOM   4558  C   TYR A 380      -1.117 -11.751   5.643  1.00 20.30           C
ATOM   4559  O   TYR A 380      -1.206 -12.955   5.893  1.00 21.92           O
ATOM   4560  CB  TYR A 380      -3.560 -11.243   5.231  1.00 19.97           C
ATOM   4561  CG  TYR A 380      -3.750 -10.791   6.670  1.00 21.86           C
ATOM   4562  CD1 TYR A 380      -3.851  -9.423   6.991  1.00 18.74           C
ATOM   4563  CD2 TYR A 380      -3.769 -11.749   7.703  1.00 19.94           C
ATOM   4564  CE1 TYR A 380      -3.934  -9.020   8.340  1.00 21.73           C
ATOM   4565  CE2 TYR A 380      -3.852 -11.342   9.046  1.00 22.01           C
ATOM   4566  CZ  TYR A 380      -3.906  -9.979   9.369  1.00 22.98           C
ATOM   4567  OH  TYR A 380      -3.941  -9.613  10.681  1.00 22.49           O
ATOM   4568  H   TYR A 380      -1.948 -12.885   3.605  1.00  0.00           H
ATOM   4569  HA  TYR A 380      -1.887 -10.052   4.539  1.00  0.00           H
ATOM   4570  HB2 TYR A 380      -4.236 -10.666   4.599  1.00  0.00           H
ATOM   4571  HB3 TYR A 380      -3.888 -12.281   5.160  1.00  0.00           H
ATOM   4572  HD1 TYR A 380      -3.840  -8.679   6.208  1.00  0.00           H
ATOM   4573  HD2 TYR A 380      -3.693 -12.801   7.469  1.00  0.00           H
ATOM   4574  HE1 TYR A 380      -4.007  -7.973   8.585  1.00  0.00           H
ATOM   4575  HE2 TYR A 380      -3.875 -12.075   9.836  1.00  0.00           H
ATOM   4576  HH  TYR A 380      -4.363  -8.762  10.848  1.00  0.00           H
ATOM   4577  N   PHE A 381      -0.177 -10.966   6.172  1.00 21.02           N
ATOM   4578  CA  PHE A 381       0.806 -11.432   7.143  1.00 22.01           C
ATOM   4579  C   PHE A 381       0.152 -11.478   8.535  1.00 21.75           C
ATOM   4580  O   PHE A 381       0.153 -10.496   9.279  1.00 21.88           O
ATOM   4581  CB  PHE A 381       1.993 -10.457   7.173  1.00 21.96           C
ATOM   4582  CG  PHE A 381       2.929 -10.532   5.983  1.00 23.44           C
ATOM   4583  CD1 PHE A 381       3.974 -11.479   5.975  1.00 24.95           C
ATOM   4584  CD2 PHE A 381       2.797  -9.630   4.912  1.00 24.30           C
ATOM   4585  CE1 PHE A 381       4.890 -11.516   4.906  1.00 24.65           C
ATOM   4586  CE2 PHE A 381       3.710  -9.670   3.845  1.00 24.16           C
ATOM   4587  CZ  PHE A 381       4.761 -10.606   3.841  1.00 22.13           C
ATOM   4588  H   PHE A 381      -0.173  -9.980   5.929  1.00  0.00           H
ATOM   4589  HA  PHE A 381       1.171 -12.428   6.888  1.00  0.00           H
ATOM   4590  HB2 PHE A 381       1.654  -9.431   7.307  1.00  0.00           H
ATOM   4591  HB3 PHE A 381       2.591 -10.692   8.049  1.00  0.00           H
ATOM   4592  HD1 PHE A 381       4.093 -12.165   6.804  1.00  0.00           H
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ATOM   4593  HD2 PHE A 381       2.012  -8.891   4.912  1.00  0.00           H
ATOM   4594  HE1 PHE A 381       5.693 -12.239   4.914  1.00  0.00           H
ATOM   4595  HE2 PHE A 381       3.616  -8.958   3.046  1.00  0.00           H
ATOM   4596  HZ  PHE A 381       5.467 -10.627   3.025  1.00  0.00           H
ATOM   4597  N   SER A 382      -0.412 -12.638   8.882  1.00 22.55           N
ATOM   4598  CA  SER A 382      -1.033 -12.936  10.170  1.00 23.85           C
ATOM   4599  C   SER A 382      -0.013 -13.207  11.288  1.00 23.18           C
ATOM   4600  O   SER A 382      -0.399 -13.358  12.443  1.00 24.66           O
ATOM   4601  CB  SER A 382      -1.911 -14.187   9.960  1.00 23.74           C
ATOM   4602  OG  SER A 382      -1.201 -15.292   9.416  1.00 23.95           O
ATOM   4603  H   SER A 382      -0.396 -13.390   8.204  1.00  0.00           H
ATOM   4604  HA  SER A 382      -1.644 -12.091  10.491  1.00  0.00           H
ATOM   4605  HB2 SER A 382      -2.385 -14.483  10.898  1.00  0.00           H
ATOM   4606  HB3 SER A 382      -2.713 -13.948   9.269  1.00  0.00           H
ATOM   4607  HG  SER A 382      -0.425 -15.442   9.941  1.00  0.00           H
ATOM   4608  N   ASP A 383       1.264 -13.309  10.925  1.00 25.17           N
ATOM   4609  CA  ASP A 383       2.455 -13.503  11.741  1.00 23.87           C
ATOM   4610  C   ASP A 383       3.088 -12.144  12.103  1.00 23.92           C
ATOM   4611  O   ASP A 383       3.871 -12.079  13.051  1.00 24.24           O
ATOM   4612  CB  ASP A 383       3.488 -14.288  10.881  1.00 23.64           C
ATOM   4613  CG  ASP A 383       3.816 -13.690   9.504  1.00 23.19           C
ATOM   4614  OD1 ASP A 383       2.857 -13.356   8.768  1.00 22.50           O
ATOM   4615  OD2 ASP A 383       5.016 -13.574   9.189  1.00 22.18           O1-
ATOM   4616  H   ASP A 383       1.497 -13.210   9.931  1.00  0.00           H
ATOM   4617  HA  ASP A 383       2.217 -14.048  12.656  1.00  0.00           H
ATOM   4618  HB2 ASP A 383       4.420 -14.398  11.438  1.00  0.00           H
ATOM   4619  HB3 ASP A 383       3.125 -15.300  10.712  1.00  0.00           H
ATOM   4620  N   ILE A 384       2.753 -11.061  11.387  1.00 22.55           N
ATOM   4621  CA  ILE A 384       3.300  -9.731  11.616  1.00 22.33           C
ATOM   4622  C   ILE A 384       2.269  -8.913  12.410  1.00 23.48           C
ATOM   4623  O   ILE A 384       1.102  -8.780  12.039  1.00 25.39           O
ATOM   4624  CB  ILE A 384       3.666  -9.048  10.265  1.00 22.93           C
ATOM   4625  CG1 ILE A 384       4.764  -9.874   9.544  1.00 21.02           C
ATOM   4626  CG2 ILE A 384       4.125  -7.581  10.443  1.00 18.69           C
ATOM   4627  CD1 ILE A 384       5.322  -9.257   8.253  1.00 22.41           C
ATOM   4628  H   ILE A 384       2.063 -11.170  10.657  1.00  0.00           H
ATOM   4629  HA  ILE A 384       4.217  -9.802  12.203  1.00  0.00           H
ATOM   4630  HB  ILE A 384       2.773  -9.029   9.639  1.00  0.00           H
ATOM   4631 HG12 ILE A 384       5.587 -10.069  10.228  1.00  0.00           H
ATOM   4632 HG13 ILE A 384       4.381 -10.865   9.302  1.00  0.00           H
ATOM   4633 HG21 ILE A 384       4.337  -7.105   9.487  1.00  0.00           H
ATOM   4634 HG22 ILE A 384       3.363  -6.962  10.913  1.00  0.00           H
ATOM   4635 HG23 ILE A 384       5.026  -7.530  11.053  1.00  0.00           H
ATOM   4636 HD11 ILE A 384       5.944  -9.981   7.724  1.00  0.00           H
ATOM   4637 HD12 ILE A 384       4.525  -8.950   7.577  1.00  0.00           H
ATOM   4638 HD13 ILE A 384       5.942  -8.388   8.459  1.00  0.00           H
ATOM   4639  N   GLY A 385       2.754  -8.287  13.479  1.00 22.88           N
ATOM   4640  CA  GLY A 385       2.053  -7.327  14.306  1.00 21.82           C
ATOM   4641  C   GLY A 385       2.718  -5.982  14.053  1.00 20.82           C
ATOM   4642  O   GLY A 385       3.947  -5.885  14.024  1.00 19.73           O
ATOM   4643  H   GLY A 385       3.723  -8.448  13.702  1.00  0.00           H
ATOM   4644  HA2 GLY A 385       0.994  -7.304  14.059  1.00  0.00           H
ATOM   4645  HA3 GLY A 385       2.139  -7.593  15.359  1.00  0.00           H
ATOM   4646  N   TYR A 386       1.907  -4.957  13.815  1.00 21.09           N
ATOM   4647  CA  TYR A 386       2.277  -3.699  13.183  1.00 20.61           C
ATOM   4648  C   TYR A 386       1.304  -2.610  13.651  1.00 20.86           C
ATOM   4649  O   TYR A 386       0.206  -2.936  14.093  1.00 21.94           O
ATOM   4650  CB  TYR A 386       2.296  -3.940  11.653  1.00 21.65           C
ATOM   4651  CG  TYR A 386       2.297  -2.714  10.766  1.00 21.23           C
ATOM   4652  CD1 TYR A 386       3.504  -2.113  10.355  1.00 20.92           C
ATOM   4653  CD2 TYR A 386       1.065  -2.179  10.343  1.00 17.77           C
ATOM   4654  CE1 TYR A 386       3.472  -1.001   9.493  1.00 20.13           C
ATOM   4655  CE2 TYR A 386       1.035  -1.056   9.504  1.00 19.71           C
ATOM   4656  CZ  TYR A 386       2.238  -0.482   9.057  1.00 19.65           C
ATOM   4657  OH  TYR A 386       2.192   0.551   8.170  1.00 20.30           O
ATOM   4658  H   TYR A 386       0.915  -5.070  14.025  1.00  0.00           H
ATOM   4659  HA  TYR A 386       3.271  -3.410  13.519  1.00  0.00           H
ATOM   4660  HB2 TYR A 386       3.151  -4.559  11.386  1.00  0.00           H
ATOM   4661  HB3 TYR A 386       1.426  -4.534  11.368  1.00  0.00           H
ATOM   4662  HD1 TYR A 386       4.453  -2.514  10.681  1.00  0.00           H
ATOM   4663  HD2 TYR A 386       0.138  -2.636  10.658  1.00  0.00           H
ATOM   4664  HE1 TYR A 386       4.399  -0.566   9.154  1.00  0.00           H
ATOM   4665  HE2 TYR A 386       0.079  -0.671   9.188  1.00  0.00           H
ATOM   4666  HH  TYR A 386       2.888   0.562   7.514  1.00  0.00           H
ATOM   4667  N   HIS A 387       1.659  -1.327  13.530  1.00 19.49           N
ATOM   4668  CA  HIS A 387       0.758  -0.194  13.747  1.00 20.54           C
ATOM   4669  C   HIS A 387       1.160   0.977  12.853  1.00 18.80           C
ATOM   4670  O   HIS A 387       2.290   1.451  12.955  1.00 18.62           O
ATOM   4671  CB  HIS A 387       0.658   0.148  15.253  1.00 20.00           C
ATOM   4672  CG  HIS A 387       0.033   1.472  15.660  1.00 25.81           C
ATOM   4673  ND1 HIS A 387      -1.254   1.583  16.169  1.00 22.90           N1+
ATOM   4674  CD2 HIS A 387       0.578   2.746  15.698  1.00 23.86           C
ATOM   4675  CE1 HIS A 387      -1.435   2.844  16.532  1.00 24.18           C
ATOM   4676  NE2 HIS A 387      -0.381   3.591  16.227  1.00 25.10           N
ATOM   4677  H   HIS A 387       2.589  -1.123  13.172  1.00  0.00           H
ATOM   4678  HA  HIS A 387      -0.230  -0.498  13.409  1.00  0.00           H
ATOM   4679  HB2 HIS A 387       0.122  -0.649  15.760  1.00  0.00           H
ATOM   4680  HB3 HIS A 387       1.659   0.132  15.673  1.00  0.00           H
ATOM   4681  HD1 HIS A 387      -1.914   0.833  16.484  1.00  0.00           H
ATOM   4682  HD2 HIS A 387       1.561   3.115  15.434  1.00  0.00           H
ATOM   4683  HE1 HIS A 387      -2.314   3.195  17.054  1.00  0.00           H
ATOM   4684  HE2 HIS A 387      -0.261   4.588  16.519  1.00  0.00           H
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ATOM   4685  N   HIS A 388       0.217   1.481  12.048  1.00 18.98           N
ATOM   4686  CA  HIS A 388       0.244   2.805  11.436  1.00 18.64           C
ATOM   4687  C   HIS A 388      -0.856   3.602  12.163  1.00 20.19           C
ATOM   4688  O   HIS A 388      -1.981   3.101  12.219  1.00 20.72           O
ATOM   4689  CB  HIS A 388      -0.151   2.704   9.943  1.00  0.00           C
ATOM   4690  CG  HIS A 388      -0.330   3.954   9.127  1.00  0.00           C
ATOM   4691  ND1 HIS A 388      -1.330   4.022   8.183  1.00  0.00           N
ATOM   4692  CD2 HIS A 388       0.353   5.136   8.985  1.00  0.00           C
ATOM   4693  CE1 HIS A 388      -1.224   5.185   7.516  1.00  0.00           C
ATOM   4694  NE2 HIS A 388      -0.214   5.891   7.989  1.00  0.00           N
ATOM   4695  H   HIS A 388      -0.715   1.075  12.117  1.00  0.00           H
ATOM   4696  HA  HIS A 388       1.231   3.261  11.519  1.00  0.00           H
ATOM   4697  HB2 HIS A 388       0.635   2.095   9.498  1.00  0.00           H
ATOM   4698  HB3 HIS A 388      -1.062   2.108   9.879  1.00  0.00           H
ATOM   4699  HD1 HIS A 388      -2.028   3.315   7.972  1.00  0.00           H
ATOM   4700  HD2 HIS A 388       1.216   5.503   9.518  1.00  0.00           H
ATOM   4701  HE1 HIS A 388      -1.866   5.481   6.701  1.00  0.00           H
ATOM   4702  N   PRO A 389      -0.580   4.786  12.752  1.00 19.60           N
ATOM   4703  CA  PRO A 389      -1.570   5.582  13.497  1.00 19.62           C
ATOM   4704  C   PRO A 389      -2.915   5.787  12.756  1.00 19.23           C
ATOM   4705  O   PRO A 389      -2.877   6.239  11.608  1.00 20.06           O
ATOM   4706  CB  PRO A 389      -0.871   6.929  13.752  1.00 19.61           C
ATOM   4707  CG  PRO A 389       0.618   6.649  13.661  1.00 19.36           C
ATOM   4708  CD  PRO A 389       0.744   5.406  12.792  1.00 19.21           C
ATOM   4709  HA  PRO A 389      -1.713   5.067  14.441  1.00  0.00           H
ATOM   4710  HB2 PRO A 389      -1.134   7.666  12.990  1.00  0.00           H
ATOM   4711  HB3 PRO A 389      -1.136   7.360  14.715  1.00  0.00           H
ATOM   4712  HG2 PRO A 389       1.160   7.499  13.248  1.00  0.00           H
ATOM   4713  HG3 PRO A 389       1.027   6.449  14.650  1.00  0.00           H
ATOM   4714  HD2 PRO A 389       1.059   5.691  11.790  1.00  0.00           H
ATOM   4715  HD3 PRO A 389       1.490   4.727  13.206  1.00  0.00           H
ATOM   4716  N   PRO A 390      -4.094   5.526  13.367  1.00 19.23           N
ATOM   4717  CA  PRO A 390      -4.314   5.042  14.741  1.00 19.78           C
ATOM   4718  C   PRO A 390      -4.432   3.503  14.902  1.00 19.82           C
ATOM   4719  O   PRO A 390      -4.792   3.073  15.996  1.00 20.50           O
ATOM   4720  CB  PRO A 390      -5.673   5.668  15.102  1.00 16.45           C
ATOM   4721  CG  PRO A 390      -6.449   5.637  13.796  1.00 19.09           C
ATOM   4722  CD  PRO A 390      -5.370   5.920  12.752  1.00 19.54           C
ATOM   4723  HA  PRO A 390      -3.570   5.418  15.444  1.00  0.00           H
ATOM   4724  HB2 PRO A 390      -6.205   5.172  15.912  1.00  0.00           H
ATOM   4725  HB3 PRO A 390      -5.522   6.697  15.425  1.00  0.00           H
ATOM   4726  HG2 PRO A 390      -6.872   4.645  13.646  1.00  0.00           H
ATOM   4727  HG3 PRO A 390      -7.270   6.355  13.768  1.00  0.00           H
ATOM   4728  HD2 PRO A 390      -5.566   5.373  11.830  1.00  0.00           H
ATOM   4729  HD3 PRO A 390      -5.346   6.982  12.505  1.00  0.00           H
ATOM   4730  N   TYR A 391      -4.199   2.665  13.878  1.00 21.44           N
ATOM   4731  CA  TYR A 391      -4.662   1.267  13.850  1.00 22.01           C
ATOM   4732  C   TYR A 391      -3.534   0.232  13.786  1.00 21.91           C
ATOM   4733  O   TYR A 391      -2.520   0.419  13.108  1.00 21.23           O
ATOM   4734  CB  TYR A 391      -5.664   1.066  12.693  1.00 25.04           C
ATOM   4735  CG  TYR A 391      -6.988   1.783  12.880  1.00 26.98           C
ATOM   4736  CD1 TYR A 391      -7.688   1.630  14.092  1.00 27.76           C
ATOM   4737  CD2 TYR A 391      -7.535   2.587  11.856  1.00 28.12           C
ATOM   4738  CE1 TYR A 391      -8.907   2.289  14.294  1.00 29.80           C
ATOM   4739  CE2 TYR A 391      -8.770   3.239  12.055  1.00 28.51           C
ATOM   4740  CZ  TYR A 391      -9.451   3.090  13.279  1.00 30.11           C
ATOM   4741  OH  TYR A 391     -10.639   3.710  13.514  1.00 29.73           O
ATOM   4742  H   TYR A 391      -3.712   2.994  13.052  1.00  0.00           H
ATOM   4743  HA  TYR A 391      -5.177   1.042  14.783  1.00  0.00           H
ATOM   4744  HB2 TYR A 391      -5.217   1.370  11.751  1.00  0.00           H
ATOM   4745  HB3 TYR A 391      -5.892   0.006  12.579  1.00  0.00           H
ATOM   4746  HD1 TYR A 391      -7.312   0.991  14.876  1.00  0.00           H
ATOM   4747  HD2 TYR A 391      -7.018   2.704  10.914  1.00  0.00           H
ATOM   4748  HE1 TYR A 391      -9.421   2.161  15.233  1.00  0.00           H
ATOM   4749  HE2 TYR A 391      -9.188   3.852  11.268  1.00  0.00           H
ATOM   4750  HH  TYR A 391     -11.011   4.151  12.732  1.00  0.00           H
ATOM   4751  N   ASP A 392      -3.734  -0.866  14.526  1.00 20.65           N
ATOM   4752  CA  ASP A 392      -2.780  -1.941  14.785  1.00 21.18           C
ATOM   4753  C   ASP A 392      -3.228  -3.207  14.055  1.00 20.89           C
ATOM   4754  O   ASP A 392      -4.419  -3.500  13.988  1.00 20.18           O
ATOM   4755  CB  ASP A 392      -2.683  -2.292  16.299  1.00 22.25           C
ATOM   4756  CG  ASP A 392      -2.330  -1.128  17.213  1.00 21.58           C
ATOM   4757  OD1 ASP A 392      -3.026  -0.088  17.166  1.00 20.66           O
ATOM   4758  OD2 ASP A 392      -1.292  -1.168  17.902  1.00 21.72           O1-
ATOM   4759  H   ASP A 392      -4.604  -0.933  15.046  1.00  0.00           H
ATOM   4760  HA  ASP A 392      -1.803  -1.634  14.434  1.00  0.00           H
ATOM   4761  HB2 ASP A 392      -3.622  -2.718  16.654  1.00  0.00           H
ATOM   4762  HB3 ASP A 392      -1.936  -3.075  16.443  1.00  0.00           H
ATOM   4763  N   ASN A 393      -2.260  -3.981  13.572  1.00 20.94           N
ATOM   4764  CA  ASN A 393      -2.399  -5.389  13.209  1.00 20.94           C
ATOM   4765  C   ASN A 393      -1.792  -6.155  14.390  1.00 23.33           C
ATOM   4766  O   ASN A 393      -0.721  -5.755  14.865  1.00 20.26           O
ATOM   4767  CB  ASN A 393      -1.495  -5.678  11.981  1.00 21.01           C
ATOM   4768  CG  ASN A 393      -2.046  -6.820  11.135  1.00 21.80           C
ATOM   4769  OD1 ASN A 393      -2.996  -6.601  10.396  1.00 21.19           O
ATOM   4770  ND2 ASN A 393      -1.460  -8.011  11.165  1.00 18.99           N
ATOM   4771  H   ASN A 393      -1.310  -3.679  13.785  1.00  0.00           H
ATOM   4772  HA  ASN A 393      -3.442  -5.663  13.032  1.00  0.00           H
ATOM   4773  HB2 ASN A 393      -1.464  -4.804  11.331  1.00  0.00           H
ATOM   4774  HB3 ASN A 393      -0.456  -5.879  12.246  1.00  0.00           H
ATOM   4775 HD21 ASN A 393      -0.582  -8.216  11.644  1.00  0.00           H
ATOM   4776 HD22 ASN A 393      -1.904  -8.766  10.652  1.00  0.00           H
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ATOM   4777  N   CYS A 394     -2.402  -7.248  14.854  1.00 21.34           N
ATOM   4778  CA  CYS A 394     -1.790  -8.122  15.859  1.00 23.77           C
ATOM   4779  C   CYS A 394     -2.193  -9.591  15.647  1.00 23.91           C
ATOM   4780  O   CYS A 394     -3.395  -9.853  15.616  1.00 23.61           O
ATOM   4781  CB  CYS A 394     -2.066  -7.603  17.283  1.00 24.76           C
ATOM   4782  SG  CYS A 394     -1.155  -8.444  18.606  1.00 21.89           S
ATOM   4783  H   CYS A 394     -3.331  -7.496  14.500  1.00  0.00           H
ATOM   4784  HA  CYS A 394     -0.714  -8.043  15.734  1.00  0.00           H
ATOM   4785  HB2 CYS A 394     -1.844  -6.538  17.351  1.00  0.00           H
ATOM   4786  HB3 CYS A 394     -3.122  -7.705  17.518  1.00  0.00           H
ATOM   4787  N   PRO A 395     -1.240 -10.553  15.537  1.00 24.08           N
ATOM   4788  CA  PRO A 395     -1.515 -12.001  15.533  1.00 23.62           C
ATOM   4789  C   PRO A 395     -2.360 -12.428  16.746  1.00 23.97           C
ATOM   4790  O   PRO A 395     -1.999 -12.128  17.884  1.00 22.43           O
ATOM   4791  CB  PRO A 395     -0.134 -12.675  15.593  1.00 22.83           C
ATOM   4792  CG  PRO A 395      0.834 -11.653  15.040  1.00 22.60           C
ATOM   4793  CD  PRO A 395      0.191 -10.305  15.340  1.00 24.08           C
ATOM   4794  HA  PRO A 395     -2.014 -12.251  14.596  1.00  0.00           H
ATOM   4795  HB2 PRO A 395      0.158 -12.909  16.617  1.00  0.00           H
ATOM   4796  HB3 PRO A 395     -0.103 -13.613  15.037  1.00  0.00           H
ATOM   4797  HG2 PRO A 395      1.839 -11.761  15.447  1.00  0.00           H
ATOM   4798  HG3 PRO A 395      0.911 -11.772  13.961  1.00  0.00           H
ATOM   4799  HD2 PRO A 395      0.621  -9.888  16.250  1.00  0.00           H
ATOM   4800  HD3 PRO A 395      0.364  -9.613  14.517  1.00  0.00           H
ATOM   4801  N   LEU A 396     -3.495 -13.097  16.509  1.00 23.38           N
ATOM   4802  CA  LEU A 396     -4.469 -13.464  17.542  1.00 25.21           C
ATOM   4803  C   LEU A 396     -4.395 -14.954  17.910  1.00 27.18           C
ATOM   4804  O   LEU A 396     -5.261 -15.461  18.628  1.00 29.80           O
ATOM   4805  CB  LEU A 396     -5.897 -13.129  17.064  1.00 24.81           C
ATOM   4806  CG  LEU A 396     -6.132 -11.648  16.719  1.00 23.79           C
ATOM   4807  CD1 LEU A 396     -7.575 -11.448  16.256  1.00 23.36           C
ATOM   4808  CD2 LEU A 396     -5.795 -10.713  17.892  1.00 21.88           C
ATOM   4809  H   LEU A 396     -3.728 -13.263  15.543  1.00  0.00           H
ATOM   4810  HA  LEU A 396     -4.276 -12.917  18.466  1.00  0.00           H
ATOM   4811  HB2 LEU A 396     -6.152 -13.742  16.202  1.00  0.00           H
ATOM   4812  HB3 LEU A 396     -6.607 -13.410  17.842  1.00  0.00           H
ATOM   4813  HG  LEU A 396     -5.493 -11.368  15.881  1.00  0.00           H
ATOM   4814 HD11 LEU A 396     -7.762 -10.398  16.024  1.00  0.00           H
ATOM   4815 HD12 LEU A 396     -7.777 -12.026  15.355  1.00  0.00           H
ATOM   4816 HD13 LEU A 396     -8.285 -11.757  17.020  1.00  0.00           H
ATOM   4817 HD21 LEU A 396     -6.111  -9.693  17.682  1.00  0.00           H
ATOM   4818 HD22 LEU A 396     -6.279 -11.026  18.813  1.00  0.00           H
ATOM   4819 HD23 LEU A 396     -4.720 -10.672  18.072  1.00  0.00           H
ATOM   4820  N   ASP A 397     -3.346 -15.660  17.478  1.00 26.31           N
ATOM   4821  CA  ASP A 397     -2.969 -17.016  17.890  1.00 26.97           C
ATOM   4822  C   ASP A 397     -2.422 -16.970  19.340  1.00 27.26           C
ATOM   4823  O   ASP A 397     -2.584 -15.971  20.047  1.00 24.89           O
ATOM   4824  CB  ASP A 397     -1.884 -17.522  16.908  1.00 27.87           C
ATOM   4825  CG  ASP A 397     -0.569 -16.777  17.066  1.00 31.48           C
ATOM   4826  OD1 ASP A 397     -0.538 -15.605  16.660  1.00 33.62           O
ATOM   4827  OD2 ASP A 397      0.334 -17.331  17.722  1.00 32.96           O1-
ATOM   4828  H   ASP A 397     -2.595 -15.149  17.010  1.00  0.00           H
ATOM   4829  HA  ASP A 397     -3.837 -17.670  17.846  1.00  0.00           H
ATOM   4830  HB2 ASP A 397     -1.700 -18.586  17.055  1.00  0.00           H
ATOM   4831  HB3 ASP A 397     -2.217 -17.416  15.876  1.00  0.00           H
ATOM   4832  N   LYS A 398     -1.824 -18.058  19.828  1.00 27.55           N
ATOM   4833  CA  LYS A 398     -1.187 -18.144  21.137  1.00 28.98           C
ATOM   4834  C   LYS A 398      0.156 -18.899  21.041  1.00 28.03           C
ATOM   4835  O   LYS A 398      0.579 -19.497  22.031  1.00 27.56           O
ATOM   4836  CB  LYS A 398     -2.174 -18.720  22.194  1.00 32.65           C
ATOM   4837  CG  LYS A 398     -3.573 -18.056  22.290  1.00 38.44           C
ATOM   4838  CD  LYS A 398     -3.590 -16.660  22.948  1.00 40.86           C
ATOM   4839  CE  LYS A 398     -4.879 -15.859  22.656  1.00 42.41           C
ATOM   4840  NZ  LYS A 398     -4.746 -15.004  21.466  1.00 44.87           N1+
ATOM   4841  H   LYS A 398     -1.682 -18.880  19.226  1.00  0.00           H
ATOM   4842  HA  LYS A 398     -0.898 -17.141  21.459  1.00  0.00           H
ATOM   4843  HB2 LYS A 398     -2.315 -19.777  21.965  1.00  0.00           H
ATOM   4844  HB3 LYS A 398     -1.699 -18.701  23.176  1.00  0.00           H
ATOM   4845  HG2 LYS A 398     -4.038 -18.021  21.306  1.00  0.00           H
ATOM   4846  HG3 LYS A 398     -4.220 -18.709  22.876  1.00  0.00           H
ATOM   4847  HD2 LYS A 398     -3.491 -16.795  24.027  1.00  0.00           H
ATOM   4848  HD3 LYS A 398     -2.714 -16.075  22.660  1.00  0.00           H
ATOM   4849  HE2 LYS A 398     -5.736 -16.523  22.540  1.00  0.00           H
ATOM   4850  HE3 LYS A 398     -5.102 -15.200  23.496  1.00  0.00           H
ATOM   4851  HZ1 LYS A 398     -5.628 -14.584  21.165  1.00  0.00           H
ATOM   4852  HZ2 LYS A 398     -4.105 -14.241  21.706  1.00  0.00           H
ATOM   4853  HZ3 LYS A 398     -4.323 -15.490  20.681  1.00  0.00           H
ATOM   4854  N   GLU A 399      0.830 -18.888  19.881  1.00 29.00           N
ATOM   4855  CA  GLU A 399      1.996 -19.719  19.578  1.00 29.56           C
ATOM   4856  C   GLU A 399      3.053 -18.970  18.751  1.00 27.81           C
ATOM   4857  O   GLU A 399      4.177 -18.774  19.213  1.00 26.43           O
ATOM   4858  CB  GLU A 399      1.584 -21.081  18.968  1.00 34.33           C
ATOM   4859  CG  GLU A 399      0.510 -21.033  17.852  1.00 42.27           C
ATOM   4860  CD  GLU A 399     -0.870 -21.433  18.338  1.00 46.74           C
ATOM   4861  OE1 GLU A 399     -1.664 -20.575  18.795  1.00 49.38           O
ATOM   4862  OE2 GLU A 399     -1.211 -22.634  18.295  1.00 48.28           O1-
ATOM   4863  H   GLU A 399      0.486 -18.303  19.107  1.00  0.00           H
ATOM   4864  HA  GLU A 399      2.510 -19.948  20.515  1.00  0.00           H
ATOM   4865  HB2 GLU A 399      2.473 -21.576  18.576  1.00  0.00           H
ATOM   4866  HB3 GLU A 399      1.241 -21.733  19.774  1.00  0.00           H
ATOM   4867  HG2 GLU A 399      0.449 -20.052  17.383  1.00  0.00           H
ATOM   4868  HG3 GLU A 399      0.786 -21.727  17.058  1.00  0.00           H
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ATOM   4869  N   VAL A 400      2.684 -18.515  17.549  1.00 26.01           N
ATOM   4870  CA  VAL A 400      3.494 -17.748  16.605  1.00 24.53           C
ATOM   4871  C   VAL A 400      3.738 -16.346  17.187  1.00 24.42           C
ATOM   4872  O   VAL A 400      4.866 -15.858  17.123  1.00 22.04           O
ATOM   4873  CB  VAL A 400      2.757 -17.660  15.234  1.00 24.87           C
ATOM   4874  CG1 VAL A 400      3.561 -16.902  14.157  1.00 22.22           C
ATOM   4875  CG2 VAL A 400      2.366 -19.050  14.694  1.00 22.82           C
ATOM   4876  H   VAL A 400      1.674 -18.422  17.413  1.00  0.00           H
ATOM   4877  HA  VAL A 400      4.452 -18.253  16.475  1.00  0.00           H
ATOM   4878  HB  VAL A 400      1.831 -17.101  15.380  1.00  0.00           H
ATOM   4879 HG11 VAL A 400      3.014 -16.863  13.214  1.00  0.00           H
ATOM   4880 HG12 VAL A 400      3.755 -15.866  14.440  1.00  0.00           H
ATOM   4881 HG13 VAL A 400      4.520 -17.382  13.961  1.00  0.00           H
ATOM   4882 HG21 VAL A 400      1.875 -18.968  13.724  1.00  0.00           H
ATOM   4883 HG22 VAL A 400      3.241 -19.688  14.571  1.00  0.00           H
ATOM   4884 HG23 VAL A 400      1.669 -19.563  15.356  1.00  0.00           H
ATOM   4885  N   TYR A 401      2.718 -15.772  17.842  1.00 25.28           N
ATOM   4886  CA  TYR A 401      2.755 -14.547  18.640  1.00 27.50           C
ATOM   4887  C   TYR A 401      3.878 -14.583  19.697  1.00 27.74           C
ATOM   4888  O   TYR A 401      4.706 -13.674  19.792  1.00 28.01           O
ATOM   4889  CB  TYR A 401      1.355 -14.352  19.269  1.00 26.68           C
ATOM   4890  CG  TYR A 401      1.195 -13.210  20.260  1.00 28.89           C
ATOM   4891  CD1 TYR A 401      1.338 -13.448  21.644  1.00 27.82           C
ATOM   4892  CD2 TYR A 401      0.875 -11.913  19.807  1.00 27.03           C
ATOM   4893  CE1 TYR A 401      1.151 -12.402  22.568  1.00 26.44           C
ATOM   4894  CE2 TYR A 401      0.700 -10.867  20.734  1.00 26.20           C
ATOM   4895  CZ  TYR A 401      0.821 -11.112  22.115  1.00 27.15           C
ATOM   4896  OH  TYR A 401      0.592 -10.115  23.016  1.00 23.75           O
ATOM   4897  H   TYR A 401      1.806 -16.235  17.753  1.00  0.00           H
ATOM   4898  HA  TYR A 401      2.947 -13.722  17.958  1.00  0.00           H
ATOM   4899  HB2 TYR A 401      0.626 -14.201  18.474  1.00  0.00           H
ATOM   4900  HB3 TYR A 401      1.044 -15.272  19.765  1.00  0.00           H
ATOM   4901  HD1 TYR A 401      1.593 -14.431  22.011  1.00  0.00           H
ATOM   4902  HD2 TYR A 401      0.759 -11.712  18.750  1.00  0.00           H
ATOM   4903  HE1 TYR A 401      1.259 -12.590  23.626  1.00  0.00           H
ATOM   4904  HE2 TYR A 401      0.457  -9.877  20.385  1.00  0.00           H
ATOM   4905  HH  TYR A 401      0.448  -9.258  22.612  1.00  0.00           H
ATOM   4906  N   ASN A 402      3.938 -15.688  20.452  1.00 27.33           N
ATOM   4907  CA  ASN A 402      4.892 -15.893  21.547  1.00 29.34           C
ATOM   4908  C   ASN A 402      6.293 -16.263  21.036  1.00 27.72           C
ATOM   4909  O   ASN A 402      7.266 -16.096  21.764  1.00 27.54           O
ATOM   4910  CB  ASN A 402      4.411 -17.040  22.472  1.00 30.12           C
ATOM   4911  CG  ASN A 402      3.220 -16.652  23.349  1.00 33.27           C
ATOM   4912  OD1 ASN A 402      3.253 -15.650  24.050  1.00 33.60           O
ATOM   4913  ND2 ASN A 402      2.129 -17.408  23.330  1.00 34.63           N
ATOM   4914  H   ASN A 402      3.283 -16.423  20.239  1.00  0.00           H
ATOM   4915  HA  ASN A 402      4.989 -14.970  22.124  1.00  0.00           H
ATOM   4916  HB2 ASN A 402      4.187 -17.935  21.891  1.00  0.00           H
ATOM   4917  HB3 ASN A 402      5.212 -17.319  23.159  1.00  0.00           H
ATOM   4918 HD21 ASN A 402      2.050 -18.261  22.787  1.00  0.00           H
ATOM   4919 HD22 ASN A 402      1.379 -17.130  23.941  1.00  0.00           H
ATOM   4920  N   SER A 403      6.410 -16.748  19.794  1.00 27.84           N
ATOM   4921  CA  SER A 403      7.679 -17.151  19.187  1.00 28.74           C
ATOM   4922  C   SER A 403      8.367 -15.977  18.459  1.00 28.13           C
ATOM   4923  O   SER A 403      9.493 -16.136  17.992  1.00 27.53           O
ATOM   4924  CB  SER A 403      7.383 -18.231  18.125  1.00 28.94           C
ATOM   4925  OG  SER A 403      6.803 -19.383  18.715  1.00 35.87           O
ATOM   4926  H   SER A 403      5.572 -16.843  19.237  1.00  0.00           H
ATOM   4927  HA  SER A 403      8.366 -17.548  19.937  1.00  0.00           H
ATOM   4928  HB2 SER A 403      6.726 -17.850  17.343  1.00  0.00           H
ATOM   4929  HB3 SER A 403      8.309 -18.536  17.633  1.00  0.00           H
ATOM   4930  HG  SER A 403      5.926 -19.157  19.022  1.00  0.00           H
ATOM   4931  N   ASN A 404      7.701 -14.820  18.327  1.00 25.90           N
ATOM   4932  CA  ASN A 404      8.114 -13.714  17.455  1.00 25.37           C
ATOM   4933  C   ASN A 404      8.094 -12.361  18.168  1.00 25.69           C
ATOM   4934  O   ASN A 404      8.027 -11.327  17.510  1.00 25.02           O
ATOM   4935  CB  ASN A 404      7.355 -13.725  16.104  1.00 26.10           C
ATOM   4936  CG  ASN A 404      7.738 -14.893  15.195  1.00 26.26           C
ATOM   4937  OD1 ASN A 404      8.835 -14.948  14.644  1.00 29.36           O
ATOM   4938  ND2 ASN A 404      6.849 -15.866  15.054  1.00 28.99           N
ATOM   4939  H   ASN A 404      6.778 -14.759  18.739  1.00  0.00           H
ATOM   4940  HA  ASN A 404      9.172 -13.830  17.213  1.00  0.00           H
ATOM   4941  HB2 ASN A 404      6.278 -13.709  16.278  1.00  0.00           H
ATOM   4942  HB3 ASN A 404      7.563 -12.817  15.539  1.00  0.00           H
ATOM   4943 HD21 ASN A 404      5.984 -15.816  15.589  1.00  0.00           H
ATOM   4944 HD22 ASN A 404      7.056 -16.634  14.438  1.00  0.00           H
ATOM   4945  N   ASN A 405      8.177 -12.343  19.506  1.00 25.25           N
ATOM   4946  CA  ASN A 405      8.378 -11.154  20.358  1.00 26.77           C
ATOM   4947  C   ASN A 405      7.272 -10.098  20.164  1.00 26.11           C
ATOM   4948  O   ASN A 405      7.564  -8.905  20.101  1.00 25.19           O
ATOM   4949  CB  ASN A 405      9.759 -10.472  20.128  1.00 28.88           C
ATOM   4950  CG  ASN A 405     10.996 -11.344  20.293  1.00 29.98           C
ATOM   4951  OD1 ASN A 405     11.003 -12.320  21.035  1.00 31.34           O
ATOM   4952  ND2 ASN A 405     12.061 -11.003  19.578  1.00 32.27           N
ATOM   4953  H   ASN A 405      8.261 -13.242  19.961  1.00  0.00           H
ATOM   4954  HA  ASN A 405      8.327 -11.488  21.395  1.00  0.00           H
ATOM   4955  HB2 ASN A 405      9.776 -10.030  19.132  1.00  0.00           H
ATOM   4956  HB3 ASN A 405      9.879  -9.643  20.827  1.00  0.00           H
ATOM   4957 HD21 ASN A 405     12.019 -10.170  18.973  1.00  0.00           H
ATOM   4958 HD22 ASN A 405     12.906 -11.541  19.658  1.00  0.00           H
ATOM   4959  N   CYS A 406      6.019 -10.515  19.960  1.00 25.69           N
ATOM   4960  CA  CYS A 406      4.940  -9.636  19.516  1.00 25.23           C
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ATOM   4961  C   CYS A 406      4.448  -8.694  20.627  1.00 26.10           C
ATOM   4962  O   CYS A 406      3.531  -9.020  21.378  1.00 26.16           O
ATOM   4963  CB  CYS A 406      3.791 -10.510  19.002  1.00 27.05           C
ATOM   4964  SG  CYS A 406      4.115 -11.315  17.407  1.00 25.91           S
ATOM   4965  H   CYS A 406      5.828 -11.508  19.985  1.00  0.00           H
ATOM   4966  HA  CYS A 406      5.283  -9.013  18.693  1.00  0.00           H
ATOM   4967  HB2 CYS A 406      3.552 -11.274  19.741  1.00  0.00           H
ATOM   4968  HB3 CYS A 406      2.885  -9.916  18.878  1.00  0.00           H
ATOM   4969  N   GLU A 407      5.033  -7.491  20.685  1.00 25.27           N
ATOM   4970  CA  GLU A 407      4.731  -6.380  21.594  1.00 25.75           C
ATOM   4971  C   GLU A 407      3.352  -5.730  21.300  1.00 24.42           C
ATOM   4972  O   GLU A 407      3.257  -4.506  21.199  1.00 22.09           O
ATOM   4973  CB  GLU A 407      5.838  -5.309  21.409  1.00 29.18           C
ATOM   4974  CG  GLU A 407      7.287  -5.752  21.705  1.00 35.84           C
ATOM   4975  CD  GLU A 407      8.312  -4.930  20.927  1.00 38.75           C
ATOM   4976  OE1 GLU A 407      9.370  -5.504  20.585  1.00 41.17           O
ATOM   4977  OE2 GLU A 407      8.017  -3.754  20.616  1.00 43.63           O1-
ATOM   4978  H   GLU A 407      5.873  -7.384  20.125  1.00  0.00           H
ATOM   4979  HA  GLU A 407      4.733  -6.742  22.624  1.00  0.00           H
ATOM   4980  HB2 GLU A 407      5.780  -4.940  20.383  1.00  0.00           H
ATOM   4981  HB3 GLU A 407      5.634  -4.441  22.039  1.00  0.00           H
ATOM   4982  HG2 GLU A 407      7.501  -5.664  22.769  1.00  0.00           H
ATOM   4983  HG3 GLU A 407      7.443  -6.796  21.450  1.00  0.00           H
ATOM   4984  N   CYS A 408      2.287  -6.518  21.105  1.00 23.64           N
ATOM   4985  CA  CYS A 408      0.991  -6.047  20.622  1.00 21.06           C
ATOM   4986  C   CYS A 408     -0.192  -6.603  21.404  1.00 21.00           C
ATOM   4987  O   CYS A 408     -0.156  -7.709  21.951  1.00 19.91           O
ATOM   4988  CB  CYS A 408      0.868  -6.198  19.097  1.00 20.88           C
ATOM   4989  SG  CYS A 408      0.789  -7.860  18.369  1.00 22.25           S
ATOM   4990  H   CYS A 408      2.403  -7.516  21.267  1.00  0.00           H
ATOM   4991  HA  CYS A 408      0.943  -4.970  20.807  1.00  0.00           H
ATOM   4992  HB2 CYS A 408      0.017  -5.623  18.733  1.00  0.00           H
ATOM   4993  HB3 CYS A 408      1.744  -5.736  18.669  1.00  0.00           H
ATOM   4994  N   ASP A 409     -1.248  -5.793  21.433  1.00 17.35           N
ATOM   4995  CA  ASP A 409     -2.455  -5.941  22.224  1.00 19.95           C
ATOM   4996  C   ASP A 409     -3.436  -6.822  21.437  1.00 21.68           C
ATOM   4997  O   ASP A 409     -4.141  -6.353  20.542  1.00 21.54           O
ATOM   4998  CB  ASP A 409     -3.085  -4.533  22.439  1.00 20.43           C
ATOM   4999  CG  ASP A 409     -2.079  -3.460  22.843  1.00 23.66           C
ATOM   5000  OD1 ASP A 409     -1.816  -3.307  24.049  1.00 21.49           O
ATOM   5001  OD2 ASP A 409     -1.478  -2.851  21.923  1.00 21.32           O1-
ATOM   5002  H   ASP A 409     -1.138  -4.865  21.036  1.00  0.00           H
ATOM   5003  HA  ASP A 409     -2.211  -6.381  23.193  1.00  0.00           H
ATOM   5004  HB2 ASP A 409     -3.549  -4.167  21.524  1.00  0.00           H
ATOM   5005  HB3 ASP A 409     -3.875  -4.575  23.189  1.00  0.00           H
ATOM   5006  N   GLN A 410     -3.544  -8.109  21.797  1.00 19.59           N
ATOM   5007  CA  GLN A 410     -4.446  -9.093  21.172  1.00 20.13           C
ATOM   5008  C   GLN A 410     -5.952  -8.834  21.437  1.00 21.87           C
ATOM   5009  O   GLN A 410     -6.797  -9.654  21.067  1.00 20.41           O
ATOM   5010  CB  GLN A 410     -4.098 -10.508  21.677  1.00 20.31           C
ATOM   5011  CG  GLN A 410     -2.717 -11.009  21.227  1.00 21.69           C
ATOM   5012  CD  GLN A 410     -2.610 -12.525  21.369  1.00 20.78           C
ATOM   5013  OE1 GLN A 410     -3.096 -13.112  22.335  1.00 24.03           O
ATOM   5014  NE2 GLN A 410     -2.092 -13.209  20.364  1.00 20.56           N
ATOM   5015  H   GLN A 410     -2.873  -8.443  22.475  1.00  0.00           H
ATOM   5016  HA  GLN A 410     -4.304  -9.052  20.090  1.00  0.00           H
ATOM   5017  HB2 GLN A 410     -4.172 -10.553  22.765  1.00  0.00           H
ATOM   5018  HB3 GLN A 410     -4.844 -11.210  21.300  1.00  0.00           H
ATOM   5019  HG2 GLN A 410     -2.537 -10.730  20.187  1.00  0.00           H
ATOM   5020  HG3 GLN A 410     -1.934 -10.534  21.817  1.00  0.00           H
ATOM   5021 HE21 GLN A 410     -1.778 -12.703  19.527  1.00  0.00           H
ATOM   5022 HE22 GLN A 410     -1.946 -14.212  20.389  1.00  0.00           H
ATOM   5023  N   GLY A 411     -6.283  -7.705  22.069  1.00 24.50           N
ATOM   5024  CA  GLY A 411     -7.624  -7.191  22.304  1.00 26.96           C
ATOM   5025  C   GLY A 411     -7.866  -5.857  21.591  1.00 27.55           C
ATOM   5026  O   GLY A 411     -8.973  -5.336  21.693  1.00 30.46           O
ATOM   5027  H   GLY A 411     -5.518  -7.090  22.304  1.00  0.00           H
ATOM   5028  HA2 GLY A 411     -8.393  -7.898  21.989  1.00  0.00           H
ATOM   5029  HA3 GLY A 411     -7.758  -7.034  23.374  1.00  0.00           H
ATOM   5030  N   ASN A 412     -6.880  -5.328  20.844  1.00 27.68           N
ATOM   5031  CA  ASN A 412     -6.946  -4.061  20.099  1.00 25.90           C
ATOM   5032  C   ASN A 412     -6.319  -4.188  18.702  1.00 24.16           C
ATOM   5033  O   ASN A 412     -5.821  -3.209  18.140  1.00 24.85           O
ATOM   5034  CB  ASN A 412     -6.457  -2.836  20.916  1.00 26.56           C
ATOM   5035  CG  ASN A 412     -7.370  -2.458  22.080  1.00 27.79           C
ATOM   5036  OD1 ASN A 412     -7.121  -2.825  23.223  1.00 32.66           O
ATOM   5037  ND2 ASN A 412     -8.434  -1.709  21.816  1.00 25.88           N
ATOM   5038  H   ASN A 412     -5.993  -5.818  20.770  1.00  0.00           H
ATOM   5039  HA  ASN A 412     -7.995  -3.869  19.864  1.00  0.00           H
ATOM   5040  HB2 ASN A 412     -5.455  -3.014  21.301  1.00  0.00           H
ATOM   5041  HB3 ASN A 412     -6.371  -1.959  20.274  1.00  0.00           H
ATOM   5042 HD21 ASN A 412     -8.675  -1.475  20.843  1.00  0.00           H
ATOM   5043 HD22 ASN A 412     -9.055  -1.478  22.569  1.00  0.00           H
ATOM   5044  N   ASP A 413     -6.375  -5.396  18.121  1.00 22.31           N
ATOM   5045  CA  ASP A 413     -6.107  -5.653  16.702  1.00 22.05           C
ATOM   5046  C   ASP A 413     -7.247  -5.025  15.886  1.00 21.82           C
ATOM   5047  O   ASP A 413     -8.412  -5.143  16.266  1.00 21.38           O
ATOM   5048  CB  ASP A 413     -6.052  -7.182  16.435  1.00 20.91           C
ATOM   5049  CG  ASP A 413     -6.190  -7.571  14.962  1.00 19.89           C
ATOM   5050  OD1 ASP A 413     -5.302  -7.178  14.168  1.00 19.55           O
ATOM   5051  OD2 ASP A 413     -7.247  -8.127  14.602  1.00 19.62           O1-
ATOM   5052  H   ASP A 413     -6.894  -6.104  18.612  1.00  0.00           H
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ATOM   5053  HA  ASP A 413      -5.158  -5.200  16.410  1.00  0.00           H
ATOM   5054  HB2 ASP A 413      -5.139  -7.618  16.822  1.00  0.00           H
ATOM   5055  HB3 ASP A 413      -6.876  -7.665  16.959  1.00  0.00           H
ATOM   5056  N   PHE A 414      -6.922  -4.378  14.768  1.00 21.02           N
ATOM   5057  CA  PHE A 414      -7.915  -3.798  13.888  1.00 18.26           C
ATOM   5058  C   PHE A 414      -8.433  -4.822  12.866  1.00 19.44           C
ATOM   5059  O   PHE A 414      -9.547  -4.626  12.387  1.00 21.11           O
ATOM   5060  CB  PHE A 414      -7.291  -2.612  13.128  1.00 18.35           C
ATOM   5061  CG  PHE A 414      -8.303  -1.774  12.366  1.00 17.60           C
ATOM   5062  CD1 PHE A 414      -9.259  -1.017  13.073  1.00 19.23           C
ATOM   5063  CD2 PHE A 414      -8.326  -1.783  10.957  1.00 17.55           C
ATOM   5064  CE1 PHE A 414     -10.223  -0.265  12.377  1.00 20.54           C
ATOM   5065  CE2 PHE A 414      -9.278  -1.017  10.263  1.00 16.66           C
ATOM   5066  CZ  PHE A 414     -10.226  -0.256  10.972  1.00 18.35           C
ATOM   5067  H   PHE A 414      -5.941  -4.308  14.499  1.00  0.00           H
ATOM   5068  HA  PHE A 414      -8.755  -3.427  14.476  1.00  0.00           H
ATOM   5069  HB2 PHE A 414      -6.792  -1.952  13.838  1.00  0.00           H
ATOM   5070  HB3 PHE A 414      -6.514  -2.960  12.445  1.00  0.00           H
ATOM   5071  HD1 PHE A 414      -9.250  -1.006  14.153  1.00  0.00           H
ATOM   5072  HD2 PHE A 414      -7.638  -2.395  10.396  1.00  0.00           H
ATOM   5073  HE1 PHE A 414     -10.950   0.320  12.921  1.00  0.00           H
ATOM   5074  HE2 PHE A 414      -9.290  -1.037   9.185  1.00  0.00           H
ATOM   5075  HZ  PHE A 414     -10.958   0.329  10.440  1.00  0.00           H
ATOM   5076  N   THR A 415      -7.695  -5.895  12.522  1.00 20.19           N
ATOM   5077  CA  THR A 415      -7.959  -6.817  11.400  1.00 20.23           C
ATOM   5078  C   THR A 415      -9.417  -7.315  11.327  1.00 22.22           C
ATOM   5079  O   THR A 415      -9.987  -7.441  10.243  1.00 22.79           O
ATOM   5080  CB  THR A 415      -6.979  -8.020  11.418  1.00 21.37           C
ATOM   5081  OG1 THR A 415      -5.640  -7.590  11.579  1.00 17.64           O
ATOM   5082  CG2 THR A 415      -7.039  -8.880  10.142  1.00 20.76           C
ATOM   5083  H   THR A 415      -6.868  -6.111  13.073  1.00  0.00           H
ATOM   5084  HA  THR A 415      -7.772  -6.246  10.489  1.00  0.00           H
ATOM   5085  HB  THR A 415      -7.214  -8.673  12.255  1.00  0.00           H
ATOM   5086  HG1 THR A 415      -5.501  -7.445  12.534  1.00  0.00           H
ATOM   5087 HG21 THR A 415      -6.445  -9.784  10.256  1.00  0.00           H
ATOM   5088 HG22 THR A 415      -8.047  -9.228   9.924  1.00  0.00           H
ATOM   5089 HG23 THR A 415      -6.672  -8.335   9.272  1.00  0.00           H
ATOM   5090  N   PHE A 416     -10.041  -7.554  12.481  1.00 22.70           N
ATOM   5091  CA  PHE A 416     -11.368  -8.146  12.559  1.00 23.45           C
ATOM   5092  C   PHE A 416     -12.412  -7.186  13.142  1.00 22.80           C
ATOM   5093  O   PHE A 416     -13.508  -7.639  13.467  1.00 25.25           O
ATOM   5094  CB  PHE A 416     -11.268  -9.488  13.309  1.00 20.24           C
ATOM   5095  CG  PHE A 416     -10.316 -10.465  12.640  1.00 20.62           C
ATOM   5096  CD1 PHE A 416     -10.700 -11.148  11.470  1.00 20.38           C
ATOM   5097  CD2 PHE A 416      -9.005 -10.612  13.132  1.00 18.91           C
ATOM   5098  CE1 PHE A 416      -9.765 -11.930  10.769  1.00 19.44           C
ATOM   5099  CE2 PHE A 416      -8.074 -11.411  12.446  1.00 18.21           C
ATOM   5100  CZ  PHE A 416      -8.451 -12.058  11.256  1.00 20.50           C
ATOM   5101  H   PHE A 416      -9.484  -7.463  13.327  1.00  0.00           H
ATOM   5102  HA  PHE A 416     -11.749  -8.377  11.564  1.00  0.00           H
ATOM   5103  HB2 PHE A 416     -10.937  -9.320  14.335  1.00  0.00           H
ATOM   5104  HB3 PHE A 416     -12.252  -9.951  13.368  1.00  0.00           H
ATOM   5105  HD1 PHE A 416     -11.696 -11.036  11.085  1.00  0.00           H
ATOM   5106  HD2 PHE A 416      -8.685 -10.056  14.002  1.00  0.00           H
ATOM   5107  HE1 PHE A 416     -10.042 -12.398   9.838  1.00  0.00           H
ATOM   5108  HE2 PHE A 416      -7.056 -11.473  12.806  1.00  0.00           H
ATOM   5109  HZ  PHE A 416      -7.719 -12.629  10.707  1.00  0.00           H
ATOM   5110  N   GLN A 417     -12.118  -5.882  13.271  1.00 23.60           N
ATOM   5111  CA  GLN A 417     -13.055  -4.858  13.757  1.00 22.99           C
ATOM   5112  C   GLN A 417     -14.107  -4.469  12.694  1.00 22.57           C
ATOM   5113  O   GLN A 417     -14.201  -5.097  11.636  1.00 22.49           O
ATOM   5114  CB  GLN A 417     -12.271  -3.617  14.225  1.00 22.97           C
ATOM   5115  CG  GLN A 417     -11.527  -3.863  15.551  1.00 23.29           C
ATOM   5116  CD  GLN A 417     -11.076  -2.597  16.286  1.00 26.35           C
ATOM   5117  OE1 GLN A 417     -10.465  -2.682  17.344  1.00 25.95           O
ATOM   5118  NE2 GLN A 417     -11.391  -1.409  15.783  1.00 24.11           N
ATOM   5119  H   GLN A 417     -11.199  -5.574  12.961  1.00  0.00           H
ATOM   5120  HA  GLN A 417     -13.617  -5.256  14.599  1.00  0.00           H
ATOM   5121  HB2 GLN A 417     -11.583  -3.262  13.456  1.00  0.00           H
ATOM   5122  HB3 GLN A 417     -12.976  -2.810  14.399  1.00  0.00           H
ATOM   5123  HG2 GLN A 417     -12.186  -4.388  16.241  1.00  0.00           H
ATOM   5124  HG3 GLN A 417     -10.673  -4.517  15.388  1.00  0.00           H
ATOM   5125 HE21 GLN A 417     -11.959  -1.313  14.949  1.00  0.00           H
ATOM   5126 HE22 GLN A 417     -11.110  -0.570  16.293  1.00  0.00           H
ATOM   5127  N   GLY A 418     -14.931  -3.452  12.972  1.00 22.92           N
ATOM   5128  CA  GLY A 418     -16.172  -3.179  12.251  1.00 21.05           C
ATOM   5129  C   GLY A 418     -16.004  -2.135  11.150  1.00 21.18           C
ATOM   5130  O   GLY A 418     -16.692  -2.232  10.140  1.00 21.14           O
ATOM   5131  H   GLY A 418     -14.768  -2.909  13.811  1.00  0.00           H
ATOM   5132  HA2 GLY A 418     -16.593  -4.091  11.825  1.00  0.00           H
ATOM   5133  HA3 GLY A 418     -16.908  -2.798  12.960  1.00  0.00           H
ATOM   5134  N   TYR A 419     -15.039  -1.217  11.279  1.00 20.25           N
ATOM   5135  CA  TYR A 419     -14.627  -0.311  10.201  1.00 21.27           C
ATOM   5136  C   TYR A 419     -13.490  -0.957   9.375  1.00 20.92           C
ATOM   5137  O   TYR A 419     -12.991  -0.384   8.408  1.00 19.73           O
ATOM   5138  CB  TYR A 419     -14.121   1.000  10.842  1.00 21.11           C
ATOM   5139  CG  TYR A 419     -14.121   2.197   9.911  1.00 22.25           C
ATOM   5140  CD1 TYR A 419     -15.311   2.923   9.715  1.00 23.37           C
ATOM   5141  CD2 TYR A 419     -12.945   2.596   9.245  1.00 21.83           C
ATOM   5142  CE1 TYR A 419     -15.317   4.064   8.895  1.00 23.61           C
ATOM   5143  CE2 TYR A 419     -12.960   3.707   8.383  1.00 24.89           C
ATOM   5144  CZ  TYR A 419     -14.147   4.447   8.224  1.00 22.99           C
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ATOM   5145  OH  TYR A 419     -14.165   5.576   7.470  1.00 26.03           O
ATOM   5146  H   TYR A 419     -14.537  -1.143  12.157  1.00  0.00           H
ATOM   5147  HA  TYR A 419     -15.471  -0.090   9.544  1.00  0.00           H
ATOM   5148  HB2 TYR A 419     -14.762   1.265  11.684  1.00  0.00           H
ATOM   5149  HB3 TYR A 419     -13.127   0.869  11.272  1.00  0.00           H
ATOM   5150  HD1 TYR A 419     -16.221   2.620  10.209  1.00  0.00           H
ATOM   5151  HD2 TYR A 419     -12.028   2.053   9.395  1.00  0.00           H
ATOM   5152  HE1 TYR A 419     -16.220   4.648   8.782  1.00  0.00           H
ATOM   5153  HE2 TYR A 419     -12.052   4.001   7.878  1.00  0.00           H
ATOM   5154  HH  TYR A 419     -13.470   5.606   6.791  1.00  0.00           H
ATOM   5155  N   SER A 420     -13.070  -2.165   9.760  1.00 19.72           N
ATOM   5156  CA  SER A 420     -12.020  -2.932   9.121  1.00 19.12           C
ATOM   5157  C   SER A 420     -12.614  -3.840   8.039  1.00 19.14           C
ATOM   5158  O   SER A 420     -13.824  -4.095   7.999  1.00 18.72           O
ATOM   5159  CB  SER A 420     -11.360  -3.798  10.200  1.00 20.59           C
ATOM   5160  OG  SER A 420     -10.201  -4.459   9.742  1.00 18.07           O
ATOM   5161  H   SER A 420     -13.604  -2.621  10.481  1.00  0.00           H
ATOM   5162  HA  SER A 420     -11.276  -2.267   8.691  1.00  0.00           H
ATOM   5163  HB2 SER A 420     -11.080  -3.160  11.039  1.00  0.00           H
ATOM   5164  HB3 SER A 420     -12.039  -4.554  10.584  1.00  0.00           H
ATOM   5165  HG  SER A 420      -9.689  -4.632  10.530  1.00  0.00           H
ATOM   5166  N   CYS A 421     -11.718  -4.351   7.195  1.00 20.98           N
ATOM   5167  CA  CYS A 421     -11.996  -5.256   6.092  1.00 19.83           C
ATOM   5168  C   CYS A 421     -11.049  -6.465   6.081  1.00 21.04           C
ATOM   5169  O   CYS A 421     -10.951  -7.164   5.073  1.00 23.25           O
ATOM   5170  CB  CYS A 421     -12.076  -4.489   4.761  1.00 20.05           C
ATOM   5171  SG  CYS A 421     -13.550  -3.447   4.557  1.00 22.53           S
ATOM   5172  H   CYS A 421     -10.744  -4.121   7.381  1.00  0.00           H
ATOM   5173  HA  CYS A 421     -12.978  -5.703   6.248  1.00  0.00           H
ATOM   5174  HB2 CYS A 421     -11.188  -3.871   4.623  1.00  0.00           H
ATOM   5175  HB3 CYS A 421     -12.077  -5.195   3.933  1.00  0.00           H
ATOM   5176  N   GLY A 422     -10.393  -6.786   7.204  1.00 20.19           N
ATOM   5177  CA  GLY A 422      -9.429  -7.886   7.244  1.00 22.14           C
ATOM   5178  C   GLY A 422     -10.140  -9.226   7.436  1.00 22.26           C
ATOM   5179  O   GLY A 422      -9.743 -10.219   6.826  1.00 19.11           O
ATOM   5180  H   GLY A 422     -10.467  -6.190   8.022  1.00  0.00           H
ATOM   5181  HA2 GLY A 422      -8.839  -7.930   6.327  1.00  0.00           H
ATOM   5182  HA3 GLY A 422      -8.719  -7.721   8.051  1.00  0.00           H
ATOM   5183  N   LYS A 423     -11.280  -9.243   8.149  1.00 24.00           N
ATOM   5184  CA  LYS A 423     -12.211 -10.370   8.140  1.00 25.44           C
ATOM   5185  C   LYS A 423     -12.760 -10.587   6.719  1.00 25.53           C
ATOM   5186  O   LYS A 423     -12.770 -11.715   6.237  1.00 26.66           O
ATOM   5187  CB  LYS A 423     -13.387 -10.158   9.124  1.00 26.73           C
ATOM   5188  CG  LYS A 423     -14.136 -11.484   9.400  1.00 31.23           C
ATOM   5189  CD  LYS A 423     -15.543 -11.371  10.013  1.00 34.49           C
ATOM   5190  CE  LYS A 423     -16.534 -10.451   9.276  1.00 36.84           C
ATOM   5191  NZ  LYS A 423     -16.721 -10.778   7.852  1.00 39.84          N1+
ATOM   5192  H   LYS A 423     -11.529  -8.379   8.612  1.00  0.00           H
ATOM   5193  HA  LYS A 423     -11.653 -11.259   8.436  1.00  0.00           H
ATOM   5194  HB2 LYS A 423     -13.045  -9.719  10.059  1.00  0.00           H
ATOM   5195  HB3 LYS A 423     -14.062  -9.417   8.703  1.00  0.00           H
ATOM   5196  HG2 LYS A 423     -14.224 -12.054   8.478  1.00  0.00           H
ATOM   5197  HG3 LYS A 423     -13.520 -12.112  10.043  1.00  0.00           H
ATOM   5198  HD2 LYS A 423     -15.974 -12.371  10.051  1.00  0.00           H
ATOM   5199  HD3 LYS A 423     -15.449 -11.036  11.046  1.00  0.00           H
ATOM   5200  HE2 LYS A 423     -17.508 -10.497   9.764  1.00  0.00           H
ATOM   5201  HE3 LYS A 423     -16.214  -9.414   9.359  1.00  0.00           H
ATOM   5202  HZ1 LYS A 423     -16.452  -9.935   7.320  1.00  0.00           H
ATOM   5203  HZ2 LYS A 423     -16.213 -11.621   7.514  1.00  0.00           H
ATOM   5204  HZ3 LYS A 423     -17.685 -10.933   7.628  1.00  0.00           H
ATOM   5205  N   GLU A 424     -13.177  -9.505   6.053  1.00 23.69           N
ATOM   5206  CA  GLU A 424     -13.762  -9.474   4.715  1.00 23.47           C
ATOM   5207  C   GLU A 424     -12.779 -10.030   3.672  1.00 23.14           C
ATOM   5208  O   GLU A 424     -13.193 -10.820   2.828  1.00 18.61           O
ATOM   5209  CB  GLU A 424     -14.184  -8.027   4.366  1.00 24.63           C
ATOM   5210  CG  GLU A 424     -15.455  -7.496   5.069  1.00 25.57           C
ATOM   5211  CD  GLU A 424     -15.532  -7.733   6.569  1.00 28.25           C
ATOM   5212  OE1 GLU A 424     -14.597  -7.390   7.324  1.00 27.71           O
ATOM   5213  OE2 GLU A 424     -16.526  -8.344   7.021  1.00 33.30          O1-
ATOM   5214  H   GLU A 424     -13.226  -8.629   6.568  1.00  0.00           H
ATOM   5215  HA  GLU A 424     -14.645 -10.116   4.706  1.00  0.00           H
ATOM   5216  HB2 GLU A 424     -13.367  -7.337   4.546  1.00  0.00           H
ATOM   5217  HB3 GLU A 424     -14.366  -7.961   3.292  1.00  0.00           H
ATOM   5218  HG2 GLU A 424     -15.544  -6.425   4.891  1.00  0.00           H
ATOM   5219  HG3 GLU A 424     -16.332  -7.949   4.607  1.00  0.00           H
ATOM   5220  N   TYR A 425     -11.480  -9.712   3.784  1.00 21.56           N
ATOM   5221  CA  TYR A 425     -10.402 -10.342   3.018  1.00 21.96           C
ATOM   5222  C   TYR A 425     -10.362 -11.864   3.252  1.00 23.23           C
ATOM   5223  O   TYR A 425     -10.469 -12.643   2.302  1.00 21.80           O
ATOM   5224  CB  TYR A 425      -9.037  -9.694   3.353  1.00 21.92           C
ATOM   5225  CG  TYR A 425      -7.877 -10.418   2.693  1.00 20.41           C
ATOM   5226  CD1 TYR A 425      -7.740 -10.359   1.293  1.00 20.32           C
ATOM   5227  CD2 TYR A 425      -7.013 -11.240   3.450  1.00 20.40           C
ATOM   5228  CE1 TYR A 425      -6.776 -11.149   0.648  1.00 17.64           C
ATOM   5229  CE2 TYR A 425      -6.040 -12.025   2.800  1.00 18.10           C
ATOM   5230  CZ  TYR A 425      -5.936 -11.988   1.398  1.00 19.87           C
ATOM   5231  OH  TYR A 425      -5.065 -12.794   0.735  1.00 16.52           O
ATOM   5232  H   TYR A 425     -11.230  -8.995   4.460  1.00  0.00           H
ATOM   5233  HA  TYR A 425     -10.606 -10.187   1.958  1.00  0.00           H
ATOM   5234  HB2 TYR A 425      -9.027  -8.653   3.030  1.00  0.00           H
ATOM   5235  HB3 TYR A 425      -8.874  -9.672   4.430  1.00  0.00           H
ATOM   5236  HD1 TYR A 425      -8.399  -9.735   0.708  1.00  0.00           H
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ATOM   5237  HD2 TYR A 425      -7.115 -11.302   4.525  1.00  0.00           H
ATOM   5238  HE1 TYR A 425      -6.695 -11.130  -0.427  1.00  0.00           H
ATOM   5239  HE2 TYR A 425      -5.405 -12.678   3.380  1.00  0.00           H
ATOM   5240  HH  TYR A 425      -4.268 -13.034   1.191  1.00  0.00           H
ATOM   5241  N   TYR A 426     -10.254 -12.286   4.520  1.00 21.99           N
ATOM   5242  CA  TYR A 426     -10.224 -13.688   4.937  1.00 23.50           C
ATOM   5243  C   TYR A 426     -11.448 -14.486   4.449  1.00 23.34           C
ATOM   5244  O   TYR A 426     -11.306 -15.633   4.028  1.00 24.05           O
ATOM   5245  CB  TYR A 426     -10.108 -13.779   6.474  1.00 22.73           C
ATOM   5246  CG  TYR A 426      -8.716 -14.003   7.034  1.00 23.27           C
ATOM   5247  CD1 TYR A 426      -8.009 -12.959   7.662  1.00 22.47           C
ATOM   5248  CD2 TYR A 426      -8.155 -15.296   7.013  1.00 22.87           C
ATOM   5249  CE1 TYR A 426      -6.776 -13.214   8.286  1.00 21.19           C
ATOM   5250  CE2 TYR A 426      -6.902 -15.543   7.603  1.00 22.99           C
ATOM   5251  CZ  TYR A 426      -6.225 -14.507   8.266  1.00 22.86           C
ATOM   5252  OH  TYR A 426      -5.056 -14.758   8.917  1.00 23.29           O
ATOM   5253  H   TYR A 426     -10.182 -11.576   5.242  1.00  0.00           H
ATOM   5254  HA  TYR A 426      -9.345 -14.150   4.483  1.00  0.00           H
ATOM   5255  HB2 TYR A 426     -10.544 -12.899   6.947  1.00  0.00           H
ATOM   5256  HB3 TYR A 426     -10.708 -14.613   6.837  1.00  0.00           H
ATOM   5257  HD1 TYR A 426      -8.411 -11.962   7.715  1.00  0.00           H
ATOM   5258  HD2 TYR A 426      -8.704 -16.115   6.587  1.00  0.00           H
ATOM   5259  HE1 TYR A 426      -6.265 -12.409   8.792  1.00  0.00           H
ATOM   5260  HE2 TYR A 426      -6.488 -16.540   7.580  1.00  0.00           H
ATOM   5261  HH  TYR A 426      -4.575 -15.502   8.578  1.00  0.00           H
ATOM   5262  N   ASP A 427     -12.639 -13.881   4.501  1.00 22.93           N
ATOM   5263  CA  ASP A 427     -13.919 -14.481   4.117  1.00 24.60           C
ATOM   5264  C   ASP A 427     -14.105 -14.482   2.590  1.00 23.59           C
ATOM   5265  O   ASP A 427     -14.644 -15.453   2.062  1.00 22.45           O
ATOM   5266  CB  ASP A 427     -15.102 -13.721   4.772  1.00 25.71           C
ATOM   5267  CG  ASP A 427     -15.166 -13.804   6.299  1.00 25.52           C
ATOM   5268  OD1 ASP A 427     -14.485 -14.672   6.892  1.00 30.54           O
ATOM   5269  OD2 ASP A 427     -15.903 -12.991   6.901  1.00 26.99          O1-
ATOM   5270  H   ASP A 427     -12.669 -12.952   4.920  1.00  0.00           H
ATOM   5271  HA  ASP A 427     -13.941 -15.520   4.451  1.00  0.00           H
ATOM   5272  HB2 ASP A 427     -15.072 -12.668   4.487  1.00  0.00           H
ATOM   5273  HB3 ASP A 427     -16.046 -14.112   4.393  1.00  0.00           H
ATOM   5274  N   ALA A 428     -13.610 -13.463   1.869  1.00 23.60           N
ATOM   5275  CA  ALA A 428     -13.608 -13.399   0.401  1.00 22.71           C
ATOM   5276  C   ALA A 428     -12.611 -14.400  -0.207  1.00 22.99           C
ATOM   5277  O   ALA A 428     -12.840 -14.950  -1.292  1.00 21.89           O
ATOM   5278  CB  ALA A 428     -13.209 -11.984  -0.050  1.00 22.18           C
ATOM   5279  H   ALA A 428     -13.235 -12.656   2.363  1.00  0.00           H
ATOM   5280  HA  ALA A 428     -14.608 -13.629   0.029  1.00  0.00           H
ATOM   5281  HB1 ALA A 428     -13.149 -11.916  -1.136  1.00  0.00           H
ATOM   5282  HB2 ALA A 428     -13.944 -11.247   0.276  1.00  0.00           H
ATOM   5283  HB3 ALA A 428     -12.238 -11.687   0.349  1.00  0.00           H
ATOM   5284  N   GLN A 429     -11.506 -14.670   0.503  1.00 21.48           N
ATOM   5285  CA  GLN A 429     -10.597 -15.767   0.204  1.00 23.47           C
ATOM   5286  C   GLN A 429     -11.284 -17.109   0.516  1.00 23.16           C
ATOM   5287  O   GLN A 429     -11.405 -17.948  -0.380  1.00 24.44           O
ATOM   5288  CB  GLN A 429      -9.283 -15.623   1.006  1.00 24.04           C
ATOM   5289  CG  GLN A 429      -8.310 -14.549   0.470  1.00 23.93           C
ATOM   5290  CD  GLN A 429      -7.605 -14.954  -0.829  1.00 27.30           C
ATOM   5291  OE1 GLN A 429      -8.128 -15.741  -1.612  1.00 28.29           O
ATOM   5292  NE2 GLN A 429      -6.410 -14.442  -1.074  1.00 21.69           N
ATOM   5293  H   GLN A 429     -11.315 -14.084   1.313  1.00  0.00           H
ATOM   5294  HA  GLN A 429     -10.390 -15.746  -0.861  1.00  0.00           H
ATOM   5295  HB2 GLN A 429      -9.503 -15.413   2.052  1.00  0.00           H
ATOM   5296  HB3 GLN A 429      -8.755 -16.578   1.003  1.00  0.00           H
ATOM   5297  HG2 GLN A 429      -8.825 -13.600   0.317  1.00  0.00           H
ATOM   5298  HG3 GLN A 429      -7.549 -14.363   1.228  1.00  0.00           H
ATOM   5299 HE21 GLN A 429      -5.946 -13.805  -0.423  1.00  0.00           H
ATOM   5300 HE22 GLN A 429      -5.909 -14.726  -1.921  1.00  0.00           H
ATOM   5301  N   GLY A 430     -11.786 -17.260   1.748  1.00 24.56           N
ATOM   5302  CA  GLY A 430     -12.488 -18.436   2.265  1.00 25.89           C
ATOM   5303  C   GLY A 430     -11.729 -19.101   3.422  1.00 27.73           C
ATOM   5304  O   GLY A 430     -11.991 -20.253   3.758  1.00 27.40           O
ATOM   5305  H   GLY A 430     -11.692 -16.476   2.386  1.00  0.00           H
ATOM   5306  HA2 GLY A 430     -13.470 -18.124   2.622  1.00  0.00           H
ATOM   5307  HA3 GLY A 430     -12.659 -19.178   1.483  1.00  0.00           H
ATOM   5308  N   LEU A 431     -10.752 -18.399   4.007  1.00 26.14           N
ATOM   5309  CA  LEU A 431      -9.739 -18.932   4.906  1.00 27.26           C
ATOM   5310  C   LEU A 431     -10.157 -18.820   6.386  1.00 25.34           C
ATOM   5311  O   LEU A 431     -10.921 -17.932   6.793  1.00 25.57           O
ATOM   5312  CB  LEU A 431      -8.451 -18.102   4.690  1.00 26.32           C
ATOM   5313  CG  LEU A 431      -7.726 -18.364   3.353  1.00 26.85           C
ATOM   5314  CD1 LEU A 431      -6.701 -17.254   3.069  1.00 28.01           C
ATOM   5315  CD2 LEU A 431      -7.042 -19.740   3.316  1.00 26.82           C
ATOM   5316  H   LEU A 431     -10.704 -17.410   3.790  1.00  0.00           H
ATOM   5317  HA  LEU A 431      -9.556 -19.983   4.676  1.00  0.00           H
ATOM   5318  HB2 LEU A 431      -8.720 -17.047   4.714  1.00  0.00           H
ATOM   5319  HB3 LEU A 431      -7.747 -18.254   5.511  1.00  0.00           H
ATOM   5320  HG  LEU A 431      -8.461 -18.337   2.547  1.00  0.00           H
ATOM   5321 HD11 LEU A 431      -6.226 -17.392   2.097  1.00  0.00           H
ATOM   5322 HD12 LEU A 431      -7.167 -16.268   3.060  1.00  0.00           H
ATOM   5323 HD13 LEU A 431      -5.911 -17.236   3.822  1.00  0.00           H
ATOM   5324 HD21 LEU A 431      -6.515 -19.886   2.372  1.00  0.00           H
ATOM   5325 HD22 LEU A 431      -6.309 -19.845   4.117  1.00  0.00           H
ATOM   5326 HD23 LEU A 431      -7.758 -20.556   3.405  1.00  0.00           H
ATOM   5327  N   VAL A 432      -9.604 -19.730   7.198  1.00 24.67           N
ATOM   5328  CA  VAL A 432      -9.708 -19.803   8.656  1.00 24.91           C
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ATOM   5329  C   VAL A 432      -8.855 -18.672   9.267  1.00 24.65           C
ATOM   5330  O   VAL A 432      -7.823 -18.307   8.712  1.00 23.35           O
ATOM   5331  CB  VAL A 432      -9.203 -21.199   9.127  1.00 26.40           C
ATOM   5332  CG1 VAL A 432      -9.332 -21.411  10.650  1.00 27.65           C
ATOM   5333  CG2 VAL A 432      -9.918 -22.355   8.395  1.00 27.01           C
ATOM   5334  H   VAL A 432      -8.937 -20.359   6.778  1.00  0.00           H
ATOM   5335  HA  VAL A 432     -10.754 -19.670   8.937  1.00  0.00           H
ATOM   5336  HB  VAL A 432      -8.140 -21.274   8.884  1.00  0.00           H
ATOM   5337 HG11 VAL A 432      -8.997 -22.409  10.934  1.00  0.00           H
ATOM   5338 HG12 VAL A 432      -8.720 -20.708  11.217  1.00  0.00           H
ATOM   5339 HG13 VAL A 432     -10.365 -21.305  10.983  1.00  0.00           H
ATOM   5340 HG21 VAL A 432      -9.569 -23.324   8.754  1.00  0.00           H
ATOM   5341 HG22 VAL A 432     -10.997 -22.316   8.549  1.00  0.00           H
ATOM   5342 HG23 VAL A 432      -9.738 -22.340   7.320  1.00  0.00           H
ATOM   5343  N   LYS A 433      -9.315 -18.105  10.385  1.00 25.23           N
ATOM   5344  CA  LYS A 433      -8.810 -16.876  10.999  1.00 27.01           C
ATOM   5345  C   LYS A 433      -8.228 -17.178  12.402  1.00 28.68           C
ATOM   5346  O   LYS A 433      -8.653 -18.165  13.014  1.00 29.12           O
ATOM   5347  CB  LYS A 433     -10.012 -15.909  11.062  1.00 26.07           C
ATOM   5348  CG  LYS A 433     -10.412 -15.365   9.675  1.00 25.95           C
ATOM   5349  CD  LYS A 433     -11.862 -14.856   9.589  1.00 27.29           C
ATOM   5350  CE  LYS A 433     -12.881 -15.981   9.324  1.00 27.92           C
ATOM   5351  NZ  LYS A 433     -12.942 -16.371   7.904  1.00 27.82           N1+
ATOM   5352  H   LYS A 433     -10.042 -18.579  10.895  1.00  0.00           H
ATOM   5353  HA  LYS A 433      -8.027 -16.440  10.376  1.00  0.00           H
ATOM   5354  HB2 LYS A 433     -10.855 -16.420  11.525  1.00  0.00           H
ATOM   5355  HB3 LYS A 433      -9.787 -15.062  11.710  1.00  0.00           H
ATOM   5356  HG2 LYS A 433      -9.725 -14.554   9.446  1.00  0.00           H
ATOM   5357  HG3 LYS A 433     -10.243 -16.105   8.894  1.00  0.00           H
ATOM   5358  HD2 LYS A 433     -12.107 -14.343  10.518  1.00  0.00           H
ATOM   5359  HD3 LYS A 433     -11.953 -14.094   8.813  1.00  0.00           H
ATOM   5360  HE2 LYS A 433     -12.661 -16.854   9.940  1.00  0.00           H
ATOM   5361  HE3 LYS A 433     -13.878 -15.638   9.605  1.00  0.00           H
ATOM   5362  HZ1 LYS A 433     -13.526 -17.177   7.769  1.00  0.00           H
ATOM   5363  HZ2 LYS A 433     -13.449 -15.607   7.397  1.00  0.00           H
ATOM   5364  HZ3 LYS A 433     -12.042 -16.561   7.474  1.00  0.00           H
ATOM   5365  N   PRO A 434      -7.272 -16.371  12.922  1.00 29.99           N
ATOM   5366  CA  PRO A 434      -6.530 -16.661  14.161  1.00 31.36           C
ATOM   5367  C   PRO A 434      -7.363 -16.508  15.452  1.00 32.47           C
ATOM   5368  O   PRO A 434      -8.281 -15.693  15.528  1.00 33.32           O
ATOM   5369  CB  PRO A 434      -5.323 -15.711  14.123  1.00 31.69           C
ATOM   5370  CG  PRO A 434      -5.783 -14.527  13.286  1.00 29.64           C
ATOM   5371  CD  PRO A 434      -6.789 -15.131  12.307  1.00 30.38           C
ATOM   5372  HA  PRO A 434      -6.168 -17.690  14.107  1.00  0.00           H
ATOM   5373  HB2 PRO A 434      -4.959 -15.417  15.106  1.00  0.00           H
ATOM   5374  HB3 PRO A 434      -4.491 -16.202  13.616  1.00  0.00           H
ATOM   5375  HG2 PRO A 434      -6.289 -13.794  13.915  1.00  0.00           H
ATOM   5376  HG3 PRO A 434      -4.962 -14.013  12.783  1.00  0.00           H
ATOM   5377  HD2 PRO A 434      -7.605 -14.440  12.114  1.00  0.00           H
ATOM   5378  HD3 PRO A 434      -6.293 -15.352  11.361  1.00  0.00           H
ATOM   5379  N   LYS A 435      -7.017 -17.331  16.452  1.00 34.56           N
ATOM   5380  CA  LYS A 435      -7.720 -17.770  17.669  1.00 36.88           C
ATOM   5381  C   LYS A 435      -8.709 -16.872  18.448  1.00 37.85           C
ATOM   5382  O   LYS A 435      -9.442 -17.413  19.274  1.00 39.08           O
ATOM   5383  CB  LYS A 435      -6.744 -18.509  18.614  1.00 38.28           C
ATOM   5384  CG  LYS A 435      -6.173 -19.821  18.048  1.00 40.34           C
ATOM   5385  CD  LYS A 435      -5.185 -20.474  19.026  1.00 42.32           C
ATOM   5386  CE  LYS A 435      -4.622 -21.809  18.514  1.00 43.22           C
ATOM   5387  NZ  LYS A 435      -3.532 -22.274  19.377  1.00 42.23           N1+
ATOM   5388  H   LYS A 435      -6.167 -17.841  16.270  1.00  0.00           H
ATOM   5389  HA  LYS A 435      -8.392 -18.539  17.285  1.00  0.00           H
ATOM   5390  HB2 LYS A 435      -5.932 -17.841  18.894  1.00  0.00           H
ATOM   5391  HB3 LYS A 435      -7.251 -18.744  19.552  1.00  0.00           H
ATOM   5392  HG2 LYS A 435      -6.991 -20.510  17.831  1.00  0.00           H
ATOM   5393  HG3 LYS A 435      -5.666 -19.633  17.101  1.00  0.00           H
ATOM   5394  HD2 LYS A 435      -4.359 -19.780  19.200  1.00  0.00           H
ATOM   5395  HD3 LYS A 435      -5.668 -20.626  19.993  1.00  0.00           H
ATOM   5396  HE2 LYS A 435      -5.398 -22.572  18.449  1.00  0.00           H
ATOM   5397  HE3 LYS A 435      -4.207 -21.679  17.513  1.00  0.00           H
ATOM   5398  HZ1 LYS A 435      -2.956 -22.989  18.930  1.00  0.00           H
ATOM   5399  HZ2 LYS A 435      -2.798 -21.539  19.328  1.00  0.00           H
ATOM   5400  HZ3 LYS A 435      -3.744 -22.493  20.331  1.00  0.00           H
ATOM   5401  N   ASN A 436      -8.781 -15.555  18.227  1.00 38.38           N
ATOM   5402  CA  ASN A 436      -9.766 -14.672  18.871  1.00 38.54           C
ATOM   5403  C   ASN A 436     -10.418 -13.635  17.948  1.00 36.60           C
ATOM   5404  O   ASN A 436     -11.047 -12.697  18.439  1.00 35.38           O
ATOM   5405  CB  ASN A 436      -9.386 -14.191  20.297  1.00 41.89           C
ATOM   5406  CG  ASN A 436      -8.150 -13.296  20.409  1.00 46.16           C
ATOM   5407  OD1 ASN A 436      -7.054 -13.777  20.696  1.00 46.58           O
ATOM   5408  ND2 ASN A 436      -8.333 -11.986  20.276  1.00 48.00           N
ATOM   5409  H   ASN A 436      -8.179 -15.176  17.504  1.00  0.00           H
ATOM   5410  HA  ASN A 436     -10.640 -15.298  19.054  1.00  0.00           H
ATOM   5411  HB2 ASN A 436     -10.231 -13.670  20.748  1.00  0.00           H
ATOM   5412  HB3 ASN A 436      -9.222 -15.063  20.931  1.00  0.00           H
ATOM   5413 HD21 ASN A 436      -9.234 -11.610  20.020  1.00  0.00           H
ATOM   5414 HD22 ASN A 436      -7.574 -11.325  20.452  1.00  0.00           H
ATOM   5415  N   TRP A 437     -10.324 -13.844  16.625  1.00 33.69           N
ATOM   5416  CA  TRP A 437     -10.849 -13.009  15.535  1.00 32.40           C
ATOM   5417  C   TRP A 437     -12.290 -12.500  15.723  1.00 31.88           C
ATOM   5418  O   TRP A 437     -12.592 -11.335  15.478  1.00 31.51           O
ATOM   5419  CB  TRP A 437     -10.698 -13.764  14.194  1.00 31.53           C
ATOM   5420  CG  TRP A 437     -11.581 -14.964  13.970  1.00 29.81           C
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ATOM   5421  CD1 TRP A 437     -11.300 -16.241  14.317  1.00 30.15           C
ATOM   5422  CD2 TRP A 437     -12.900 -15.013  13.340  1.00 29.74           C
ATOM   5423  NE1 TRP A 437     -12.342 -17.066  13.952  1.00 29.97           N
ATOM   5424  CE3 TRP A 437     -13.765 -14.046  12.774  1.00 28.47           C
ATOM   5425  CE2 TRP A 437     -13.361 -16.365  13.347  1.00 28.86           C
ATOM   5426  CZ3 TRP A 437     -15.022 -14.408  12.250  1.00 29.95           C
ATOM   5427  CZ2 TRP A 437     -14.607 -16.740  12.815  1.00 30.78           C
ATOM   5428  CH2 TRP A 437     -15.442 -15.752  12.264  1.00 28.37           C
ATOM   5429  H   TRP A 437      -9.743 -14.623  16.328  1.00  0.00           H
ATOM   5430  HA  TRP A 437     -10.216 -12.121  15.488  1.00  0.00           H
ATOM   5431  HB2 TRP A 437     -10.899 -13.075  13.377  1.00  0.00           H
ATOM   5432  HB3 TRP A 437      -9.657 -14.057  14.055  1.00  0.00           H
ATOM   5433  HD1 TRP A 437     -10.391 -16.565  14.799  1.00  0.00           H
ATOM   5434  HE1 TRP A 437     -12.318 -18.064  14.121  1.00  0.00           H
ATOM   5435  HE3 TRP A 437     -13.454 -13.010  12.756  1.00  0.00           H
ATOM   5436  HZ3 TRP A 437     -15.669 -13.650  11.838  1.00  0.00           H
ATOM   5437  HZ2 TRP A 437     -14.925 -17.772  12.836  1.00  0.00           H
ATOM   5438  HH2 TRP A 437     -16.405 -16.023  11.855  1.00  0.00           H
ATOM   5439  N   LYS A 438     -13.197 -13.386  16.156  1.00 30.82           N
ATOM   5440  CA  LYS A 438     -14.640 -13.143  16.174  1.00 31.39           C
ATOM   5441  C   LYS A 438     -15.022 -12.053  17.197  1.00 29.84           C
ATOM   5442  O   LYS A 438     -15.985 -11.325  16.971  1.00 28.51           O
ATOM   5443  CB  LYS A 438     -15.362 -14.484  16.480  1.00 33.89           C
ATOM   5444  CG  LYS A 438     -16.797 -14.643  15.917  1.00 35.72           C
ATOM   5445  CD  LYS A 438     -17.826 -13.666  16.508  1.00 37.55           C
ATOM   5446  CE  LYS A 438     -19.297 -14.075  16.360  1.00 37.38           C
ATOM   5447  NZ  LYS A 438     -20.159 -13.114  17.067  1.00 33.68           N1+
ATOM   5448  H   LYS A 438     -12.862 -14.323  16.316  1.00  0.00           H
ATOM   5449  HA  LYS A 438     -14.929 -12.796  15.180  1.00  0.00           H
ATOM   5450  HB2 LYS A 438     -14.777 -15.299  16.049  1.00  0.00           H
ATOM   5451  HB3 LYS A 438     -15.364 -14.672  17.555  1.00  0.00           H
ATOM   5452  HG2 LYS A 438     -16.782 -14.554  14.829  1.00  0.00           H
ATOM   5453  HG3 LYS A 438     -17.118 -15.664  16.127  1.00  0.00           H
ATOM   5454  HD2 LYS A 438     -17.605 -13.531  17.568  1.00  0.00           H
ATOM   5455  HD3 LYS A 438     -17.708 -12.696  16.028  1.00  0.00           H
ATOM   5456  HE2 LYS A 438     -19.579 -14.120  15.308  1.00  0.00           H
ATOM   5457  HE3 LYS A 438     -19.459 -15.065  16.789  1.00  0.00           H
ATOM   5458  HZ1 LYS A 438     -21.136 -13.347  17.009  1.00  0.00           H
ATOM   5459  HZ2 LYS A 438     -19.890 -13.161  18.078  1.00  0.00           H
ATOM   5460  HZ3 LYS A 438     -19.993 -12.162  16.771  1.00  0.00           H
ATOM   5461  N   LYS A 439     -14.252 -11.889  18.285  1.00 29.46           N
ATOM   5462  CA  LYS A 439     -14.545 -10.950  19.373  1.00 32.01           C
ATOM   5463  C   LYS A 439     -14.586  -9.474  18.943  1.00 31.47           C
ATOM   5464  O   LYS A 439     -15.245  -8.664  19.593  1.00 31.96           O
ATOM   5465  CB  LYS A 439     -13.512 -11.129  20.508  1.00 33.79           C
ATOM   5466  CG  LYS A 439     -13.624 -12.454  21.293  1.00 37.29           C
ATOM   5467  CD  LYS A 439     -15.017 -12.756  21.886  1.00 37.29           C
ATOM   5468  CE  LYS A 439     -15.591 -11.639  22.781  1.00 40.03           C
ATOM   5469  NZ  LYS A 439     -16.967 -11.945  23.203  1.00 40.12           N1+
ATOM   5470  H   LYS A 439     -13.380 -12.401  18.324  1.00  0.00           H
ATOM   5471  HA  LYS A 439     -15.550 -11.168  19.738  1.00  0.00           H
ATOM   5472  HB2 LYS A 439     -12.504 -11.037  20.096  1.00  0.00           H
ATOM   5473  HB3 LYS A 439     -13.593 -10.298  21.211  1.00  0.00           H
ATOM   5474  HG2 LYS A 439     -13.333 -13.278  20.640  1.00  0.00           H
ATOM   5475  HG3 LYS A 439     -12.885 -12.443  22.095  1.00  0.00           H
ATOM   5476  HD2 LYS A 439     -15.710 -12.971  21.071  1.00  0.00           H
ATOM   5477  HD3 LYS A 439     -14.953 -13.683  22.458  1.00  0.00           H
ATOM   5478  HE2 LYS A 439     -14.960 -11.484  23.657  1.00  0.00           H
ATOM   5479  HE3 LYS A 439     -15.628 -10.693  22.239  1.00  0.00           H
ATOM   5480  HZ1 LYS A 439     -17.380 -11.186  23.719  1.00  0.00           H
ATOM   5481  HZ2 LYS A 439     -17.541 -12.054  22.327  1.00  0.00           H
ATOM   5482  HZ3 LYS A 439     -17.037 -12.812  23.705  1.00  0.00           H
ATOM   5483  N   PHE A 440     -13.929  -9.142  17.833  1.00 29.67           N
ATOM   5484  CA  PHE A 440     -13.863  -7.800  17.273  1.00 30.46           C
ATOM   5485  C   PHE A 440     -15.083  -7.491  16.376  1.00 32.12           C
ATOM   5486  O   PHE A 440     -15.353  -6.325  16.104  1.00 32.41           O
ATOM   5487  CB  PHE A 440     -12.569  -7.726  16.458  1.00 27.41           C
ATOM   5488  CG  PHE A 440     -11.311  -7.834  17.297  1.00 25.90           C
ATOM   5489  CD1 PHE A 440     -10.820  -6.688  17.951  1.00 25.42           C
ATOM   5490  CD2 PHE A 440     -10.624  -9.061  17.427  1.00 24.33           C
ATOM   5491  CE1 PHE A 440      -9.647  -6.759  18.716  1.00 23.50           C
ATOM   5492  CE2 PHE A 440      -9.454  -9.131  18.208  1.00 24.72           C
ATOM   5493  CZ  PHE A 440      -8.962  -7.981  18.849  1.00 23.12           C
ATOM   5494  H   PHE A 440     -13.397  -9.858  17.357  1.00  0.00           H
ATOM   5495  HA  PHE A 440     -13.828  -7.053  18.069  1.00  0.00           H
ATOM   5496  HB2 PHE A 440     -12.562  -8.508  15.702  1.00  0.00           H
ATOM   5497  HB3 PHE A 440     -12.519  -6.775  15.934  1.00  0.00           H
ATOM   5498  HD1 PHE A 440     -11.316  -5.733  17.855  1.00  0.00           H
ATOM   5499  HD2 PHE A 440     -10.973  -9.945  16.919  1.00  0.00           H
ATOM   5500  HE1 PHE A 440      -9.271  -5.856  19.171  1.00  0.00           H
ATOM   5501  HE2 PHE A 440      -8.910 -10.057  18.297  1.00  0.00           H
ATOM   5502  HZ  PHE A 440      -8.047  -8.030  19.417  1.00  0.00           H
ATOM   5503  N   ARG A 441     -15.895  -8.498  16.009  1.00 33.77           N
ATOM   5504  CA  ARG A 441     -17.264  -8.324  15.512  1.00 36.52           C
ATOM   5505  C   ARG A 441     -18.228  -8.785  16.629  1.00 38.32           C
ATOM   5506  O   ARG A 441     -19.165  -9.556  16.391  1.00 39.68           O
ATOM   5507  CB  ARG A 441     -17.502  -9.103  14.190  1.00 36.16           C
ATOM   5508  CG  ARG A 441     -16.592  -8.738  12.994  1.00 36.35           C
ATOM   5509  CD  ARG A 441     -16.636  -7.268  12.510  1.00 37.85           C
ATOM   5510  NE  ARG A 441     -17.241  -7.112  11.169  1.00 37.46           N
ATOM   5511  CZ  ARG A 441     -16.630  -6.922   9.987  1.00 38.15           C
ATOM   5512  NH1 ARG A 441     -15.308  -6.863   9.844  1.00 39.40           N
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ATOM   5513  NH2 ARG A 441     -17.405  -6.824   8.920  1.00 37.27          N1+
ATOM   5514  H   ARG A 441     -15.653  -9.425  16.341  1.00  0.00           H
ATOM   5515  HA  ARG A 441     -17.489  -7.270  15.342  1.00  0.00           H
ATOM   5516  HB2 ARG A 441     -17.395 -10.171  14.387  1.00  0.00           H
ATOM   5517  HB3 ARG A 441     -18.539  -8.961  13.881  1.00  0.00           H
ATOM   5518  HG2 ARG A 441     -15.568  -8.998  13.255  1.00  0.00           H
ATOM   5519  HG3 ARG A 441     -16.841  -9.396  12.163  1.00  0.00           H
ATOM   5520  HD2 ARG A 441     -17.172  -6.628  13.209  1.00  0.00           H
ATOM   5521  HD3 ARG A 441     -15.628  -6.878  12.484  1.00  0.00           H
ATOM   5522  HE  ARG A 441     -18.250  -7.033  11.146  1.00  0.00           H
ATOM   5523 HH11 ARG A 441     -14.732  -6.409  10.560  1.00  0.00           H
ATOM   5524 HH12 ARG A 441     -14.904  -6.909   8.878  1.00  0.00           H
ATOM   5525 HH21 ARG A 441     -17.304  -5.903   8.448  1.00  0.00           H
ATOM   5526 HH22 ARG A 441     -17.121  -7.455   8.130  1.00  0.00           H
ATOM   5527  N   GLU A 442     -17.954  -8.317  17.854  1.00 40.76           N
ATOM   5528  CA  GLU A 442     -18.776  -8.376  19.062  1.00 41.35           C
ATOM   5529  C   GLU A 442     -18.548  -7.102  19.884  1.00 40.88           C
ATOM   5530  O   GLU A 442     -19.506  -6.478  20.329  1.00 41.44           O
ATOM   5531  CB  GLU A 442     -18.544  -9.655  19.896  1.00 43.85           C
ATOM   5532  CG  GLU A 442     -18.881 -10.947  19.143  1.00 47.68           C
ATOM   5533  CD  GLU A 442     -18.864 -12.200  19.997  1.00 49.70           C
ATOM   5534  OE1 GLU A 442     -18.280 -12.179  21.101  1.00 49.65           O
ATOM   5535  OE2 GLU A 442     -19.407 -13.200  19.482  1.00 50.39          O1-
ATOM   5536  H   GLU A 442     -17.163  -7.691  17.910  1.00  0.00           H
ATOM   5537  HA  GLU A 442     -19.824  -8.355  18.753  1.00  0.00           H
ATOM   5538  HB2 GLU A 442     -17.515  -9.696  20.248  1.00  0.00           H
ATOM   5539  HB3 GLU A 442     -19.163  -9.599  20.793  1.00  0.00           H
ATOM   5540  HG2 GLU A 442     -19.874 -10.846  18.707  1.00  0.00           H
ATOM   5541  HG3 GLU A 442     -18.175 -11.098  18.329  1.00  0.00           H
ATOM   5542  N   NMA A 442A    -17.279  -6.713  20.066  1.00  0.00           N
ATOM   5543  CA  NMA A 442A    -16.898  -5.482  20.745  1.00  0.00           C
ATOM   5544  H   NMA A 442A    -16.530  -7.339  19.777  1.00  0.00           H
ATOM   5545 1HA  NMA A 442A    -15.812  -5.387  20.772  1.00  0.00           H
ATOM   5546 2HA  NMA A 442A    -17.303  -4.613  20.224  1.00  0.00           H
ATOM   5547 3HA  NMA A 442A    -17.270  -5.471  21.770  1.00  0.00           H
TER    5548      NMA A 442A
HETATM 5549  O   SPC     5     -1.739  -0.667  20.495  1.00  0.00           O
HETATM 5550  H1  SPC     5     -1.707  -1.514  21.060  1.00  0.00           H
HETATM 5551  H2  SPC     5     -1.582  -0.923  19.528  1.00  0.00           H
HETATM 5552  O   SPC     9     -3.443   8.608  14.878  1.00  0.00           O
HETATM 5553  H1  SPC     9     -2.809   9.367  14.680  1.00  0.00           H
HETATM 5554  H2  SPC     9     -3.158   8.174  15.740  1.00  0.00           H
HETATM 5555  O   SPC    12     -7.827   6.567  17.748  1.00  0.00           O
HETATM 5556  H1  SPC    12     -8.469   6.050  17.166  1.00  0.00           H
HETATM 5557  H2  SPC    12     -7.721   7.497  17.368  1.00  0.00           H
HETATM 5558  O   SPC    13     -3.003   5.289  18.292  1.00  0.00           O
HETATM 5559  H1  SPC    13     -2.674   6.196  18.000  1.00  0.00           H
HETATM 5560  H2  SPC    13     -3.986   5.363  18.519  1.00  0.00           H
HETATM 5561  O   SPC    14      5.037   2.316  22.035  1.00  0.00           O
HETATM 5562  H1  SPC    14      4.143   2.223  22.493  1.00  0.00           H
HETATM 5563  H2  SPC    14      5.383   1.387  21.830  1.00  0.00           H
HETATM 5564  O   SPC    15      2.284   7.505  17.140  1.00  0.00           O
HETATM 5565  H1  SPC    15      3.070   8.027  17.505  1.00  0.00           H
HETATM 5566  H2  SPC    15      1.870   8.061  16.398  1.00  0.00           H
HETATM 5567  O   SPC    17      4.380   9.264  17.533  1.00  0.00           O
HETATM 5568  H1  SPC    17      4.680   9.272  16.570  1.00  0.00           H
HETATM 5569  H2  SPC    17      5.135   8.904  18.100  1.00  0.00           H
HETATM 5570  O   SPC    19     -5.732   2.897  19.686  1.00  0.00           O
HETATM 5571  H1  SPC    19     -6.101   2.630  20.580  1.00  0.00           H
HETATM 5572  H2  SPC    19     -4.927   2.318  19.488  1.00  0.00           H
HETATM 5573  O   SPC    21     -4.926   8.253  18.149  1.00  0.00           O
HETATM 5574  H1  SPC    21     -5.158   7.404  18.645  1.00  0.00           H
HETATM 5575  H2  SPC    21     -5.749   8.560  17.648  1.00  0.00           H
HETATM 5576  O   SPC    22     -7.185   3.101  17.312  1.00  0.00           O
HETATM 5577  H1  SPC    22     -6.385   3.124  16.696  1.00  0.00           H
HETATM 5578  H2  SPC    22     -6.843   3.106  18.262  1.00  0.00           H
HETATM 5579  O   SPC    26      6.413   7.909  18.803  1.00  0.00           O
HETATM 5580  H1  SPC    26      6.420   7.634  19.767  1.00  0.00           H
HETATM 5581  H2  SPC    26      6.211   7.090  18.237  1.00  0.00           H
HETATM 5582  O   SPC    31     -0.170   6.129  16.982  1.00  0.00           O
HETATM 5583  H1  SPC    31      0.686   6.625  17.176  1.00  0.00           H
HETATM 5584  H2  SPC    31     -0.946   6.754  17.146  1.00  0.00           H
HETATM 5585  O   SPC    32      5.825   5.774  17.297  1.00  0.00           O
HETATM 5586  H1  SPC    32      6.571   5.358  16.761  1.00  0.00           H
HETATM 5587  H2  SPC    32      4.942   5.428  16.948  1.00  0.00           H
HETATM 5588  O   SPC    34      1.530   4.758  22.084  1.00  0.00           O
HETATM 5589  H1  SPC    34      1.439   5.323  21.256  1.00  0.00           H
HETATM 5590  H2  SPC    34      0.642   4.305  22.262  1.00  0.00           H
HETATM 5591  O   SPC    35      0.643  -1.938  23.260  1.00  0.00           O
HETATM 5592  H1  SPC    35     -0.118  -2.302  22.691  1.00  0.00           H
HETATM 5593  H2  SPC    35      0.455  -2.208  24.208  1.00  0.00           H
HETATM 5594  O   SPC    37     -1.810   3.342  19.724  1.00  0.00           O
HETATM 5595  H1  SPC    37     -2.434   2.549  19.650  1.00  0.00           H
HETATM 5596  H2  SPC    37     -2.245   4.134  19.265  1.00  0.00           H
HETATM 5597  O   SPC    38      2.100   5.709  19.418  1.00  0.00           O
HETATM 5598  H1  SPC    38      2.999   5.462  19.808  1.00  0.00           H
HETATM 5599  H2  SPC    38      2.237   6.390  18.689  1.00  0.00           H
HETATM 5600  O   SPC    39      4.116   4.719  21.030  1.00  0.00           O
HETATM 5601  H1  SPC    39      3.319   4.792  21.643  1.00  0.00           H
HETATM 5602  H2  SPC    39      4.693   3.953  21.349  1.00  0.00           H
HETATM 5603  O   SPC    41     -5.609   5.608  18.939  1.00  0.00           O
HETATM 5604  H1  SPC    41     -6.500   5.895  18.546  1.00  0.00           H
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HETATM 5605  H2  SPC    41      -5.706   4.673  19.306  1.00  0.00           H
HETATM 5606  O   SPC    44       3.158  -1.892  22.029  1.00  0.00           O
HETATM 5607  H1  SPC    44       3.259  -2.836  21.687  1.00  0.00           H
HETATM 5608  H2  SPC    44       2.286  -1.833  22.536  1.00  0.00           H
HETATM 5609  O   SPC    46       3.381   5.163  16.173  1.00  0.00           O
HETATM 5610  H1  SPC    46       2.914   6.009  16.463  1.00  0.00           H
HETATM 5611  H2  SPC    46       3.537   5.200  15.176  1.00  0.00           H
HETATM 5612  O   SPC    52       2.345   2.085  22.504  1.00  0.00           O
HETATM 5613  H1  SPC    52       1.542   1.477  22.589  1.00  0.00           H
HETATM 5614  H2  SPC    52       2.031   3.042  22.571  1.00  0.00           H
HETATM 5615  O   SPC    53      -7.096   8.999  16.664  1.00  0.00           O
HETATM 5616  H1  SPC    53      -7.510   9.922  16.683  1.00  0.00           H
HETATM 5617  H2  SPC    53      -6.733   8.839  15.734  1.00  0.00           H
HETATM 5618  O   SPC    55      -2.375   7.821  17.387  1.00  0.00           O
HETATM 5619  H1  SPC    55      -1.858   8.694  17.397  1.00  0.00           H
HETATM 5620  H2  SPC    55      -3.308   8.003  17.740  1.00  0.00           H
HETATM 5621  O   SPC    57       5.323  -0.287  21.277  1.00  0.00           O
HETATM 5622  H1  SPC    57       6.119  -0.784  20.906  1.00  0.00           H
HETATM 5623  H2  SPC    57       4.662  -0.956  21.650  1.00  0.00           H
HETATM 5624  O   SPC    59       0.115   0.485  22.136  1.00  0.00           O
HETATM 5625  H1  SPC    59      -0.597   0.189  21.479  1.00  0.00           H
HETATM 5626  H2  SPC    59       0.369  -0.322  22.693  1.00  0.00           H
HETATM 5627  O   SPC    61      -0.647   3.170  22.205  1.00  0.00           O
HETATM 5628  H1  SPC    61      -0.510   2.182  22.355  1.00  0.00           H
HETATM 5629  H2  SPC    61      -1.200   3.293  21.369  1.00  0.00           H
HETATM 5630  O   SPC    62       0.880   3.267  19.208  1.00  0.00           O
HETATM 5631  H1  SPC    62       1.224   4.218  19.230  1.00  0.00           H
HETATM 5632  H2  SPC    62      -0.112   3.278  19.411  1.00  0.00           H
HETATM 5633  O   SPC    65      -3.488   1.217  19.406  1.00  0.00           O
HETATM 5634  H1  SPC    65      -3.412   0.782  18.493  1.00  0.00           H
HETATM 5635  H2  SPC    65      -3.043   0.601  20.073  1.00  0.00           H
HETATM 5636  O   SPC   384       1.248   1.583 -20.839  1.00  0.00           O
HETATM 5637  H1  SPC   384       0.456   0.942 -20.763  1.00  0.00           H
HETATM 5638  H2  SPC   384       0.905   2.442 -21.222  1.00  0.00           H
HETATM 5639  O   SPC   406       6.048   9.547 -15.929  1.00  0.00           O
HETATM 5640  H1  SPC   406       6.116  10.548 -15.875  1.00  0.00           H
HETATM 5641  H2  SPC   406       6.816   9.155 -15.397  1.00  0.00           H
HETATM 5642  O   SPC   447      -0.035   8.426 -16.306  1.00  0.00           O
HETATM 5643  H1  SPC   447      -0.555   8.015 -17.078  1.00  0.00           H
HETATM 5644  H2  SPC   447      -0.582   9.195 -15.937  1.00  0.00           H
HETATM 5645  O   SPC   454      -7.193  21.978   5.501  1.00  0.00           O
HETATM 5646  H1  SPC   454      -7.353  21.025   5.785  1.00  0.00           H
HETATM 5647  H2  SPC   454      -7.595  22.592   6.194  1.00  0.00           H
HETATM 5648  O   SPC   455       5.540  27.070  -7.206  1.00  0.00           O
HETATM 5649  H1  SPC   455       6.422  27.306  -7.637  1.00  0.00           H
HETATM 5650  H2  SPC   455       5.660  26.199  -6.705  1.00  0.00           H
HETATM 5651  O   SPC   457       4.548  21.794  -0.179  1.00  0.00           O
HETATM 5652  H1  SPC   457       4.173  21.084  -0.800  1.00  0.00           H
HETATM 5653  H2  SPC   457       3.795  22.391   0.133  1.00  0.00           H
HETATM 5654  O   SPC   458      -0.518  17.288   2.767  1.00  0.00           O
HETATM 5655  H1  SPC   458      -0.648  16.296   2.883  1.00  0.00           H
HETATM 5656  H2  SPC   458      -0.267  17.468   1.804  1.00  0.00           H
HETATM 5657  O   SPC   459       5.961  23.398  -8.473  1.00  0.00           O
HETATM 5658  H1  SPC   459       5.586  22.469  -8.615  1.00  0.00           H
HETATM 5659  H2  SPC   459       5.298  24.069  -8.845  1.00  0.00           H
HETATM 5660  O   SPC   460      -0.209  25.880  -5.169  1.00  0.00           O
HETATM 5661  H1  SPC   460       0.193  25.069  -4.716  1.00  0.00           H
HETATM 5662  H2  SPC   460      -1.199  25.904  -4.954  1.00  0.00           H
HETATM 5663  O   SPC   461      -3.143  18.191   6.810  1.00  0.00           O
HETATM 5664  H1  SPC   461      -3.068  18.191   5.804  1.00  0.00           H
HETATM 5665  H2  SPC   461      -3.820  18.891   7.089  1.00  0.00           H
HETATM 5666  O   SPC   462      -8.188  23.247   7.749  1.00  0.00           O
HETATM 5667  H1  SPC   462      -8.895  23.930   7.945  1.00  0.00           H
HETATM 5668  H2  SPC   462      -8.505  22.343   8.075  1.00  0.00           H
HETATM 5669  O   SPC   463       8.173  23.191   0.970  1.00  0.00           O
HETATM 5670  H1  SPC   463       8.817  22.595   1.483  1.00  0.00           H
HETATM 5671  H2  SPC   463       8.623  23.476   0.109  1.00  0.00           H
HETATM 5672  O   SPC   464       4.839  23.142  -4.255  1.00  0.00           O
HETATM 5673  H1  SPC   464       4.175  23.844  -3.952  1.00  0.00           H
HETATM 5674  H2  SPC   464       5.429  22.910  -3.468  1.00  0.00           H
HETATM 5675  O   SPC   466      -3.511  23.287   7.304  1.00  0.00           O
HETATM 5676  H1  SPC   466      -4.060  23.119   6.472  1.00  0.00           H
HETATM 5677  H2  SPC   466      -2.717  23.855   7.040  1.00  0.00           H
HETATM 5678  O   SPC   467      -0.826  19.636   7.057  1.00  0.00           O
HETATM 5679  H1  SPC   467      -0.957  20.363   7.748  1.00  0.00           H
HETATM 5680  H2  SPC   467      -1.658  19.062   7.039  1.00  0.00           H
HETATM 5681  O   SPC   468       7.815  28.439  -0.989  1.00  0.00           O
HETATM 5682  H1  SPC   468       8.514  27.767  -0.695  1.00  0.00           H
HETATM 5683  H2  SPC   468       7.746  28.412  -1.998  1.00  0.00           H
HETATM 5684  O   SPC   469       7.864  28.293  -3.704  1.00  0.00           O
HETATM 5685  H1  SPC   469       7.908  27.397  -4.174  1.00  0.00           H
HETATM 5686  H2  SPC   469       8.788  28.703  -3.718  1.00  0.00           H
HETATM 5687  O   SPC   470      -3.853  23.943   0.100  1.00  0.00           O
HETATM 5688  H1  SPC   470      -4.046  24.026  -0.883  1.00  0.00           H
HETATM 5689  H2  SPC   470      -4.716  24.076   0.614  1.00  0.00           H
HETATM 5690  O   SPC   471       3.419  26.320   0.728  1.00  0.00           O
HETATM 5691  H1  SPC   471       4.293  26.829   0.709  1.00  0.00           H
HETATM 5692  H2  SPC   471       2.872  26.576  -0.085  1.00  0.00           H
HETATM 5693  O   SPC   472      -5.310  19.349   4.513  1.00  0.00           O
HETATM 5694  H1  SPC   472      -4.380  18.994   4.364  1.00  0.00           H
HETATM 5695  H2  SPC   472      -5.420  20.198   3.985  1.00  0.00           H
HETATM 5696  O   SPC   473       5.949  27.368   0.666  1.00  0.00           O
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HETATM 5697  H1  SPC   473       6.504  27.936   0.038  1.00  0.00           H
HETATM 5698  H2  SPC   473       6.572  26.746   1.166  1.00  0.00           H
HETATM 5699  O   SPC   475       3.319  25.079  -3.242  1.00  0.00           O
HETATM 5700  H1  SPC   475       2.812  25.934  -3.426  1.00  0.00           H
HETATM 5701  H2  SPC   475       4.015  25.267  -2.535  1.00  0.00           H
HETATM 5702  O   SPC   476      -3.597  26.508  -7.216  1.00  0.00           O
HETATM 5703  H1  SPC   476      -3.254  25.957  -7.985  1.00  0.00           H
HETATM 5704  H2  SPC   476      -4.175  27.244  -7.573  1.00  0.00           H
HETATM 5705  O   SPC   477      -1.918  25.225   1.546  1.00  0.00           O
HETATM 5706  H1  SPC   477      -2.609  24.837   0.918  1.00  0.00           H
HETATM 5707  H2  SPC   477      -2.301  25.210   2.485  1.00  0.00           H
HETATM 5708  O   SPC   478       6.718  24.014   7.001  1.00  0.00           O
HETATM 5709  H1  SPC   478       7.559  24.389   7.418  1.00  0.00           H
HETATM 5710  H2  SPC   478       5.926  24.362   7.517  1.00  0.00           H
HETATM 5711  O   SPC   479       6.093  24.665  -6.088  1.00  0.00           O
HETATM 5712  H1  SPC   479       6.106  24.137  -6.953  1.00  0.00           H
HETATM 5713  H2  SPC   479       5.636  24.103  -5.381  1.00  0.00           H
HETATM 5714  O   SPC   480      -4.742  22.927   4.872  1.00  0.00           O
HETATM 5715  H1  SPC   480      -4.198  22.205   4.421  1.00  0.00           H
HETATM 5716  H2  SPC   480      -5.693  22.596   4.987  1.00  0.00           H
HETATM 5717  O   SPC   481       7.674  25.693   1.920  1.00  0.00           O
HETATM 5718  H1  SPC   481       7.158  25.715   2.787  1.00  0.00           H
HETATM 5719  H2  SPC   481       7.810  24.726   1.650  1.00  0.00           H
HETATM 5720  O   SPC   483       0.972  25.154   6.995  1.00  0.00           O
HETATM 5721  H1  SPC   483       1.535  24.600   7.624  1.00  0.00           H
HETATM 5722  H2  SPC   483       1.396  25.134   6.080  1.00  0.00           H
HETATM 5723  O   SPC   484       4.027  26.365   6.010  1.00  0.00           O
HETATM 5724  H1  SPC   484       3.926  27.350   6.175  1.00  0.00           H
HETATM 5725  H2  SPC   484       4.232  25.914   6.890  1.00  0.00           H
HETATM 5726  O   SPC   485       2.936  23.676   1.113  1.00  0.00           O
HETATM 5727  H1  SPC   485       3.142  24.645   0.905  1.00  0.00           H
HETATM 5728  H2  SPC   485       1.935  23.557   1.123  1.00  0.00           H
HETATM 5729  O   SPC   486       6.384  21.297   1.678  1.00  0.00           O
HETATM 5730  H1  SPC   486       7.099  21.942   1.363  1.00  0.00           H
HETATM 5731  H2  SPC   486       5.634  21.307   0.993  1.00  0.00           H
HETATM 5732  O   SPC   487       2.173  24.994   4.535  1.00  0.00           O
HETATM 5733  H1  SPC   487       2.925  25.491   4.992  1.00  0.00           H
HETATM 5734  H2  SPC   487       1.803  25.581   3.794  1.00  0.00           H
HETATM 5735  O   SPC   488       1.423  22.494   3.720  1.00  0.00           O
HETATM 5736  H1  SPC   488       1.784  23.380   4.057  1.00  0.00           H
HETATM 5737  H2  SPC   488       1.046  22.638   2.797  1.00  0.00           H
HETATM 5738  O   SPC   490      -2.325  21.950   1.251  1.00  0.00           O
HETATM 5739  H1  SPC   490      -2.922  22.645   0.822  1.00  0.00           H
HETATM 5740  H2  SPC   490      -1.374  22.288   1.223  1.00  0.00           H
HETATM 5741  O   SPC   491       5.116  23.497   2.777  1.00  0.00           O
HETATM 5742  H1  SPC   491       5.567  22.672   2.410  1.00  0.00           H
HETATM 5743  H2  SPC   491       4.228  23.602   2.303  1.00  0.00           H
HETATM 5744  O   SPC   492      -2.644  18.531   4.076  1.00  0.00           O
HETATM 5745  H1  SPC   492      -1.769  18.121   3.774  1.00  0.00           H
HETATM 5746  H2  SPC   492      -2.581  19.538   3.979  1.00  0.00           H
HETATM 5747  O   SPC   493      -0.282  24.774  -7.724  1.00  0.00           O
HETATM 5748  H1  SPC   493      -0.195  25.356  -6.901  1.00  0.00           H
HETATM 5749  H2  SPC   493       0.455  25.009  -8.375  1.00  0.00           H
HETATM 5750  O   SPC   494      -1.373  24.326   6.045  1.00  0.00           O
HETATM 5751  H1  SPC   494      -0.572  24.779   6.469  1.00  0.00           H
HETATM 5752  H2  SPC   494      -1.098  23.397   5.757  1.00  0.00           H
HETATM 5753  O   SPC   495      -2.857  25.586  -4.652  1.00  0.00           O
HETATM 5754  H1  SPC   495      -3.255  24.708  -4.350  1.00  0.00           H
HETATM 5755  H2  SPC   495      -3.299  25.870  -5.515  1.00  0.00           H
HETATM 5756  O   SPC   497       6.282  23.033  -1.933  1.00  0.00           O
HETATM 5757  H1  SPC   497       6.138  24.023  -1.783  1.00  0.00           H
HETATM 5758  H2  SPC   497       5.743  22.524  -1.246  1.00  0.00           H
HETATM 5759  O   SPC   498      -7.184  19.345   6.407  1.00  0.00           O
HETATM 5760  H1  SPC   498      -6.529  19.295   5.634  1.00  0.00           H
HETATM 5761  H2  SPC   498      -7.527  18.407   6.587  1.00  0.00           H
HETATM 5762  O   SPC   499      -3.055  24.904   3.971  1.00  0.00           O
HETATM 5763  H1  SPC   499      -3.811  24.294   4.242  1.00  0.00           H
HETATM 5764  H2  SPC   499      -2.374  24.912   4.717  1.00  0.00           H
HETATM 5765  O   SPC   500      -8.641  20.642   8.403  1.00  0.00           O
HETATM 5766  H1  SPC   500      -8.136  20.103   7.714  1.00  0.00           H
HETATM 5767  H2  SPC   500      -8.134  20.593   9.279  1.00  0.00           H
HETATM 5768  O   SPC   502      -2.644  24.537  -9.045  1.00  0.00           O
HETATM 5769  H1  SPC   502      -2.383  24.309  -9.999  1.00  0.00           H
HETATM 5770  H2  SPC   502      -1.793  24.601  -8.498  1.00  0.00           H
HETATM 5771  O   SPC   503       2.795  20.413   4.986  1.00  0.00           O
HETATM 5772  H1  SPC   503       2.558  19.577   4.474  1.00  0.00           H
HETATM 5773  H2  SPC   503       2.404  21.207   4.500  1.00  0.00           H
HETATM 5774  O   SPC   504      -8.813  24.135   1.317  1.00  0.00           O
HETATM 5775  H1  SPC   504      -9.164  23.632   0.519  1.00  0.00           H
HETATM 5776  H2  SPC   504      -7.813  24.213   1.246  1.00  0.00           H
HETATM 5777  O   SPC   505       0.726  24.103  -1.299  1.00  0.00           O
HETATM 5778  H1  SPC   505       1.089  25.044  -1.251  1.00  0.00           H
HETATM 5779  H2  SPC   505       0.720  23.816  -2.266  1.00  0.00           H
HETATM 5780  O   SPC   506       1.366  26.523   2.472  1.00  0.00           O
HETATM 5781  H1  SPC   506       0.620  26.920   1.923  1.00  0.00           H
HETATM 5782  H2  SPC   506       2.198  26.490   1.899  1.00  0.00           H
HETATM 5783  O   SPC   507       3.499  21.074   7.591  1.00  0.00           O
HETATM 5784  H1  SPC   507       2.888  20.498   8.157  1.00  0.00           H
HETATM 5785  H2  SPC   507       3.334  20.851   6.617  1.00  0.00           H
HETATM 5786  O   SPC   508      -5.100  23.653 -10.140  1.00  0.00           O
HETATM 5787  H1  SPC   508      -5.086  23.536 -11.141  1.00  0.00           H
HETATM 5788  H2  SPC   508      -4.215  24.037  -9.853  1.00  0.00           H
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HETATM 5789  O   SPC   509     -0.699  21.774   5.255  1.00  0.00          O
HETATM 5790  H1  SPC   509      0.161  21.958   4.752  1.00  0.00          H
HETATM 5791  H2  SPC   509     -0.549  20.998   5.884  1.00  0.00          H
HETATM 5792  O   SPC   510      2.642  23.559   8.438  1.00  0.00          O
HETATM 5793  H1  SPC   510      2.982  22.676   8.080  1.00  0.00          H
HETATM 5794  H2  SPC   510      3.421  24.195   8.522  1.00  0.00          H
HETATM 5795  O   SPC   511      1.073  23.756  -4.071  1.00  0.00          O
HETATM 5796  H1  SPC   511      2.026  24.033  -3.883  1.00  0.00          H
HETATM 5797  H2  SPC   511      1.065  23.075  -4.815  1.00  0.00          H
HETATM 5798  O   SPC   512     -2.873  21.198   3.768  1.00  0.00          O
HETATM 5799  H1  SPC   512     -2.107  21.520   4.350  1.00  0.00          H
HETATM 5800  H2  SPC   512     -2.707  21.511   2.818  1.00  0.00          H
HETATM 5801  O   SPC   513      8.204  25.916  -4.939  1.00  0.00          O
HETATM 5802  H1  SPC   513      8.731  25.195  -4.467  1.00  0.00          H
HETATM 5803  H2  SPC   513      7.416  25.480  -5.403  1.00  0.00          H
HETATM 5804  O   SPC   514      7.365  23.510   4.445  1.00  0.00          O
HETATM 5805  H1  SPC   514      7.094  23.711   5.402  1.00  0.00          H
HETATM 5806  H2  SPC   514      6.549  23.603   3.859  1.00  0.00          H
HETATM 5807  O   SPC   515     -6.014  24.147   1.726  1.00  0.00          O
HETATM 5808  H1  SPC   515     -6.096  23.207   2.089  1.00  0.00          H
HETATM 5809  H2  SPC   515     -5.990  24.788   2.498  1.00  0.00          H
HETATM 5810  O   SPC   516      0.122  23.361   1.204  1.00  0.00          O
HETATM 5811  H1  SPC   516      0.314  23.505   0.217  1.00  0.00          H
HETATM 5812  H2  SPC   516     -0.473  24.115   1.518  1.00  0.00          H
HETATM 5813  O   SPC   520     -4.888  19.871  12.196  1.00  0.00          O
HETATM 5814  H1  SPC   520     -4.286  20.429  12.789  1.00  0.00          H
HETATM 5815  H2  SPC   520     -4.834  18.907  12.507  1.00  0.00          H
HETATM 5816  O   SPC   522      4.822  25.366   8.544  1.00  0.00          O
HETATM 5817  H1  SPC   522      5.389  26.197   8.407  1.00  0.00          H
HETATM 5818  H2  SPC   522      4.873  25.102   9.520  1.00  0.00          H
HETATM 5819  O   SPC   523      5.090  20.730  12.068  1.00  0.00          O
HETATM 5820  H1  SPC   523      4.118  20.835  12.317  1.00  0.00          H
HETATM 5821  H2  SPC   523      5.223  21.162  11.164  1.00  0.00          H
HETATM 5822  O   SPC   525      0.265  12.185  18.483  1.00  0.00          O
HETATM 5823  H1  SPC   525     -0.031  12.378  19.421  1.00  0.00          H
HETATM 5824  H2  SPC   525      0.093  13.009  17.914  1.00  0.00          H
HETATM 5825  O   SPC   531      5.239  21.893   9.600  1.00  0.00          O
HETATM 5826  H1  SPC   531      6.208  21.626   9.512  1.00  0.00          H
HETATM 5827  H2  SPC   531      4.728  21.552   8.797  1.00  0.00          H
HETATM 5828  O   SPC   534     -6.475  16.353   9.491  1.00  0.00          O
HETATM 5829  H1  SPC   534     -7.399  16.596   9.819  1.00  0.00          H
HETATM 5830  H2  SPC   534     -5.997  15.877  10.247  1.00  0.00          H
HETATM 5831  O   SPC   542      3.560  23.654  13.409  1.00  0.00          O
HETATM 5832  H1  SPC   542      3.211  24.443  13.918  1.00  0.00          H
HETATM 5833  H2  SPC   542      3.959  22.994  14.069  1.00  0.00          H
HETATM 5834  O   SPC   543      0.922  18.578  15.476  1.00  0.00          O
HETATM 5835  H1  SPC   543      0.962  17.596  15.690  1.00  0.00          H
HETATM 5836  H2  SPC   543      1.863  18.937  15.437  1.00  0.00          H
HETATM 5837  O   SPC   546      4.017  18.089   9.954  1.00  0.00          O
HETATM 5838  H1  SPC   546      3.277  18.706   9.646  1.00  0.00          H
HETATM 5839  H2  SPC   546      4.281  17.505   9.170  1.00  0.00          H
HETATM 5840  O   SPC   547      6.776  20.144  14.182  1.00  0.00          O
HETATM 5841  H1  SPC   547      6.212  20.493  13.417  1.00  0.00          H
HETATM 5842  H2  SPC   547      6.506  19.186  14.351  1.00  0.00          H
HETATM 5843  O   SPC   551      6.908  18.757  11.450  1.00  0.00          O
HETATM 5844  H1  SPC   551      6.571  17.811  11.517  1.00  0.00          H
HETATM 5845  H2  SPC   551      6.148  19.384  11.671  1.00  0.00          H
HETATM 5846  O   SPC   557      4.170  15.719  15.830  1.00  0.00          O
HETATM 5847  H1  SPC   557      4.717  16.405  15.337  1.00  0.00          H
HETATM 5848  H2  SPC   557      4.787  15.015  16.198  1.00  0.00          H
HETATM 5849  O   SPC   559     -0.223  14.330  16.936  1.00  0.00          O
HETATM 5850  H1  SPC   559      0.418  14.969  16.487  1.00  0.00          H
HETATM 5851  H2  SPC   559     -1.087  14.333  16.415  1.00  0.00          H
HETATM 5852  O   SPC   560     -6.873  20.715  10.468  1.00  0.00          O
HETATM 5853  H1  SPC   560     -6.272  20.349  11.194  1.00  0.00          H
HETATM 5854  H2  SPC   560     -6.373  21.443   9.979  1.00  0.00          H
HETATM 5855  O   SPC   562      0.006  19.865  11.038  1.00  0.00          O
HETATM 5856  H1  SPC   562     -0.358  19.666  11.959  1.00  0.00          H
HETATM 5857  H2  SPC   562      0.010  20.862  10.899  1.00  0.00          H
HETATM 5858  O   SPC   565     -2.939  21.104  13.635  1.00  0.00          O
HETATM 5859  H1  SPC   565     -2.631  21.919  14.127  1.00  0.00          H
HETATM 5860  H2  SPC   565     -2.192  20.422  13.633  1.00  0.00          H
HETATM 5861  O   SPC   566     -6.214  11.648  13.995  1.00  0.00          O
HETATM 5862  H1  SPC   566     -6.324  12.599  13.677  1.00  0.00          H
HETATM 5863  H2  SPC   566     -6.768  11.532  14.833  1.00  0.00          H
HETATM 5864  O   SPC   568      4.697  13.782  12.069  1.00  0.00          O
HETATM 5865  H1  SPC   568      4.751  13.360  12.985  1.00  0.00          H
HETATM 5866  H2  SPC   568      3.926  13.360  11.570  1.00  0.00          H
HETATM 5867  O   SPC   572      5.736  17.517  14.357  1.00  0.00          O
HETATM 5868  H1  SPC   572      5.432  17.273  13.421  1.00  0.00          H
HETATM 5869  H2  SPC   572      6.471  16.872  14.621  1.00  0.00          H
HETATM 5870  O   SPC   575      4.901  12.530  14.529  1.00  0.00          O
HETATM 5871  H1  SPC   575      5.442  12.880  15.306  1.00  0.00          H
HETATM 5872  H2  SPC   575      3.921  12.713  14.715  1.00  0.00          H
HETATM 5873  O   SPC   577     -3.761  11.216  12.890  1.00  0.00          O
HETATM 5874  H1  SPC   577     -4.670  11.328  13.320  1.00  0.00          H
HETATM 5875  H2  SPC   577     -3.725  10.317  12.424  1.00  0.00          H
HETATM 5876  O   SPC   583     -3.267  19.857   9.993  1.00  0.00          O
HETATM 5877  H1  SPC   583     -3.889  19.766   9.203  1.00  0.00          H
HETATM 5878  H2  SPC   583     -3.827  19.899  10.835  1.00  0.00          H
HETATM 5879  O   SPC   587     -2.211  14.155   9.507  1.00  0.00          O
HETATM 5880  H1  SPC   587     -2.179  13.543   8.706  1.00  0.00          H
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HETATM 5881  H2  SPC   587     -2.733  14.984   9.255  1.00  0.00          H
HETATM 5882  O   SPC   591     -1.717  10.856  14.580  1.00  0.00          O
HETATM 5883  H1  SPC   591     -0.973  11.496  14.339  1.00  0.00          H
HETATM 5884  H2  SPC   591     -2.515  11.077  13.996  1.00  0.00          H
HETATM 5885  O   SPC   593     -4.260  12.864  10.800  1.00  0.00          O
HETATM 5886  H1  SPC   593     -3.455  13.272  10.344  1.00  0.00          H
HETATM 5887  H2  SPC   593     -3.942  12.308  11.583  1.00  0.00          H
HETATM 5888  O   SPC   596      2.637  18.791  12.337  1.00  0.00          O
HETATM 5889  H1  SPC   596      3.166  18.493  11.531  1.00  0.00          H
HETATM 5890  H2  SPC   596      2.255  19.708  12.147  1.00  0.00          H
HETATM 5891  O   SPC   597      4.520  21.775  15.100  1.00  0.00          O
HETATM 5892  H1  SPC   597      3.983  20.921  15.133  1.00  0.00          H
HETATM 5893  H2  SPC   597      5.495  21.535  15.130  1.00  0.00          H
HETATM 5894  O   SPC   598      4.918  24.178  11.036  1.00  0.00          O
HETATM 5895  H1  SPC   598      4.958  23.309  10.518  1.00  0.00          H
HETATM 5896  H2  SPC   598      4.370  24.030  11.873  1.00  0.00          H
HETATM 5897  O   SPC   599      7.479  15.514  14.797  1.00  0.00          O
HETATM 5898  H1  SPC   599      8.359  15.929  15.072  1.00  0.00          H
HETATM 5899  H2  SPC   599      7.586  15.069  13.892  1.00  0.00          H
HETATM 5900  O   SPC   600     -7.064  14.116  16.366  1.00  0.00          O
HETATM 5901  H1  SPC   600     -6.086  13.838  16.359  1.00  0.00          H
HETATM 5902  H2  SPC   600     -7.183  14.837  17.051  1.00  0.00          H
HETATM 5903  O   SPC   601     -6.166  10.982  10.037  1.00  0.00          O
HETATM 5904  H1  SPC   601     -5.550  11.760  10.222  1.00  0.00          H
HETATM 5905  H2  SPC   601     -5.618  10.218   9.672  1.00  0.00          H
HETATM 5906  O   SPC   607      7.363  14.305  12.378  1.00  0.00          O
HETATM 5907  H1  SPC   607      6.399  14.091  12.164  1.00  0.00          H
HETATM 5908  H2  SPC   607      7.719  14.935  11.674  1.00  0.00          H
HETATM 5909  O   SPC   612      2.320  13.052  15.052  1.00  0.00          O
HETATM 5910  H1  SPC   612      2.293  12.425  15.848  1.00  0.00          H
HETATM 5911  H2  SPC   612      2.003  13.964  15.344  1.00  0.00          H
HETATM 5912  O   SPC   614     -4.923  20.015   7.805  1.00  0.00          O
HETATM 5913  H1  SPC   614     -5.110  20.948   8.147  1.00  0.00          H
HETATM 5914  H2  SPC   614     -5.766  19.666   7.372  1.00  0.00          H
HETATM 5915  O   SPC   617      0.868  17.520   7.466  1.00  0.00          O
HETATM 5916  H1  SPC   617      0.243  18.259   7.168  1.00  0.00          H
HETATM 5917  H2  SPC   617      1.147  16.985   6.664  1.00  0.00          H
HETATM 5918  O   SPC   625      8.221  11.875  17.176  1.00  0.00          O
HETATM 5919  H1  SPC   625      7.403  12.428  16.975  1.00  0.00          H
HETATM 5920  H2  SPC   625      8.756  11.766  16.325  1.00  0.00          H
HETATM 5921  O   SPC   626      6.313  13.907  16.568  1.00  0.00          O
HETATM 5922  H1  SPC   626      6.769  14.439  15.833  1.00  0.00          H
HETATM 5923  H2  SPC   626      6.541  14.342  17.448  1.00  0.00          H
HETATM 5924  O   SPC   628     -1.684  16.548  13.144  1.00  0.00          O
HETATM 5925  H1  SPC   628     -0.688  16.391  13.210  1.00  0.00          H
HETATM 5926  H2  SPC   628     -1.903  16.761  12.178  1.00  0.00          H
HETATM 5927  O   SPC   630      1.529  15.769  15.358  1.00  0.00          O
HETATM 5928  H1  SPC   630      1.388  15.966  14.375  1.00  0.00          H
HETATM 5929  H2  SPC   630      2.521  15.834  15.563  1.00  0.00          H
HETATM 5930  O   SPC   631     -8.998  16.847  10.437  1.00  0.00          O
HETATM 5931  H1  SPC   631     -9.026  17.622  11.074  1.00  0.00          H
HETATM 5932  H2  SPC   631     -9.541  17.080   9.614  1.00  0.00          H
HETATM 5933  O   SPC   633     -3.734  16.346   8.776  1.00  0.00          O
HETATM 5934  H1  SPC   633     -4.735  16.355   8.911  1.00  0.00          H
HETATM 5935  H2  SPC   633     -3.510  16.948   7.995  1.00  0.00          H
HETATM 5936  O   SPC   634      1.581   9.327  15.305  1.00  0.00          O
HETATM 5937  H1  SPC   634      1.530   9.643  14.344  1.00  0.00          H
HETATM 5938  H2  SPC   634      1.826  10.114  15.886  1.00  0.00          H
HETATM 5939  O   SPC   639      7.741  15.927  18.052  1.00  0.00          O
HETATM 5940  H1  SPC   639      7.413  16.652  18.661  1.00  0.00          H
HETATM 5941  H2  SPC   639      8.293  16.346  17.315  1.00  0.00          H
HETATM 5942  O   SPC   641     -0.184  13.122  11.086  1.00  0.00          O
HETATM 5943  H1  SPC   641     -0.453  12.155  10.965  1.00  0.00          H
HETATM 5944  H2  SPC   641     -0.818  13.696  10.545  1.00  0.00          H
HETATM 5945  O   SPC   642     -7.098  14.258  13.610  1.00  0.00          O
HETATM 5946  H1  SPC   642     -7.122  14.371  14.614  1.00  0.00          H
HETATM 5947  H2  SPC   642     -7.974  13.849  13.310  1.00  0.00          H
HETATM 5948  O   SPC   643     -2.186  14.342  14.965  1.00  0.00          O
HETATM 5949  H1  SPC   643     -2.257  15.182  14.412  1.00  0.00          H
HETATM 5950  H2  SPC   643     -1.513  13.729  14.524  1.00  0.00          H
HETATM 5951  O   SPC   646     -4.491  13.393  16.332  1.00  0.00          O
HETATM 5952  H1  SPC   646     -3.667  13.705  15.840  1.00  0.00          H
HETATM 5953  H2  SPC   646     -4.290  12.505  16.775  1.00  0.00          H
HETATM 5954  O   SPC   647     -0.137  12.941  13.801  1.00  0.00          O
HETATM 5955  H1  SPC   647      0.818  12.896  14.127  1.00  0.00          H
HETATM 5956  H2  SPC   647     -0.131  13.089  12.800  1.00  0.00          H
HETATM 5957  O   SPC   648      2.803  15.041   9.599  1.00  0.00          O
HETATM 5958  H1  SPC   648      1.928  15.509   9.790  1.00  0.00          H
HETATM 5959  H2  SPC   648      2.759  14.109   9.980  1.00  0.00          H
HETATM 5960  O   SPC   649     -3.950  10.972  17.546  1.00  0.00          O
HETATM 5961  H1  SPC   649     -2.966  10.762  17.481  1.00  0.00          H
HETATM 5962  H2  SPC   649     -4.431  10.157  17.887  1.00  0.00          H
HETATM 5963  O   SPC   651      3.553  19.189  14.839  1.00  0.00          O
HETATM 5964  H1  SPC   651      3.154  19.075  13.914  1.00  0.00          H
HETATM 5965  H2  SPC   651      4.369  18.601  14.902  1.00  0.00          H
HETATM 5966  O   SPC   658      0.669  22.429  10.067  1.00  0.00          O
HETATM 5967  H1  SPC   658     -0.177  22.296   9.530  1.00  0.00          H
HETATM 5968  H2  SPC   658      1.332  22.939   9.499  1.00  0.00          H
HETATM 5969  O   SPC   666     -7.853  16.860   7.104  1.00  0.00          O
HETATM 5970  H1  SPC   666     -8.790  16.958   7.475  1.00  0.00          H
HETATM 5971  H2  SPC   666     -7.240  16.565   7.851  1.00  0.00          H
HETATM 5972  O   SPC   670     -1.660  21.676   8.747  1.00  0.00          O
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HETATM 5973  H1  SPC   670      -2.316  22.283   8.279  1.00  0.00          H
HETATM 5974  H2  SPC   670      -2.179  21.044   9.344  1.00  0.00          H
HETATM 5975  O   SPC   676      -6.060   8.965  14.149  1.00  0.00          O
HETATM 5976  H1  SPC   676      -5.094   8.720  14.332  1.00  0.00          H
HETATM 5977  H2  SPC   676      -6.105   9.954  13.943  1.00  0.00          H
HETATM 5978  O   SPC   679      -4.414  17.312  12.930  1.00  0.00          O
HETATM 5979  H1  SPC   679      -4.850  16.538  12.449  1.00  0.00          H
HETATM 5980  H2  SPC   679      -3.508  17.018  13.253  1.00  0.00          H
HETATM 5981  O   SPC   686       1.880  19.458   9.094  1.00  0.00          O
HETATM 5982  H1  SPC   686       1.533  18.733   8.480  1.00  0.00          H
HETATM 5983  H2  SPC   686       1.184  19.627   9.810  1.00  0.00          H
HETATM 5984  O   SPC   687       2.429  11.259  17.064  1.00  0.00          O
HETATM 5985  H1  SPC   687       3.118  10.648  17.479  1.00  0.00          H
HETATM 5986  H2  SPC   687       1.739  11.503  17.763  1.00  0.00          H
HETATM 5987  O   SPC   688      -5.683  22.490   8.727  1.00  0.00          O
HETATM 5988  H1  SPC   688      -6.502  22.963   8.374  1.00  0.00          H
HETATM 5989  H2  SPC   688      -4.859  22.952   8.363  1.00  0.00          H
HETATM 5990  O   SPC   691       0.476  16.440   9.980  1.00  0.00          O
HETATM 5991  H1  SPC   691      -0.444  16.755  10.259  1.00  0.00          H
HETATM 5992  H2  SPC   691       0.649  16.772   9.041  1.00  0.00          H
HETATM 5993  O   SPC   692      -1.298  10.281  17.205  1.00  0.00          O
HETATM 5994  H1  SPC   692      -1.331  10.499  16.216  1.00  0.00          H
HETATM 5995  H2  SPC   692      -0.662  10.923  17.657  1.00  0.00          H
HETATM 5996  O   SPC   693      -8.039  11.526  16.077  1.00  0.00          O
HETATM 5997  H1  SPC   693      -7.851  12.489  16.318  1.00  0.00          H
HETATM 5998  H2  SPC   693      -8.974  11.457  15.701  1.00  0.00          H
HETATM 5999  O   SPC   697       7.498  24.565  11.932  1.00  0.00          O
HETATM 6000  H1  SPC   697       7.755  23.671  12.326  1.00  0.00          H
HETATM 6001  H2  SPC   697       6.537  24.519  11.626  1.00  0.00          H
HETATM 6002  O   SPC   698      -5.459  15.122  11.667  1.00  0.00          O
HETATM 6003  H1  SPC   698      -6.096  14.862  12.412  1.00  0.00          H
HETATM 6004  H2  SPC   698      -5.018  14.280  11.319  1.00  0.00          H
HETATM 6005  O   SPC   703       5.154  16.551  11.886  1.00  0.00          O
HETATM 6006  H1  SPC   703       4.878  15.579  11.872  1.00  0.00          H
HETATM 6007  H2  SPC   703       4.669  17.034  11.139  1.00  0.00          H
HETATM 6008  O   SPC   706      -2.019  17.395  10.597  1.00  0.00          O
HETATM 6009  H1  SPC   706      -2.150  18.391  10.501  1.00  0.00          H
HETATM 6010  H2  SPC   706      -2.691  16.933   9.998  1.00  0.00          H
HETATM 6011  O   SPC   707      -0.945  19.234  13.601  1.00  0.00          O
HETATM 6012  H1  SPC   707      -0.248  19.146  14.331  1.00  0.00          H
HETATM 6013  H2  SPC   707      -1.379  18.333  13.473  1.00  0.00          H
HETATM 6014  O   SPC   709       2.406  21.565  12.044  1.00  0.00          O
HETATM 6015  H1  SPC   709       2.703  22.383  12.557  1.00  0.00          H
HETATM 6016  H2  SPC   709       1.777  21.862  11.309  1.00  0.00          H
HETATM 6017  O   SPC   712       1.091  16.533  12.733  1.00  0.00          O
HETATM 6018  H1  SPC   712       0.915  16.264  11.776  1.00  0.00          H
HETATM 6019  H2  SPC   712       1.606  17.403  12.720  1.00  0.00          H
HETATM 6020  O   SPC  1025       7.537  20.564 -14.094  1.00  0.00          O
HETATM 6021  H1  SPC  1025       8.249  19.850 -14.139  1.00  0.00          H
HETATM 6022  H2  SPC  1025       6.965  20.501 -14.919  1.00  0.00          H
HETATM 6023  O   SPC  1030       1.517  24.980  -9.838  1.00  0.00          O
HETATM 6024  H1  SPC  1030       1.012  25.296 -10.645  1.00  0.00          H
HETATM 6025  H2  SPC  1030       1.908  24.076 -10.036  1.00  0.00          H
HETATM 6026  O   SPC  1049       3.904  18.264 -16.075  1.00  0.00          O
HETATM 6027  H1  SPC  1049       4.690  18.890 -16.158  1.00  0.00          H
HETATM 6028  H2  SPC  1049       3.055  18.806 -16.201  1.00  0.00          H
HETATM 6029  O   SPC  1052       4.487  21.620 -12.330  1.00  0.00          O
HETATM 6030  H1  SPC  1052       3.667  21.035 -12.306  1.00  0.00          H
HETATM 6031  H2  SPC  1052       4.811  21.687 -13.276  1.00  0.00          H
HETATM 6032  O   SPC  1058       6.053  20.118 -16.513  1.00  0.00          O
HETATM 6033  H1  SPC  1058       5.690  20.747 -17.205  1.00  0.00          H
HETATM 6034  H2  SPC  1058       6.960  19.786 -16.816  1.00  0.00          H
HETATM 6035  O   SPC  1061       3.135  15.620 -15.644  1.00  0.00          O
HETATM 6036  H1  SPC  1061       3.427  16.590 -15.625  1.00  0.00          H
HETATM 6037  H2  SPC  1061       2.661  15.454 -16.511  1.00  0.00          H
HETATM 6038  O   SPC  1083       8.130   8.780 -14.341  1.00  0.00          O
HETATM 6039  H1  SPC  1083       8.542   8.047 -13.787  1.00  0.00          H
HETATM 6040  H2  SPC  1083       8.798   9.541 -14.398  1.00  0.00          H
HETATM 6041  O   SPC  1095       0.049  22.140 -12.587  1.00  0.00          O
HETATM 6042  H1  SPC  1095       0.870  21.570 -12.696  1.00  0.00          H
HETATM 6043  H2  SPC  1095      -0.280  22.405 -13.507  1.00  0.00          H
HETATM 6044  O   SPC  1096       9.232  15.092 -17.131  1.00  0.00          O
HETATM 6045  H1  SPC  1096       8.398  15.590 -17.409  1.00  0.00          H
HETATM 6046  H2  SPC  1096       9.944  15.767 -16.892  1.00  0.00          H
HETATM 6047  O   SPC  1097       7.098  16.787 -17.606  1.00  0.00          O
HETATM 6048  H1  SPC  1097       6.122  17.012 -17.571  1.00  0.00          H
HETATM 6049  H2  SPC  1097       7.633  17.633 -17.473  1.00  0.00          H
HETATM 6050  O   SPC  1101      -0.841   9.797 -19.175  1.00  0.00          O
HETATM 6051  H1  SPC  1101      -1.043   8.836 -18.921  1.00  0.00          H
HETATM 6052  H2  SPC  1101      -1.710  10.286 -19.260  1.00  0.00          H
HETATM 6053  O   SPC  1102       8.534  19.077 -16.997  1.00  0.00          O
HETATM 6054  H1  SPC  1102       8.728  18.782 -16.044  1.00  0.00          H
HETATM 6055  H2  SPC  1102       9.408  19.357 -17.414  1.00  0.00          H
HETATM 6056  O   SPC  1109       7.208  21.697 -11.617  1.00  0.00          O
HETATM 6057  H1  SPC  1109       7.481  21.300 -12.506  1.00  0.00          H
HETATM 6058  H2  SPC  1109       6.202  21.758 -11.598  1.00  0.00          H
HETATM 6059  O   SPC  1111       1.800  19.922 -16.407  1.00  0.00          O
HETATM 6060  H1  SPC  1111       1.627  20.798 -15.953  1.00  0.00          H
HETATM 6061  H2  SPC  1111       1.271  19.928 -17.276  1.00  0.00          H
HETATM 6062  O   SPC  1113      -2.006  23.802 -11.567  1.00  0.00          O
HETATM 6063  H1  SPC  1113      -1.240  23.252 -11.928  1.00  0.00          H
HETATM 6064  H2  SPC  1113      -2.777  23.744 -12.213  1.00  0.00          H
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HETATM 6065  O   SPC  1128      4.185  25.363  -9.020  1.00  0.00           O
HETATM 6066  H1  SPC  1128      3.211  25.472  -9.252  1.00  0.00           H
HETATM 6067  H2  SPC  1128      4.487  26.155  -8.477  1.00  0.00           H
HETATM 6068  O   SPC  1147     -0.553  27.353   0.568  1.00  0.00           O
HETATM 6069  H1  SPC  1147     -1.069  26.539   0.882  1.00  0.00           H
HETATM 6070  H2  SPC  1147     -1.182  28.132   0.520  1.00  0.00           H
HETATM 6071  O   SPC  1155      5.518  25.688  -1.636  1.00  0.00           O
HETATM 6072  H1  SPC  1155      5.639  26.103  -0.727  1.00  0.00           H
HETATM 6073  H2  SPC  1155      5.473  26.435  -2.322  1.00  0.00           H
HETATM 6074  O   SPC  1178      3.720  28.360  -5.618  1.00  0.00           O
HETATM 6075  H1  SPC  1178      4.358  27.862  -6.227  1.00  0.00           H
HETATM 6076  H2  SPC  1178      3.534  29.260  -6.019  1.00  0.00           H
HETATM 6077  O   SPC  1184      5.685  25.929   3.885  1.00  0.00           O
HETATM 6078  H1  SPC  1184      5.352  25.106   3.400  1.00  0.00           H
HETATM 6079  H2  SPC  1184      5.069  26.105   4.668  1.00  0.00           H
HETATM 6080  O   SPC  1190      6.367  27.483   7.882  1.00  0.00           O
HETATM 6081  H1  SPC  1190      6.544  27.733   6.919  1.00  0.00           H
HETATM 6082  H2  SPC  1190      7.138  27.811   8.445  1.00  0.00           H
HETATM 6083  O   SPC  1196      1.789  27.288  -3.904  1.00  0.00           O
HETATM 6084  H1  SPC  1196      2.426  27.741  -4.545  1.00  0.00           H
HETATM 6085  H2  SPC  1196      1.004  26.926  -4.430  1.00  0.00           H
HETATM 6086  O   SPC  1211      9.194  30.634  -0.145  1.00  0.00           O
HETATM 6087  H1  SPC  1211      8.626  29.878  -0.502  1.00  0.00           H
HETATM 6088  H2  SPC  1211      8.709  31.056   0.630  1.00  0.00           H
HETATM 6089  O   SPC  1220      7.776  31.457   2.092  1.00  0.00           O
HETATM 6090  H1  SPC  1220      7.197  32.275   2.095  1.00  0.00           H
HETATM 6091  H2  SPC  1220      7.202  30.656   2.342  1.00  0.00           H
HETATM 6092  O   SPC  1223      5.227  27.719  -3.364  1.00  0.00           O
HETATM 6093  H1  SPC  1223      4.623  27.991  -4.124  1.00  0.00           H
HETATM 6094  H2  SPC  1223      6.148  28.101  -3.528  1.00  0.00           H
HETATM 6095  O   SPC  1228      6.294  29.336   2.790  1.00  0.00           O
HETATM 6096  H1  SPC  1228      5.962  28.634   2.148  1.00  0.00           H
HETATM 6097  H2  SPC  1228      6.375  28.926   3.707  1.00  0.00           H
HETATM 6098  O   SPC  1230      1.542  26.768  -1.183  1.00  0.00           O
HETATM 6099  H1  SPC  1230      1.533  27.136  -2.125  1.00  0.00           H
HETATM 6100  H2  SPC  1230      0.734  27.115  -0.685  1.00  0.00           H
HETATM 6101  O   SPC  1254      6.955  27.987   5.212  1.00  0.00           O
HETATM 6102  H1  SPC  1254      6.693  27.146   4.718  1.00  0.00           H
HETATM 6103  H2  SPC  1254      7.949  28.140   5.095  1.00  0.00           H
HETATM 6104  O   SPC  1358      8.573  28.270   9.371  1.00  0.00           O
HETATM 6105  H1  SPC  1358      8.850  27.469   9.931  1.00  0.00           H
HETATM 6106  H2  SPC  1358      8.627  29.093   9.940  1.00  0.00           H
HETATM 6107  O   SPC  3122     23.201   9.278  -2.747  1.00  0.00           O
HETATM 6108  H1  SPC  3122     23.876   8.896  -3.380  1.00  0.00           H
HETATM 6109  H2  SPC  3122     23.076   8.625  -1.976  1.00  0.00           H
HETATM 6110  O   SPC  3135     23.456  11.284   0.815  1.00  0.00           O
HETATM 6111  H1  SPC  3135     23.068  11.494  -0.092  1.00  0.00           H
HETATM 6112  H2  SPC  3135     23.646  10.295   0.867  1.00  0.00           H
HETATM 6113  O   SPC  3137     20.502   8.891  -3.272  1.00  0.00           O
HETATM 6114  H1  SPC  3137     20.217   9.336  -4.132  1.00  0.00           H
HETATM 6115  H2  SPC  3137     21.486   9.057  -3.129  1.00  0.00           H
HETATM 6116  O   SPC  3144     24.231   8.634   1.412  1.00  0.00           O
HETATM 6117  H1  SPC  3144     24.051   8.702   2.409  1.00  0.00           H
HETATM 6118  H2  SPC  3144     25.161   8.285   1.283  1.00  0.00           H
HETATM 6119  O   SPC  3156     22.913   7.599  -0.723  1.00  0.00           O
HETATM 6120  H1  SPC  3156     23.322   7.938   0.136  1.00  0.00           H
HETATM 6121  H2  SPC  3156     22.405   6.748  -0.524  1.00  0.00           H
HETATM 6122  O   SPC  3162     24.000   8.997   4.059  1.00  0.00           O
HETATM 6123  H1  SPC  3162     24.132   9.998   4.002  1.00  0.00           H
HETATM 6124  H2  SPC  3162     23.878   8.737   5.026  1.00  0.00           H
HETATM 6125  O   SPC  3189     10.851   7.598  17.458  1.00  0.00           O
HETATM 6126  H1  SPC  3189     10.532   6.691  17.769  1.00  0.00           H
HETATM 6127  H2  SPC  3189     10.070   8.242  17.514  1.00  0.00           H
HETATM 6128  O   SPC  3194     13.269   8.811  17.405  1.00  0.00           O
HETATM 6129  H1  SPC  3194     12.414   8.269  17.314  1.00  0.00           H
HETATM 6130  H2  SPC  3194     13.372   9.074  18.367  1.00  0.00           H
HETATM 6131  O   SPC  3212      9.603   5.230  18.177  1.00  0.00           O
HETATM 6132  H1  SPC  3212      8.941   5.008  17.451  1.00  0.00           H
HETATM 6133  H2  SPC  3212      9.400   4.671  18.983  1.00  0.00           H
HETATM 6134  O   SPC  3266      8.631   9.161  17.663  1.00  0.00           O
HETATM 6135  H1  SPC  3266      7.823   8.720  18.080  1.00  0.00           H
HETATM 6136  H2  SPC  3266      8.463  10.155  17.607  1.00  0.00           H
HETATM 6137  O   SPC  3271     15.907   8.703  16.430  1.00  0.00           O
HETATM 6138  H1  SPC  3271     16.262   9.649  16.360  1.00  0.00           H
HETATM 6139  H2  SPC  3271     14.948   8.743  16.749  1.00  0.00           H
HETATM 6140  O   SPC  3671     16.188   8.352 -15.269  1.00  0.00           O
HETATM 6141  H1  SPC  3671     15.406   7.772 -14.995  1.00  0.00           H
HETATM 6142  H2  SPC  3671     16.498   8.886 -14.467  1.00  0.00           H
HETATM 6143  O   SPC  3690     12.513  10.258 -13.007  1.00  0.00           O
HETATM 6144  H1  SPC  3690     13.291  10.662 -13.506  1.00  0.00           H
HETATM 6145  H2  SPC  3690     12.865   9.881 -12.129  1.00  0.00           H
HETATM 6146  O   SPC  3693     18.991   8.212 -12.040  1.00  0.00           O
HETATM 6147  H1  SPC  3693     19.031   7.900 -11.081  1.00  0.00           H
HETATM 6148  H2  SPC  3693     19.116   7.409 -12.642  1.00  0.00           H
HETATM 6149  O   SPC  3704     19.042   6.022 -13.646  1.00  0.00           O
HETATM 6150  H1  SPC  3704     18.854   6.282 -14.603  1.00  0.00           H
HETATM 6151  H2  SPC  3704     18.452   5.248 -13.403  1.00  0.00           H
HETATM 6152  O   SPC  3725     16.487   4.849 -14.681  1.00  0.00           O
HETATM 6153  H1  SPC  3725     15.756   5.495 -14.424  1.00  0.00           H
HETATM 6154  H2  SPC  3725     17.115   5.316 -15.317  1.00  0.00           H
HETATM 6155  O   SPC  3734     14.250   6.487 -14.657  1.00  0.00           O
HETATM 6156  H1  SPC  3734     13.423   6.933 -14.273  1.00  0.00           H
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HETATM 6157  H2  SPC  3734      13.957   5.667 -15.169  1.00  0.00           H
HETATM 6158  O   SPC  3757      18.872   4.379  -9.105  1.00  0.00           O
HETATM 6159  H1  SPC  3757      19.113   3.596  -8.501  1.00  0.00           H
HETATM 6160  H2  SPC  3757      17.989   4.178  -9.545  1.00  0.00           H
HETATM 6161  O   SPC  3761      19.311   7.126  -9.440  1.00  0.00           O
HETATM 6162  H1  SPC  3761      19.033   6.159  -9.319  1.00  0.00           H
HETATM 6163  H2  SPC  3761      20.307   7.179  -9.351  1.00  0.00           H
HETATM 6164  O   SPC  3778      14.086   3.911 -15.705  1.00  0.00           O
HETATM 6165  H1  SPC  3778      13.666   3.078 -15.342  1.00  0.00           H
HETATM 6166  H2  SPC  3778      15.047   3.957 -15.400  1.00  0.00           H
HETATM 6167  O   SPC  3781      12.019   7.662 -13.748  1.00  0.00           O
HETATM 6168  H1  SPC  3781      12.185   8.623 -13.484  1.00  0.00           H
HETATM 6169  H2  SPC  3781      11.073   7.420 -13.501  1.00  0.00           H
HETATM 6170  O   SPC  3783      18.042   6.627 -16.161  1.00  0.00           O
HETATM 6171  H1  SPC  3783      18.372   6.844 -17.081  1.00  0.00           H
HETATM 6172  H2  SPC  3783      17.370   7.335 -15.883  1.00  0.00           H
HETATM 6173  O   SPC  3785      18.648   9.553  -7.913  1.00  0.00           O
HETATM 6174  H1  SPC  3785      17.668   9.761  -7.769  1.00  0.00           H
HETATM 6175  H2  SPC  3785      18.726   8.688  -8.426  1.00  0.00           H
HETATM 6176  O   SPC  3790      17.752  22.392   1.274  1.00  0.00           O
HETATM 6177  H1  SPC  3790      18.224  21.494   1.241  1.00  0.00           H
HETATM 6178  H2  SPC  3790      17.969  22.835   2.156  1.00  0.00           H
HETATM 6179  O   SPC  3794       9.252  22.226   8.284  1.00  0.00           O
HETATM 6180  H1  SPC  3794       9.102  23.218   8.164  1.00  0.00           H
HETATM 6181  H2  SPC  3794       8.574  21.866   8.941  1.00  0.00           H
HETATM 6182  O   SPC  3796      22.468  11.766  -1.838  1.00  0.00           O
HETATM 6183  H1  SPC  3796      22.820  10.853  -2.092  1.00  0.00           H
HETATM 6184  H2  SPC  3796      21.900  12.100  -2.602  1.00  0.00           H
HETATM 6185  O   SPC  3798      18.959  19.954   1.288  1.00  0.00           O
HETATM 6186  H1  SPC  3798      19.876  19.715   1.659  1.00  0.00           H
HETATM 6187  H2  SPC  3798      18.444  19.101   1.173  1.00  0.00           H
HETATM 6188  O   SPC  3799      15.430  28.622  -0.642  1.00  0.00           O
HETATM 6189  H1  SPC  3799      14.803  29.076   0.004  1.00  0.00           H
HETATM 6190  H2  SPC  3799      15.917  27.882  -0.160  1.00  0.00           H
HETATM 6191  O   SPC  3800      13.319  22.630   8.615  1.00  0.00           O
HETATM 6192  H1  SPC  3800      12.803  22.954   7.806  1.00  0.00           H
HETATM 6193  H2  SPC  3800      14.291  22.878   8.487  1.00  0.00           H
HETATM 6194  O   SPC  3803      16.145  20.275   8.416  1.00  0.00           O
HETATM 6195  H1  SPC  3803      15.283  20.202   8.938  1.00  0.00           H
HETATM 6196  H2  SPC  3803      16.531  19.342   8.331  1.00  0.00           H
HETATM 6197  O   SPC  3808      11.284  23.562   2.582  1.00  0.00           O
HETATM 6198  H1  SPC  3808      10.617  22.807   2.449  1.00  0.00           H
HETATM 6199  H2  SPC  3808      11.731  23.744   1.693  1.00  0.00           H
HETATM 6200  O   SPC  3810      15.001  22.548   1.117  1.00  0.00           O
HETATM 6201  H1  SPC  3810      14.709  22.800   0.186  1.00  0.00           H
HETATM 6202  H2  SPC  3810      15.997  22.380   1.111  1.00  0.00           H
HETATM 6203  O   SPC  3811       8.187  21.795  -3.497  1.00  0.00           O
HETATM 6204  H1  SPC  3811       7.538  22.199  -2.835  1.00  0.00           H
HETATM 6205  H2  SPC  3811       8.960  22.431  -3.612  1.00  0.00           H
HETATM 6206  O   SPC  3812      13.736  25.600   3.197  1.00  0.00           O
HETATM 6207  H1  SPC  3812      13.658  25.752   2.199  1.00  0.00           H
HETATM 6208  H2  SPC  3812      13.977  24.630   3.358  1.00  0.00           H
HETATM 6209  O   SPC  3813      13.891  24.282  -4.096  1.00  0.00           O
HETATM 6210  H1  SPC  3813      13.951  23.351  -4.493  1.00  0.00           H
HETATM 6211  H2  SPC  3813      13.486  24.893  -4.786  1.00  0.00           H
HETATM 6212  O   SPC  3814      14.461  23.620  -1.498  1.00  0.00           O
HETATM 6213  H1  SPC  3814      15.434  23.841  -1.345  1.00  0.00           H
HETATM 6214  H2  SPC  3814      14.222  23.877  -2.449  1.00  0.00           H
HETATM 6215  O   SPC  3815      16.143  10.596  -7.503  1.00  0.00           O
HETATM 6216  H1  SPC  3815      16.274  11.572  -7.292  1.00  0.00           H
HETATM 6217  H2  SPC  3815      15.652  10.520  -8.389  1.00  0.00           H
HETATM 6218  O   SPC  3818      19.638  10.342  -5.425  1.00  0.00           O
HETATM 6219  H1  SPC  3818      19.363  10.045  -6.353  1.00  0.00           H
HETATM 6220  H2  SPC  3818      18.840  10.752  -4.968  1.00  0.00           H
HETATM 6221  O   SPC  3822      21.571  14.336  -0.872  1.00  0.00           O
HETATM 6222  H1  SPC  3822      22.193  13.570  -1.078  1.00  0.00           H
HETATM 6223  H2  SPC  3822      20.662  14.111  -1.260  1.00  0.00           H
HETATM 6224  O   SPC  3823      13.474  26.011   0.537  1.00  0.00           O
HETATM 6225  H1  SPC  3823      13.263  26.663  -0.206  1.00  0.00           H
HETATM 6226  H2  SPC  3823      12.980  25.148   0.350  1.00  0.00           H
HETATM 6227  O   SPC  3825       9.976  27.605  -6.160  1.00  0.00           O
HETATM 6228  H1  SPC  3825      10.257  28.278  -5.464  1.00  0.00           H
HETATM 6229  H2  SPC  3825       9.359  26.932  -5.725  1.00  0.00           H
HETATM 6230  O   SPC  3826      12.121  25.690  -5.835  1.00  0.00           O
HETATM 6231  H1  SPC  3826      11.607  24.880  -6.154  1.00  0.00           H
HETATM 6232  H2  SPC  3826      11.685  26.510  -6.224  1.00  0.00           H
HETATM 6233  O   SPC  3827      11.389  20.800  -4.515  1.00  0.00           O
HETATM 6234  H1  SPC  3827      11.276  20.939  -5.508  1.00  0.00           H
HETATM 6235  H2  SPC  3827      10.724  20.112  -4.202  1.00  0.00           H
HETATM 6236  O   SPC  3829      11.460  26.216  -3.246  1.00  0.00           O
HETATM 6237  H1  SPC  3829      12.155  26.571  -2.599  1.00  0.00           H
HETATM 6238  H2  SPC  3829      11.909  26.037  -4.134  1.00  0.00           H
HETATM 6239  O   SPC  3831      16.667  13.269  -6.723  1.00  0.00           O
HETATM 6240  H1  SPC  3831      17.589  13.198  -6.306  1.00  0.00           H
HETATM 6241  H2  SPC  3831      16.762  13.688  -7.639  1.00  0.00           H
HETATM 6242  O   SPC  3832      15.149  27.290   4.698  1.00  0.00           O
HETATM 6243  H1  SPC  3832      14.597  26.691   4.094  1.00  0.00           H
HETATM 6244  H2  SPC  3832      14.981  27.007   5.649  1.00  0.00           H
HETATM 6245  O   SPC  3839      12.097  23.463   6.319  1.00  0.00           O
HETATM 6246  H1  SPC  3839      12.206  22.649   5.729  1.00  0.00           H
HETATM 6247  H2  SPC  3839      11.240  23.926   6.056  1.00  0.00           H
HETATM 6248  O   SPC  3843      11.349  26.602   4.008  1.00  0.00           O
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HETATM 6249  H1  SPC  3843      12.274  26.250   3.792  1.00  0.00          H
HETATM 6250  H2  SPC  3843      10.798  25.839   4.376  1.00  0.00          H
HETATM 6251  O   SPC  3845      19.154  13.638  -1.856  1.00  0.00          O
HETATM 6252  H1  SPC  3845      18.869  12.833  -2.393  1.00  0.00          H
HETATM 6253  H2  SPC  3845      18.495  14.386  -2.014  1.00  0.00          H
HETATM 6254  O   SPC  3847      11.759  21.518  -7.204  1.00  0.00          O
HETATM 6255  H1  SPC  3847      11.687  21.276  -8.185  1.00  0.00          H
HETATM 6256  H2  SPC  3847      12.730  21.656  -6.979  1.00  0.00          H
HETATM 6257  O   SPC  3848      12.139  23.736  -0.015  1.00  0.00          O
HETATM 6258  H1  SPC  3848      12.876  23.526  -0.675  1.00  0.00          H
HETATM 6259  H2  SPC  3848      11.256  23.765  -0.507  1.00  0.00          H
HETATM 6260  O   SPC  3850      16.480  17.712  -6.323  1.00  0.00          O
HETATM 6261  H1  SPC  3850      16.035  18.616  -6.287  1.00  0.00          H
HETATM 6262  H2  SPC  3850      16.483  17.399  -7.287  1.00  0.00          H
HETATM 6263  O   SPC  3851      18.375  23.868   3.604  1.00  0.00          O
HETATM 6264  H1  SPC  3851      19.365  23.977   3.710  1.00  0.00          H
HETATM 6265  H2  SPC  3851      17.969  24.777   3.403  1.00  0.00          H
HETATM 6266  O   SPC  3853       9.897  24.060  -3.828  1.00  0.00          O
HETATM 6267  H1  SPC  3853      10.557  24.780  -3.558  1.00  0.00          H
HETATM 6268  H2  SPC  3853      10.116  23.768  -4.774  1.00  0.00          H
HETATM 6269  O   SPC  3855      16.274  23.729   5.496  1.00  0.00          O
HETATM 6270  H1  SPC  3855      17.146  23.784   4.993  1.00  0.00          H
HETATM 6271  H2  SPC  3855      15.563  23.406   4.850  1.00  0.00          H
HETATM 6272  O   SPC  3858      21.293  12.252  -4.362  1.00  0.00          O
HETATM 6273  H1  SPC  3858      20.732  11.487  -4.718  1.00  0.00          H
HETATM 6274  H2  SPC  3858      22.039  12.428  -5.007  1.00  0.00          H
HETATM 6275  O   SPC  3859      17.633  15.854  -2.280  1.00  0.00          O
HETATM 6276  H1  SPC  3859      17.258  15.683  -3.207  1.00  0.00          H
HETATM 6277  H2  SPC  3859      18.232  16.656  -2.325  1.00  0.00          H
HETATM 6278  O   SPC  3860      24.365  11.644   3.368  1.00  0.00          O
HETATM 6279  H1  SPC  3860      23.976  11.565   2.436  1.00  0.00          H
HETATM 6280  H2  SPC  3860      24.987  12.428   3.390  1.00  0.00          H
HETATM 6281  O   SPC  3862       9.653  24.181  -1.082  1.00  0.00          O
HETATM 6282  H1  SPC  3862       9.652  25.161  -0.833  1.00  0.00          H
HETATM 6283  H2  SPC  3862       9.614  24.099  -2.088  1.00  0.00          H
HETATM 6284  O   SPC  3863      14.441  22.964   3.682  1.00  0.00          O
HETATM 6285  H1  SPC  3863      13.758  22.289   3.992  1.00  0.00          H
HETATM 6286  H2  SPC  3863      14.665  22.768   2.711  1.00  0.00          H
HETATM 6287  O   SPC  3864      18.943  13.477  -5.278  1.00  0.00          O
HETATM 6288  H1  SPC  3864      19.798  13.196  -4.824  1.00  0.00          H
HETATM 6289  H2  SPC  3864      18.655  14.369  -4.916  1.00  0.00          H
HETATM 6290  O   SPC  3870      12.150  21.616   4.308  1.00  0.00          O
HETATM 6291  H1  SPC  3870      11.926  22.422   3.741  1.00  0.00          H
HETATM 6292  H2  SPC  3870      11.738  20.804   3.866  1.00  0.00          H
HETATM 6293  O   SPC  3872      16.006  22.921   8.108  1.00  0.00          O
HETATM 6294  H1  SPC  3872      16.209  23.265   7.179  1.00  0.00          H
HETATM 6295  H2  SPC  3872      16.174  21.920   8.123  1.00  0.00          H
HETATM 6296  O   SPC  3873      13.079  27.659  -1.631  1.00  0.00          O
HETATM 6297  H1  SPC  3873      14.040  27.964  -1.544  1.00  0.00          H
HETATM 6298  H2  SPC  3873      12.480  28.465  -1.515  1.00  0.00          H
HETATM 6299  O   SPC  3874      12.396  26.188   8.525  1.00  0.00          O
HETATM 6300  H1  SPC  3874      11.650  26.654   8.029  1.00  0.00          H
HETATM 6301  H2  SPC  3874      13.138  25.981   7.872  1.00  0.00          H
HETATM 6302  O   SPC  3876      14.173  25.295   6.571  1.00  0.00          O
HETATM 6303  H1  SPC  3876      13.403  24.664   6.399  1.00  0.00          H
HETATM 6304  H2  SPC  3876      15.027  24.840   6.286  1.00  0.00          H
HETATM 6305  O   SPC  3877       7.802  21.101  10.309  1.00  0.00          O
HETATM 6306  H1  SPC  3877       7.655  20.130  10.551  1.00  0.00          H
HETATM 6307  H2  SPC  3877       8.027  21.602  11.158  1.00  0.00          H
HETATM 6308  O   SPC  3879       8.968  24.955   8.212  1.00  0.00          O
HETATM 6309  H1  SPC  3879       9.016  25.290   9.163  1.00  0.00          H
HETATM 6310  H2  SPC  3879       9.452  25.618   7.624  1.00  0.00          H
HETATM 6311  O   SPC  3881       9.533  26.669   0.149  1.00  0.00          O
HETATM 6312  H1  SPC  3881       8.915  26.304   0.862  1.00  0.00          H
HETATM 6313  H2  SPC  3881      10.245  27.227   0.601  1.00  0.00          H
HETATM 6314  O   SPC  3883      16.187  26.235   0.617  1.00  0.00          O
HETATM 6315  H1  SPC  3883      16.598  25.493   0.069  1.00  0.00          H
HETATM 6316  H2  SPC  3883      15.182  26.111   0.620  1.00  0.00          H
HETATM 6317  O   SPC  3888      10.347  23.694  -6.493  1.00  0.00          O
HETATM 6318  H1  SPC  3888       9.653  23.933  -7.191  1.00  0.00          H
HETATM 6319  H2  SPC  3888      10.832  22.858  -6.798  1.00  0.00          H
HETATM 6320  O   SPC  3890      16.991  15.513  -4.864  1.00  0.00          O
HETATM 6321  H1  SPC  3890      16.650  14.755  -5.434  1.00  0.00          H
HETATM 6322  H2  SPC  3890      16.820  16.383  -5.358  1.00  0.00          H
HETATM 6323  O   SPC  3891      17.133  24.045  -0.805  1.00  0.00          O
HETATM 6324  H1  SPC  3891      17.841  24.027  -1.515  1.00  0.00          H
HETATM 6325  H2  SPC  3891      17.414  23.426  -0.053  1.00  0.00          H
HETATM 6326  O   SPC  3895      13.858  21.829  -5.177  1.00  0.00          O
HETATM 6327  H1  SPC  3895      13.043  21.361  -4.803  1.00  0.00          H
HETATM 6328  H2  SPC  3895      14.470  21.143  -5.596  1.00  0.00          H
HETATM 6329  O   SPC  3898       9.945  24.395   4.759  1.00  0.00          O
HETATM 6330  H1  SPC  3898      10.430  24.104   3.919  1.00  0.00          H
HETATM 6331  H2  SPC  3898       8.977  24.115   4.680  1.00  0.00          H
HETATM 6332  O   SPC  3899      17.259  26.260   3.142  1.00  0.00          O
HETATM 6333  H1  SPC  3899      16.907  26.334   2.197  1.00  0.00          H
HETATM 6334  H2  SPC  3899      16.604  26.705   3.766  1.00  0.00          H
HETATM 6335  O   SPC  3903      13.952  20.579  12.660  1.00  0.00          O
HETATM 6336  H1  SPC  3903      13.927  21.589  12.692  1.00  0.00          H
HETATM 6337  H2  SPC  3903      13.183  20.220  13.209  1.00  0.00          H
HETATM 6338  O   SPC  3911       9.356  19.532  15.185  1.00  0.00          O
HETATM 6339  H1  SPC  3911       8.427  19.674  14.818  1.00  0.00          H
HETATM 6340  H2  SPC  3911       9.726  20.433  15.465  1.00  0.00          H
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HETATM 6341  O   SPC  3923      9.450  16.923  16.104  1.00  0.00          O
HETATM 6342  H1  SPC  3923      9.515  17.891  15.812  1.00  0.00          H
HETATM 6343  H2  SPC  3923     10.377  16.587  16.327  1.00  0.00          H
HETATM 6344  O   SPC  3942      8.349  22.111  12.800  1.00  0.00          O
HETATM 6345  H1  SPC  3942      7.950  21.448  13.447  1.00  0.00          H
HETATM 6346  H2  SPC  3942      9.327  22.232  13.018  1.00  0.00          H
HETATM 6347  O   SPC  3960      9.341  26.070  10.717  1.00  0.00          O
HETATM 6348  H1  SPC  3960     10.266  25.733  10.944  1.00  0.00          H
HETATM 6349  H2  SPC  3960      8.663  25.559  11.274  1.00  0.00          H
HETATM 6350  O   SPC  3961     11.842  24.839  10.791  1.00  0.00          O
HETATM 6351  H1  SPC  3961     11.560  23.933  10.458  1.00  0.00          H
HETATM 6352  H2  SPC  3961     12.143  25.395   9.997  1.00  0.00          H
HETATM 6353  O   SPC  3963     13.861  20.271   9.908  1.00  0.00          O
HETATM 6354  H1  SPC  3963     13.635  21.134   9.435  1.00  0.00          H
HETATM 6355  H2  SPC  3963     13.955  20.454  10.897  1.00  0.00          H
HETATM 6356  O   SPC  3965     13.685  23.362  12.310  1.00  0.00          O
HETATM 6357  H1  SPC  3965     14.573  23.264  11.830  1.00  0.00          H
HETATM 6358  H2  SPC  3965     13.160  24.095  11.855  1.00  0.00          H
HETATM 6359  O   SPC  3970     18.880   9.457  14.236  1.00  0.00          O
HETATM 6360  H1  SPC  3970     19.756   9.759  14.618  1.00  0.00          H
HETATM 6361  H2  SPC  3970     19.009   9.256  13.254  1.00  0.00          H
HETATM 6362  O   SPC  3978     11.803  15.552  16.846  1.00  0.00          O
HETATM 6363  H1  SPC  3978     12.475  14.885  16.484  1.00  0.00          H
HETATM 6364  H2  SPC  3978     11.129  15.042  17.404  1.00  0.00          H
HETATM 6365  O   SPC  3991     11.197  19.488  11.178  1.00  0.00          O
HETATM 6366  H1  SPC  3991     11.149  20.413  10.779  1.00  0.00          H
HETATM 6367  H2  SPC  3991     11.281  19.568  12.179  1.00  0.00          H
HETATM 6368  O   SPC  3992     10.367  22.007  15.468  1.00  0.00          O
HETATM 6369  H1  SPC  3992     10.745  22.162  14.543  1.00  0.00          H
HETATM 6370  H2  SPC  3992     10.570  22.805  16.038  1.00  0.00          H
HETATM 6371  O   SPC  3996     11.142  22.425  12.878  1.00  0.00          O
HETATM 6372  H1  SPC  3996     12.053  22.848  12.978  1.00  0.00          H
HETATM 6373  H2  SPC  3996     10.983  22.273  11.892  1.00  0.00          H
HETATM 6374  O   SPC  4004     15.917  16.607  14.875  1.00  0.00          O
HETATM 6375  H1  SPC  4004     16.607  17.075  15.431  1.00  0.00          H
HETATM 6376  H2  SPC  4004     15.785  17.141  14.022  1.00  0.00          H
HETATM 6377  O   SPC  4008     17.147  11.089  15.871  1.00  0.00          O
HETATM 6378  H1  SPC  4008     17.740  10.724  15.145  1.00  0.00          H
HETATM 6379  H2  SPC  4008     16.855  12.022  15.622  1.00  0.00          H
HETATM 6380  O   SPC  4015     16.265  13.843  15.577  1.00  0.00          O
HETATM 6381  H1  SPC  4015     16.592  14.031  16.506  1.00  0.00          H
HETATM 6382  H2  SPC  4015     16.132  14.723  15.100  1.00  0.00          H
HETATM 6383  O   SPC  4018     13.491  13.651  15.906  1.00  0.00          O
HETATM 6384  H1  SPC  4018     14.479  13.585  15.720  1.00  0.00          H
HETATM 6385  H2  SPC  4018     13.118  12.716  16.019  1.00  0.00          H
HETATM 6386  O   SPC  4019     12.411  11.167  16.143  1.00  0.00          O
HETATM 6387  H1  SPC  4019     12.701  10.293  16.553  1.00  0.00          H
HETATM 6388  H2  SPC  4019     11.420  11.137  15.974  1.00  0.00          H
HETATM 6389  O   SPC  4040     15.921  22.816  10.865  1.00  0.00          O
HETATM 6390  H1  SPC  4040     15.986  23.063   9.888  1.00  0.00          H
HETATM 6391  H2  SPC  4040     16.545  22.052  11.042  1.00  0.00          H
HETATM 6392  O   SPC  4047     11.859  19.308  13.972  1.00  0.00          O
HETATM 6393  H1  SPC  4047     12.427  18.717  14.568  1.00  0.00          H
HETATM 6394  H2  SPC  4047     10.943  19.391  14.389  1.00  0.00          H
HETATM 6395  O   SPC  4049     13.288  17.558  15.547  1.00  0.00          O
HETATM 6396  H1  SPC  4049     12.787  16.904  16.132  1.00  0.00          H
HETATM 6397  H2  SPC  4049     14.208  17.190  15.368  1.00  0.00          H
HETATM 6398  O   SPC  4057     11.175  22.116  10.145  1.00  0.00          O
HETATM 6399  H1  SPC  4057     10.430  22.085   9.459  1.00  0.00          H
HETATM 6400  H2  SPC  4057     12.048  22.252   9.648  1.00  0.00          H
HETATM 6401  O   SPC  4065      9.798  14.089  18.019  1.00  0.00          O
HETATM 6402  H1  SPC  4065      9.419  13.164  17.901  1.00  0.00          H
HETATM 6403  H2  SPC  4065      9.037  14.727  18.194  1.00  0.00          H
HETATM 6404  O   SPC  4072     15.581  18.296  12.794  1.00  0.00          O
HETATM 6405  H1  SPC  4072     15.129  19.198  12.793  1.00  0.00          H
HETATM 6406  H2  SPC  4072     15.705  17.999  11.831  1.00  0.00          H
HETATM 6407  O   SPC  4392      9.398  22.434 -10.130  1.00  0.00          O
HETATM 6408  H1  SPC  4392      8.610  22.157 -10.702  1.00  0.00          H
HETATM 6409  H2  SPC  4392      9.120  23.214  -9.556  1.00  0.00          H
HETATM 6410  O   SPC  4394     11.854  16.769 -12.284  1.00  0.00          O
HETATM 6411  H1  SPC  4394     11.982  16.023 -12.953  1.00  0.00          H
HETATM 6412  H2  SPC  4394     10.882  17.068 -12.335  1.00  0.00          H
HETATM 6413  O   SPC  4398     18.599  12.021  -9.360  1.00  0.00          O
HETATM 6414  H1  SPC  4398     18.804  11.173  -8.855  1.00  0.00          H
HETATM 6415  H2  SPC  4398     18.062  11.786 -10.182  1.00  0.00          H
HETATM 6416  O   SPC  4400     14.793  11.050 -14.403  1.00  0.00          O
HETATM 6417  H1  SPC  4400     14.772  10.542 -15.268  1.00  0.00          H
HETATM 6418  H2  SPC  4400     15.601  10.750 -13.878  1.00  0.00          H
HETATM 6419  O   SPC  4410     14.243  20.471  -9.033  1.00  0.00          O
HETATM 6420  H1  SPC  4410     14.682  19.971  -9.793  1.00  0.00          H
HETATM 6421  H2  SPC  4410     13.319  20.749  -9.332  1.00  0.00          H
HETATM 6422  O   SPC  4411      8.473  24.418  -8.371  1.00  0.00          O
HETATM 6423  H1  SPC  4411      8.337  25.418  -8.360  1.00  0.00          H
HETATM 6424  H2  SPC  4411      7.568  23.972  -8.468  1.00  0.00          H
HETATM 6425  O   SPC  4416     16.326  16.897  -8.917  1.00  0.00          O
HETATM 6426  H1  SPC  4416     15.471  16.891  -9.450  1.00  0.00          H
HETATM 6427  H2  SPC  4416     16.757  15.985  -8.994  1.00  0.00          H
HETATM 6428  O   SPC  4423     15.514  20.272  -6.677  1.00  0.00          O
HETATM 6429  H1  SPC  4423     16.405  20.702  -6.837  1.00  0.00          H
HETATM 6430  H2  SPC  4423     14.995  20.275  -7.550  1.00  0.00          H
HETATM 6431  O   SPC  4433     13.596  12.641  -9.614  1.00  0.00          O
HETATM 6432  H1  SPC  4433     13.215  12.643  -8.682  1.00  0.00          H
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HETATM 6433  H2  SPC  4433      14.014  11.730  -9.786  1.00  0.00           H
HETATM 6434  O   SPC  4458      12.543  19.455 -12.043  1.00  0.00           O
HETATM 6435  H1  SPC  4458      13.536  19.454 -11.862  1.00  0.00           H
HETATM 6436  H2  SPC  4458      12.234  18.497 -12.139  1.00  0.00           H
HETATM 6437  O   SPC  4466      11.321  19.629 -17.203  1.00  0.00           O
HETATM 6438  H1  SPC  4466      11.356  19.814 -16.206  1.00  0.00           H
HETATM 6439  H2  SPC  4466      12.016  20.188 -17.657  1.00  0.00           H
HETATM 6440  O   SPC  4479      11.700  14.883 -14.414  1.00  0.00           O
HETATM 6441  H1  SPC  4479      11.579  15.620 -15.093  1.00  0.00           H
HETATM 6442  H2  SPC  4479      10.952  14.214 -14.534  1.00  0.00           H
HETATM 6443  O   SPC  4481      17.124   9.885 -13.184  1.00  0.00           O
HETATM 6444  H1  SPC  4481      17.028  10.642 -12.520  1.00  0.00           H
HETATM 6445  H2  SPC  4481      17.844   9.260 -12.841  1.00  0.00           H
HETATM 6446  O   SPC  4484      10.087  10.669 -14.283  1.00  0.00           O
HETATM 6447  H1  SPC  4484      10.955  10.545 -13.780  1.00  0.00           H
HETATM 6448  H2  SPC  4484      10.044  11.616 -14.626  1.00  0.00           H
HETATM 6449  O   SPC  4485      11.711  21.046  -9.926  1.00  0.00           O
HETATM 6450  H1  SPC  4485      11.879  20.492 -10.756  1.00  0.00           H
HETATM 6451  H2  SPC  4485      10.860  21.581 -10.067  1.00  0.00           H
HETATM 6452  O   SPC  4491      14.129  13.702 -13.660  1.00  0.00           O
HETATM 6453  H1  SPC  4491      14.284  12.781 -14.044  1.00  0.00           H
HETATM 6454  H2  SPC  4491      13.252  14.061 -14.010  1.00  0.00           H
HETATM 6455  O   SPC  4519      15.113  14.100 -11.218  1.00  0.00           O
HETATM 6456  H1  SPC  4519      14.785  14.017 -12.177  1.00  0.00           H
HETATM 6457  H2  SPC  4519      14.475  13.581 -10.619  1.00  0.00           H
HETATM 6458  O   SPC  4533      14.180  16.615 -10.764  1.00  0.00           O
HETATM 6459  H1  SPC  4533      13.262  16.661 -11.187  1.00  0.00           H
HETATM 6460  H2  SPC  4533      14.556  15.690 -10.928  1.00  0.00           H
HETATM 6461  O   SPC  4538      15.175  19.068 -11.209  1.00  0.00           O
HETATM 6462  H1  SPC  4538      14.830  18.130 -11.036  1.00  0.00           H
HETATM 6463  H2  SPC  4538      16.145  19.011 -11.454  1.00  0.00           H
HETATM 6464  O   SPC  4549       8.174  27.235  -8.228  1.00  0.00           O
HETATM 6465  H1  SPC  4549       8.867  27.450  -7.523  1.00  0.00           H
HETATM 6466  H2  SPC  4549       8.467  27.636  -9.099  1.00  0.00           H
HETATM 6467  O   SPC  4562      17.072  14.283  -9.228  1.00  0.00           O
HETATM 6468  H1  SPC  4562      17.774  13.557  -9.314  1.00  0.00           H
HETATM 6469  H2  SPC  4562      16.419  14.191  -9.993  1.00  0.00           H
HETATM 6470  O   SPC  4578       9.501  13.276 -15.139  1.00  0.00           O
HETATM 6471  H1  SPC  4578       9.458  13.863 -15.963  1.00  0.00           H
HETATM 6472  H2  SPC  4578       8.578  12.907 -14.970  1.00  0.00           H
HETATM 6473  O   SPC  4583      10.966  16.995 -16.130  1.00  0.00           O
HETATM 6474  H1  SPC  4583      10.356  17.439 -15.456  1.00  0.00           H
HETATM 6475  H2  SPC  4583      11.357  17.713 -16.718  1.00  0.00           H
HETATM 6476  O   SPC  4591      11.342  19.920 -14.523  1.00  0.00           O
HETATM 6477  H1  SPC  4591      11.822  19.936 -13.636  1.00  0.00           H
HETATM 6478  H2  SPC  4591      10.504  19.359 -14.420  1.00  0.00           H
HETATM 6479  O   SPC  4593      16.680  11.797 -11.325  1.00  0.00           O
HETATM 6480  H1  SPC  4593      16.036  11.249 -10.758  1.00  0.00           H
HETATM 6481  H2  SPC  4593      16.243  12.682 -11.528  1.00  0.00           H
HETATM 6482  O   SPC  4595       9.631  28.468   4.880  1.00  0.00           O
HETATM 6483  H1  SPC  4595      10.297  27.777   4.557  1.00  0.00           H
HETATM 6484  H2  SPC  4595       9.763  29.311   4.337  1.00  0.00           H
HETATM 6485  O   SPC  4603      15.023  29.553   3.154  1.00  0.00           O
HETATM 6486  H1  SPC  4603      15.011  28.757   3.778  1.00  0.00           H
HETATM 6487  H2  SPC  4603      15.923  29.988   3.207  1.00  0.00           H
HETATM 6488  O   SPC  4655      10.156  27.319   7.324  1.00  0.00           O
HETATM 6489  H1  SPC  4655      10.006  27.799   6.448  1.00  0.00           H
HETATM 6490  H2  SPC  4655       9.609  27.778   8.039  1.00  0.00           H
HETATM 6491  O   SPC  4664      11.103  28.214   1.813  1.00  0.00           O
HETATM 6492  H1  SPC  4664      11.236  27.560   2.573  1.00  0.00           H
HETATM 6493  H2  SPC  4664      10.658  29.044   2.181  1.00  0.00           H
HETATM 6494  O   SPC  4699      13.362  29.552   1.007  1.00  0.00           O
HETATM 6495  H1  SPC  4699      13.957  29.642   1.822  1.00  0.00           H
HETATM 6496  H2  SPC  4699      12.577  28.963   1.250  1.00  0.00           H
HETATM 6497  O   SPC  4716      10.539  28.792  -3.603  1.00  0.00           O
HETATM 6498  H1  SPC  4716      10.846  27.848  -3.415  1.00  0.00           H
HETATM 6499  H2  SPC  4716      10.939  29.401  -2.905  1.00  0.00           H
HETATM 6500  O   SPC  4729      11.605  29.928  -1.196  1.00  0.00           O
HETATM 6501  H1  SPC  4729      12.307  30.071  -0.485  1.00  0.00           H
HETATM 6502  H2  SPC  4729      10.718  30.262  -0.839  1.00  0.00           H
HETATM 6503  O   SPC  4733      10.130  30.486   3.081  1.00  0.00           O
HETATM 6504  H1  SPC  4733       9.262  30.873   2.731  1.00  0.00           H
HETATM 6505  H2  SPC  4733      10.852  31.175   2.983  1.00  0.00           H
HETATM 6506  O   SPC  A25J    -18.142   6.717   7.996  1.00  0.00           O
HETATM 6507  H1  SPC  A25J    -17.880   6.406   7.069  1.00  0.00           H
HETATM 6508  H2  SPC  A25J    -19.085   7.052   7.956  1.00  0.00           H
HETATM 6509  O   SPC  A25P    -18.345  -2.602   8.072  1.00  0.00           O
HETATM 6510  H1  SPC  A25P    -17.875  -3.434   7.752  1.00  0.00           H
HETATM 6511  H2  SPC  A25P    -17.878  -2.286   8.909  1.00  0.00           H
HETATM 6512  O   SPC  A25R    -17.541   2.564   7.371  1.00  0.00           O
HETATM 6513  H1  SPC  A25R    -16.698   2.878   7.815  1.00  0.00           H
HETATM 6514  H2  SPC  A25R    -17.572   2.949   6.439  1.00  0.00           H
HETATM 6515  O   SPC  A25S    -18.834  -2.926   3.343  1.00  0.00           O
HETATM 6516  H1  SPC  A25S    -19.807  -3.020   3.123  1.00  0.00           H
HETATM 6517  H2  SPC  A25S    -18.416  -2.273   2.695  1.00  0.00           H
HETATM 6518  O   SPC  A26K    -16.980  -4.104   4.946  1.00  0.00           O
HETATM 6519  H1  SPC  A26K    -16.113  -3.975   4.454  1.00  0.00           H
HETATM 6520  H2  SPC  A26K    -17.727  -3.714   4.384  1.00  0.00           H
HETATM 6521  O   SPC  A26V    -17.976   6.088   5.285  1.00  0.00           O
HETATM 6522  H1  SPC  A26V    -18.435   6.348   4.413  1.00  0.00           H
HETATM 6523  H2  SPC  A26V    -17.661   5.133   5.198  1.00  0.00           H
HETATM 6524  O   SPC  A278    -16.564  -4.652   7.528  1.00  0.00           O
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HETATM 6525  H1  SPC  A278     -15.596  -4.439   7.721  1.00  0.00          H
HETATM 6526  H2  SPC  A278     -16.725  -4.517   6.533  1.00  0.00          H
HETATM 6527  O   SPC  A27A     -17.033   3.499   4.782  1.00  0.00          O
HETATM 6528  H1  SPC  A27A     -16.399   3.908   4.111  1.00  0.00          H
HETATM 6529  H2  SPC  A27A     -17.019   2.498   4.655  1.00  0.00          H
HETATM 6530  O   SPC  A281    -14.511   4.702  12.630  1.00  0.00          O
HETATM 6531  H1  SPC  A281    -14.390   5.698  12.512  1.00  0.00          H
HETATM 6532  H2  SPC  A281    -14.263   4.457  13.580  1.00  0.00          H
HETATM 6533  O   SPC  A287     -8.741   8.941  13.373  1.00  0.00          O
HETATM 6534  H1  SPC  A287     -7.805   8.722  13.681  1.00  0.00          H
HETATM 6535  H2  SPC  A287     -8.673   9.507  12.535  1.00  0.00          H
HETATM 6536  O   SPC  A28N    -10.664   0.938  17.118  1.00  0.00          O
HETATM 6537  H1  SPC  A28N    -11.007   0.998  18.059  1.00  0.00          H
HETATM 6538  H2  SPC  A28N     -9.669   0.756  17.151  1.00  0.00          H
HETATM 6539  O   SPC  A291     -9.251   4.826  16.121  1.00  0.00          O
HETATM 6540  H1  SPC  A291     -9.516   4.456  15.224  1.00  0.00          H
HETATM 6541  H2  SPC  A291     -8.612   4.180  16.562  1.00  0.00          H
HETATM 6542  O   SPC  A298    -13.780   4.012  15.143  1.00  0.00          O
HETATM 6543  H1  SPC  A298    -13.262   3.146  15.162  1.00  0.00          H
HETATM 6544  H2  SPC  A298    -13.148   4.770  15.370  1.00  0.00          H
HETATM 6545  O   SPC  A29N    -18.206   0.573   9.114  1.00  0.00          O
HETATM 6546  H1  SPC  A29N    -18.049   1.326   8.456  1.00  0.00          H
HETATM 6547  H2  SPC  A29N    -18.456  -0.252   8.602  1.00  0.00          H
HETATM 6548  O   SPC  A2AC    -12.135   1.782  14.910  1.00  0.00          O
HETATM 6549  H1  SPC  A2AC    -11.558   2.404  14.362  1.00  0.00          H
HETATM 6550  H2  SPC  A2AC    -11.626   1.519  15.743  1.00  0.00          H
HETATM 6551  O   SPC  A2AJ    -17.803   5.870  10.655  1.00  0.00          O
HETATM 6552  H1  SPC  A2AJ    -17.434   6.727  11.018  1.00  0.00          H
HETATM 6553  H2  SPC  A2AJ    -17.955   5.979   9.664  1.00  0.00          H
HETATM 6554  O   SPC  A2AP    -11.856   5.946  15.462  1.00  0.00          O
HETATM 6555  H1  SPC  A2AP    -11.712   6.706  14.814  1.00  0.00          H
HETATM 6556  H2  SPC  A2AP    -10.972   5.703  15.878  1.00  0.00          H
HETATM 6557  O   SPC  A2BE    -17.633   0.989  11.792  1.00  0.00          O
HETATM 6558  H1  SPC  A2BE    -17.573   1.986  11.936  1.00  0.00          H
HETATM 6559  H2  SPC  A2BE    -17.895   0.814  10.830  1.00  0.00          H
HETATM 6560  O   SPC  A2BQ    -16.241   2.686  14.840  1.00  0.00          O
HETATM 6561  H1  SPC  A2BQ    -16.704   3.109  14.050  1.00  0.00          H
HETATM 6562  H2  SPC  A2BQ    -15.442   3.249  15.088  1.00  0.00          H
HETATM 6563  O   SPC  A2BS    -17.067   3.759  12.338  1.00  0.00          O
HETATM 6564  H1  SPC  A2BS    -16.089   4.017  12.351  1.00  0.00          H
HETATM 6565  H2  SPC  A2BS    -17.557   4.430  11.761  1.00  0.00          H
HETATM 6566  O   SPC  A2BV    -16.227   0.109  13.945  1.00  0.00          O
HETATM 6567  H1  SPC  A2BV    -16.791   0.259  13.117  1.00  0.00          H
HETATM 6568  H2  SPC  A2BV    -16.252   0.961  14.491  1.00  0.00          H
HETATM 6569  O   SPC  A2OW    -18.006   8.929   4.991  1.00  0.00          O
HETATM 6570  H1  SPC  A2OW    -18.396   9.038   4.059  1.00  0.00          H
HETATM 6571  H2  SPC  A2OW    -17.963   7.942   5.192  1.00  0.00          H
HETATM 6572  O   SPC  A2QF    -17.399  10.522   7.092  1.00  0.00          O
HETATM 6573  H1  SPC  A2QF    -17.579   9.904   6.308  1.00  0.00          H
HETATM 6574  H2  SPC  A2QF    -17.838  11.402   6.909  1.00  0.00          H
HETATM 6575  O   SPC  A2QT    -10.823  19.671   7.004  1.00  0.00          O
HETATM 6576  H1  SPC  A2QT    -10.209  20.205   7.603  1.00  0.00          H
HETATM 6577  H2  SPC  A2QT    -11.582  20.263   6.698  1.00  0.00          H
HETATM 6578  O   SPC  A2R4    -11.358   7.980  13.538  1.00  0.00          O
HETATM 6579  H1  SPC  A2R4    -10.352   8.056  13.510  1.00  0.00          H
HETATM 6580  H2  SPC  A2R4    -11.748   8.845  13.188  1.00  0.00          H
HETATM 6581  O   SPC  A2RI     -8.531  10.648  11.281  1.00  0.00          O
HETATM 6582  H1  SPC  A2RI     -9.309  10.903  10.689  1.00  0.00          H
HETATM 6583  H2  SPC  A2RI     -7.669  10.754  10.754  1.00  0.00          H
HETATM 6584  O   SPC  A2RJ    -10.879  11.684  10.298  1.00  0.00          O
HETATM 6585  H1  SPC  A2RJ    -10.696  12.676  10.337  1.00  0.00          H
HETATM 6586  H2  SPC  A2RJ    -11.742  11.532   9.794  1.00  0.00          H
HETATM 6587  O   SPC  A2RY    -16.717   8.848   9.164  1.00  0.00          O
HETATM 6588  H1  SPC  A2RY    -16.911   9.578   8.491  1.00  0.00          H
HETATM 6589  H2  SPC  A2RY    -17.088   7.984   8.801  1.00  0.00          H
HETATM 6590  O   SPC  A2S2    -14.711   9.551  10.936  1.00  0.00          O
HETATM 6591  H1  SPC  A2S2    -14.494   8.724  11.474  1.00  0.00          H
HETATM 6592  H2  SPC  A2S2    -15.511   9.347  10.350  1.00  0.00          H
HETATM 6593  O   SPC  A2S9    -10.241  14.355  10.764  1.00  0.00          O
HETATM 6594  H1  SPC  A2S9     -9.918  13.889  11.601  1.00  0.00          H
HETATM 6595  H2  SPC  A2S9     -9.723  15.216  10.660  1.00  0.00          H
HETATM 6596  O   SPC  A2T8    -12.045  15.297   8.846  1.00  0.00          O
HETATM 6597  H1  SPC  A2T8    -12.660  14.592   8.467  1.00  0.00          H
HETATM 6598  H2  SPC  A2T8    -11.525  14.897   9.613  1.00  0.00          H
HETATM 6599  O   SPC  A2TA    -10.304  10.954  14.520  1.00  0.00          O
HETATM 6600  H1  SPC  A2TA     -9.742  10.155  14.260  1.00  0.00          H
HETATM 6601  H2  SPC  A2TA    -11.220  10.840  14.116  1.00  0.00          H
HETATM 6602  O   SPC  A2TV    -12.231  10.344  12.424  1.00  0.00          O
HETATM 6603  H1  SPC  A2TV    -13.166  10.234  12.066  1.00  0.00          H
HETATM 6604  H2  SPC  A2TV    -11.672  10.811  11.725  1.00  0.00          H
HETATM 6605  O   SPC  A2UG    -13.575  13.282   7.741  1.00  0.00          O
HETATM 6606  H1  SPC  A2UG    -14.552  13.396   7.548  1.00  0.00          H
HETATM 6607  H2  SPC  A2UG    -13.449  12.419   8.256  1.00  0.00          H
HETATM 6608  O   SPC  A2UN     -9.240  12.816  12.816  1.00  0.00          O
HETATM 6609  H1  SPC  A2UN     -8.838  12.098  12.228  1.00  0.00          H
HETATM 6610  H2  SPC  A2UN     -9.748  12.358  13.559  1.00  0.00          H
HETATM 6611  O   SPC  A2V9    -10.330  17.252   8.141  1.00  0.00          O
HETATM 6612  H1  SPC  A2V9    -11.093  16.600   8.296  1.00  0.00          H
HETATM 6613  H2  SPC  A2V9    -10.700  18.093   7.717  1.00  0.00          H
HETATM 6614  O   SPC  A2W8    -13.237  11.007   9.163  1.00  0.00          O
HETATM 6615  H1  SPC  A2W8    -13.895  10.618   9.828  1.00  0.00          H
HETATM 6616  H2  SPC  A2W8    -12.829  10.244   8.643  1.00  0.00          H
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HETATM 6617  O   SPC  A4YB     2.474  12.573  10.850  1.00  0.00          O
HETATM 6618  H1  SPC  A4YB     1.519  12.862  11.022  1.00  0.00          H
HETATM 6619  H2  SPC  A4YB     2.470  11.907  10.093  1.00  0.00          H
HETATM 6620  O   SPC  A4YC    -9.812  18.379   4.800  1.00  0.00          O
HETATM 6621  H1  SPC  A4YC   -10.529  17.674   4.708  1.00  0.00          H
HETATM 6622  H2  SPC  A4YC   -10.026  18.941   5.611  1.00  0.00          H
HETATM 6623  O   SPC  A4YD    -9.909   7.958  -0.982  1.00  0.00          O
HETATM 6624  H1  SPC  A4YD    -9.763   7.149  -0.386  1.00  0.00          H
HETATM 6625  H2  SPC  A4YD   -10.856   8.280  -0.855  1.00  0.00          H
HETATM 6626  O   SPC  A4YE    -0.849   8.703   8.675  1.00  0.00          O
HETATM 6627  H1  SPC  A4YE    -1.601   9.116   8.160  1.00  0.00          H
HETATM 6628  H2  SPC  A4YE    -1.197   7.888   9.064  1.00  0.00          H
HETATM 6629  O   SPC  A4YF    -7.968   0.505  17.360  1.00  0.00          O
HETATM 6630  H1  SPC  A4YF    -7.144  -0.034  17.121  1.00  0.00          H
HETATM 6631  H2  SPC  A4YF    -7.718   1.485  17.348  1.00  0.00          H
HETATM 6632  O   SPC  A4YG     2.144  18.934  -3.864  1.00  0.00          O
HETATM 6633  H1  SPC  A4YG     2.792  18.254  -4.230  1.00  0.00          H
HETATM 6634  H2  SPC  A4YG     1.294  18.884  -4.402  1.00  0.00          H
HETATM 6635  O   SPC  A4YH     2.129  10.771   8.405  1.00  0.00          O
HETATM 6636  H1  SPC  A4YH     2.843  11.257   7.916  1.00  0.00          H
HETATM 6637  H2  SPC  A4YH     1.399  10.723   7.761  1.00  0.00          H
HETATM 6638  O   SPC  A4YJ     3.024   3.304  -3.183  1.00  0.00          O
HETATM 6639  H1  SPC  A4YJ     3.339   2.800  -3.993  1.00  0.00          H
HETATM 6640  H2  SPC  A4YJ     3.473   4.208  -3.173  1.00  0.00          H
HETATM 6641  O   SPC  A4YK   -13.578  -0.392  13.885  1.00  0.00          O
HETATM 6642  H1  SPC  A4YK   -13.079   0.427  14.203  1.00  0.00          H
HETATM 6643  H2  SPC  A4YK   -14.571  -0.212  13.976  1.00  0.00          H
HETATM 6644  O   SPC  A4YL     9.066  18.068   3.288  1.00  0.00          O
HETATM 6645  H1  SPC  A4YL     9.863  18.639   3.019  1.00  0.00          H
HETATM 6646  H2  SPC  A4YL     8.433  18.010   2.498  1.00  0.00          H
HETATM 6647  O   SPC  A4YM     4.318  16.366   7.853  1.00  0.00          O
HETATM 6648  H1  SPC  A4YM     4.202  15.967   6.940  1.00  0.00          H
HETATM 6649  H2  SPC  A4YM     3.777  15.816   8.513  1.00  0.00          H
HETATM 6650  O   SPC  A4YN   -12.247   5.568   5.676  1.00  0.00          O
HETATM 6651  H1  SPC  A4YN   -12.057   4.610   5.419  1.00  0.00          H
HETATM 6652  H2  SPC  A4YN   -12.102   6.157   4.876  1.00  0.00          H
HETATM 6653  O   SPC  A4YO     5.917   6.130   2.274  1.00  0.00          O
HETATM 6654  H1  SPC  A4YO     6.291   5.565   3.014  1.00  0.00          H
HETATM 6655  H2  SPC  A4YO     5.681   7.039   2.640  1.00  0.00          H
HETATM 6656  O   SPC  A4YP    -3.290   8.950  11.465  1.00  0.00          O
HETATM 6657  H1  SPC  A4YP    -3.128   7.975  11.662  1.00  0.00          H
HETATM 6658  H2  SPC  A4YP    -3.830   9.012  10.610  1.00  0.00          H
HETATM 6659  O   SPC  A4YQ     3.882  19.840  -1.886  1.00  0.00          O
HETATM 6660  H1  SPC  A4YQ     3.229  19.611  -2.622  1.00  0.00          H
HETATM 6661  H2  SPC  A4YQ     4.738  19.318  -2.032  1.00  0.00          H
HETATM 6662  O   SPC  A4YS     1.610  10.346  12.797  1.00  0.00          O
HETATM 6663  H1  SPC  A4YS     0.792  10.219  12.221  1.00  0.00          H
HETATM 6664  H2  SPC  A4YS     2.233  10.984  12.335  1.00  0.00          H
HETATM 6665  O   SPC  A4YT     4.655  20.994  -8.542  1.00  0.00          O
HETATM 6666  H1  SPC  A4YT     4.859  20.278  -9.223  1.00  0.00          H
HETATM 6667  H2  SPC  A4YT     3.657  21.005  -8.372  1.00  0.00          H
HETATM 6668  O   SPC  A4YU    -5.628  -0.790  16.823  1.00  0.00          O
HETATM 6669  H1  SPC  A4YU    -5.733  -1.694  17.264  1.00  0.00          H
HETATM 6670  H2  SPC  A4YU    -4.695  -0.448  17.016  1.00  0.00          H
HETATM 6671  O   SPC  A4YV    -1.059  22.575 -15.090  1.00  0.00          O
HETATM 6672  H1  SPC  A4YV    -1.236  21.596 -14.916  1.00  0.00          H
HETATM 6673  H2  SPC  A4YV    -0.599  22.647 -15.996  1.00  0.00          H
HETATM 6674  O   SPC  A4YY   -11.943   4.767  11.453  1.00  0.00          O
HETATM 6675  H1  SPC  A4YY   -12.037   5.434  10.703  1.00  0.00          H
HETATM 6676  H2  SPC  A4YY   -12.867   4.476  11.733  1.00  0.00          H
HETATM 6677  O   SPC  A4YZ     2.024   8.145   8.435  1.00  0.00          O
HETATM 6678  H1  SPC  A4YZ     2.792   7.653   8.763  1.00  0.00          H
HETATM 6679  H2  SPC  A4YZ     2.217   9.114   8.525  1.00  0.00          H
HETATM 6680  O   SPC  A4Z0     2.038  18.167   3.415  1.00  0.00          O
HETATM 6681  H1  SPC  A4Z0     1.061  18.076   3.175  1.00  0.00          H
HETATM 6682  H2  SPC  A4Z0     2.583  18.110   2.570  1.00  0.00          H
HETATM 6683  O   SPC  A4Z2    -4.562   8.916   9.117  1.00  0.00          O
HETATM 6684  H1  SPC  A4Z2    -3.954   9.314   8.415  1.00  0.00          H
HETATM 6685  H2  SPC  A4Z2    -5.007   8.109   8.719  1.00  0.00          H
HETATM 6686  O   SPC  A4Z3     7.159  18.589   1.467  1.00  0.00          O
HETATM 6687  H1  SPC  A4Z3     6.792  19.518   1.333  1.00  0.00          H
HETATM 6688  H2  SPC  A4Z3     7.089  18.089   0.583  1.00  0.00          H
HETATM 6689  O   SPC  A4Z5    -0.668  10.243  10.954  1.00  0.00          O
HETATM 6690  H1  SPC  A4Z5    -1.527   9.897  11.245  1.00  0.00          H
HETATM 6691  H2  SPC  A4Z5    -0.513   9.793  10.108  1.00  0.00          H
HETATM 6692  O   SPC  A4Z6   -13.700   7.297  12.160  1.00  0.00          O
HETATM 6693  H1  SPC  A4Z6   -13.373   7.073  11.228  1.00  0.00          H
HETATM 6694  H2  SPC  A4Z6   -12.899   7.384  12.768  1.00  0.00          H
HETATM 6695  O   SPC  A4Z7    -9.114  -1.199  19.176  1.00  0.00          O
HETATM 6696  H1  SPC  A4Z7    -9.622  -1.857  18.601  1.00  0.00          H
HETATM 6697  H2  SPC  A4Z7    -8.609  -0.571  18.568  1.00  0.00          H
HETATM 6698  O   SPC  A4Z8     5.057  20.958  -5.829  1.00  0.00          O
HETATM 6699  H1  SPC  A4Z8     4.793  21.805  -5.343  1.00  0.00          H
HETATM 6700  H2  SPC  A4Z8     4.856  21.068  -6.814  1.00  0.00          H
HETATM 6701  O   SPC  A4Z9     2.045  20.918  -7.780  1.00  0.00          O
HETATM 6702  H1  SPC  A4Z9     2.055  19.941  -7.530  1.00  0.00          H
HETATM 6703  H2  SPC  A4Z9     1.364  21.397  -7.207  1.00  0.00          H
HETATM 6704  O   SPC  A4ZA    -0.949  14.456   4.198  1.00  0.00          O
HETATM 6705  H1  SPC  A4ZA    -0.710  13.555   4.505  1.00  0.00          H
HETATM 6706  H2  SPC  A4ZA    -1.865  14.528   4.498  1.00  0.00          H
HETATM 6707  O   SPC  A4ZB     0.139  22.399  -6.417  1.00  0.00          O
HETATM 6708  H1  SPC  A4ZB    -0.765  22.243  -5.984  1.00  0.00          H
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HETATM 6709  H2  SPC  A4ZB       0.071  23.231  -6.986  1.00  0.00           H
HETATM 6710  O   SPC  A4ZC     -12.811   6.769   9.668  1.00  0.00           O
HETATM 6711  H1  SPC  A4ZC     -12.425   7.556   9.168  1.00  0.00           H
HETATM 6712  H2  SPC  A4ZC     -13.417   6.264   9.037  1.00  0.00           H
HETATM 6713  C1  MMA A 901      -7.564   7.200   7.611  1.00 38.63           C
HETATM 6714  C2  MMA A 901      -6.853   8.267   6.789  1.00 39.79           C
HETATM 6715  O1  MMA A 901      -8.676   7.773   8.242  1.00 38.68           O
HETATM 6716  C3  MMA A 901      -7.712   8.671   5.601  1.00 38.55           C
HETATM 6717  C7  MMA A 901      -9.217   6.907   9.229  1.00 39.29           C
HETATM 6718  O2  MMA A 901      -5.628   7.677   6.407  1.00 42.66           O
HETATM 6719  C4  MMA A 901      -8.187   7.464   4.809  1.00 38.26           C
HETATM 6720  O3  MMA A 901      -7.043   9.619   4.789  1.00 36.39           O
HETATM 6721  C5  MMA A 901      -8.770   6.388   5.739  1.00 38.04           C
HETATM 6722  O4  MMA A 901      -9.154   7.957   3.905  1.00 36.12           O
HETATM 6723  C6  MMA A 901      -8.983   5.080   5.004  1.00 39.02           C
HETATM 6724  O5  MMA A 901      -7.895   6.093   6.829  1.00 38.49           O
HETATM 6725  O6  MMA A 901      -7.795   4.761   4.320  1.00 37.72           O
HETATM 6726  H1  MMA A 901      -6.876   6.812   8.376  1.00  0.00           H
HETATM 6727  H2  MMA A 901      -6.694   9.156   7.415  1.00  0.00           H
HETATM 6728  H3  MMA A 901      -8.582   9.193   6.014  1.00  0.00           H
HETATM 6729  H71 MMA A 901      -9.932   7.481   9.819  1.00  0.00           H
HETATM 6730  H72 MMA A 901      -9.712   6.044   8.773  1.00  0.00           H
HETATM 6731  H73 MMA A 901      -8.426   6.550   9.901  1.00  0.00           H
HETATM 6732  HO2 MMA A 901      -5.089   8.293   5.879  1.00  0.00           H
HETATM 6733  H4  MMA A 901      -7.339   7.024   4.273  1.00  0.00           H
HETATM 6734  HO3 MMA A 901      -6.529   9.185   4.089  1.00  0.00           H
HETATM 6735  H5  MMA A 901      -9.734   6.734   6.136  1.00  0.00           H
HETATM 6736  HO4 MMA A 901      -9.678   7.255   3.461  1.00  0.00           H
HETATM 6737  H61 MMA A 901      -9.256   4.313   5.739  1.00  0.00           H
HETATM 6738  H62 MMA A 901      -9.821   5.196   4.308  1.00  0.00           H
HETATM 6739  HO6 MMA A 901      -7.912   3.922   3.845  1.00  0.00           H
HETATM 6740  PB  GDP A 904      -2.369   8.943   5.776  1.00 26.19           P
HETATM 6741  O1B GDP A 904      -3.588   8.640   4.876  1.00 27.84           O
HETATM 6742  O2B GDP A 904      -1.491   7.714   5.975  1.00 26.32           O1-
HETATM 6743  O3B GDP A 904      -2.694   9.671   7.088  1.00 26.19           O1-
HETATM 6744  O3A GDP A 904      -1.525  10.025   4.867  1.00 25.44           O
HETATM 6745  PA  GDP A 904      -0.082  10.682   5.196  1.00 25.23           P
HETATM 6746  O1A GDP A 904       0.605   9.841   6.261  1.00 25.43           O
HETATM 6747  O2A GDP A 904      -0.178  12.159   5.419  1.00 26.02           O1-
HETATM 6748  O5' GDP A 904       0.622  10.530   3.760  1.00 25.21           O
HETATM 6749  C5' GDP A 904       0.862   9.268   3.166  1.00 23.27           C
HETATM 6750  C4' GDP A 904       2.352   9.195   2.786  1.00 23.57           C
HETATM 6751  O4' GDP A 904       2.651  10.266   1.890  1.00 24.01           O
HETATM 6752  C3' GDP A 904       3.304   9.352   3.974  1.00 23.80           C
HETATM 6753  O3' GDP A 904       4.421   8.502   3.787  1.00 22.36           O
HETATM 6754  C2' GDP A 904       3.750  10.808   3.908  1.00 23.31           C
HETATM 6755  O2' GDP A 904       5.068  10.875   4.421  1.00 21.65           O
HETATM 6756  C1' GDP A 904       3.650  11.100   2.404  1.00 24.11           C
HETATM 6757  N9  GDP A 904       3.246  12.519   2.128  1.00 24.67           N
HETATM 6758  C8  GDP A 904       2.031  13.131   2.340  1.00 24.89           C
HETATM 6759  N7  GDP A 904       1.982  14.386   1.992  1.00 24.52           N
HETATM 6760  C5  GDP A 904       3.255  14.642   1.505  1.00 24.90           C
HETATM 6761  C6  GDP A 904       3.816  15.867   1.013  1.00 26.54           C
HETATM 6762  O6  GDP A 904       3.289  16.985   0.995  1.00 27.33           O
HETATM 6763  N1  GDP A 904       5.127  15.700   0.570  1.00 26.79           N
HETATM 6764  C2  GDP A 904       5.842  14.517   0.678  1.00 25.66           C
HETATM 6765  N2  GDP A 904       7.115  14.565   0.294  1.00 26.54           N
HETATM 6766  N3  GDP A 904       5.343  13.396   1.167  1.00 26.00           N
HETATM 6767  C4  GDP A 904       4.037  13.504   1.567  1.00 24.67           C
HETATM 6768 H5'1 GDP A 904       0.603   8.451   3.841  1.00  0.00           H
HETATM 6769 H5'2 GDP A 904       0.230   9.137   2.287  1.00  0.00           H
HETATM 6770  H4' GDP A 904       2.525   8.246   2.274  1.00  0.00           H
HETATM 6771  H3' GDP A 904       2.850   9.118   4.936  1.00  0.00           H
HETATM 6772  HO3 GDP A 904       5.165   9.110   3.850  1.00  0.00           H
HETATM 6773  H2' GDP A 904       3.065  11.446   4.466  1.00  0.00           H
HETATM 6774  HO2 GDP A 904       5.153  11.722   4.884  1.00  0.00           H
HETATM 6775  H1' GDP A 904       4.589  10.932   1.875  1.00  0.00           H
HETATM 6776  H8  GDP A 904       1.166  12.633   2.747  1.00  0.00           H
HETATM 6777  HN1 GDP A 904       5.601  16.510   0.150  1.00  0.00           H
HETATM 6778  HN2 GDP A 904       7.785  13.892   0.663  1.00  0.00           H
HETATM 6779  H1  GDP A 904       7.453  15.423  -0.139  1.00  0.00           H
HETATM 6780 MN1   MN A 909       0.415   7.809   7.002  1.00 24.77          Mn2+
HETATM 6781  C1  0MA   2      -3.546   6.673   4.062  0.00  0.00           C1+
HETATM 6782  C2  0MA   2      -2.268   6.744   3.239  0.00  0.00           C
HETATM 6783  O2  0MA   2      -1.717   5.470   3.426  0.00  0.00           O
HETATM 6784  C3  0MA   2      -2.555   7.031   1.764  0.00  0.00           C
HETATM 6785  O3  0MA   2      -1.362   6.790   1.068  0.00  0.00           O
HETATM 6786  C4  0MA   2      -3.722   6.152   1.335  0.00  0.00           C
HETATM 6787  O4  0MA   2      -4.078   6.320  -0.011  0.00  0.00           O
HETATM 6788  C5  0MA   2      -4.951   6.613   2.106  0.00  0.00           C
HETATM 6789  O5  0MA   2      -4.699   6.494   3.558  0.00  0.00           O
HETATM 6790  C6  0MA   2      -6.221   5.849   1.795  0.00  0.00           C
HETATM 6791  O6  0MA   2      -7.299   6.705   2.044  0.00  0.00           O
HETATM 6792  H1  0MA   2      -3.465   6.367   5.099  0.00  0.00           H
HETATM 6793  H2  0MA   2      -1.626   7.520   3.655  0.00  0.00           H
HETATM 6794  H2O 0MA   2      -0.805   5.563   3.776  0.00  0.00           H
HETATM 6795  H3  0MA   2      -2.871   8.083   1.660  0.00  0.00           H
HETATM 6796  H3O 0MA   2      -1.508   6.828   0.092  0.00  0.00           H
HETATM 6797  H4  0MA   2      -3.461   5.111   1.576  0.00  0.00           H
HETATM 6798  H4O 0MA   2      -3.259   6.306  -0.568  0.00  0.00           H
HETATM 6799  H5  0MA   2      -5.127   7.675   1.919  0.00  0.00           H
HETATM 6800  H61 0MA   2      -6.262   4.937   2.406  0.00  0.00           H
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HETATM 6801  H62 0MA     2      -6.161   5.568   0.737  0.00  0.00           H
HETATM 6802  H6O 0MA     2      -8.130   6.348   1.646  0.00  0.00           H
CONECT 5549 5550 5551
CONECT 5550 5549
CONECT 5551 5549
CONECT 5552 5553 5554
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(e) The Cartesian coordinates (in the PDB format) of the M06-2X:OPLS2005 optimized oxocarbenium ion intermediate **TS22** (**WT_Mn**).

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REMARK 888
REMARK 888 WRITTEN BY MAESTRO (A PRODUCT OF SCHRODINGER, LLC)
TITLE     TS22 (WT_Mn)
MODEL        1
ATOM      1  CH3 ACE A 103      -7.056 -19.277 -19.426  1.00  0.00           C
ATOM      2  C   ACE A 103      -5.975 -18.234 -19.658  1.00  0.00           C
ATOM      3  O   ACE A 103      -5.273 -18.285 -20.670  1.00  0.00           O
ATOM      4 1H   ACE A 103      -8.038 -18.802 -19.416  1.00  0.00           H
ATOM      5 2H   ACE A 103      -7.042 -20.036 -20.206  1.00  0.00           H
ATOM      6 3H   ACE A 103      -6.912 -19.762 -18.461  1.00  0.00           H
ATOM      7  N   LYS A 104      -5.840 -17.289 -18.725  1.00 36.95           N
ATOM      8  CA  LYS A 104      -4.832 -16.240 -18.701  1.00 37.33           C
ATOM      9  C   LYS A 104      -4.817 -15.638 -17.298  1.00 36.73           C
ATOM     10  O   LYS A 104      -5.652 -14.771 -17.008  1.00 37.03           O
ATOM     11  CB  LYS A 104      -5.120 -15.152 -19.774  1.00 38.20           C
ATOM     12  CG  LYS A 104      -4.015 -14.073 -19.896  1.00 40.08           C
ATOM     13  CD  LYS A 104      -4.508 -12.608 -19.865  1.00 40.86           C
ATOM     14  CE  LYS A 104      -4.403 -11.907 -18.492  1.00 41.37           C
ATOM     15  NZ  LYS A 104      -5.557 -12.155 -17.609  1.00 44.72           N1+
ATOM     16  HA  LYS A 104      -3.861 -16.695 -18.904  1.00  0.00           H
ATOM     17  HB2 LYS A 104      -5.240 -15.627 -20.748  1.00  0.00           H
ATOM     18  HB3 LYS A 104      -6.088 -14.692 -19.569  1.00  0.00           H
ATOM     19  HG2 LYS A 104      -3.229 -14.220 -19.153  1.00  0.00           H
ATOM     20  HG3 LYS A 104      -3.511 -14.242 -20.849  1.00  0.00           H
ATOM     21  HD2 LYS A 104      -3.860 -12.046 -20.539  1.00  0.00           H
ATOM     22  HD3 LYS A 104      -5.507 -12.509 -20.293  1.00  0.00           H
ATOM     23  HE2 LYS A 104      -3.480 -12.186 -17.989  1.00  0.00           H
ATOM     24  HE3 LYS A 104      -4.341 -10.829 -18.643  1.00  0.00           H
ATOM     25  HZ1 LYS A 104      -5.394 -11.681 -16.719  1.00  0.00           H
ATOM     26  HZ2 LYS A 104      -6.400 -11.755 -18.010  1.00  0.00           H
ATOM     27  HZ3 LYS A 104      -5.689 -13.151 -17.422  1.00  0.00           H
ATOM     28  H2  LYS A 104      -6.417 -17.400 -17.871  1.00  0.00           H
ATOM     29  N   THR A 105      -3.824 -15.977 -16.464  1.00 34.30           N
ATOM     30  CA  THR A 105      -3.622 -15.260 -15.210  1.00 33.23           C
ATOM     31  C   THR A 105      -2.986 -13.898 -15.556  1.00 32.56           C
ATOM     32  O   THR A 105      -2.182 -13.782 -16.485  1.00 32.13           O
ATOM     33  CB  THR A 105      -2.768 -16.070 -14.189  1.00 32.21           C
ATOM     34  OG1 THR A 105      -1.371 -15.809 -14.167  1.00 35.33           O
ATOM     35  CG2 THR A 105      -3.001 -17.588 -14.217  1.00 33.79           C
ATOM     36  H   THR A 105      -3.099 -16.616 -16.755  1.00  0.00           H
ATOM     37  HA  THR A 105      -4.605 -15.111 -14.763  1.00  0.00           H
ATOM     38  HB  THR A 105      -3.119 -15.724 -13.218  1.00  0.00           H
ATOM     39  HG1 THR A 105      -0.939 -16.191 -14.960  1.00  0.00           H
ATOM     40 HG21 THR A 105      -2.536 -18.071 -13.359  1.00  0.00           H
ATOM     41 HG22 THR A 105      -4.067 -17.818 -14.192  1.00  0.00           H
ATOM     42 HG23 THR A 105      -2.582 -18.040 -15.117  1.00  0.00           H
ATOM     43  N   THR A 106      -3.342 -12.848 -14.821  1.00 30.71           N
ATOM     44  CA  THR A 106      -2.718 -11.533 -14.947  1.00 29.71           C
ATOM     45  C   THR A 106      -1.400 -11.489 -14.128  1.00 28.38           C
ATOM     46  O   THR A 106      -0.650 -10.517 -14.211  1.00 26.84           O
ATOM     47  CB  THR A 106      -3.765 -10.465 -14.540  1.00 29.60           C
ATOM     48  OG1 THR A 106      -4.857 -10.541 -15.454  1.00 29.62           O
ATOM     49  CG2 THR A 106      -3.276  -9.012 -14.639  1.00 29.22           C
ATOM     50  H   THR A 106      -3.977 -13.030 -14.026  1.00  0.00           H
ATOM     51  HA  THR A 106      -2.433 -11.345 -15.984  1.00  0.00           H
ATOM     52  HB  THR A 106      -4.131 -10.670 -13.533  1.00  0.00           H
ATOM     53  HG1 THR A 106      -5.389  -9.753 -15.331  1.00  0.00           H
ATOM     54 HG21 THR A 106      -4.074  -8.300 -14.437  1.00  0.00           H
ATOM     55 HG22 THR A 106      -2.477  -8.796 -13.932  1.00  0.00           H
ATOM     56 HG23 THR A 106      -2.892  -8.789 -15.629  1.00  0.00           H
ATOM     57  N   MET A 107      -1.028 -12.592 -13.449  1.00 27.33           N
ATOM     58  CA  MET A 107       0.306 -12.796 -12.884  1.00 27.87           C
ATOM     59  C   MET A 107       1.338 -13.017 -14.001  1.00 27.83           C
ATOM     60  O   MET A 107       2.513 -12.736 -13.797  1.00 28.87           O
ATOM     61  CB  MET A 107       0.328 -14.037 -11.958  1.00 25.92           C
ATOM     62  CG  MET A 107       1.124 -13.835 -10.656  1.00 26.21           C
ATOM     63  SD  MET A 107       2.936 -13.726 -10.758  1.00 27.25           S
ATOM     64  CE  MET A 107       3.446 -15.164  -9.773  1.00 24.40           C
ATOM     65  H   MET A 107      -1.634 -13.400 -13.519  1.00  0.00           H
ATOM     66  HA  MET A 107       0.580 -11.905 -12.317  1.00  0.00           H
ATOM     67  HB2 MET A 107      -0.693 -14.291 -11.682  1.00  0.00           H
ATOM     68  HB3 MET A 107       0.693 -14.925 -12.480  1.00  0.00           H
ATOM     69  HG2 MET A 107       0.754 -12.952 -10.135  1.00  0.00           H
ATOM     70  HG3 MET A 107       0.909 -14.681 -10.013  1.00  0.00           H
ATOM     71  HE1 MET A 107       4.525 -15.299  -9.836  1.00  0.00           H
ATOM     72  HE2 MET A 107       3.189 -15.033  -8.723  1.00  0.00           H
ATOM     73  HE3 MET A 107       2.975 -16.078 -10.135  1.00  0.00           H
ATOM     74  N   ASP A 108       0.943 -13.488 -15.190  1.00 28.14           N
ATOM     75  CA  ASP A 108       1.871 -13.853 -16.271  1.00 28.57           C
ATOM     76  C   ASP A 108       2.474 -12.660 -17.032  1.00 28.39           C
ATOM     77  O   ASP A 108       3.242 -12.836 -17.976  1.00 28.31           O
ATOM     78  CB  ASP A 108       1.243 -14.898 -17.213  1.00 29.94           C
ATOM     79  CG  ASP A 108       1.154 -16.245 -16.507  1.00 31.66           C
ATOM     80  OD1 ASP A 108       2.242 -16.778 -16.185  1.00 31.67           O
ATOM     81  OD2 ASP A 108       0.012 -16.663 -16.205  1.00 33.98           O1-
ATOM     82  H   ASP A 108      -0.023 -13.774 -15.304  1.00  0.00           H
ATOM     83  HA  ASP A 108       2.734 -14.308 -15.801  1.00  0.00           H
ATOM     84  HB2 ASP A 108       0.257 -14.585 -17.555  1.00  0.00           H
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ATOM     85  HB3 ASP A 108       1.855 -15.045 -18.103  1.00  0.00           H
ATOM     86  N   TYR A 109       2.233 -11.437 -16.548  1.00 29.03           N
ATOM     87  CA  TYR A 109       3.037 -10.256 -16.858  1.00 29.95           C
ATOM     88  C   TYR A 109       4.177 -10.070 -15.822  1.00 29.37           C
ATOM     89  O   TYR A 109       4.957  -9.127 -15.945  1.00 30.93           O
ATOM     90  CB  TYR A 109       2.122  -9.013 -16.800  1.00 32.34           C
ATOM     91  CG  TYR A 109       0.933  -9.038 -17.752  1.00 34.77           C
ATOM     92  CD1 TYR A 109      -0.382  -8.939 -17.248  1.00 34.89           C
ATOM     93  CD2 TYR A 109       1.133  -9.179 -19.142  1.00 35.80           C
ATOM     94  CE1 TYR A 109      -1.483  -9.014 -18.124  1.00 34.99           C
ATOM     95  CE2 TYR A 109       0.030  -9.253 -20.016  1.00 35.75           C
ATOM     96  CZ  TYR A 109      -1.280  -9.183 -19.504  1.00 36.34           C
ATOM     97  OH  TYR A 109      -2.361  -9.289 -20.327  1.00 36.60           O
ATOM     98  H   TYR A 109       1.557 -11.376 -15.800  1.00  0.00           H
ATOM     99  HA  TYR A 109       3.487 -10.336 -17.849  1.00  0.00           H
ATOM    100  HB2 TYR A 109       1.758  -8.871 -15.782  1.00  0.00           H
ATOM    101  HB3 TYR A 109       2.710  -8.124 -17.034  1.00  0.00           H
ATOM    102  HD1 TYR A 109      -0.553  -8.827 -16.187  1.00  0.00           H
ATOM    103  HD2 TYR A 109       2.132  -9.259 -19.544  1.00  0.00           H
ATOM    104  HE1 TYR A 109      -2.491  -8.956 -17.746  1.00  0.00           H
ATOM    105  HE2 TYR A 109       0.202  -9.383 -21.075  1.00  0.00           H
ATOM    106  HH  TYR A 109      -2.142  -9.281 -21.247  1.00  0.00           H
ATOM    107  N   ILE A 110       4.267 -10.936 -14.799  1.00 28.23           N
ATOM    108  CA  ILE A 110       5.159 -10.866 -13.642  1.00 27.12           C
ATOM    109  C   ILE A 110       5.943 -12.182 -13.449  1.00 28.39           C
ATOM    110  O   ILE A 110       7.102 -12.111 -13.021  1.00 27.18           O
ATOM    111  CB  ILE A 110       4.374 -10.437 -12.360  1.00 26.29           C
ATOM    112  CG1 ILE A 110       3.582  -9.122 -12.539  1.00 26.10           C
ATOM    113  CG2 ILE A 110       5.268 -10.337 -11.108  1.00 24.77           C
ATOM    114  CD1 ILE A 110       2.098  -9.338 -12.868  1.00 26.96           C
ATOM    115  H   ILE A 110       3.556 -11.661 -14.745  1.00  0.00           H
ATOM    116  HA  ILE A 110       5.912 -10.099 -13.835  1.00  0.00           H
ATOM    117  HB  ILE A 110       3.654 -11.221 -12.128  1.00  0.00           H
ATOM    118 HG12 ILE A 110       3.626  -8.550 -11.615  1.00  0.00           H
ATOM    119 HG13 ILE A 110       4.052  -8.490 -13.294  1.00  0.00           H
ATOM    120 HG21 ILE A 110       4.699 -10.005 -10.239  1.00  0.00           H
ATOM    121 HG22 ILE A 110       5.698 -11.299 -10.836  1.00  0.00           H
ATOM    122 HG23 ILE A 110       6.085  -9.633 -11.262  1.00  0.00           H
ATOM    123 HD11 ILE A 110       1.593  -8.398 -13.090  1.00  0.00           H
ATOM    124 HD12 ILE A 110       1.962  -9.987 -13.729  1.00  0.00           H
ATOM    125 HD13 ILE A 110       1.576  -9.800 -12.030  1.00  0.00           H
ATOM    126  N   THR A 111       5.354 -13.357 -13.753  1.00 28.11           N
ATOM    127  CA  THR A 111       5.926 -14.711 -13.616  1.00 29.58           C
ATOM    128  C   THR A 111       7.444 -14.900 -13.875  1.00 30.49           C
ATOM    129  O   THR A 111       8.089 -15.515 -13.021  1.00 30.80           O
ATOM    130  CB  THR A 111       5.017 -15.836 -14.189  1.00 29.32           C
ATOM    131  OG1 THR A 111       4.714 -15.636 -15.552  1.00 32.94           O
ATOM    132  CG2 THR A 111       3.725 -16.055 -13.396  1.00 28.93           C
ATOM    133  H   THR A 111       4.383 -13.332 -14.049  1.00  0.00           H
ATOM    134  HA  THR A 111       5.862 -14.854 -12.537  1.00  0.00           H
ATOM    135  HB  THR A 111       5.567 -16.778 -14.139  1.00  0.00           H
ATOM    136  HG1 THR A 111       3.905 -16.127 -15.777  1.00  0.00           H
ATOM    137 HG21 THR A 111       3.160 -16.903 -13.784  1.00  0.00           H
ATOM    138 HG22 THR A 111       3.939 -16.268 -12.350  1.00  0.00           H
ATOM    139 HG23 THR A 111       3.071 -15.189 -13.434  1.00  0.00           H
ATOM    140  N   PRO A 112       8.070 -14.339 -14.943  1.00 32.29           N
ATOM    141  CA  PRO A 112       9.536 -14.276 -15.099  1.00 33.46           C
ATOM    142  C   PRO A 112      10.344 -13.811 -13.867  1.00 35.96           C
ATOM    143  O   PRO A 112      11.372 -14.409 -13.556  1.00 35.45           O
ATOM    144  CB  PRO A 112       9.773 -13.333 -16.288  1.00 33.51           C
ATOM    145  CG  PRO A 112       8.524 -13.481 -17.138  1.00 31.85           C
ATOM    146  CD  PRO A 112       7.411 -13.798 -16.140  1.00 31.36           C
ATOM    147  HA  PRO A 112       9.868 -15.281 -15.365  1.00  0.00           H
ATOM    148  HB2 PRO A 112       9.855 -12.297 -15.954  1.00  0.00           H
ATOM    149  HB3 PRO A 112      10.684 -13.575 -16.836  1.00  0.00           H
ATOM    150  HG2 PRO A 112       8.309 -12.598 -17.742  1.00  0.00           H
ATOM    151  HG3 PRO A 112       8.646 -14.324 -17.821  1.00  0.00           H
ATOM    152  HD2 PRO A 112       6.865 -12.885 -15.912  1.00  0.00           H
ATOM    153  HD3 PRO A 112       6.705 -14.506 -16.574  1.00  0.00           H
ATOM    154  N   SER A 113       9.878 -12.796 -13.123  1.00 36.66           N
ATOM    155  CA  SER A 113      10.554 -12.299 -11.916  1.00 35.89           C
ATOM    156  C   SER A 113      10.369 -13.246 -10.705  1.00 36.89           C
ATOM    157  O   SER A 113      11.110 -13.156  -9.727  1.00 37.22           O
ATOM    158  CB  SER A 113      10.078 -10.853 -11.622  1.00 35.80           C
ATOM    159  OG  SER A 113       8.720 -10.724 -11.219  1.00 33.01           O
ATOM    160  H   SER A 113       8.972 -12.400 -13.357  1.00  0.00           H
ATOM    161  HA  SER A 113      11.626 -12.252 -12.120  1.00  0.00           H
ATOM    162  HB2 SER A 113      10.701 -10.426 -10.833  1.00  0.00           H
ATOM    163  HB3 SER A 113      10.247 -10.226 -12.499  1.00  0.00           H
ATOM    164  HG  SER A 113       8.153 -11.143 -11.870  1.00  0.00           H
ATOM    165  N   PHE A 114       9.439 -14.207 -10.801  1.00 37.03           N
ATOM    166  CA  PHE A 114       9.178 -15.262  -9.825  1.00 38.15           C
ATOM    167  C   PHE A 114       9.871 -16.581 -10.212  1.00 40.29           C
ATOM    168  O   PHE A 114       9.698 -17.579  -9.510  1.00 41.86           O
ATOM    169  CB  PHE A 114       7.650 -15.480  -9.710  1.00 37.24           C
ATOM    170  CG  PHE A 114       7.020 -14.602  -8.651  1.00 37.59           C
ATOM    171  CD1 PHE A 114       6.934 -13.209  -8.849  1.00 37.08           C
ATOM    172  CD2 PHE A 114       6.544 -15.176  -7.453  1.00 36.59           C
ATOM    173  CE1 PHE A 114       6.400 -12.391  -7.840  1.00 37.47           C
ATOM    174  CE2 PHE A 114       6.015 -14.357  -6.443  1.00 35.73           C
ATOM    175  CZ  PHE A 114       5.955 -12.968  -6.637  1.00 36.89           C
ATOM    176  H   PHE A 114       8.918 -14.269 -11.669  1.00  0.00           H
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ATOM    177  HA  PHE A 114       9.572 -14.985  -8.845  1.00  0.00           H
ATOM    178  HB2 PHE A 114       7.148 -15.290 -10.657  1.00  0.00           H
ATOM    179  HB3 PHE A 114       7.399 -16.514  -9.471  1.00  0.00           H
ATOM    180  HD1 PHE A 114       7.286 -12.761  -9.767  1.00  0.00           H
ATOM    181  HD2 PHE A 114       6.582 -16.242  -7.297  1.00  0.00           H
ATOM    182  HE1 PHE A 114       6.333 -11.323  -7.989  1.00  0.00           H
ATOM    183  HE2 PHE A 114       5.665 -14.786  -5.516  1.00  0.00           H
ATOM    184  HZ  PHE A 114       5.562 -12.345  -5.855  1.00  0.00           H
ATOM    185  N   ALA A 115      10.690 -16.602 -11.275  1.00 -1.00           N
ATOM    186  CA  ALA A 115      11.519 -17.750 -11.654  1.00 -1.00           C
ATOM    187  C   ALA A 115      12.824 -17.800 -10.832  1.00 -1.00           C
ATOM    188  O   ALA A 115      13.491 -18.829 -10.789  1.00 -1.00           O
ATOM    189  CB  ALA A 115      11.902 -17.609 -13.135  1.00 -1.00           C
ATOM    190  H   ALA A 115      10.751 -15.770 -11.851  1.00 -1.00           H
ATOM    191  HA  ALA A 115      10.967 -18.681 -11.507  1.00 -1.00           H
ATOM    192  HB1 ALA A 115      12.451 -18.487 -13.480  1.00 -1.00           H
ATOM    193  HB2 ALA A 115      11.016 -17.511 -13.764  1.00 -1.00           H
ATOM    194  HB3 ALA A 115      12.535 -16.739 -13.313  1.00 -1.00           H
ATOM    195  N   ASN A 116      13.166 -16.706 -10.139  1.00 -1.00           N
ATOM    196  CA  ASN A 116      14.375 -16.456  -9.337  1.00 -1.00           C
ATOM    197  C   ASN A 116      14.379 -17.232  -7.987  1.00 -1.00           C
ATOM    198  O   ASN A 116      15.009 -16.820  -7.008  1.00 -1.00           O
ATOM    199  CB  ASN A 116      14.408 -14.921  -9.124  1.00 -1.00           C
ATOM    200  CG  ASN A 116      15.691 -14.361  -8.504  1.00 -1.00           C
ATOM    201  OD1 ASN A 116      16.784 -14.547  -9.027  1.00 -1.00           O
ATOM    202  ND2 ASN A 116      15.568 -13.687  -7.369  1.00 -1.00           N
ATOM    203  H   ASN A 116      12.518 -15.936 -10.218  1.00 -1.00           H
ATOM    204  HA  ASN A 116      15.251 -16.766  -9.910  1.00 -1.00           H
ATOM    205  HB2 ASN A 116      14.309 -14.423 -10.090  1.00 -1.00           H
ATOM    206  HB3 ASN A 116      13.540 -14.605  -8.547  1.00 -1.00           H
ATOM    207 HD21 ASN A 116      16.377 -13.251  -6.944  1.00 -1.00           H
ATOM    208 HD22 ASN A 116      14.646 -13.619  -6.931  1.00 -1.00           H
ATOM    209  N   LYS A 117      13.685 -18.377  -7.927  1.00 -1.00           N
ATOM    210  CA  LYS A 117      13.455 -19.263  -6.779  1.00 -1.00           C
ATOM    211  C   LYS A 117      14.732 -20.004  -6.323  1.00 -1.00           C
ATOM    212  O   LYS A 117      14.812 -21.232  -6.314  1.00 -1.00           O
ATOM    213  CB  LYS A 117      12.316 -20.243  -7.145  1.00 -1.00           C
ATOM    214  CG  LYS A 117      10.920 -19.601  -7.046  1.00 -1.00           C
ATOM    215  CD  LYS A 117       9.825 -20.477  -7.684  1.00 -1.00           C
ATOM    216  CE  LYS A 117       8.376 -20.089  -7.333  1.00 -1.00           C
ATOM    217  NZ  LYS A 117       8.075 -18.685  -7.629  1.00 -1.00          N1+
ATOM    218  H   LYS A 117      13.335 -18.702  -8.822  1.00 -1.00           H
ATOM    219  HA  LYS A 117      13.140 -18.654  -5.935  1.00 -1.00           H
ATOM    220  HB2 LYS A 117      12.488 -20.652  -8.142  1.00 -1.00           H
ATOM    221  HB3 LYS A 117      12.322 -21.098  -6.467  1.00 -1.00           H
ATOM    222  HG2 LYS A 117      10.707 -19.422  -5.994  1.00 -1.00           H
ATOM    223  HG3 LYS A 117      10.933 -18.618  -7.516  1.00 -1.00           H
ATOM    224  HD2 LYS A 117       9.954 -20.468  -8.768  1.00 -1.00           H
ATOM    225  HD3 LYS A 117       9.975 -21.514  -7.379  1.00 -1.00           H
ATOM    226  HE2 LYS A 117       7.688 -20.706  -7.913  1.00 -1.00           H
ATOM    227  HE3 LYS A 117       8.151 -20.287  -6.285  1.00 -1.00           H
ATOM    228  HZ1 LYS A 117       7.048 -18.592  -7.804  1.00 -1.00           H
ATOM    229  HZ2 LYS A 117       8.285 -18.089  -6.829  1.00 -1.00           H
ATOM    230  HZ3 LYS A 117       8.580 -18.351  -8.446  1.00 -1.00           H
ATOM    231  N   ALA A 118      15.746 -19.219  -5.963  1.00 -1.00           N
ATOM    232  CA  ALA A 118      17.011 -19.611  -5.361  1.00 -1.00           C
ATOM    233  C   ALA A 118      17.648 -18.436  -4.606  1.00 -1.00           C
ATOM    234  O   ALA A 118      18.332 -18.646  -3.607  1.00 -1.00           O
ATOM    235  CB  ALA A 118      17.957 -20.212  -6.413  1.00 -1.00           C
ATOM    236  H   ALA A 118      15.553 -18.231  -6.085  1.00 -1.00           H
ATOM    237  HA  ALA A 118      16.796 -20.381  -4.616  1.00 -1.00           H
ATOM    238  HB1 ALA A 118      18.908 -20.499  -5.963  1.00 -1.00           H
ATOM    239  HB2 ALA A 118      17.527 -21.106  -6.865  1.00 -1.00           H
ATOM    240  HB3 ALA A 118      18.167 -19.501  -7.213  1.00 -1.00           H
ATOM    241  N   GLY A 119      17.419 -17.193  -5.055  1.00 49.69           N
ATOM    242  CA  GLY A 119      18.054 -15.992  -4.521  1.00 48.49           C
ATOM    243  C   GLY A 119      17.040 -15.029  -3.903  1.00 47.46           C
ATOM    244  O   GLY A 119      15.846 -15.331  -3.818  1.00 48.38           O
ATOM    245  H   GLY A 119      16.817 -17.065  -5.861  1.00 -1.00           H
ATOM    246  HA2 GLY A 119      18.826 -16.222  -3.786  1.00  0.00           H
ATOM    247  HA3 GLY A 119      18.551 -15.485  -5.350  1.00  0.00           H
ATOM    248  N   LYS A 120      17.519 -13.855  -3.474  1.00 45.71           N
ATOM    249  CA  LYS A 120      16.684 -12.686  -3.191  1.00 42.69           C
ATOM    250  C   LYS A 120      16.312 -12.060  -4.553  1.00 40.13           C
ATOM    251  O   LYS A 120      17.152 -12.096  -5.460  1.00 39.70           O
ATOM    252  CB  LYS A 120      17.521 -11.606  -2.451  1.00 44.31           C
ATOM    253  CG  LYS A 120      17.862 -11.849  -0.966  1.00 45.11           C
ATOM    254  CD  LYS A 120      18.779 -10.719  -0.434  1.00 45.84           C
ATOM    255  CE  LYS A 120      18.925 -10.627   1.099  1.00 46.18           C
ATOM    256  NZ  LYS A 120      17.839  -9.851   1.714  1.00 44.91          N1+
ATOM    257  H   LYS A 120      18.489 -13.658  -3.671  1.00  0.00           H
ATOM    258  HA  LYS A 120      15.803 -12.968  -2.613  1.00  0.00           H
ATOM    259  HB2 LYS A 120      18.442 -11.420  -3.009  1.00  0.00           H
ATOM    260  HB3 LYS A 120      16.972 -10.662  -2.493  1.00  0.00           H
ATOM    261  HG2 LYS A 120      16.939 -11.901  -0.388  1.00  0.00           H
ATOM    262  HG3 LYS A 120      18.353 -12.815  -0.842  1.00  0.00           H
ATOM    263  HD2 LYS A 120      19.770 -10.869  -0.866  1.00  0.00           H
ATOM    264  HD3 LYS A 120      18.446  -9.753  -0.819  1.00  0.00           H
ATOM    265  HE2 LYS A 120      18.968 -11.618   1.553  1.00  0.00           H
ATOM    266  HE3 LYS A 120      19.860 -10.124   1.349  1.00  0.00           H
ATOM    267  HZ1 LYS A 120      17.271 -10.477   2.327  1.00  0.00           H
ATOM    268  HZ2 LYS A 120      18.144  -9.039   2.250  1.00  0.00           H
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ATOM    269  HZ3 LYS A 120      17.167  -9.549   1.023  1.00  0.00           H
ATOM    270  N   PRO A 121      15.126 -11.444  -4.713  1.00 37.16           N
ATOM    271  CA  PRO A 121      14.864 -10.546  -5.844  1.00 35.52           C
ATOM    272  C   PRO A 121      15.542  -9.184  -5.588  1.00 33.34           C
ATOM    273  O   PRO A 121      16.067  -8.937  -4.497  1.00 31.34           O
ATOM    274  CB  PRO A 121      13.337 -10.414  -5.860  1.00 35.26           C
ATOM    275  CG  PRO A 121      12.921 -10.579  -4.404  1.00 37.08           C
ATOM    276  CD  PRO A 121      13.973 -11.522  -3.811  1.00 36.33           C
ATOM    277  HA  PRO A 121      15.223 -10.959  -6.788  1.00  0.00           H
ATOM    278  HB2 PRO A 121      12.994  -9.474  -6.290  1.00  0.00           H
ATOM    279  HB3 PRO A 121      12.907 -11.219  -6.458  1.00  0.00           H
ATOM    280  HG2 PRO A 121      12.973  -9.609  -3.909  1.00  0.00           H
ATOM    281  HG3 PRO A 121      11.904 -10.957  -4.291  1.00  0.00           H
ATOM    282  HD2 PRO A 121      14.229 -11.225  -2.792  1.00  0.00           H
ATOM    283  HD3 PRO A 121      13.598 -12.546  -3.786  1.00  0.00           H
ATOM    284  N   LYS A 122      15.492  -8.264  -6.562  1.00 31.90           N
ATOM    285  CA  LYS A 122      15.862  -6.872  -6.322  1.00 31.10           C
ATOM    286  C   LYS A 122      14.671  -6.241  -5.577  1.00 29.95           C
ATOM    287  O   LYS A 122      13.636  -5.961  -6.180  1.00 31.41           O
ATOM    288  CB  LYS A 122      16.110  -6.129  -7.659  1.00 33.97           C
ATOM    289  CG  LYS A 122      17.120  -6.810  -8.604  1.00 35.41           C
ATOM    290  CD  LYS A 122      17.749  -5.869  -9.658  1.00 40.19           C
ATOM    291  CE  LYS A 122      16.924  -5.602 -10.937  1.00 42.24           C
ATOM    292  NZ  LYS A 122      15.708  -4.815 -10.691  1.00 43.94           N1+
ATOM    293  H   LYS A 122      15.010  -8.479  -7.423  1.00  0.00           H
ATOM    294  HA  LYS A 122      16.767  -6.814  -5.713  1.00  0.00           H
ATOM    295  HB2 LYS A 122      15.173  -5.978  -8.189  1.00  0.00           H
ATOM    296  HB3 LYS A 122      16.480  -5.133  -7.411  1.00  0.00           H
ATOM    297  HG2 LYS A 122      17.933  -7.207  -7.993  1.00  0.00           H
ATOM    298  HG3 LYS A 122      16.664  -7.674  -9.090  1.00  0.00           H
ATOM    299  HD2 LYS A 122      18.054  -4.930  -9.193  1.00  0.00           H
ATOM    300  HD3 LYS A 122      18.683  -6.332  -9.981  1.00  0.00           H
ATOM    301  HE2 LYS A 122      17.540  -5.046 -11.644  1.00  0.00           H
ATOM    302  HE3 LYS A 122      16.645  -6.537 -11.425  1.00  0.00           H
ATOM    303  HZ1 LYS A 122      15.352  -4.406 -11.540  1.00  0.00           H
ATOM    304  HZ2 LYS A 122      14.975  -5.490 -10.379  1.00  0.00           H
ATOM    305  HZ3 LYS A 122      15.881  -4.085 -10.005  1.00  0.00           H
ATOM    306  N   ALA A 123      14.808  -6.043  -4.267  1.00 25.55           N
ATOM    307  CA  ALA A 123      13.805  -5.456  -3.389  1.00 25.13           C
ATOM    308  C   ALA A 123      14.462  -4.381  -2.528  1.00 23.88           C
ATOM    309  O   ALA A 123      15.661  -4.456  -2.260  1.00 23.84           O
ATOM    310  CB  ALA A 123      13.153  -6.555  -2.540  1.00 23.35           C
ATOM    311  H   ALA A 123      15.692  -6.262  -3.829  1.00  0.00           H
ATOM    312  HA  ALA A 123      13.035  -4.973  -3.987  1.00  0.00           H
ATOM    313  HB1 ALA A 123      12.293  -6.161  -1.997  1.00  0.00           H
ATOM    314  HB2 ALA A 123      12.809  -7.385  -3.153  1.00  0.00           H
ATOM    315  HB3 ALA A 123      13.846  -6.961  -1.806  1.00  0.00           H
ATOM    316  N   CYS A 124      13.671  -3.409  -2.079  1.00 25.75           N
ATOM    317  CA  CYS A 124      14.073  -2.310  -1.212  1.00 23.52           C
ATOM    318  C   CYS A 124      12.962  -2.044  -0.196  1.00 23.67           C
ATOM    319  O   CYS A 124      11.812  -2.439  -0.412  1.00 24.40           O
ATOM    320  CB  CYS A 124      14.445  -1.073  -2.063  1.00 22.25           C
ATOM    321  SG  CYS A 124      13.004  -0.368  -2.939  1.00 23.91           S
ATOM    322  H   CYS A 124      12.695  -3.404  -2.344  1.00  0.00           H
ATOM    323  HA  CYS A 124      14.956  -2.612  -0.645  1.00  0.00           H
ATOM    324  HB2 CYS A 124      14.880  -0.295  -1.435  1.00  0.00           H
ATOM    325  HB3 CYS A 124      15.208  -1.339  -2.791  1.00  0.00           H
ATOM    326  HG  CYS A 124      12.480   0.228  -1.862  1.00  0.00           H
ATOM    327  N   TYR A 125      13.265  -1.282   0.856  1.00 21.36           N
ATOM    328  CA  TYR A 125      12.248  -0.500   1.550  1.00 22.40           C
ATOM    329  C   TYR A 125      12.065   0.783   0.726  1.00 21.88           C
ATOM    330  O   TYR A 125      13.053   1.345   0.248  1.00 20.40           O
ATOM    331  CB  TYR A 125      12.711  -0.097   2.962  1.00 21.32           C
ATOM    332  CG  TYR A 125      13.240  -1.214   3.841  1.00 22.30           C
ATOM    333  CD1 TYR A 125      12.367  -2.082   4.531  1.00 20.05           C
ATOM    334  CD2 TYR A 125      14.632  -1.363   3.988  1.00 18.10           C
ATOM    335  CE1 TYR A 125      12.895  -3.106   5.345  1.00 20.76           C
ATOM    336  CE2 TYR A 125      15.154  -2.382   4.797  1.00 18.47           C
ATOM    337  CZ  TYR A 125      14.288  -3.264   5.469  1.00 18.41           C
ATOM    338  OH  TYR A 125      14.800  -4.269   6.233  1.00 19.18           O
ATOM    339  H   TYR A 125      14.234  -0.983   0.963  1.00  0.00           H
ATOM    340  HA  TYR A 125      11.320  -1.052   1.610  1.00  0.00           H
ATOM    341  HB2 TYR A 125      13.491   0.653   2.885  1.00  0.00           H
ATOM    342  HB3 TYR A 125      11.892   0.397   3.487  1.00  0.00           H
ATOM    343  HD1 TYR A 125      11.297  -1.968   4.444  1.00  0.00           H
ATOM    344  HD2 TYR A 125      15.312  -0.691   3.486  1.00  0.00           H
ATOM    345  HE1 TYR A 125      12.230  -3.768   5.878  1.00  0.00           H
ATOM    346  HE2 TYR A 125      16.224  -2.468   4.887  1.00  0.00           H
ATOM    347  HH  TYR A 125      15.755  -4.270   6.204  1.00  0.00           H
ATOM    348  N   VAL A 126      10.825   1.237   0.550  1.00 22.88           N
ATOM    349  CA  VAL A 126      10.499   2.515  -0.060  1.00 20.05           C
ATOM    350  C   VAL A 126       9.741   3.342   0.980  1.00 20.90           C
ATOM    351  O   VAL A 126       8.864   2.840   1.691  1.00 19.39           O
ATOM    352  CB  VAL A 126       9.761   2.343  -1.413  1.00 21.97           C
ATOM    353  CG1 VAL A 126       8.354   1.739  -1.307  1.00 21.20           C
ATOM    354  CG2 VAL A 126       9.701   3.670  -2.192  1.00 17.14           C
ATOM    355  H   VAL A 126      10.056   0.738   0.999  1.00  0.00           H
ATOM    356  HA  VAL A 126      11.424   3.038  -0.286  1.00  0.00           H
ATOM    357  HB  VAL A 126      10.358   1.651  -2.007  1.00  0.00           H
ATOM    358 HG11 VAL A 126       7.932   1.571  -2.298  1.00  0.00           H
ATOM    359 HG12 VAL A 126       8.382   0.784  -0.787  1.00  0.00           H
ATOM    360 HG13 VAL A 126       7.666   2.397  -0.775  1.00  0.00           H
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ATOM    361 HG21 VAL A 126       9.272   3.529  -3.183  1.00  0.00           H
ATOM    362 HG22 VAL A 126       9.093   4.415  -1.678  1.00  0.00           H
ATOM    363 HG23 VAL A 126      10.698   4.092  -2.326  1.00  0.00           H
ATOM    364  N   THR A 127      10.090   4.621   1.057  1.00 20.50           N
ATOM    365  CA  THR A 127       9.526   5.580   1.974  1.00 20.93           C
ATOM    366  C   THR A 127       9.347   6.895   1.217  1.00 21.13           C
ATOM    367  O   THR A 127      10.326   7.598   0.991  1.00 23.81           O
ATOM    368  CB  THR A 127      10.446   5.657   3.218  1.00 22.06           C
ATOM    369  OG1 THR A 127      10.297   4.486   4.004  1.00 22.71           O
ATOM    370  CG2 THR A 127      10.163   6.837   4.144  1.00 19.49           C
ATOM    371  H   THR A 127      10.893   4.928   0.510  1.00  0.00           H
ATOM    372  HA  THR A 127       8.532   5.262   2.288  1.00  0.00           H
ATOM    373  HB  THR A 127      11.487   5.726   2.894  1.00  0.00           H
ATOM    374  HG1 THR A 127       9.358   4.311   4.087  1.00  0.00           H
ATOM    375 HG21 THR A 127      10.853   6.820   4.980  1.00  0.00           H
ATOM    376 HG22 THR A 127      10.335   7.781   3.633  1.00  0.00           H
ATOM    377 HG23 THR A 127       9.140   6.831   4.523  1.00  0.00           H
ATOM    378  N   LEU A 128       8.106   7.262   0.879  1.00 20.38           N
ATOM    379  CA  LEU A 128       7.764   8.640   0.547  1.00 18.73           C
ATOM    380  C   LEU A 128       7.508   9.343   1.882  1.00 18.52           C
ATOM    381  O   LEU A 128       6.792   8.806   2.732  1.00 17.90           O
ATOM    382  CB  LEU A 128       6.497   8.662  -0.326  1.00 18.41           C
ATOM    383  CG  LEU A 128       6.002  10.061  -0.766  1.00 18.76           C
ATOM    384  CD1 LEU A 128       7.113  10.986  -1.290  1.00 18.77           C
ATOM    385  CD2 LEU A 128       4.883   9.905  -1.800  1.00 14.06           C
ATOM    386  H   LEU A 128       7.337   6.672   1.186  1.00  0.00           H
ATOM    387  HA  LEU A 128       8.580   9.118   0.018  1.00  0.00           H
ATOM    388  HB2 LEU A 128       6.695   8.064  -1.217  1.00  0.00           H
ATOM    389  HB3 LEU A 128       5.689   8.158   0.204  1.00  0.00           H
ATOM    390  HG  LEU A 128       5.572  10.564   0.098  1.00  0.00           H
ATOM    391 HD11 LEU A 128       6.698  11.891  -1.735  1.00  0.00           H
ATOM    392 HD12 LEU A 128       7.765  11.324  -0.487  1.00  0.00           H
ATOM    393 HD13 LEU A 128       7.739  10.494  -2.033  1.00  0.00           H
ATOM    394 HD21 LEU A 128       4.525  10.870  -2.143  1.00  0.00           H
ATOM    395 HD22 LEU A 128       5.214   9.345  -2.675  1.00  0.00           H
ATOM    396 HD23 LEU A 128       4.032   9.381  -1.367  1.00  0.00           H
ATOM    397  N   VAL A 129       8.163  10.482   2.097  1.00 18.42           N
ATOM    398  CA  VAL A 129       8.206  11.183   3.366  1.00 18.44           C
ATOM    399  C   VAL A 129       8.391  12.688   3.126  1.00 18.85           C
ATOM    400  O   VAL A 129       8.946  13.093   2.104  1.00 19.12           O
ATOM    401  CB  VAL A 129       9.238  10.475   4.286  1.00 19.71           C
ATOM    402  CG1 VAL A 129      10.681  10.564   3.751  1.00 19.20           C
ATOM    403  CG2 VAL A 129       9.133  10.895   5.755  1.00 16.64           C
ATOM    404  H   VAL A 129       8.793  10.838   1.379  1.00  0.00           H
ATOM    405  HA  VAL A 129       7.232  11.079   3.830  1.00  0.00           H
ATOM    406  HB  VAL A 129       8.963   9.422   4.292  1.00  0.00           H
ATOM    407 HG11 VAL A 129      11.354   9.915   4.304  1.00  0.00           H
ATOM    408 HG12 VAL A 129      10.744  10.249   2.709  1.00  0.00           H
ATOM    409 HG13 VAL A 129      11.063  11.584   3.804  1.00  0.00           H
ATOM    410 HG21 VAL A 129       9.660  10.210   6.412  1.00  0.00           H
ATOM    411 HG22 VAL A 129       9.551  11.882   5.920  1.00  0.00           H
ATOM    412 HG23 VAL A 129       8.091  10.899   6.072  1.00  0.00           H
ATOM    413  N   ARG A 130       7.928  13.518   4.065  1.00 21.17           N
ATOM    414  CA  ARG A 130       8.267  14.935   4.162  1.00 21.51           C
ATOM    415  C   ARG A 130       9.481  15.080   5.096  1.00 21.74           C
ATOM    416  O   ARG A 130       9.644  14.290   6.026  1.00 18.71           O
ATOM    417  CB  ARG A 130       7.085  15.668   4.837  1.00 24.72           C
ATOM    418  CG  ARG A 130       5.846  15.739   3.936  1.00 26.46           C
ATOM    419  CD  ARG A 130       4.577  16.256   4.630  1.00 30.21           C
ATOM    420  NE  ARG A 130       3.865  15.149   5.284  1.00 33.85           N
ATOM    421  CZ  ARG A 130       2.548  14.923   5.400  1.00 35.23           C
ATOM    422  NH1 ARG A 130       1.634  15.785   4.953  1.00 35.12           N
ATOM    423  NH2 ARG A 130       2.152  13.807   5.999  1.00 31.29           N1+
ATOM    424  H   ARG A 130       7.391  13.123   4.829  1.00  0.00           H
ATOM    425  HA  ARG A 130       8.489  15.362   3.181  1.00  0.00           H
ATOM    426  HB2 ARG A 130       6.837  15.192   5.786  1.00  0.00           H
ATOM    427  HB3 ARG A 130       7.374  16.684   5.084  1.00  0.00           H
ATOM    428  HG2 ARG A 130       6.075  16.370   3.078  1.00  0.00           H
ATOM    429  HG3 ARG A 130       5.643  14.747   3.535  1.00  0.00           H
ATOM    430  HD2 ARG A 130       4.793  17.062   5.331  1.00  0.00           H
ATOM    431  HD3 ARG A 130       3.930  16.670   3.865  1.00  0.00           H
ATOM    432  HE  ARG A 130       4.497  14.337   5.512  1.00  0.00           H
ATOM    433 HH11 ARG A 130       1.900  16.627   4.429  1.00  0.00           H
ATOM    434 HH12 ARG A 130       0.670  15.465   4.830  1.00  0.00           H
ATOM    435 HH21 ARG A 130       2.843  13.174   6.467  1.00  0.00           H
ATOM    436 HH22 ARG A 130       1.191  13.444   5.995  1.00  0.00           H
ATOM    437  N   ASN A 131      10.275  16.150   4.959  1.00 21.83           N
ATOM    438  CA  ASN A 131      11.398  16.479   5.864  1.00 20.92           C
ATOM    439  C   ASN A 131      10.931  16.714   7.320  1.00 21.34           C
ATOM    440  O   ASN A 131      11.653  16.452   8.286  1.00 20.83           O
ATOM    441  CB  ASN A 131      12.207  17.698   5.359  1.00 24.29           C
ATOM    442  CG  ASN A 131      13.056  17.403   4.120  1.00 24.72           C
ATOM    443  OD1 ASN A 131      13.888  16.502   4.124  1.00 26.89           O
ATOM    444  ND2 ASN A 131      12.835  18.111   3.019  1.00 26.08           N
ATOM    445  H   ASN A 131      10.016  16.813   4.227  1.00  0.00           H
ATOM    446  HA  ASN A 131      12.054  15.614   5.884  1.00  0.00           H
ATOM    447  HB2 ASN A 131      11.552  18.551   5.180  1.00  0.00           H
ATOM    448  HB3 ASN A 131      12.911  18.019   6.131  1.00  0.00           H
ATOM    449 HD21 ASN A 131      12.099  18.831   2.975  1.00  0.00           H
ATOM    450 HD22 ASN A 131      13.475  18.027   2.226  1.00  0.00           H
ATOM    451  N   LYS A 132       9.659  17.107   7.460  1.00 21.47           N
ATOM    452  CA  LYS A 132       8.876  17.246   8.683  1.00 21.50           C
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ATOM    453  C   LYS A 132      8.640  15.894   9.381  1.00 20.13           C
ATOM    454  O   LYS A 132      8.518  15.835  10.603  1.00 20.64           O
ATOM    455  CB  LYS A 132      7.495  17.827   8.293  1.00 18.17           C
ATOM    456  CG  LYS A 132      7.544  19.238   7.678  1.00 -1.00          C
ATOM    457  CD  LYS A 132      7.531  19.235   6.145  1.00 -1.00          C
ATOM    458  CE  LYS A 132      7.774  20.612   5.520  1.00 -1.00          C
ATOM    459  NZ  LYS A 132      7.792  20.508   4.054  1.00 -1.00          N1+
ATOM    460  H   LYS A 132      9.170  17.262   6.593  1.00  0.00           H
ATOM    461  HA  LYS A 132      9.389  17.916   9.377  1.00  0.00           H
ATOM    462  HB2 LYS A 132      6.958  17.145   7.631  1.00  0.00           H
ATOM    463  HB3 LYS A 132      6.872  17.872   9.185  1.00  0.00           H
ATOM    464  HG2 LYS A 132      6.684  19.811   8.028  1.00 -1.00          H
ATOM    465  HG3 LYS A 132      8.428  19.757   8.047  1.00 -1.00          H
ATOM    466  HD2 LYS A 132      8.315  18.573   5.790  1.00 -1.00          H
ATOM    467  HD3 LYS A 132      6.581  18.830   5.793  1.00 -1.00          H
ATOM    468  HE2 LYS A 132      7.007  21.317   5.842  1.00 -1.00          H
ATOM    469  HE3 LYS A 132      8.737  21.008   5.847  1.00 -1.00          H
ATOM    470  HZ1 LYS A 132      6.896  20.666   3.609  1.00 -1.00          H
ATOM    471  HZ2 LYS A 132      8.440  21.182   3.632  1.00 -1.00          H
ATOM    472  HZ3 LYS A 132      8.149  19.601   3.765  1.00 -1.00          H
ATOM    473  N   GLU A 133      8.579  14.800   8.613  1.00 20.07           N
ATOM    474  CA  GLU A 133      8.218  13.469   9.080  1.00 17.67           C
ATOM    475  C   GLU A 133      9.452  12.600   9.344  1.00 18.46           C
ATOM    476  O   GLU A 133      9.269  11.453   9.745  1.00 15.28           O
ATOM    477  CB  GLU A 133      7.316  12.798   8.034  1.00 17.59           C
ATOM    478  CG  GLU A 133      5.845  13.177   8.243  1.00 20.24           C
ATOM    479  CD  GLU A 133      4.988  12.804   7.055  1.00 23.42           C
ATOM    480  OE1 GLU A 133      3.867  12.294   7.244  1.00 24.54           O
ATOM    481  OE2 GLU A 133      5.373  13.114   5.908  1.00 22.56           O1-
ATOM    482  H   GLU A 133      8.793  14.882   7.623  1.00  0.00           H
ATOM    483  HA  GLU A 133      7.672  13.517  10.021  1.00  0.00           H
ATOM    484  HB2 GLU A 133      7.649  13.049   7.028  1.00  0.00           H
ATOM    485  HB3 GLU A 133      7.374  11.714   8.102  1.00  0.00           H
ATOM    486  HG2 GLU A 133      5.451  12.703   9.143  1.00  0.00           H
ATOM    487  HG3 GLU A 133      5.754  14.252   8.390  1.00  0.00           H
ATOM    488  N   LEU A 134     10.686  13.134   9.269  1.00 18.65           N
ATOM    489  CA  LEU A 134     11.907  12.497   9.802  1.00 19.98           C
ATOM    490  C   LEU A 134     11.692  12.067  11.259  1.00 18.99           C
ATOM    491  O   LEU A 134     11.904  10.921  11.643  1.00 19.26           O
ATOM    492  CB  LEU A 134     13.103  13.479   9.726  1.00 19.11           C
ATOM    493  CG  LEU A 134     14.433  12.988  10.354  1.00 23.22           C
ATOM    494  CD1 LEU A 134     15.011  11.769   9.618  1.00 21.36           C
ATOM    495  CD2 LEU A 134     15.444  14.139  10.444  1.00 21.65           C
ATOM    496  H   LEU A 134     10.760  14.063   8.878  1.00  0.00           H
ATOM    497  HA  LEU A 134     12.120  11.614   9.199  1.00  0.00           H
ATOM    498  HB2 LEU A 134     13.278  13.763   8.696  1.00  0.00           H
ATOM    499  HB3 LEU A 134     12.829  14.409  10.216  1.00  0.00           H
ATOM    500  HG  LEU A 134     14.262  12.680  11.385  1.00  0.00           H
ATOM    501 HD11 LEU A 134     15.931  11.420  10.085  1.00  0.00           H
ATOM    502 HD12 LEU A 134     14.320  10.927   9.621  1.00  0.00           H
ATOM    503 HD13 LEU A 134     15.240  12.002   8.581  1.00  0.00           H
ATOM    504 HD21 LEU A 134     16.455  13.785  10.631  1.00  0.00           H
ATOM    505 HD22 LEU A 134     15.457  14.739   9.534  1.00  0.00           H
ATOM    506 HD23 LEU A 134     15.213  14.811  11.265  1.00  0.00           H
ATOM    507  N   LYS A 135     11.166  13.023  12.024  1.00 17.87           N
ATOM    508  CA  LYS A 135     10.879  13.007  13.443  1.00 18.77           C
ATOM    509  C   LYS A 135      9.815  11.961  13.844  1.00 18.88           C
ATOM    510  O   LYS A 135      9.692  11.642  15.027  1.00 18.40           O
ATOM    511  CB  LYS A 135     10.454  14.444  13.813  1.00 18.36           C
ATOM    512  CG  LYS A 135     11.524  15.523  13.520  1.00 19.77           C
ATOM    513  CD  LYS A 135     11.490  16.203  12.127  1.00 16.28           C
ATOM    514  CE  LYS A 135     12.851  16.855  11.810  1.00 18.85           C
ATOM    515  NZ  LYS A 135     12.942  17.516  10.496  1.00 18.17           N1+
ATOM    516  H   LYS A 135     10.954  13.888  11.554  1.00  0.00           H
ATOM    517  HA  LYS A 135     11.798  12.755  13.971  1.00  0.00           H
ATOM    518  HB2 LYS A 135      9.532  14.722  13.315  1.00  0.00           H
ATOM    519  HB3 LYS A 135     10.232  14.457  14.881  1.00  0.00           H
ATOM    520  HG2 LYS A 135     11.398  16.318  14.253  1.00  0.00           H
ATOM    521  HG3 LYS A 135     12.511  15.102  13.719  1.00  0.00           H
ATOM    522  HD2 LYS A 135     11.231  15.501  11.340  1.00  0.00           H
ATOM    523  HD3 LYS A 135     10.697  16.953  12.116  1.00  0.00           H
ATOM    524  HE2 LYS A 135     13.086  17.592  12.573  1.00  0.00           H
ATOM    525  HE3 LYS A 135     13.636  16.107  11.865  1.00  0.00           H
ATOM    526  HZ1 LYS A 135     13.943  17.687  10.302  1.00  0.00           H
ATOM    527  HZ2 LYS A 135     12.563  16.982   9.722  1.00  0.00           H
ATOM    528  HZ3 LYS A 135     12.466  18.418  10.537  1.00  0.00           H
ATOM    529  N   GLY A 136      9.104  11.378  12.870  1.00 19.43           N
ATOM    530  CA  GLY A 136      8.178  10.263  13.029  1.00 17.22           C
ATOM    531  C   GLY A 136      8.697   9.005  12.322  1.00 19.59           C
ATOM    532  O   GLY A 136      8.499   7.896  12.811  1.00 18.34           O
ATOM    533  H   GLY A 136      9.277  11.702  11.929  1.00  0.00           H
ATOM    534  HA2 GLY A 136      7.975  10.038  14.078  1.00  0.00           H
ATOM    535  HA3 GLY A 136      7.228  10.545  12.577  1.00  0.00           H
ATOM    536  N   LEU A 137      9.397   9.143  11.188  1.00 18.36           N
ATOM    537  CA  LEU A 137     10.017   8.059  10.423  1.00 21.19           C
ATOM    538  C   LEU A 137     11.122   7.342  11.203  1.00 22.14           C
ATOM    539  O   LEU A 137     11.316   6.141  11.025  1.00 24.02           O
ATOM    540  CB  LEU A 137     10.585   8.626   9.106  1.00 21.04           C
ATOM    541  CG  LEU A 137     11.176   7.581   8.138  1.00 21.35           C
ATOM    542  CD1 LEU A 137     10.100   6.640   7.570  1.00 23.22           C
ATOM    543  CD2 LEU A 137     11.974   8.277   7.032  1.00 20.28           C
ATOM    544  H   LEU A 137      9.483  10.075  10.787  1.00  0.00           H
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ATOM    545  HA  LEU A 137       9.255   7.315  10.223  1.00  0.00           H
ATOM    546  HB2 LEU A 137       9.816   9.186   8.580  1.00  0.00           H
ATOM    547  HB3 LEU A 137      11.359   9.355   9.353  1.00  0.00           H
ATOM    548  HG  LEU A 137      11.900   6.966   8.666  1.00  0.00           H
ATOM    549 HD11 LEU A 137      10.547   5.859   6.954  1.00  0.00           H
ATOM    550 HD12 LEU A 137       9.550   6.125   8.354  1.00  0.00           H
ATOM    551 HD13 LEU A 137       9.373   7.182   6.965  1.00  0.00           H
ATOM    552 HD21 LEU A 137      12.499   7.553   6.420  1.00  0.00           H
ATOM    553 HD22 LEU A 137      11.331   8.847   6.369  1.00  0.00           H
ATOM    554 HD23 LEU A 137      12.728   8.949   7.443  1.00  0.00           H
ATOM    555  N   LEU A 138      11.815   8.048  12.099  1.00 21.78           N
ATOM    556  CA  LEU A 138      12.805   7.470  12.998  1.00 22.46           C
ATOM    557  C   LEU A 138      12.221   6.375  13.916  1.00 21.43           C
ATOM    558  O   LEU A 138      12.956   5.444  14.238  1.00 22.46           O
ATOM    559  CB  LEU A 138      13.496   8.593  13.790  1.00 19.96           C
ATOM    560  CG  LEU A 138      14.438   9.472  12.930  1.00 22.18           C
ATOM    561 CD1 LEU A 138      14.644  10.844  13.585  1.00 21.53           C
ATOM    562 CD2 LEU A 138      15.788   8.801  12.647  1.00 21.97           C
ATOM    563  H   LEU A 138      11.671   9.055  12.123  1.00  0.00           H
ATOM    564  HA  LEU A 138      13.551   6.973  12.377  1.00  0.00           H
ATOM    565  HB2 LEU A 138      12.724   9.215  14.246  1.00  0.00           H
ATOM    566  HB3 LEU A 138      14.055   8.171  14.624  1.00  0.00           H
ATOM    567  HG  LEU A 138      13.979   9.646  11.958  1.00  0.00           H
ATOM    568 HD11 LEU A 138      15.396  11.436  13.063  1.00  0.00           H
ATOM    569 HD12 LEU A 138      13.719  11.419  13.587  1.00  0.00           H
ATOM    570 HD13 LEU A 138      14.951  10.742  14.623  1.00  0.00           H
ATOM    571 HD21 LEU A 138      16.386   9.408  11.965  1.00  0.00           H
ATOM    572 HD22 LEU A 138      16.357   8.687  13.565  1.00  0.00           H
ATOM    573 HD23 LEU A 138      15.666   7.824  12.181  1.00  0.00           H
ATOM    574  N   SER A 139      10.910   6.408  14.224  1.00 20.82           N
ATOM    575  CA  SER A 139      10.182   5.322  14.892  1.00 20.60           C
ATOM    576  C   SER A 139      10.108   4.094  13.972  1.00 21.37           C
ATOM    577  O   SER A 139      10.442   2.987  14.396  1.00 21.68           O
ATOM    578  CB  SER A 139       8.744   5.779  15.267  1.00 19.65           C
ATOM    579  OG  SER A 139       7.991   4.781  15.955  1.00 22.99           O
ATOM    580  H   SER A 139      10.363   7.184  13.877  1.00  0.00           H
ATOM    581  HA  SER A 139      10.728   5.048  15.796  1.00  0.00           H
ATOM    582  HB2 SER A 139       8.783   6.678  15.883  1.00  0.00           H
ATOM    583  HB3 SER A 139       8.175   6.038  14.376  1.00  0.00           H
ATOM    584  HG  SER A 139       7.784   4.084  15.327  1.00  0.00           H
ATOM    585  N   SER A 140       9.716   4.304  12.706  1.00 20.33           N
ATOM    586  CA  SER A 140       9.568   3.268  11.693  1.00 20.38           C
ATOM    587  C   SER A 140      10.920   2.581  11.450  1.00 20.79           C
ATOM    588  O   SER A 140      10.999   1.357  11.515  1.00 19.68           O
ATOM    589  CB  SER A 140       9.055   3.894  10.379  1.00 18.81           C
ATOM    590  OG  SER A 140       8.010   4.836  10.579  1.00 20.17           O
ATOM    591  H   SER A 140       9.474   5.237  12.406  1.00  0.00           H
ATOM    592  HA  SER A 140       8.851   2.532  12.059  1.00  0.00           H
ATOM    593  HB2 SER A 140       9.855   4.376   9.818  1.00  0.00           H
ATOM    594  HB3 SER A 140       8.681   3.095   9.738  1.00  0.00           H
ATOM    595  HG  SER A 140       7.542   4.887   9.740  1.00  0.00           H
ATOM    596  N   ILE A 141      11.983   3.378  11.250  1.00 20.52           N
ATOM    597  CA  ILE A 141      13.353   2.912  11.069  1.00 22.74           C
ATOM    598  C   ILE A 141      13.833   2.127  12.299  1.00 22.91           C
ATOM    599  O   ILE A 141      14.177   0.961  12.135  1.00 25.89           O
ATOM    600  CB  ILE A 141      14.315   4.071  10.683  1.00 21.78           C
ATOM    601 CG1 ILE A 141      13.917   4.732   9.341  1.00 21.69           C
ATOM    602 CG2 ILE A 141      15.773   3.570  10.594  1.00 19.44           C
ATOM    603 CD1 ILE A 141      14.568   6.106   9.104  1.00 20.88           C
ATOM    604  H   ILE A 141      11.818   4.382  11.235  1.00  0.00           H
ATOM    605  HA  ILE A 141      13.346   2.204  10.241  1.00  0.00           H
ATOM    606  HB  ILE A 141      14.261   4.828  11.466  1.00  0.00           H
ATOM    607 HG12 ILE A 141      14.168   4.067   8.512  1.00  0.00           H
ATOM    608 HG13 ILE A 141      12.837   4.862   9.283  1.00  0.00           H
ATOM    609 HG21 ILE A 141      16.443   4.333  10.212  1.00  0.00           H
ATOM    610 HG22 ILE A 141      16.172   3.261  11.560  1.00  0.00           H
ATOM    611 HG23 ILE A 141      15.848   2.709   9.929  1.00  0.00           H
ATOM    612 HD11 ILE A 141      14.239   6.523   8.151  1.00  0.00           H
ATOM    613 HD12 ILE A 141      14.295   6.816   9.885  1.00  0.00           H
ATOM    614 HD13 ILE A 141      15.654   6.048   9.060  1.00  0.00           H
ATOM    615  N   LYS A 142      13.842   2.722  13.508  1.00 22.93           N
ATOM    616  CA  LYS A 142      14.359   2.076  14.723  1.00 24.30           C
ATOM    617  C   LYS A 142      13.653   0.752  15.074  1.00 23.46           C
ATOM    618  O   LYS A 142      14.295  -0.136  15.637  1.00 20.35           O
ATOM    619  CB  LYS A 142      14.359   3.036  15.945  1.00 26.67           C
ATOM    620  CG  LYS A 142      15.707   3.736  16.236  1.00 31.03           C
ATOM    621  CD  LYS A 142      15.958   5.054  15.479  1.00 35.34           C
ATOM    622  CE  LYS A 142      17.324   5.675  15.846  1.00 39.87           C
ATOM    623  NZ  LYS A 142      17.522   7.006  15.249  1.00 41.29          N1+
ATOM    624  H   LYS A 142      13.458   3.658  13.600  1.00  0.00           H
ATOM    625  HA  LYS A 142      15.390   1.794  14.505  1.00  0.00           H
ATOM    626  HB2 LYS A 142      13.531   3.741  15.910  1.00  0.00           H
ATOM    627  HB3 LYS A 142      14.145   2.446  16.840  1.00  0.00           H
ATOM    628  HG2 LYS A 142      15.735   3.960  17.304  1.00  0.00           H
ATOM    629  HG3 LYS A 142      16.529   3.039  16.066  1.00  0.00           H
ATOM    630  HD2 LYS A 142      15.895   4.876  14.405  1.00  0.00           H
ATOM    631  HD3 LYS A 142      15.159   5.756  15.724  1.00  0.00           H
ATOM    632  HE2 LYS A 142      17.412   5.780  16.929  1.00  0.00           H
ATOM    633  HE3 LYS A 142      18.133   5.017  15.531  1.00  0.00           H
ATOM    634  HZ1 LYS A 142      18.480   7.328  15.335  1.00  0.00           H
ATOM    635  HZ2 LYS A 142      17.295   7.019  14.270  1.00  0.00           H
ATOM    636  HZ3 LYS A 142      16.913   7.692  15.724  1.00  0.00           H
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ATOM    637  N   TYR A 143      12.371   0.595  14.717  1.00 22.06           N
ATOM    638  CA  TYR A 143      11.675  -0.682  14.819  1.00 22.59           C
ATOM    639  C   TYR A 143      12.108  -1.641  13.690  1.00 21.72           C
ATOM    640  O   TYR A 143      12.688  -2.682  13.998  1.00 22.10           O
ATOM    641  CB  TYR A 143      10.140  -0.475  14.839  1.00 20.02           C
ATOM    642  CG  TYR A 143       9.511  -0.608  16.221  1.00 21.94           C
ATOM    643  CD1 TYR A 143       9.735  -1.783  16.967  1.00 23.77           C
ATOM    644  CD2 TYR A 143       8.676   0.395  16.762  1.00 22.49           C
ATOM    645  CE1 TYR A 143       9.091  -1.988  18.197  1.00 22.37           C
ATOM    646  CE2 TYR A 143       8.009   0.177  17.990  1.00 23.21           C
ATOM    647  CZ  TYR A 143       8.196  -1.029  18.697  1.00 22.87           C
ATOM    648  OH  TYR A 143       7.512  -1.289  19.851  1.00 21.97           O
ATOM    649  H   TYR A 143      11.880   1.382  14.307  1.00  0.00           H
ATOM    650  HA  TYR A 143      11.980  -1.156  15.752  1.00  0.00           H
ATOM    651  HB2 TYR A 143       9.862   0.476  14.386  1.00  0.00           H
ATOM    652  HB3 TYR A 143       9.651  -1.231  14.223  1.00  0.00           H
ATOM    653  HD1 TYR A 143      10.373  -2.566  16.590  1.00  0.00           H
ATOM    654  HD2 TYR A 143       8.522   1.322  16.229  1.00  0.00           H
ATOM    655  HE1 TYR A 143       9.263  -2.905  18.740  1.00  0.00           H
ATOM    656  HE2 TYR A 143       7.344   0.929  18.388  1.00  0.00           H
ATOM    657  HH  TYR A 143       7.729  -2.189  20.187  1.00  0.00           H
ATOM    658  N   VAL A 144      11.893  -1.296  12.405  1.00 22.79           N
ATOM    659  CA  VAL A 144      12.209  -2.115  11.214  1.00 22.01           C
ATOM    660  C   VAL A 144      13.665  -2.625  11.195  1.00 23.35           C
ATOM    661  O   VAL A 144      13.926  -3.768  10.816  1.00 21.03           O
ATOM    662  CB  VAL A 144      11.833  -1.331   9.920  1.00 21.23           C
ATOM    663  CG1 VAL A 144      12.323  -1.972   8.603  1.00 23.80           C
ATOM    664  CG2 VAL A 144      10.317  -1.076   9.795  1.00 17.15           C
ATOM    665  H   VAL A 144      11.518  -0.370  12.216  1.00  0.00           H
ATOM    666  HA  VAL A 144      11.593  -3.012  11.267  1.00  0.00           H
ATOM    667  HB  VAL A 144      12.327  -0.362   9.994  1.00  0.00           H
ATOM    668 HG11 VAL A 144      11.980  -1.405   7.736  1.00  0.00           H
ATOM    669 HG12 VAL A 144      13.411  -2.006   8.532  1.00  0.00           H
ATOM    670 HG13 VAL A 144      11.953  -2.992   8.491  1.00  0.00           H
ATOM    671 HG21 VAL A 144      10.124  -0.264   9.095  1.00  0.00           H
ATOM    672 HG22 VAL A 144       9.797  -1.951   9.408  1.00  0.00           H
ATOM    673 HG23 VAL A 144       9.851  -0.807  10.743  1.00  0.00           H
ATOM    674  N   GLU A 145      14.601  -1.793  11.660  1.00 23.20           N
ATOM    675  CA  GLU A 145      16.027  -2.069  11.724  1.00 23.64           C
ATOM    676  C   GLU A 145      16.363  -3.321  12.534  1.00 24.71           C
ATOM    677  O   GLU A 145      17.194  -4.134  12.138  1.00 23.64           O
ATOM    678  CB  GLU A 145      16.728  -0.853  12.352  1.00 25.26           C
ATOM    679  CG  GLU A 145      17.408  -0.007  11.273  1.00 25.70           C
ATOM    680  CD  GLU A 145      18.698  -0.661  10.802  1.00 24.54           C
ATOM    681  OE1 GLU A 145      19.462  -1.135  11.669  1.00 27.65           O
ATOM    682  OE2 GLU A 145      18.943  -0.695   9.583  1.00 28.24           O1-
ATOM    683  H   GLU A 145      14.306  -0.850  11.908  1.00  0.00           H
ATOM    684  HA  GLU A 145      16.362  -2.216  10.704  1.00  0.00           H
ATOM    685  HB2 GLU A 145      16.050  -0.253  12.950  1.00  0.00           H
ATOM    686  HB3 GLU A 145      17.469  -1.161  13.088  1.00  0.00           H
ATOM    687  HG2 GLU A 145      16.741   0.159  10.425  1.00  0.00           H
ATOM    688  HG3 GLU A 145      17.631   0.973  11.674  1.00  0.00           H
ATOM    689  N   ASN A 146      15.725  -3.445  13.694  1.00 25.05           N
ATOM    690  CA  ASN A 146      16.045  -4.475  14.673  1.00 28.02           C
ATOM    691  C   ASN A 146      15.029  -5.616  14.552  1.00 26.91           C
ATOM    692  O   ASN A 146      15.401  -6.773  14.727  1.00 26.71           O
ATOM    693  CB  ASN A 146      16.024  -3.854  16.087  1.00 31.59           C
ATOM    694  CG  ASN A 146      17.026  -2.697  16.234  1.00 35.43           C
ATOM    695  OD1 ASN A 146      18.216  -2.826  15.946  1.00 38.91           O
ATOM    696  ND2 ASN A 146      16.561  -1.507  16.589  1.00 38.29           N
ATOM    697  H   ASN A 146      14.980  -2.788  13.892  1.00  0.00           H
ATOM    698  HA  ASN A 146      17.039  -4.895  14.497  1.00  0.00           H
ATOM    699  HB2 ASN A 146      15.017  -3.513  16.336  1.00  0.00           H
ATOM    700  HB3 ASN A 146      16.277  -4.618  16.823  1.00  0.00           H
ATOM    701 HD21 ASN A 146      15.559  -1.326  16.624  1.00  0.00           H
ATOM    702 HD22 ASN A 146      17.196  -0.739  16.716  1.00  0.00           H
ATOM    703  N   LYS A 147      13.779  -5.312  14.164  1.00 25.17           N
ATOM    704  CA  LYS A 147      12.721  -6.296  13.943  1.00 25.56           C
ATOM    705  C   LYS A 147      12.932  -7.110  12.655  1.00 23.80           C
ATOM    706  O   LYS A 147      12.409  -8.225  12.576  1.00 24.25           O
ATOM    707  CB  LYS A 147      11.351  -5.581  13.876  1.00 26.51           C
ATOM    708  CG  LYS A 147      10.897  -5.007  15.235  1.00 27.65           C
ATOM    709  CD  LYS A 147      10.325  -6.086  16.167  1.00 29.92           C
ATOM    710  CE  LYS A 147      10.184  -5.675  17.637  1.00 29.66           C
ATOM    711  NZ  LYS A 147       9.869  -6.823  18.502  1.00 34.14           N1+
ATOM    712  H   LYS A 147      13.527  -4.336  14.038  1.00  0.00           H
ATOM    713  HA  LYS A 147      12.731  -7.003  14.772  1.00  0.00           H
ATOM    714  HB2 LYS A 147      11.391  -4.786  13.132  1.00  0.00           H
ATOM    715  HB3 LYS A 147      10.581  -6.269  13.517  1.00  0.00           H
ATOM    716  HG2 LYS A 147      11.727  -4.495  15.721  1.00  0.00           H
ATOM    717  HG3 LYS A 147      10.136  -4.250  15.058  1.00  0.00           H
ATOM    718  HD2 LYS A 147       9.354  -6.394  15.789  1.00  0.00           H
ATOM    719  HD3 LYS A 147      10.973  -6.953  16.125  1.00  0.00           H
ATOM    720  HE2 LYS A 147      11.107  -5.227  18.004  1.00  0.00           H
ATOM    721  HE3 LYS A 147       9.395  -4.933  17.753  1.00  0.00           H
ATOM    722  HZ1 LYS A 147       9.805  -6.424  19.458  1.00  0.00           H
ATOM    723  HZ2 LYS A 147       8.938  -7.175  18.316  1.00  0.00           H
ATOM    724  HZ3 LYS A 147      10.576  -7.563  18.430  1.00  0.00           H
ATOM    725  N   ILE A 148      13.723  -6.612  11.689  1.00 24.02           N
ATOM    726  CA  ILE A 148      14.152  -7.352  10.503  1.00 21.98           C
ATOM    727  C   ILE A 148      15.578  -7.026  10.021  1.00 23.64           C
ATOM    728  O   ILE A 148      16.374  -7.952   9.886  1.00 24.28           O
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ATOM    729  CB  ILE A 148      13.065  -7.406   9.396  1.00 21.36           C
ATOM    730  CG1 ILE A 148      13.505  -8.284   8.199  1.00 23.00           C
ATOM    731  CG2 ILE A 148      12.610  -6.009   8.937  1.00 19.78           C
ATOM    732  CD1 ILE A 148      12.369  -9.071   7.540  1.00 19.41           C
ATOM    733  H   ILE A 148      14.079  -5.671  11.800  1.00  0.00           H
ATOM    734  HA  ILE A 148      14.245  -8.388  10.831  1.00  0.00           H
ATOM    735  HB  ILE A 148      12.200  -7.889   9.845  1.00  0.00           H
ATOM    736 HG12 ILE A 148      14.031  -7.681   7.456  1.00  0.00           H
ATOM    737 HG13 ILE A 148      14.224  -9.027   8.542  1.00  0.00           H
ATOM    738 HG21 ILE A 148      11.859  -6.078   8.159  1.00  0.00           H
ATOM    739 HG22 ILE A 148      12.168  -5.441   9.756  1.00  0.00           H
ATOM    740 HG23 ILE A 148      13.433  -5.423   8.525  1.00  0.00           H
ATOM    741 HD11 ILE A 148      12.730  -9.615   6.667  1.00  0.00           H
ATOM    742 HD12 ILE A 148      11.960  -9.807   8.231  1.00  0.00           H
ATOM    743 HD13 ILE A 148      11.554  -8.430   7.221  1.00  0.00           H
ATOM    744  N   ASN A 149      15.895  -5.757   9.715  1.00 22.03           N
ATOM    745  CA  ASN A 149      17.011  -5.361   8.825  1.00 24.97           C
ATOM    746  C   ASN A 149      18.394  -5.916   9.213  1.00 27.08           C
ATOM    747  O   ASN A 149      19.131  -6.387   8.353  1.00 26.94           O
ATOM    748  CB  ASN A 149      17.079  -3.823   8.692  1.00 24.58           C
ATOM    749  CG  ASN A 149      17.760  -3.330   7.412  1.00 26.06           C
ATOM    750  OD1 ASN A 149      17.560  -3.897   6.339  1.00 24.50           O
ATOM    751  ND2 ASN A 149      18.548  -2.267   7.494  1.00 25.60           N
ATOM    752  H   ASN A 149      15.184  -5.056   9.895  1.00  0.00           H
ATOM    753  HA  ASN A 149      16.757  -5.790   7.854  1.00  0.00           H
ATOM    754  HB2 ASN A 149      16.078  -3.392   8.707  1.00  0.00           H
ATOM    755  HB3 ASN A 149      17.632  -3.416   9.539  1.00  0.00           H
ATOM    756 HD21 ASN A 149      18.690  -1.739   8.377  1.00  0.00           H
ATOM    757 HD22 ASN A 149      18.980  -1.876   6.655  1.00  0.00           H
ATOM    758  N   LYS A 150      18.731  -5.926  10.508  1.00 30.35           N
ATOM    759  CA  LYS A 150      20.002  -6.457  11.010  1.00 31.86           C
ATOM    760  C   LYS A 150      20.081  -7.997  10.989  1.00 30.69           C
ATOM    761  O   LYS A 150      21.165  -8.547  11.167  1.00 31.66           O
ATOM    762  CB  LYS A 150      20.200  -5.991  12.465  1.00 34.31           C
ATOM    763  CG  LYS A 150      20.575  -4.507  12.581  1.00 37.03           C
ATOM    764  CD  LYS A 150      20.903  -4.130  14.032  1.00 39.82           C
ATOM    765  CE  LYS A 150      21.225  -2.644  14.214  1.00 41.88           C
ATOM    766  NZ  LYS A 150      20.028  -1.814  14.038  1.00 43.28           N1+
ATOM    767  H   LYS A 150      18.103  -5.461  11.159  1.00  0.00           H
ATOM    768  HA  LYS A 150      20.821  -6.084  10.391  1.00  0.00           H
ATOM    769  HB2 LYS A 150      19.305  -6.204  13.053  1.00  0.00           H
ATOM    770  HB3 LYS A 150      21.004  -6.572  12.924  1.00  0.00           H
ATOM    771  HG2 LYS A 150      21.438  -4.296  11.946  1.00  0.00           H
ATOM    772  HG3 LYS A 150      19.765  -3.890  12.192  1.00  0.00           H
ATOM    773  HD2 LYS A 150      20.080  -4.419  14.688  1.00  0.00           H
ATOM    774  HD3 LYS A 150      21.764  -4.716  14.357  1.00  0.00           H
ATOM    775  HE2 LYS A 150      21.603  -2.482  15.224  1.00  0.00           H
ATOM    776  HE3 LYS A 150      22.008  -2.322  13.526  1.00  0.00           H
ATOM    777  HZ1 LYS A 150      20.199  -0.868  14.325  1.00  0.00           H
ATOM    778  HZ2 LYS A 150      19.789  -1.728  13.025  1.00  0.00           H
ATOM    779  HZ3 LYS A 150      19.243  -2.208  14.548  1.00  0.00           H
ATOM    780  N   LYS A 151      18.952  -8.690  10.801  1.00 29.61           N
ATOM    781  CA  LYS A 151      18.884 -10.140  10.649  1.00 28.95           C
ATOM    782  C   LYS A 151      18.802 -10.480   9.147  1.00 28.12           C
ATOM    783  O   LYS A 151      19.463 -11.412   8.695  1.00 26.36           O
ATOM    784  CB  LYS A 151      17.611 -10.666  11.363  1.00 30.41           C
ATOM    785  CG  LYS A 151      17.562 -10.340  12.876  1.00 32.64           C
ATOM    786  CD  LYS A 151      16.275 -10.790  13.601  1.00 35.44           C
ATOM    787  CE  LYS A 151      15.032 -10.004  13.154  1.00 35.31           C
ATOM    788  NZ  LYS A 151      13.827 -10.308  13.939  1.00 36.53           N1+
ATOM    789  H   LYS A 151      18.110  -8.162  10.597  1.00  0.00           H
ATOM    790  HA  LYS A 151      19.765 -10.627  11.072  1.00  0.00           H
ATOM    791  HB2 LYS A 151      16.725 -10.273  10.868  1.00  0.00           H
ATOM    792  HB3 LYS A 151      17.562 -11.749  11.233  1.00  0.00           H
ATOM    793  HG2 LYS A 151      18.421 -10.810  13.358  1.00  0.00           H
ATOM    794  HG3 LYS A 151      17.688  -9.268  13.034  1.00  0.00           H
ATOM    795  HD2 LYS A 151      16.118 -11.860  13.456  1.00  0.00           H
ATOM    796  HD3 LYS A 151      16.416 -10.644  14.674  1.00  0.00           H
ATOM    797  HE2 LYS A 151      15.218  -8.932  13.206  1.00  0.00           H
ATOM    798  HE3 LYS A 151      14.808 -10.239  12.114  1.00  0.00           H
ATOM    799  HZ1 LYS A 151      13.040  -9.945  13.417  1.00  0.00           H
ATOM    800  HZ2 LYS A 151      13.694 -11.307  14.089  1.00  0.00           H
ATOM    801  HZ3 LYS A 151      13.791  -9.828  14.857  1.00  0.00           H
ATOM    802  N   PHE A 152      18.009  -9.722   8.373  1.00 26.10           N
ATOM    803  CA  PHE A 152      17.731  -9.947   6.953  1.00 27.49           C
ATOM    804  C   PHE A 152      17.745  -8.591   6.220  1.00 27.68           C
ATOM    805  O   PHE A 152      16.703  -7.934   6.176  1.00 27.95           O
ATOM    806  CB  PHE A 152      16.403 -10.720   6.789  1.00 28.65           C
ATOM    807  CG  PHE A 152      16.337 -12.033   7.554  1.00 30.27           C
ATOM    808  CD1 PHE A 152      17.041 -13.165   7.092  1.00 29.39           C
ATOM    809  CD2 PHE A 152      15.628 -12.102   8.771  1.00 29.26           C
ATOM    810  CE1 PHE A 152      17.031 -14.359   7.838  1.00 29.40           C
ATOM    811  CE2 PHE A 152      15.650 -13.285   9.531  1.00 30.84           C
ATOM    812  CZ  PHE A 152      16.339 -14.418   9.062  1.00 29.38           C
ATOM    813  H   PHE A 152      17.506  -8.959   8.816  1.00  0.00           H
ATOM    814  HA  PHE A 152      18.504 -10.585   6.527  1.00  0.00           H
ATOM    815  HB2 PHE A 152      15.564 -10.097   7.092  1.00  0.00           H
ATOM    816  HB3 PHE A 152      16.241 -10.921   5.731  1.00  0.00           H
ATOM    817  HD1 PHE A 152      17.611 -13.113   6.176  1.00  0.00           H
ATOM    818  HD2 PHE A 152      15.091 -11.240   9.141  1.00  0.00           H
ATOM    819  HE1 PHE A 152      17.578 -15.221   7.485  1.00  0.00           H
ATOM    820  HE2 PHE A 152      15.141 -13.322  10.480  1.00  0.00           H
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ATOM    821  HZ  PHE A 152      16.343 -15.327   9.647  1.00  0.00           H
ATOM    822  N   PRO A 153      18.901  -8.130   5.690  1.00 27.92           N
ATOM    823  CA  PRO A 153      19.058  -6.755   5.196  1.00 26.86           C
ATOM    824  C   PRO A 153      18.486  -6.503   3.791  1.00 25.61           C
ATOM    825  O   PRO A 153      18.486  -7.399   2.934  1.00 23.81           O
ATOM    826  CB  PRO A 153      20.575  -6.513   5.214  1.00 28.24           C
ATOM    827  CG  PRO A 153      21.186  -7.892   5.017  1.00 29.29           C
ATOM    828  CD  PRO A 153      20.186  -8.837   5.688  1.00 28.25           C
ATOM    829  HA  PRO A 153      18.577  -6.075   5.894  1.00  0.00           H
ATOM    830  HB2 PRO A 153      20.916  -5.790   4.471  1.00  0.00           H
ATOM    831  HB3 PRO A 153      20.860  -6.125   6.193  1.00  0.00           H
ATOM    832  HG2 PRO A 153      21.248  -8.114   3.951  1.00  0.00           H
ATOM    833  HG3 PRO A 153      22.190  -7.974   5.436  1.00  0.00           H
ATOM    834  HD2 PRO A 153      20.133  -9.790   5.161  1.00  0.00           H
ATOM    835  HD3 PRO A 153      20.486  -9.031   6.720  1.00  0.00           H
ATOM    836  N   TYR A 154      18.069  -5.247   3.571  1.00 23.90           N
ATOM    837  CA  TYR A 154      17.640  -4.629   2.312  1.00 25.51           C
ATOM    838  C   TYR A 154      18.067  -3.145   2.271  1.00 24.53           C
ATOM    839  O   TYR A 154      18.275  -2.562   3.339  1.00 23.72           O
ATOM    840  CB  TYR A 154      16.122  -4.823   2.087  1.00 24.29           C
ATOM    841  CG  TYR A 154      15.758  -6.207   1.587  1.00 25.02           C
ATOM    842  CD1 TYR A 154      16.070  -6.574   0.262  1.00 24.50           C
ATOM    843  CD2 TYR A 154      15.163  -7.145   2.455  1.00 23.16           C
ATOM    844  CE1 TYR A 154      15.832  -7.883  -0.186  1.00 26.82           C
ATOM    845  CE2 TYR A 154      14.927  -8.457   2.008  1.00 25.35           C
ATOM    846  CZ  TYR A 154      15.282  -8.827   0.695  1.00 26.98           C
ATOM    847  OH  TYR A 154      15.217 -10.127   0.301  1.00 26.94           O
ATOM    848  H   TYR A 154      18.100  -4.607   4.361  1.00  0.00           H
ATOM    849  HA  TYR A 154      18.183  -5.131   1.512  1.00  0.00           H
ATOM    850  HB2 TYR A 154      15.575  -4.605   3.005  1.00  0.00           H
ATOM    851  HB3 TYR A 154      15.746  -4.104   1.357  1.00  0.00           H
ATOM    852  HD1 TYR A 154      16.525  -5.863  -0.411  1.00  0.00           H
ATOM    853  HD2 TYR A 154      14.929  -6.875   3.476  1.00  0.00           H
ATOM    854  HE1 TYR A 154      16.098  -8.163  -1.197  1.00  0.00           H
ATOM    855  HE2 TYR A 154      14.512  -9.178   2.697  1.00  0.00           H
ATOM    856  HH  TYR A 154      14.865 -10.723   0.996  1.00  0.00           H
ATOM    857  N   PRO A 155      18.202  -2.517   1.080  1.00 24.68           N
ATOM    858  CA  PRO A 155      18.444  -1.071   0.942  1.00 23.85           C
ATOM    859  C   PRO A 155      17.149  -0.264   1.168  1.00 24.27           C
ATOM    860  O   PRO A 155      16.049  -0.806   1.010  1.00 23.44           O
ATOM    861  CB  PRO A 155      18.942  -0.903  -0.500  1.00 23.62           C
ATOM    862  CG  PRO A 155      18.297  -2.048  -1.264  1.00 23.92           C
ATOM    863  CD  PRO A 155      18.155  -3.165  -0.233  1.00 24.00           C
ATOM    864  HA  PRO A 155      19.207  -0.745   1.648  1.00  0.00           H
ATOM    865  HB2 PRO A 155      18.716   0.072  -0.937  1.00  0.00           H
ATOM    866  HB3 PRO A 155      20.025  -1.014  -0.536  1.00  0.00           H
ATOM    867  HG2 PRO A 155      17.313  -1.740  -1.618  1.00  0.00           H
ATOM    868  HG3 PRO A 155      18.877  -2.349  -2.137  1.00  0.00           H
ATOM    869  HD2 PRO A 155      17.225  -3.706  -0.388  1.00  0.00           H
ATOM    870  HD3 PRO A 155      18.984  -3.867  -0.327  1.00  0.00           H
ATOM    871  N   TRP A 156      17.267   1.020   1.531  1.00 23.62           N
ATOM    872  CA  TRP A 156      16.142   1.906   1.835  1.00 24.34           C
ATOM    873  C   TRP A 156      16.148   3.117   0.892  1.00 24.58           C
ATOM    874  O   TRP A 156      17.040   3.962   0.954  1.00 24.78           O
ATOM    875  CB  TRP A 156      16.187   2.310   3.326  1.00 22.47           C
ATOM    876  CG  TRP A 156      14.865   2.608   3.975  1.00 23.60           C
ATOM    877  CD1 TRP A 156      13.843   3.312   3.428  1.00 23.21           C
ATOM    878  CD2 TRP A 156      14.377   2.157   5.280  1.00 24.20           C
ATOM    879  NE1 TRP A 156      12.769   3.318   4.293  1.00 23.02           N
ATOM    880  CE3 TRP A 156      14.916   1.382   6.336  1.00 22.06           C
ATOM    881  CE2 TRP A 156      13.041   2.627   5.447  1.00 24.32           C
ATOM    882  CZ3 TRP A 156      14.155   1.080   7.485  1.00 23.14           C
ATOM    883  CZ2 TRP A 156      12.280   2.353   6.592  1.00 23.17           C
ATOM    884  CH2 TRP A 156      12.835   1.560   7.610  1.00 23.12           C
ATOM    885  H   TRP A 156      18.205   1.405   1.628  1.00  0.00           H
ATOM    886  HA  TRP A 156      15.212   1.367   1.672  1.00  0.00           H
ATOM    887  HB2 TRP A 156      16.625   1.491   3.897  1.00  0.00           H
ATOM    888  HB3 TRP A 156      16.852   3.158   3.483  1.00  0.00           H
ATOM    889  HD1 TRP A 156      13.865   3.787   2.458  1.00  0.00           H
ATOM    890  HE1 TRP A 156      11.870   3.781   4.086  1.00  0.00           H
ATOM    891  HE3 TRP A 156      15.921   0.995   6.246  1.00  0.00           H
ATOM    892  HZ3 TRP A 156      14.585   0.466   8.264  1.00  0.00           H
ATOM    893  HZ2 TRP A 156      11.277   2.738   6.670  1.00  0.00           H
ATOM    894  HH2 TRP A 156      12.243   1.320   8.478  1.00  0.00           H
ATOM    895  N   VAL A 157      15.133   3.208   0.030  1.00 24.62           N
ATOM    896  CA  VAL A 157      14.909   4.309  -0.894  1.00 22.16           C
ATOM    897  C   VAL A 157      13.951   5.299  -0.208  1.00 21.82           C
ATOM    898  O   VAL A 157      12.771   5.009   0.010  1.00 22.52           O
ATOM    899  CB  VAL A 157      14.281   3.734  -2.193  1.00 20.88           C
ATOM    900  CG1 VAL A 157      13.848   4.836  -3.176  1.00 19.19           C
ATOM    901  CG2 VAL A 157      15.245   2.758  -2.897  1.00 20.83           C
ATOM    902  H   VAL A 157      14.403   2.498   0.065  1.00  0.00           H
ATOM    903  HA  VAL A 157      15.849   4.809  -1.140  1.00  0.00           H
ATOM    904  HB  VAL A 157      13.386   3.165  -1.933  1.00  0.00           H
ATOM    905 HG11 VAL A 157      13.619   4.430  -4.160  1.00  0.00           H
ATOM    906 HG12 VAL A 157      12.955   5.351  -2.829  1.00  0.00           H
ATOM    907 HG13 VAL A 157      14.632   5.582  -3.302  1.00  0.00           H
ATOM    908 HG21 VAL A 157      14.774   2.300  -3.766  1.00  0.00           H
ATOM    909 HG22 VAL A 157      16.147   3.265  -3.241  1.00  0.00           H
ATOM    910 HG23 VAL A 157      15.555   1.941  -2.246  1.00  0.00           H
ATOM    911  N   PHE A 158      14.461   6.480   0.131  1.00 22.60           N
ATOM    912  CA  PHE A 158      13.703   7.587   0.685  1.00 21.72           C
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ATOM    913  C   PHE A 158      13.365   8.534  -0.478  1.00 21.85           C
ATOM    914  O   PHE A 158      14.242   8.927  -1.250  1.00 21.79           O
ATOM    915  CB  PHE A 158      14.583   8.309   1.726  1.00 22.82           C
ATOM    916  CG  PHE A 158      14.973   7.430   2.901  1.00 22.97           C
ATOM    917  CD1 PHE A 158      14.025   7.111   3.896  1.00 20.44           C
ATOM    918  CD2 PHE A 158      16.268   6.878   2.970  1.00 23.38           C
ATOM    919  CE1 PHE A 158      14.371   6.234   4.943  1.00 23.63           C
ATOM    920  CE2 PHE A 158      16.609   6.009   4.021  1.00 22.41           C
ATOM    921  CZ  PHE A 158      15.665   5.693   5.013  1.00 21.10           C
ATOM    922  H   PHE A 158      15.443   6.668  -0.079  1.00  0.00           H
ATOM    923  HA  PHE A 158      12.797   7.233   1.174  1.00  0.00           H
ATOM    924  HB2 PHE A 158      15.480   8.715   1.257  1.00  0.00           H
ATOM    925  HB3 PHE A 158      14.042   9.158   2.137  1.00  0.00           H
ATOM    926  HD1 PHE A 158      13.023   7.508   3.836  1.00  0.00           H
ATOM    927  HD2 PHE A 158      17.000   7.098   2.205  1.00  0.00           H
ATOM    928  HE1 PHE A 158      13.638   5.923   5.671  1.00  0.00           H
ATOM    929  HE2 PHE A 158      17.592   5.570   4.053  1.00  0.00           H
ATOM    930  HZ  PHE A 158      15.912   4.997   5.800  1.00  0.00           H
ATOM    931  N   LEU A 159      12.082   8.881  -0.606  1.00 22.19           N
ATOM    932  CA  LEU A 159      11.491   9.728  -1.635  1.00 20.94           C
ATOM    933  C   LEU A 159      10.840  10.947  -0.957  1.00 21.28           C
ATOM    934  O   LEU A 159      10.319  10.832   0.154  1.00 22.09           O
ATOM    935  CB  LEU A 159      10.453   8.914  -2.444  1.00 22.79           C
ATOM    936  CG  LEU A 159      10.993   7.628  -3.110  1.00 22.80           C
ATOM    937  CD1 LEU A 159       9.861   6.799  -3.738  1.00 23.75           C
ATOM    938  CD2 LEU A 159      12.075   7.929  -4.155  1.00 19.61           C
ATOM    939  H   LEU A 159      11.421   8.501   0.073  1.00  0.00           H
ATOM    940  HA  LEU A 159      12.263  10.072  -2.315  1.00  0.00           H
ATOM    941  HB2 LEU A 159       9.628   8.634  -1.793  1.00  0.00           H
ATOM    942  HB3 LEU A 159      10.019   9.564  -3.202  1.00  0.00           H
ATOM    943  HG  LEU A 159      11.436   7.003  -2.335  1.00  0.00           H
ATOM    944 HD11 LEU A 159      10.243   5.852  -4.122  1.00  0.00           H
ATOM    945 HD12 LEU A 159       9.084   6.569  -3.009  1.00  0.00           H
ATOM    946 HD13 LEU A 159       9.396   7.315  -4.575  1.00  0.00           H
ATOM    947 HD21 LEU A 159      12.401   7.022  -4.666  1.00  0.00           H
ATOM    948 HD22 LEU A 159      11.706   8.616  -4.915  1.00  0.00           H
ATOM    949 HD23 LEU A 159      12.960   8.375  -3.703  1.00  0.00           H
ATOM    950  N   ASN A 160      10.869  12.115  -1.604  1.00 21.67           N
ATOM    951  CA  ASN A 160      10.405  13.403  -1.071  1.00 21.59           C
ATOM    952  C   ASN A 160       9.914  14.281  -2.232  1.00 22.22           C
ATOM    953  O   ASN A 160      10.090  13.927  -3.395  1.00 22.40           O
ATOM    954  CB  ASN A 160      11.552  14.029  -0.244  1.00 21.73           C
ATOM    955  CG  ASN A 160      11.197  15.139   0.749  1.00 20.70           C
ATOM    956  OD1 ASN A 160      10.195  15.844   0.629  1.00 17.56           O
ATOM    957  ND2 ASN A 160      12.045  15.310   1.755  1.00 20.24           N
ATOM    958  H   ASN A 160      11.332  12.154  -2.505  1.00  0.00           H
ATOM    959  HA  ASN A 160       9.547  13.222  -0.423  1.00  0.00           H
ATOM    960  HB2 ASN A 160      11.967  13.238   0.367  1.00  0.00           H
ATOM    961  HB3 ASN A 160      12.358  14.362  -0.898  1.00  0.00           H
ATOM    962 HD21 ASN A 160      12.861  14.717   1.828  1.00  0.00           H
ATOM    963 HD22 ASN A 160      11.939  16.087   2.389  1.00  0.00           H
ATOM    964  N   ASP A 161       9.309  15.432  -1.932  1.00 22.62           N
ATOM    965  CA  ASP A 161       8.840  16.432  -2.899  1.00 21.64           C
ATOM    966  C   ASP A 161       9.545  17.786  -2.668  1.00 24.09           C
ATOM    967  O   ASP A 161       9.559  18.645  -3.551  1.00 24.64           O
ATOM    968  CB  ASP A 161       7.293  16.490  -2.892  1.00 22.24           C
ATOM    969  CG  ASP A 161       6.632  17.480  -1.936  1.00 22.54           C
ATOM    970  OD1 ASP A 161       6.756  17.298  -0.704  1.00 19.79           O
ATOM    971  OD2 ASP A 161       5.938  18.389  -2.453  1.00 25.86           O1-
ATOM    972  H   ASP A 161       9.291  15.679  -0.946  1.00  0.00           H
ATOM    973  HA  ASP A 161       9.139  16.124  -3.903  1.00  0.00           H
ATOM    974  HB2 ASP A 161       6.961  16.724  -3.902  1.00  0.00           H
ATOM    975  HB3 ASP A 161       6.882  15.499  -2.693  1.00  0.00           H
ATOM    976  N   GLU A 162      10.202  17.950  -1.521  1.00 25.03           N
ATOM    977  CA  GLU A 162      11.324  18.857  -1.323  1.00 25.78           C
ATOM    978  C   GLU A 162      12.611  18.049  -1.589  1.00 26.36           C
ATOM    979  O   GLU A 162      12.557  16.816  -1.622  1.00 26.47           O
ATOM    980  CB  GLU A 162      11.330  19.236   0.170  1.00 28.39           C
ATOM    981  CG  GLU A 162      10.237  20.252   0.525  1.00 34.38           C
ATOM    982  CD  GLU A 162      10.210  20.575   2.004  1.00 38.51           C
ATOM    983  OE1 GLU A 162      10.766  19.822   2.834  1.00 40.07           O
ATOM    984  OE2 GLU A 162       9.555  21.569   2.383  1.00 39.26           O1-
ATOM    985  H   GLU A 162      10.181  17.175  -0.871  1.00  0.00           H
ATOM    986  HA  GLU A 162      11.272  19.738  -1.964  1.00  0.00           H
ATOM    987  HB2 GLU A 162      11.219  18.335   0.774  1.00  0.00           H
ATOM    988  HB3 GLU A 162      12.291  19.662   0.462  1.00  0.00           H
ATOM    989  HG2 GLU A 162      10.389  21.174  -0.037  1.00  0.00           H
ATOM    990  HG3 GLU A 162       9.257  19.869   0.240  1.00  0.00           H
ATOM    991  N   PRO A 163      13.789  18.697  -1.686  1.00 25.77           N
ATOM    992  CA  PRO A 163      15.062  17.992  -1.532  1.00 25.31           C
ATOM    993  C   PRO A 163      15.235  17.565  -0.059  1.00 24.48           C
ATOM    994  O   PRO A 163      14.671  18.180   0.851  1.00 23.95           O
ATOM    995  CB  PRO A 163      16.122  19.002  -1.992  1.00 25.46           C
ATOM    996  CG  PRO A 163      15.497  20.367  -1.734  1.00 26.93           C
ATOM    997  CD  PRO A 163      13.987  20.137  -1.858  1.00 25.47           C
ATOM    998  HA  PRO A 163      15.083  17.107  -2.171  1.00  0.00           H
ATOM    999  HB2 PRO A 163      17.082  18.883  -1.488  1.00  0.00           H
ATOM   1000  HB3 PRO A 163      16.295  18.877  -3.062  1.00  0.00           H
ATOM   1001  HG2 PRO A 163      15.733  20.678  -0.716  1.00  0.00           H
ATOM   1002  HG3 PRO A 163      15.862  21.141  -2.411  1.00  0.00           H
ATOM   1003  HD2 PRO A 163      13.443  20.739  -1.131  1.00  0.00           H
ATOM   1004  HD3 PRO A 163      13.636  20.417  -2.850  1.00  0.00           H
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ATOM   1005  N   PHE A 164      16.004  16.503   0.187  1.00 23.91           N
ATOM   1006  CA  PHE A 164      16.252  16.000   1.535  1.00 22.65           C
ATOM   1007  C   PHE A 164      17.261  16.904   2.243  1.00 22.61           C
ATOM   1008  O   PHE A 164      18.369  17.105   1.733  1.00 20.34           O
ATOM   1009  CB  PHE A 164      16.818  14.572   1.465  1.00 21.23           C
ATOM   1010  CG  PHE A 164      15.725  13.531   1.386  1.00 21.71           C
ATOM   1011  CD1 PHE A 164      14.979  13.233   2.544  1.00 21.29           C
ATOM   1012  CD2 PHE A 164      15.427  12.886   0.170  1.00 20.13           C
ATOM   1013  CE1 PHE A 164      13.945  12.284   2.493  1.00 22.86           C
ATOM   1014  CE2 PHE A 164      14.402  11.925   0.128  1.00 22.82           C
ATOM   1015  CZ  PHE A 164      13.663  11.624   1.287  1.00 20.54           C
ATOM   1016  H   PHE A 164      16.479  16.060  -0.597  1.00  0.00           H
ATOM   1017  HA  PHE A 164      15.320  15.993   2.100  1.00  0.00           H
ATOM   1018  HB2 PHE A 164      17.514  14.460   0.632  1.00  0.00           H
ATOM   1019  HB3 PHE A 164      17.393  14.347   2.365  1.00  0.00           H
ATOM   1020  HD1 PHE A 164      15.185  13.744   3.474  1.00  0.00           H
ATOM   1021  HD2 PHE A 164      15.972  13.125  -0.732  1.00  0.00           H
ATOM   1022  HE1 PHE A 164      13.363  12.070   3.375  1.00  0.00           H
ATOM   1023  HE2 PHE A 164      14.166  11.433  -0.801  1.00  0.00           H
ATOM   1024  HZ  PHE A 164      12.852  10.912   1.243  1.00  0.00           H
ATOM   1025  N   THR A 165      16.870  17.439   3.404  1.00 23.48           N
ATOM   1026  CA  THR A 165      17.685  18.263   4.286  1.00 23.94           C
ATOM   1027  C   THR A 165      18.827  17.423   4.885  1.00 26.62           C
ATOM   1028  O   THR A 165      18.670  16.227   5.142  1.00 21.92           O
ATOM   1029  CB  THR A 165      16.754  18.867   5.371  1.00 25.32           C
ATOM   1030  OG1 THR A 165      15.977  17.876   6.024  1.00 27.19           O
ATOM   1031  CG2 THR A 165      15.796  19.927   4.806  1.00 25.62           C
ATOM   1032  H   THR A 165      15.958  17.200   3.786  1.00  0.00           H
ATOM   1033  HA  THR A 165      18.126  19.074   3.706  1.00  0.00           H
ATOM   1034  HB  THR A 165      17.369  19.351   6.132  1.00  0.00           H
ATOM   1035  HG1 THR A 165      16.284  17.786   6.941  1.00  0.00           H
ATOM   1036 HG21 THR A 165      15.165  20.345   5.590  1.00  0.00           H
ATOM   1037 HG22 THR A 165      16.348  20.751   4.354  1.00  0.00           H
ATOM   1038 HG23 THR A 165      15.143  19.515   4.037  1.00  0.00           H
ATOM   1039  N   GLU A 166      20.006  18.031   5.059  1.00 27.49           N
ATOM   1040  CA  GLU A 166      21.242  17.363   5.476  1.00 30.60           C
ATOM   1041  C   GLU A 166      21.107  16.627   6.818  1.00 29.25           C
ATOM   1042  O   GLU A 166      21.586  15.503   6.949  1.00 31.53           O
ATOM   1043  CB  GLU A 166      22.436  18.346   5.445  1.00 34.11           C
ATOM   1044  CG  GLU A 166      22.500  19.310   4.229  1.00 40.02           C
ATOM   1045  CD  GLU A 166      22.122  18.661   2.901  1.00 44.19           C
ATOM   1046  OE1 GLU A 166      21.033  18.996   2.394  1.00 48.52           O
ATOM   1047  OE2 GLU A 166      22.791  17.696   2.481  1.00 46.29           O1-
ATOM   1048  H   GLU A 166      20.126  18.925   4.599  1.00  0.00           H
ATOM   1049  HA  GLU A 166      21.456  16.590   4.743  1.00  0.00           H
ATOM   1050  HB2 GLU A 166      22.442  18.947   6.355  1.00  0.00           H
ATOM   1051  HB3 GLU A 166      23.358  17.763   5.472  1.00  0.00           H
ATOM   1052  HG2 GLU A 166      21.837  20.160   4.393  1.00  0.00           H
ATOM   1053  HG3 GLU A 166      23.503  19.725   4.133  1.00  0.00           H
ATOM   1054  N   GLU A 167      20.361  17.221   7.761  1.00 29.61           N
ATOM   1055  CA  GLU A 167      19.947  16.634   9.035  1.00 30.74           C
ATOM   1056  C   GLU A 167      19.170  15.311   8.876  1.00 29.24           C
ATOM   1057  O   GLU A 167      19.398  14.389   9.656  1.00 26.20           O
ATOM   1058  CB  GLU A 167      19.254  17.729   9.900  1.00 33.76           C
ATOM   1059  CG  GLU A 167      17.923  17.400  10.620  1.00 39.85           C
ATOM   1060  CD  GLU A 167      16.679  17.531   9.746  1.00 43.67           C
ATOM   1061  OE1 GLU A 167      16.821  17.747   8.521  1.00 45.84           O
ATOM   1062  OE2 GLU A 167      15.569  17.505  10.327  1.00 45.11           O1-
ATOM   1063  H   GLU A 167      19.932  18.096   7.505  1.00  0.00           H
ATOM   1064  HA  GLU A 167      20.870  16.359   9.550  1.00  0.00           H
ATOM   1065  HB2 GLU A 167      19.968  18.031  10.666  1.00  0.00           H
ATOM   1066  HB3 GLU A 167      19.102  18.636   9.313  1.00  0.00           H
ATOM   1067  HG2 GLU A 167      17.944  16.415  11.087  1.00  0.00           H
ATOM   1068  HG3 GLU A 167      17.804  18.111  11.436  1.00  0.00           H
ATOM   1069  N   PHE A 168      18.311  15.188   7.852  1.00 26.92           N
ATOM   1070  CA  PHE A 168      17.558  13.981   7.504  1.00 25.65           C
ATOM   1071  C   PHE A 168      18.519  12.838   7.190  1.00 24.16           C
ATOM   1072  O   PHE A 168      18.443  11.765   7.784  1.00 21.85           O
ATOM   1073  CB  PHE A 168      16.616  14.250   6.301  1.00 25.88           C
ATOM   1074  CG  PHE A 168      15.444  13.291   6.145  1.00 25.83           C
ATOM   1075  CD1 PHE A 168      15.636  11.922   5.851  1.00 27.41           C
ATOM   1076  CD2 PHE A 168      14.135  13.789   6.285  1.00 26.00           C
ATOM   1077  CE1 PHE A 168      14.531  11.050   5.789  1.00 27.73           C
ATOM   1078  CE2 PHE A 168      13.029  12.921   6.209  1.00 24.69           C
ATOM   1079  CZ  PHE A 168      13.232  11.548   5.995  1.00 24.72           C
ATOM   1080  H   PHE A 168      18.157  16.009   7.278  1.00  0.00           H
ATOM   1081  HA  PHE A 168      16.970  13.685   8.365  1.00  0.00           H
ATOM   1082  HB2 PHE A 168      16.215  15.260   6.387  1.00  0.00           H
ATOM   1083  HB3 PHE A 168      17.162  14.241   5.358  1.00  0.00           H
ATOM   1084  HD1 PHE A 168      16.626  11.524   5.687  1.00  0.00           H
ATOM   1085  HD2 PHE A 168      13.989  14.842   6.477  1.00  0.00           H
ATOM   1086  HE1 PHE A 168      14.680  10.000   5.579  1.00  0.00           H
ATOM   1087  HE2 PHE A 168      12.027  13.301   6.334  1.00  0.00           H
ATOM   1088  HZ  PHE A 168      12.383  10.887   5.965  1.00  0.00           H
ATOM   1089  N   LYS A 169      19.453  13.103   6.277  1.00 24.01           N
ATOM   1090  CA  LYS A 169      20.414  12.139   5.768  1.00 26.45           C
ATOM   1091  C   LYS A 169      21.416  11.743   6.870  1.00 26.84           C
ATOM   1092  O   LYS A 169      21.690  10.553   7.036  1.00 27.09           O
ATOM   1093  CB  LYS A 169      21.087  12.752   4.523  1.00 29.03           C
ATOM   1094  CG  LYS A 169      20.058  13.025   3.398  1.00 31.88           C
ATOM   1095  CD  LYS A 169      20.593  13.751   2.155  1.00 35.09           C
ATOM   1096  CE  LYS A 169      21.025  15.188   2.471  1.00 37.28           C
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ATOM   1097  NZ  LYS A 169      21.143  16.059   1.297  1.00 38.69          N1+
ATOM   1098  H   LYS A 169      19.479  14.045   5.909  1.00  0.00           H
ATOM   1099  HA  LYS A 169      19.875  11.238   5.469  1.00  0.00           H
ATOM   1100  HB2 LYS A 169      21.616  13.664   4.801  1.00  0.00           H
ATOM   1101  HB3 LYS A 169      21.840  12.059   4.149  1.00  0.00           H
ATOM   1102  HG2 LYS A 169      19.642  12.072   3.080  1.00  0.00           H
ATOM   1103  HG3 LYS A 169      19.211  13.595   3.779  1.00  0.00           H
ATOM   1104  HD2 LYS A 169      21.420  13.189   1.718  1.00  0.00           H
ATOM   1105  HD3 LYS A 169      19.803  13.761   1.403  1.00  0.00           H
ATOM   1106  HE2 LYS A 169      20.301  15.657   3.132  1.00  0.00           H
ATOM   1107  HE3 LYS A 169      21.986  15.176   2.986  1.00  0.00           H
ATOM   1108  HZ1 LYS A 169      21.822  16.793   1.571  1.00  0.00           H
ATOM   1109  HZ2 LYS A 169      21.463  15.543   0.473  1.00  0.00           H
ATOM   1110  HZ3 LYS A 169      20.265  16.528   1.124  1.00  0.00           H
ATOM   1111  N   GLU A 170      21.857  12.700   7.703  1.00 26.50           N
ATOM   1112  CA  GLU A 170      22.700  12.478   8.883  1.00 27.91           C
ATOM   1113  C   GLU A 170      21.962  11.610   9.930  1.00 26.70           C
ATOM   1114  O   GLU A 170      22.522  10.635  10.437  1.00 25.68           O
ATOM   1115  CB  GLU A 170      23.106  13.852   9.493  1.00 30.74           C
ATOM   1116  CG  GLU A 170      24.591  13.982   9.891  1.00 38.58           C
ATOM   1117  CD  GLU A 170      25.028  12.928  10.889  1.00 44.74           C
ATOM   1118  OE1 GLU A 170      24.329  12.732  11.908  1.00 47.54           O
ATOM   1119  OE2 GLU A 170      25.965  12.158  10.583  1.00 48.23          O1-
ATOM   1120  H   GLU A 170      21.597  13.660   7.491  1.00  0.00           H
ATOM   1121  HA  GLU A 170      23.592  11.944   8.548  1.00  0.00           H
ATOM   1122  HB2 GLU A 170      22.921  14.653   8.785  1.00  0.00           H
ATOM   1123  HB3 GLU A 170      22.483  14.095  10.356  1.00  0.00           H
ATOM   1124  HG2 GLU A 170      25.222  13.910   9.004  1.00  0.00           H
ATOM   1125  HG3 GLU A 170      24.778  14.962  10.329  1.00  0.00           H
ATOM   1126  N   ALA A 171      20.688  11.921  10.218  1.00 23.76           N
ATOM   1127  CA  ALA A 171      19.870  11.236  11.216  1.00 23.64           C
ATOM   1128  C   ALA A 171      19.450   9.829  10.768  1.00 23.90           C
ATOM   1129  O   ALA A 171      19.348   8.940  11.617  1.00 22.94           O
ATOM   1130  CB  ALA A 171      18.600  12.050  11.483  1.00 23.80           C
ATOM   1131  H   ALA A 171      20.294  12.754   9.784  1.00  0.00           H
ATOM   1132  HA  ALA A 171      20.446  11.153  12.139  1.00  0.00           H
ATOM   1133  HB1 ALA A 171      17.940  11.554  12.195  1.00  0.00           H
ATOM   1134  HB2 ALA A 171      18.840  13.033  11.889  1.00  0.00           H
ATOM   1135  HB3 ALA A 171      18.042  12.201  10.559  1.00  0.00           H
ATOM   1136  N   VAL A 172      19.232   9.613   9.463  1.00 24.62           N
ATOM   1137  CA  VAL A 172      19.053   8.303   8.836  1.00 25.76           C
ATOM   1138  C   VAL A 172      20.354   7.482   8.940  1.00 26.15           C
ATOM   1139  O   VAL A 172      20.300   6.316   9.334  1.00 25.46           O
ATOM   1140  CB  VAL A 172      18.551   8.489   7.378  1.00 25.40           C
ATOM   1141  CG1 VAL A 172      18.723   7.254   6.477  1.00 25.21           C
ATOM   1142  CG2 VAL A 172      17.066   8.897   7.367  1.00 22.74           C
ATOM   1143  H   VAL A 172      19.225  10.426   8.849  1.00  0.00           H
ATOM   1144  HA  VAL A 172      18.288   7.760   9.392  1.00  0.00           H
ATOM   1145  HB  VAL A 172      19.127   9.291   6.915  1.00  0.00           H
ATOM   1146 HG11 VAL A 172      18.307   7.441   5.489  1.00  0.00           H
ATOM   1147 HG12 VAL A 172      19.771   6.990   6.324  1.00  0.00           H
ATOM   1148 HG13 VAL A 172      18.208   6.389   6.885  1.00  0.00           H
ATOM   1149 HG21 VAL A 172      16.732   9.114   6.354  1.00  0.00           H
ATOM   1150 HG22 VAL A 172      16.431   8.099   7.751  1.00  0.00           H
ATOM   1151 HG23 VAL A 172      16.874   9.783   7.971  1.00  0.00           H
ATOM   1152  N   THR A 173      21.523   8.110   8.743  1.00 26.81           N
ATOM   1153  CA  THR A 173      22.864   7.537   8.950  1.00 28.03           C
ATOM   1154  C   THR A 173      23.226   7.552  10.469  1.00 27.32           C
ATOM   1155  O   THR A 173      24.379   7.689  10.879  1.00 26.39           O
ATOM   1156  CB  THR A 173      23.890   8.346   8.096  1.00 27.81           C
ATOM   1157  OG1 THR A 173      23.394   8.533   6.779  1.00 30.64           O
ATOM   1158  CG2 THR A 173      25.245   7.646   7.895  1.00 27.52           C
ATOM   1159  H   THR A 173      21.489   9.078   8.443  1.00  0.00           H
ATOM   1160  HA  THR A 173      22.859   6.498   8.610  1.00  0.00           H
ATOM   1161  HB  THR A 173      24.055   9.332   8.537  1.00  0.00           H
ATOM   1162  HG1 THR A 173      22.700   9.197   6.821  1.00  0.00           H
ATOM   1163 HG21 THR A 173      25.893   8.234   7.243  1.00  0.00           H
ATOM   1164 HG22 THR A 173      25.785   7.502   8.828  1.00  0.00           H
ATOM   1165 HG23 THR A 173      25.118   6.666   7.433  1.00  0.00           H
ATOM   1166  N   LYS A 174      22.211   7.453  11.333  1.00 27.78           N
ATOM   1167  CA  LYS A 174      22.233   7.231  12.774  1.00 31.22           C
ATOM   1168  C   LYS A 174      20.913   6.557  13.191  1.00 30.61           C
ATOM   1169  O   LYS A 174      20.361   6.790  14.272  1.00 30.04           O
ATOM   1170  CB  LYS A 174      22.648   8.513  13.538  1.00 32.27           C
ATOM   1171  CG  LYS A 174      24.034   8.390  14.206  1.00 36.69           C
ATOM   1172  CD  LYS A 174      24.754   9.738  14.388  1.00 39.08           C
ATOM   1173  CE  LYS A 174      25.729  10.074  13.243  1.00 41.57           C
ATOM   1174  NZ  LYS A 174      25.055  10.162  11.946  1.00 43.16          N1+
ATOM   1175  H   LYS A 174      21.294   7.432  10.903  1.00  0.00           H
ATOM   1176  HA  LYS A 174      22.981   6.457  12.954  1.00  0.00           H
ATOM   1177  HB2 LYS A 174      22.625   9.363  12.855  1.00  0.00           H
ATOM   1178  HB3 LYS A 174      21.919   8.770  14.306  1.00  0.00           H
ATOM   1179  HG2 LYS A 174      23.904   7.911  15.177  1.00  0.00           H
ATOM   1180  HG3 LYS A 174      24.684   7.721  13.640  1.00  0.00           H
ATOM   1181  HD2 LYS A 174      24.035  10.547  14.525  1.00  0.00           H
ATOM   1182  HD3 LYS A 174      25.333   9.702  15.312  1.00  0.00           H
ATOM   1183  HE2 LYS A 174      26.195  11.043  13.434  1.00  0.00           H
ATOM   1184  HE3 LYS A 174      26.533   9.342  13.177  1.00  0.00           H
ATOM   1185  HZ1 LYS A 174      25.640  10.711  11.296  1.00  0.00           H
ATOM   1186  HZ2 LYS A 174      24.758   9.286  11.530  1.00  0.00           H
ATOM   1187  HZ3 LYS A 174      24.294  10.841  11.997  1.00  0.00           H
ATOM   1188  N   ALA A 175      20.373   5.743  12.280  1.00 28.23           N
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ATOM   1189  CA  ALA A 175      19.131   5.014  12.405  1.00 26.89           C
ATOM   1190  C   ALA A 175      19.250   3.698  11.646  1.00 26.79           C
ATOM   1191  O   ALA A 175      19.197   2.651  12.281  1.00 27.40           O
ATOM   1192  CB  ALA A 175      17.936   5.892  12.001  1.00 24.63           C
ATOM   1193  H   ALA A 175      20.900   5.565  11.431  1.00  0.00           H
ATOM   1194  HA  ALA A 175      19.010   4.740  13.453  1.00  0.00           H
ATOM   1195  HB1 ALA A 175      16.991   5.423  12.273  1.00  0.00           H
ATOM   1196  HB2 ALA A 175      17.975   6.866  12.483  1.00  0.00           H
ATOM   1197  HB3 ALA A 175      17.921   6.070  10.926  1.00  0.00           H
ATOM   1198  N   VAL A 176      19.440   3.772  10.322  1.00 27.12           N
ATOM   1199  CA  VAL A 176      19.592   2.632   9.418  1.00 25.91           C
ATOM   1200  C   VAL A 176      21.034   2.085   9.527  1.00 26.78           C
ATOM   1201  O   VAL A 176      21.964   2.838   9.831  1.00 26.76           O
ATOM   1202  CB  VAL A 176      19.295   3.099   7.957  1.00 24.16           C
ATOM   1203  CG1 VAL A 176      19.363   1.954   6.927  1.00 25.45           C
ATOM   1204  CG2 VAL A 176      17.923   3.781   7.814  1.00 19.93           C
ATOM   1205  H   VAL A 176      19.611   4.680   9.902  1.00  0.00           H
ATOM   1206  HA  VAL A 176      18.873   1.866   9.698  1.00  0.00           H
ATOM   1207  HB  VAL A 176      20.048   3.836   7.670  1.00  0.00           H
ATOM   1208 HG11 VAL A 176      18.916   2.229   5.972  1.00  0.00           H
ATOM   1209 HG12 VAL A 176      20.394   1.691   6.706  1.00  0.00           H
ATOM   1210 HG13 VAL A 176      18.846   1.058   7.276  1.00  0.00           H
ATOM   1211 HG21 VAL A 176      17.762   4.097   6.784  1.00  0.00           H
ATOM   1212 HG22 VAL A 176      17.115   3.096   8.066  1.00  0.00           H
ATOM   1213 HG23 VAL A 176      17.837   4.669   8.437  1.00  0.00           H
ATOM   1214  N   SER A 177      21.214   0.788   9.255  1.00 24.88           N
ATOM   1215  CA  SER A 177      22.491   0.080   9.211  1.00 26.57           C
ATOM   1216  C   SER A 177      22.650  -0.796   7.952  1.00 27.23           C
ATOM   1217  O   SER A 177      23.411  -1.762   7.936  1.00 28.95           O
ATOM   1218  CB  SER A 177      22.836  -0.526  10.591  1.00 24.99           C
ATOM   1219  OG  SER A 177      21.995  -1.590  11.007  1.00 23.21           O
ATOM   1220  H   SER A 177      20.372   0.204   9.168  1.00  0.00           H
ATOM   1221  HA  SER A 177      23.262   0.836   9.043  1.00  0.00           H
ATOM   1222  HB2 SER A 177      23.859  -0.904  10.568  1.00  0.00           H
ATOM   1223  HB3 SER A 177      22.815   0.256  11.350  1.00  0.00           H
ATOM   1224  HG  SER A 177      21.069  -1.310  10.975  1.00  0.00           H
ATOM   1225  N   SER A 178      21.983  -0.394   6.866  1.00 26.97           N
ATOM   1226  CA  SER A 178      22.122  -0.888   5.502  1.00 26.31           C
ATOM   1227  C   SER A 178      22.315   0.313   4.548  1.00 26.98           C
ATOM   1228  O   SER A 178      22.584   1.427   5.005  1.00 27.69           O
ATOM   1229  CB  SER A 178      20.954  -1.848   5.185  1.00 26.87           C
ATOM   1230  OG  SER A 178      19.699  -1.188   5.200  1.00 26.69           O
ATOM   1231  H   SER A 178      21.419   0.438   6.950  1.00  0.00           H
ATOM   1232  HA  SER A 178      23.049  -1.461   5.432  1.00  0.00           H
ATOM   1233  HB2 SER A 178      21.096  -2.292   4.199  1.00  0.00           H
ATOM   1234  HB3 SER A 178      20.937  -2.679   5.892  1.00  0.00           H
ATOM   1235  HG  SER A 178      19.133  -1.591   4.534  1.00  0.00           H
ATOM   1236  N   GLU A 179      22.237   0.087   3.229  1.00 28.23           N
ATOM   1237  CA  GLU A 179      22.413   1.105   2.193  1.00 30.32           C
ATOM   1238  C   GLU A 179      21.141   1.973   2.089  1.00 29.86           C
ATOM   1239  O   GLU A 179      20.035   1.504   2.378  1.00 29.62           O
ATOM   1240  CB  GLU A 179      22.716   0.374   0.866  1.00 30.92           C
ATOM   1241  CG  GLU A 179      23.304   1.263  -0.255  1.00 36.26           C
ATOM   1242  CD  GLU A 179      22.426   1.346  -1.496  1.00 40.60           C
ATOM   1243  OE1 GLU A 179      21.215   1.620  -1.368  1.00 42.26           O
ATOM   1244  OE2 GLU A 179      22.955   1.154  -2.613  1.00 41.15           O1-
ATOM   1245  H   GLU A 179      21.900  -0.806   2.917  1.00  0.00           H
ATOM   1246  HA  GLU A 179      23.261   1.736   2.466  1.00  0.00           H
ATOM   1247  HB2 GLU A 179      23.439  -0.419   1.053  1.00  0.00           H
ATOM   1248  HB3 GLU A 179      21.818  -0.137   0.519  1.00  0.00           H
ATOM   1249  HG2 GLU A 179      23.484   2.279   0.091  1.00  0.00           H
ATOM   1250  HG3 GLU A 179      24.277   0.874  -0.559  1.00  0.00           H
ATOM   1251  N   VAL A 180      21.312   3.249   1.733  1.00 28.50           N
ATOM   1252  CA  VAL A 180      20.284   4.280   1.733  1.00 27.87           C
ATOM   1253  C   VAL A 180      20.398   5.122   0.455  1.00 27.26           C
ATOM   1254  O   VAL A 180      21.515   5.442   0.038  1.00 25.36           O
ATOM   1255  CB  VAL A 180      20.337   5.108   3.051  1.00 28.46           C
ATOM   1256  CG1 VAL A 180      19.958   4.265   4.282  1.00 25.72           C
ATOM   1257  CG2 VAL A 180      21.689   5.807   3.302  1.00 29.12           C
ATOM   1258  H   VAL A 180      22.202   3.535   1.357  1.00  0.00           H
ATOM   1259  HA  VAL A 180      19.318   3.786   1.690  1.00  0.00           H
ATOM   1260  HB  VAL A 180      19.587   5.895   2.954  1.00  0.00           H
ATOM   1261 HG11 VAL A 180      19.827   4.884   5.167  1.00  0.00           H
ATOM   1262 HG12 VAL A 180      19.030   3.720   4.114  1.00  0.00           H
ATOM   1263 HG13 VAL A 180      20.727   3.527   4.514  1.00  0.00           H
ATOM   1264 HG21 VAL A 180      21.650   6.427   4.199  1.00  0.00           H
ATOM   1265 HG22 VAL A 180      22.494   5.085   3.440  1.00  0.00           H
ATOM   1266 HG23 VAL A 180      21.968   6.460   2.476  1.00  0.00           H
ATOM   1267  N   LYS A 181      19.263   5.520  -0.131  1.00 26.75           N
ATOM   1268  CA  LYS A 181      19.163   6.425  -1.276  1.00 27.00           C
ATOM   1269  C   LYS A 181      18.089   7.484  -1.001  1.00 26.79           C
ATOM   1270  O   LYS A 181      17.080   7.187  -0.361  1.00 26.53           O
ATOM   1271  CB  LYS A 181      18.932   5.655  -2.593  1.00 28.69           C
ATOM   1272  CG  LYS A 181      20.055   4.653  -2.913  1.00 31.19           C
ATOM   1273  CD  LYS A 181      20.060   4.170  -4.372  1.00 35.82           C
ATOM   1274  CE  LYS A 181      21.203   3.185  -4.650  1.00 35.27           C
ATOM   1275  NZ  LYS A 181      20.914   1.857  -4.108  1.00 36.42           N1+
ATOM   1276  H   LYS A 181      18.382   5.203   0.269  1.00  0.00           H
ATOM   1277  HA  LYS A 181      20.104   6.969  -1.372  1.00  0.00           H
ATOM   1278  HB2 LYS A 181      17.971   5.140  -2.571  1.00  0.00           H
ATOM   1279  HB3 LYS A 181      18.867   6.385  -3.401  1.00  0.00           H
ATOM   1280  HG2 LYS A 181      21.019   5.116  -2.698  1.00  0.00           H
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ATOM   1281  HG3 LYS A 181      19.975   3.800  -2.237  1.00  0.00           H
ATOM   1282  HD2 LYS A 181      19.102   3.722  -4.645  1.00  0.00           H
ATOM   1283  HD3 LYS A 181      20.193   5.032  -5.026  1.00  0.00           H
ATOM   1284  HE2 LYS A 181      21.359   3.078  -5.724  1.00  0.00           H
ATOM   1285  HE3 LYS A 181      22.137   3.548  -4.221  1.00  0.00           H
ATOM   1286  HZ1 LYS A 181      21.791   1.399  -3.833  1.00  0.00           H
ATOM   1287  HZ2 LYS A 181      20.445   1.893  -3.209  1.00  0.00           H
ATOM   1288  HZ3 LYS A 181      20.398   1.311  -4.815  1.00  0.00           H
ATOM   1289  N   PHE A 182      18.317   8.712  -1.471  1.00 25.47           N
ATOM   1290  CA  PHE A 182      17.560   9.918  -1.151  1.00 24.54           C
ATOM   1291  C   PHE A 182      17.211  10.636  -2.461  1.00 23.94           C
ATOM   1292  O   PHE A 182      18.072  11.305  -3.041  1.00 25.57           O
ATOM   1293  CB  PHE A 182      18.421  10.814  -0.232  1.00 24.23           C
ATOM   1294  CG  PHE A 182      18.828  10.209   1.098  1.00 25.85           C
ATOM   1295  CD1 PHE A 182      17.909  10.142   2.166  1.00 25.40           C
ATOM   1296  CD2 PHE A 182      20.144   9.730   1.271  1.00 27.19           C
ATOM   1297  CE1 PHE A 182      18.311   9.603   3.404  1.00 27.01           C
ATOM   1298  CE2 PHE A 182      20.545   9.200   2.510  1.00 25.63           C
ATOM   1299  CZ  PHE A 182      19.630   9.138   3.576  1.00 26.56           C
ATOM   1300  H   PHE A 182      19.137   8.836  -2.073  1.00  0.00           H
ATOM   1301  HA  PHE A 182      16.637   9.671  -0.628  1.00  0.00           H
ATOM   1302  HB2 PHE A 182      19.331  11.112  -0.756  1.00  0.00           H
ATOM   1303  HB3 PHE A 182      17.895  11.744  -0.024  1.00  0.00           H
ATOM   1304  HD1 PHE A 182      16.900  10.509   2.041  1.00  0.00           H
ATOM   1305  HD2 PHE A 182      20.852   9.771   0.456  1.00  0.00           H
ATOM   1306  HE1 PHE A 182      17.604   9.546   4.218  1.00  0.00           H
ATOM   1307  HE2 PHE A 182      21.556   8.844   2.642  1.00  0.00           H
ATOM   1308  HZ  PHE A 182      19.955   8.734   4.522  1.00  0.00           H
ATOM   1309  N   GLY A 183      15.971  10.512  -2.942  1.00 24.28           N
ATOM   1310  CA  GLY A 183      15.521  11.080  -4.213  1.00 21.73           C
ATOM   1311  C   GLY A 183      14.356  12.051  -4.044  1.00 22.11           C
ATOM   1312  O   GLY A 183      13.547  11.900  -3.130  1.00 22.30           O
ATOM   1313  H   GLY A 183      15.293   9.968  -2.409  1.00  0.00           H
ATOM   1314  HA2 GLY A 183      16.333  11.565  -4.752  1.00  0.00           H
ATOM   1315  HA3 GLY A 183      15.170  10.273  -4.854  1.00  0.00           H
ATOM   1316  N   ILE A 184      14.226  13.023  -4.951  1.00 24.31           N
ATOM   1317  CA  ILE A 184      13.010  13.821  -5.087  1.00 25.05           C
ATOM   1318  C   ILE A 184      12.101  13.101  -6.102  1.00 27.69           C
ATOM   1319  O   ILE A 184      12.579  12.421  -7.015  1.00 27.87           O
ATOM   1320  CB  ILE A 184      13.372  15.260  -5.563  1.00 25.38           C
ATOM   1321  CG1 ILE A 184      12.254  16.262  -5.199  1.00 25.06           C
ATOM   1322  CG2 ILE A 184      13.748  15.381  -7.058  1.00 20.90           C
ATOM   1323  CD1 ILE A 184      12.672  17.731  -5.334  1.00 26.79           C
ATOM   1324  H   ILE A 184      14.908  13.077  -5.704  1.00  0.00           H
ATOM   1325  HA  ILE A 184      12.512  13.887  -4.120  1.00  0.00           H
ATOM   1326  HB  ILE A 184      14.243  15.565  -4.983  1.00  0.00           H
ATOM   1327 HG12 ILE A 184      11.369  16.083  -5.809  1.00  0.00           H
ATOM   1328 HG13 ILE A 184      11.944  16.098  -4.167  1.00  0.00           H
ATOM   1329 HG21 ILE A 184      14.177  16.356  -7.275  1.00  0.00           H
ATOM   1330 HG22 ILE A 184      14.481  14.636  -7.358  1.00  0.00           H
ATOM   1331 HG23 ILE A 184      12.880  15.267  -7.710  1.00  0.00           H
ATOM   1332 HD11 ILE A 184      11.869  18.372  -4.984  1.00  0.00           H
ATOM   1333 HD12 ILE A 184      13.560  17.951  -4.741  1.00  0.00           H
ATOM   1334 HD13 ILE A 184      12.877  18.006  -6.369  1.00  0.00           H
ATOM   1335  N   LEU A 185      10.788  13.265  -5.962  1.00 28.44           N
ATOM   1336  CA  LEU A 185       9.795  12.884  -6.956  1.00 29.84           C
ATOM   1337  C   LEU A 185       9.601  14.062  -7.936  1.00 29.59           C
ATOM   1338  O   LEU A 185       9.500  15.198  -7.459  1.00 31.09           O
ATOM   1339  CB  LEU A 185       8.446  12.656  -6.246  1.00 30.35           C
ATOM   1340  CG  LEU A 185       8.433  11.519  -5.203  1.00 31.80           C
ATOM   1341  CD1 LEU A 185       7.001  11.310  -4.702  1.00 29.02           C
ATOM   1342  CD2 LEU A 185       9.047  10.217  -5.736  1.00 32.61           C
ATOM   1343  H   LEU A 185      10.457  13.772  -5.144  1.00  0.00           H
ATOM   1344  HA  LEU A 185      10.108  11.971  -7.458  1.00  0.00           H
ATOM   1345  HB2 LEU A 185       8.113  13.578  -5.764  1.00  0.00           H
ATOM   1346  HB3 LEU A 185       7.697  12.437  -7.010  1.00  0.00           H
ATOM   1347  HG  LEU A 185       9.030  11.813  -4.341  1.00  0.00           H
ATOM   1348 HD11 LEU A 185       6.903  10.403  -4.109  1.00  0.00           H
ATOM   1349 HD12 LEU A 185       6.691  12.154  -4.087  1.00  0.00           H
ATOM   1350 HD13 LEU A 185       6.298  11.237  -5.527  1.00  0.00           H
ATOM   1351 HD21 LEU A 185       8.751   9.360  -5.136  1.00  0.00           H
ATOM   1352 HD22 LEU A 185       8.756  10.019  -6.763  1.00  0.00           H
ATOM   1353 HD23 LEU A 185      10.136  10.267  -5.721  1.00  0.00           H
ATOM   1354  N   PRO A 186       9.523  13.818  -9.267  1.00 28.92           N
ATOM   1355  CA  PRO A 186       9.207  14.821 -10.299  1.00 29.13           C
ATOM   1356  C   PRO A 186       8.007  15.723  -9.951  1.00 28.44           C
ATOM   1357  O   PRO A 186       6.878  15.250  -9.779  1.00 28.12           O
ATOM   1358  CB  PRO A 186       8.960  14.016 -11.584  1.00 30.26           C
ATOM   1359  CG  PRO A 186       9.736  12.727 -11.396  1.00 28.14           C
ATOM   1360  CD  PRO A 186       9.787  12.517  -9.886  1.00 28.20           C
ATOM   1361  HA  PRO A 186      10.103  15.432 -10.426  1.00  0.00           H
ATOM   1362  HB2 PRO A 186       7.903  13.781 -11.711  1.00  0.00           H
ATOM   1363  HB3 PRO A 186       9.291  14.553 -12.472  1.00  0.00           H
ATOM   1364  HG2 PRO A 186       9.288  11.881 -11.918  1.00  0.00           H
ATOM   1365  HG3 PRO A 186      10.751  12.851 -11.780  1.00  0.00           H
ATOM   1366  HD2 PRO A 186       9.013  11.818  -9.579  1.00  0.00           H
ATOM   1367  HD3 PRO A 186      10.757  12.110  -9.598  1.00  0.00           H
ATOM   1368  N   LYS A 187       8.262  17.032  -9.864  1.00 28.27           N
ATOM   1369  CA  LYS A 187       7.321  18.071  -9.454  1.00 28.97           C
ATOM   1370  C   LYS A 187       6.217  18.310 -10.498  1.00 26.32           C
ATOM   1371  O   LYS A 187       5.143  18.804 -10.154  1.00 25.20           O
ATOM   1372  CB  LYS A 187       8.095  19.375  -9.205  1.00 32.18           C
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ATOM  1373  CG  LYS A 187      8.964  19.355  -7.930  1.00 34.77          C
ATOM  1374  CD  LYS A 187      8.298  19.954  -6.674  1.00 38.08          C
ATOM  1375  CE  LYS A 187      7.514  18.948  -5.814  1.00 37.86          C
ATOM  1376  NZ  LYS A 187      6.938  19.610  -4.629  1.00 39.41          N1+
ATOM  1377  H   LYS A 187      9.156  17.341 -10.228  1.00  0.00          H
ATOM  1378  HA  LYS A 187      6.862  17.756  -8.524  1.00  0.00          H
ATOM  1379  HB2 LYS A 187      8.733  19.570 -10.071  1.00  0.00          H
ATOM  1380  HB3 LYS A 187      7.414  20.226  -9.166  1.00  0.00          H
ATOM  1381  HG2 LYS A 187      9.371  18.362  -7.730  1.00  0.00          H
ATOM  1382  HG3 LYS A 187      9.833  19.970  -8.151  1.00  0.00          H
ATOM  1383  HD2 LYS A 187      9.085  20.379  -6.053  1.00  0.00          H
ATOM  1384  HD3 LYS A 187      7.665  20.799  -6.953  1.00  0.00          H
ATOM  1385  HE2 LYS A 187      6.701  18.511  -6.390  1.00  0.00          H
ATOM  1386  HE3 LYS A 187      8.157  18.122  -5.518  1.00  0.00          H
ATOM  1387  HZ1 LYS A 187      6.597  18.981  -3.896  1.00  0.00          H
ATOM  1388  HZ2 LYS A 187      7.587  20.265  -4.185  1.00  0.00          H
ATOM  1389  HZ3 LYS A 187      6.136  20.163  -4.953  1.00  0.00          H
ATOM  1390  N   GLU A 188      6.472  17.898 -11.744  1.00 26.19          N
ATOM  1391  CA  GLU A 188      5.575  17.862 -12.897  1.00 25.89          C
ATOM  1392  C   GLU A 188      4.378  16.949 -12.609  1.00 25.60          C
ATOM  1393  O   GLU A 188      3.223  17.378 -12.618  1.00 25.35          O
ATOM  1394  CB  GLU A 188      6.313  17.336 -14.165  1.00 28.34          C
ATOM  1395  CG  GLU A 188      7.647  16.590 -13.959  1.00 32.78          C
ATOM  1396  CD  GLU A 188      8.796  17.527 -13.637  1.00 33.60          C
ATOM  1397  OE1 GLU A 188      9.297  17.469 -12.500  1.00 31.32          O
ATOM  1398  OE2 GLU A 188      9.139  18.356 -14.508  1.00 35.45          O1-
ATOM  1399  H   GLU A 188      7.433  17.594 -11.901  1.00  0.00          H
ATOM  1400  HA  GLU A 188      5.198  18.869 -13.083  1.00  0.00          H
ATOM  1401  HB2 GLU A 188      5.661  16.692 -14.757  1.00  0.00          H
ATOM  1402  HB3 GLU A 188      6.498  18.180 -14.822  1.00  0.00          H
ATOM  1403  HG2 GLU A 188      7.544  15.826 -13.192  1.00  0.00          H
ATOM  1404  HG3 GLU A 188      7.909  16.057 -14.872  1.00  0.00          H
ATOM  1405  N   HIS A 189      4.679  15.678 -12.322  1.00 23.36          N
ATOM  1406  CA  HIS A 189      3.700  14.617 -12.097  1.00 23.70          C
ATOM  1407  C   HIS A 189      3.040  14.767 -10.716  1.00 22.66          C
ATOM  1408  O   HIS A 189      1.887  14.377 -10.529  1.00 23.19          O
ATOM  1409  CB  HIS A 189      4.388  13.245 -12.220  1.00 22.55          C
ATOM  1410  CG  HIS A 189      5.192  13.036 -13.488  1.00 24.25          C
ATOM  1411  ND1 HIS A 189      4.902  13.649 -14.703  1.00 24.12          N
ATOM  1412  CD2 HIS A 189      6.289  12.241 -13.739  1.00 22.85          C
ATOM  1413  CE1 HIS A 189      5.814  13.247 -15.588  1.00 22.58          C
ATOM  1414  NE2 HIS A 189      6.672  12.373 -15.076  1.00 24.93          N
ATOM  1415  H   HIS A 189      5.657  15.422 -12.337  1.00  0.00          H
ATOM  1416  HA  HIS A 189      2.932  14.695 -12.866  1.00  0.00          H
ATOM  1417  HB2 HIS A 189      5.054  13.075 -11.372  1.00  0.00          H
ATOM  1418  HB3 HIS A 189      3.631  12.460 -12.169  1.00  0.00          H
ATOM  1419  HD1 HIS A 189      4.169  14.344 -14.913  1.00  0.00          H
ATOM  1420  HD2 HIS A 189      6.828  11.584 -13.068  1.00  0.00          H
ATOM  1421  HE1 HIS A 189      5.852  13.595 -16.613  1.00  0.00          H
ATOM  1422  N   TRP A 190      3.727  15.457  -9.799  1.00 21.90          N
ATOM  1423  CA  TRP A 190      3.236  15.968  -8.524  1.00 22.07          C
ATOM  1424  C   TRP A 190      2.498  17.323  -8.709  1.00 22.09          C
ATOM  1425  O   TRP A 190      2.390  18.115  -7.772  1.00 23.25          O
ATOM  1426  CB  TRP A 190      4.474  16.167  -7.633  1.00 20.63          C
ATOM  1427  CG  TRP A 190      4.275  16.252  -6.156  1.00 20.86          C
ATOM  1428  CD1 TRP A 190      4.289  17.395  -5.436  1.00 20.30          C
ATOM  1429  CD2 TRP A 190      4.148  15.169  -5.188  1.00 20.57          C
ATOM  1430  NE1 TRP A 190      4.214  17.092  -4.095  1.00 22.97          N
ATOM  1431  CE3 TRP A 190      4.128  13.759  -5.269  1.00 20.34          C
ATOM  1432  CE2 TRP A 190      4.074  15.741  -3.885  1.00 21.62          C
ATOM  1433  CZ3 TRP A 190      4.048  12.967  -4.107  1.00 20.80          C
ATOM  1434  CZ2 TRP A 190      3.968  14.965  -2.723  1.00 20.94          C
ATOM  1435  CH2 TRP A 190      3.959  13.567  -2.834  1.00 23.55          C
ATOM  1436  H   TRP A 190      4.670  15.726 -10.057  1.00  0.00          H
ATOM  1437  HA  TRP A 190      2.563  15.234  -8.080  1.00  0.00          H
ATOM  1438  HB2 TRP A 190      5.187  15.357  -7.787  1.00  0.00          H
ATOM  1439  HB3 TRP A 190      4.978  17.077  -7.942  1.00  0.00          H
ATOM  1440  HD1 TRP A 190      4.413  18.378  -5.868  1.00  0.00          H
ATOM  1441  HE1 TRP A 190      4.578  17.724  -3.363  1.00  0.00          H
ATOM  1442  HE3 TRP A 190      4.208  13.285  -6.236  1.00  0.00          H
ATOM  1443  HZ3 TRP A 190      4.063  11.891  -4.197  1.00  0.00          H
ATOM  1444  HZ2 TRP A 190      3.927  15.438  -1.756  1.00  0.00          H
ATOM  1445  HH2 TRP A 190      3.902  12.969  -1.937  1.00  0.00          H
ATOM  1446  N   SER A 191      1.962  17.595  -9.903  1.00 23.12          N
ATOM  1447  CA  SER A 191      1.092  18.715 -10.239  1.00 23.81          C
ATOM  1448  C   SER A 191     -0.090  18.193 -11.073  1.00 24.41          C
ATOM  1449  O   SER A 191     -0.299  16.980 -11.156  1.00 24.90          O
ATOM  1450  CB  SER A 191      1.913  19.908 -10.785  1.00 25.10          C
ATOM  1451  OG  SER A 191      2.158  19.873 -12.183  1.00 24.23          O
ATOM  1452  H   SER A 191      2.073  16.908 -10.635  1.00  0.00          H
ATOM  1453  HA  SER A 191      0.635  19.064  -9.314  1.00  0.00          H
ATOM  1454  HB2 SER A 191      1.387  20.835 -10.558  1.00  0.00          H
ATOM  1455  HB3 SER A 191      2.864  19.979 -10.263  1.00  0.00          H
ATOM  1456  HG  SER A 191      2.529  19.008 -12.394  1.00  0.00          H
ATOM  1457  N   TYR A 192     -0.894  19.098 -11.637  1.00 24.18          N
ATOM  1458  CA  TYR A 192     -2.108  18.796 -12.387  1.00 22.22          C
ATOM  1459  C   TYR A 192     -1.753  18.908 -13.880  1.00 21.91          C
ATOM  1460  O   TYR A 192     -1.464  20.022 -14.315  1.00 20.67          O
ATOM  1461  CB  TYR A 192     -3.159  19.896 -12.071  1.00 22.43          C
ATOM  1462  CG  TYR A 192     -3.450  20.089 -10.594  1.00 24.33          C
ATOM  1463  CD1 TYR A 192     -4.537  19.436  -9.981  1.00 24.83          C
ATOM  1464  CD2 TYR A 192     -2.608  20.915  -9.822  1.00 24.09          C
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ATOM   1465  CE1 TYR A 192      -4.735  19.559  -8.592  1.00 24.93           C
ATOM   1466  CE2 TYR A 192      -2.803  21.029  -8.438  1.00 24.35           C
ATOM   1467  CZ  TYR A 192      -3.847  20.319  -7.817  1.00 24.98           C
ATOM   1468  OH  TYR A 192      -3.978  20.333  -6.463  1.00 28.04           O
ATOM   1469  H   TYR A 192      -0.602  20.067 -11.652  1.00  0.00           H
ATOM   1470  HA  TYR A 192      -2.517  17.820 -12.124  1.00  0.00           H
ATOM   1471  HB2 TYR A 192      -2.845  20.868 -12.453  1.00  0.00           H
ATOM   1472  HB3 TYR A 192      -4.091  19.667 -12.591  1.00  0.00           H
ATOM   1473  HD1 TYR A 192      -5.199  18.815 -10.565  1.00  0.00           H
ATOM   1474  HD2 TYR A 192      -1.785  21.442 -10.283  1.00  0.00           H
ATOM   1475  HE1 TYR A 192      -5.547  19.043  -8.106  1.00  0.00           H
ATOM   1476  HE2 TYR A 192      -2.126  21.640  -7.862  1.00  0.00           H
ATOM   1477  HH  TYR A 192      -3.409  20.998  -6.051  1.00  0.00           H
ATOM   1478  N   PRO A 193      -1.751  17.821 -14.679  1.00 22.36           N
ATOM   1479  CA  PRO A 193      -1.633  17.899 -16.143  1.00 24.02           C
ATOM   1480  C   PRO A 193      -2.676  18.820 -16.805  1.00 24.39           C
ATOM   1481  O   PRO A 193      -3.764  19.052 -16.277  1.00 24.70           O
ATOM   1482  CB  PRO A 193      -1.835  16.461 -16.635  1.00 24.46           C
ATOM   1483  CG  PRO A 193      -1.482  15.577 -15.455  1.00 25.42           C
ATOM   1484  CD  PRO A 193      -1.734  16.435 -14.218  1.00 24.13           C
ATOM   1485  HA  PRO A 193      -0.626  18.247 -16.384  1.00  0.00           H
ATOM   1486  HB2 PRO A 193      -2.877  16.282 -16.902  1.00  0.00           H
ATOM   1487  HB3 PRO A 193      -1.235  16.237 -17.517  1.00  0.00           H
ATOM   1488  HG2 PRO A 193      -2.059  14.652 -15.442  1.00  0.00           H
ATOM   1489  HG3 PRO A 193      -0.425  15.317 -15.513  1.00  0.00           H
ATOM   1490  HD2 PRO A 193      -2.684  16.164 -13.765  1.00  0.00           H
ATOM   1491  HD3 PRO A 193      -0.954  16.282 -13.476  1.00  0.00           H
ATOM   1492  N   GLU A 194      -2.361  19.307 -18.001  1.00 22.73           N
ATOM   1493  CA  GLU A 194      -3.166  20.245 -18.776  1.00 23.46           C
ATOM   1494  C   GLU A 194      -4.406  19.570 -19.410  1.00 23.36           C
ATOM   1495  O   GLU A 194      -5.244  20.268 -19.976  1.00 21.68           O
ATOM   1496  CB  GLU A 194      -2.254  20.853 -19.871  1.00 25.61           C
ATOM   1497  CG  GLU A 194      -1.232  21.906 -19.358  1.00 28.09           C
ATOM   1498  CD  GLU A 194      -0.231  21.398 -18.322  1.00 32.73           C
ATOM   1499  OE1 GLU A 194       0.042  22.139 -17.354  1.00 31.59           O
ATOM   1500  OE2 GLU A 194       0.188  20.222 -18.431  1.00 33.69           O1-
ATOM   1501  H   GLU A 194      -1.373  19.273 -18.270  1.00  0.00           H
ATOM   1502  HA  GLU A 194      -3.528  21.042 -18.124  1.00  0.00           H
ATOM   1503  HB2 GLU A 194      -1.727  20.060 -20.404  1.00  0.00           H
ATOM   1504  HB3 GLU A 194      -2.872  21.346 -20.622  1.00  0.00           H
ATOM   1505  HG2 GLU A 194      -0.658  22.297 -20.198  1.00  0.00           H
ATOM   1506  HG3 GLU A 194      -1.766  22.755 -18.931  1.00  0.00           H
ATOM   1507  N   TRP A 195      -4.558  18.241 -19.283  1.00 22.03           N
ATOM   1508  CA  TRP A 195      -5.773  17.509 -19.653  1.00 22.35           C
ATOM   1509  C   TRP A 195      -6.809  17.484 -18.510  1.00 22.75           C
ATOM   1510  O   TRP A 195      -7.957  17.110 -18.740  1.00 21.13           O
ATOM   1511  CB  TRP A 195      -5.423  16.047 -20.031  1.00 22.81           C
ATOM   1512  CG  TRP A 195      -4.808  15.123 -19.011  1.00 23.84           C
ATOM   1513  CD1 TRP A 195      -5.453  14.572 -17.955  1.00 25.41           C
ATOM   1514  CD2 TRP A 195      -3.466  14.543 -18.995  1.00 23.39           C
ATOM   1515  NE1 TRP A 195      -4.602  13.723 -17.278  1.00 26.41           N
ATOM   1516  CE3 TRP A 195      -2.319  14.663 -19.816  1.00 23.41           C
ATOM   1517  CE2 TRP A 195      -3.387  13.613 -17.912  1.00 24.13           C
ATOM   1518  CZ3 TRP A 195      -1.167  13.884 -19.583  1.00 26.61           C
ATOM   1519  CZ2 TRP A 195      -2.253  12.817 -17.681  1.00 24.83           C
ATOM   1520  CH2 TRP A 195      -1.135  12.957 -18.523  1.00 23.38           C
ATOM   1521  H   TRP A 195      -3.827  17.737 -18.805  1.00  0.00           H
ATOM   1522  HA  TRP A 195      -6.243  17.984 -20.516  1.00  0.00           H
ATOM   1523  HB2 TRP A 195      -6.335  15.554 -20.374  1.00  0.00           H
ATOM   1524  HB3 TRP A 195      -4.771  16.051 -20.905  1.00  0.00           H
ATOM   1525  HD1 TRP A 195      -6.492  14.747 -17.715  1.00  0.00           H
ATOM   1526  HE1 TRP A 195      -4.915  13.113 -16.514  1.00  0.00           H
ATOM   1527  HE3 TRP A 195      -2.344  15.336 -20.660  1.00  0.00           H
ATOM   1528  HZ3 TRP A 195      -0.318  13.971 -20.245  1.00  0.00           H
ATOM   1529  HZ2 TRP A 195      -2.249  12.090 -16.882  1.00  0.00           H
ATOM   1530  HH2 TRP A 195      -0.270  12.325 -18.377  1.00  0.00           H
ATOM   1531  N   ILE A 196      -6.420  17.848 -17.279  1.00 22.64           N
ATOM   1532  CA  ILE A 196      -7.281  17.820 -16.099  1.00 24.40           C
ATOM   1533  C   ILE A 196      -8.237  19.023 -16.177  1.00 23.38           C
ATOM   1534  O   ILE A 196      -7.812  20.145 -16.464  1.00 23.92           O
ATOM   1535  CB  ILE A 196      -6.397  17.928 -14.815  1.00 23.65           C
ATOM   1536  CG1 ILE A 196      -5.317  16.826 -14.719  1.00 23.75           C
ATOM   1537  CG2 ILE A 196      -7.179  17.999 -13.486  1.00 25.15           C
ATOM   1538  CD1 ILE A 196      -5.838  15.404 -14.498  1.00 22.43           C
ATOM   1539  H   ILE A 196      -5.488  18.224 -17.163  1.00  0.00           H
ATOM   1540  HA  ILE A 196      -7.852  16.890 -16.088  1.00  0.00           H
ATOM   1541  HB  ILE A 196      -5.863  18.876 -14.883  1.00  0.00           H
ATOM   1542 HG12 ILE A 196      -4.701  16.814 -15.615  1.00  0.00           H
ATOM   1543 HG13 ILE A 196      -4.648  17.087 -13.902  1.00  0.00           H
ATOM   1544 HG21 ILE A 196      -6.500  18.054 -12.635  1.00  0.00           H
ATOM   1545 HG22 ILE A 196      -7.816  18.880 -13.432  1.00  0.00           H
ATOM   1546 HG23 ILE A 196      -7.805  17.118 -13.351  1.00  0.00           H
ATOM   1547 HD11 ILE A 196      -5.014  14.689 -14.488  1.00  0.00           H
ATOM   1548 HD12 ILE A 196      -6.354  15.319 -13.547  1.00  0.00           H
ATOM   1549 HD13 ILE A 196      -6.524  15.096 -15.286  1.00  0.00           H
ATOM   1550  N   ASN A 197      -9.518  18.816 -15.849  1.00 22.81           N
ATOM   1551  CA  ASN A 197     -10.485  19.886 -15.604  1.00 22.80           C
ATOM   1552  C   ASN A 197     -10.090  20.603 -14.294  1.00 21.04           C
ATOM   1553  O   ASN A 197     -10.549  20.277 -13.197  1.00 21.74           O
ATOM   1554  CB  ASN A 197     -11.921  19.299 -15.560  1.00  0.00           C
ATOM   1555  CG  ASN A 197     -12.988  20.287 -15.075  1.00  0.00           C
ATOM   1556  OD1 ASN A 197     -13.544  20.100 -14.004  1.00  0.00           O
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ATOM   1557  ND2 ASN A 197     -13.280  21.360 -15.798  1.00  0.00           N
ATOM   1558  H   ASN A 197      -9.804  17.858 -15.646  1.00  0.00           H
ATOM   1559  HA  ASN A 197     -10.436  20.604 -16.424  1.00  0.00           H
ATOM   1560  HB2 ASN A 197     -12.204  18.926 -16.545  1.00  0.00           H
ATOM   1561  HB3 ASN A 197     -11.953  18.438 -14.895  1.00  0.00           H
ATOM   1562 HD22 ASN A 197     -13.903  22.036 -15.348  1.00  0.00           H
ATOM   1563 HD21 ASN A 197     -12.882  21.539 -16.704  1.00  0.00           H
ATOM   1564  N   GLN A 198      -9.237  21.622 -14.421  1.00 20.33           N
ATOM   1565  CA  GLN A 198      -8.818  22.536 -13.359  1.00 20.78           C
ATOM   1566  C   GLN A 198      -9.923  23.574 -13.044  1.00 22.61           C
ATOM   1567  O   GLN A 198      -9.629  24.730 -12.748  1.00 19.79           O
ATOM   1568  CB  GLN A 198      -7.453  23.167 -13.732  1.00 22.47           C
ATOM   1569  CG  GLN A 198      -6.346  22.095 -13.917  1.00 22.31           C
ATOM   1570  CD  GLN A 198      -4.915  22.630 -13.825  1.00 23.01           C
ATOM   1571  OE1 GLN A 198      -4.568  23.343 -12.884  1.00 21.95           O
ATOM   1572  NE2 GLN A 198      -4.056  22.254 -14.767  1.00 23.94           N
ATOM   1573  H   GLN A 198      -8.807  21.734 -15.332  1.00  0.00           H
ATOM   1574  HA  GLN A 198      -8.672  21.985 -12.435  1.00  0.00           H
ATOM   1575  HB2 GLN A 198      -7.543  23.771 -14.637  1.00  0.00           H
ATOM   1576  HB3 GLN A 198      -7.161  23.859 -12.940  1.00  0.00           H
ATOM   1577  HG2 GLN A 198      -6.441  21.332 -13.144  1.00  0.00           H
ATOM   1578  HG3 GLN A 198      -6.481  21.581 -14.867  1.00  0.00           H
ATOM   1579 HE21 GLN A 198      -4.342  21.622 -15.503  1.00  0.00           H
ATOM   1580 HE22 GLN A 198      -3.094  22.593 -14.775  1.00  0.00           H
ATOM   1581  N   THR A 199     -11.190  23.131 -13.052  1.00 22.32           N
ATOM   1582  CA  THR A 199     -12.323  23.775 -12.406  1.00 22.52           C
ATOM   1583  C   THR A 199     -12.727  22.816 -11.275  1.00 21.34           C
ATOM   1584  O   THR A 199     -12.504  23.173 -10.126  1.00 21.66           O
ATOM   1585  CB  THR A 199     -13.443  24.200 -13.402  1.00 21.15           C
ATOM   1586  OG1 THR A 199     -14.368  23.183 -13.732  1.00 24.02           O
ATOM   1587  CG2 THR A 199     -12.914  24.831 -14.699  1.00 20.12           C
ATOM   1588  H   THR A 199     -11.324  22.151 -13.263  1.00  0.00           H
ATOM   1589  HA  THR A 199     -11.982  24.695 -11.926  1.00  0.00           H
ATOM   1590  HB  THR A 199     -14.036  24.963 -12.893  1.00  0.00           H
ATOM   1591  HG1 THR A 199     -14.966  23.145 -12.972  1.00  0.00           H
ATOM   1592 HG21 THR A 199     -13.732  25.229 -15.300  1.00  0.00           H
ATOM   1593 HG22 THR A 199     -12.234  25.654 -14.478  1.00  0.00           H
ATOM   1594 HG23 THR A 199     -12.372  24.108 -15.308  1.00  0.00           H
ATOM   1595  N   LYS A 200     -13.153  21.563 -11.532  1.00 21.45           N
ATOM   1596  CA  LYS A 200     -13.529  20.597 -10.483  1.00 22.36           C
ATOM   1597  C   LYS A 200     -12.325  20.253  -9.585  1.00 21.80           C
ATOM   1598  O   LYS A 200     -12.465  20.129  -8.369  1.00 21.82           O
ATOM   1599  CB  LYS A 200     -14.131  19.322 -11.118  1.00 23.43           C
ATOM   1600  CG  LYS A 200     -14.794  18.347 -10.119  1.00 27.52           C
ATOM   1601  CD  LYS A 200     -15.303  17.062 -10.799  1.00 27.63           C
ATOM   1602  CE  LYS A 200     -15.806  16.000  -9.797  1.00 27.92           C
ATOM   1603  NZ  LYS A 200     -15.827  14.652 -10.396  1.00 31.29           N1+
ATOM   1604  H   LYS A 200     -13.376  21.312 -12.492  1.00  0.00           H
ATOM   1605  HA  LYS A 200     -14.294  21.060  -9.860  1.00  0.00           H
ATOM   1606  HB2 LYS A 200     -14.893  19.625 -11.838  1.00  0.00           H
ATOM   1607  HB3 LYS A 200     -13.359  18.802 -11.688  1.00  0.00           H
ATOM   1608  HG2 LYS A 200     -14.078  18.080  -9.341  1.00  0.00           H
ATOM   1609  HG3 LYS A 200     -15.615  18.855  -9.610  1.00  0.00           H
ATOM   1610  HD2 LYS A 200     -16.091  17.313 -11.510  1.00  0.00           H
ATOM   1611  HD3 LYS A 200     -14.484  16.655 -11.394  1.00  0.00           H
ATOM   1612  HE2 LYS A 200     -15.159  15.962  -8.923  1.00  0.00           H
ATOM   1613  HE3 LYS A 200     -16.796  16.259  -9.420  1.00  0.00           H
ATOM   1614  HZ1 LYS A 200     -15.773  13.922  -9.647  1.00  0.00           H
ATOM   1615  HZ2 LYS A 200     -16.657  14.486 -10.937  1.00  0.00           H
ATOM   1616  HZ3 LYS A 200     -15.008  14.495 -10.960  1.00  0.00           H
ATOM   1617  N   ALA A 201     -11.117  20.197 -10.167  1.00 21.18           N
ATOM   1618  CA  ALA A 201      -9.862  20.076  -9.428  1.00 21.35           C
ATOM   1619  C   ALA A 201      -9.442  21.373  -8.703  1.00 21.94           C
ATOM   1620  O   ALA A 201      -8.433  21.351  -8.003  1.00 19.69           O
ATOM   1621  CB  ALA A 201      -8.738  19.646 -10.390  1.00 16.72           C
ATOM   1622  H   ALA A 201     -11.083  20.323 -11.174  1.00  0.00           H
ATOM   1623  HA  ALA A 201      -9.979  19.314  -8.660  1.00  0.00           H
ATOM   1624  HB1 ALA A 201      -7.753  19.733  -9.931  1.00  0.00           H
ATOM   1625  HB2 ALA A 201      -8.854  18.611 -10.704  1.00  0.00           H
ATOM   1626  HB3 ALA A 201      -8.718  20.247 -11.290  1.00  0.00           H
ATOM   1627  N   ALA A 202     -10.176  22.485  -8.846  1.00 20.87           N
ATOM   1628  CA  ALA A 202     -10.008  23.739  -8.112  1.00 22.47           C
ATOM   1629  C   ALA A 202     -11.151  23.916  -7.092  1.00 22.33           C
ATOM   1630  O   ALA A 202     -10.883  24.204  -5.927  1.00 22.37           O
ATOM   1631  CB  ALA A 202      -9.995  24.923  -9.094  1.00 19.99           C
ATOM   1632  H   ALA A 202     -11.019  22.424  -9.413  1.00  0.00           H
ATOM   1633  HA  ALA A 202      -9.057  23.748  -7.584  1.00  0.00           H
ATOM   1634  HB1 ALA A 202      -9.776  25.854  -8.569  1.00  0.00           H
ATOM   1635  HB2 ALA A 202      -9.227  24.794  -9.857  1.00  0.00           H
ATOM   1636  HB3 ALA A 202     -10.946  25.063  -9.605  1.00  0.00           H
ATOM   1637  N   GLU A 203     -12.411  23.688  -7.498  1.00 22.02           N
ATOM   1638  CA  GLU A 203     -13.646  23.792  -6.710  1.00 23.59           C
ATOM   1639  C   GLU A 203     -13.575  22.927  -5.437  1.00 23.77           C
ATOM   1640  O   GLU A 203     -13.773  23.400  -4.314  1.00 22.97           O
ATOM   1641  CB  GLU A 203     -14.846  23.341  -7.583  1.00 24.19           C
ATOM   1642  CG  GLU A 203     -15.190  24.231  -8.808  1.00 28.14           C
ATOM   1643  CD  GLU A 203     -15.837  23.445  -9.958  1.00 30.24           C
ATOM   1644  OE1 GLU A 203     -16.510  22.436  -9.661  1.00 31.20           O
ATOM   1645  OE2 GLU A 203     -15.596  23.817 -11.131  1.00 32.85           O1-
ATOM   1646  H   GLU A 203     -12.543  23.481  -8.490  1.00  0.00           H
ATOM   1647  HA  GLU A 203     -13.784  24.832  -6.410  1.00  0.00           H
ATOM   1648  HB2 GLU A 203     -14.656  22.322  -7.922  1.00  0.00           H
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ATOM   1649  HB3 GLU A 203     -15.744  23.265  -6.968  1.00  0.00          H
ATOM   1650  HG2 GLU A 203     -15.870  25.029  -8.514  1.00  0.00          H
ATOM   1651  HG3 GLU A 203     -14.301  24.722  -9.198  1.00  0.00          H
ATOM   1652  N   ILE A 204     -13.214  21.652  -5.617  1.00 23.93          N
ATOM   1653  CA  ILE A 204     -13.203  20.632  -4.574  1.00 24.60          C
ATOM   1654  C   ILE A 204     -11.864  20.666  -3.788  1.00 24.13          C
ATOM   1655  O   ILE A 204     -11.656  19.847  -2.892  1.00 26.89          O
ATOM   1656  CB  ILE A 204     -13.532  19.255  -5.240  1.00 24.83          C
ATOM   1657  CG1 ILE A 204     -14.790  19.320  -6.155  1.00 27.64          C
ATOM   1658  CG2 ILE A 204     -13.707  18.092  -4.240  1.00 22.97          C
ATOM   1659  CD1 ILE A 204     -16.092  19.738  -5.454  1.00 28.38          C
ATOM   1660  H   ILE A 204     -13.047  21.339  -6.568  1.00  0.00          H
ATOM   1661  HA  ILE A 204     -13.989  20.850  -3.849  1.00  0.00          H
ATOM   1662  HB  ILE A 204     -12.693  18.987  -5.887  1.00  0.00          H
ATOM   1663 HG12 ILE A 204     -14.625  19.993  -6.995  1.00  0.00          H
ATOM   1664 HG13 ILE A 204     -14.952  18.349  -6.621  1.00  0.00          H
ATOM   1665 HG21 ILE A 204     -14.123  17.213  -4.729  1.00  0.00          H
ATOM   1666 HG22 ILE A 204     -12.765  17.780  -3.799  1.00  0.00          H
ATOM   1667 HG23 ILE A 204     -14.382  18.366  -3.430  1.00  0.00          H
ATOM   1668 HD11 ILE A 204     -16.921  19.750  -6.163  1.00  0.00          H
ATOM   1669 HD12 ILE A 204     -16.356  19.054  -4.649  1.00  0.00          H
ATOM   1670 HD13 ILE A 204     -16.021  20.740  -5.033  1.00  0.00          H
ATOM   1671  N   ARG A 205     -10.984  21.660  -4.020  1.00 23.13          N
ATOM   1672  CA  ARG A 205      -9.873  21.992  -3.112  1.00 25.14          C
ATOM   1673  C   ARG A 205     -10.422  22.734  -1.878  1.00 25.07          C
ATOM   1674  O   ARG A 205      -9.836  22.643  -0.800  1.00 22.75          O
ATOM   1675  CB  ARG A 205      -8.859  22.969  -3.762  1.00 25.21          C
ATOM   1676  CG  ARG A 205      -8.265  22.555  -5.117  1.00 29.73          C
ATOM   1677  CD  ARG A 205      -6.972  21.723  -5.072  1.00 29.20          C
ATOM   1678  NE  ARG A 205      -5.787  22.510  -5.458  1.00 29.90          N
ATOM   1679  CZ  ARG A 205      -5.427  22.926  -6.682  1.00 28.96          C
ATOM   1680  NH1 ARG A 205      -6.216  22.804  -7.747  1.00 29.65          N
ATOM   1681  NH2 ARG A 205      -4.229  23.476  -6.834  1.00 28.01          N1+
ATOM   1682  H   ARG A 205     -11.215  22.328  -4.747  1.00  0.00          H
ATOM   1683  HA  ARG A 205      -9.361  21.084  -2.794  1.00  0.00          H
ATOM   1684  HB2 ARG A 205      -9.345  23.936  -3.905  1.00  0.00          H
ATOM   1685  HB3 ARG A 205      -8.043  23.175  -3.067  1.00  0.00          H
ATOM   1686  HG2 ARG A 205      -9.023  22.033  -5.697  1.00  0.00          H
ATOM   1687  HG3 ARG A 205      -8.058  23.475  -5.662  1.00  0.00          H
ATOM   1688  HD2 ARG A 205      -6.812  21.298  -4.081  1.00  0.00          H
ATOM   1689  HD3 ARG A 205      -7.043  20.876  -5.756  1.00  0.00          H
ATOM   1690  HE  ARG A 205      -5.074  22.665  -4.710  1.00  0.00          H
ATOM   1691 HH11 ARG A 205      -7.083  22.256  -7.721  1.00  0.00          H
ATOM   1692 HH12 ARG A 205      -5.894  23.095  -8.687  1.00  0.00          H
ATOM   1693 HH21 ARG A 205      -3.507  23.221  -6.134  1.00  0.00          H
ATOM   1694 HH22 ARG A 205      -3.868  23.830  -7.719  1.00  0.00          H
ATOM   1695  N   ALA A 206     -11.512  23.497  -2.055  1.00 24.01          N
ATOM   1696  CA  ALA A 206     -12.132  24.320  -1.026  1.00 24.47          C
ATOM   1697  C   ALA A 206     -13.259  23.537  -0.342  1.00 24.30          C
ATOM   1698  O   ALA A 206     -13.212  23.360   0.872  1.00 25.49          O
ATOM   1699  CB  ALA A 206     -12.729  25.574  -1.688  1.00 23.88          C
ATOM   1700  H   ALA A 206     -11.944  23.499  -2.971  1.00  0.00          H
ATOM   1701  HA  ALA A 206     -11.400  24.623  -0.273  1.00  0.00          H
ATOM   1702  HB1 ALA A 206     -13.224  26.206  -0.949  1.00  0.00          H
ATOM   1703  HB2 ALA A 206     -11.948  26.174  -2.154  1.00  0.00          H
ATOM   1704  HB3 ALA A 206     -13.462  25.335  -2.459  1.00  0.00          H
ATOM   1705  N   ASP A 207     -14.252  23.050  -1.111  1.00 23.97          N
ATOM   1706  CA  ASP A 207     -15.468  22.365  -0.623  1.00 24.82          C
ATOM   1707  C   ASP A 207     -15.148  21.207   0.347  1.00 24.07          C
ATOM   1708  O   ASP A 207     -15.748  21.069   1.415  1.00 24.77          O
ATOM   1709  CB  ASP A 207     -16.382  21.965  -1.829  1.00 25.95          C
ATOM   1710  CG  ASP A 207     -16.957  20.544  -1.838  1.00 28.75          C
ATOM   1711  OD1 ASP A 207     -18.177  20.360  -1.638  1.00 30.03          O
ATOM   1712  OD2 ASP A 207     -16.193  19.564  -1.998  1.00 31.14          O1-
ATOM   1713  H   ASP A 207     -14.196  23.237  -2.105  1.00  0.00          H
ATOM   1714  HA  ASP A 207     -16.019  23.095  -0.028  1.00  0.00          H
ATOM   1715  HB2 ASP A 207     -17.216  22.664  -1.893  1.00  0.00          H
ATOM   1716  HB3 ASP A 207     -15.843  22.074  -2.769  1.00  0.00          H
ATOM   1717  N   ALA A 208     -14.157  20.395  -0.034  1.00 23.20          N
ATOM   1718  CA  ALA A 208     -13.786  19.162   0.636  1.00 22.76          C
ATOM   1719  C   ALA A 208     -13.088  19.397   1.985  1.00 22.38          C
ATOM   1720  O   ALA A 208     -13.065  18.486   2.815  1.00 24.01          O
ATOM   1721  CB  ALA A 208     -12.869  18.376  -0.298  1.00 19.96          C
ATOM   1722  H   ALA A 208     -13.773  20.566  -0.951  1.00  0.00          H
ATOM   1723  HA  ALA A 208     -14.689  18.582   0.810  1.00  0.00          H
ATOM   1724  HB1 ALA A 208     -12.520  17.463   0.174  1.00  0.00          H
ATOM   1725  HB2 ALA A 208     -13.389  18.093  -1.213  1.00  0.00          H
ATOM   1726  HB3 ALA A 208     -11.999  18.963  -0.575  1.00  0.00          H
ATOM   1727  N   ALA A 209     -12.603  20.622   2.246  1.00 22.75          N
ATOM   1728  CA  ALA A 209     -12.062  21.063   3.535  1.00 22.99          C
ATOM   1729  C   ALA A 209     -13.144  21.103   4.629  1.00 24.29          C
ATOM   1730  O   ALA A 209     -12.828  21.044   5.817  1.00 25.18          O
ATOM   1731  CB  ALA A 209     -11.465  22.470   3.382  1.00 23.91          C
ATOM   1732  H   ALA A 209     -12.742  21.339   1.541  1.00  0.00          H
ATOM   1733  HA  ALA A 209     -11.281  20.368   3.843  1.00  0.00          H
ATOM   1734  HB1 ALA A 209     -10.876  22.742   4.258  1.00  0.00          H
ATOM   1735  HB2 ALA A 209     -10.814  22.538   2.512  1.00  0.00          H
ATOM   1736  HB3 ALA A 209     -12.240  23.228   3.265  1.00  0.00          H
ATOM   1737  N   THR A 210     -14.411  21.152   4.214  1.00 22.25          N
ATOM   1738  CA  THR A 210     -15.610  21.098   5.030  1.00 22.42          C
ATOM   1739  C   THR A 210     -16.437  19.834   4.711  1.00 21.18          C
ATOM   1740  O   THR A 210     -17.630  19.804   5.007  1.00 19.00          O
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ATOM   1741  CB  THR A 210     -16.376  22.441   4.874  1.00 24.82          C
ATOM   1742  OG1 THR A 210     -16.490  22.847   3.518  1.00 24.17          O
ATOM   1743  CG2 THR A 210     -15.692  23.597   5.619  1.00 24.26          C
ATOM   1744  H   THR A 210     -14.573  21.291   3.222  1.00  0.00          H
ATOM   1745  HA  THR A 210     -15.342  20.987   6.083  1.00  0.00          H
ATOM   1746  HB  THR A 210     -17.384  22.333   5.278  1.00  0.00          H
ATOM   1747  HG1 THR A 210     -16.713  22.102   2.968  1.00  0.00          H
ATOM   1748 HG21 THR A 210     -16.270  24.517   5.526  1.00  0.00          H
ATOM   1749 HG22 THR A 210     -15.591  23.376   6.682  1.00  0.00          H
ATOM   1750 HG23 THR A 210     -14.695  23.792   5.223  1.00  0.00          H
ATOM   1751  N   LYS A 211     -15.818  18.779   4.146  1.00 20.79          N
ATOM   1752  CA  LYS A 211     -16.454  17.476   3.932  1.00 22.47          C
ATOM   1753  C   LYS A 211     -15.663  16.317   4.555  1.00 22.13          C
ATOM   1754  O   LYS A 211     -16.285  15.420   5.123  1.00 22.26          O
ATOM   1755  CB  LYS A 211     -16.753  17.191   2.439  1.00 24.94          C
ATOM   1756  CG  LYS A 211     -17.657  18.226   1.732  1.00 30.95          C
ATOM   1757  CD  LYS A 211     -18.772  17.609   0.869  1.00 35.72          C
ATOM   1758  CE  LYS A 211     -18.304  16.860  -0.393  1.00 40.53          C
ATOM   1759  NZ  LYS A 211     -17.998  17.765  -1.511  1.00 39.99          N1+
ATOM   1760  H   LYS A 211     -14.832  18.869   3.934  1.00  0.00          H
ATOM   1761  HA  LYS A 211     -17.417  17.456   4.448  1.00  0.00          H
ATOM   1762  HB2 LYS A 211     -15.822  17.065   1.889  1.00  0.00          H
ATOM   1763  HB3 LYS A 211     -17.235  16.213   2.395  1.00  0.00          H
ATOM   1764  HG2 LYS A 211     -18.140  18.853   2.482  1.00  0.00          H
ATOM   1765  HG3 LYS A 211     -17.055  18.907   1.132  1.00  0.00          H
ATOM   1766  HD2 LYS A 211     -19.345  16.922   1.495  1.00  0.00          H
ATOM   1767  HD3 LYS A 211     -19.478  18.393   0.586  1.00  0.00          H
ATOM   1768  HE2 LYS A 211     -17.448  16.218  -0.186  1.00  0.00          H
ATOM   1769  HE3 LYS A 211     -19.112  16.206  -0.723  1.00  0.00          H
ATOM   1770  HZ1 LYS A 211     -18.060  17.354  -2.424  1.00  0.00          H
ATOM   1771  HZ2 LYS A 211     -18.539  18.638  -1.504  1.00  0.00          H
ATOM   1772  HZ3 LYS A 211     -17.081  18.233  -1.464  1.00  0.00          H
ATOM   1773  N   TYR A 212     -14.329  16.268   4.417  1.00 21.51          N
ATOM   1774  CA  TYR A 212     -13.556  15.079   4.791  1.00 22.30          C
ATOM   1775  C   TYR A 212     -12.070  15.340   5.060  1.00 19.69          C
ATOM   1776  O   TYR A 212     -11.499  16.312   4.565  1.00 19.22          O
ATOM   1777  CB  TYR A 212     -13.791  13.933   3.777  1.00 22.78          C
ATOM   1778  CG  TYR A 212     -13.627  14.300   2.308  1.00 23.36          C
ATOM   1779  CD1 TYR A 212     -12.353  14.573   1.768  1.00 23.83          C
ATOM   1780  CD2 TYR A 212     -14.758  14.349   1.469  1.00 26.25          C
ATOM   1781  CE1 TYR A 212     -12.217  14.848   0.396  1.00 23.80          C
ATOM   1782  CE2 TYR A 212     -14.618  14.620   0.096  1.00 24.56          C
ATOM   1783  CZ  TYR A 212     -13.342  14.852  -0.447  1.00 23.94          C
ATOM   1784  OH  TYR A 212     -13.191  15.080  -1.782  1.00 25.44          O
ATOM   1785  H   TYR A 212     -13.823  17.005   3.932  1.00  0.00          H
ATOM   1786  HA  TYR A 212     -13.946  14.747   5.753  1.00  0.00          H
ATOM   1787  HB2 TYR A 212     -13.117  13.101   3.990  1.00  0.00          H
ATOM   1788  HB3 TYR A 212     -14.789  13.521   3.927  1.00  0.00          H
ATOM   1789  HD1 TYR A 212     -11.473  14.550   2.395  1.00  0.00          H
ATOM   1790  HD2 TYR A 212     -15.739  14.162   1.881  1.00  0.00          H
ATOM   1791  HE1 TYR A 212     -11.243  15.055  -0.010  1.00  0.00          H
ATOM   1792  HE2 TYR A 212     -15.490  14.626  -0.539  1.00  0.00          H
ATOM   1793  HH  TYR A 212     -13.988  14.923  -2.267  1.00  0.00          H
ATOM   1794  N   ILE A 213     -11.451  14.421   5.814  1.00 19.76          N
ATOM   1795  CA  ILE A 213     -10.020  14.226   6.067  1.00 18.38          C
ATOM   1796  C   ILE A 213      -9.165  14.286   4.779  1.00 19.12          C
ATOM   1797  O   ILE A 213      -9.425  13.551   3.822  1.00 20.73          O
ATOM   1798  CB  ILE A 213      -9.840  12.935   6.928  1.00 18.18          C
ATOM   1799  CG1 ILE A 213      -8.386  12.495   7.213  1.00 16.52          C
ATOM   1800  CG2 ILE A 213     -10.603  11.721   6.369  1.00 15.90          C
ATOM   1801  CD1 ILE A 213      -7.508  13.536   7.910  1.00 15.33          C
ATOM   1802  H   ILE A 213     -12.053  13.730   6.246  1.00  0.00          H
ATOM   1803  HA  ILE A 213      -9.719  15.064   6.692  1.00  0.00          H
ATOM   1804  HB  ILE A 213     -10.285  13.154   7.900  1.00  0.00          H
ATOM   1805 HG12 ILE A 213      -8.406  11.612   7.853  1.00  0.00          H
ATOM   1806 HG13 ILE A 213      -7.908  12.166   6.292  1.00  0.00          H
ATOM   1807 HG21 ILE A 213     -10.472  10.872   7.036  1.00  0.00          H
ATOM   1808 HG22 ILE A 213     -11.676  11.885   6.285  1.00  0.00          H
ATOM   1809 HG23 ILE A 213     -10.233  11.429   5.386  1.00  0.00          H
ATOM   1810 HD11 ILE A 213      -6.564  13.091   8.224  1.00  0.00          H
ATOM   1811 HD12 ILE A 213      -7.251  14.351   7.240  1.00  0.00          H
ATOM   1812 HD13 ILE A 213      -7.992  13.945   8.798  1.00  0.00          H
ATOM   1813  N   TYR A 214      -8.177  15.193   4.748  1.00 17.70          N
ATOM   1814  CA  TYR A 214      -7.228  15.459   3.658  1.00 17.21          C
ATOM   1815  C   TYR A 214      -7.932  16.015   2.397  1.00 16.96          C
ATOM   1816  O   TYR A 214      -7.464  15.857   1.270  1.00 18.78          O
ATOM   1817  CB  TYR A 214      -6.285  14.262   3.351  1.00 16.51          C
ATOM   1818  CG  TYR A 214      -5.454  13.709   4.486  1.00 22.99          C
ATOM   1819  CD1 TYR A 214      -4.478  14.458   5.152  1.00 22.50          C
ATOM   1820  CD2 TYR A 214      -5.565  12.356   4.808  1.00 22.11          C
ATOM   1821  CE1 TYR A 214      -3.649  13.875   6.107  1.00 25.16          C
ATOM   1822  CE2 TYR A 214      -4.749  11.757   5.760  1.00 24.75          C
ATOM   1823  CZ  TYR A 214      -3.780  12.517   6.418  1.00 24.22          C
ATOM   1824  OH  TYR A 214      -2.978  12.003   7.378  1.00 26.19          O
ATOM   1825  H   TYR A 214      -8.052  15.758   5.587  1.00  0.00          H
ATOM   1826  HA  TYR A 214      -6.605  16.279   4.017  1.00  0.00          H
ATOM   1827  HB2 TYR A 214      -6.885  13.448   2.948  1.00  0.00          H
ATOM   1828  HB3 TYR A 214      -5.605  14.551   2.543  1.00  0.00          H
ATOM   1829  HD1 TYR A 214      -4.358  15.517   4.928  1.00  0.00          H
ATOM   1830  HD2 TYR A 214      -6.295  11.732   4.300  1.00  0.00          H
ATOM   1831  HE1 TYR A 214      -2.898  14.460   6.628  1.00  0.00          H
ATOM   1832  HE2 TYR A 214      -4.861  10.699   5.979  1.00  0.00          H
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ATOM   1833 HH  TYR A 214      -3.035  11.020   7.374  1.00  0.00           H
ATOM   1834 N   GLY A 215      -9.058  16.707   2.581  1.00 19.32           N
ATOM   1835 CA  GLY A 215      -9.909  17.230   1.518  1.00 20.66           C
ATOM   1836 C   GLY A 215      -9.611  18.705   1.270  1.00 20.07           C
ATOM   1837 O   GLY A 215      -9.636  19.151   0.124  1.00 23.01           O
ATOM   1838 H   GLY A 215      -9.366  16.859   3.536  1.00  0.00           H
ATOM   1839 HA2 GLY A 215      -9.790  16.670   0.590  1.00  0.00           H
ATOM   1840 HA3 GLY A 215     -10.946  17.128   1.833  1.00  0.00           H
ATOM   1841 N   GLY A 216      -9.148  19.416   2.300  1.00 20.86           N
ATOM   1842 CA  GLY A 216      -8.566  20.748   2.199  1.00 19.87           C
ATOM   1843 C   GLY A 216      -7.043  20.642   2.087  1.00 20.78           C
ATOM   1844 O   GLY A 216      -6.313  21.552   2.477  1.00 20.29           O
ATOM   1845 H   GLY A 216      -9.200  18.997   3.231  1.00  0.00           H
ATOM   1846 HA2 GLY A 216      -8.964  21.305   1.350  1.00  0.00           H
ATOM   1847 HA3 GLY A 216      -8.811  21.314   3.098  1.00  0.00           H
ATOM   1848 N   SER A 217      -6.546  19.506   1.585  1.00 19.48           N
ATOM   1849 CA  SER A 217      -5.154  19.281   1.257  1.00 20.05           C
ATOM   1850 C   SER A 217      -4.981  19.510  -0.247  1.00 20.74           C
ATOM   1851 O   SER A 217      -5.812  19.095  -1.066  1.00 20.42           O
ATOM   1852 CB  SER A 217      -4.783  17.816   1.547  1.00 20.42           C
ATOM   1853 OG  SER A 217      -3.377  17.653   1.494  1.00 20.14           O
ATOM   1854 H   SER A 217      -7.210  18.820   1.257  1.00  0.00           H
ATOM   1855 HA  SER A 217      -4.508  19.950   1.829  1.00  0.00           H
ATOM   1856 HB2 SER A 217      -5.127  17.507   2.534  1.00  0.00           H
ATOM   1857 HB3 SER A 217      -5.254  17.145   0.828  1.00  0.00           H
ATOM   1858 HG  SER A 217      -3.032  17.921   2.344  1.00  0.00           H
ATOM   1859 N   GLU A 218      -3.853  20.126  -0.583  1.00 21.33           N
ATOM   1860 CA  GLU A 218      -3.304  20.209  -1.917  1.00 22.53           C
ATOM   1861 C   GLU A 218      -2.548  18.893  -2.199  1.00 21.12           C
ATOM   1862 O   GLU A 218      -2.955  18.097  -3.046  1.00 21.10           O
ATOM   1863 CB  GLU A 218      -2.344  21.421  -1.887  1.00 25.65           C
ATOM   1864 CG  GLU A 218      -1.686  21.809  -3.208  1.00 26.70           C
ATOM   1865 CD  GLU A 218      -2.664  22.352  -4.229  1.00 27.03           C
ATOM   1866 OE1 GLU A 218      -3.697  22.963  -3.882  1.00 26.49           O
ATOM   1867 OE2 GLU A 218      -2.400  22.172  -5.433  1.00 26.09           O1-
ATOM   1868 H   GLU A 218      -3.273  20.489   0.167  1.00  0.00           H
ATOM   1869 HA  GLU A 218      -4.094  20.355  -2.656  1.00  0.00           H
ATOM   1870 HB2 GLU A 218      -2.891  22.291  -1.530  1.00  0.00           H
ATOM   1871 HB3 GLU A 218      -1.548  21.270  -1.158  1.00  0.00           H
ATOM   1872 HG2 GLU A 218      -0.974  22.602  -3.004  1.00  0.00           H
ATOM   1873 HG3 GLU A 218      -1.119  20.977  -3.625  1.00  0.00           H
ATOM   1874 N   SER A 219      -1.471  18.644  -1.442  1.00 19.74           N
ATOM   1875 CA  SER A 219      -0.441  17.668  -1.769  1.00 18.94           C
ATOM   1876 C   SER A 219      -0.844  16.202  -1.553  1.00 18.73           C
ATOM   1877 O   SER A 219      -0.245  15.330  -2.182  1.00 18.43           O
ATOM   1878 CB  SER A 219       0.820  18.020  -0.962  1.00 17.41           C
ATOM   1879 OG  SER A 219       0.652  17.889   0.441  1.00 21.92           O
ATOM   1880 H   SER A 219      -1.238  19.289  -0.703  1.00  0.00           H
ATOM   1881 HA  SER A 219      -0.200  17.774  -2.824  1.00  0.00           H
ATOM   1882 HB2 SER A 219       1.637  17.364  -1.273  1.00  0.00           H
ATOM   1883 HB3 SER A 219       1.153  19.034  -1.189  1.00  0.00           H
ATOM   1884 HG  SER A 219       1.535  17.661   0.748  1.00  0.00           H
ATOM   1885 N   TYR A 220      -1.884  15.903  -0.752  1.00 20.35           N
ATOM   1886 CA  TYR A 220      -2.384  14.537  -0.556  1.00 20.31           C
ATOM   1887 C   TYR A 220      -2.909  13.935  -1.879  1.00 21.43           C
ATOM   1888 O   TYR A 220      -2.781  12.738  -2.121  1.00 21.25           O
ATOM   1889 CB  TYR A 220      -3.489  14.516   0.528  1.00 18.66           C
ATOM   1890 CG  TYR A 220      -3.867  13.151   1.069  1.00 19.79           C
ATOM   1891 CD1 TYR A 220      -3.109  12.621   2.120  1.00 20.92           C
ATOM   1892 CD2 TYR A 220      -4.985  12.436   0.637  1.00 19.71           C
ATOM   1893 CE1 TYR A 220      -3.418  11.393   2.684  1.00 21.76           C
ATOM   1894 CE2 TYR A 220      -5.326  11.212   1.207  1.00 20.40           C
ATOM   1895 CZ  TYR A 220      -4.528  10.684   2.220  1.00 22.36           C
ATOM   1896 OH  TYR A 220      -4.859   9.482   2.763  1.00 20.26           O
ATOM   1897 H   TYR A 220      -2.337  16.654  -0.242  1.00  0.00           H
ATOM   1898 HA  TYR A 220      -1.548  13.928  -0.205  1.00  0.00           H
ATOM   1899 HB2 TYR A 220      -3.091  15.102   1.358  1.00  0.00           H
ATOM   1900 HB3 TYR A 220      -4.369  15.037   0.139  1.00  0.00           H
ATOM   1901 HD1 TYR A 220      -2.262  13.183   2.509  1.00  0.00           H
ATOM   1902 HD2 TYR A 220      -5.597  12.836  -0.167  1.00  0.00           H
ATOM   1903 HE1 TYR A 220      -2.823  10.994   3.499  1.00  0.00           H
ATOM   1904 HE2 TYR A 220      -6.181  10.643   0.859  1.00  0.00           H
ATOM   1905 HH  TYR A 220      -4.263   9.285   3.535  1.00  0.00           H
ATOM   1906 N   ARG A 221      -3.419  14.781  -2.782  1.00 19.98           N
ATOM   1907 CA  ARG A 221      -3.955  14.388  -4.081  1.00 19.09           C
ATOM   1908 C   ARG A 221      -2.824  14.067  -5.074  1.00 20.19           C
ATOM   1909 O   ARG A 221      -2.941  13.132  -5.866  1.00 18.27           O
ATOM   1910 CB  ARG A 221      -4.769  15.572  -4.627  1.00 19.12           C
ATOM   1911 CG  ARG A 221      -5.938  15.976  -3.713  1.00 16.39           C
ATOM   1912 CD  ARG A 221      -6.623  17.268  -4.168  1.00 17.18           C
ATOM   1913 NE  ARG A 221      -8.076  17.164  -3.993  1.00 19.14           N
ATOM   1914 CZ  ARG A 221      -8.836  17.803  -3.100  1.00 18.73           C
ATOM   1915 NH1 ARG A 221      -8.321  18.612  -2.173  1.00 18.23           N
ATOM   1916 NH2 ARG A 221     -10.144  17.603  -3.144  1.00 17.55           N1+
ATOM   1917 H   ARG A 221      -3.400  15.768  -2.555  1.00  0.00           H
ATOM   1918 HA  ARG A 221      -4.597  13.511  -3.973  1.00  0.00           H
ATOM   1919 HB2 ARG A 221      -4.120  16.434  -4.798  1.00  0.00           H
ATOM   1920 HB3 ARG A 221      -5.171  15.293  -5.600  1.00  0.00           H
ATOM   1921 HG2 ARG A 221      -6.648  15.149  -3.659  1.00  0.00           H
ATOM   1922 HG3 ARG A 221      -5.593  16.136  -2.691  1.00  0.00           H
ATOM   1923 HD2 ARG A 221      -6.205  18.133  -3.651  1.00  0.00           H
ATOM   1924 HD3 ARG A 221      -6.437  17.449  -5.226  1.00  0.00           H
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ATOM   1925  HE  ARG A 221      -8.543  16.565  -4.673  1.00  0.00           H
ATOM   1926 HH11 ARG A 221      -7.316  18.735  -2.029  1.00  0.00           H
ATOM   1927 HH12 ARG A 221      -8.911  18.974  -1.412  1.00  0.00           H
ATOM   1928 HH21 ARG A 221     -10.527  16.859  -3.739  1.00  0.00           H
ATOM   1929 HH22 ARG A 221     -10.800  18.307  -2.788  1.00  0.00           H
ATOM   1930  N   HIS A 222      -1.711  14.812  -4.999  1.00 19.92           N
ATOM   1931  CA  HIS A 222      -0.500  14.594  -5.795  1.00 20.24           C
ATOM   1932  C   HIS A 222       0.220  13.337  -5.307  1.00 19.44           C
ATOM   1933  O   HIS A 222       0.626  12.505  -6.115  1.00 21.15           O
ATOM   1934  CB  HIS A 222       0.451  15.796  -5.643  1.00 18.79           C
ATOM   1935  CG  HIS A 222      -0.125  17.078  -6.157  1.00 19.64           C
ATOM   1936  ND1 HIS A 222      -0.256  18.207  -5.347  1.00 22.12           N
ATOM   1937  CD2 HIS A 222      -0.639  17.357  -7.403  1.00 20.71           C
ATOM   1938  CE1 HIS A 222      -0.896  19.088  -6.100  1.00 20.00           C
ATOM   1939  NE2 HIS A 222      -1.154  18.637  -7.325  1.00 22.40           N
ATOM   1940  H   HIS A 222      -1.677  15.522  -4.281  1.00  0.00           H
ATOM   1941  HA  HIS A 222      -0.769  14.460  -6.844  1.00  0.00           H
ATOM   1942  HB2 HIS A 222       0.749  15.935  -4.603  1.00  0.00           H
ATOM   1943  HB3 HIS A 222       1.375  15.611  -6.187  1.00  0.00           H
ATOM   1944  HD2 HIS A 222      -0.709  16.754  -8.297  1.00  0.00           H
ATOM   1945  HE1 HIS A 222      -1.194  20.063  -5.753  1.00  0.00           H
ATOM   1946  HE2 HIS A 222      -1.697  19.129  -8.026  1.00  0.00           H
ATOM   1947  N   MET A 223       0.296  13.176  -3.980  1.00 20.38           N
ATOM   1948  CA  MET A 223       0.753  11.989  -3.272  1.00 21.04           C
ATOM   1949  C   MET A 223      -0.027  10.744  -3.711  1.00 21.36           C
ATOM   1950  O   MET A 223       0.594   9.790  -4.174  1.00 20.45           O
ATOM   1951  CB  MET A 223       0.681  12.267  -1.760  1.00 20.16           C
ATOM   1952  CG  MET A 223       1.309  11.204  -0.853  1.00 21.68           C
ATOM   1953  SD  MET A 223       0.314   9.725  -0.506  1.00 24.24           S
ATOM   1954  CE  MET A 223      -1.080  10.460   0.378  1.00 23.61           C
ATOM   1955  H   MET A 223      -0.016  13.956  -3.407  1.00  0.00           H
ATOM   1956  HA  MET A 223       1.790  11.816  -3.545  1.00  0.00           H
ATOM   1957  HB2 MET A 223       1.223  13.194  -1.570  1.00  0.00           H
ATOM   1958  HB3 MET A 223      -0.339  12.464  -1.453  1.00  0.00           H
ATOM   1959  HG2 MET A 223       2.271  10.894  -1.254  1.00  0.00           H
ATOM   1960  HG3 MET A 223       1.521  11.674   0.103  1.00  0.00           H
ATOM   1961  HE1 MET A 223      -1.747   9.680   0.740  1.00  0.00           H
ATOM   1962  HE2 MET A 223      -0.727  11.042   1.229  1.00  0.00           H
ATOM   1963  HE3 MET A 223      -1.660  11.114  -0.268  1.00  0.00           H
ATOM   1964  N   CYS A 224      -1.366  10.773  -3.652  1.00 20.63           N
ATOM   1965  CA  CYS A 224      -2.213   9.641  -4.029  1.00 20.63           C
ATOM   1966  C   CYS A 224      -2.141   9.309  -5.527  1.00 19.25           C
ATOM   1967  O   CYS A 224      -2.185   8.132  -5.876  1.00 18.72           O
ATOM   1968  CB  CYS A 224      -3.677   9.902  -3.648  1.00 18.88           C
ATOM   1969  SG  CYS A 224      -3.837   9.863  -1.847  1.00 21.25           S
ATOM   1970  H   CYS A 224      -1.816  11.570  -3.212  1.00  0.00           H
ATOM   1971  HA  CYS A 224      -1.864   8.758  -3.487  1.00  0.00           H
ATOM   1972  HB2 CYS A 224      -4.045  10.850  -4.043  1.00  0.00           H
ATOM   1973  HB3 CYS A 224      -4.311   9.113  -4.055  1.00  0.00           H
ATOM   1974  HG  CYS A 224      -3.277  11.067  -1.648  1.00  0.00           H
ATOM   1975  N   ARG A 225      -1.958  10.308  -6.408  1.00 20.13           N
ATOM   1976  CA  ARG A 225      -1.680  10.086  -7.829  1.00 18.90           C
ATOM   1977  C   ARG A 225      -0.310   9.402  -7.993  1.00 18.94           C
ATOM   1978  O   ARG A 225      -0.201   8.385  -8.679  1.00 18.24           O
ATOM   1979  CB  ARG A 225      -1.712  11.426  -8.607  1.00 19.79           C
ATOM   1980  CG  ARG A 225      -1.433  11.272 -10.119  1.00 22.48           C
ATOM   1981  CD  ARG A 225      -1.375  12.600 -10.881  1.00 21.79           C
ATOM   1982  NE  ARG A 225      -1.179  12.359 -12.313  1.00 21.49           N
ATOM   1983  CZ  ARG A 225      -0.437  13.001 -13.218  1.00 23.17           C
ATOM   1984 NH1 ARG A 225       0.333  14.034 -12.877  1.00 23.34           N
ATOM   1985 NH2 ARG A 225      -0.477  12.590 -14.482  1.00 25.08           N1+
ATOM   1986  H   ARG A 225      -1.974  11.262  -6.066  1.00  0.00           H
ATOM   1987  HA  ARG A 225      -2.450   9.425  -8.236  1.00  0.00           H
ATOM   1988  HB2 ARG A 225      -2.689  11.892  -8.474  1.00  0.00           H
ATOM   1989  HB3 ARG A 225      -0.987  12.120  -8.181  1.00  0.00           H
ATOM   1990  HG2 ARG A 225      -0.486  10.759 -10.288  1.00  0.00           H
ATOM   1991  HG3 ARG A 225      -2.205  10.636 -10.556  1.00  0.00           H
ATOM   1992  HD2 ARG A 225      -2.323  13.120 -10.766  1.00  0.00           H
ATOM   1993  HD3 ARG A 225      -0.587  13.237 -10.481  1.00  0.00           H
ATOM   1994  HE  ARG A 225      -1.828  11.605 -12.696  1.00  0.00           H
ATOM   1995 HH11 ARG A 225       0.483  14.269 -11.896  1.00  0.00           H
ATOM   1996 HH12 ARG A 225       0.846  14.572 -13.558  1.00  0.00           H
ATOM   1997 HH21 ARG A 225      -0.984  11.687 -14.714  1.00  0.00           H
ATOM   1998 HH22 ARG A 225      -0.006  13.014 -15.260  1.00  0.00           H
ATOM   1999  N   TYR A 226       0.732   9.937  -7.342  1.00 16.90           N
ATOM   2000  CA  TYR A 226       2.102   9.450  -7.467  1.00 18.14           C
ATOM   2001  C   TYR A 226       2.259   8.035  -6.877  1.00 17.98           C
ATOM   2002  O   TYR A 226       2.834   7.156  -7.522  1.00 18.92           O
ATOM   2003  CB  TYR A 226       3.094  10.441  -6.817  1.00 15.96           C
ATOM   2004  CG  TYR A 226       4.493  10.308  -7.388  1.00 20.33           C
ATOM   2005  CD1 TYR A 226       4.948  11.214  -8.373  1.00 18.06           C
ATOM   2006  CD2 TYR A 226       5.308   9.219  -7.013  1.00 19.81           C
ATOM   2007  CE1 TYR A 226       6.166  10.977  -9.041  1.00 20.94           C
ATOM   2008  CE2 TYR A 226       6.513   8.979  -7.690  1.00 22.35           C
ATOM   2009  CZ  TYR A 226       6.919   9.828  -8.734  1.00 20.61           C
ATOM   2010  OH  TYR A 226       8.011   9.504  -9.479  1.00 24.39           O
ATOM   2011  H   TYR A 226       0.577  10.776  -6.786  1.00  0.00           H
ATOM   2012  HA  TYR A 226       2.310   9.406  -8.534  1.00  0.00           H
ATOM   2013  HB2 TYR A 226       2.766  11.464  -6.998  1.00  0.00           H
ATOM   2014  HB3 TYR A 226       3.119  10.321  -5.733  1.00  0.00           H
ATOM   2015  HD1 TYR A 226       4.343  12.061  -8.666  1.00  0.00           H
ATOM   2016  HD2 TYR A 226       4.993   8.530  -6.242  1.00  0.00           H
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ATOM   2017  HE1 TYR A 226       6.491  11.641  -9.830  1.00  0.00           H
ATOM   2018  HE2 TYR A 226       7.116   8.126  -7.424  1.00  0.00           H
ATOM   2019  HH  TYR A 226       8.012   8.588  -9.746  1.00  0.00           H
ATOM   2020  N   GLN A 227       1.682   7.795  -5.693  1.00 19.29           N
ATOM   2021  CA  GLN A 227       1.670   6.506  -5.006  1.00 19.24           C
ATOM   2022  C   GLN A 227       0.692   5.516  -5.654  1.00 21.01           C
ATOM   2023  O   GLN A 227       0.733   4.334  -5.327  1.00 21.37           O
ATOM   2024  CB  GLN A 227       1.242   6.702  -3.536  1.00 19.57           C
ATOM   2025  CG  GLN A 227       2.266   7.437  -2.653  1.00 16.42           C
ATOM   2026  CD  GLN A 227       3.425   6.561  -2.181  1.00 20.53           C
ATOM   2027  OE1 GLN A 227       4.005   5.795  -2.944  1.00 21.69           O
ATOM   2028  NE2 GLN A 227       3.764   6.641  -0.902  1.00 19.47           N
ATOM   2029  H   GLN A 227       1.218   8.571  -5.215  1.00  0.00           H
ATOM   2030  HA  GLN A 227       2.663   6.059  -5.061  1.00  0.00           H
ATOM   2031  HB2 GLN A 227       0.292   7.237  -3.499  1.00  0.00           H
ATOM   2032  HB3 GLN A 227       1.034   5.734  -3.077  1.00  0.00           H
ATOM   2033  HG2 GLN A 227       2.659   8.318  -3.161  1.00  0.00           H
ATOM   2034  HG3 GLN A 227       1.741   7.796  -1.773  1.00  0.00           H
ATOM   2035 HE21 GLN A 227       3.258   7.257  -0.283  1.00  0.00           H
ATOM   2036 HE22 GLN A 227       4.516   6.067  -0.551  1.00  0.00           H
ATOM   2037  N   SER A 228      -0.163   5.941  -6.587  1.00 19.57           N
ATOM   2038  CA  SER A 228      -0.874   5.020  -7.461  1.00 20.36           C
ATOM   2039  C   SER A 228       0.011   4.708  -8.679  1.00 20.27           C
ATOM   2040  O   SER A 228       0.210   3.536  -8.995  1.00 23.07           O
ATOM   2041  CB  SER A 228      -2.182   5.657  -7.956  1.00 16.62           C
ATOM   2042  OG  SER A 228      -3.083   5.804  -6.883  1.00 18.44           O
ATOM   2043  H   SER A 228      -0.211   6.930  -6.790  1.00  0.00           H
ATOM   2044  HA  SER A 228      -1.120   4.085  -6.954  1.00  0.00           H
ATOM   2045  HB2 SER A 228      -2.017   6.631  -8.412  1.00  0.00           H
ATOM   2046  HB3 SER A 228      -2.648   5.019  -8.706  1.00  0.00           H
ATOM   2047  HG  SER A 228      -2.805   6.580  -6.391  1.00  0.00           H
ATOM   2048  N   GLY A 229       0.536   5.730  -9.364  1.00 19.50           N
ATOM   2049  CA  GLY A 229       0.903   5.614 -10.768  1.00 20.20           C
ATOM   2050  C   GLY A 229       2.341   5.908 -11.169  1.00 19.94           C
ATOM   2051  O   GLY A 229       2.660   5.729 -12.345  1.00 17.43           O
ATOM   2052  H   GLY A 229       0.341   6.675  -9.039  1.00  0.00           H
ATOM   2053  HA2 GLY A 229       0.574   4.677 -11.213  1.00  0.00           H
ATOM   2054  HA3 GLY A 229       0.338   6.387 -11.266  1.00  0.00           H
ATOM   2055  N   PHE A 230       3.187   6.416 -10.265  1.00 19.02           N
ATOM   2056  CA  PHE A 230       4.471   7.017 -10.641  1.00 20.56           C
ATOM   2057  C   PHE A 230       5.665   6.516  -9.821  1.00 21.40           C
ATOM   2058  O   PHE A 230       6.805   6.812 -10.177  1.00 24.25           O
ATOM   2059  CB  PHE A 230       4.376   8.553 -10.683  1.00 21.77           C
ATOM   2060  CG  PHE A 230       3.478   9.153 -11.752  1.00 22.64           C
ATOM   2061  CD1 PHE A 230       4.051   9.616 -12.954  1.00 24.17           C
ATOM   2062  CD2 PHE A 230       2.084   9.264 -11.556  1.00 24.47           C
ATOM   2063  CE1 PHE A 230       3.237  10.179 -13.953  1.00 25.11           C
ATOM   2064  CE2 PHE A 230       1.269   9.804 -12.570  1.00 23.94           C
ATOM   2065  CZ  PHE A 230       1.846  10.253 -13.771  1.00 26.08           C
ATOM   2066  H   PHE A 230       2.855   6.570  -9.318  1.00  0.00           H
ATOM   2067  HA  PHE A 230       4.727   6.721 -11.654  1.00  0.00           H
ATOM   2068  HB2 PHE A 230       4.070   8.922  -9.711  1.00  0.00           H
ATOM   2069  HB3 PHE A 230       5.374   8.961 -10.849  1.00  0.00           H
ATOM   2070  HD1 PHE A 230       5.116   9.539 -13.123  1.00  0.00           H
ATOM   2071  HD2 PHE A 230       1.624   8.911 -10.646  1.00  0.00           H
ATOM   2072  HE1 PHE A 230       3.681  10.533 -14.872  1.00  0.00           H
ATOM   2073  HE2 PHE A 230       0.197   9.865 -12.445  1.00  0.00           H
ATOM   2074  HZ  PHE A 230       1.217  10.635 -14.560  1.00  0.00           H
ATOM   2075  N   PHE A 231       5.443   5.764  -8.734  1.00 19.26           N
ATOM   2076  CA  PHE A 231       6.531   5.221  -7.912  1.00 21.27           C
ATOM   2077  C   PHE A 231       7.188   3.994  -8.574  1.00 20.88           C
ATOM   2078  O   PHE A 231       8.382   3.786  -8.403  1.00 21.71           O
ATOM   2079  CB  PHE A 231       6.028   4.917  -6.482  1.00 18.61           C
ATOM   2080  CG  PHE A 231       5.113   3.720  -6.274  1.00 18.09           C
ATOM   2081  CD1 PHE A 231       5.610   2.571  -5.624  1.00 16.51           C
ATOM   2082  CD2 PHE A 231       3.767   3.752  -6.695  1.00 15.34           C
ATOM   2083  CE1 PHE A 231       4.772   1.468  -5.389  1.00 15.19           C
ATOM   2084  CE2 PHE A 231       2.932   2.640  -6.468  1.00 15.58           C
ATOM   2085  CZ  PHE A 231       3.428   1.508  -5.799  1.00 17.00           C
ATOM   2086  H   PHE A 231       4.490   5.576  -8.463  1.00  0.00           H
ATOM   2087  HA  PHE A 231       7.316   5.974  -7.823  1.00  0.00           H
ATOM   2088  HB2 PHE A 231       6.904   4.783  -5.844  1.00  0.00           H
ATOM   2089  HB3 PHE A 231       5.526   5.798  -6.080  1.00  0.00           H
ATOM   2090  HD1 PHE A 231       6.638   2.527  -5.297  1.00  0.00           H
ATOM   2091  HD2 PHE A 231       3.360   4.620  -7.190  1.00  0.00           H
ATOM   2092  HE1 PHE A 231       5.165   0.589  -4.900  1.00  0.00           H
ATOM   2093  HE2 PHE A 231       1.910   2.650  -6.815  1.00  0.00           H
ATOM   2094  HZ  PHE A 231       2.779   0.666  -5.614  1.00  0.00           H
ATOM   2095  N   TRP A 232       6.448   3.263  -9.419  1.00 20.84           N
ATOM   2096  CA  TRP A 232       6.928   2.189 -10.300  1.00 21.29           C
ATOM   2097  C   TRP A 232       7.362   2.752 -11.671  1.00 22.43           C
ATOM   2098  O   TRP A 232       7.304   2.063 -12.687  1.00 24.91           O
ATOM   2099  CB  TRP A 232       5.781   1.170 -10.499  1.00 20.84           C
ATOM   2100  CG  TRP A 232       4.431   1.730 -10.842  1.00 22.17           C
ATOM   2101  CD1 TRP A 232       3.511   2.091  -9.923  1.00 22.45           C
ATOM   2102  CD2 TRP A 232       3.812   1.978 -12.144  1.00 25.05           C
ATOM   2103  NE1 TRP A 232       2.377   2.549 -10.553  1.00 24.51           N
ATOM   2104  CE3 TRP A 232       4.219   1.824 -13.491  1.00 25.82           C
ATOM   2105  CE2 TRP A 232       2.487   2.466 -11.928  1.00 26.33           C
ATOM   2106  CZ3 TRP A 232       3.362   2.145 -14.563  1.00 27.28           C
ATOM   2107  CZ2 TRP A 232       1.610   2.758 -12.990  1.00 26.19           C
ATOM   2108  CH2 TRP A 232       2.056   2.608 -14.314  1.00 25.91           C
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ATOM   2109  H   TRP A 232       5.483   3.528  -9.537  1.00  0.00           H
ATOM   2110  HA  TRP A 232       7.794   1.685  -9.866  1.00  0.00           H
ATOM   2111  HB2 TRP A 232       6.047   0.415 -11.240  1.00  0.00           H
ATOM   2112  HB3 TRP A 232       5.671   0.610  -9.570  1.00  0.00           H
ATOM   2113  HD1 TRP A 232       3.663   1.996  -8.860  1.00  0.00           H
ATOM   2114  HE1 TRP A 232       1.551   2.846 -10.029  1.00  0.00           H
ATOM   2115  HE3 TRP A 232       5.204   1.444 -13.705  1.00  0.00           H
ATOM   2116  HZ3 TRP A 232       3.706   2.022 -15.579  1.00  0.00           H
ATOM   2117  HZ2 TRP A 232       0.604   3.100 -12.804  1.00  0.00           H
ATOM   2118  HH2 TRP A 232       1.397   2.843 -15.136  1.00  0.00           H
ATOM   2119  N   ARG A 233       7.770   4.023 -11.701  1.00 22.95           N
ATOM   2120  CA  ARG A 233       8.476   4.674 -12.794  1.00 23.34           C
ATOM   2121  C   ARG A 233       9.360   5.798 -12.237  1.00 23.57           C
ATOM   2122  O   ARG A 233       9.433   6.876 -12.829  1.00 24.36           O
ATOM   2123  CB  ARG A 233       7.556   5.023 -13.990  1.00 23.72           C
ATOM   2124  CG  ARG A 233       6.264   5.773 -13.633  1.00 23.64           C
ATOM   2125  CD  ARG A 233       5.473   6.191 -14.881  1.00 22.56           C
ATOM   2126  NE  ARG A 233       4.056   6.458 -14.586  1.00 23.96           N
ATOM   2127  CZ  ARG A 233       3.203   7.206 -15.299  1.00 23.37           C
ATOM   2128  NH1 ARG A 233       3.625   8.013 -16.274  1.00 24.58           N
ATOM   2129  NH2 ARG A 233       1.904   7.113 -15.029  1.00 27.02           N1+
ATOM   2130  H   ARG A 233       7.819   4.497 -10.811  1.00  0.00           H
ATOM   2131  HA  ARG A 233       9.195   3.957 -13.186  1.00  0.00           H
ATOM   2132  HB2 ARG A 233       8.125   5.602 -14.719  1.00  0.00           H
ATOM   2133  HB3 ARG A 233       7.292   4.097 -14.501  1.00  0.00           H
ATOM   2134  HG2 ARG A 233       5.650   5.134 -12.996  1.00  0.00           H
ATOM   2135  HG3 ARG A 233       6.518   6.662 -13.055  1.00  0.00           H
ATOM   2136  HD2 ARG A 233       5.952   7.049 -15.345  1.00  0.00           H
ATOM   2137  HD3 ARG A 233       5.493   5.390 -15.621  1.00  0.00           H
ATOM   2138  HE  ARG A 233       3.670   5.959 -13.776  1.00  0.00           H
ATOM   2139 HH11 ARG A 233       4.584   8.392 -16.249  1.00  0.00           H
ATOM   2140 HH12 ARG A 233       2.953   8.504 -16.847  1.00  0.00           H
ATOM   2141 HH21 ARG A 233       1.579   6.571 -14.242  1.00  0.00           H
ATOM   2142 HH22 ARG A 233       1.164   7.638 -15.552  1.00  0.00           H
ATOM   2143  N   HIS A 234      10.000   5.560 -11.083  1.00 23.15           N
ATOM   2144  CA  HIS A 234      10.979   6.449 -10.455  1.00 24.03           C
ATOM   2145  C   HIS A 234      12.338   5.742 -10.494  1.00 25.68           C
ATOM   2146  O   HIS A 234      12.421   4.542 -10.226  1.00 24.39           O
ATOM   2147  CB  HIS A 234      10.580   6.730  -8.993  1.00 21.56           C
ATOM   2148  CG  HIS A 234      11.458   7.762  -8.332  1.00 23.59           C
ATOM   2149  ND1 HIS A 234      12.653   7.440  -7.674  1.00 24.32           N
ATOM   2150  CD2 HIS A 234      11.280   9.127  -8.286  1.00 21.93           C
ATOM   2151  CE1 HIS A 234      13.153   8.610  -7.292  1.00 24.17           C
ATOM   2152  NE2 HIS A 234      12.372   9.641  -7.610  1.00 23.23           N
ATOM   2153  H   HIS A 234      10.004   4.601 -10.749  1.00  0.00           H
ATOM   2154  HA  HIS A 234      11.052   7.398 -10.992  1.00  0.00           H
ATOM   2155  HB2 HIS A 234       9.556   7.100  -8.965  1.00  0.00           H
ATOM   2156  HB3 HIS A 234      10.592   5.816  -8.397  1.00  0.00           H
ATOM   2157  HD2 HIS A 234      10.504   9.751  -8.704  1.00  0.00           H
ATOM   2158  HE1 HIS A 234      14.095   8.725  -6.776  1.00  0.00           H
ATOM   2159  HE2 HIS A 234      12.583  10.625  -7.445  1.00  0.00           H
ATOM   2160  N   GLU A 235      13.404   6.481 -10.800  1.00 26.94           N
ATOM   2161  CA  GLU A 235      14.766   6.020 -11.038  1.00 29.85           C
ATOM   2162  C   GLU A 235      15.390   5.211  -9.884  1.00 27.43           C
ATOM   2163  O   GLU A 235      16.187   4.305 -10.137  1.00 27.58           O
ATOM   2164  CB  GLU A 235      15.637   7.238 -11.410  1.00 32.61           C
ATOM   2165  CG  GLU A 235      15.769   8.355 -10.342  1.00 40.85           C
ATOM   2166  CD  GLU A 235      14.656   9.396 -10.340  1.00 45.22           C
ATOM   2167  OE1 GLU A 235      13.568   9.157 -10.901  1.00 46.95           O
ATOM   2168  OE2 GLU A 235      14.919  10.486  -9.785  1.00 48.79           O1-
ATOM   2169  H   GLU A 235      13.278   7.497 -10.907  1.00  0.00           H
ATOM   2170  HA  GLU A 235      14.727   5.354 -11.902  1.00  0.00           H
ATOM   2171  HB2 GLU A 235      16.635   6.871 -11.646  1.00  0.00           H
ATOM   2172  HB3 GLU A 235      15.272   7.673 -12.341  1.00  0.00           H
ATOM   2173  HG2 GLU A 235      15.869   7.947  -9.338  1.00  0.00           H
ATOM   2174  HG3 GLU A 235      16.697   8.894 -10.526  1.00  0.00           H
ATOM   2175  N   LEU A 236      15.013   5.495  -8.630  1.00 26.47           N
ATOM   2176  CA  LEU A 236      15.485   4.751  -7.461  1.00 26.49           C
ATOM   2177  C   LEU A 236      14.642   3.487  -7.218  1.00 26.64           C
ATOM   2178  O   LEU A 236      15.006   2.690  -6.360  1.00 25.30           O
ATOM   2179  CB  LEU A 236      15.395   5.628  -6.191  1.00 24.84           C
ATOM   2180  CG  LEU A 236      16.322   6.860  -6.143  1.00 24.56           C
ATOM   2181  CD1 LEU A 236      16.131   7.621  -4.825  1.00 23.65           C
ATOM   2182  CD2 LEU A 236      17.799   6.481  -6.290  1.00 22.45           C
ATOM   2183  H   LEU A 236      14.316   6.220  -8.491  1.00  0.00           H
ATOM   2184  HA  LEU A 236      16.513   4.416  -7.602  1.00  0.00           H
ATOM   2185  HB2 LEU A 236      14.361   5.941  -6.038  1.00  0.00           H
ATOM   2186  HB3 LEU A 236      15.650   5.004  -5.333  1.00  0.00           H
ATOM   2187  HG  LEU A 236      16.064   7.530  -6.963  1.00  0.00           H
ATOM   2188 HD11 LEU A 236      16.752   8.516  -4.807  1.00  0.00           H
ATOM   2189 HD12 LEU A 236      15.095   7.924  -4.687  1.00  0.00           H
ATOM   2190 HD13 LEU A 236      16.415   7.014  -3.965  1.00  0.00           H
ATOM   2191 HD21 LEU A 236      18.457   7.334  -6.121  1.00  0.00           H
ATOM   2192 HD22 LEU A 236      18.066   5.701  -5.581  1.00  0.00           H
ATOM   2193 HD23 LEU A 236      18.011   6.105  -7.287  1.00  0.00           H
ATOM   2194  N   LEU A 237      13.542   3.280  -7.956  1.00 25.05           N
ATOM   2195  CA  LEU A 237      12.659   2.126  -7.826  1.00 27.46           C
ATOM   2196  C   LEU A 237      12.685   1.234  -9.070  1.00 27.75           C
ATOM   2197  O   LEU A 237      12.450   0.035  -8.925  1.00 28.17           O
ATOM   2198  CB  LEU A 237      11.229   2.561  -7.433  1.00 25.77           C
ATOM   2199  CG  LEU A 237      10.803   2.016  -6.052  1.00 26.56           C
ATOM   2200  CD1 LEU A 237      11.622   2.628  -4.909  1.00 26.59           C
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ATOM   2201  CD2 LEU A 237       9.307   2.221  -5.800  1.00 27.15           C
ATOM   2202  H   LEU A 237      13.301   3.966  -8.666  1.00  0.00           H
ATOM   2203  HA  LEU A 237      13.036   1.469  -7.044  1.00  0.00           H
ATOM   2204  HB2 LEU A 237      11.131   3.647  -7.450  1.00  0.00           H
ATOM   2205  HB3 LEU A 237      10.519   2.206  -8.184  1.00  0.00           H
ATOM   2206  HG  LEU A 237      10.986   0.941  -6.048  1.00  0.00           H
ATOM   2207 HD11 LEU A 237      11.351   2.188  -3.954  1.00  0.00           H
ATOM   2208 HD12 LEU A 237      12.689   2.447  -5.032  1.00  0.00           H
ATOM   2209 HD13 LEU A 237      11.471   3.706  -4.846  1.00  0.00           H
ATOM   2210 HD21 LEU A 237       8.992   1.743  -4.872  1.00  0.00           H
ATOM   2211 HD22 LEU A 237       9.060   3.282  -5.740  1.00  0.00           H
ATOM   2212 HD23 LEU A 237       8.715   1.794  -6.609  1.00  0.00           H
ATOM   2213  N   GLU A 238      13.066   1.736 -10.255  1.00 28.09           N
ATOM   2214  CA  GLU A 238      13.338   0.915 -11.452  1.00 29.19           C
ATOM   2215  C   GLU A 238      14.638   0.099 -11.301  1.00 29.11           C
ATOM   2216  O   GLU A 238      14.857  -0.889 -12.005  1.00 28.86           O
ATOM   2217  CB  GLU A 238      13.370   1.792 -12.727  1.00 32.53           C
ATOM   2218  CG  GLU A 238      12.075   2.592 -13.027  1.00 39.05           C
ATOM   2219  CD  GLU A 238      10.796   1.825 -12.723  1.00 42.35           C
ATOM   2220  OE1 GLU A 238      10.322   1.061 -13.586  1.00 44.53           O
ATOM   2221  OE2 GLU A 238      10.334   1.896 -11.563  1.00 42.36           O1-
ATOM   2222  H   GLU A 238      13.055   2.747 -10.361  1.00  0.00           H
ATOM   2223  HA  GLU A 238      12.564   0.161 -11.569  1.00  0.00           H
ATOM   2224  HB2 GLU A 238      14.210   2.485 -12.676  1.00  0.00           H
ATOM   2225  HB3 GLU A 238      13.568   1.142 -13.581  1.00  0.00           H
ATOM   2226  HG2 GLU A 238      12.056   3.512 -12.451  1.00  0.00           H
ATOM   2227  HG3 GLU A 238      12.046   2.899 -14.071  1.00  0.00           H
ATOM   2228  N   GLU A 239      15.443   0.447 -10.293  1.00 30.17           N
ATOM   2229  CA  GLU A 239      16.506  -0.351  -9.700  1.00 30.22           C
ATOM   2230  C   GLU A 239      15.963  -1.684  -9.110  1.00 30.36           C
ATOM   2231  O   GLU A 239      16.658  -2.703  -9.121  1.00 29.89           O
ATOM   2232  CB  GLU A 239      17.192   0.569  -8.658  1.00 31.52           C
ATOM   2233  CG  GLU A 239      18.510   0.058  -8.041  1.00 34.59           C
ATOM   2234  CD  GLU A 239      19.191   1.108  -7.159  1.00 35.31           C
ATOM   2235  OE1 GLU A 239      19.250   2.291  -7.555  1.00 38.54           O
ATOM   2236  OE2 GLU A 239      19.664   0.725  -6.063  1.00 36.01           O1-
ATOM   2237  H   GLU A 239      15.190   1.297  -9.809  1.00  0.00           H
ATOM   2238  HA  GLU A 239      17.223  -0.592 -10.487  1.00  0.00           H
ATOM   2239  HB2 GLU A 239      17.399   1.528  -9.135  1.00  0.00           H
ATOM   2240  HB3 GLU A 239      16.495   0.796  -7.850  1.00  0.00           H
ATOM   2241  HG2 GLU A 239      18.331  -0.843  -7.455  1.00  0.00           H
ATOM   2242  HG3 GLU A 239      19.212  -0.211  -8.830  1.00  0.00           H
ATOM   2243  N   TYR A 240      14.687  -1.736  -8.692  1.00 29.40           N
ATOM   2244  CA  TYR A 240      14.068  -2.812  -7.916  1.00 26.76           C
ATOM   2245  C   TYR A 240      12.839  -3.412  -8.618  1.00 26.94           C
ATOM   2246  O   TYR A 240      12.177  -2.779  -9.437  1.00 26.38           O
ATOM   2247  CB  TYR A 240      13.750  -2.303  -6.495  1.00 25.17           C
ATOM   2248  CG  TYR A 240      14.994  -1.846  -5.756  1.00 22.76           C
ATOM   2249  CD1 TYR A 240      15.936  -2.788  -5.299  1.00 23.97           C
ATOM   2250  CD2 TYR A 240      15.259  -0.472  -5.598  1.00 23.51           C
ATOM   2251  CE1 TYR A 240      17.142  -2.368  -4.716  1.00 21.82           C
ATOM   2252  CE2 TYR A 240      16.474  -0.046  -5.033  1.00 21.33           C
ATOM   2253  CZ  TYR A 240      17.420  -0.996  -4.610  1.00 21.91           C
ATOM   2254  OH  TYR A 240      18.636  -0.593  -4.165  1.00 23.59           O
ATOM   2255  H   TYR A 240      14.095  -0.924  -8.847  1.00  0.00           H
ATOM   2256  HA  TYR A 240      14.781  -3.626  -7.808  1.00  0.00           H
ATOM   2257  HB2 TYR A 240      13.025  -1.488  -6.536  1.00  0.00           H
ATOM   2258  HB3 TYR A 240      13.279  -3.091  -5.907  1.00  0.00           H
ATOM   2259  HD1 TYR A 240      15.759  -3.838  -5.421  1.00  0.00           H
ATOM   2260  HD2 TYR A 240      14.551   0.265  -5.938  1.00  0.00           H
ATOM   2261  HE1 TYR A 240      17.873  -3.093  -4.390  1.00  0.00           H
ATOM   2262  HE2 TYR A 240      16.689   1.012  -4.963  1.00  0.00           H
ATOM   2263  HH  TYR A 240      19.047  -0.083  -4.889  1.00  0.00           H
ATOM   2264  N   ASP A 241      12.547  -4.674  -8.306  1.00 27.29           N
ATOM   2265  CA  ASP A 241      11.426  -5.470  -8.813  1.00 26.93           C
ATOM   2266  C   ASP A 241      10.331  -5.589  -7.748  1.00 26.42           C
ATOM   2267  O   ASP A 241       9.190  -5.901  -8.080  1.00 27.05           O
ATOM   2268  CB  ASP A 241      11.904  -6.905  -9.127  1.00 27.77           C
ATOM   2269  CG  ASP A 241      12.788  -6.965 -10.357  1.00 27.65           C
ATOM   2270  OD1 ASP A 241      12.256  -7.339 -11.420  1.00 25.77           O
ATOM   2271  OD2 ASP A 241      13.980  -6.605 -10.229  1.00 26.65           O1-
ATOM   2272  H   ASP A 241      13.114  -5.140  -7.599  1.00  0.00           H
ATOM   2273  HA  ASP A 241      10.989  -5.030  -9.711  1.00  0.00           H
ATOM   2274  HB2 ASP A 241      12.466  -7.324  -8.294  1.00  0.00           H
ATOM   2275  HB3 ASP A 241      11.053  -7.569  -9.294  1.00  0.00           H
ATOM   2276  N   TRP A 242      10.658  -5.349  -6.474  1.00 24.04           N
ATOM   2277  CA  TRP A 242       9.761  -5.387  -5.325  1.00 24.23           C
ATOM   2278  C   TRP A 242      10.010  -4.169  -4.434  1.00 23.82           C
ATOM   2279  O   TRP A 242      11.064  -3.538  -4.514  1.00 22.71           O
ATOM   2280  CB  TRP A 242       9.913  -6.693  -4.516  1.00 23.96           C
ATOM   2281  CG  TRP A 242       9.683  -8.037  -5.144  1.00 23.75           C
ATOM   2282  CD1 TRP A 242      10.395  -8.574  -6.158  1.00 26.08           C
ATOM   2283  CD2 TRP A 242       8.765  -9.088  -4.716  1.00 25.48           C
ATOM   2284  NE1 TRP A 242       9.999  -9.877  -6.377  1.00 23.93           N
ATOM   2285  CE3 TRP A 242       7.745  -9.181  -3.739  1.00 25.82           C
ATOM   2286  CE2 TRP A 242       9.067 -10.275  -5.449  1.00 25.93           C
ATOM   2287  CZ3 TRP A 242       7.119 -10.409  -3.452  1.00 26.34           C
ATOM   2288  CZ2 TRP A 242       8.466 -11.508  -5.160  1.00 26.43           C
ATOM   2289  CH2 TRP A 242       7.504 -11.575  -4.139  1.00 24.99           C
ATOM   2290  H   TRP A 242      11.609  -5.068  -6.275  1.00  0.00           H
ATOM   2291  HA  TRP A 242       8.737  -5.286  -5.672  1.00  0.00           H
ATOM   2292  HB2 TRP A 242      10.917  -6.721  -4.103  1.00  0.00           H
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ATOM   2293  HB3 TRP A 242      9.255  -6.642  -3.651  1.00  0.00          H
ATOM   2294  HD1 TRP A 242     11.199  -8.062  -6.662  1.00  0.00          H
ATOM   2295  HE1 TRP A 242     10.453 -10.486  -7.050  1.00  0.00          H
ATOM   2296  HE3 TRP A 242      7.468  -8.303  -3.177  1.00  0.00          H
ATOM   2297  HZ3 TRP A 242      6.349 -10.459  -2.695  1.00  0.00          H
ATOM   2298  HZ2 TRP A 242      8.728 -12.393  -5.721  1.00  0.00          H
ATOM   2299  HH2 TRP A 242      7.034 -12.520  -3.913  1.00  0.00          H
ATOM   2300  N   TYR A 243      9.050  -3.870  -3.560  1.00 22.84          N
ATOM   2301  CA  TYR A 243      9.068  -2.769  -2.614  1.00 21.90          C
ATOM   2302  C   TYR A 243      8.454  -3.215  -1.287  1.00 22.39          C
ATOM   2303  O   TYR A 243      7.452  -3.935  -1.277  1.00 22.11          O
ATOM   2304  CB  TYR A 243      8.374  -1.530  -3.217  1.00 22.85          C
ATOM   2305  CG  TYR A 243      6.849  -1.577  -3.322  1.00 20.92          C
ATOM   2306  CD1 TYR A 243      6.218  -2.395  -4.281  1.00 18.97          C
ATOM   2307  CD2 TYR A 243      6.049  -0.810  -2.449  1.00 20.38          C
ATOM   2308  CE1 TYR A 243      4.820  -2.398  -4.415  1.00 18.11          C
ATOM   2309  CE2 TYR A 243      4.645  -0.827  -2.564  1.00 20.28          C
ATOM   2310  CZ  TYR A 243      4.032  -1.608  -3.559  1.00 19.55          C
ATOM   2311  OH  TYR A 243      2.679  -1.596  -3.702  1.00 19.44          O
ATOM   2312  H   TYR A 243      8.211  -4.454  -3.532  1.00  0.00          H
ATOM   2313  HA  TYR A 243     10.108  -2.501  -2.421  1.00  0.00          H
ATOM   2314  HB2 TYR A 243      8.654  -0.666  -2.619  1.00  0.00          H
ATOM   2315  HB3 TYR A 243      8.786  -1.327  -4.204  1.00  0.00          H
ATOM   2316  HD1 TYR A 243      6.792  -3.038  -4.924  1.00  0.00          H
ATOM   2317  HD2 TYR A 243      6.504  -0.209  -1.680  1.00  0.00          H
ATOM   2318  HE1 TYR A 243      4.361  -3.027  -5.166  1.00  0.00          H
ATOM   2319  HE2 TYR A 243      4.036  -0.231  -1.900  1.00  0.00          H
ATOM   2320  HH  TYR A 243      2.224  -1.192  -2.934  1.00  0.00          H
ATOM   2321  N   TRP A 244      9.036  -2.777  -0.167  1.00 20.85          N
ATOM   2322  CA  TRP A 244      8.377  -2.730   1.129  1.00 20.48          C
ATOM   2323  C   TRP A 244      8.043  -1.254   1.350  1.00 21.37          C
ATOM   2324  O   TRP A 244      8.943  -0.456   1.609  1.00 18.99          O
ATOM   2325  CB  TRP A 244      9.325  -3.218   2.240  1.00 20.36          C
ATOM   2326  CG  TRP A 244      8.702  -3.590   3.550  1.00 22.78          C
ATOM   2327  CD1 TRP A 244      7.512  -3.177   4.050  1.00 24.36          C
ATOM   2328  CD2 TRP A 244      9.233  -4.532   4.521  1.00 23.95          C
ATOM   2329  NE1 TRP A 244      7.282  -3.796   5.260  1.00 23.22          N
ATOM   2330  CE3 TRP A 244     10.400  -5.326   4.576  1.00 24.80          C
ATOM   2331  CE2 TRP A 244      8.309  -4.649   5.601  1.00 24.71          C
ATOM   2332  CZ3 TRP A 244     10.629  -6.207   5.646  1.00 26.03          C
ATOM   2333  CZ2 TRP A 244      8.528  -5.520   6.681  1.00 26.18          C
ATOM   2334  CH2 TRP A 244      9.687  -6.315   6.687  1.00 24.87          C
ATOM   2335  H   TRP A 244      9.943  -2.322  -0.244  1.00  0.00          H
ATOM   2336  HA  TRP A 244      7.498  -3.363   1.142  1.00  0.00          H
ATOM   2337  HB2 TRP A 244      9.836  -4.111   1.895  1.00  0.00          H
ATOM   2338  HB3 TRP A 244     10.121  -2.517   2.460  1.00  0.00          H
ATOM   2339  HD1 TRP A 244      6.832  -2.493   3.563  1.00  0.00          H
ATOM   2340  HE1 TRP A 244      6.398  -3.709   5.750  1.00  0.00          H
ATOM   2341  HE3 TRP A 244     11.125  -5.258   3.779  1.00  0.00          H
ATOM   2342  HZ3 TRP A 244     11.530  -6.802   5.658  1.00  0.00          H
ATOM   2343  HZ2 TRP A 244      7.807  -5.606   7.479  1.00  0.00          H
ATOM   2344  HH2 TRP A 244      9.860  -7.009   7.491  1.00  0.00          H
ATOM   2345  N   ARG A 245      6.773  -0.862   1.231  1.00 21.39          N
ATOM   2346  CA  ARG A 245      6.355   0.493   1.568  1.00 21.27          C
ATOM   2347  C   ARG A 245      6.295   0.621   3.095  1.00 18.90          C
ATOM   2348  O   ARG A 245      5.479  -0.034   3.744  1.00 20.72          O
ATOM   2349  CB  ARG A 245      4.997   0.833   0.928  1.00 22.80          C
ATOM   2350  CG  ARG A 245      4.501   2.249   1.285  1.00 24.05          C
ATOM   2351  CD  ARG A 245      3.540   2.812   0.248  1.00 22.81          C
ATOM   2352  NE  ARG A 245      2.820   3.910   0.876  1.00 24.70          N
ATOM   2353  CZ  ARG A 245      1.585   4.277   0.488  1.00 24.50          C
ATOM   2354  NH1 ARG A 245      1.175   3.945  -0.729  1.00 21.87          N
ATOM   2355  NH2 ARG A 245      0.827   4.976   1.322  1.00 25.57          N1+
ATOM   2356  H   ARG A 245      6.071  -1.578   1.042  1.00  0.00          H
ATOM   2357  HA  ARG A 245      7.082   1.200   1.174  1.00  0.00          H
ATOM   2358  HB2 ARG A 245      5.116   0.767  -0.151  1.00  0.00          H
ATOM   2359  HB3 ARG A 245      4.238   0.097   1.198  1.00  0.00          H
ATOM   2360  HG2 ARG A 245      4.034   2.222   2.274  1.00  0.00          H
ATOM   2361  HG3 ARG A 245      5.354   2.930   1.363  1.00  0.00          H
ATOM   2362  HD2 ARG A 245      4.113   3.142  -0.623  1.00  0.00          H
ATOM   2363  HD3 ARG A 245      2.845   2.024  -0.048  1.00  0.00          H
ATOM   2364  HE  ARG A 245      3.127   4.238   1.778  1.00  0.00          H
ATOM   2365 HH11 ARG A 245      1.829   3.609  -1.435  1.00  0.00          H
ATOM   2366 HH12 ARG A 245      0.201   4.153  -1.030  1.00  0.00          H
ATOM   2367 HH21 ARG A 245      1.073   5.058   2.307  1.00  0.00          H
ATOM   2368 HH22 ARG A 245     -0.105   5.308   1.081  1.00  0.00          H
ATOM   2369  N   VAL A 246      7.167   1.471   3.641  1.00 18.37          N
ATOM   2370  CA  VAL A 246      7.214   1.843   5.043  1.00 17.88          C
ATOM   2371  C   VAL A 246      6.904   3.346   5.091  1.00 17.66          C
ATOM   2372  O   VAL A 246      7.564   4.160   4.437  1.00 16.95          O
ATOM   2373  CB  VAL A 246      8.603   1.498   5.651  1.00 20.27          C
ATOM   2374  CG1 VAL A 246      8.653   1.813   7.159  1.00 18.44          C
ATOM   2375  CG2 VAL A 246      9.005   0.027   5.418  1.00 22.05          C
ATOM   2376  H   VAL A 246      7.811   1.954   3.015  1.00  0.00          H
ATOM   2377  HA  VAL A 246      6.447   1.302   5.601  1.00  0.00          H
ATOM   2378  HB  VAL A 246      9.359   2.111   5.158  1.00  0.00          H
ATOM   2379 HG11 VAL A 246      9.604   1.509   7.596  1.00  0.00          H
ATOM   2380 HG12 VAL A 246      8.538   2.881   7.347  1.00  0.00          H
ATOM   2381 HG13 VAL A 246      7.865   1.289   7.700  1.00  0.00          H
ATOM   2382 HG21 VAL A 246      9.965  -0.201   5.882  1.00  0.00          H
ATOM   2383 HG22 VAL A 246      8.265  -0.662   5.826  1.00  0.00          H
ATOM   2384 HG23 VAL A 246      9.111  -0.199   4.357  1.00  0.00          H
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ATOM   2385  N   GLU A 247      5.880   3.717   5.858  1.00 18.37           N
ATOM   2386  CA  GLU A 247      5.462   5.097   6.088  1.00 17.71           C
ATOM   2387  C   GLU A 247      6.106   5.634   7.386  1.00 18.77           C
ATOM   2388  O   GLU A 247      6.644   4.854   8.184  1.00 19.80           O
ATOM   2389  CB  GLU A 247      3.918   5.085   6.234  1.00 17.17           C
ATOM   2390  CG  GLU A 247      3.226   5.363   4.895  1.00 16.44           C
ATOM   2391  CD  GLU A 247      1.848   6.002   4.989  1.00 20.59           C
ATOM   2392  OE1 GLU A 247      1.691   6.895   5.863  1.00 21.32           O
ATOM   2393  OE2 GLU A 247      1.017   5.661   4.117  1.00 23.91           O1-
ATOM   2394  H   GLU A 247      5.382   2.995   6.354  1.00  0.00           H
ATOM   2395  HA  GLU A 247      5.790   5.740   5.271  1.00  0.00           H
ATOM   2396  HB2 GLU A 247      3.567   4.128   6.625  1.00  0.00           H
ATOM   2397  HB3 GLU A 247      3.615   5.808   6.994  1.00  0.00           H
ATOM   2398  HG2 GLU A 247      3.814   6.088   4.330  1.00  0.00           H
ATOM   2399  HG3 GLU A 247      3.204   4.435   4.326  1.00  0.00           H
ATOM   2400  N   PRO A 248      6.050   6.961   7.635  1.00 19.92           N
ATOM   2401  CA  PRO A 248      6.492   7.555   8.899  1.00 20.59           C
ATOM   2402  C   PRO A 248      5.500   7.269  10.040  1.00 20.76           C
ATOM   2403  O   PRO A 248      4.303   7.113   9.796  1.00 20.31           O
ATOM   2404  CB  PRO A 248      6.605   9.057   8.608  1.00 22.82           C
ATOM   2405  CG  PRO A 248      5.617   9.307   7.480  1.00 21.16           C
ATOM   2406  CD  PRO A 248      5.560   7.990   6.713  1.00 20.35           C
ATOM   2407  HA  PRO A 248      7.464   7.151   9.157  1.00  0.00           H
ATOM   2408  HB2 PRO A 248      6.418   9.691   9.476  1.00  0.00           H
ATOM   2409  HB3 PRO A 248      7.609   9.283   8.252  1.00  0.00           H
ATOM   2410  HG2 PRO A 248      4.634   9.534   7.895  1.00  0.00           H
ATOM   2411  HG3 PRO A 248      5.901  10.139   6.839  1.00  0.00           H
ATOM   2412  HD2 PRO A 248      4.542   7.800   6.372  1.00  0.00           H
ATOM   2413  HD3 PRO A 248      6.208   8.037   5.836  1.00  0.00           H
ATOM   2414  N   ASP A 249      6.010   7.182  11.277  1.00 20.20           N
ATOM   2415  CA  ASP A 249      5.269   6.992  12.533  1.00 19.81           C
ATOM   2416  C   ASP A 249      4.821   5.536  12.753  1.00 20.04           C
ATOM   2417  O   ASP A 249      3.900   5.277  13.527  1.00 20.11           O
ATOM   2418  CB  ASP A 249      4.172   8.071  12.786  1.00  0.00           C
ATOM   2419  CG  ASP A 249      4.639   9.210  13.690  1.00  0.00           C
ATOM   2420  OD1 ASP A 249      4.994   9.062  14.858  1.00  0.00           O
ATOM   2421  OD2 ASP A 249      4.625  10.414  13.062  1.00  0.00           O
ATOM   2422  H   ASP A 249      7.014   7.255  11.384  1.00  0.00           H
ATOM   2423  HA  ASP A 249      6.024   7.110  13.312  1.00  0.00           H
ATOM   2424  HB2 ASP A 249      3.759   8.478  11.864  1.00  0.00           H
ATOM   2425  HB3 ASP A 249      3.315   7.644  13.303  1.00  0.00           H
ATOM   2426  HD2 ASP A 249      4.781  11.135  13.684  1.00  0.00           H
ATOM   2427  N   ILE A 250      5.461   4.575  12.076  1.00 19.14           N
ATOM   2428  CA  ILE A 250      5.124   3.155  12.121  1.00 20.37           C
ATOM   2429  C   ILE A 250      5.817   2.480  13.319  1.00 19.83           C
ATOM   2430  O   ILE A 250      6.845   2.938  13.830  1.00 20.11           O
ATOM   2431  CB  ILE A 250      5.480   2.507  10.736  1.00 21.38           C
ATOM   2432  CG1 ILE A 250      4.232   2.432   9.834  1.00 23.63           C
ATOM   2433  CG2 ILE A 250      6.148   1.112  10.750  1.00 22.17           C
ATOM   2434  CD1 ILE A 250      3.554   3.771   9.547  1.00 20.80           C
ATOM   2435  H   ILE A 250      6.285   4.833  11.543  1.00  0.00           H
ATOM   2436  HA  ILE A 250      4.052   3.064  12.289  1.00  0.00           H
ATOM   2437  HB  ILE A 250      6.190   3.149  10.222  1.00  0.00           H
ATOM   2438 HG12 ILE A 250      4.503   1.985   8.878  1.00  0.00           H
ATOM   2439 HG13 ILE A 250      3.497   1.769  10.291  1.00  0.00           H
ATOM   2440 HG21 ILE A 250      6.383   0.780   9.739  1.00  0.00           H
ATOM   2441 HG22 ILE A 250      7.090   1.110  11.298  1.00  0.00           H
ATOM   2442 HG23 ILE A 250      5.498   0.356  11.193  1.00  0.00           H
ATOM   2443 HD11 ILE A 250      2.765   3.637   8.809  1.00  0.00           H
ATOM   2444 HD12 ILE A 250      3.105   4.202  10.441  1.00  0.00           H
ATOM   2445 HD13 ILE A 250      4.255   4.500   9.155  1.00  0.00           H
ATOM   2446  N   LYS A 251      5.213   1.369  13.746  1.00 20.52           N
ATOM   2447  CA  LYS A 251      5.704   0.414  14.726  1.00 20.36           C
ATOM   2448  C   LYS A 251      5.610  -0.967  14.057  1.00 21.67           C
ATOM   2449  O   LYS A 251      4.599  -1.249  13.407  1.00 19.23           O
ATOM   2450  CB  LYS A 251      4.827   0.481  16.002  1.00 20.47           C
ATOM   2451  CG  LYS A 251      4.612   1.899  16.587  1.00 20.09           C
ATOM   2452  CD  LYS A 251      3.445   1.980  17.585  1.00 22.23           C
ATOM   2453  CE  LYS A 251      3.800   1.612  19.028  1.00 20.07           C
ATOM   2454  NZ  LYS A 251      2.580   1.354  19.814  1.00 21.10           N1+
ATOM   2455  H   LYS A 251      4.362   1.092  13.267  1.00  0.00           H
ATOM   2456  HA  LYS A 251      6.743   0.631  14.965  1.00  0.00           H
ATOM   2457  HB2 LYS A 251      3.857   0.043  15.769  1.00  0.00           H
ATOM   2458  HB3 LYS A 251      5.255  -0.169  16.768  1.00  0.00           H
ATOM   2459  HG2 LYS A 251      5.533   2.281  17.028  1.00  0.00           H
ATOM   2460  HG3 LYS A 251      4.363   2.595  15.787  1.00  0.00           H
ATOM   2461  HD2 LYS A 251      3.057   2.999  17.591  1.00  0.00           H
ATOM   2462  HD3 LYS A 251      2.623   1.359  17.237  1.00  0.00           H
ATOM   2463  HE2 LYS A 251      4.451   0.741  19.046  1.00  0.00           H
ATOM   2464  HE3 LYS A 251      4.360   2.429  19.480  1.00  0.00           H
ATOM   2465  HZ1 LYS A 251      1.907   2.113  19.661  1.00  0.00           H
ATOM   2466  HZ2 LYS A 251      2.117   0.498  19.515  1.00  0.00           H
ATOM   2467  HZ3 LYS A 251      2.768   1.316  20.813  1.00  0.00           H
ATOM   2468  N   LEU A 252      6.629  -1.820  14.215  1.00 19.01           N
ATOM   2469  CA  LEU A 252      6.558  -3.257  13.953  1.00 20.86           C
ATOM   2470  C   LEU A 252      6.734  -3.910  15.318  1.00 19.45           C
ATOM   2471  O   LEU A 252      7.787  -3.763  15.928  1.00 21.96           O
ATOM   2472  CB  LEU A 252      7.710  -3.733  13.032  1.00 21.87           C
ATOM   2473  CG  LEU A 252      7.380  -3.779  11.527  1.00 22.64           C
ATOM   2474  CD1 LEU A 252      8.635  -4.173  10.740  1.00 23.58           C
ATOM   2475  CD2 LEU A 252      6.256  -4.780  11.212  1.00 23.00           C
ATOM   2476  H   LEU A 252      7.373  -1.554  14.848  1.00  0.00           H
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ATOM   2477  HA  LEU A 252       5.588  -3.551  13.557  1.00  0.00           H
ATOM   2478  HB2 LEU A 252       8.593  -3.116  13.203  1.00  0.00           H
ATOM   2479  HB3 LEU A 252       8.018  -4.742  13.319  1.00  0.00           H
ATOM   2480  HG  LEU A 252       7.068  -2.784  11.206  1.00  0.00           H
ATOM   2481 HD11 LEU A 252       8.468  -4.131   9.663  1.00  0.00           H
ATOM   2482 HD12 LEU A 252       9.461  -3.510  10.977  1.00  0.00           H
ATOM   2483 HD13 LEU A 252       8.959  -5.185  10.988  1.00  0.00           H
ATOM   2484 HD21 LEU A 252       6.118  -4.904  10.139  1.00  0.00           H
ATOM   2485 HD22 LEU A 252       6.484  -5.762  11.629  1.00  0.00           H
ATOM   2486 HD23 LEU A 252       5.298  -4.468  11.619  1.00  0.00           H
ATOM   2487  N   TYR A 253      5.708  -4.597  15.806  1.00 20.60           N
ATOM   2488  CA  TYR A 253      5.688  -5.153  17.150  1.00 20.37           C
ATOM   2489  C   TYR A 253      6.315  -6.548  17.159  1.00 19.45           C
ATOM   2490  O   TYR A 253      7.090  -6.866  18.056  1.00 22.46           O
ATOM   2491  CB  TYR A 253      4.221  -5.305  17.574  1.00 19.57           C
ATOM   2492  CG  TYR A 253      3.458  -3.999  17.692  1.00 20.14           C
ATOM   2493  CD1 TYR A 253      3.928  -2.991  18.555  1.00 20.07           C
ATOM   2494  CD2 TYR A 253      2.227  -3.824  17.024  1.00 19.83           C
ATOM   2495  CE1 TYR A 253      3.147  -1.850  18.790  1.00 20.33           C
ATOM   2496  CE2 TYR A 253      1.447  -2.681  17.266  1.00 19.82           C
ATOM   2497  CZ  TYR A 253      1.901  -1.694  18.159  1.00 18.82           C
ATOM   2498  OH  TYR A 253      1.126  -0.605  18.434  1.00 18.72           O
ATOM   2499  H   TYR A 253      4.906  -4.764  15.206  1.00  0.00           H
ATOM   2500  HA  TYR A 253      6.230  -4.516  17.853  1.00  0.00           H
ATOM   2501  HB2 TYR A 253      3.688  -5.978  16.901  1.00  0.00           H
ATOM   2502  HB3 TYR A 253      4.182  -5.785  18.551  1.00  0.00           H
ATOM   2503  HD1 TYR A 253      4.855  -3.111  19.099  1.00  0.00           H
ATOM   2504  HD2 TYR A 253      1.827  -4.597  16.388  1.00  0.00           H
ATOM   2505  HE1 TYR A 253      3.498  -1.142  19.519  1.00  0.00           H
ATOM   2506  HE2 TYR A 253      0.481  -2.598  16.789  1.00  0.00           H
ATOM   2507  HH  TYR A 253      0.185  -0.812  18.257  1.00  0.00           H
ATOM   2508  N   CYS A 254      6.004  -7.381  16.162  1.00 22.80           N
ATOM   2509  CA  CYS A 254      6.550  -8.730  16.057  1.00 23.68           C
ATOM   2510  C   CYS A 254      7.866  -8.654  15.285  1.00 22.63           C
ATOM   2511  O   CYS A 254      7.970  -7.952  14.276  1.00 23.04           O
ATOM   2512  CB  CYS A 254      5.584  -9.628  15.274  1.00 23.53           C
ATOM   2513  SG  CYS A 254      3.940  -9.793  16.024  1.00 25.59           S
ATOM   2514  H   CYS A 254      5.471  -7.022  15.384  1.00  0.00           H
ATOM   2515  HA  CYS A 254      6.721  -9.160  17.043  1.00  0.00           H
ATOM   2516  HB2 CYS A 254      5.457  -9.250  14.260  1.00  0.00           H
ATOM   2517  HB3 CYS A 254      6.003 -10.631  15.164  1.00  0.00           H
ATOM   2518  N   ASP A 255      8.865  -9.382  15.781  1.00 22.72           N
ATOM   2519  CA  ASP A 255     10.137  -9.649  15.131  1.00 23.70           C
ATOM   2520  C   ASP A 255      9.869 -10.599  13.974  1.00 24.37           C
ATOM   2521  O   ASP A 255      9.421 -11.723  14.178  1.00 24.71           O
ATOM   2522  CB  ASP A 255     11.103 -10.337  16.121  1.00 25.02           C
ATOM   2523  CG  ASP A 255     12.038  -9.346  16.774  1.00 25.86           C
ATOM   2524  OD1 ASP A 255     11.665  -8.788  17.833  1.00 25.31           O
ATOM   2525  OD2 ASP A 255     13.116  -9.157  16.170  1.00 30.23           O1-
ATOM   2526  H   ASP A 255      8.620 -10.019  16.541  1.00  0.00           H
ATOM   2527  HA  ASP A 255     10.565  -8.723  14.741  1.00  0.00           H
ATOM   2528  HB2 ASP A 255     10.566 -10.890  16.890  1.00  0.00           H
ATOM   2529  HB3 ASP A 255     11.724 -11.077  15.621  1.00  0.00           H
ATOM   2530  N   ILE A 256     10.150 -10.141  12.758  1.00 23.24           N
ATOM   2531  CA  ILE A 256      9.974 -10.910  11.542  1.00 25.08           C
ATOM   2532  C   ILE A 256     11.308 -11.659  11.402  1.00 24.17           C
ATOM   2533  O   ILE A 256     12.372 -11.050  11.263  1.00 23.01           O
ATOM   2534  CB  ILE A 256      9.710  -9.940  10.361  1.00 24.13           C
ATOM   2535  CG1 ILE A 256      8.571  -8.935  10.684  1.00 24.74           C
ATOM   2536  CG2 ILE A 256      9.378 -10.730   9.078  1.00 23.47           C
ATOM   2537  CD1 ILE A 256      8.416  -7.801   9.668  1.00 24.32           C
ATOM   2538  H   ILE A 256     10.579  -9.230  12.661  1.00  0.00           H
ATOM   2539  HA  ILE A 256      9.136 -11.606  11.640  1.00  0.00           H
ATOM   2540  HB  ILE A 256     10.616  -9.366  10.181  1.00  0.00           H
ATOM   2541 HG12 ILE A 256      7.634  -9.477  10.788  1.00  0.00           H
ATOM   2542 HG13 ILE A 256      8.729  -8.450  11.646  1.00  0.00           H
ATOM   2543 HG21 ILE A 256      9.270 -10.068   8.223  1.00  0.00           H
ATOM   2544 HG22 ILE A 256     10.157 -11.447   8.820  1.00  0.00           H
ATOM   2545 HG23 ILE A 256      8.445 -11.287   9.179  1.00  0.00           H
ATOM   2546 HD11 ILE A 256      7.595  -7.143   9.951  1.00  0.00           H
ATOM   2547 HD12 ILE A 256      9.324  -7.199   9.628  1.00  0.00           H
ATOM   2548 HD13 ILE A 256      8.199  -8.173   8.668  1.00  0.00           H
ATOM   2549  N   ASN A 257     11.257 -12.980  11.576  1.00 25.64           N
ATOM   2550  CA  ASN A 257     12.425 -13.846  11.755  1.00 27.73           C
ATOM   2551  C   ASN A 257     12.654 -14.714  10.514  1.00 27.85           C
ATOM   2552  O   ASN A 257     13.134 -15.842  10.596  1.00 27.48           O
ATOM   2553  CB  ASN A 257     12.302 -14.663  13.062  1.00 29.60           C
ATOM   2554  CG  ASN A 257     12.406 -13.780  14.308  1.00 31.61           C
ATOM   2555  OD1 ASN A 257     13.326 -12.969  14.429  1.00 33.94           O
ATOM   2556  ND2 ASN A 257     11.441 -13.863  15.213  1.00 33.79           N
ATOM   2557  H   ASN A 257     10.346 -13.391  11.738  1.00  0.00           H
ATOM   2558  HA  ASN A 257     13.331 -13.244  11.838  1.00  0.00           H
ATOM   2559  HB2 ASN A 257     11.371 -15.232  13.070  1.00  0.00           H
ATOM   2560  HB3 ASN A 257     13.108 -15.396  13.129  1.00  0.00           H
ATOM   2561 HD21 ASN A 257     10.592 -14.404  15.023  1.00  0.00           H
ATOM   2562 HD22 ASN A 257     11.473 -13.296  16.043  1.00  0.00           H
ATOM   2563  N   TYR A 258     12.349 -14.147   9.348  1.00 29.16           N
ATOM   2564  CA  TYR A 258     12.642 -14.649   8.019  1.00 29.16           C
ATOM   2565  C   TYR A 258     12.792 -13.442   7.088  1.00 28.34           C
ATOM   2566  O   TYR A 258     12.282 -12.358   7.381  1.00 28.39           O
ATOM   2567  CB  TYR A 258     11.593 -15.691   7.572  1.00 29.46           C
ATOM   2568  CG  TYR A 258     10.180 -15.155   7.420  1.00 30.02           C
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ATOM   2569  CD1 TYR A 258       9.326 -15.082   8.541  1.00 31.04          C
ATOM   2570  CD2 TYR A 258       9.720 -14.713   6.162  1.00 30.30          C
ATOM   2571  CE1 TYR A 258       8.028 -14.557   8.406  1.00 29.83          C
ATOM   2572  CE2 TYR A 258       8.416 -14.204   6.026  1.00 30.49          C
ATOM   2573  CZ  TYR A 258       7.574 -14.119   7.149  1.00 31.23          C
ATOM   2574  OH  TYR A 258       6.323 -13.607   7.006  1.00 30.56          O
ATOM   2575  H   TYR A 258      11.989 -13.200   9.354  1.00  0.00          H
ATOM   2576  HA  TYR A 258      13.615 -15.142   8.059  1.00  0.00          H
ATOM   2577  HB2 TYR A 258      11.900 -16.125   6.620  1.00  0.00          H
ATOM   2578  HB3 TYR A 258      11.577 -16.523   8.277  1.00  0.00          H
ATOM   2579  HD1 TYR A 258       9.664 -15.418   9.510  1.00  0.00          H
ATOM   2580  HD2 TYR A 258      10.363 -14.756   5.297  1.00  0.00          H
ATOM   2581  HE1 TYR A 258       7.377 -14.494   9.268  1.00  0.00          H
ATOM   2582  HE2 TYR A 258       8.053 -13.875   5.064  1.00  0.00          H
ATOM   2583  HH  TYR A 258       5.826 -13.552   7.851  1.00  0.00          H
ATOM   2584  N   ASP A 259      13.485 -13.621   5.961  1.00 26.74          N
ATOM   2585  CA  ASP A 259      13.620 -12.609   4.918  1.00 25.98          C
ATOM   2586  C   ASP A 259      12.355 -12.681   4.049  1.00 26.85          C
ATOM   2587  O   ASP A 259      12.126 -13.688   3.375  1.00 26.32          O
ATOM   2588  CB  ASP A 259      14.881 -12.938   4.091  1.00 24.33          C
ATOM   2589  CG  ASP A 259      15.191 -11.941   2.978  1.00 23.76          C
ATOM   2590  OD1 ASP A 259      14.342 -11.688   2.094  1.00 24.79          O
ATOM   2591  OD2 ASP A 259      16.323 -11.416   2.980  1.00 24.27          O1-
ATOM   2592  H   ASP A 259      13.857 -14.535   5.766  1.00  0.00          H
ATOM   2593  HA  ASP A 259      13.728 -11.615   5.358  1.00  0.00          H
ATOM   2594  HB2 ASP A 259      15.744 -12.969   4.750  1.00  0.00          H
ATOM   2595  HB3 ASP A 259      14.818 -13.938   3.673  1.00  0.00          H
ATOM   2596  N   VAL A 260      11.511 -11.645   4.119  1.00 27.13          N
ATOM   2597  CA  VAL A 260      10.184 -11.609   3.509  1.00 26.80          C
ATOM   2598  C   VAL A 260      10.210 -11.771   1.978  1.00 26.31          C
ATOM   2599  O   VAL A 260       9.436 -12.560   1.444  1.00 25.15          O
ATOM   2600  CB  VAL A 260       9.415 -10.337   3.959  1.00 27.92          C
ATOM   2601  CG1 VAL A 260       9.150 -10.354   5.474  1.00 27.39          C
ATOM   2602  CG2 VAL A 260      10.070  -9.003   3.550  1.00 30.01          C
ATOM   2603  H   VAL A 260      11.735 -10.905   4.766  1.00  0.00          H
ATOM   2604  HA  VAL A 260       9.641 -12.474   3.894  1.00  0.00          H
ATOM   2605  HB  VAL A 260       8.435 -10.370   3.477  1.00  0.00          H
ATOM   2606 HG11 VAL A 260       8.551  -9.497   5.783  1.00  0.00          H
ATOM   2607 HG12 VAL A 260       8.602 -11.250   5.772  1.00  0.00          H
ATOM   2608 HG13 VAL A 260      10.078 -10.332   6.046  1.00  0.00          H
ATOM   2609 HG21 VAL A 260       9.477  -8.159   3.903  1.00  0.00          H
ATOM   2610 HG22 VAL A 260      11.074  -8.892   3.959  1.00  0.00          H
ATOM   2611 HG23 VAL A 260      10.129  -8.895   2.468  1.00  0.00          H
ATOM   2612  N   PHE A 261      11.118 -11.097   1.262  1.00 25.12          N
ATOM   2613  CA  PHE A 261      11.149 -11.131  -0.203  1.00 24.42          C
ATOM   2614  C   PHE A 261      11.835 -12.401  -0.719  1.00 26.37          C
ATOM   2615  O   PHE A 261      11.453 -12.906  -1.772  1.00 26.96          O
ATOM   2616  CB  PHE A 261      11.891  -9.903  -0.749  1.00 24.90          C
ATOM   2617  CG  PHE A 261      11.163  -8.603  -0.495  1.00 24.87          C
ATOM   2618  CD1 PHE A 261       9.959  -8.342  -1.178  1.00 23.69          C
ATOM   2619  CD2 PHE A 261      11.667  -7.664   0.427  1.00 24.07          C
ATOM   2620  CE1 PHE A 261       9.245  -7.159  -0.922  1.00 23.05          C
ATOM   2621  CE2 PHE A 261      10.955  -6.481   0.684  1.00 26.09          C
ATOM   2622  CZ  PHE A 261       9.738  -6.241   0.019  1.00 24.79          C
ATOM   2623  H   PHE A 261      11.804 -10.540   1.750  1.00  0.00          H
ATOM   2624  HA  PHE A 261      10.129 -11.126  -0.595  1.00  0.00          H
ATOM   2625  HB2 PHE A 261      12.892  -9.847  -0.338  1.00  0.00          H
ATOM   2626  HB3 PHE A 261      12.015  -9.997  -1.827  1.00  0.00          H
ATOM   2627  HD1 PHE A 261       9.579  -9.061  -1.887  1.00  0.00          H
ATOM   2628  HD2 PHE A 261      12.593  -7.845   0.947  1.00  0.00          H
ATOM   2629  HE1 PHE A 261       8.311  -6.958  -1.427  1.00  0.00          H
ATOM   2630  HE2 PHE A 261      11.340  -5.765   1.394  1.00  0.00          H
ATOM   2631  HZ  PHE A 261       9.162  -5.360   0.236  1.00  0.00          H
ATOM   2632  N   LYS A 262      12.772 -12.981   0.047  1.00 25.29          N
ATOM   2633  CA  LYS A 262      13.311 -14.312  -0.213  1.00 27.76          C
ATOM   2634  C   LYS A 262      12.239 -15.397   0.003  1.00 27.08          C
ATOM   2635  O   LYS A 262      12.359 -16.447  -0.619  1.00 27.65          O
ATOM   2636  CB  LYS A 262      14.505 -14.553   0.736  1.00 27.98          C
ATOM   2637  CG  LYS A 262      15.209 -15.930   0.715  1.00 31.68          C
ATOM   2638  CD  LYS A 262      16.074 -16.215  -0.527  1.00 35.77          C
ATOM   2639  CE  LYS A 262      15.602 -17.420  -1.364  1.00 38.98          C
ATOM   2640  NZ  LYS A 262      14.468 -17.076  -2.226  1.00 38.71          N1+
ATOM   2641  H   LYS A 262      13.093 -12.500   0.891  1.00  0.00          H
ATOM   2642  HA  LYS A 262      13.653 -14.354  -1.249  1.00  0.00          H
ATOM   2643  HB2 LYS A 262      15.249 -13.769   0.591  1.00  0.00          H
ATOM   2644  HB3 LYS A 262      14.120 -14.419   1.742  1.00  0.00          H
ATOM   2645  HG2 LYS A 262      15.869 -15.954   1.584  1.00  0.00          H
ATOM   2646  HG3 LYS A 262      14.502 -16.739   0.902  1.00  0.00          H
ATOM   2647  HD2 LYS A 262      16.177 -15.321  -1.140  1.00  0.00          H
ATOM   2648  HD3 LYS A 262      17.086 -16.437  -0.183  1.00  0.00          H
ATOM   2649  HE2 LYS A 262      16.410 -17.766  -2.006  1.00  0.00          H
ATOM   2650  HE3 LYS A 262      15.329 -18.264  -0.729  1.00  0.00          H
ATOM   2651  HZ1 LYS A 262      14.107 -17.934  -2.696  1.00  0.00          H
ATOM   2652  HZ2 LYS A 262      13.666 -16.756  -1.689  1.00  0.00          H
ATOM   2653  HZ3 LYS A 262      14.725 -16.402  -2.941  1.00  0.00          H
ATOM   2654  N   TRP A 263      11.239 -15.169   0.866  1.00 26.32          N
ATOM   2655  CA  TRP A 263      10.186 -16.122   1.219  1.00 26.06          C
ATOM   2656  C   TRP A 263       8.957 -15.975   0.298  1.00 28.00          C
ATOM   2657  O   TRP A 263       8.466 -16.981  -0.218  1.00 26.85          O
ATOM   2658  CB  TRP A 263       9.775 -15.840   2.681  1.00 25.69          C
ATOM   2659  CG  TRP A 263       8.726 -16.720   3.294  1.00 24.08          C
ATOM   2660  CD1 TRP A 263       8.957 -17.889   3.935  1.00 24.32          C
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ATOM   2661  CD2 TRP A 263       7.284 -16.497   3.375  1.00 24.24           C
ATOM   2662  NE1 TRP A 263       7.761 -18.409   4.388  1.00 24.75           N
ATOM   2663  CE3 TRP A 263       6.411 -15.477   2.932  1.00 25.60           C
ATOM   2664  CE2 TRP A 263       6.695 -17.589   4.079  1.00 24.89           C
ATOM   2665  CZ3 TRP A 263       5.022 -15.543   3.165  1.00 24.08           C
ATOM   2666  CZ2 TRP A 263       5.311 -17.669   4.318  1.00 24.80           C
ATOM   2667  CH2 TRP A 263       4.472 -16.640   3.854  1.00 25.33           C
ATOM   2668  H   TRP A 263      11.271 -14.298   1.383  1.00  0.00           H
ATOM   2669  HA  TRP A 263      10.563 -17.144   1.144  1.00  0.00           H
ATOM   2670  HB2 TRP A 263      10.664 -15.940   3.305  1.00  0.00           H
ATOM   2671  HB3 TRP A 263       9.447 -14.808   2.806  1.00  0.00           H
ATOM   2672  HD1 TRP A 263       9.937 -18.324   4.075  1.00  0.00           H
ATOM   2673  HE1 TRP A 263       7.691 -19.249   4.947  1.00  0.00           H
ATOM   2674  HE3 TRP A 263       6.819 -14.627   2.415  1.00  0.00           H
ATOM   2675  HZ3 TRP A 263       4.379 -14.744   2.823  1.00  0.00           H
ATOM   2676  HZ2 TRP A 263       4.893 -18.510   4.850  1.00  0.00           H
ATOM   2677  HH2 TRP A 263       3.408 -16.684   4.035  1.00  0.00           H
ATOM   2678  N   MET A 264       8.468 -14.745   0.068  1.00 26.69           N
ATOM   2679  CA  MET A 264       7.252 -14.418  -0.699  1.00 27.66           C
ATOM   2680  C   MET A 264       7.331 -14.915  -2.155  1.00 28.61           C
ATOM   2681  O   MET A 264       6.346 -15.384  -2.725  1.00 28.17           O
ATOM   2682  CB  MET A 264       7.043 -12.884  -0.710  1.00 26.75           C
ATOM   2683  CG  MET A 264       6.479 -12.274   0.585  1.00 27.80           C
ATOM   2684  SD  MET A 264       4.690 -12.439   0.810  1.00 32.27           S
ATOM   2685  CE  MET A 264       4.116 -11.112  -0.283  1.00 29.89           C
ATOM   2686  H   MET A 264       8.921 -13.969   0.552  1.00  0.00           H
ATOM   2687  HA  MET A 264       6.393 -14.901  -0.230  1.00  0.00           H
ATOM   2688  HB2 MET A 264       7.990 -12.397  -0.950  1.00  0.00           H
ATOM   2689  HB3 MET A 264       6.373 -12.610  -1.524  1.00  0.00           H
ATOM   2690  HG2 MET A 264       6.963 -12.704   1.457  1.00  0.00           H
ATOM   2691  HG3 MET A 264       6.718 -11.211   0.616  1.00  0.00           H
ATOM   2692  HE1 MET A 264       3.028 -11.124  -0.346  1.00  0.00           H
ATOM   2693  HE2 MET A 264       4.435 -10.144   0.099  1.00  0.00           H
ATOM   2694  HE3 MET A 264       4.511 -11.225  -1.290  1.00  0.00           H
ATOM   2695  N   GLN A 265       8.538 -14.837  -2.726  1.00 28.33           N
ATOM   2696  CA  GLN A 265       8.893 -15.222  -4.085  1.00 30.41           C
ATOM   2697  C   GLN A 265       8.736 -16.739  -4.330  1.00 30.83           C
ATOM   2698  O   GLN A 265       8.365 -17.145  -5.434  1.00 30.37           O
ATOM   2699  CB  GLN A 265      10.347 -14.756  -4.286  1.00 27.86           C
ATOM   2700  CG  GLN A 265      10.922 -14.902  -5.706  1.00 30.57           C
ATOM   2701  CD  GLN A 265      12.442 -14.796  -5.676  1.00 32.16           C
ATOM   2702  OE1 GLN A 265      13.031 -13.842  -6.174  1.00 31.72           O
ATOM   2703  NE2 GLN A 265      13.102 -15.783  -5.093  1.00 32.89           N
ATOM   2704  H   GLN A 265       9.277 -14.441  -2.162  1.00  0.00           H
ATOM   2705  HA  GLN A 265       8.242 -14.689  -4.779  1.00  0.00           H
ATOM   2706  HB2 GLN A 265      10.424 -13.701  -4.020  1.00  0.00           H
ATOM   2707  HB3 GLN A 265      10.977 -15.286  -3.567  1.00  0.00           H
ATOM   2708  HG2 GLN A 265      10.674 -15.870  -6.141  1.00  0.00           H
ATOM   2709  HG3 GLN A 265      10.507 -14.144  -6.372  1.00  0.00           H
ATOM   2710 HE21 GLN A 265      12.570 -16.597  -4.711  1.00  0.00           H
ATOM   2711 HE22 GLN A 265      14.104 -15.828  -5.209  1.00  0.00           H
ATOM   2712  N   GLU A 266       8.983 -17.578  -3.313  1.00 31.44           N
ATOM   2713  CA  GLU A 266       8.917 -19.038  -3.429  1.00 33.01           C
ATOM   2714  C   GLU A 266       7.498 -19.514  -3.108  1.00 32.66           C
ATOM   2715  O   GLU A 266       6.980 -20.409  -3.769  1.00 32.48           O
ATOM   2716  CB  GLU A 266       9.875 -19.756  -2.443  1.00 34.36           C
ATOM   2717  CG  GLU A 266      11.169 -19.027  -2.056  1.00 44.11           C
ATOM   2718  CD  GLU A 266      12.124 -18.703  -3.198  1.00 48.33           C
ATOM   2719  OE1 GLU A 266      13.290 -19.144  -3.140  1.00 49.69           O
ATOM   2720  OE2 GLU A 266      11.817 -17.805  -4.003  1.00 50.67           O1-
ATOM   2721  H   GLU A 266       9.334 -17.188  -2.451  1.00  0.00           H
ATOM   2722  HA  GLU A 266       9.176 -19.340  -4.441  1.00  0.00           H
ATOM   2723  HB2 GLU A 266       9.364 -19.979  -1.504  1.00  0.00           H
ATOM   2724  HB3 GLU A 266      10.132 -20.731  -2.860  1.00  0.00           H
ATOM   2725  HG2 GLU A 266      10.900 -18.106  -1.550  1.00  0.00           H
ATOM   2726  HG3 GLU A 266      11.709 -19.625  -1.322  1.00  0.00           H
ATOM   2727  N   ASN A 267       6.870 -18.879  -2.108  1.00 29.70           N
ATOM   2728  CA  ASN A 267       5.525 -19.185  -1.612  1.00 28.37           C
ATOM   2729  C   ASN A 267       4.424 -18.654  -2.541  1.00 26.52           C
ATOM   2730  O   ASN A 267       3.243 -18.890  -2.278  1.00 27.70           O
ATOM   2731  CB  ASN A 267       5.323 -18.556  -0.213  1.00 29.57           C
ATOM   2732  CG  ASN A 267       6.002 -19.358   0.892  1.00 30.12           C
ATOM   2733  OD1 ASN A 267       5.411 -20.264   1.468  1.00 32.14           O
ATOM   2734  ND2 ASN A 267       7.243 -19.030   1.219  1.00 27.84           N
ATOM   2735  H   ASN A 267       7.386 -18.140  -1.645  1.00  0.00           H
ATOM   2736  HA  ASN A 267       5.396 -20.268  -1.551  1.00  0.00           H
ATOM   2737  HB2 ASN A 267       5.659 -17.518  -0.193  1.00  0.00           H
ATOM   2738  HB3 ASN A 267       4.264 -18.525   0.051  1.00  0.00           H
ATOM   2739 HD21 ASN A 267       7.709 -18.258   0.748  1.00  0.00           H
ATOM   2740 HD22 ASN A 267       7.639 -19.432   2.054  1.00  0.00           H
ATOM   2741  N   GLU A 268       4.798 -17.939  -3.612  1.00 28.56           N
ATOM   2742  CA  GLU A 268       3.956 -17.485  -4.715  1.00 29.03           C
ATOM   2743  C   GLU A 268       3.025 -16.360  -4.248  1.00 27.53           C
ATOM   2744  O   GLU A 268       1.809 -16.471  -4.371  1.00 29.81           O
ATOM   2745  CB  GLU A 268       3.230 -18.683  -5.390  1.00 31.12           C
ATOM   2746  CG  GLU A 268       4.121 -19.456  -6.379  1.00 34.99           C
ATOM   2747  CD  GLU A 268       4.392 -18.642  -7.633  1.00 36.24           C
ATOM   2748  OE1 GLU A 268       3.395 -18.128  -8.188  1.00 38.70           O
ATOM   2749  OE2 GLU A 268       5.584 -18.498  -7.978  1.00 37.35           O1-
ATOM   2750  H   GLU A 268       5.787 -17.759  -3.696  1.00  0.00           H
ATOM   2751  HA  GLU A 268       4.616 -17.015  -5.443  1.00  0.00           H
ATOM   2752  HB2 GLU A 268       2.815 -19.381  -4.666  1.00  0.00           H
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ATOM   2753  HB3 GLU A 268       2.353 -18.321  -5.917  1.00  0.00           H
ATOM   2754  HG2 GLU A 268       5.059 -19.747  -5.905  1.00  0.00           H
ATOM   2755  HG3 GLU A 268       3.625 -20.378  -6.682  1.00  0.00           H
ATOM   2756  N   LYS A 269       3.568 -15.315  -3.620  1.00 25.71           N
ATOM   2757  CA  LYS A 269       2.812 -14.207  -3.051  1.00 25.50           C
ATOM   2758  C   LYS A 269       3.414 -12.913  -3.616  1.00 24.82           C
ATOM   2759  O   LYS A 269       4.600 -12.661  -3.426  1.00 25.11           O
ATOM   2760  CB  LYS A 269       2.837 -14.316  -1.510  1.00 23.34           C
ATOM   2761  CG  LYS A 269       2.311 -15.651  -0.920  1.00 24.75           C
ATOM   2762  CD  LYS A 269       0.802 -15.909  -1.118  1.00 23.23           C
ATOM   2763  CE  LYS A 269       0.386 -17.396  -1.157  1.00 22.16           C
ATOM   2764  NZ  LYS A 269       0.682 -18.018  -2.457  1.00 22.20           N1+
ATOM   2765  H   LYS A 269       4.577 -15.285  -3.487  1.00  0.00           H
ATOM   2766  HA  LYS A 269       1.774 -14.237  -3.374  1.00  0.00           H
ATOM   2767  HB2 LYS A 269       3.872 -14.199  -1.188  1.00  0.00           H
ATOM   2768  HB3 LYS A 269       2.292 -13.476  -1.080  1.00  0.00           H
ATOM   2769  HG2 LYS A 269       2.890 -16.473  -1.332  1.00  0.00           H
ATOM   2770  HG3 LYS A 269       2.527 -15.672   0.150  1.00  0.00           H
ATOM   2771  HD2 LYS A 269       0.251 -15.439  -0.304  1.00  0.00           H
ATOM   2772  HD3 LYS A 269       0.444 -15.409  -2.016  1.00  0.00           H
ATOM   2773  HE2 LYS A 269       0.861 -17.964  -0.357  1.00  0.00           H
ATOM   2774  HE3 LYS A 269      -0.689 -17.474  -0.992  1.00  0.00           H
ATOM   2775  HZ1 LYS A 269      -0.094 -18.599  -2.833  1.00  0.00           H
ATOM   2776  HZ2 LYS A 269       0.801 -17.307  -3.171  1.00  0.00           H
ATOM   2777  HZ3 LYS A 269       1.543 -18.558  -2.433  1.00  0.00           H
ATOM   2778  N   VAL A 270       2.620 -12.140  -4.364  1.00 24.36           N
ATOM   2779  CA  VAL A 270       3.045 -10.998  -5.182  1.00 23.54           C
ATOM   2780  C   VAL A 270       2.625  -9.672  -4.517  1.00 22.50           C
ATOM   2781  O   VAL A 270       3.250  -8.639  -4.763  1.00 23.72           O
ATOM   2782  CB  VAL A 270       2.407 -11.135  -6.602  1.00 23.18           C
ATOM   2783  CG1 VAL A 270       2.888 -10.062  -7.597  1.00 22.05           C
ATOM   2784  CG2 VAL A 270       2.640 -12.509  -7.268  1.00 23.42           C
ATOM   2785  H   VAL A 270       1.629 -12.368  -4.388  1.00  0.00           H
ATOM   2786  HA  VAL A 270       4.128 -10.963  -5.270  1.00  0.00           H
ATOM   2787  HB  VAL A 270       1.328 -11.017  -6.483  1.00  0.00           H
ATOM   2788 HG11 VAL A 270       2.456 -10.210  -8.587  1.00  0.00           H
ATOM   2789 HG12 VAL A 270       2.627  -9.053  -7.282  1.00  0.00           H
ATOM   2790 HG13 VAL A 270       3.970 -10.109  -7.719  1.00  0.00           H
ATOM   2791 HG21 VAL A 270       1.920 -12.665  -8.069  1.00  0.00           H
ATOM   2792 HG22 VAL A 270       3.621 -12.569  -7.732  1.00  0.00           H
ATOM   2793 HG23 VAL A 270       2.555 -13.358  -6.591  1.00  0.00           H
ATOM   2794  N   TYR A 271       1.604  -9.695  -3.652  1.00 21.55           N
ATOM   2795  CA  TYR A 271       1.136  -8.557  -2.874  1.00 22.01           C
ATOM   2796  C   TYR A 271       0.883  -9.053  -1.452  1.00 20.85           C
ATOM   2797  O   TYR A 271      -0.003  -9.880  -1.241  1.00 21.84           O
ATOM   2798  CB  TYR A 271      -0.093  -7.918  -3.555  1.00 19.56           C
ATOM   2799  CG  TYR A 271      -0.629  -6.674  -2.865  1.00 18.54           C
ATOM   2800  CD1 TYR A 271      -0.158  -5.397  -3.232  1.00 18.88           C
ATOM   2801  CD2 TYR A 271      -1.592  -6.791  -1.839  1.00 19.17           C
ATOM   2802  CE1 TYR A 271      -0.642  -4.249  -2.575  1.00 16.85           C
ATOM   2803  CE2 TYR A 271      -2.072  -5.643  -1.185  1.00 18.66           C
ATOM   2804  CZ  TYR A 271      -1.605  -4.368  -1.555  1.00 18.55           C
ATOM   2805  OH  TYR A 271      -2.085  -3.258  -0.924  1.00 19.00           O
ATOM   2806  H   TYR A 271       1.133 -10.576  -3.479  1.00  0.00           H
ATOM   2807  HA  TYR A 271       1.919  -7.801  -2.824  1.00  0.00           H
ATOM   2808  HB2 TYR A 271       0.160  -7.650  -4.582  1.00  0.00           H
ATOM   2809  HB3 TYR A 271      -0.900  -8.649  -3.629  1.00  0.00           H
ATOM   2810  HD1 TYR A 271       0.579  -5.287  -4.016  1.00  0.00           H
ATOM   2811  HD2 TYR A 271      -1.959  -7.762  -1.540  1.00  0.00           H
ATOM   2812  HE1 TYR A 271      -0.268  -3.277  -2.853  1.00  0.00           H
ATOM   2813  HE2 TYR A 271      -2.800  -5.743  -0.393  1.00  0.00           H
ATOM   2814  HH  TYR A 271      -1.558  -2.460  -1.093  1.00  0.00           H
ATOM   2815  N   GLY A 272       1.671  -8.581  -0.486  1.00 20.02           N
ATOM   2816  CA  GLY A 272       1.567  -8.920   0.920  1.00 19.98           C
ATOM   2817  C   GLY A 272       1.292  -7.660   1.732  1.00 19.55           C
ATOM   2818  O   GLY A 272       2.026  -6.681   1.601  1.00 20.95           O
ATOM   2819  H   GLY A 272       2.424  -7.936  -0.712  1.00  0.00           H
ATOM   2820  HA2 GLY A 272       0.819  -9.681   1.099  1.00  0.00           H
ATOM   2821  HA3 GLY A 272       2.514  -9.344   1.236  1.00  0.00           H
ATOM   2822  N   PHE A 273       0.261  -7.686   2.576  1.00 19.12           N
ATOM   2823  CA  PHE A 273      -0.218  -6.552   3.365  1.00 19.96           C
ATOM   2824  C   PHE A 273      -0.511  -6.991   4.814  1.00 20.73           C
ATOM   2825  O   PHE A 273      -0.304  -8.150   5.185  1.00 21.45           O
ATOM   2826  CB  PHE A 273      -1.401  -5.865   2.632  1.00 20.09           C
ATOM   2827  CG  PHE A 273      -2.703  -6.649   2.690  1.00 21.22           C
ATOM   2828  CD1 PHE A 273      -2.913  -7.747   1.831  1.00 20.84           C
ATOM   2829  CD2 PHE A 273      -3.665  -6.342   3.673  1.00 20.08           C
ATOM   2830  CE1 PHE A 273      -4.037  -8.575   2.008  1.00 20.71           C
ATOM   2831  CE2 PHE A 273      -4.775  -7.184   3.864  1.00 20.46           C
ATOM   2832  CZ  PHE A 273      -4.956  -8.304   3.036  1.00 22.49           C
ATOM   2833  H   PHE A 273      -0.292  -8.538   2.640  1.00  0.00           H
ATOM   2834  HA  PHE A 273       0.584  -5.817   3.436  1.00  0.00           H
ATOM   2835  HB2 PHE A 273      -1.568  -4.875   3.059  1.00  0.00           H
ATOM   2836  HB3 PHE A 273      -1.138  -5.679   1.590  1.00  0.00           H
ATOM   2837  HD1 PHE A 273      -2.189  -7.991   1.067  1.00  0.00           H
ATOM   2838  HD2 PHE A 273      -3.530  -5.493   4.327  1.00  0.00           H
ATOM   2839  HE1 PHE A 273      -4.183  -9.433   1.372  1.00  0.00           H
ATOM   2840  HE2 PHE A 273      -5.476  -6.985   4.658  1.00  0.00           H
ATOM   2841  HZ  PHE A 273      -5.807  -8.945   3.184  1.00  0.00           H
ATOM   2842  N   THR A 274      -1.000  -6.059   5.636  1.00 20.67           N
ATOM   2843  CA  THR A 274      -1.479  -6.292   6.995  1.00 19.86           C
ATOM   2844  C   THR A 274      -2.881  -5.679   7.139  1.00 23.58           C
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ATOM   2845  O   THR A 274      -3.886  -6.313   6.821  1.00 27.01           O
ATOM   2846  CB  THR A 274      -0.425  -5.828   8.036  1.00 23.05           C
ATOM   2847  OG1 THR A 274       0.039  -4.513   7.768  1.00 20.98           O
ATOM   2848  CG2 THR A 274       0.769  -6.778   8.190  1.00 20.44           C
ATOM   2849  H   THR A 274      -1.187  -5.143   5.257  1.00  0.00           H
ATOM   2850  HA  THR A 274      -1.639  -7.361   7.156  1.00  0.00           H
ATOM   2851  HB  THR A 274      -0.913  -5.771   9.004  1.00  0.00           H
ATOM   2852  HG1 THR A 274       0.726  -4.579   7.116  1.00  0.00           H
ATOM   2853 HG21 THR A 274       1.486  -6.404   8.922  1.00  0.00           H
ATOM   2854 HG22 THR A 274       0.433  -7.756   8.539  1.00  0.00           H
ATOM   2855 HG23 THR A 274       1.294  -6.932   7.249  1.00  0.00           H
ATOM   2856  N   VAL A 275      -2.962  -4.426   7.589  1.00 21.17           N
ATOM   2857  CA  VAL A 275      -4.214  -3.752   7.915  1.00 19.25           C
ATOM   2858  C   VAL A 275      -5.037  -3.489   6.629  1.00 18.02           C
ATOM   2859  O   VAL A 275      -4.493  -3.154   5.574  1.00 19.67           O
ATOM   2860  CB  VAL A 275      -3.892  -2.437   8.674  1.00 17.62           C
ATOM   2861  CG1 VAL A 275      -5.155  -1.804   9.286  1.00 17.33           C
ATOM   2862  CG2 VAL A 275      -2.854  -2.624   9.801  1.00 17.17           C
ATOM   2863  H   VAL A 275      -2.087  -3.959   7.790  1.00  0.00           H
ATOM   2864  HA  VAL A 275      -4.778  -4.417   8.574  1.00  0.00           H
ATOM   2865  HB  VAL A 275      -3.465  -1.749   7.945  1.00  0.00           H
ATOM   2866 HG11 VAL A 275      -4.925  -0.909   9.863  1.00  0.00           H
ATOM   2867 HG12 VAL A 275      -5.891  -1.520   8.533  1.00  0.00           H
ATOM   2868 HG13 VAL A 275      -5.622  -2.507   9.974  1.00  0.00           H
ATOM   2869 HG21 VAL A 275      -2.677  -1.693  10.340  1.00  0.00           H
ATOM   2870 HG22 VAL A 275      -3.199  -3.362  10.527  1.00  0.00           H
ATOM   2871 HG23 VAL A 275      -1.889  -2.958   9.421  1.00  0.00           H
ATOM   2872  N   SER A 276      -6.358  -3.644   6.723  1.00 18.71           N
ATOM   2873  CA  SER A 276      -7.331  -3.477   5.650  1.00 19.95           C
ATOM   2874  C   SER A 276      -8.601  -2.860   6.247  1.00 18.73           C
ATOM   2875  O   SER A 276      -8.957  -3.166   7.386  1.00 22.68           O
ATOM   2876  CB  SER A 276      -7.489  -4.803   4.883  1.00 18.49           C
ATOM   2877  OG  SER A 276      -7.641  -5.897   5.767  1.00 20.03           O
ATOM   2878  H   SER A 276      -6.771  -3.871   7.617  1.00  0.00           H
ATOM   2879  HA  SER A 276      -6.942  -2.734   4.951  1.00  0.00           H
ATOM   2880  HB2 SER A 276      -8.346  -4.762   4.208  1.00  0.00           H
ATOM   2881  HB3 SER A 276      -6.610  -4.985   4.268  1.00  0.00           H
ATOM   2882  HG  SER A 276      -6.830  -5.982   6.256  1.00  0.00           H
ATOM   2883  N   ILE A 277      -9.236  -1.931   5.531  1.00 19.56           N
ATOM   2884  CA  ILE A 277     -10.140  -0.931   6.090  1.00 18.81           C
ATOM   2885  C   ILE A 277     -11.229  -0.550   5.075  1.00 17.40           C
ATOM   2886  O   ILE A 277     -11.110  -0.840   3.883  1.00 17.52           O
ATOM   2887  CB  ILE A 277      -9.281   0.242   6.660  1.00 16.88           C
ATOM   2888  CG1 ILE A 277     -10.062   1.193   7.589  1.00 21.77           C
ATOM   2889  CG2 ILE A 277      -8.577   1.038   5.554  1.00 21.13           C
ATOM   2890  CD1 ILE A 277      -9.170   2.091   8.461  1.00 19.17           C
ATOM   2891  H   ILE A 277      -8.993  -1.810   4.549  1.00  0.00           H
ATOM   2892  HA  ILE A 277     -10.678  -1.391   6.915  1.00  0.00           H
ATOM   2893  HB  ILE A 277      -8.497  -0.203   7.275  1.00  0.00           H
ATOM   2894 HG12 ILE A 277     -10.740   1.822   7.015  1.00  0.00           H
ATOM   2895 HG13 ILE A 277     -10.692   0.594   8.242  1.00  0.00           H
ATOM   2896 HG21 ILE A 277      -7.893   1.771   5.973  1.00  0.00           H
ATOM   2897 HG22 ILE A 277      -8.000   0.400   4.884  1.00  0.00           H
ATOM   2898 HG23 ILE A 277      -9.304   1.585   4.957  1.00  0.00           H
ATOM   2899 HD11 ILE A 277      -9.774   2.680   9.150  1.00  0.00           H
ATOM   2900 HD12 ILE A 277      -8.473   1.500   9.056  1.00  0.00           H
ATOM   2901 HD13 ILE A 277      -8.588   2.793   7.864  1.00  0.00           H
ATOM   2902  N   HIS A 278     -12.276   0.119   5.569  1.00 17.40           N
ATOM   2903  CA  HIS A 278     -13.295   0.829   4.803  1.00 18.62           C
ATOM   2904  C   HIS A 278     -12.719   2.158   4.294  1.00 20.19           C
ATOM   2905  O   HIS A 278     -11.983   2.832   5.020  1.00 22.16           O
ATOM   2906  CB  HIS A 278     -14.451   1.199   5.760  1.00 19.60           C
ATOM   2907  CG  HIS A 278     -15.658   0.321   5.663  1.00 19.20           C
ATOM   2908  ND1 HIS A 278     -16.701   0.601   4.774  1.00 19.72           N
ATOM   2909  CD2 HIS A 278     -15.972  -0.807   6.384  1.00 19.63           C
ATOM   2910  CE1 HIS A 278     -17.604  -0.345   5.001  1.00 18.30           C
ATOM   2911  NE2 HIS A 278     -17.230  -1.193   5.957  1.00 20.42           N
ATOM   2912  H   HIS A 278     -12.305   0.258   6.572  1.00  0.00           H
ATOM   2913  HA  HIS A 278     -13.649   0.221   3.969  1.00  0.00           H
ATOM   2914  HB2 HIS A 278     -14.116   1.210   6.797  1.00  0.00           H
ATOM   2915  HB3 HIS A 278     -14.808   2.216   5.591  1.00  0.00           H
ATOM   2916  HD2 HIS A 278     -15.430  -1.332   7.156  1.00  0.00           H
ATOM   2917  HE1 HIS A 278     -18.549  -0.407   4.481  1.00  0.00           H
ATOM   2918  HE2 HIS A 278     -17.788  -1.953   6.345  1.00  0.00           H
ATOM   2919  N   GLU A 279     -13.095   2.580   3.084  1.00 18.56           N
ATOM   2920  CA  GLU A 279     -12.876   3.937   2.592  1.00 20.35           C
ATOM   2921  C   GLU A 279     -14.133   4.785   2.841  1.00 20.15           C
ATOM   2922  O   GLU A 279     -15.237   4.254   2.987  1.00 21.21           O
ATOM   2923  CB  GLU A 279     -12.555   3.911   1.073  1.00 18.12           C
ATOM   2924  CG  GLU A 279     -12.045   5.236   0.451  1.00 19.55           C
ATOM   2925  CD  GLU A 279     -10.909   5.904   1.223  1.00 21.45           C
ATOM   2926  OE1 GLU A 279     -11.168   6.413   2.334  1.00 21.73           O
ATOM   2927  OE2 GLU A 279      -9.774   5.961   0.704  1.00 20.95           O1-
ATOM   2928  H   GLU A 279     -13.671   1.960   2.524  1.00  0.00           H
ATOM   2929  HA  GLU A 279     -12.051   4.368   3.150  1.00  0.00           H
ATOM   2930  HB2 GLU A 279     -11.806   3.154   0.867  1.00  0.00           H
ATOM   2931  HB3 GLU A 279     -13.439   3.585   0.522  1.00  0.00           H
ATOM   2932  HG2 GLU A 279     -11.712   5.052  -0.569  1.00  0.00           H
ATOM   2933  HG3 GLU A 279     -12.859   5.954   0.362  1.00  0.00           H
ATOM   2934  N   TYR A 280     -13.962   6.109   2.859  1.00 20.93           N
ATOM   2935  CA  TYR A 280     -15.059   7.070   2.902  1.00 21.95           C
ATOM   2936  C   TYR A 280     -15.558   7.235   1.459  1.00 20.59           C
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ATOM   2937  O   TYR A 280     -14.842   7.775   0.608  1.00 20.61           O
ATOM   2938  CB  TYR A 280     -14.537   8.446   3.362  1.00 23.30           C
ATOM   2939  CG  TYR A 280     -13.789   8.485   4.676  1.00 26.62           C
ATOM   2940  CD1 TYR A 280     -14.471   8.396   5.905  1.00 30.13           C
ATOM   2941  CD2 TYR A 280     -12.392   8.646   4.661  1.00 30.20           C
ATOM   2942  CE1 TYR A 280     -13.756   8.478   7.114  1.00 31.13           C
ATOM   2943  CE2 TYR A 280     -11.681   8.710   5.869  1.00 32.21           C
ATOM   2944  CZ  TYR A 280     -12.358   8.630   7.096  1.00 32.49           C
ATOM   2945  OH  TYR A 280     -11.656   8.719   8.263  1.00 34.99           O
ATOM   2946  H   TYR A 280     -13.018   6.452   2.670  1.00  0.00           H
ATOM   2947  HA  TYR A 280     -15.857   6.730   3.566  1.00  0.00           H
ATOM   2948  HB2 TYR A 280     -13.873   8.868   2.611  1.00  0.00           H
ATOM   2949  HB3 TYR A 280     -15.376   9.135   3.444  1.00  0.00           H
ATOM   2950  HD1 TYR A 280     -15.542   8.263   5.931  1.00  0.00           H
ATOM   2951  HD2 TYR A 280     -11.858   8.717   3.724  1.00  0.00           H
ATOM   2952  HE1 TYR A 280     -14.295   8.402   8.048  1.00  0.00           H
ATOM   2953  HE2 TYR A 280     -10.613   8.835   5.836  1.00  0.00           H
ATOM   2954  HH  TYR A 280     -10.718   8.750   8.103  1.00  0.00           H
ATOM   2955  N   GLU A 281     -16.785   6.791   1.186  1.00 22.29           N
ATOM   2956  CA  GLU A 281     -17.557   6.952  -0.049  1.00 20.70           C
ATOM   2957  C   GLU A 281     -17.465   8.365  -0.666  1.00 20.87           C
ATOM   2958  O   GLU A 281     -17.207   8.499  -1.862  1.00 18.87           O
ATOM   2959  CB  GLU A 281     -19.003   6.444   0.200  1.00 21.60           C
ATOM   2960  CG  GLU A 281     -19.936   7.337   1.060  1.00 27.54           C
ATOM   2961  CD  GLU A 281     -19.319   7.678   2.408  1.00 30.84           C
ATOM   2962  OE1 GLU A 281     -18.970   6.734   3.145  1.00 32.62           O
ATOM   2963  OE2 GLU A 281     -18.954   8.855   2.603  1.00 35.66           O1-
ATOM   2964  H   GLU A 281     -17.334   6.469   1.983  1.00  0.00           H
ATOM   2965  HA  GLU A 281     -17.099   6.271  -0.767  1.00  0.00           H
ATOM   2966  HB2 GLU A 281     -19.483   6.298  -0.768  1.00  0.00           H
ATOM   2967  HB3 GLU A 281     -18.960   5.453   0.652  1.00  0.00           H
ATOM   2968  HG2 GLU A 281     -20.183   8.260   0.535  1.00  0.00           H
ATOM   2969  HG3 GLU A 281     -20.879   6.823   1.241  1.00  0.00           H
ATOM   2970  N   VAL A 282     -17.593   9.409   0.164  1.00 20.46           N
ATOM   2971  CA  VAL A 282     -17.532  10.823  -0.197  1.00 20.98           C
ATOM   2972  C   VAL A 282     -16.169  11.275  -0.784  1.00 20.93           C
ATOM   2973  O   VAL A 282     -16.126  12.298  -1.471  1.00 18.59           O
ATOM   2974  CB  VAL A 282     -17.965  11.657   1.045  1.00 21.34           C
ATOM   2975  CG1 VAL A 282     -16.996  11.549   2.240  1.00 22.74           C
ATOM   2976  CG2 VAL A 282     -18.297  13.125   0.717  1.00 22.47           C
ATOM   2977  H   VAL A 282     -17.909   9.199   1.118  1.00  0.00           H
ATOM   2978  HA  VAL A 282     -18.273  10.972  -0.984  1.00  0.00           H
ATOM   2979  HB  VAL A 282     -18.909  11.229   1.388  1.00  0.00           H
ATOM   2980 HG11 VAL A 282     -17.340  12.147   3.084  1.00  0.00           H
ATOM   2981 HG12 VAL A 282     -16.935  10.521   2.595  1.00  0.00           H
ATOM   2982 HG13 VAL A 282     -15.986  11.868   1.992  1.00  0.00           H
ATOM   2983 HG21 VAL A 282     -18.689  13.641   1.594  1.00  0.00           H
ATOM   2984 HG22 VAL A 282     -17.423  13.673   0.374  1.00  0.00           H
ATOM   2985 HG23 VAL A 282     -19.054  13.184  -0.065  1.00  0.00           H
ATOM   2986  N   THR A 283     -15.071  10.529  -0.572  1.00 19.91           N
ATOM   2987  CA  THR A 283     -13.759  10.846  -1.152  1.00 18.39           C
ATOM   2988  C   THR A 283     -13.586  10.228  -2.557  1.00 19.45           C
ATOM   2989  O   THR A 283     -12.706  10.663  -3.300  1.00 20.36           O
ATOM   2990  CB  THR A 283     -12.621  10.355  -0.210  1.00 20.55           C
ATOM   2991  OG1 THR A 283     -12.523   8.949  -0.069  1.00 18.62           O
ATOM   2992  CG2 THR A 283     -12.651  10.991   1.183  1.00 17.56           C
ATOM   2993  H   THR A 283     -15.171   9.663  -0.055  1.00  0.00           H
ATOM   2994  HA  THR A 283     -13.652  11.928  -1.259  1.00  0.00           H
ATOM   2995  HB  THR A 283     -11.679  10.660  -0.665  1.00  0.00           H
ATOM   2996  HG1 THR A 283     -13.352   8.585   0.252  1.00  0.00           H
ATOM   2997 HG21 THR A 283     -11.868  10.587   1.825  1.00  0.00           H
ATOM   2998 HG22 THR A 283     -12.473  12.057   1.096  1.00  0.00           H
ATOM   2999 HG23 THR A 283     -13.609  10.863   1.685  1.00  0.00           H
ATOM   3000  N   ILE A 284     -14.435   9.258  -2.938  1.00 16.54           N
ATOM   3001  CA  ILE A 284     -14.314   8.419  -4.130  1.00 16.06           C
ATOM   3002  C   ILE A 284     -15.523   8.380  -5.119  1.00 16.32           C
ATOM   3003  O   ILE A 284     -15.601   7.373  -5.833  1.00 18.94           O
ATOM   3004  CB  ILE A 284     -13.837   7.001  -3.677  1.00 14.12           C
ATOM   3005  CG1 ILE A 284     -14.881   6.250  -2.819  1.00 16.19           C
ATOM   3006  CG2 ILE A 284     -12.480   7.034  -2.955  1.00 14.01           C
ATOM   3007  CD1 ILE A 284     -14.553   4.766  -2.616  1.00 12.12           C
ATOM   3008  H   ILE A 284     -15.192   9.019  -2.307  1.00  0.00           H
ATOM   3009  HA  ILE A 284     -13.518   8.826  -4.755  1.00  0.00           H
ATOM   3010  HB  ILE A 284     -13.677   6.413  -4.576  1.00  0.00           H
ATOM   3011 HG12 ILE A 284     -14.972   6.731  -1.845  1.00  0.00           H
ATOM   3012 HG13 ILE A 284     -15.867   6.316  -3.278  1.00  0.00           H
ATOM   3013 HG21 ILE A 284     -12.000   6.058  -2.944  1.00  0.00           H
ATOM   3014 HG22 ILE A 284     -11.795   7.738  -3.423  1.00  0.00           H
ATOM   3015 HG23 ILE A 284     -12.601   7.331  -1.919  1.00  0.00           H
ATOM   3016 HD11 ILE A 284     -15.344   4.277  -2.053  1.00  0.00           H
ATOM   3017 HD12 ILE A 284     -14.450   4.248  -3.570  1.00  0.00           H
ATOM   3018 HD13 ILE A 284     -13.628   4.629  -2.056  1.00  0.00           H
ATOM   3019  N   PRO A 285     -16.448   9.380  -5.231  1.00 17.10           N
ATOM   3020  CA  PRO A 285     -17.635   9.355  -6.119  1.00 18.10           C
ATOM   3021  C   PRO A 285     -17.501   8.787  -7.542  1.00 18.61           C
ATOM   3022  O   PRO A 285     -18.439   8.145  -8.020  1.00 21.16           O
ATOM   3023  CB  PRO A 285     -18.145  10.799  -6.185  1.00 19.30           C
ATOM   3024  CG  PRO A 285     -17.745  11.390  -4.852  1.00 19.72           C
ATOM   3025  CD  PRO A 285     -16.474  10.633  -4.470  1.00 17.67           C
ATOM   3026  HA  PRO A 285     -18.376   8.746  -5.598  1.00  0.00           H
ATOM   3027  HB2 PRO A 285     -17.647  11.348  -6.986  1.00  0.00           H
ATOM   3028  HB3 PRO A 285     -19.219  10.854  -6.364  1.00  0.00           H
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ATOM   3029  HG2 PRO A 285     -17.604  12.470  -4.885  1.00  0.00           H
ATOM   3030  HG3 PRO A 285     -18.524  11.181  -4.116  1.00  0.00           H
ATOM   3031  HD2 PRO A 285     -15.574  11.208  -4.682  1.00  0.00           H
ATOM   3032  HD3 PRO A 285     -16.527  10.448  -3.404  1.00  0.00           H
ATOM   3033  N   THR A 286     -16.365   8.992  -8.220  1.00 19.69           N
ATOM   3034  CA  THR A 286     -16.149   8.501  -9.575  1.00 19.30           C
ATOM   3035  C   THR A 286     -14.983   7.497  -9.686  1.00 20.60           C
ATOM   3036  O   THR A 286     -14.746   7.003 -10.788  1.00 18.78           O
ATOM   3037  CB  THR A 286     -16.203   9.667 -10.607  1.00 21.39           C
ATOM   3038  OG1 THR A 286     -15.156  10.613 -10.487  1.00 21.34           O
ATOM   3039  CG2 THR A 286     -17.525  10.449 -10.592  1.00 19.97           C
ATOM   3040  H   THR A 286     -15.677   9.662  -7.853  1.00  0.00           H
ATOM   3041  HA  THR A 286     -16.988   7.867  -9.857  1.00  0.00           H
ATOM   3042  HB  THR A 286     -16.099   9.226 -11.601  1.00  0.00           H
ATOM   3043  HG1 THR A 286     -15.203  11.039  -9.620  1.00  0.00           H
ATOM   3044 HG21 THR A 286     -17.567  11.162 -11.415  1.00  0.00           H
ATOM   3045 HG22 THR A 286     -18.378   9.780 -10.694  1.00  0.00           H
ATOM   3046 HG23 THR A 286     -17.650  11.006  -9.663  1.00  0.00           H
ATOM   3047  N   LEU A 287     -14.319   7.101  -8.582  1.00 19.85           N
ATOM   3048  CA  LEU A 287     -13.159   6.184  -8.567  1.00 20.60           C
ATOM   3049  C   LEU A 287     -13.578   4.792  -9.053  1.00 20.95           C
ATOM   3050  O   LEU A 287     -13.061   4.286 -10.052  1.00 18.74           O
ATOM   3051  CB  LEU A 287     -12.568   6.088  -7.136  1.00 19.84           C
ATOM   3052  CG  LEU A 287     -11.127   5.520  -6.993  1.00 24.19           C
ATOM   3053  CD1 LEU A 287     -10.637   5.685  -5.548  1.00 17.69           C
ATOM   3054  CD2 LEU A 287     -10.959   4.044  -7.400  1.00 20.76           C
ATOM   3055  H   LEU A 287     -14.612   7.503  -7.698  1.00  0.00           H
ATOM   3056  HA  LEU A 287     -12.395   6.565  -9.245  1.00  0.00           H
ATOM   3057  HB2 LEU A 287     -12.561   7.095  -6.717  1.00  0.00           H
ATOM   3058  HB3 LEU A 287     -13.236   5.514  -6.495  1.00  0.00           H
ATOM   3059  HG  LEU A 287     -10.465   6.110  -7.625  1.00  0.00           H
ATOM   3060 HD11 LEU A 287      -9.583   5.427  -5.451  1.00  0.00           H
ATOM   3061 HD12 LEU A 287     -10.748   6.713  -5.210  1.00  0.00           H
ATOM   3062 HD13 LEU A 287     -11.196   5.044  -4.866  1.00  0.00           H
ATOM   3063 HD21 LEU A 287      -9.990   3.654  -7.085  1.00  0.00           H
ATOM   3064 HD22 LEU A 287     -11.723   3.409  -6.951  1.00  0.00           H
ATOM   3065 HD23 LEU A 287     -10.992   3.916  -8.480  1.00  0.00           H
ATOM   3066  N   TRP A 288     -14.565   4.195  -8.371  1.00 18.96           N
ATOM   3067  CA  TRP A 288     -15.092   2.873  -8.700  1.00 20.78           C
ATOM   3068  C   TRP A 288     -15.791   2.890 -10.067  1.00 21.73           C
ATOM   3069  O   TRP A 288     -15.687   1.926 -10.815  1.00 21.01           O
ATOM   3070  CB  TRP A 288     -16.079   2.410  -7.615  1.00 16.55           C
ATOM   3071  CG  TRP A 288     -16.746   1.101  -7.916  1.00 19.20           C
ATOM   3072  CD1 TRP A 288     -18.032   0.956  -8.309  1.00 17.19           C
ATOM   3073  CD2 TRP A 288     -16.177  -0.245  -7.889  1.00 18.61           C
ATOM   3074  NE1 TRP A 288     -18.289  -0.375  -8.548  1.00 18.83           N
ATOM   3075  CE3 TRP A 288     -14.911  -0.784  -7.560  1.00 16.92           C
ATOM   3076  CE2 TRP A 288     -17.191  -1.169  -8.285  1.00 18.36           C
ATOM   3077  CZ3 TRP A 288     -14.671  -2.173  -7.614  1.00 21.22           C
ATOM   3078  CZ2 TRP A 288     -16.964  -2.554  -8.340  1.00 20.24           C
ATOM   3079  CH2 TRP A 288     -15.696  -3.058  -7.999  1.00 22.41           C
ATOM   3080  H   TRP A 288     -14.930   4.680  -7.564  1.00  0.00           H
ATOM   3081  HA  TRP A 288     -14.261   2.166  -8.742  1.00  0.00           H
ATOM   3082  HB2 TRP A 288     -15.563   2.307  -6.659  1.00  0.00           H
ATOM   3083  HB3 TRP A 288     -16.854   3.163  -7.468  1.00  0.00           H
ATOM   3084  HD1 TRP A 288     -18.727   1.771  -8.451  1.00  0.00           H
ATOM   3085  HE1 TRP A 288     -19.186  -0.698  -8.931  1.00  0.00           H
ATOM   3086  HE3 TRP A 288     -14.117  -0.123  -7.248  1.00  0.00           H
ATOM   3087  HZ3 TRP A 288     -13.696  -2.560  -7.355  1.00  0.00           H
ATOM   3088  HZ2 TRP A 288     -17.757  -3.224  -8.633  1.00  0.00           H
ATOM   3089  HH2 TRP A 288     -15.505  -4.121  -8.036  1.00  0.00           H
ATOM   3090  N   GLN A 289     -16.451   4.001 -10.414  1.00 23.21           N
ATOM   3091  CA  GLN A 289     -17.116   4.201 -11.698  1.00 24.00           C
ATOM   3092  C   GLN A 289     -16.091   4.172 -12.849  1.00 23.78           C
ATOM   3093  O   GLN A 289     -16.259   3.410 -13.793  1.00 21.70           O
ATOM   3094  CB  GLN A 289     -17.912   5.519 -11.630  1.00 26.05           C
ATOM   3095  CG  GLN A 289     -18.844   5.764 -12.835  1.00 30.79           C
ATOM   3096  CD  GLN A 289     -19.857   6.898 -12.642  1.00 32.56           C
ATOM   3097  OE1 GLN A 289     -20.629   7.188 -13.545  1.00 33.91           O
ATOM   3098  NE2 GLN A 289     -19.905   7.558 -11.487  1.00 33.71           N
ATOM   3099  H   GLN A 289     -16.425   4.767  -9.761  1.00  0.00           H
ATOM   3100  HA  GLN A 289     -17.813   3.374 -11.847  1.00  0.00           H
ATOM   3101  HB2 GLN A 289     -18.507   5.496 -10.716  1.00  0.00           H
ATOM   3102  HB3 GLN A 289     -17.229   6.362 -11.546  1.00  0.00           H
ATOM   3103  HG2 GLN A 289     -18.258   5.973 -13.732  1.00  0.00           H
ATOM   3104  HG3 GLN A 289     -19.412   4.859 -13.051  1.00  0.00           H
ATOM   3105 HE21 GLN A 289     -19.319   7.318 -10.703  1.00  0.00           H
ATOM   3106 HE22 GLN A 289     -20.599   8.283 -11.403  1.00  0.00           H
ATOM   3107  N   THR A 290     -14.975   4.897 -12.709  1.00 23.31           N
ATOM   3108  CA  THR A 290     -13.890   4.934 -13.693  1.00 22.84           C
ATOM   3109  C   THR A 290     -13.109   3.595 -13.715  1.00 22.38           C
ATOM   3110  O   THR A 290     -12.583   3.211 -14.757  1.00 22.84           O
ATOM   3111  CB  THR A 290     -12.965   6.129 -13.348  1.00 24.30           C
ATOM   3112  OG1 THR A 290     -13.745   7.311 -13.241  1.00 25.09           O
ATOM   3113  CG2 THR A 290     -11.895   6.423 -14.401  1.00 22.40           C
ATOM   3114  H   THR A 290     -14.868   5.480 -11.887  1.00  0.00           H
ATOM   3115  HA  THR A 290     -14.323   5.091 -14.683  1.00  0.00           H
ATOM   3116  HB  THR A 290     -12.473   5.955 -12.387  1.00  0.00           H
ATOM   3117  HG1 THR A 290     -14.188   7.262 -12.393  1.00  0.00           H
ATOM   3118 HG21 THR A 290     -11.312   7.307 -14.143  1.00  0.00           H
ATOM   3119 HG22 THR A 290     -11.190   5.599 -14.486  1.00  0.00           H
ATOM   3120 HG23 THR A 290     -12.329   6.589 -15.388  1.00  0.00           H
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ATOM   3121  N   SER A 291     -13.099   2.838 -12.605  1.00 19.88           N
ATOM   3122  CA  SER A 291     -12.561   1.476 -12.551  1.00 20.14           C
ATOM   3123  C   SER A 291     -13.511   0.481 -13.252  1.00 20.06           C
ATOM   3124  O   SER A 291     -13.058  -0.465 -13.894  1.00 19.13           O
ATOM   3125  CB  SER A 291     -12.386   1.048 -11.078  1.00 19.42           C
ATOM   3126  OG  SER A 291     -11.473   1.903 -10.402  1.00 19.96           O
ATOM   3127  H   SER A 291     -13.520   3.219 -11.768  1.00  0.00           H
ATOM   3128  HA  SER A 291     -11.600   1.452 -13.068  1.00  0.00           H
ATOM   3129  HB2 SER A 291     -13.335   1.029 -10.547  1.00  0.00           H
ATOM   3130  HB3 SER A 291     -12.000   0.028 -11.036  1.00  0.00           H
ATOM   3131  HG  SER A 291     -11.848   2.782 -10.379  1.00  0.00           H
ATOM   3132  N   MET A 292     -14.830   0.721 -13.205  1.00 22.05           N
ATOM   3133  CA  MET A 292     -15.845   0.001 -13.971  1.00 23.75           C
ATOM   3134  C   MET A 292     -15.619   0.252 -15.473  1.00 23.08           C
ATOM   3135  O   MET A 292     -15.585  -0.698 -16.242  1.00 23.18           O
ATOM   3136  CB  MET A 292     -17.266   0.426 -13.522  1.00 23.46           C
ATOM   3137  CG  MET A 292     -18.195  -0.735 -13.120  1.00 23.79           C
ATOM   3138  SD  MET A 292     -19.029  -1.610 -14.477  1.00 24.01           S
ATOM   3139  CE  MET A 292     -17.882  -2.989 -14.758  1.00 23.71           C
ATOM   3140  H   MET A 292     -15.151   1.484 -12.617  1.00  0.00           H
ATOM   3141  HA  MET A 292     -15.703  -1.063 -13.774  1.00  0.00           H
ATOM   3142  HB2 MET A 292     -17.186   1.065 -12.645  1.00  0.00           H
ATOM   3143  HB3 MET A 292     -17.752   1.057 -14.268  1.00  0.00           H
ATOM   3144  HG2 MET A 292     -17.681  -1.447 -12.472  1.00  0.00           H
ATOM   3145  HG3 MET A 292     -18.993  -0.319 -12.503  1.00  0.00           H
ATOM   3146  HE1 MET A 292     -18.280  -3.663 -15.516  1.00  0.00           H
ATOM   3147  HE2 MET A 292     -16.918  -2.629 -15.109  1.00  0.00           H
ATOM   3148  HE3 MET A 292     -17.728  -3.558 -13.841  1.00  0.00           H
ATOM   3149  N   ASP A 293     -15.316   1.489 -15.889  1.00 25.20           N
ATOM   3150  CA  ASP A 293     -14.903   1.863 -17.257  1.00 24.42           C
ATOM   3151  C   ASP A 293     -13.426   1.525 -17.577  1.00 24.19           C
ATOM   3152  O   ASP A 293     -12.851   1.996 -18.567  1.00 22.66           O
ATOM   3153  CB  ASP A 293     -15.245   3.345 -17.542  1.00 25.99           C
ATOM   3154  CG  ASP A 293     -16.755   3.540 -17.615  1.00 25.87           C
ATOM   3155  OD1 ASP A 293     -17.432   3.573 -16.565  1.00 25.88           O
ATOM   3156  OD2 ASP A 293     -17.336   3.421 -18.713  1.00 26.97           O1-
ATOM   3157  H   ASP A 293     -15.452   2.249 -15.226  1.00  0.00           H
ATOM   3158  HA  ASP A 293     -15.468   1.258 -17.966  1.00  0.00           H
ATOM   3159  HB2 ASP A 293     -14.829   3.998 -16.776  1.00  0.00           H
ATOM   3160  HB3 ASP A 293     -14.826   3.671 -18.495  1.00  0.00           H
ATOM   3161  N   PHE A 294     -12.830   0.624 -16.790  1.00 22.53           N
ATOM   3162  CA  PHE A 294     -11.744  -0.257 -17.195  1.00 21.67           C
ATOM   3163  C   PHE A 294     -12.321  -1.676 -17.359  1.00 22.37           C
ATOM   3164  O   PHE A 294     -12.205  -2.243 -18.437  1.00 23.42           O
ATOM   3165  CB  PHE A 294     -10.605  -0.225 -16.159  1.00 21.57           C
ATOM   3166  CG  PHE A 294      -9.439  -1.131 -16.500  1.00 21.32           C
ATOM   3167  CD1 PHE A 294      -8.491  -0.739 -17.467  1.00 23.19           C
ATOM   3168  CD2 PHE A 294      -9.317  -2.385 -15.864  1.00 21.72           C
ATOM   3169  CE1 PHE A 294      -7.402  -1.579 -17.762  1.00 21.37           C
ATOM   3170  CE2 PHE A 294      -8.237  -3.228 -16.177  1.00 24.26           C
ATOM   3171  CZ  PHE A 294      -7.264  -2.811 -17.099  1.00 21.92           C
ATOM   3172  H   PHE A 294     -13.360   0.335 -15.980  1.00  0.00           H
ATOM   3173  HA  PHE A 294     -11.334   0.045 -18.157  1.00  0.00           H
ATOM   3174  HB2 PHE A 294     -10.226   0.793 -16.062  1.00  0.00           H
ATOM   3175  HB3 PHE A 294     -10.964  -0.496 -15.169  1.00  0.00           H
ATOM   3176  HD1 PHE A 294      -8.574   0.209 -17.977  1.00  0.00           H
ATOM   3177  HD2 PHE A 294     -10.048  -2.711 -15.139  1.00  0.00           H
ATOM   3178  HE1 PHE A 294      -6.663  -1.280 -18.492  1.00  0.00           H
ATOM   3179  HE2 PHE A 294      -8.139  -4.194 -15.708  1.00  0.00           H
ATOM   3180  HZ  PHE A 294      -6.410  -3.442 -17.290  1.00  0.00           H
ATOM   3181  N   ILE A 295     -13.001  -2.238 -16.350  1.00 24.85           N
ATOM   3182  CA  ILE A 295     -13.555  -3.604 -16.364  1.00 26.88           C
ATOM   3183  C   ILE A 295     -14.651  -3.847 -17.446  1.00 27.94           C
ATOM   3184  O   ILE A 295     -14.867  -4.987 -17.846  1.00 27.36           O
ATOM   3185  CB  ILE A 295     -14.006  -3.960 -14.911  1.00 28.74           C
ATOM   3186  CG1 ILE A 295     -12.831  -3.927 -13.896  1.00 30.86           C
ATOM   3187  CG2 ILE A 295     -14.780  -5.289 -14.770  1.00 29.65           C
ATOM   3188  CD1 ILE A 295     -11.749  -5.001 -14.106  1.00 31.32           C
ATOM   3189  H   ILE A 295     -13.068  -1.725 -15.479  1.00  0.00           H
ATOM   3190  HA  ILE A 295     -12.744  -4.276 -16.648  1.00  0.00           H
ATOM   3191  HB  ILE A 295     -14.698  -3.178 -14.598  1.00  0.00           H
ATOM   3192 HG12 ILE A 295     -12.348  -2.951 -13.903  1.00  0.00           H
ATOM   3193 HG13 ILE A 295     -13.230  -4.033 -12.886  1.00  0.00           H
ATOM   3194 HG21 ILE A 295     -14.982  -5.523 -13.725  1.00  0.00           H
ATOM   3195 HG22 ILE A 295     -15.744  -5.253 -15.279  1.00  0.00           H
ATOM   3196 HG23 ILE A 295     -14.220  -6.122 -15.197  1.00  0.00           H
ATOM   3197 HD11 ILE A 295     -10.966  -4.911 -13.353  1.00  0.00           H
ATOM   3198 HD12 ILE A 295     -12.156  -6.009 -14.030  1.00  0.00           H
ATOM   3199 HD13 ILE A 295     -11.263  -4.913 -15.078  1.00  0.00           H
ATOM   3200  N   LYS A 296     -15.302  -2.798 -17.972  1.00 27.30           N
ATOM   3201  CA  LYS A 296     -16.206  -2.856 -19.132  1.00 29.16           C
ATOM   3202  C   LYS A 296     -15.433  -2.939 -20.467  1.00 29.60           C
ATOM   3203  O   LYS A 296     -16.019  -3.284 -21.490  1.00 30.49           O
ATOM   3204  CB  LYS A 296     -16.973  -1.512 -19.247  1.00 30.80           C
ATOM   3205  CG  LYS A 296     -18.074  -1.199 -18.217  1.00 35.46           C
ATOM   3206  CD  LYS A 296     -18.490   0.278 -18.370  1.00 37.53           C
ATOM   3207  CE  LYS A 296     -19.380   0.853 -17.261  1.00 39.57           C
ATOM   3208  NZ  LYS A 296     -19.497   2.316 -17.396  1.00 42.84           N1+
ATOM   3209  H   LYS A 296     -15.178  -1.903 -17.507  1.00  0.00           H
ATOM   3210  HA  LYS A 296     -16.894  -3.701 -19.057  1.00  0.00           H
ATOM   3211  HB2 LYS A 296     -16.234  -0.709 -19.240  1.00  0.00           H
ATOM   3212  HB3 LYS A 296     -17.449  -1.447 -20.229  1.00  0.00           H
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ATOM   3213  HG2 LYS A 296     -18.929  -1.861 -18.362  1.00  0.00          H
ATOM   3214  HG3 LYS A 296     -17.716  -1.389 -17.209  1.00  0.00          H
ATOM   3215  HD2 LYS A 296     -17.584   0.876 -18.405  1.00  0.00          H
ATOM   3216  HD3 LYS A 296     -18.968   0.420 -19.341  1.00  0.00          H
ATOM   3217  HE2 LYS A 296     -20.368   0.395 -17.295  1.00  0.00          H
ATOM   3218  HE3 LYS A 296     -18.953   0.641 -16.281  1.00  0.00          H
ATOM   3219  HZ1 LYS A 296     -20.261   2.735 -16.900  1.00  0.00          H
ATOM   3220  HZ2 LYS A 296     -18.627   2.770 -17.029  1.00  0.00          H
ATOM   3221  HZ3 LYS A 296     -19.440   2.622 -18.358  1.00  0.00          H
ATOM   3222  N   LYS A 297     -14.174  -2.494 -20.467  1.00 28.79          N
ATOM   3223  CA  LYS A 297     -13.386  -2.116 -21.637  1.00 30.07          C
ATOM   3224  C   LYS A 297     -12.218  -3.087 -21.850  1.00 29.13          C
ATOM   3225  O   LYS A 297     -11.858  -3.348 -22.994  1.00 30.10          O
ATOM   3226  CB  LYS A 297     -12.871  -0.687 -21.346  1.00 31.69          C
ATOM   3227  CG  LYS A 297     -11.958  -0.032 -22.402  1.00 36.08          C
ATOM   3228  CD  LYS A 297     -11.502   1.367 -21.954  1.00 40.63          C
ATOM   3229  CE  LYS A 297     -10.393   1.346 -20.880  1.00 42.81          C
ATOM   3230  NZ  LYS A 297     -10.479   2.528 -20.009  1.00 42.47          N1+
ATOM   3231  H   LYS A 297     -13.730  -2.360 -19.566  1.00  0.00          H
ATOM   3232  HA  LYS A 297     -14.000  -2.113 -22.540  1.00  0.00          H
ATOM   3233  HB2 LYS A 297     -13.736  -0.040 -21.192  1.00  0.00          H
ATOM   3234  HB3 LYS A 297     -12.342  -0.696 -20.397  1.00  0.00          H
ATOM   3235  HG2 LYS A 297     -11.083  -0.653 -22.609  1.00  0.00          H
ATOM   3236  HG3 LYS A 297     -12.504   0.041 -23.343  1.00  0.00          H
ATOM   3237  HD2 LYS A 297     -11.140   1.920 -22.823  1.00  0.00          H
ATOM   3238  HD3 LYS A 297     -12.378   1.914 -21.598  1.00  0.00          H
ATOM   3239  HE2 LYS A 297     -10.465   0.465 -20.244  1.00  0.00          H
ATOM   3240  HE3 LYS A 297      -9.409   1.296 -21.352  1.00  0.00          H
ATOM   3241  HZ1 LYS A 297      -9.661   2.601 -19.392  1.00  0.00          H
ATOM   3242  HZ2 LYS A 297     -10.511   3.373 -20.554  1.00  0.00          H
ATOM   3243  HZ3 LYS A 297     -11.317   2.457 -19.433  1.00  0.00          H
ATOM   3244  N   ASN A 298     -11.644  -3.602 -20.758  1.00 28.47          N
ATOM   3245  CA  ASN A 298     -10.454  -4.449 -20.716  1.00 26.71          C
ATOM   3246  C   ASN A 298     -10.731  -5.734 -19.913  1.00 25.72          C
ATOM   3247  O   ASN A 298     -10.227  -5.869 -18.792  1.00 23.38          O
ATOM   3248  CB  ASN A 298      -9.259  -3.646 -20.140  1.00 27.91          C
ATOM   3249  CG  ASN A 298      -8.664  -2.636 -21.115  1.00 28.07          C
ATOM   3250  OD1 ASN A 298      -8.933  -1.435 -21.037  1.00 30.60          O
ATOM   3251  ND2 ASN A 298      -7.816  -3.115 -22.013  1.00 28.22          N
ATOM   3252  H   ASN A 298     -11.977  -3.281 -19.855  1.00  0.00          H
ATOM   3253  HA  ASN A 298     -10.183  -4.766 -21.724  1.00  0.00          H
ATOM   3254  HB2 ASN A 298      -9.546  -3.140 -19.218  1.00  0.00          H
ATOM   3255  HB3 ASN A 298      -8.458  -4.331 -19.864  1.00  0.00          H
ATOM   3256 HD21 ASN A 298      -7.661  -4.151 -22.028  1.00  0.00          H
ATOM   3257 HD22 ASN A 298      -7.358  -2.536 -22.689  1.00  0.00          H
ATOM   3258  N   PRO A 299     -11.551  -6.682 -20.425  1.00 25.00          N
ATOM   3259  CA  PRO A 299     -11.817  -7.955 -19.740  1.00 25.78          C
ATOM   3260  C   PRO A 299     -10.655  -8.967 -19.817  1.00 25.64          C
ATOM   3261  O   PRO A 299     -10.616  -9.886 -19.004  1.00 25.28          O
ATOM   3262  CB  PRO A 299     -13.074  -8.507 -20.430  1.00 26.77          C
ATOM   3263  CG  PRO A 299     -13.005  -7.947 -21.842  1.00 25.54          C
ATOM   3264  CD  PRO A 299     -12.322  -6.590 -21.670  1.00 25.40          C
ATOM   3265  HA  PRO A 299     -12.031  -7.776 -18.685  1.00  0.00          H
ATOM   3266  HB2 PRO A 299     -13.137  -9.596 -20.412  1.00  0.00          H
ATOM   3267  HB3 PRO A 299     -13.959  -8.119 -19.925  1.00  0.00          H
ATOM   3268  HG2 PRO A 299     -12.374  -8.588 -22.460  1.00  0.00          H
ATOM   3269  HG3 PRO A 299     -13.980  -7.872 -22.326  1.00  0.00          H
ATOM   3270  HD2 PRO A 299     -11.709  -6.335 -22.535  1.00  0.00          H
ATOM   3271  HD3 PRO A 299     -13.081  -5.816 -21.559  1.00  0.00          H
ATOM   3272  N   GLU A 300      -9.708  -8.820 -20.752  1.00 27.36          N
ATOM   3273  CA  GLU A 300      -8.512  -9.647 -20.895  1.00 30.62          C
ATOM   3274  C   GLU A 300      -7.504  -9.384 -19.760  1.00 31.01          C
ATOM   3275  O   GLU A 300      -6.861 -10.318 -19.281  1.00 30.85          O
ATOM   3276  CB  GLU A 300      -7.881  -9.378 -22.292  1.00 33.91          C
ATOM   3277  CG  GLU A 300      -7.162  -8.020 -22.539  1.00 38.15          C
ATOM   3278  CD  GLU A 300      -8.075  -6.806 -22.405  1.00 41.20          C
ATOM   3279  OE1 GLU A 300      -9.288  -6.969 -22.646  1.00 42.55          O
ATOM   3280  OE2 GLU A 300      -7.597  -5.754 -21.943  1.00 42.55          O1-
ATOM   3281  H   GLU A 300      -9.773  -8.046 -21.431  1.00  0.00          H
ATOM   3282  HA  GLU A 300      -8.817 -10.694 -20.844  1.00  0.00          H
ATOM   3283  HB2 GLU A 300      -7.152 -10.166 -22.482  1.00  0.00          H
ATOM   3284  HB3 GLU A 300      -8.646  -9.513 -23.057  1.00  0.00          H
ATOM   3285  HG2 GLU A 300      -6.307  -7.896 -21.875  1.00  0.00          H
ATOM   3286  HG3 GLU A 300      -6.759  -8.002 -23.550  1.00  0.00          H
ATOM   3287  N   TYR A 301      -7.383  -8.130 -19.305  1.00 29.28          N
ATOM   3288  CA  TYR A 301      -6.468  -7.709 -18.244  1.00 27.29          C
ATOM   3289  C   TYR A 301      -6.988  -8.062 -16.834  1.00 26.08          C
ATOM   3290  O   TYR A 301      -6.212  -8.056 -15.876  1.00 25.20          O
ATOM   3291  CB  TYR A 301      -6.264  -6.181 -18.345  1.00 25.45          C
ATOM   3292  CG  TYR A 301      -5.349  -5.648 -19.451  1.00 24.93          C
ATOM   3293  CD1 TYR A 301      -4.359  -6.445 -20.073  1.00 25.31          C
ATOM   3294  CD2 TYR A 301      -5.460  -4.294 -19.834  1.00 23.92          C
ATOM   3295  CE1 TYR A 301      -3.497  -5.888 -21.038  1.00 25.27          C
ATOM   3296  CE2 TYR A 301      -4.575  -3.729 -20.770  1.00 26.82          C
ATOM   3297  CZ  TYR A 301      -3.585  -4.524 -21.367  1.00 25.82          C
ATOM   3298  OH  TYR A 301      -2.699  -3.966 -22.240  1.00 26.18          O
ATOM   3299  H   TYR A 301      -7.886  -7.408 -19.809  1.00  0.00          H
ATOM   3300  HA  TYR A 301      -5.518  -8.233 -18.337  1.00  0.00          H
ATOM   3301  HB2 TYR A 301      -7.237  -5.696 -18.433  1.00  0.00          H
ATOM   3302  HB3 TYR A 301      -5.850  -5.812 -17.408  1.00  0.00          H
ATOM   3303  HD1 TYR A 301      -4.235  -7.488 -19.833  1.00  0.00          H
ATOM   3304  HD2 TYR A 301      -6.226  -3.664 -19.419  1.00  0.00          H
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ATOM   3305  HE1 TYR A 301      -2.742  -6.502 -21.505  1.00  0.00           H
ATOM   3306  HE2 TYR A 301      -4.660  -2.687 -21.036  1.00  0.00           H
ATOM   3307  HH  TYR A 301      -2.415  -3.076 -21.947  1.00  0.00           H
ATOM   3308  N   LEU A 302      -8.261  -8.446 -16.699  1.00 26.08           N
ATOM   3309  CA  LEU A 302      -8.828  -9.057 -15.498  1.00 25.64           C
ATOM   3310  C   LEU A 302      -8.319 -10.511 -15.401  1.00 26.50           C
ATOM   3311  O   LEU A 302      -8.144 -11.185 -16.419  1.00 26.41           O
ATOM   3312  CB  LEU A 302     -10.371  -9.002 -15.637  1.00 26.41           C
ATOM   3313  CG  LEU A 302     -11.227  -9.680 -14.543  1.00 28.11           C
ATOM   3314  CD1 LEU A 302     -10.973  -9.118 -13.139  1.00 26.19           C
ATOM   3315  CD2 LEU A 302     -12.719  -9.576 -14.894  1.00 28.85           C
ATOM   3316  H   LEU A 302      -8.795  -8.541 -17.553  1.00  0.00           H
ATOM   3317  HA  LEU A 302      -8.510  -8.494 -14.618  1.00  0.00           H
ATOM   3318  HB2 LEU A 302     -10.673  -7.958 -15.729  1.00  0.00           H
ATOM   3319  HB3 LEU A 302     -10.641  -9.467 -16.583  1.00  0.00           H
ATOM   3320  HG  LEU A 302     -10.985 -10.743 -14.530  1.00  0.00           H
ATOM   3321 HD11 LEU A 302     -11.605  -9.616 -12.404  1.00  0.00           H
ATOM   3322 HD12 LEU A 302      -9.944  -9.283 -12.829  1.00  0.00           H
ATOM   3323 HD13 LEU A 302     -11.176  -8.049 -13.091  1.00  0.00           H
ATOM   3324 HD21 LEU A 302     -13.334 -10.101 -14.162  1.00  0.00           H
ATOM   3325 HD22 LEU A 302     -13.049  -8.538 -14.930  1.00  0.00           H
ATOM   3326 HD23 LEU A 302     -12.922 -10.022 -15.869  1.00  0.00           H
ATOM   3327  N   ASP A 303      -8.046 -10.986 -14.182  1.00 26.14           N
ATOM   3328  CA  ASP A 303      -7.732 -12.387 -13.903  1.00 26.40           C
ATOM   3329  C   ASP A 303      -9.045 -13.141 -13.661  1.00 26.12           C
ATOM   3330  O   ASP A 303      -9.962 -12.616 -13.022  1.00 26.00           O
ATOM   3331  CB  ASP A 303      -6.885 -12.481 -12.616  1.00 24.91           C
ATOM   3332  CG  ASP A 303      -6.085 -13.773 -12.577  1.00 24.80           C
ATOM   3333  OD1 ASP A 303      -6.689 -14.855 -12.395  1.00 24.92           O
ATOM   3334  OD2 ASP A 303      -4.857 -13.662 -12.765  1.00 22.64           O1-
ATOM   3335  H   ASP A 303      -8.147 -10.381 -13.374  1.00  0.00           H
ATOM   3336  HA  ASP A 303      -7.185 -12.823 -14.742  1.00  0.00           H
ATOM   3337  HB2 ASP A 303      -6.175 -11.655 -12.574  1.00  0.00           H
ATOM   3338  HB3 ASP A 303      -7.489 -12.404 -11.711  1.00  0.00           H
ATOM   3339  N   GLU A 304      -9.138 -14.379 -14.142  1.00 27.08           N
ATOM   3340  CA  GLU A 304     -10.282 -15.268 -13.959  1.00 27.05           C
ATOM   3341  C   GLU A 304     -10.354 -15.826 -12.519  1.00 26.35           C
ATOM   3342  O   GLU A 304     -11.442 -16.153 -12.046  1.00 25.01           O
ATOM   3343  CB  GLU A 304     -10.152 -16.406 -14.995  1.00 29.55           C
ATOM   3344  CG  GLU A 304      -8.870 -17.264 -14.885  1.00 34.94           C
ATOM   3345  CD  GLU A 304      -8.407 -17.827 -16.221  1.00 38.80           C
ATOM   3346  OE1 GLU A 304      -9.276 -18.243 -17.014  1.00 40.86           O
ATOM   3347  OE2 GLU A 304      -7.176 -17.816 -16.440  1.00 37.70           O1-
ATOM   3348  H   GLU A 304      -8.325 -14.779 -14.593  1.00  0.00           H
ATOM   3349  HA  GLU A 304     -11.202 -14.715 -14.158  1.00  0.00           H
ATOM   3350  HB2 GLU A 304     -11.016 -17.067 -14.931  1.00  0.00           H
ATOM   3351  HB3 GLU A 304     -10.208 -15.965 -15.992  1.00  0.00           H
ATOM   3352  HG2 GLU A 304      -8.041 -16.669 -14.507  1.00  0.00           H
ATOM   3353  HG3 GLU A 304      -9.014 -18.087 -14.186  1.00  0.00           H
ATOM   3354  N   ASN A 305      -9.230 -15.876 -11.790  1.00 25.29           N
ATOM   3355  CA  ASN A 305      -9.094 -16.482 -10.457  1.00 24.94           C
ATOM   3356  C   ASN A 305      -9.122 -15.379  -9.373  1.00 25.14           C
ATOM   3357  O   ASN A 305      -8.531 -15.534  -8.300  1.00 24.32           O
ATOM   3358  CB  ASN A 305      -7.726 -17.204 -10.335  1.00 26.38           C
ATOM   3359  CG  ASN A 305      -7.355 -18.147 -11.475  1.00 26.41           C
ATOM   3360  OD1 ASN A 305      -7.653 -19.336 -11.421  1.00 28.64           O
ATOM   3361  ND2 ASN A 305      -6.671 -17.623 -12.487  1.00 27.76           N
ATOM   3362  H   ASN A 305      -8.368 -15.506 -12.206  1.00  0.00           H
ATOM   3363  HA  ASN A 305      -9.899 -17.195 -10.274  1.00  0.00           H
ATOM   3364  HB2 ASN A 305      -6.940 -16.467 -10.268  1.00  0.00           H
ATOM   3365  HB3 ASN A 305      -7.688 -17.773  -9.406  1.00  0.00           H
ATOM   3366 HD21 ASN A 305      -6.525 -16.601 -12.516  1.00  0.00           H
ATOM   3367 HD22 ASN A 305      -6.496 -18.171 -13.318  1.00  0.00           H
ATOM   3368  N   ASN A 306      -9.746 -14.237  -9.678  1.00 24.92           N
ATOM   3369  CA  ASN A 306      -9.764 -12.991  -8.905  1.00 24.17           C
ATOM   3370  C   ASN A 306     -10.448 -13.080  -7.520  1.00 23.07           C
ATOM   3371  O   ASN A 306     -11.075 -14.074  -7.149  1.00 22.07           O
ATOM   3372  CB  ASN A 306     -10.411 -11.860  -9.748  1.00 24.78           C
ATOM   3373  CG  ASN A 306     -11.874 -12.091 -10.132  1.00 23.30           C
ATOM   3374  OD1 ASN A 306     -12.767 -11.954  -9.300  1.00 23.64           O
ATOM   3375  ND2 ASN A 306     -12.138 -12.431 -11.386  1.00 30.14           N
ATOM   3376  H   ASN A 306     -10.192 -14.236 -10.584  1.00  0.00           H
ATOM   3377  HA  ASN A 306      -8.721 -12.720  -8.725  1.00  0.00           H
ATOM   3378  HB2 ASN A 306     -10.380 -10.924  -9.198  1.00  0.00           H
ATOM   3379  HB3 ASN A 306      -9.810 -11.679 -10.639  1.00  0.00           H
ATOM   3380 HD21 ASN A 306     -11.368 -12.509 -12.063  1.00  0.00           H
ATOM   3381 HD22 ASN A 306     -13.078 -12.654 -11.664  1.00  0.00           H
ATOM   3382  N   LEU A 307     -10.346 -11.982  -6.764  1.00 22.52           N
ATOM   3383  CA  LEU A 307     -10.922 -11.746  -5.450  1.00 20.85           C
ATOM   3384  C   LEU A 307     -11.913 -10.562  -5.536  1.00 21.65           C
ATOM   3385  O   LEU A 307     -11.951  -9.710  -4.647  1.00 22.08           O
ATOM   3386  CB  LEU A 307      -9.756 -11.496  -4.459  1.00 21.68           C
ATOM   3387  CG  LEU A 307     -10.121 -11.533  -2.958  1.00 24.57           C
ATOM   3388  CD1 LEU A 307     -10.278 -12.958  -2.426  1.00 25.54           C
ATOM   3389  CD2 LEU A 307      -9.084 -10.771  -2.126  1.00 24.54           C
ATOM   3390  H   LEU A 307      -9.817 -11.197  -7.149  1.00  0.00           H
ATOM   3391  HA  LEU A 307     -11.487 -12.622  -5.127  1.00  0.00           H
ATOM   3392  HB2 LEU A 307      -8.956 -12.213  -4.641  1.00  0.00           H
ATOM   3393  HB3 LEU A 307      -9.317 -10.527  -4.697  1.00  0.00           H
ATOM   3394  HG  LEU A 307     -11.078 -11.043  -2.807  1.00  0.00           H
ATOM   3395 HD11 LEU A 307     -10.499 -12.944  -1.360  1.00  0.00           H
ATOM   3396 HD12 LEU A 307     -11.092 -13.482  -2.926  1.00  0.00           H
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ATOM   3397 HD13 LEU A 307      -9.359 -13.526  -2.560  1.00  0.00           H
ATOM   3398 HD21 LEU A 307      -9.361 -10.770  -1.073  1.00  0.00           H
ATOM   3399 HD22 LEU A 307      -8.099 -11.227  -2.212  1.00  0.00           H
ATOM   3400 HD23 LEU A 307      -9.002  -9.730  -2.445  1.00  0.00           H
ATOM   3401  N   MET A 308     -12.754 -10.493  -6.583  1.00 20.81           N
ATOM   3402  CA  MET A 308     -13.809  -9.473  -6.746  1.00 22.78           C
ATOM   3403  C   MET A 308     -14.789  -9.423  -5.550  1.00 22.78           C
ATOM   3404  O   MET A 308     -15.315  -8.361  -5.215  1.00 22.72           O
ATOM   3405  CB  MET A 308     -14.552  -9.712  -8.082  1.00 21.26           C
ATOM   3406  CG  MET A 308     -15.685  -8.722  -8.408  1.00 20.59           C
ATOM   3407  SD  MET A 308     -15.180  -6.997  -8.654  1.00 23.31           S
ATOM   3408  CE  MET A 308     -14.760  -7.028 -10.421  1.00 20.96           C
ATOM   3409  H   MET A 308     -12.656 -11.187  -7.319  1.00  0.00           H
ATOM   3410  HA  MET A 308     -13.314  -8.501  -6.791  1.00  0.00           H
ATOM   3411  HB2 MET A 308     -13.836  -9.685  -8.902  1.00  0.00           H
ATOM   3412  HB3 MET A 308     -14.968 -10.721  -8.080  1.00  0.00           H
ATOM   3413  HG2 MET A 308     -16.209  -9.056  -9.304  1.00  0.00           H
ATOM   3414  HG3 MET A 308     -16.428  -8.742  -7.616  1.00  0.00           H
ATOM   3415  HE1 MET A 308     -14.351  -6.066 -10.729  1.00  0.00           H
ATOM   3416  HE2 MET A 308     -14.021  -7.799 -10.636  1.00  0.00           H
ATOM   3417  HE3 MET A 308     -15.645  -7.232 -11.023  1.00  0.00           H
ATOM   3418  N   SER A 309     -14.970 -10.552  -4.859  1.00 22.41           N
ATOM   3419  CA  SER A 309     -15.768 -10.722  -3.652  1.00 23.60           C
ATOM   3420  C   SER A 309     -15.216  -9.973  -2.419  1.00 22.97           C
ATOM   3421  O   SER A 309     -15.942  -9.811  -1.440  1.00 22.64           O
ATOM   3422  CB  SER A 309     -15.849 -12.240  -3.390  1.00 24.95           C
ATOM   3423  OG  SER A 309     -14.557 -12.844  -3.369  1.00 30.97           O
ATOM   3424  H   SER A 309     -14.461 -11.375  -5.149  1.00  0.00           H
ATOM   3425  HA  SER A 309     -16.773 -10.337  -3.839  1.00  0.00           H
ATOM   3426  HB2 SER A 309     -16.352 -12.427  -2.439  1.00  0.00           H
ATOM   3427  HB3 SER A 309     -16.455 -12.718  -4.161  1.00  0.00           H
ATOM   3428  HG  SER A 309     -14.642 -13.724  -3.030  1.00  0.00           H
ATOM   3429  N   PHE A 310     -13.963  -9.490  -2.453  1.00 22.04           N
ATOM   3430  CA  PHE A 310     -13.421  -8.598  -1.428  1.00 21.22           C
ATOM   3431  C   PHE A 310     -13.847  -7.148  -1.708  1.00 21.27           C
ATOM   3432  O   PHE A 310     -14.042  -6.392  -0.761  1.00 20.91           O
ATOM   3433  CB  PHE A 310     -11.876  -8.675  -1.439  1.00 20.01           C
ATOM   3434  CG  PHE A 310     -11.149  -7.685  -0.543  1.00 20.57           C
ATOM   3435  CD1 PHE A 310     -11.341  -7.720   0.852  1.00 21.24           C
ATOM   3436  CD2 PHE A 310     -10.310  -6.701  -1.108  1.00 21.25           C
ATOM   3437  CE1 PHE A 310     -10.696  -6.781   1.676  1.00 21.69           C
ATOM   3438  CE2 PHE A 310      -9.676  -5.754  -0.281  1.00 21.89           C
ATOM   3439  CZ  PHE A 310      -9.865  -5.796   1.113  1.00 21.34           C
ATOM   3440  H   PHE A 310     -13.400  -9.667  -3.279  1.00  0.00           H
ATOM   3441  HA  PHE A 310     -13.786  -8.883  -0.440  1.00  0.00           H
ATOM   3442  HB2 PHE A 310     -11.579  -9.671  -1.115  1.00  0.00           H
ATOM   3443  HB3 PHE A 310     -11.499  -8.553  -2.454  1.00  0.00           H
ATOM   3444  HD1 PHE A 310     -11.997  -8.457   1.293  1.00  0.00           H
ATOM   3445  HD2 PHE A 310     -10.151  -6.659  -2.177  1.00  0.00           H
ATOM   3446  HE1 PHE A 310     -10.838  -6.816   2.742  1.00  0.00           H
ATOM   3447  HE2 PHE A 310      -9.019  -5.015  -0.715  1.00  0.00           H
ATOM   3448  HZ  PHE A 310      -9.361  -5.084   1.749  1.00  0.00           H
ATOM   3449  N   LEU A 311     -14.006  -6.759  -2.980  1.00 20.63           N
ATOM   3450  CA  LEU A 311     -14.255  -5.376  -3.385  1.00 22.79           C
ATOM   3451  C   LEU A 311     -15.750  -5.065  -3.502  1.00 24.02           C
ATOM   3452  O   LEU A 311     -16.134  -3.899  -3.448  1.00 26.14           O
ATOM   3453  CB  LEU A 311     -13.713  -5.169  -4.819  1.00 23.27           C
ATOM   3454  CG  LEU A 311     -12.223  -5.474  -5.036  1.00 24.44           C
ATOM   3455  CD1 LEU A 311     -11.910  -5.342  -6.531  1.00 21.83           C
ATOM   3456  CD2 LEU A 311     -11.310  -4.571  -4.191  1.00 24.33           C
ATOM   3457  H   LEU A 311     -13.916  -7.452  -3.710  1.00  0.00           H
ATOM   3458  HA  LEU A 311     -13.798  -4.669  -2.689  1.00  0.00           H
ATOM   3459  HB2 LEU A 311     -14.289  -5.785  -5.514  1.00  0.00           H
ATOM   3460  HB3 LEU A 311     -13.901  -4.137  -5.123  1.00  0.00           H
ATOM   3461  HG  LEU A 311     -12.024  -6.510  -4.754  1.00  0.00           H
ATOM   3462 HD11 LEU A 311     -10.865  -5.552  -6.738  1.00  0.00           H
ATOM   3463 HD12 LEU A 311     -12.502  -6.039  -7.123  1.00  0.00           H
ATOM   3464 HD13 LEU A 311     -12.117  -4.338  -6.900  1.00  0.00           H
ATOM   3465 HD21 LEU A 311     -10.264  -4.833  -4.342  1.00  0.00           H
ATOM   3466 HD22 LEU A 311     -11.429  -3.519  -4.451  1.00  0.00           H
ATOM   3467 HD23 LEU A 311     -11.508  -4.675  -3.124  1.00  0.00           H
ATOM   3468  N   SER A 312     -16.595  -6.069  -3.736  1.00 24.95           N
ATOM   3469  CA  SER A 312     -17.923  -5.875  -4.289  1.00 24.03           C
ATOM   3470  C   SER A 312     -18.979  -6.662  -3.513  1.00 25.46           C
ATOM   3471  O   SER A 312     -18.709  -7.742  -2.991  1.00 23.59           O
ATOM   3472  CB  SER A 312     -17.861  -6.179  -5.797  1.00 22.48           C
ATOM   3473  OG  SER A 312     -19.099  -5.946  -6.441  1.00 23.27           O
ATOM   3474  H   SER A 312     -16.232  -7.014  -3.746  1.00  0.00           H
ATOM   3475  HA  SER A 312     -18.210  -4.828  -4.179  1.00  0.00           H
ATOM   3476  HB2 SER A 312     -17.102  -5.558  -6.276  1.00  0.00           H
ATOM   3477  HB3 SER A 312     -17.561  -7.215  -5.951  1.00  0.00           H
ATOM   3478  HG  SER A 312     -19.282  -5.001  -6.358  1.00  0.00           H
ATOM   3479  N   ASN A 313     -20.191  -6.099  -3.457  1.00 27.59           N
ATOM   3480  CA  ASN A 313     -21.352  -6.665  -2.766  1.00 30.50           C
ATOM   3481  C   ASN A 313     -22.067  -7.644  -3.713  1.00 30.83           C
ATOM   3482  O   ASN A 313     -22.573  -8.674  -3.276  1.00 32.14           O
ATOM   3483  CB  ASN A 313     -22.389  -5.553  -2.436  1.00 29.50           C
ATOM   3484  CG  ASN A 313     -21.801  -4.294  -1.799  1.00 31.80           C
ATOM   3485  OD1 ASN A 313     -21.465  -4.275  -0.621  1.00 30.49           O
ATOM   3486  ND2 ASN A 313     -21.644  -3.237  -2.589  1.00 31.11           N
ATOM   3487  H   ASN A 313     -20.312  -5.208  -3.918  1.00  0.00           H
ATOM   3488  HA  ASN A 313     -21.041  -7.176  -1.853  1.00  0.00           H
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ATOM   3489  HB2 ASN A 313     -22.954  -5.258  -3.322  1.00  0.00           H
ATOM   3490  HB3 ASN A 313     -23.131  -5.958  -1.745  1.00  0.00           H
ATOM   3491 HD21 ASN A 313     -21.946  -3.287  -3.566  1.00  0.00           H
ATOM   3492 HD22 ASN A 313     -21.217  -2.390  -2.230  1.00  0.00           H
ATOM   3493  N   ASP A 314     -22.134  -7.301  -5.008  1.00 32.03           N
ATOM   3494  CA  ASP A 314     -22.845  -8.043  -6.052  1.00 31.57           C
ATOM   3495  C   ASP A 314     -21.865  -8.883  -6.895  1.00 32.42           C
ATOM   3496  O   ASP A 314     -22.286  -9.862  -7.509  1.00 29.58           O
ATOM   3497  CB  ASP A 314     -23.549  -7.024  -6.989  1.00 33.24           C
ATOM   3498  CG  ASP A 314     -22.605  -6.160  -7.819  1.00 33.93           C
ATOM   3499  OD1 ASP A 314     -22.032  -5.205  -7.261  1.00 33.28           O
ATOM   3500  OD2 ASP A 314     -22.379  -6.489  -9.000  1.00 35.28           O1-
ATOM   3501  H   ASP A 314     -21.695  -6.435  -5.294  1.00  0.00           H
ATOM   3502  HA  ASP A 314     -23.593  -8.706  -5.613  1.00  0.00           H
ATOM   3503  HB2 ASP A 314     -24.206  -7.560  -7.674  1.00  0.00           H
ATOM   3504  HB3 ASP A 314     -24.197  -6.368  -6.408  1.00  0.00           H
ATOM   3505  N   ASN A 315     -20.585  -8.490  -6.948  1.00 31.75           N
ATOM   3506  CA  ASN A 315     -19.501  -9.012  -7.782  1.00 32.79           C
ATOM   3507  C   ASN A 315     -19.367  -8.225  -9.092  1.00 31.79           C
ATOM   3508  O   ASN A 315     -19.575  -8.757 -10.185  1.00 30.01           O
ATOM   3509  CB  ASN A 315     -19.396 -10.553  -7.921  1.00 34.98           C
ATOM   3510  CG  ASN A 315     -19.145 -11.256  -6.589  1.00 39.86           C
ATOM   3511  OD1 ASN A 315     -18.008 -11.388  -6.148  1.00 41.48           O
ATOM   3512  ND2 ASN A 315     -20.204 -11.707  -5.928  1.00 39.98           N
ATOM   3513  H   ASN A 315     -20.364  -7.634  -6.450  1.00  0.00           H
ATOM   3514  HA  ASN A 315     -18.612  -8.736  -7.221  1.00  0.00           H
ATOM   3515  HB2 ASN A 315     -20.264 -10.978  -8.424  1.00  0.00           H
ATOM   3516  HB3 ASN A 315     -18.550 -10.793  -8.568  1.00  0.00           H
ATOM   3517 HD21 ASN A 315     -21.129 -11.513  -6.291  1.00  0.00           H
ATOM   3518 HD22 ASN A 315     -20.074 -12.130  -5.024  1.00  0.00           H
ATOM   3519  N   GLY A 316     -19.047  -6.934  -8.988  1.00 29.91           N
ATOM   3520  CA  GLY A 316     -18.433  -6.132 -10.039  1.00 28.90           C
ATOM   3521  C   GLY A 316     -19.182  -4.876 -10.474  1.00 29.49           C
ATOM   3522  O   GLY A 316     -18.623  -4.139 -11.281  1.00 31.30           O
ATOM   3523  H   GLY A 316     -19.035  -6.537  -8.043  1.00  0.00           H
ATOM   3524  HA2 GLY A 316     -17.471  -5.790  -9.665  1.00  0.00           H
ATOM   3525  HA3 GLY A 316     -18.214  -6.728 -10.926  1.00  0.00           H
ATOM   3526  N   LYS A 317     -20.409  -4.608 -10.002  1.00 28.46           N
ATOM   3527  CA  LYS A 317     -21.115  -3.369 -10.344  1.00 29.26           C
ATOM   3528  C   LYS A 317     -21.017  -2.354  -9.190  1.00 28.45           C
ATOM   3529  O   LYS A 317     -20.768  -1.177  -9.447  1.00 29.61           O
ATOM   3530  CB  LYS A 317     -22.599  -3.650 -10.683  1.00 30.65           C
ATOM   3531  CG  LYS A 317     -22.845  -4.271 -12.083  1.00 32.56           C
ATOM   3532  CD  LYS A 317     -23.152  -5.784 -12.106  1.00 33.46           C
ATOM   3533  CE  LYS A 317     -21.914  -6.703 -12.198  1.00 35.75           C
ATOM   3534  NZ  LYS A 317     -21.914  -7.719 -11.135  1.00 33.98           N1+
ATOM   3535  H   LYS A 317     -20.859  -5.233  -9.330  1.00  0.00           H
ATOM   3536  HA  LYS A 317     -20.672  -2.880 -11.214  1.00  0.00           H
ATOM   3537  HB2 LYS A 317     -23.092  -4.217  -9.896  1.00  0.00           H
ATOM   3538  HB3 LYS A 317     -23.114  -2.687 -10.680  1.00  0.00           H
ATOM   3539  HG2 LYS A 317     -23.723  -3.770 -12.494  1.00  0.00           H
ATOM   3540  HG3 LYS A 317     -22.037  -4.021 -12.773  1.00  0.00           H
ATOM   3541  HD2 LYS A 317     -23.781  -6.037 -11.250  1.00  0.00           H
ATOM   3542  HD3 LYS A 317     -23.776  -5.987 -12.978  1.00  0.00           H
ATOM   3543  HE2 LYS A 317     -21.878  -7.202 -13.167  1.00  0.00           H
ATOM   3544  HE3 LYS A 317     -20.997  -6.123 -12.132  1.00  0.00           H
ATOM   3545  HZ1 LYS A 317     -21.006  -8.167 -11.015  1.00  0.00           H
ATOM   3546  HZ2 LYS A 317     -22.094  -7.220 -10.232  1.00  0.00           H
ATOM   3547  HZ3 LYS A 317     -22.634  -8.410 -11.239  1.00  0.00           H
ATOM   3548  N   THR A 318     -21.169  -2.777  -7.932  1.00 28.25           N
ATOM   3549  CA  THR A 318     -21.099  -1.930  -6.740  1.00 25.97           C
ATOM   3550  C   THR A 318     -19.791  -2.210  -5.976  1.00 24.96           C
ATOM   3551  O   THR A 318     -19.318  -3.348  -5.954  1.00 24.07           O
ATOM   3552  CB  THR A 318     -22.339  -2.223  -5.849  1.00 27.38           C
ATOM   3553  OG1 THR A 318     -22.341  -3.535  -5.307  1.00 30.36           O
ATOM   3554  CG2 THR A 318     -23.679  -1.998  -6.566  1.00 28.55           C
ATOM   3555  H   THR A 318     -21.391  -3.768  -7.764  1.00  0.00           H
ATOM   3556  HA  THR A 318     -21.116  -0.874  -7.018  1.00  0.00           H
ATOM   3557  HB  THR A 318     -22.304  -1.536  -5.001  1.00  0.00           H
ATOM   3558  HG1 THR A 318     -22.276  -4.159  -6.054  1.00  0.00           H
ATOM   3559 HG21 THR A 318     -24.515  -2.111  -5.875  1.00  0.00           H
ATOM   3560 HG22 THR A 318     -23.733  -0.995  -6.989  1.00  0.00           H
ATOM   3561 HG23 THR A 318     -23.827  -2.709  -7.379  1.00  0.00           H
ATOM   3562  N   TYR A 319     -19.224  -1.189  -5.326  1.00 22.19           N
ATOM   3563  CA  TYR A 319     -18.091  -1.306  -4.409  1.00 21.55           C
ATOM   3564  C   TYR A 319     -18.669  -1.462  -2.992  1.00 20.73           C
ATOM   3565  O   TYR A 319     -19.705  -0.863  -2.691  1.00 22.78           O
ATOM   3566  CB  TYR A 319     -17.283   0.017  -4.475  1.00 17.02           C
ATOM   3567  CG  TYR A 319     -15.867   0.024  -3.907  1.00 18.70           C
ATOM   3568  CD1 TYR A 319     -15.017  -1.094  -4.043  1.00 15.33           C
ATOM   3569  CD2 TYR A 319     -15.371   1.183  -3.273  1.00 16.65           C
ATOM   3570  CE1 TYR A 319     -13.744  -1.105  -3.445  1.00 16.26           C
ATOM   3571  CE2 TYR A 319     -14.077   1.192  -2.714  1.00 16.78           C
ATOM   3572  CZ  TYR A 319     -13.282   0.033  -2.762  1.00 15.64           C
ATOM   3573  OH  TYR A 319     -12.078   0.009  -2.131  1.00 14.07           O
ATOM   3574  H   TYR A 319     -19.685  -0.293  -5.343  1.00  0.00           H
ATOM   3575  HA  TYR A 319     -17.482  -2.162  -4.693  1.00  0.00           H
ATOM   3576  HB2 TYR A 319     -17.188   0.317  -5.510  1.00  0.00           H
ATOM   3577  HB3 TYR A 319     -17.852   0.820  -4.002  1.00  0.00           H
ATOM   3578  HD1 TYR A 319     -15.326  -1.960  -4.605  1.00  0.00           H
ATOM   3579  HD2 TYR A 319     -15.982   2.070  -3.206  1.00  0.00           H
ATOM   3580  HE1 TYR A 319     -13.128  -1.990  -3.514  1.00  0.00           H
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ATOM   3581  HE2 TYR A 319     -13.708   2.070  -2.204  1.00  0.00           H
ATOM   3582  HH  TYR A 319     -11.921  -0.847  -1.725  1.00  0.00           H
ATOM   3583  N   ASN A 320     -18.035  -2.261  -2.126  1.00 18.73           N
ATOM   3584  CA  ASN A 320     -18.434  -2.425  -0.716  1.00 19.06           C
ATOM   3585  C   ASN A 320     -17.667  -1.471   0.226  1.00 16.51           C
ATOM   3586  O   ASN A 320     -17.984  -1.420   1.413  1.00 16.08           O
ATOM   3587  CB  ASN A 320     -18.233  -3.890  -0.237  1.00 19.10           C
ATOM   3588  CG  ASN A 320     -16.805  -4.433  -0.267  1.00 19.82           C
ATOM   3589  OD1 ASN A 320     -15.842  -3.691  -0.425  1.00 21.01           O
ATOM   3590  ND2 ASN A 320     -16.640  -5.743  -0.168  1.00 17.92           N
ATOM   3591  H   ASN A 320     -17.212  -2.774  -2.446  1.00  0.00           H
ATOM   3592  HA  ASN A 320     -19.493  -2.194  -0.598  1.00  0.00           H
ATOM   3593  HB2 ASN A 320     -18.613  -4.000   0.779  1.00  0.00           H
ATOM   3594  HB3 ASN A 320     -18.849  -4.543  -0.855  1.00  0.00           H
ATOM   3595 HD21 ASN A 320     -17.410  -6.387  -0.088  1.00  0.00           H
ATOM   3596 HD22 ASN A 320     -15.679  -6.085  -0.246  1.00  0.00           H
ATOM   3597  N   LEU A 321     -16.663  -0.751  -0.302  1.00 16.54           N
ATOM   3598  CA  LEU A 321     -15.781   0.230   0.341  1.00 16.81           C
ATOM   3599  C   LEU A 321     -14.455  -0.343   0.880  1.00 19.47           C
ATOM   3600  O   LEU A 321     -13.611   0.431   1.334  1.00 17.04           O
ATOM   3601  CB  LEU A 321     -16.491   1.221   1.303  1.00 17.52           C
ATOM   3602  CG  LEU A 321     -17.679   2.016   0.713  1.00 19.03           C
ATOM   3603  CD1 LEU A 321     -18.490   2.696   1.825  1.00 18.92           C
ATOM   3604  CD2 LEU A 321     -17.227   3.063  -0.313  1.00 19.85           C
ATOM   3605  H   LEU A 321     -16.455  -0.953  -1.269  1.00  0.00           H
ATOM   3606  HA  LEU A 321     -15.440   0.844  -0.485  1.00  0.00           H
ATOM   3607  HB2 LEU A 321     -16.831   0.662   2.172  1.00  0.00           H
ATOM   3608  HB3 LEU A 321     -15.763   1.929   1.702  1.00  0.00           H
ATOM   3609  HG  LEU A 321     -18.354   1.320   0.214  1.00  0.00           H
ATOM   3610 HD11 LEU A 321     -19.397   3.156   1.432  1.00  0.00           H
ATOM   3611 HD12 LEU A 321     -18.794   1.983   2.592  1.00  0.00           H
ATOM   3612 HD13 LEU A 321     -17.913   3.483   2.313  1.00  0.00           H
ATOM   3613 HD21 LEU A 321     -18.077   3.615  -0.714  1.00  0.00           H
ATOM   3614 HD22 LEU A 321     -16.541   3.785   0.135  1.00  0.00           H
ATOM   3615 HD23 LEU A 321     -16.723   2.596  -1.155  1.00  0.00           H
ATOM   3616  N   CYS A 322     -14.239  -1.664   0.828  1.00 19.78           N
ATOM   3617  CA  CYS A 322     -13.080  -2.323   1.434  1.00 21.80           C
ATOM   3618  C   CYS A 322     -11.805  -2.172   0.593  1.00 21.81           C
ATOM   3619  O   CYS A 322     -11.845  -2.226  -0.640  1.00 21.18           O
ATOM   3620  CB  CYS A 322     -13.344  -3.833   1.573  1.00 20.40           C
ATOM   3621  SG  CYS A 322     -14.499  -4.302   2.893  1.00 21.81           S
ATOM   3622  H   CYS A 322     -14.932  -2.267   0.390  1.00  0.00           H
ATOM   3623  HA  CYS A 322     -12.905  -1.889   2.418  1.00  0.00           H
ATOM   3624  HB2 CYS A 322     -13.676  -4.255   0.626  1.00  0.00           H
ATOM   3625  HB3 CYS A 322     -12.412  -4.353   1.793  1.00  0.00           H
ATOM   3626  N   HIS A 323     -10.660  -2.011   1.264  1.00 21.47           N
ATOM   3627  CA  HIS A 323      -9.335  -1.943   0.661  1.00 21.03           C
ATOM   3628  C   HIS A 323      -8.244  -2.397   1.644  1.00 21.77           C
ATOM   3629  O   HIS A 323      -8.472  -2.474   2.853  1.00 21.97           O
ATOM   3630  CB  HIS A 323      -9.088  -0.546   0.067  1.00 19.56           C
ATOM   3631  CG  HIS A 323      -9.027   0.578   1.057  1.00 20.31           C
ATOM   3632  ND1 HIS A 323     -10.136   1.267   1.503  1.00 18.55           N
ATOM   3633  CD2 HIS A 323      -7.959   1.117   1.730  1.00 19.48           C
ATOM   3634  CE1 HIS A 323      -9.697   2.214   2.331  1.00 19.82           C
ATOM   3635  NE2 HIS A 323      -8.382   2.188   2.507  1.00 17.55           N
ATOM   3636  H   HIS A 323     -10.696  -1.845   2.269  1.00  0.00           H
ATOM   3637  HA  HIS A 323      -9.312  -2.662  -0.159  1.00  0.00           H
ATOM   3638  HB2 HIS A 323      -8.131  -0.528  -0.444  1.00  0.00           H
ATOM   3639  HB3 HIS A 323      -9.833  -0.312  -0.691  1.00  0.00           H
ATOM   3640  HD1 HIS A 323     -11.110   1.072   1.287  1.00  0.00           H
ATOM   3641  HD2 HIS A 323      -6.926   0.815   1.703  1.00  0.00           H
ATOM   3642  HE1 HIS A 323     -10.338   2.921   2.831  1.00  0.00           H
ATOM   3643  N   PHE A 324      -7.053  -2.685   1.118  1.00 20.35           N
ATOM   3644  CA  PHE A 324      -5.803  -2.962   1.819  1.00 21.54           C
ATOM   3645  C   PHE A 324      -5.148  -1.598   2.095  1.00 21.67           C
ATOM   3646  O   PHE A 324      -5.063  -0.771   1.186  1.00 19.86           O
ATOM   3647  CB  PHE A 324      -4.887  -3.762   0.860  1.00 21.99           C
ATOM   3648  CG  PHE A 324      -5.509  -5.002   0.224  1.00 23.32           C
ATOM   3649  CD1 PHE A 324      -6.226  -5.931   1.002  1.00 23.40           C
ATOM   3650  CD2 PHE A 324      -5.363  -5.234  -1.161  1.00 21.47           C
ATOM   3651  CE1 PHE A 324      -6.782  -7.078   0.408  1.00 23.76           C
ATOM   3652  CE2 PHE A 324      -5.928  -6.378  -1.760  1.00 21.69           C
ATOM   3653  CZ  PHE A 324      -6.637  -7.304  -0.973  1.00 21.06           C
ATOM   3654  H   PHE A 324      -6.935  -2.557   0.109  1.00  0.00           H
ATOM   3655  HA  PHE A 324      -5.978  -3.507   2.743  1.00  0.00           H
ATOM   3656  HB2 PHE A 324      -4.540  -3.113   0.054  1.00  0.00           H
ATOM   3657  HB3 PHE A 324      -3.986  -4.073   1.389  1.00  0.00           H
ATOM   3658  HD1 PHE A 324      -6.345  -5.779   2.063  1.00  0.00           H
ATOM   3659  HD2 PHE A 324      -4.797  -4.537  -1.763  1.00  0.00           H
ATOM   3660  HE1 PHE A 324      -7.327  -7.777   1.021  1.00  0.00           H
ATOM   3661  HE2 PHE A 324      -5.812  -6.552  -2.819  1.00  0.00           H
ATOM   3662  HZ  PHE A 324      -7.068  -8.183  -1.428  1.00  0.00           H
ATOM   3663  N   TRP A 325      -4.743  -1.321   3.341  1.00 22.91           N
ATOM   3664  CA  TRP A 325      -4.263  -0.008   3.778  1.00 25.28           C
ATOM   3665  C   TRP A 325      -2.766   0.082   3.406  1.00 26.42           C
ATOM   3666  O   TRP A 325      -1.912  -0.529   4.052  1.00 30.29           O
ATOM   3667  CB  TRP A 325      -4.498   0.089   5.314  1.00 24.63           C
ATOM   3668  CG  TRP A 325      -4.833   1.423   5.930  1.00 24.92           C
ATOM   3669  CD1 TRP A 325      -5.438   2.470   5.322  1.00 22.73           C
ATOM   3670  CD2 TRP A 325      -4.605   1.857   7.309  1.00 22.74           C
ATOM   3671  NE1 TRP A 325      -5.641   3.488   6.234  1.00 25.68           N
ATOM   3672  CE3 TRP A 325      -3.973   1.283   8.435  1.00 22.84           C
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ATOM   3673  CE2 TRP A 325      -5.146   3.167   7.479  1.00 24.25           C
ATOM   3674  CZ3 TRP A 325      -3.897   1.955   9.668  1.00 20.89           C
ATOM   3675  CZ2 TRP A 325      -5.093   3.844   8.712  1.00 22.79           C
ATOM   3676  CH2 TRP A 325      -4.462   3.234   9.810  1.00 24.61           C
ATOM   3677  H   TRP A 325      -4.707  -2.068   4.030  1.00  0.00           H
ATOM   3678  HA  TRP A 325      -4.830   0.764   3.259  1.00  0.00           H
ATOM   3679  HB2 TRP A 325      -5.343  -0.542   5.590  1.00  0.00           H
ATOM   3680  HB3 TRP A 325      -3.650  -0.328   5.857  1.00  0.00           H
ATOM   3681  HD1 TRP A 325      -5.772   2.484   4.294  1.00  0.00           H
ATOM   3682  HE1 TRP A 325      -6.175   4.327   5.994  1.00  0.00           H
ATOM   3683  HE3 TRP A 325      -3.524   0.312   8.342  1.00  0.00           H
ATOM   3684  HZ3 TRP A 325      -3.403   1.488  10.509  1.00  0.00           H
ATOM   3685  HZ2 TRP A 325      -5.517   4.826   8.827  1.00  0.00           H
ATOM   3686  HH2 TRP A 325      -4.397   3.750  10.756  1.00  0.00           H
ATOM   3687  N   SER A 326      -2.461   0.795   2.313  1.00 24.03           N
ATOM   3688  CA  SER A 326      -1.211   0.762   1.544  1.00 22.71           C
ATOM   3689  C   SER A 326       0.062   1.260   2.266  1.00 21.08           C
ATOM   3690  O   SER A 326       1.169   1.124   1.755  1.00 19.92           O
ATOM   3691  CB  SER A 326      -1.448   1.530   0.228  1.00 22.45           C
ATOM   3692  OG  SER A 326      -1.984   2.825   0.465  1.00 23.98           O
ATOM   3693  H   SER A 326      -3.202   1.294   1.844  1.00  0.00           H
ATOM   3694  HA  SER A 326      -1.034  -0.283   1.293  1.00  0.00           H
ATOM   3695  HB2 SER A 326      -0.515   1.620  -0.331  1.00  0.00           H
ATOM   3696  HB3 SER A 326      -2.123   0.966  -0.416  1.00  0.00           H
ATOM   3697  HG  SER A 326      -1.821   3.367  -0.323  1.00  0.00           H
ATOM   3698  N   ASN A 327      -0.064   1.772   3.490  1.00 18.51           N
ATOM   3699  CA  ASN A 327       1.008   2.118   4.427  1.00 18.42           C
ATOM   3700  C   ASN A 327       1.883   0.916   4.880  1.00 19.32           C
ATOM   3701  O   ASN A 327       2.903   1.117   5.548  1.00 18.72           O
ATOM   3702  CB  ASN A 327       0.382   2.847   5.647  1.00 18.64           C
ATOM   3703  CG  ASN A 327      -0.887   2.234   6.208  1.00 18.91           C
ATOM   3704  OD1 ASN A 327      -1.985   2.629   5.851  1.00 17.18           O
ATOM   3705  ND2 ASN A 327      -0.743   1.268   7.156  1.00 16.88           N
ATOM   3706  H   ASN A 327      -1.020   1.859   3.809  1.00  0.00           H
ATOM   3707  HA  ASN A 327       1.679   2.798   3.903  1.00  0.00           H
ATOM   3708  HB2 ASN A 327       1.125   2.983   6.440  1.00  0.00           H
ATOM   3709  HB3 ASN A 327       0.096   3.834   5.280  1.00  0.00           H
ATOM   3710 HD21 ASN A 327       0.171   0.887   7.379  1.00  0.00           H
ATOM   3711 HD22 ASN A 327      -1.560   0.705   7.343  1.00  0.00           H
ATOM   3712  N   PHE A 328       1.491  -0.320   4.540  1.00 18.00           N
ATOM   3713  CA  PHE A 328       2.285  -1.538   4.646  1.00 19.94           C
ATOM   3714  C   PHE A 328       1.967  -2.418   3.442  1.00 20.27           C
ATOM   3715  O   PHE A 328       0.916  -3.061   3.414  1.00 20.85           O
ATOM   3716  CB  PHE A 328       2.037  -2.258   5.981  1.00 20.17           C
ATOM   3717  CG  PHE A 328       2.971  -3.423   6.274  1.00 21.71           C
ATOM   3718  CD1 PHE A 328       2.687  -4.715   5.783  1.00 20.89           C
ATOM   3719  CD2 PHE A 328       4.133  -3.215   7.045  1.00 21.40           C
ATOM   3720  CE1 PHE A 328       3.548  -5.789   6.074  1.00 23.81           C
ATOM   3721  CE2 PHE A 328       4.980  -4.293   7.361  1.00 23.59           C
ATOM   3722  CZ  PHE A 328       4.688  -5.580   6.873  1.00 20.62           C
ATOM   3723  H   PHE A 328       0.633  -0.409   4.007  1.00  0.00           H
ATOM   3724  HA  PHE A 328       3.343  -1.270   4.603  1.00  0.00           H
ATOM   3725  HB2 PHE A 328       2.145  -1.543   6.782  1.00  0.00           H
ATOM   3726  HB3 PHE A 328       1.003  -2.601   6.035  1.00  0.00           H
ATOM   3727  HD1 PHE A 328       1.815  -4.887   5.169  1.00  0.00           H
ATOM   3728  HD2 PHE A 328       4.377  -2.227   7.403  1.00  0.00           H
ATOM   3729  HE1 PHE A 328       3.334  -6.777   5.689  1.00  0.00           H
ATOM   3730  HE2 PHE A 328       5.860  -4.130   7.965  1.00  0.00           H
ATOM   3731  HZ  PHE A 328       5.343  -6.408   7.097  1.00  0.00           H
ATOM   3732  N   GLU A 329       2.881  -2.457   2.473  1.00 21.96           N
ATOM   3733  CA  GLU A 329       2.844  -3.337   1.316  1.00 21.09           C
ATOM   3734  C   GLU A 329       4.247  -3.909   1.169  1.00 20.76           C
ATOM   3735  O   GLU A 329       5.175  -3.132   0.960  1.00 20.35           O
ATOM   3736  CB  GLU A 329       2.420  -2.554   0.061  1.00 20.27           C
ATOM   3737  CG  GLU A 329       0.992  -2.005   0.160  1.00 21.97           C
ATOM   3738  CD  GLU A 329       0.580  -1.190  -1.048  1.00 23.07           C
ATOM   3739  OE1 GLU A 329       1.437  -0.589  -1.726  1.00 20.27           O
ATOM   3740  OE2 GLU A 329      -0.633  -1.148  -1.347  1.00 25.60           O1-
ATOM   3741  H   GLU A 329       3.722  -1.908   2.578  1.00  0.00           H
ATOM   3742  HA  GLU A 329       2.138  -4.153   1.475  1.00  0.00           H
ATOM   3743  HB2 GLU A 329       3.117  -1.734  -0.116  1.00  0.00           H
ATOM   3744  HB3 GLU A 329       2.490  -3.201  -0.815  1.00  0.00           H
ATOM   3745  HG2 GLU A 329       0.288  -2.824   0.307  1.00  0.00           H
ATOM   3746  HG3 GLU A 329       0.905  -1.360   1.028  1.00  0.00           H
ATOM   3747  N   ILE A 330       4.397  -5.229   1.282  1.00 20.01           N
ATOM   3748  CA  ILE A 330       5.553  -6.001   0.840  1.00 21.19           C
ATOM   3749  C   ILE A 330       5.048  -6.593  -0.483  1.00 21.93           C
ATOM   3750  O   ILE A 330       4.298  -7.570  -0.481  1.00 20.27           O
ATOM   3751  CB  ILE A 330       5.860  -7.114   1.889  1.00 20.93           C
ATOM   3752  CG1 ILE A 330       6.334  -6.501   3.227  1.00 21.73           C
ATOM   3753  CG2 ILE A 330       6.891  -8.163   1.410  1.00 18.92           C
ATOM   3754  CD1 ILE A 330       6.375  -7.486   4.404  1.00 23.49           C
ATOM   3755  H   ILE A 330       3.545  -5.771   1.431  1.00  0.00           H
ATOM   3756  HA  ILE A 330       6.434  -5.381   0.671  1.00  0.00           H
ATOM   3757  HB  ILE A 330       4.927  -7.639   2.071  1.00  0.00           H
ATOM   3758 HG12 ILE A 330       7.325  -6.070   3.085  1.00  0.00           H
ATOM   3759 HG13 ILE A 330       5.690  -5.670   3.515  1.00  0.00           H
ATOM   3760 HG21 ILE A 330       6.924  -9.020   2.079  1.00  0.00           H
ATOM   3761 HG22 ILE A 330       6.669  -8.563   0.422  1.00  0.00           H
ATOM   3762 HG23 ILE A 330       7.895  -7.743   1.383  1.00  0.00           H
ATOM   3763 HD11 ILE A 330       6.791  -7.012   5.288  1.00  0.00           H
ATOM   3764 HD12 ILE A 330       5.376  -7.821   4.672  1.00  0.00           H
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ATOM   3765 HD13 ILE A 330       6.986  -8.363   4.201  1.00  0.00           H
ATOM   3766  N   ALA A 331       5.369  -5.954  -1.607  1.00 21.39           N
ATOM   3767  CA  ALA A 331       4.764  -6.248  -2.898  1.00 22.41           C
ATOM   3768  C   ALA A 331       5.774  -6.131  -4.034  1.00 21.44           C
ATOM   3769  O   ALA A 331       6.841  -5.537  -3.885  1.00 20.66           O
ATOM   3770  CB  ALA A 331       3.488  -5.412  -3.087  1.00 21.06           C
ATOM   3771  H   ALA A 331       6.017  -5.167  -1.569  1.00  0.00           H
ATOM   3772  HA  ALA A 331       4.467  -7.298  -2.907  1.00  0.00           H
ATOM   3773  HB1 ALA A 331       3.048  -5.568  -4.073  1.00  0.00           H
ATOM   3774  HB2 ALA A 331       2.734  -5.665  -2.342  1.00  0.00           H
ATOM   3775  HB3 ALA A 331       3.693  -4.350  -2.978  1.00  0.00           H
ATOM   3776  N   ASN A 332       5.441  -6.744  -5.167  1.00 22.89           N
ATOM   3777  CA  ASN A 332       6.206  -6.717  -6.406  1.00 20.34           C
ATOM   3778  C   ASN A 332       5.807  -5.442  -7.179  1.00 21.01           C
ATOM   3779  O   ASN A 332       4.621  -5.144  -7.311  1.00 20.20           O
ATOM   3780  CB  ASN A 332       5.806  -7.978  -7.193  1.00 21.25           C
ATOM   3781  CG  ASN A 332       6.627  -8.190  -8.459  1.00 19.39           C
ATOM   3782  OD1 ASN A 332       6.277  -7.647  -9.496  1.00 19.86           O
ATOM   3783  ND2 ASN A 332       7.695  -8.978  -8.416  1.00 20.38           N
ATOM   3784  H   ASN A 332       4.539  -7.212  -5.192  1.00  0.00           H
ATOM   3785  HA  ASN A 332       7.273  -6.750  -6.199  1.00  0.00           H
ATOM   3786  HB2 ASN A 332       5.901  -8.863  -6.562  1.00  0.00           H
ATOM   3787  HB3 ASN A 332       4.755  -7.915  -7.479  1.00  0.00           H
ATOM   3788 HD21 ASN A 332       8.055  -9.339  -7.540  1.00  0.00           H
ATOM   3789 HD22 ASN A 332       8.183  -9.184  -9.278  1.00  0.00           H
ATOM   3790  N   LEU A 333       6.790  -4.697  -7.698  1.00 20.23           N
ATOM   3791  CA  LEU A 333       6.600  -3.466  -8.471  1.00 22.19           C
ATOM   3792  C   LEU A 333       6.253  -3.781  -9.930  1.00 22.56           C
ATOM   3793  O   LEU A 333       5.581  -2.983 -10.581  1.00 23.16           O
ATOM   3794  CB  LEU A 333       7.921  -2.656  -8.514  1.00 20.41           C
ATOM   3795  CG  LEU A 333       8.301  -1.959  -7.197  1.00 19.24           C
ATOM   3796  CD1 LEU A 333       9.772  -1.526  -7.189  1.00 21.42           C
ATOM   3797  CD2 LEU A 333       7.386  -0.753  -6.917  1.00 20.07           C
ATOM   3798  H   LEU A 333       7.734  -5.081  -7.673  1.00  0.00           H
ATOM   3799  HA  LEU A 333       5.788  -2.873  -8.047  1.00  0.00           H
ATOM   3800  HB2 LEU A 333       8.730  -3.318  -8.823  1.00  0.00           H
ATOM   3801  HB3 LEU A 333       7.870  -1.891  -9.294  1.00  0.00           H
ATOM   3802  HG  LEU A 333       8.205  -2.687  -6.399  1.00  0.00           H
ATOM   3803 HD11 LEU A 333      10.060  -1.137  -6.213  1.00  0.00           H
ATOM   3804 HD12 LEU A 333      10.431  -2.366  -7.397  1.00  0.00           H
ATOM   3805 HD13 LEU A 333       9.968  -0.748  -7.926  1.00  0.00           H
ATOM   3806 HD21 LEU A 333       7.648  -0.267  -5.978  1.00  0.00           H
ATOM   3807 HD22 LEU A 333       7.462  -0.004  -7.706  1.00  0.00           H
ATOM   3808 HD23 LEU A 333       6.339  -1.042  -6.839  1.00  0.00           H
ATOM   3809  N   ASN A 334       6.679  -4.940 -10.456  1.00 22.33           N
ATOM   3810  CA  ASN A 334       6.443  -5.335 -11.850  1.00 23.39           C
ATOM   3811  C   ASN A 334       4.958  -5.658 -12.100  1.00 23.98           C
ATOM   3812  O   ASN A 334       4.503  -5.570 -13.237  1.00 23.96           O
ATOM   3813  CB  ASN A 334       7.330  -6.522 -12.304  1.00 25.18           C
ATOM   3814  CG  ASN A 334       8.835  -6.280 -12.144  1.00 27.49           C
ATOM   3815  OD1 ASN A 334       9.307  -5.150 -12.272  1.00 28.65           O
ATOM   3816  ND2 ASN A 334       9.593  -7.323 -11.825  1.00 26.16           N
ATOM   3817  H   ASN A 334       7.148  -5.603  -9.851  1.00  0.00           H
ATOM   3818  HA  ASN A 334       6.701  -4.480 -12.469  1.00  0.00           H
ATOM   3819  HB2 ASN A 334       7.046  -7.442 -11.797  1.00  0.00           H
ATOM   3820  HB3 ASN A 334       7.148  -6.713 -13.363  1.00  0.00           H
ATOM   3821 HD21 ASN A 334       9.188  -8.237 -11.700  1.00  0.00           H
ATOM   3822 HD22 ASN A 334      10.625  -7.225 -11.738  1.00  0.00           H
ATOM   3823  N   LEU A 335       4.180  -5.916 -11.035  1.00 23.74           N
ATOM   3824  CA  LEU A 335       2.716  -5.953 -11.028  1.00 22.83           C
ATOM   3825  C   LEU A 335       2.118  -4.590 -11.408  1.00 23.38           C
ATOM   3826  O   LEU A 335       1.145  -4.529 -12.155  1.00 20.24           O
ATOM   3827  CB  LEU A 335       2.225  -6.401  -9.629  1.00 22.39           C
ATOM   3828  CG  LEU A 335       0.690  -6.481  -9.433  1.00 22.32           C
ATOM   3829  CD1 LEU A 335       0.027  -7.498 -10.376  1.00 21.69           C
ATOM   3830  CD2 LEU A 335       0.346  -6.781  -7.966  1.00 20.81           C
ATOM   3831  H   LEU A 335       4.659  -6.026 -10.150  1.00  0.00           H
ATOM   3832  HA  LEU A 335       2.386  -6.667 -11.780  1.00  0.00           H
ATOM   3833  HB2 LEU A 335       2.664  -7.372  -9.394  1.00  0.00           H
ATOM   3834  HB3 LEU A 335       2.623  -5.709  -8.885  1.00  0.00           H
ATOM   3835  HG  LEU A 335       0.251  -5.507  -9.648  1.00  0.00           H
ATOM   3836 HD11 LEU A 335      -1.035  -7.611 -10.160  1.00  0.00           H
ATOM   3837 HD12 LEU A 335       0.102  -7.187 -11.419  1.00  0.00           H
ATOM   3838 HD13 LEU A 335       0.488  -8.481 -10.295  1.00  0.00           H
ATOM   3839 HD21 LEU A 335      -0.733  -6.808  -7.811  1.00  0.00           H
ATOM   3840 HD22 LEU A 335       0.753  -7.739  -7.650  1.00  0.00           H
ATOM   3841 HD23 LEU A 335       0.749  -6.013  -7.304  1.00  0.00           H
ATOM   3842  N   TRP A 336       2.715  -3.491 -10.941  1.00 20.71           N
ATOM   3843  CA  TRP A 336       2.257  -2.143 -11.254  1.00 21.14           C
ATOM   3844  C   TRP A 336       2.832  -1.663 -12.599  1.00 20.82           C
ATOM   3845  O   TRP A 336       2.187  -0.891 -13.300  1.00 21.72           O
ATOM   3846  CB  TRP A 336       2.667  -1.188 -10.127  1.00 19.56           C
ATOM   3847  CG  TRP A 336       2.276  -1.556  -8.720  1.00 21.10           C
ATOM   3848  CD1 TRP A 336       3.041  -1.316  -7.630  1.00 20.91           C
ATOM   3849  CD2 TRP A 336       1.059  -2.202  -8.212  1.00 20.60           C
ATOM   3850  NE1 TRP A 336       2.365  -1.715  -6.495  1.00 21.76           N
ATOM   3851  CE3 TRP A 336      -0.107  -2.766  -8.787  1.00 21.74           C
ATOM   3852  CE2 TRP A 336       1.135  -2.241  -6.788  1.00 18.03           C
ATOM   3853  CZ3 TRP A 336      -1.143  -3.295  -7.990  1.00 18.29           C
ATOM   3854  CZ2 TRP A 336       0.102  -2.741  -5.981  1.00 20.48           C
ATOM   3855  CH2 TRP A 336      -1.051  -3.265  -6.587  1.00 21.36           C
ATOM   3856  H   TRP A 336       3.543  -3.586 -10.368  1.00  0.00           H
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ATOM   3857  HA  TRP A 336       1.175  -2.130 -11.341  1.00  0.00           H
ATOM   3858  HB2 TRP A 336       3.744  -1.015 -10.151  1.00  0.00           H
ATOM   3859  HB3 TRP A 336       2.198  -0.228 -10.331  1.00  0.00           H
ATOM   3860  HD1 TRP A 336       4.013  -0.844  -7.659  1.00  0.00           H
ATOM   3861  HE1 TRP A 336       2.717  -1.632  -5.533  1.00  0.00           H
ATOM   3862  HE3 TRP A 336      -0.214  -2.798  -9.858  1.00  0.00           H
ATOM   3863  HZ3 TRP A 336      -2.011  -3.728  -8.460  1.00  0.00           H
ATOM   3864  HZ2 TRP A 336       0.208  -2.726  -4.909  1.00  0.00           H
ATOM   3865  HH2 TRP A 336      -1.851  -3.653  -5.978  1.00  0.00           H
ATOM   3866  N   ARG A 337       3.987  -2.191 -13.027  1.00 21.65           N
ATOM   3867  CA  ARG A 337       4.527  -1.951 -14.368  1.00 20.04           C
ATOM   3868  C   ARG A 337       3.823  -2.803 -15.447  1.00 18.23           C
ATOM   3869  O   ARG A 337       4.121  -2.613 -16.630  1.00 17.77           O
ATOM   3870  CB  ARG A 337       6.031  -2.300 -14.413  1.00 21.14           C
ATOM   3871  CG  ARG A 337       6.902  -1.462 -13.464  1.00 20.85           C
ATOM   3872  CD  ARG A 337       8.379  -1.874 -13.490  1.00 23.87           C
ATOM   3873  NE  ARG A 337       9.140  -1.063 -12.541  1.00 23.95           N
ATOM   3874  CZ  ARG A 337       9.835  -1.447 -11.470  1.00 25.49           C
ATOM   3875  NH1 ARG A 337      10.062  -2.726 -11.171  1.00 26.97           N
ATOM   3876  NH2 ARG A 337      10.314  -0.508 -10.668  1.00 26.66           N1+
ATOM   3877  H   ARG A 337       4.492  -2.788 -12.385  1.00  0.00           H
ATOM   3878  HA  ARG A 337       4.396  -0.900 -14.632  1.00  0.00           H
ATOM   3879  HB2 ARG A 337       6.165  -3.362 -14.219  1.00  0.00           H
ATOM   3880  HB3 ARG A 337       6.408  -2.146 -15.426  1.00  0.00           H
ATOM   3881  HG2 ARG A 337       6.815  -0.406 -13.724  1.00  0.00           H
ATOM   3882  HG3 ARG A 337       6.534  -1.548 -12.444  1.00  0.00           H
ATOM   3883  HD2 ARG A 337       8.484  -2.931 -13.261  1.00  0.00           H
ATOM   3884  HD3 ARG A 337       8.803  -1.718 -14.483  1.00  0.00           H
ATOM   3885  HE  ARG A 337       9.394  -0.109 -12.909  1.00  0.00           H
ATOM   3886 HH11 ARG A 337       9.738  -3.515 -11.740  1.00  0.00           H
ATOM   3887 HH12 ARG A 337      10.782  -2.918 -10.471  1.00  0.00           H
ATOM   3888 HH21 ARG A 337      10.246   0.499 -10.986  1.00  0.00           H
ATOM   3889 HH22 ARG A 337      10.982  -0.667  -9.916  1.00  0.00           H
ATOM   3890  N   SER A 338       2.924  -3.729 -15.071  1.00 17.15           N
ATOM   3891  CA  SER A 338       2.205  -4.615 -15.988  1.00 19.46           C
ATOM   3892  C   SER A 338       1.155  -3.827 -16.804  1.00 20.12           C
ATOM   3893  O   SER A 338       0.584  -2.875 -16.262  1.00 21.09           O
ATOM   3894  CB  SER A 338       1.518  -5.762 -15.203  1.00 20.32           C
ATOM   3895  OG  SER A 338       0.332  -5.397 -14.515  1.00 21.76           O
ATOM   3896  H   SER A 338       2.717  -3.812 -14.087  1.00  0.00           H
ATOM   3897  HA  SER A 338       2.965  -5.056 -16.631  1.00  0.00           H
ATOM   3898  HB2 SER A 338       1.222  -6.532 -15.913  1.00  0.00           H
ATOM   3899  HB3 SER A 338       2.214  -6.241 -14.512  1.00  0.00           H
ATOM   3900  HG  SER A 338       0.577  -5.018 -13.666  1.00  0.00           H
ATOM   3901  N   PRO A 339       0.879  -4.206 -18.076  1.00 22.35           N
ATOM   3902  CA  PRO A 339      -0.169  -3.604 -18.927  1.00 21.08           C
ATOM   3903  C   PRO A 339      -1.529  -3.418 -18.225  1.00 19.47           C
ATOM   3904  O   PRO A 339      -2.092  -2.324 -18.222  1.00 20.76           O
ATOM   3905  CB  PRO A 339      -0.272  -4.537 -20.139  1.00 20.47           C
ATOM   3906  CG  PRO A 339       1.067  -5.242 -20.230  1.00 21.32           C
ATOM   3907  CD  PRO A 339       1.599  -5.258 -18.801  1.00 19.67           C
ATOM   3908  HA  PRO A 339       0.173  -2.627 -19.271  1.00  0.00           H
ATOM   3909  HB2 PRO A 339      -1.058  -5.279 -20.001  1.00  0.00           H
ATOM   3910  HB3 PRO A 339      -0.492  -3.982 -21.050  1.00  0.00           H
ATOM   3911  HG2 PRO A 339       0.990  -6.238 -20.668  1.00  0.00           H
ATOM   3912  HG3 PRO A 339       1.733  -4.653 -20.863  1.00  0.00           H
ATOM   3913  HD2 PRO A 339       1.393  -6.223 -18.338  1.00  0.00           H
ATOM   3914  HD3 PRO A 339       2.677  -5.097 -18.805  1.00  0.00           H
ATOM   3915  N   ALA A 340      -1.983  -4.463 -17.516  1.00 19.58           N
ATOM   3916  CA  ALA A 340      -3.208  -4.484 -16.723  1.00 19.57           C
ATOM   3917  C   ALA A 340      -3.315  -3.346 -15.698  1.00 19.42           C
ATOM   3918  O   ALA A 340      -4.372  -2.728 -15.593  1.00 17.04           O
ATOM   3919  CB  ALA A 340      -3.350  -5.850 -16.039  1.00 20.76           C
ATOM   3920  H   ALA A 340      -1.463  -5.321 -17.579  1.00  0.00           H
ATOM   3921  HA  ALA A 340      -4.034  -4.348 -17.418  1.00  0.00           H
ATOM   3922  HB1 ALA A 340      -4.257  -5.891 -15.433  1.00  0.00           H
ATOM   3923  HB2 ALA A 340      -3.416  -6.651 -16.776  1.00  0.00           H
ATOM   3924  HB3 ALA A 340      -2.506  -6.061 -15.380  1.00  0.00           H
ATOM   3925  N   TYR A 341      -2.230  -3.028 -14.979  1.00 18.41           N
ATOM   3926  CA  TYR A 341      -2.239  -1.914 -14.034  1.00 20.02           C
ATOM   3927  C   TYR A 341      -1.940  -0.576 -14.731  1.00 20.29           C
ATOM   3928  O   TYR A 341      -2.478   0.446 -14.307  1.00 20.54           O
ATOM   3929  CB  TYR A 341      -1.202  -2.124 -12.923  1.00 19.15           C
ATOM   3930  CG  TYR A 341      -1.352  -1.112 -11.794  1.00 19.29           C
ATOM   3931  CD1 TYR A 341      -2.352  -1.280 -10.818  1.00 18.41           C
ATOM   3932  CD2 TYR A 341      -0.540   0.036 -11.752  1.00 17.75           C
ATOM   3933  CE1 TYR A 341      -2.499  -0.349  -9.768  1.00 19.60           C
ATOM   3934  CE2 TYR A 341      -0.696   0.972 -10.720  1.00 19.82           C
ATOM   3935  CZ  TYR A 341      -1.652   0.771  -9.709  1.00 19.34           C
ATOM   3936  OH  TYR A 341      -1.743   1.667  -8.685  1.00 19.62           O
ATOM   3937  H   TYR A 341      -1.364  -3.521 -15.159  1.00  0.00           H
ATOM   3938  HA  TYR A 341      -3.217  -1.853 -13.558  1.00  0.00           H
ATOM   3939  HB2 TYR A 341      -1.311  -3.123 -12.499  1.00  0.00           H
ATOM   3940  HB3 TYR A 341      -0.192  -2.084 -13.335  1.00  0.00           H
ATOM   3941  HD1 TYR A 341      -3.003  -2.133 -10.889  1.00  0.00           H
ATOM   3942  HD2 TYR A 341       0.191   0.222 -12.524  1.00  0.00           H
ATOM   3943  HE1 TYR A 341      -3.254  -0.491  -9.009  1.00  0.00           H
ATOM   3944  HE2 TYR A 341      -0.072   1.844 -10.728  1.00  0.00           H
ATOM   3945  HH  TYR A 341      -1.034   2.300  -8.772  1.00  0.00           H
ATOM   3946  N   ARG A 342      -1.126  -0.557 -15.795  1.00 20.95           N
ATOM   3947  CA  ARG A 342      -0.771   0.648 -16.547  1.00 21.79           C
ATOM   3948  C   ARG A 342      -2.009   1.310 -17.158  1.00 22.81           C
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ATOM   3949  O   ARG A 342      -2.315   2.462 -16.849  1.00 22.78           O
ATOM   3950  CB  ARG A 342       0.187   0.298 -17.691  1.00 23.26           C
ATOM   3951  CG  ARG A 342       1.627  -0.011 -17.299  1.00 23.00           C
ATOM   3952  CD  ARG A 342       2.329  -0.721 -18.465  1.00 25.52           C
ATOM   3953  NE  ARG A 342       3.771  -0.481 -18.432  1.00 27.12           N
ATOM   3954  CZ  ARG A 342       4.424   0.462 -19.121  1.00 24.20           C
ATOM   3955  NH1 ARG A 342       3.781   1.292 -19.950  1.00 21.44           N
ATOM   3956  NH2 ARG A 342       5.743   0.577 -18.958  1.00 25.12           N1+
ATOM   3957  H   ARG A 342      -0.735  -1.441 -16.107  1.00  0.00           H
ATOM   3958  HA  ARG A 342      -0.300   1.363 -15.872  1.00  0.00           H
ATOM   3959  HB2 ARG A 342      -0.222  -0.544 -18.247  1.00  0.00           H
ATOM   3960  HB3 ARG A 342       0.213   1.126 -18.401  1.00  0.00           H
ATOM   3961  HG2 ARG A 342       2.132   0.919 -17.042  1.00  0.00           H
ATOM   3962  HG3 ARG A 342       1.661  -0.630 -16.403  1.00  0.00           H
ATOM   3963  HD2 ARG A 342       2.166  -1.792 -18.401  1.00  0.00           H
ATOM   3964  HD3 ARG A 342       1.917  -0.435 -19.430  1.00  0.00           H
ATOM   3965  HE  ARG A 342       4.223  -1.167 -17.820  1.00  0.00           H
ATOM   3966 HH11 ARG A 342       2.757   1.225 -20.129  1.00  0.00           H
ATOM   3967 HH12 ARG A 342       4.225   2.018 -20.486  1.00  0.00           H
ATOM   3968 HH21 ARG A 342       6.237  -0.033 -18.322  1.00  0.00           H
ATOM   3969 HH22 ARG A 342       6.286   1.280 -19.435  1.00  0.00           H
ATOM   3970  N   GLU A 343      -2.738   0.553 -17.982  1.00 24.14           N
ATOM   3971  CA  GLU A 343      -3.908   1.020 -18.705  1.00 24.75           C
ATOM   3972  C   GLU A 343      -5.102   1.199 -17.741  1.00 24.10           C
ATOM   3973  O   GLU A 343      -5.981   2.022 -18.010  1.00 24.31           O
ATOM   3974  CB  GLU A 343      -4.236   0.006 -19.824  1.00 25.68           C
ATOM   3975  CG  GLU A 343      -3.346   0.146 -21.087  1.00 30.62           C
ATOM   3976  CD  GLU A 343      -1.962  -0.497 -20.994  1.00 30.71           C
ATOM   3977  OE1 GLU A 343      -1.867  -1.690 -21.351  1.00 32.63           O
ATOM   3978  OE2 GLU A 343      -1.001   0.207 -20.605  1.00 29.45           O1-
ATOM   3979  H   GLU A 343      -2.391  -0.377 -18.217  1.00  0.00           H
ATOM   3980  HA  GLU A 343      -3.694   1.995 -19.148  1.00  0.00           H
ATOM   3981  HB2 GLU A 343      -4.186  -1.015 -19.441  1.00  0.00           H
ATOM   3982  HB3 GLU A 343      -5.269   0.146 -20.143  1.00  0.00           H
ATOM   3983  HG2 GLU A 343      -3.853  -0.328 -21.927  1.00  0.00           H
ATOM   3984  HG3 GLU A 343      -3.230   1.194 -21.362  1.00  0.00           H
ATOM   3985  N   TYR A 344      -5.108   0.510 -16.585  1.00 22.33           N
ATOM   3986  CA  TYR A 344      -6.018   0.776 -15.467  1.00 19.95           C
ATOM   3987  C   TYR A 344      -5.688   2.130 -14.831  1.00 21.16           C
ATOM   3988  O   TYR A 344      -6.578   2.972 -14.721  1.00 19.78           O
ATOM   3989  CB  TYR A 344      -5.944  -0.337 -14.397  1.00 17.99           C
ATOM   3990  CG  TYR A 344      -6.723  -0.063 -13.116  1.00 21.67           C
ATOM   3991  CD1 TYR A 344      -8.126   0.027 -13.160  1.00 21.18           C
ATOM   3992  CD2 TYR A 344      -6.052   0.143 -11.889  1.00 21.43           C
ATOM   3993  CE1 TYR A 344      -8.851   0.360 -12.003  1.00 20.99           C
ATOM   3994  CE2 TYR A 344      -6.784   0.459 -10.726  1.00 21.57           C
ATOM   3995  CZ  TYR A 344      -8.184   0.601 -10.789  1.00 21.53           C
ATOM   3996  OH  TYR A 344      -8.892   0.995  -9.690  1.00 19.87           O
ATOM   3997  H   TYR A 344      -4.369  -0.168 -16.451  1.00  0.00           H
ATOM   3998  HA  TYR A 344      -7.038   0.830 -15.844  1.00  0.00           H
ATOM   3999  HB2 TYR A 344      -6.323  -1.264 -14.825  1.00  0.00           H
ATOM   4000  HB3 TYR A 344      -4.907  -0.527 -14.135  1.00  0.00           H
ATOM   4001  HD1 TYR A 344      -8.647  -0.135 -14.090  1.00  0.00           H
ATOM   4002  HD2 TYR A 344      -4.975   0.077 -11.835  1.00  0.00           H
ATOM   4003  HE1 TYR A 344      -9.920   0.439 -12.062  1.00  0.00           H
ATOM   4004  HE2 TYR A 344      -6.267   0.614  -9.792  1.00  0.00           H
ATOM   4005  HH  TYR A 344      -9.787   1.259  -9.904  1.00  0.00           H
ATOM   4006  N   PHE A 345      -4.425   2.370 -14.452  1.00 20.71           N
ATOM   4007  CA  PHE A 345      -3.990   3.623 -13.850  1.00 20.36           C
ATOM   4008  C   PHE A 345      -4.222   4.806 -14.798  1.00 21.44           C
ATOM   4009  O   PHE A 345      -4.783   5.812 -14.373  1.00 22.30           O
ATOM   4010  CB  PHE A 345      -2.516   3.577 -13.379  1.00 18.78           C
ATOM   4011  CG  PHE A 345      -2.086   4.922 -12.809  1.00 18.84           C
ATOM   4012  CD1 PHE A 345      -2.661   5.379 -11.604  1.00 19.24           C
ATOM   4013  CD2 PHE A 345      -1.301   5.799 -13.590  1.00 17.98           C
ATOM   4014  CE1 PHE A 345      -2.512   6.725 -11.221  1.00 17.82           C
ATOM   4015  CE2 PHE A 345      -1.150   7.142 -13.196  1.00 18.95           C
ATOM   4016  CZ  PHE A 345      -1.769   7.609 -12.022  1.00 18.47           C
ATOM   4017  H   PHE A 345      -3.723   1.638 -14.570  1.00  0.00           H
ATOM   4018  HA  PHE A 345      -4.619   3.786 -12.974  1.00  0.00           H
ATOM   4019  HB2 PHE A 345      -2.388   2.807 -12.617  1.00  0.00           H
ATOM   4020  HB3 PHE A 345      -1.862   3.301 -14.208  1.00  0.00           H
ATOM   4021  HD1 PHE A 345      -3.294   4.723 -11.024  1.00  0.00           H
ATOM   4022  HD2 PHE A 345      -0.899   5.478 -14.542  1.00  0.00           H
ATOM   4023  HE1 PHE A 345      -3.005   7.103 -10.340  1.00  0.00           H
ATOM   4024  HE2 PHE A 345      -0.607   7.837 -13.819  1.00  0.00           H
ATOM   4025  HZ  PHE A 345      -1.690   8.651 -11.750  1.00  0.00           H
ATOM   4026  N   ASP A 346      -3.856   4.696 -16.081  1.00 21.25           N
ATOM   4027  CA  ASP A 346      -4.030   5.805 -17.021  1.00 20.54           C
ATOM   4028  C   ASP A 346      -5.517   6.083 -17.327  1.00 20.57           C
ATOM   4029  O   ASP A 346      -5.889   7.238 -17.514  1.00 18.80           O
ATOM   4030  CB  ASP A 346      -3.201   5.594 -18.301  1.00 21.13           C
ATOM   4031  CG  ASP A 346      -2.616   6.924 -18.765  1.00 21.90           C
ATOM   4032  OD1 ASP A 346      -1.578   7.346 -18.204  1.00 20.23           O
ATOM   4033  OD2 ASP A 346      -3.240   7.566 -19.631  1.00 24.56           O1-
ATOM   4034  H   ASP A 346      -3.360   3.860 -16.390  1.00  0.00           H
ATOM   4035  HA  ASP A 346      -3.642   6.688 -16.509  1.00  0.00           H
ATOM   4036  HB2 ASP A 346      -2.361   4.924 -18.119  1.00  0.00           H
ATOM   4037  HB3 ASP A 346      -3.789   5.146 -19.103  1.00  0.00           H
ATOM   4038  N   THR A 347      -6.404   5.075 -17.211  1.00 20.11           N
ATOM   4039  CA  THR A 347      -7.863   5.262 -17.189  1.00 20.50           C
ATOM   4040  C   THR A 347      -8.322   6.133 -15.986  1.00 19.74           C
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ATOM   4041  O   THR A 347      -9.332   6.825 -16.099  1.00 19.02           O
ATOM   4042  CB  THR A 347      -8.594   3.880 -17.223  1.00 17.98           C
ATOM   4043  OG1 THR A 347      -8.354   3.207 -18.454  1.00 21.15           O
ATOM   4044  CG2 THR A 347     -10.126   3.939 -17.097  1.00 18.73           C
ATOM   4045  H   THR A 347      -6.035   4.159 -16.996  1.00  0.00           H
ATOM   4046  HA  THR A 347      -8.136   5.819 -18.088  1.00  0.00           H
ATOM   4047  HB  THR A 347      -8.233   3.241 -16.422  1.00  0.00           H
ATOM   4048  HG1 THR A 347      -7.432   2.915 -18.420  1.00  0.00           H
ATOM   4049 HG21 THR A 347     -10.578   2.952 -17.193  1.00  0.00           H
ATOM   4050 HG22 THR A 347     -10.422   4.300 -16.114  1.00  0.00           H
ATOM   4051 HG23 THR A 347     -10.572   4.604 -17.836  1.00  0.00           H
ATOM   4052  N   LEU A 348      -7.590   6.146 -14.860  1.00 20.95           N
ATOM   4053  CA  LEU A 348      -7.841   7.023 -13.713  1.00 20.70           C
ATOM   4054  C   LEU A 348      -7.149   8.389 -13.917  1.00 20.77           C
ATOM   4055  O   LEU A 348      -7.708   9.425 -13.546  1.00 22.33           O
ATOM   4056  CB  LEU A 348      -7.256   6.384 -12.420  1.00 19.16           C
ATOM   4057  CG  LEU A 348      -7.766   4.967 -12.063  1.00 19.34           C
ATOM   4058  CD1 LEU A 348      -6.981   4.403 -10.874  1.00 18.78           C
ATOM   4059  CD2 LEU A 348      -9.275   4.881 -11.779  1.00 16.55           C
ATOM   4060  H   LEU A 348      -6.738   5.596 -14.838  1.00  0.00           H
ATOM   4061  HA  LEU A 348      -8.912   7.192 -13.594  1.00  0.00           H
ATOM   4062  HB2 LEU A 348      -6.172   6.339 -12.495  1.00  0.00           H
ATOM   4063  HB3 LEU A 348      -7.406   7.048 -11.572  1.00  0.00           H
ATOM   4064  HG  LEU A 348      -7.567   4.316 -12.911  1.00  0.00           H
ATOM   4065 HD11 LEU A 348      -7.308   3.390 -10.637  1.00  0.00           H
ATOM   4066 HD12 LEU A 348      -5.913   4.357 -11.086  1.00  0.00           H
ATOM   4067 HD13 LEU A 348      -7.116   5.015  -9.982  1.00  0.00           H
ATOM   4068 HD21 LEU A 348      -9.583   3.839 -11.676  1.00  0.00           H
ATOM   4069 HD22 LEU A 348      -9.542   5.384 -10.851  1.00  0.00           H
ATOM   4070 HD23 LEU A 348      -9.864   5.309 -12.587  1.00  0.00           H
ATOM   4071  N   ASP A 349      -5.940   8.397 -14.494  1.00 21.51           N
ATOM   4072  CA  ASP A 349      -5.060   9.566 -14.599  1.00 21.24           C
ATOM   4073  C   ASP A 349      -5.491  10.538 -15.707  1.00 21.96           C
ATOM   4074  O   ASP A 349      -5.533  11.750 -15.481  1.00 19.94           O
ATOM   4075  CB  ASP A 349      -3.615   9.100 -14.886  1.00 18.89           C
ATOM   4076  CG  ASP A 349      -2.572  10.088 -14.383  1.00 19.84           C
ATOM   4077  OD1 ASP A 349      -2.713  10.590 -13.249  1.00 20.50           O
ATOM   4078  OD2 ASP A 349      -1.569  10.346 -15.084  1.00 19.99           O1-
ATOM   4079  H   ASP A 349      -5.532   7.494 -14.718  1.00  0.00           H
ATOM   4080  HA  ASP A 349      -5.107  10.090 -13.641  1.00  0.00           H
ATOM   4081  HB2 ASP A 349      -3.419   8.157 -14.378  1.00  0.00           H
ATOM   4082  HB3 ASP A 349      -3.449   8.915 -15.949  1.00  0.00           H
ATOM   4083  N   HIS A 350      -5.888  10.013 -16.877  1.00 22.62           N
ATOM   4084  CA  HIS A 350      -6.475  10.787 -17.979  1.00 23.51           C
ATOM   4085  C   HIS A 350      -7.959  11.120 -17.726  1.00 22.85           C
ATOM   4086  O   HIS A 350      -8.559  11.856 -18.507  1.00 22.01           O
ATOM   4087  CB  HIS A 350      -6.316  10.052 -19.334  1.00  0.00           C
ATOM   4088  CG  HIS A 350      -5.187  10.579 -20.188  1.00  0.00           C
ATOM   4089  ND1 HIS A 350      -4.012   9.887 -20.422  1.00  0.00           N
ATOM   4090  CD2 HIS A 350      -5.052  11.766 -20.876  1.00  0.00           C
ATOM   4091  CE1 HIS A 350      -3.259  10.631 -21.232  1.00  0.00           C
ATOM   4092  NE2 HIS A 350      -3.827  11.790 -21.549  1.00  0.00           N
ATOM   4093  H   HIS A 350      -5.793   9.008 -17.021  1.00  0.00           H
ATOM   4094  HA  HIS A 350      -5.968  11.744 -18.063  1.00  0.00           H
ATOM   4095  HB2 HIS A 350      -6.202   8.978 -19.212  1.00  0.00           H
ATOM   4096  HB3 HIS A 350      -7.211  10.169 -19.947  1.00  0.00           H
ATOM   4097  HD1 HIS A 350      -3.739   8.922 -20.083  1.00  0.00           H
ATOM   4098  HD2 HIS A 350      -5.741  12.595 -20.942  1.00  0.00           H
ATOM   4099  HE1 HIS A 350      -2.287  10.319 -21.589  1.00  0.00           H
ATOM   4100  N   GLN A 351      -8.549  10.631 -16.623  1.00 22.30           N
ATOM   4101  CA  GLN A 351      -9.817  11.128 -16.096  1.00 23.00           C
ATOM   4102  C   GLN A 351      -9.479  12.354 -15.227  1.00 22.67           C
ATOM   4103  O   GLN A 351      -9.858  13.468 -15.583  1.00 19.82           O
ATOM   4104  CB  GLN A 351     -10.529  10.002 -15.300  1.00 23.52           C
ATOM   4105  CG  GLN A 351     -12.051  10.178 -15.095  1.00 26.12           C
ATOM   4106  CD  GLN A 351     -12.455  10.726 -13.725  1.00 28.38           C
ATOM   4107  OE1 GLN A 351     -11.844  11.649 -13.205  1.00 27.29           O
ATOM   4108  NE2 GLN A 351     -13.482  10.155 -13.111  1.00 27.43           N
ATOM   4109  H   GLN A 351      -7.972  10.057 -16.027  1.00  0.00           H
ATOM   4110  HA  GLN A 351     -10.459  11.442 -16.922  1.00  0.00           H
ATOM   4111  HB2 GLN A 351     -10.407   9.083 -15.870  1.00  0.00           H
ATOM   4112  HB3 GLN A 351     -10.044   9.805 -14.345  1.00  0.00           H
ATOM   4113  HG2 GLN A 351     -12.470  10.822 -15.868  1.00  0.00           H
ATOM   4114  HG3 GLN A 351     -12.531   9.208 -15.230  1.00  0.00           H
ATOM   4115 HE21 GLN A 351     -13.822   9.263 -13.467  1.00  0.00           H
ATOM   4116 HE22 GLN A 351     -13.801  10.495 -12.211  1.00  0.00           H
ATOM   4117  N   GLY A 352      -8.704  12.167 -14.147  1.00 21.90           N
ATOM   4118  CA  GLY A 352      -8.156  13.236 -13.305  1.00 22.88           C
ATOM   4119  C   GLY A 352      -8.603  13.174 -11.839  1.00 23.50           C
ATOM   4120  O   GLY A 352      -8.053  13.875 -10.986  1.00 20.98           O
ATOM   4121  H   GLY A 352      -8.371  11.224 -13.963  1.00  0.00           H
ATOM   4122  HA2 GLY A 352      -7.071  13.139 -13.331  1.00  0.00           H
ATOM   4123  HA3 GLY A 352      -8.401  14.224 -13.695  1.00  0.00           H
ATOM   4124  N   GLY A 353      -9.590  12.317 -11.559  1.00 21.49           N
ATOM   4125  CA  GLY A 353     -10.165  11.832 -10.305  1.00 20.56           C
ATOM   4126  C   GLY A 353      -9.544  12.241  -8.969  1.00 21.34           C
ATOM   4127  O   GLY A 353     -10.218  12.854  -8.140  1.00 20.96           O
ATOM   4128  H   GLY A 353     -10.038  11.932 -12.387  1.00  0.00           H
ATOM   4129  HA2 GLY A 353     -11.235  12.039 -10.297  1.00  0.00           H
ATOM   4130  HA3 GLY A 353     -10.054  10.760 -10.366  1.00  0.00           H
ATOM   4131  N   PHE A 354      -8.253  11.926  -8.777  1.00 21.51           N
ATOM   4132  CA  PHE A 354      -7.412  12.235  -7.612  1.00 21.68           C
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ATOM   4133  C   PHE A 354      -7.520  13.697  -7.154  1.00 22.65           C
ATOM   4134  O   PHE A 354      -7.505  13.991  -5.958  1.00 23.57           O
ATOM   4135  CB  PHE A 354      -5.942  11.882  -7.927  1.00 20.06           C
ATOM   4136  CG  PHE A 354      -5.706  10.439  -8.338  1.00 22.30           C
ATOM   4137  CD1 PHE A 354      -5.600   9.438  -7.352  1.00 22.41           C
ATOM   4138  CD2 PHE A 354      -5.596  10.091  -9.702  1.00 19.69           C
ATOM   4139  CE1 PHE A 354      -5.421   8.093  -7.724  1.00 22.82           C
ATOM   4140  CE2 PHE A 354      -5.411   8.746 -10.074  1.00 19.35           C
ATOM   4141  CZ  PHE A 354      -5.337   7.745  -9.085  1.00 19.73           C
ATOM   4142  H   PHE A 354      -7.800  11.423  -9.526  1.00  0.00           H
ATOM   4143  HA  PHE A 354      -7.752  11.618  -6.781  1.00  0.00           H
ATOM   4144  HB2 PHE A 354      -5.558  12.538  -8.711  1.00  0.00           H
ATOM   4145  HB3 PHE A 354      -5.322  12.088  -7.051  1.00  0.00           H
ATOM   4146  HD1 PHE A 354      -5.661   9.694  -6.305  1.00  0.00           H
ATOM   4147  HD2 PHE A 354      -5.650  10.847 -10.474  1.00  0.00           H
ATOM   4148  HE1 PHE A 354      -5.344   7.328  -6.963  1.00  0.00           H
ATOM   4149  HE2 PHE A 354      -5.320   8.485 -11.120  1.00  0.00           H
ATOM   4150  HZ  PHE A 354      -5.199   6.711  -9.368  1.00  0.00           H
ATOM   4151  N   PHE A 355      -7.656  14.602  -8.124  1.00 22.12           N
ATOM   4152  CA  PHE A 355      -7.761  16.035  -7.921  1.00 21.19           C
ATOM   4153  C   PHE A 355      -9.224  16.484  -7.842  1.00 20.42           C
ATOM   4154  O   PHE A 355      -9.530  17.403  -7.087  1.00 20.48           O
ATOM   4155  CB  PHE A 355      -7.116  16.708  -9.143  1.00 22.36           C
ATOM   4156  CG  PHE A 355      -5.672  16.298  -9.382  1.00 24.02           C
ATOM   4157  CD1 PHE A 355      -4.748  16.310  -8.318  1.00 22.48           C
ATOM   4158  CD2 PHE A 355      -5.253  15.886 -10.662  1.00 24.49           C
ATOM   4159  CE1 PHE A 355      -3.422  15.905  -8.528  1.00 22.98           C
ATOM   4160  CE2 PHE A 355      -3.913  15.515 -10.882  1.00 25.14           C
ATOM   4161  CZ  PHE A 355      -2.994  15.536  -9.815  1.00 26.02           C
ATOM   4162  H   PHE A 355      -7.660  14.264  -9.084  1.00  0.00           H
ATOM   4163  HA  PHE A 355      -7.254  16.334  -7.006  1.00  0.00           H
ATOM   4164  HB2 PHE A 355      -7.698  16.504 -10.044  1.00  0.00           H
ATOM   4165  HB3 PHE A 355      -7.140  17.786  -9.006  1.00  0.00           H
ATOM   4166  HD1 PHE A 355      -5.043  16.643  -7.336  1.00  0.00           H
ATOM   4167  HD2 PHE A 355      -5.957  15.855 -11.478  1.00  0.00           H
ATOM   4168  HE1 PHE A 355      -2.740  15.890  -7.693  1.00  0.00           H
ATOM   4169  HE2 PHE A 355      -3.594  15.202 -11.866  1.00  0.00           H
ATOM   4170  HZ  PHE A 355      -1.963  15.265  -9.984  1.00  0.00           H
ATOM   4171  N   TYR A 356     -10.116  15.833  -8.597  1.00 19.12           N
ATOM   4172  CA  TYR A 356     -11.530  16.187  -8.742  1.00 18.71           C
ATOM   4173  C   TYR A 356     -12.358  15.831  -7.509  1.00 20.13           C
ATOM   4174  O   TYR A 356     -13.346  16.495  -7.216  1.00 17.47           O
ATOM   4175  CB  TYR A 356     -12.129  15.336  -9.876  1.00 17.74           C
ATOM   4176  CG  TYR A 356     -11.701  15.620 -11.295  1.00 21.18           C
ATOM   4177  CD1 TYR A 356     -10.993  16.786 -11.649  1.00 20.84           C
ATOM   4178  CD2 TYR A 356     -12.038  14.683 -12.288  1.00 21.61           C
ATOM   4179  CE1 TYR A 356     -10.559  16.968 -12.972  1.00 22.87           C
ATOM   4180  CE2 TYR A 356     -11.625  14.880 -13.614  1.00 22.71           C
ATOM   4181  CZ  TYR A 356     -10.846  16.002 -13.950  1.00 24.04           C
ATOM   4182  OH  TYR A 356     -10.342  16.135 -15.208  1.00 25.85           O
ATOM   4183  H   TYR A 356      -9.782  15.039  -9.127  1.00  0.00           H
ATOM   4184  HA  TYR A 356     -11.648  17.255  -8.927  1.00  0.00           H
ATOM   4185  HB2 TYR A 356     -11.946  14.279  -9.676  1.00  0.00           H
ATOM   4186  HB3 TYR A 356     -13.206  15.438  -9.869  1.00  0.00           H
ATOM   4187  HD1 TYR A 356     -10.756  17.540 -10.919  1.00  0.00           H
ATOM   4188  HD2 TYR A 356     -12.584  13.785 -12.039  1.00  0.00           H
ATOM   4189  HE1 TYR A 356      -9.986  17.843 -13.227  1.00  0.00           H
ATOM   4190  HE2 TYR A 356     -11.878  14.137 -14.356  1.00  0.00           H
ATOM   4191  HH  TYR A 356     -10.223  15.266 -15.605  1.00  0.00           H
ATOM   4192  N   GLU A 357     -11.986  14.749  -6.834  1.00 19.72           N
ATOM   4193  CA  GLU A 357     -12.532  14.315  -5.567  1.00 19.69           C
ATOM   4194  C   GLU A 357     -11.307  14.268  -4.650  1.00 21.19           C
ATOM   4195  O   GLU A 357     -10.603  15.278  -4.530  1.00 22.16           O
ATOM   4196  CB  GLU A 357     -13.328  13.005  -5.773  1.00 19.32           C
ATOM   4197  CG  GLU A 357     -14.674  13.230  -6.507  1.00 20.09           C
ATOM   4198  CD  GLU A 357     -14.938  12.300  -7.686  1.00 23.06           C
ATOM   4199  OE1 GLU A 357     -14.661  11.083  -7.602  1.00 20.05           O
ATOM   4200  OE2 GLU A 357     -15.470  12.802  -8.701  1.00 23.66           O1-
ATOM   4201  H   GLU A 357     -11.181  14.234  -7.180  1.00  0.00           H
ATOM   4202  HA  GLU A 357     -13.195  15.069  -5.139  1.00  0.00           H
ATOM   4203  HB2 GLU A 357     -12.706  12.285  -6.306  1.00  0.00           H
ATOM   4204  HB3 GLU A 357     -13.553  12.553  -4.808  1.00  0.00           H
ATOM   4205  HG2 GLU A 357     -15.503  13.148  -5.808  1.00  0.00           H
ATOM   4206  HG3 GLU A 357     -14.733  14.250  -6.883  1.00  0.00           H
ATOM   4207  N   ARG A 358     -11.023  13.133  -4.015  1.00 19.68           N
ATOM   4208  CA  ARG A 358      -9.814  12.923  -3.236  1.00 19.97           C
ATOM   4209  C   ARG A 358      -9.542  11.422  -3.213  1.00 20.10           C
ATOM   4210  O   ARG A 358      -9.540  10.820  -2.142  1.00 19.00           O
ATOM   4211  CB  ARG A 358      -9.938  13.597  -1.852  1.00 19.86           C
ATOM   4212  CG  ARG A 358      -8.655  13.568  -0.997  1.00 19.86           C
ATOM   4213  CD  ARG A 358      -8.885  13.015   0.416  1.00 19.26           C
ATOM   4214  NE  ARG A 358      -9.110  11.566   0.381  1.00 20.24           N
ATOM   4215  CZ  ARG A 358      -9.033  10.720   1.410  1.00 19.04           C
ATOM   4216  NH1 ARG A 358      -8.859  11.157   2.654  1.00 17.28           N
ATOM   4217  NH2 ARG A 358      -9.123   9.416   1.191  1.00 18.85           N1+
ATOM   4218  H   ARG A 358     -11.640  12.331  -4.111  1.00  0.00           H
ATOM   4219  HA  ARG A 358      -8.973  13.379  -3.763  1.00  0.00           H
ATOM   4220  HB2 ARG A 358     -10.232  14.639  -1.980  1.00  0.00           H
ATOM   4221  HB3 ARG A 358     -10.761  13.123  -1.316  1.00  0.00           H
ATOM   4222  HG2 ARG A 358      -7.870  12.990  -1.487  1.00  0.00           H
ATOM   4223  HG3 ARG A 358      -8.252  14.579  -0.926  1.00  0.00           H
ATOM   4224  HD2 ARG A 358      -7.987  13.195   0.998  1.00  0.00           H
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ATOM   4225  HD3 ARG A 358      -9.703  13.518   0.929  1.00  0.00           H
ATOM   4226  HE  ARG A 358      -9.264  11.175  -0.564  1.00  0.00           H
ATOM   4227 HH11 ARG A 358      -8.991  12.133   2.937  1.00  0.00           H
ATOM   4228 HH12 ARG A 358      -8.538  10.511   3.379  1.00  0.00           H
ATOM   4229 HH21 ARG A 358      -9.318   9.000   0.267  1.00  0.00           H
ATOM   4230 HH22 ARG A 358      -9.073   8.750   1.964  1.00  0.00           H
ATOM   4231  N   TRP A 359      -9.374  10.812  -4.391  1.00 19.26           N
ATOM   4232  CA  TRP A 359      -9.144   9.375  -4.531  1.00 19.61           C
ATOM   4233  C   TRP A 359      -7.806   8.988  -3.891  1.00 18.49           C
ATOM   4234  O   TRP A 359      -6.810   9.687  -4.081  1.00 21.29           O
ATOM   4235  CB  TRP A 359      -9.101   8.966  -6.017  1.00 19.93           C
ATOM   4236  CG  TRP A 359     -10.301   9.204  -6.884  1.00 23.18           C
ATOM   4237  CD1 TRP A 359     -11.474   9.779  -6.529  1.00 23.43           C
ATOM   4238  CD2 TRP A 359     -10.436   8.870  -8.295  1.00 22.00           C
ATOM   4239  NE1 TRP A 359     -12.310   9.850  -7.625  1.00 26.12           N
ATOM   4240  CE3 TRP A 359      -9.593   8.257  -9.252  1.00 22.65           C
ATOM   4241  CE2 TRP A 359     -11.719   9.303  -8.743  1.00 24.16           C
ATOM   4242  CZ3 TRP A 359     -10.016   8.088 -10.586  1.00 21.38           C
ATOM   4243  CZ2 TRP A 359     -12.132   9.147 -10.075  1.00 24.29           C
ATOM   4244  CH2 TRP A 359     -11.283   8.523 -10.999  1.00 23.99           C
ATOM   4245  H   TRP A 359      -9.392  11.371  -5.229  1.00  0.00           H
ATOM   4246  HA  TRP A 359      -9.952   8.846  -4.027  1.00  0.00           H
ATOM   4247  HB2 TRP A 359      -8.261   9.454  -6.508  1.00  0.00           H
ATOM   4248  HB3 TRP A 359      -8.876   7.901  -6.084  1.00  0.00           H
ATOM   4249  HD1 TRP A 359     -11.704  10.150  -5.542  1.00  0.00           H
ATOM   4250  HE1 TRP A 359     -13.239  10.331  -7.606  1.00  0.00           H
ATOM   4251  HE3 TRP A 359      -8.606   7.926  -8.959  1.00  0.00           H
ATOM   4252  HZ3 TRP A 359      -9.369   7.640 -11.315  1.00  0.00           H
ATOM   4253  HZ2 TRP A 359     -13.090   9.501 -10.395  1.00  0.00           H
ATOM   4254  HH2 TRP A 359     -11.588   8.404 -12.027  1.00  0.00           H
ATOM   4255  N   GLY A 360      -7.792   7.867  -3.173  1.00 20.56           N
ATOM   4256  CA  GLY A 360      -6.638   7.374  -2.449  1.00 19.56           C
ATOM   4257  C   GLY A 360      -5.988   6.224  -3.212  1.00 19.97           C
ATOM   4258  O   GLY A 360      -6.665   5.452  -3.893  1.00 19.92           O
ATOM   4259  H   GLY A 360      -8.669   7.398  -2.997  1.00  0.00           H
ATOM   4260  HA2 GLY A 360      -5.924   8.166  -2.241  1.00  0.00           H
ATOM   4261  HA3 GLY A 360      -6.974   7.004  -1.480  1.00  0.00           H
ATOM   4262  N   ASP A 361      -4.667   6.082  -3.073  1.00 18.87           N
ATOM   4263  CA  ASP A 361      -3.864   5.020  -3.685  1.00 20.81           C
ATOM   4264  C   ASP A 361      -4.191   3.631  -3.101  1.00 20.03           C
ATOM   4265  O   ASP A 361      -4.076   2.636  -3.814  1.00 22.19           O
ATOM   4266  CB  ASP A 361      -2.354   5.323  -3.513  1.00 21.93           C
ATOM   4267  CG  ASP A 361      -1.879   5.421  -2.070  1.00 21.87           C
ATOM   4268  OD1 ASP A 361      -2.094   6.486  -1.452  1.00 25.70           O
ATOM   4269  OD2 ASP A 361      -1.354   4.423  -1.536  1.00 23.34           O1-
ATOM   4270  H   ASP A 361      -4.166   6.767  -2.522  1.00  0.00           H
ATOM   4271  HA  ASP A 361      -4.103   4.989  -4.746  1.00  0.00           H
ATOM   4272  HB2 ASP A 361      -1.771   4.551  -4.013  1.00  0.00           H
ATOM   4273  HB3 ASP A 361      -2.103   6.255  -4.017  1.00  0.00           H
ATOM   4274  N   ALA A 362      -4.626   3.549  -1.836  1.00 20.12           N
ATOM   4275  CA  ALA A 362      -4.988   2.301  -1.158  1.00 19.36           C
ATOM   4276  C   ALA A 362      -6.157   1.540  -1.829  1.00 19.28           C
ATOM   4277  O   ALA A 362      -5.939   0.386  -2.209  1.00 17.72           O
ATOM   4278  CB  ALA A 362      -5.234   2.551   0.334  1.00 20.36           C
ATOM   4279  H   ALA A 362      -4.676   4.412  -1.319  1.00  0.00           H
ATOM   4280  HA  ALA A 362      -4.113   1.655  -1.233  1.00  0.00           H
ATOM   4281  HB1 ALA A 362      -5.150   1.622   0.882  1.00  0.00           H
ATOM   4282  HB2 ALA A 362      -4.486   3.203   0.768  1.00  0.00           H
ATOM   4283  HB3 ALA A 362      -6.210   2.973   0.547  1.00  0.00           H
ATOM   4284  N   PRO A 363      -7.349   2.143  -2.081  1.00 17.22           N
ATOM   4285  CA  PRO A 363      -8.380   1.517  -2.920  1.00 17.69           C
ATOM   4286  C   PRO A 363      -7.941   1.225  -4.365  1.00 17.56           C
ATOM   4287  O   PRO A 363      -8.209   0.122  -4.833  1.00 18.84           O
ATOM   4288  CB  PRO A 363      -9.629   2.403  -2.810  1.00 18.18           C
ATOM   4289  CG  PRO A 363      -9.116   3.751  -2.338  1.00 20.02           C
ATOM   4290  CD  PRO A 363      -7.821   3.440  -1.586  1.00 17.04           C
ATOM   4291  HA  PRO A 363      -8.629   0.552  -2.484  1.00  0.00           H
ATOM   4292  HB2 PRO A 363     -10.200   2.470  -3.738  1.00  0.00           H
ATOM   4293  HB3 PRO A 363     -10.296   1.992  -2.051  1.00  0.00           H
ATOM   4294  HG2 PRO A 363      -8.900   4.374  -3.206  1.00  0.00           H
ATOM   4295  HG3 PRO A 363      -9.836   4.292  -1.723  1.00  0.00           H
ATOM   4296  HD2 PRO A 363      -7.099   4.245  -1.666  1.00  0.00           H
ATOM   4297  HD3 PRO A 363      -8.069   3.334  -0.529  1.00  0.00           H
ATOM   4298  N   VAL A 364      -7.201   2.121  -5.037  1.00 15.81           N
ATOM   4299  CA  VAL A 364      -6.636   1.899  -6.379  1.00 13.67           C
ATOM   4300  C   VAL A 364      -5.704   0.663  -6.422  1.00 15.13           C
ATOM   4301  O   VAL A 364      -5.827  -0.177  -7.314  1.00 12.77           O
ATOM   4302  CB  VAL A 364      -5.950   3.207  -6.868  1.00 16.16           C
ATOM   4303  CG1 VAL A 364      -5.149   3.055  -8.175  1.00 13.85           C
ATOM   4304  CG2 VAL A 364      -6.979   4.339  -7.040  1.00 15.04           C
ATOM   4305  H   VAL A 364      -7.014   3.017  -4.604  1.00  0.00           H
ATOM   4306  HA  VAL A 364      -7.467   1.677  -7.054  1.00  0.00           H
ATOM   4307  HB  VAL A 364      -5.239   3.522  -6.106  1.00  0.00           H
ATOM   4308 HG11 VAL A 364      -4.765   4.016  -8.512  1.00  0.00           H
ATOM   4309 HG12 VAL A 364      -4.291   2.393  -8.058  1.00  0.00           H
ATOM   4310 HG13 VAL A 364      -5.771   2.653  -8.972  1.00  0.00           H
ATOM   4311 HG21 VAL A 364      -6.492   5.273  -7.320  1.00  0.00           H
ATOM   4312 HG22 VAL A 364      -7.704   4.096  -7.816  1.00  0.00           H
ATOM   4313 HG23 VAL A 364      -7.534   4.531  -6.124  1.00  0.00           H
ATOM   4314  N   HIS A 365      -4.831   0.493  -5.416  1.00 14.05           N
ATOM   4315  CA  HIS A 365      -3.973  -0.688  -5.276  1.00 17.18           C
ATOM   4316  C   HIS A 365      -4.792  -1.952  -4.984  1.00 16.98           C
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ATOM   4317  O   HIS A 365     -4.417  -3.027  -5.436  1.00 19.79          O
ATOM   4318  CB  HIS A 365     -2.983  -0.543  -4.102  1.00 16.11          C
ATOM   4319  CG  HIS A 365     -1.851   0.437  -4.250  1.00 19.71          C
ATOM   4320  ND1 HIS A 365     -0.821   0.441  -3.334  1.00 19.57          N1+
ATOM   4321  CD2 HIS A 365     -1.584   1.451  -5.154  1.00 18.63          C
ATOM   4322  CE1 HIS A 365      0.021   1.406  -3.661  1.00 21.02          C
ATOM   4323  NE2 HIS A 365     -0.402   2.051  -4.740  1.00 20.54          N
ATOM   4324  H   HIS A 365     -4.755   1.238  -4.725  1.00  0.00          H
ATOM   4325  HA  HIS A 365     -3.418  -0.846  -6.204  1.00  0.00          H
ATOM   4326  HB2 HIS A 365     -3.517  -0.299  -3.183  1.00  0.00          H
ATOM   4327  HB3 HIS A 365     -2.508  -1.510  -3.915  1.00  0.00          H
ATOM   4328  HD1 HIS A 365     -0.678  -0.216  -2.516  1.00  0.00          H
ATOM   4329  HD2 HIS A 365     -2.135   1.809  -6.013  1.00  0.00          H
ATOM   4330  HE1 HIS A 365      0.916   1.639  -3.100  1.00  0.00          H
ATOM   4331  HE2 HIS A 365      0.050   2.906  -5.099  1.00  0.00          H
ATOM   4332  N   SER A 366     -5.896  -1.836  -4.239  1.00 18.87          N
ATOM   4333  CA  SER A 366     -6.689  -2.979  -3.797  1.00 18.88          C
ATOM   4334  C   SER A 366     -7.630  -3.467  -4.899  1.00 19.48          C
ATOM   4335  O   SER A 366     -7.738  -4.674  -5.100  1.00 17.62          O
ATOM   4336  CB  SER A 366     -7.547  -2.556  -2.602  1.00 18.94          C
ATOM   4337  OG  SER A 366     -6.697  -2.169  -1.543  1.00 19.20          O
ATOM   4338  H   SER A 366     -6.171  -0.912  -3.932  1.00  0.00          H
ATOM   4339  HA  SER A 366     -6.036  -3.804  -3.513  1.00  0.00          H
ATOM   4340  HB2 SER A 366     -8.227  -1.741  -2.854  1.00  0.00          H
ATOM   4341  HB3 SER A 366     -8.162  -3.394  -2.269  1.00  0.00          H
ATOM   4342  HG  SER A 366     -6.204  -1.391  -1.810  1.00  0.00          H
ATOM   4343  N   ILE A 367     -8.269  -2.546  -5.641  1.00 19.28          N
ATOM   4344  CA  ILE A 367     -9.080  -2.844  -6.822  1.00 18.73          C
ATOM   4345  C   ILE A 367     -8.211  -3.530  -7.894  1.00 19.02          C
ATOM   4346  O   ILE A 367     -8.669  -4.466  -8.541  1.00 20.14          O
ATOM   4347  CB  ILE A 367     -9.807  -1.558  -7.320  1.00 16.72          C
ATOM   4348  CG1 ILE A 367    -10.830  -1.048  -6.271  1.00 15.35          C
ATOM   4349  CG2 ILE A 367    -10.518  -1.752  -8.679  1.00 14.85          C
ATOM   4350  CD1 ILE A 367    -11.239   0.421  -6.462  1.00 15.61          C
ATOM   4351  H   ILE A 367     -8.136  -1.560  -5.419  1.00  0.00          H
ATOM   4352  HA  ILE A 367     -9.835  -3.566  -6.523  1.00  0.00          H
ATOM   4353  HB  ILE A 367     -9.045  -0.788  -7.460  1.00  0.00          H
ATOM   4354 HG12 ILE A 367    -11.716  -1.682  -6.277  1.00  0.00          H
ATOM   4355 HG13 ILE A 367    -10.424  -1.141  -5.264  1.00  0.00          H
ATOM   4356 HG21 ILE A 367    -11.056  -0.857  -8.982  1.00  0.00          H
ATOM   4357 HG22 ILE A 367     -9.808  -1.962  -9.480  1.00  0.00          H
ATOM   4358 HG23 ILE A 367    -11.231  -2.576  -8.643  1.00  0.00          H
ATOM   4359 HD11 ILE A 367    -11.906   0.741  -5.660  1.00  0.00          H
ATOM   4360 HD12 ILE A 367    -10.366   1.073  -6.443  1.00  0.00          H
ATOM   4361 HD13 ILE A 367    -11.755   0.587  -7.407  1.00  0.00          H
ATOM   4362  N   ALA A 368     -6.939  -3.132  -8.010  1.00 17.53          N
ATOM   4363  CA  ALA A 368     -5.959  -3.801  -8.846  1.00 16.44          C
ATOM   4364  C   ALA A 368     -5.518  -5.155  -8.262  1.00 18.86          C
ATOM   4365  O   ALA A 368     -5.675  -6.174  -8.924  1.00 20.08          O
ATOM   4366  CB  ALA A 368     -4.742  -2.892  -8.983  1.00 16.29          C
ATOM   4367  H   ALA A 368     -6.646  -2.315  -7.491  1.00  0.00          H
ATOM   4368  HA  ALA A 368     -6.391  -3.976  -9.834  1.00  0.00          H
ATOM   4369  HB1 ALA A 368     -3.952  -3.419  -9.513  1.00  0.00          H
ATOM   4370  HB2 ALA A 368     -5.000  -1.998  -9.550  1.00  0.00          H
ATOM   4371  HB3 ALA A 368     -4.340  -2.577  -8.021  1.00  0.00          H
ATOM   4372  N   ALA A 369     -4.983  -5.202  -7.032  1.00 18.52          N
ATOM   4373  CA  ALA A 369     -4.405  -6.408  -6.421  1.00 20.68          C
ATOM   4374  C   ALA A 369     -5.411  -7.549  -6.208  1.00 20.05          C
ATOM   4375  O   ALA A 369     -5.009  -8.706  -6.144  1.00 18.61          O
ATOM   4376  CB  ALA A 369     -3.761  -6.057  -5.070  1.00 20.85          C
ATOM   4377  H   ALA A 369     -4.882  -4.331  -6.515  1.00  0.00          H
ATOM   4378  HA  ALA A 369     -3.628  -6.786  -7.088  1.00  0.00          H
ATOM   4379  HB1 ALA A 369     -3.392  -6.950  -4.561  1.00  0.00          H
ATOM   4380  HB2 ALA A 369     -2.908  -5.395  -5.194  1.00  0.00          H
ATOM   4381  HB3 ALA A 369     -4.467  -5.566  -4.402  1.00  0.00          H
ATOM   4382  N   ALA A 370     -6.709  -7.241  -6.116  1.00 20.81          N
ATOM   4383  CA  ALA A 370     -7.770  -8.233  -6.014  1.00 23.03          C
ATOM   4384  C   ALA A 370     -8.262  -8.721  -7.391  1.00 24.19          C
ATOM   4385  O   ALA A 370     -8.979  -9.719  -7.429  1.00 25.96          O
ATOM   4386  CB  ALA A 370     -8.956  -7.582  -5.289  1.00 24.55          C
ATOM   4387  H   ALA A 370     -6.970  -6.260  -6.113  1.00  0.00          H
ATOM   4388  HA  ALA A 370     -7.434  -9.097  -5.442  1.00  0.00          H
ATOM   4389  HB1 ALA A 370     -9.811  -8.254  -5.221  1.00  0.00          H
ATOM   4390  HB2 ALA A 370     -8.684  -7.293  -4.274  1.00  0.00          H
ATOM   4391  HB3 ALA A 370     -9.285  -6.687  -5.811  1.00  0.00          H
ATOM   4392  N   LEU A 371     -7.918  -8.050  -8.502  1.00 24.56          N
ATOM   4393  CA  LEU A 371     -8.421  -8.358  -9.848  1.00 24.21          C
ATOM   4394  C   LEU A 371     -7.316  -8.708 -10.849  1.00 24.41          C
ATOM   4395  O   LEU A 371     -7.577  -9.442 -11.800  1.00 21.31          O
ATOM   4396  CB  LEU A 371     -9.262  -7.184 -10.396  1.00 24.83          C
ATOM   4397  CG  LEU A 371    -10.527  -6.834  -9.586  1.00 27.38          C
ATOM   4398  CD1 LEU A 371    -11.282  -5.662 -10.233  1.00 25.79          C
ATOM   4399  CD2 LEU A 371    -11.470  -8.026  -9.375  1.00 27.66          C
ATOM   4400  H   LEU A 371     -7.303  -7.250  -8.405  1.00  0.00          H
ATOM   4401  HA  LEU A 371     -9.051  -9.244  -9.828  1.00  0.00          H
ATOM   4402  HB2 LEU A 371     -8.626  -6.299 -10.465  1.00  0.00          H
ATOM   4403  HB3 LEU A 371     -9.553  -7.400 -11.424  1.00  0.00          H
ATOM   4404  HG  LEU A 371    -10.198  -6.511  -8.601  1.00  0.00          H
ATOM   4405 HD11 LEU A 371    -12.115  -5.336  -9.610  1.00  0.00          H
ATOM   4406 HD12 LEU A 371    -10.626  -4.802 -10.372  1.00  0.00          H
ATOM   4407 HD13 LEU A 371    -11.680  -5.938 -11.209  1.00  0.00          H
ATOM   4408 HD21 LEU A 371    -12.379  -7.705  -8.873  1.00  0.00          H
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ATOM   4409 HD22 LEU A 371     -11.748  -8.496 -10.317  1.00  0.00          H
ATOM   4410 HD23 LEU A 371     -11.027  -8.785  -8.736  1.00  0.00          H
ATOM   4411  N   PHE A 372      -6.105  -8.174 -10.672  1.00 22.29          N
ATOM   4412  CA  PHE A 372      -4.961  -8.340 -11.572  1.00 20.76          C
ATOM   4413  C   PHE A 372      -3.949  -9.330 -10.976  1.00 22.10          C
ATOM   4414  O   PHE A 372      -2.831  -9.451 -11.471  1.00 20.77          O
ATOM   4415  CB  PHE A 372      -4.264  -6.975 -11.788  1.00 20.58          C
ATOM   4416  CG  PHE A 372      -5.129  -5.834 -12.306  1.00 20.46          C
ATOM   4417  CD1 PHE A 372      -6.374  -6.063 -12.936  1.00 19.24          C
ATOM   4418  CD2 PHE A 372      -4.683  -4.510 -12.122  1.00 17.33          C
ATOM   4419  CE1 PHE A 372      -7.204  -4.983 -13.281  1.00 21.85          C
ATOM   4420  CE2 PHE A 372      -5.504  -3.429 -12.492  1.00 20.11          C
ATOM   4421  CZ  PHE A 372      -6.772  -3.665 -13.052  1.00 20.51          C
ATOM   4422  H   PHE A 372      -5.982  -7.494  -9.921  1.00  0.00          H
ATOM   4423  HA  PHE A 372      -5.284  -8.742 -12.532  1.00  0.00          H
ATOM   4424  HB2 PHE A 372      -3.811  -6.653 -10.848  1.00  0.00          H
ATOM   4425  HB3 PHE A 372      -3.431  -7.087 -12.483  1.00  0.00          H
ATOM   4426  HD1 PHE A 372      -6.726  -7.063 -13.138  1.00  0.00          H
ATOM   4427  HD2 PHE A 372      -3.717  -4.323 -11.680  1.00  0.00          H
ATOM   4428  HE1 PHE A 372      -8.171  -5.173 -13.720  1.00  0.00          H
ATOM   4429  HE2 PHE A 372      -5.166  -2.417 -12.336  1.00  0.00          H
ATOM   4430  HZ  PHE A 372      -7.408  -2.835 -13.322  1.00  0.00          H
ATOM   4431  N   LEU A 373      -4.341 -10.053  -9.927  1.00 21.49          N
ATOM   4432  CA  LEU A 373      -3.662 -11.234  -9.430  1.00 22.37          C
ATOM   4433  C   LEU A 373      -4.687 -12.369  -9.369  1.00 22.61          C
ATOM   4434  O   LEU A 373      -5.840 -12.106  -9.003  1.00 21.20          O
ATOM   4435  CB  LEU A 373      -3.109 -10.982  -8.011  1.00 21.57          C
ATOM   4436  CG  LEU A 373      -1.894 -10.041  -7.918  1.00 21.65          C
ATOM   4437  CD1 LEU A 373      -1.546  -9.759  -6.447  1.00 25.02          C
ATOM   4438  CD2 LEU A 373      -0.670 -10.603  -8.658  1.00 24.25          C
ATOM   4439  H   LEU A 373      -5.297  -9.942  -9.619  1.00  0.00          H
ATOM   4440  HA  LEU A 373      -2.861 -11.509 -10.113  1.00  0.00          H
ATOM   4441  HB2 LEU A 373      -3.916 -10.600  -7.386  1.00  0.00          H
ATOM   4442  HB3 LEU A 373      -2.848 -11.939  -7.564  1.00  0.00          H
ATOM   4443  HG  LEU A 373      -2.160  -9.089  -8.380  1.00  0.00          H
ATOM   4444 HD11 LEU A 373      -0.685  -9.099  -6.362  1.00  0.00          H
ATOM   4445 HD12 LEU A 373      -2.377  -9.275  -5.933  1.00  0.00          H
ATOM   4446 HD13 LEU A 373      -1.313 -10.676  -5.905  1.00  0.00          H
ATOM   4447 HD21 LEU A 373       0.191  -9.956  -8.511  1.00  0.00          H
ATOM   4448 HD22 LEU A 373      -0.404 -11.598  -8.304  1.00  0.00          H
ATOM   4449 HD23 LEU A 373      -0.836 -10.658  -9.734  1.00  0.00          H
ATOM   4450  N   PRO A 374      -4.266 -13.631  -9.599  1.00 23.37          N
ATOM   4451  CA  PRO A 374      -5.055 -14.794  -9.205  1.00 23.61          C
ATOM   4452  C   PRO A 374      -4.963 -14.904  -7.672  1.00 24.19          C
ATOM   4453  O   PRO A 374      -3.878 -14.725  -7.114  1.00 25.28          O
ATOM   4454  CB  PRO A 374      -4.394 -15.970  -9.944  1.00 21.86          C
ATOM   4455  CG  PRO A 374      -2.950 -15.558 -10.165  1.00 25.99          C
ATOM   4456  CD  PRO A 374      -2.986 -14.027 -10.193  1.00 23.76          C
ATOM   4457  HA  PRO A 374      -6.091 -14.654  -9.514  1.00  0.00          H
ATOM   4458  HB2 PRO A 374      -4.494 -16.925  -9.428  1.00  0.00          H
ATOM   4459  HB3 PRO A 374      -4.853 -16.080 -10.926  1.00  0.00          H
ATOM   4460  HG2 PRO A 374      -2.354 -15.916  -9.337  1.00  0.00          H
ATOM   4461  HG3 PRO A 374      -2.524 -15.986 -11.072  1.00  0.00          H
ATOM   4462  HD2 PRO A 374      -2.143 -13.607  -9.646  1.00  0.00          H
ATOM   4463  HD3 PRO A 374      -2.933 -13.661 -11.218  1.00  0.00          H
ATOM   4464  N   LYS A 375      -6.083 -15.113  -6.968  1.00 23.78          N
ATOM   4465  CA  LYS A 375      -6.210 -14.800  -5.539  1.00 23.97          C
ATOM   4466  C   LYS A 375      -5.278 -15.565  -4.571  1.00 22.75          C
ATOM   4467  O   LYS A 375      -5.169 -15.174  -3.410  1.00 21.14          O
ATOM   4468  CB  LYS A 375      -7.689 -14.867  -5.104  1.00 23.67          C
ATOM   4469  CG  LYS A 375      -8.315 -16.266  -4.942  1.00 25.99          C
ATOM   4470  CD  LYS A 375      -9.788 -16.165  -4.503  1.00 27.02          C
ATOM   4471  CE  LYS A 375     -10.239 -17.319  -3.594  1.00 27.83          C
ATOM   4472  NZ  LYS A 375     -11.547 -17.045  -2.970  1.00 29.10          N1+
ATOM   4473  H   LYS A 375      -6.952 -15.250  -7.487  1.00  0.00          H
ATOM   4474  HA  LYS A 375      -5.911 -13.754  -5.451  1.00  0.00          H
ATOM   4475  HB2 LYS A 375      -7.765 -14.348  -4.147  1.00  0.00          H
ATOM   4476  HB3 LYS A 375      -8.288 -14.280  -5.801  1.00  0.00          H
ATOM   4477  HG2 LYS A 375      -8.237 -16.831  -5.872  1.00  0.00          H
ATOM   4478  HG3 LYS A 375      -7.745 -16.819  -4.195  1.00  0.00          H
ATOM   4479  HD2 LYS A 375      -9.920 -15.235  -3.957  1.00  0.00          H
ATOM   4480  HD3 LYS A 375     -10.426 -16.082  -5.385  1.00  0.00          H
ATOM   4481  HE2 LYS A 375     -10.283 -18.254  -4.154  1.00  0.00          H
ATOM   4482  HE3 LYS A 375      -9.517 -17.475  -2.793  1.00  0.00          H
ATOM   4483  HZ1 LYS A 375     -11.681 -17.680  -2.186  1.00  0.00          H
ATOM   4484  HZ2 LYS A 375     -11.581 -16.111  -2.576  1.00  0.00          H
ATOM   4485  HZ3 LYS A 375     -12.295 -17.140  -3.637  1.00  0.00          H
ATOM   4486  N   ASP A 376      -4.562 -16.596  -5.048  1.00 22.97          N
ATOM   4487  CA  ASP A 376      -3.416 -17.234  -4.378  1.00 23.49          C
ATOM   4488  C   ASP A 376      -2.306 -16.215  -4.050  1.00 24.05          C
ATOM   4489  O   ASP A 376      -1.675 -16.297  -3.004  1.00 23.37          O
ATOM   4490  CB  ASP A 376      -2.888 -18.428  -5.237  1.00 26.21          C
ATOM   4491  CG  ASP A 376      -1.445 -18.891  -4.962  1.00 25.03          C
ATOM   4492  OD1 ASP A 376      -0.626 -18.877  -5.909  1.00 24.00          O
ATOM   4493  OD2 ASP A 376      -1.141 -19.220  -3.795  1.00 25.73          O1-
ATOM   4494  H   ASP A 376      -4.684 -16.779  -6.032  1.00  0.00          H
ATOM   4495  HA  ASP A 376      -3.758 -17.633  -3.421  1.00  0.00          H
ATOM   4496  HB2 ASP A 376      -3.543 -19.290  -5.112  1.00  0.00          H
ATOM   4497  HB3 ASP A 376      -2.935 -18.162  -6.293  1.00  0.00          H
ATOM   4498  N   LYS A 377      -2.065 -15.241  -4.935  1.00 23.50          N
ATOM   4499  CA  LYS A 377      -0.882 -14.383  -4.893  1.00 22.56          C
ATOM   4500  C   LYS A 377      -1.025 -13.176  -3.950  1.00 21.29          C
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ATOM   4501  O   LYS A 377      -0.106 -12.357  -3.869  1.00 20.97          O
ATOM   4502  CB  LYS A 377      -0.598 -13.847  -6.308  1.00 21.84          C
ATOM   4503  CG  LYS A 377      -0.588 -14.896  -7.430  1.00 23.25          C
ATOM   4504  CD  LYS A 377       0.406 -16.055  -7.285  1.00 21.18          C
ATOM   4505  CE  LYS A 377       0.200 -17.136  -8.366  1.00 22.85          C
ATOM   4506  NZ  LYS A 377       0.845 -18.398  -7.998  1.00 23.32          N1+
ATOM   4507  H   LYS A 377      -2.684 -15.158  -5.739  1.00  0.00          H
ATOM   4508  HA  LYS A 377      -0.035 -14.964  -4.551  1.00  0.00          H
ATOM   4509  HB2 LYS A 377      -1.350 -13.101  -6.556  1.00  0.00          H
ATOM   4510  HB3 LYS A 377       0.345 -13.311  -6.301  1.00  0.00          H
ATOM   4511  HG2 LYS A 377      -1.578 -15.330  -7.483  1.00  0.00          H
ATOM   4512  HG3 LYS A 377      -0.436 -14.382  -8.373  1.00  0.00          H
ATOM   4513  HD2 LYS A 377       1.435 -15.694  -7.287  1.00  0.00          H
ATOM   4514  HD3 LYS A 377       0.241 -16.513  -6.313  1.00  0.00          H
ATOM   4515  HE2 LYS A 377      -0.861 -17.359  -8.474  1.00  0.00          H
ATOM   4516  HE3 LYS A 377       0.568 -16.810  -9.338  1.00  0.00          H
ATOM   4517  HZ1 LYS A 377       0.446 -18.677  -7.083  1.00  0.00          H
ATOM   4518  HZ2 LYS A 377       0.647 -19.119  -8.666  1.00  0.00          H
ATOM   4519  HZ3 LYS A 377       1.876 -18.275  -7.960  1.00  0.00          H
ATOM   4520  N   ILE A 378      -2.155 -13.061  -3.253  1.00 20.46          N
ATOM   4521  CA  ILE A 378      -2.449 -12.012  -2.292  1.00 19.71          C
ATOM   4522  C   ILE A 378      -2.201 -12.650  -0.909  1.00 21.20          C
ATOM   4523  O   ILE A 378      -2.714 -13.736  -0.630  1.00 23.96          O
ATOM   4524  CB  ILE A 378      -3.938 -11.573  -2.447  1.00 19.96          C
ATOM   4525  CG1 ILE A 378      -4.362 -11.334  -3.923  1.00 16.92          C
ATOM   4526  CG2 ILE A 378      -4.202 -10.301  -1.617  1.00 15.66          C
ATOM   4527  CD1 ILE A 378      -5.875 -11.177  -4.120  1.00 19.39          C
ATOM   4528  H   ILE A 378      -2.799 -13.840  -3.279  1.00  0.00          H
ATOM   4529  HA  ILE A 378      -1.800 -11.152  -2.451  1.00  0.00          H
ATOM   4530  HB  ILE A 378      -4.571 -12.372  -2.057  1.00  0.00          H
ATOM   4531 HG12 ILE A 378      -3.844 -10.462  -4.325  1.00  0.00          H
ATOM   4532 HG13 ILE A 378      -4.064 -12.169  -4.557  1.00  0.00          H
ATOM   4533 HG21 ILE A 378      -5.243  -9.986  -1.662  1.00  0.00          H
ATOM   4534 HG22 ILE A 378      -3.963 -10.458  -0.567  1.00  0.00          H
ATOM   4535 HG23 ILE A 378      -3.598  -9.465  -1.970  1.00  0.00          H
ATOM   4536 HD11 ILE A 378      -6.114 -11.124  -5.183  1.00  0.00          H
ATOM   4537 HD12 ILE A 378      -6.418 -12.024  -3.701  1.00  0.00          H
ATOM   4538 HD13 ILE A 378      -6.252 -10.264  -3.660  1.00  0.00          H
ATOM   4539  N   HIS A 379      -1.412 -12.001  -0.046  1.00 20.04          N
ATOM   4540  CA  HIS A 379      -1.047 -12.482   1.285  1.00 20.47          C
ATOM   4541  C   HIS A 379      -1.435 -11.449   2.347  1.00 21.04          C
ATOM   4542  O   HIS A 379      -1.199 -10.257   2.172  1.00 19.94          O
ATOM   4543  CB  HIS A 379       0.458 -12.807   1.328  1.00 21.51          C
ATOM   4544  CG  HIS A 379       0.935 -13.385   2.634  1.00 21.45          C
ATOM   4545  ND1 HIS A 379       0.370 -14.535   3.193  1.00 20.38          N
ATOM   4546  CD2 HIS A 379       1.940 -12.940   3.459  1.00 22.37          C
ATOM   4547  CE1 HIS A 379       1.028 -14.718   4.334  1.00 22.41          C
ATOM   4548  NE2 HIS A 379       1.977 -13.805   4.539  1.00 22.62          N
ATOM   4549  H   HIS A 379      -1.010 -11.112  -0.343  1.00  0.00          H
ATOM   4550  HA  HIS A 379      -1.586 -13.404   1.510  1.00  0.00          H
ATOM   4551  HB2 HIS A 379       0.701 -13.519   0.548  1.00  0.00          H
ATOM   4552  HB3 HIS A 379       1.049 -11.918   1.113  1.00  0.00          H
ATOM   4553  HD2 HIS A 379       2.607 -12.098   3.370  1.00  0.00          H
ATOM   4554  HE1 HIS A 379       0.813 -15.517   5.030  1.00  0.00          H
ATOM   4555  HE2 HIS A 379       2.587 -13.735   5.349  1.00  0.00          H
ATOM   4556  N   TYR A 380      -1.986 -11.914   3.468  1.00 21.37          N
ATOM   4557  CA  TYR A 380      -2.120 -11.145   4.699  1.00 21.69          C
ATOM   4558  C   TYR A 380      -1.101 -11.778   5.648  1.00 20.30          C
ATOM   4559  O   TYR A 380      -1.173 -12.984   5.899  1.00 21.92          O
ATOM   4560  CB  TYR A 380      -3.551 -11.314   5.260  1.00 19.97          C
ATOM   4561  CG  TYR A 380      -3.738 -10.862   6.700  1.00 21.86          C
ATOM   4562  CD1 TYR A 380      -3.856  -9.495   7.018  1.00 18.74          C
ATOM   4563  CD2 TYR A 380      -3.739 -11.816   7.736  1.00 19.94          C
ATOM   4564  CE1 TYR A 380      -3.939  -9.088   8.366  1.00 21.73          C
ATOM   4565  CE2 TYR A 380      -3.825 -11.406   9.079  1.00 22.01          C
ATOM   4566  CZ  TYR A 380      -3.896 -10.042   9.397  1.00 22.98          C
ATOM   4567  OH  TYR A 380      -3.933  -9.671  10.708  1.00 22.49          O
ATOM   4568  H   TYR A 380      -1.954 -12.916   3.606  1.00  0.00          H
ATOM   4569  HA  TYR A 380      -1.907 -10.084   4.559  1.00  0.00          H
ATOM   4570  HB2 TYR A 380      -4.246 -10.754   4.635  1.00  0.00          H
ATOM   4571  HB3 TYR A 380      -3.856 -12.359   5.193  1.00  0.00          H
ATOM   4572  HD1 TYR A 380      -3.858  -8.755   6.231  1.00  0.00          H
ATOM   4573  HD2 TYR A 380      -3.649 -12.868   7.505  1.00  0.00          H
ATOM   4574  HE1 TYR A 380      -4.024  -8.041   8.608  1.00  0.00          H
ATOM   4575  HE2 TYR A 380      -3.836 -12.137   9.871  1.00  0.00          H
ATOM   4576  HH  TYR A 380      -4.360  -8.822  10.871  1.00  0.00          H
ATOM   4577  N   PHE A 381      -0.165 -10.983   6.170  1.00 21.02          N
ATOM   4578  CA  PHE A 381       0.823 -11.436   7.142  1.00 22.01          C
ATOM   4579  C   PHE A 381       0.170 -11.480   8.534  1.00 21.75          C
ATOM   4580  O   PHE A 381       0.150 -10.488   9.266  1.00 21.88          O
ATOM   4581  CB  PHE A 381       2.000 -10.449   7.166  1.00 21.96          C
ATOM   4582  CG  PHE A 381       2.942 -10.525   5.981  1.00 23.44          C
ATOM   4583  CD1 PHE A 381       4.001 -11.457   5.987  1.00 24.95          C
ATOM   4584  CD2 PHE A 381       2.803  -9.636   4.899  1.00 24.30          C
ATOM   4585  CE1 PHE A 381       4.921 -11.494   4.922  1.00 24.65          C
ATOM   4586  CE2 PHE A 381       3.721  -9.677   3.836  1.00 24.16          C
ATOM   4587  CZ  PHE A 381       4.785 -10.598   3.847  1.00 22.13          C
ATOM   4588  H   PHE A 381      -0.173  -9.997   5.926  1.00  0.00          H
ATOM   4589  HA  PHE A 381       1.198 -12.430   6.891  1.00  0.00          H
ATOM   4590  HB2 PHE A 381       1.651  -9.425   7.290  1.00  0.00          H
ATOM   4591  HB3 PHE A 381       2.597 -10.669   8.047  1.00  0.00          H
ATOM   4592  HD1 PHE A 381       4.125 -12.133   6.824  1.00  0.00          H
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ATOM   4593  HD2 PHE A 381       2.008  -8.908   4.887  1.00  0.00           H
ATOM   4594  HE1 PHE A 381       5.733 -12.206   4.942  1.00  0.00           H
ATOM   4595  HE2 PHE A 381       3.620  -8.977   3.028  1.00  0.00           H
ATOM   4596  HZ  PHE A 381       5.493 -10.621   3.034  1.00  0.00           H
ATOM   4597  N   SER A 382      -0.367 -12.648   8.897  1.00 22.55           N
ATOM   4598  CA  SER A 382      -0.981 -12.943  10.189  1.00 23.85           C
ATOM   4599  C   SER A 382       0.044 -13.184  11.308  1.00 23.18           C
ATOM   4600  O   SER A 382      -0.338 -13.334  12.465  1.00 24.66           O
ATOM   4601  CB  SER A 382      -1.837 -14.213   9.994  1.00 23.74           C
ATOM   4602  OG  SER A 382      -1.107 -15.308   9.455  1.00 23.95           O
ATOM   4603  H   SER A 382      -0.333 -13.409   8.229  1.00  0.00           H
ATOM   4604  HA  SER A 382      -1.606 -12.106  10.503  1.00  0.00           H
ATOM   4605  HB2 SER A 382      -2.299 -14.510  10.937  1.00  0.00           H
ATOM   4606  HB3 SER A 382      -2.649 -13.997   9.307  1.00  0.00           H
ATOM   4607  HG  SER A 382      -0.328 -15.440   9.980  1.00  0.00           H
ATOM   4608  N   ASP A 383       1.323 -13.265  10.945  1.00 25.17           N
ATOM   4609  CA  ASP A 383       2.518 -13.433  11.761  1.00 23.87           C
ATOM   4610  C   ASP A 383       3.131 -12.062  12.110  1.00 23.92           C
ATOM   4611  O   ASP A 383       3.902 -11.972  13.066  1.00 24.24           O
ATOM   4612  CB  ASP A 383       3.562 -14.208  10.905  1.00 23.64           C
ATOM   4613  CG  ASP A 383       3.873 -13.615   9.522  1.00 23.19           C
ATOM   4614  OD1 ASP A 383       2.906 -13.311   8.785  1.00 22.50           O
ATOM   4615  OD2 ASP A 383       5.070 -13.472   9.204  1.00 22.18           O1-
ATOM   4616  H   ASP A 383       1.553 -13.172   9.950  1.00  0.00           H
ATOM   4617  HA  ASP A 383       2.291 -13.974  12.681  1.00  0.00           H
ATOM   4618  HB2 ASP A 383       4.498 -14.297  11.460  1.00  0.00           H
ATOM   4619  HB3 ASP A 383       3.215 -15.228  10.745  1.00  0.00           H
ATOM   4620  N   ILE A 384       2.794 -10.995  11.371  1.00 22.55           N
ATOM   4621  CA  ILE A 384       3.319  -9.655  11.592  1.00 22.33           C
ATOM   4622  C   ILE A 384       2.287  -8.860  12.406  1.00 23.48           C
ATOM   4623  O   ILE A 384       1.110  -8.752  12.059  1.00 25.39           O
ATOM   4624  CB  ILE A 384       3.640  -8.963  10.233  1.00 22.93           C
ATOM   4625  CG1 ILE A 384       4.755  -9.753   9.498  1.00 21.02           C
ATOM   4626  CG2 ILE A 384       4.052  -7.480  10.398  1.00 18.69           C
ATOM   4627  CD1 ILE A 384       5.272  -9.122   8.197  1.00 22.41           C
ATOM   4628  H   ILE A 384       2.116 -11.125  10.634  1.00  0.00           H
ATOM   4629  HA  ILE A 384       4.250  -9.709  12.159  1.00  0.00           H
ATOM   4630  HB  ILE A 384       2.737  -8.976   9.620  1.00  0.00           H
ATOM   4631 HG12 ILE A 384       5.595  -9.911  10.170  1.00  0.00           H
ATOM   4632 HG13 ILE A 384       4.406 -10.760   9.269  1.00  0.00           H
ATOM   4633 HG21 ILE A 384       4.236  -7.001   9.437  1.00  0.00           H
ATOM   4634 HG22 ILE A 384       3.276  -6.884  10.876  1.00  0.00           H
ATOM   4635 HG23 ILE A 384       4.958  -7.397  10.997  1.00  0.00           H
ATOM   4636 HD11 ILE A 384       5.907  -9.827   7.659  1.00  0.00           H
ATOM   4637 HD12 ILE A 384       4.455  -8.840   7.535  1.00  0.00           H
ATOM   4638 HD13 ILE A 384       5.869  -8.234   8.393  1.00  0.00           H
ATOM   4639  N   GLY A 385       2.781  -8.221  13.463  1.00 22.88           N
ATOM   4640  CA  GLY A 385       2.078  -7.267  14.296  1.00 21.82           C
ATOM   4641  C   GLY A 385       2.718  -5.914  14.019  1.00 20.82           C
ATOM   4642  O   GLY A 385       3.945  -5.797  13.986  1.00 19.73           O
ATOM   4643  H   GLY A 385       3.759  -8.356  13.663  1.00  0.00           H
ATOM   4644  HA2 GLY A 385       1.015  -7.264  14.068  1.00  0.00           H
ATOM   4645  HA3 GLY A 385       2.188  -7.523  15.349  1.00  0.00           H
ATOM   4646  N   TYR A 386       1.888  -4.908  13.768  1.00 21.09           N
ATOM   4647  CA  TYR A 386       2.235  -3.645  13.133  1.00 20.61           C
ATOM   4648  C   TYR A 386       1.268  -2.566  13.632  1.00 20.86           C
ATOM   4649  O   TYR A 386       0.176  -2.900  14.081  1.00 21.94           O
ATOM   4650  CB  TYR A 386       2.218  -3.868  11.601  1.00 21.65           C
ATOM   4651  CG  TYR A 386       2.200  -2.631  10.726  1.00 21.23           C
ATOM   4652  CD1 TYR A 386       3.398  -2.011  10.319  1.00 20.92           C
ATOM   4653  CD2 TYR A 386       0.960  -2.106  10.308  1.00 17.77           C
ATOM   4654  CE1 TYR A 386       3.352  -0.894   9.464  1.00 20.13           C
ATOM   4655  CE2 TYR A 386       0.916  -0.978   9.474  1.00 19.71           C
ATOM   4656  CZ  TYR A 386       2.112  -0.386   9.031  1.00 19.65           C
ATOM   4657  OH  TYR A 386       2.051   0.646   8.143  1.00 20.30           O
ATOM   4658  H   TYR A 386       0.900  -5.036  13.984  1.00  0.00           H
ATOM   4659  HA  TYR A 386       3.236  -3.351  13.445  1.00  0.00           H
ATOM   4660  HB2 TYR A 386       3.067  -4.484  11.308  1.00  0.00           H
ATOM   4661  HB3 TYR A 386       1.341  -4.459  11.331  1.00  0.00           H
ATOM   4662  HD1 TYR A 386       4.353  -2.401  10.641  1.00  0.00           H
ATOM   4663  HD2 TYR A 386       0.039  -2.575  10.621  1.00  0.00           H
ATOM   4664  HE1 TYR A 386       4.275  -0.447   9.128  1.00  0.00           H
ATOM   4665  HE2 TYR A 386      -0.042  -0.601   9.152  1.00  0.00           H
ATOM   4666  HH  TYR A 386       2.749   0.673   7.489  1.00  0.00           H
ATOM   4667  N   HIS A 387       1.621  -1.282  13.523  1.00 19.49           N
ATOM   4668  CA  HIS A 387       0.718  -0.153  13.746  1.00 20.54           C
ATOM   4669  C   HIS A 387       1.117   1.019  12.853  1.00 18.80           C
ATOM   4670  O   HIS A 387       2.253   1.482  12.937  1.00 18.62           O
ATOM   4671  CB  HIS A 387       0.619   0.189  15.251  1.00 20.00           C
ATOM   4672  CG  HIS A 387      -0.023   1.507  15.649  1.00 25.81           C
ATOM   4673  ND1 HIS A 387      -1.313   1.606  16.153  1.00 22.90           N1+
ATOM   4674  CD2 HIS A 387       0.504   2.789  15.672  1.00 23.86           C
ATOM   4675  CE1 HIS A 387      -1.516   2.870  16.492  1.00 24.18           C
ATOM   4676  NE2 HIS A 387      -0.472   3.629  16.180  1.00 25.10           N
ATOM   4677  H   HIS A 387       2.547  -1.073  13.158  1.00  0.00           H
ATOM   4678  HA  HIS A 387      -0.270  -0.459  13.409  1.00  0.00           H
ATOM   4679  HB2 HIS A 387       0.093  -0.613  15.761  1.00  0.00           H
ATOM   4680  HB3 HIS A 387       1.622   0.187  15.668  1.00  0.00           H
ATOM   4681  HD1 HIS A 387      -1.964   0.849  16.474  1.00  0.00           H
ATOM   4682  HD2 HIS A 387       1.482   3.169  15.406  1.00  0.00           H
ATOM   4683  HE1 HIS A 387      -2.403   3.216  17.002  1.00  0.00           H
ATOM   4684  HE2 HIS A 387      -0.366   4.633  16.453  1.00  0.00           H
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ATOM   4685  N   HIS A 388       0.163   1.533  12.069  1.00 18.98           N
ATOM   4686  CA  HIS A 388       0.185   2.857  11.458  1.00 18.64           C
ATOM   4687  C   HIS A 388      -0.926   3.649  12.172  1.00 20.19           C
ATOM   4688  O   HIS A 388      -2.036   3.123  12.257  1.00 20.72           O
ATOM   4689  CB  HIS A 388      -0.192   2.748   9.961  1.00  0.00           C
ATOM   4690  CG  HIS A 388      -0.406   3.999   9.159  1.00  0.00           C
ATOM   4691  ND1 HIS A 388      -1.499   4.131   8.332  1.00  0.00           N
ATOM   4692  CD2 HIS A 388       0.317   5.147   8.958  1.00  0.00           C
ATOM   4693  CE1 HIS A 388      -1.403   5.298   7.669  1.00  0.00           C
ATOM   4694  NE2 HIS A 388      -0.313   5.943   8.036  1.00  0.00           N
ATOM   4695  H   HIS A 388      -0.768   1.129  12.149  1.00  0.00           H
ATOM   4696  HA  HIS A 388       1.168   3.320  11.551  1.00  0.00           H
ATOM   4697  HB2 HIS A 388       0.622   2.175   9.524  1.00  0.00           H
ATOM   4698  HB3 HIS A 388      -1.079   2.119   9.886  1.00  0.00           H
ATOM   4699  HD1 HIS A 388      -2.228   3.443   8.174  1.00  0.00           H
ATOM   4700  HD2 HIS A 388       1.242   5.469   9.410  1.00  0.00           H
ATOM   4701  HE1 HIS A 388      -2.114   5.652   6.938  1.00  0.00           H
ATOM   4702  N   PRO A 389      -0.675   4.860  12.713  1.00 19.60           N
ATOM   4703  CA  PRO A 389      -1.682   5.657  13.436  1.00 19.62           C
ATOM   4704  C   PRO A 389      -3.032   5.814  12.688  1.00 19.23           C
ATOM   4705  O   PRO A 389      -3.005   6.247  11.531  1.00 20.06           O
ATOM   4706  CB  PRO A 389      -1.011   7.026  13.651  1.00 19.61           C
ATOM   4707  CG  PRO A 389       0.484   6.780  13.550  1.00 19.36           C
ATOM   4708  CD  PRO A 389       0.633   5.515  12.719  1.00 19.21           C
ATOM   4709  HA  PRO A 389      -1.813   5.168  14.396  1.00  0.00           H
ATOM   4710  HB2 PRO A 389      -1.302   7.741  12.880  1.00  0.00           H
ATOM   4711  HB3 PRO A 389      -1.270   7.470  14.611  1.00  0.00           H
ATOM   4712  HG2 PRO A 389       1.005   7.629  13.106  1.00  0.00           H
ATOM   4713  HG3 PRO A 389       0.907   6.620  14.540  1.00  0.00           H
ATOM   4714  HD2 PRO A 389       0.929   5.775  11.705  1.00  0.00           H
ATOM   4715  HD3 PRO A 389       1.400   4.869  13.147  1.00  0.00           H
ATOM   4716  N   PRO A 390      -4.206   5.532  13.301  1.00 19.23           N
ATOM   4717  CA  PRO A 390      -4.423   5.053  14.679  1.00 19.78           C
ATOM   4718  C   PRO A 390      -4.522   3.514  14.861  1.00 19.82           C
ATOM   4719  O   PRO A 390      -4.876   3.098  15.964  1.00 20.50           O
ATOM   4720  CB  PRO A 390      -5.794   5.659  15.031  1.00 16.45           C
ATOM   4721  CG  PRO A 390      -6.564   5.611  13.722  1.00 19.09           C
ATOM   4722  CD  PRO A 390      -5.485   5.908  12.682  1.00 19.54           C
ATOM   4723  HA  PRO A 390      -3.689   5.447  15.381  1.00  0.00           H
ATOM   4724  HB2 PRO A 390      -6.323   5.158  15.841  1.00  0.00           H
ATOM   4725  HB3 PRO A 390      -5.660   6.690  15.353  1.00  0.00           H
ATOM   4726  HG2 PRO A 390      -6.970   4.612  13.575  1.00  0.00           H
ATOM   4727  HG3 PRO A 390      -7.395   6.316  13.689  1.00  0.00           H
ATOM   4728  HD2 PRO A 390      -5.670   5.365  11.755  1.00  0.00           H
ATOM   4729  HD3 PRO A 390      -5.477   6.973  12.444  1.00  0.00           H
ATOM   4730  N   TYR A 391      -4.280   2.659  13.853  1.00 21.44           N
ATOM   4731  CA  TYR A 391      -4.723   1.253  13.856  1.00 22.01           C
ATOM   4732  C   TYR A 391      -3.586   0.229  13.782  1.00 21.91           C
ATOM   4733  O   TYR A 391      -2.579   0.427  13.097  1.00 21.23           O
ATOM   4734  CB  TYR A 391      -5.755   1.014  12.733  1.00 25.04           C
ATOM   4735  CG  TYR A 391      -7.082   1.718  12.936  1.00 26.98           C
ATOM   4736  CD1 TYR A 391      -7.749   1.586  14.169  1.00 27.76           C
ATOM   4737  CD2 TYR A 391      -7.666   2.486  11.904  1.00 28.12           C
ATOM   4738  CE1 TYR A 391      -8.969   2.236  14.386  1.00 29.80           C
ATOM   4739  CE2 TYR A 391      -8.901   3.130  12.120  1.00 28.51           C
ATOM   4740  CZ  TYR A 391      -9.546   3.008  13.366  1.00 30.11           C
ATOM   4741  OH  TYR A 391     -10.731   3.626  13.617  1.00 29.73           O
ATOM   4742  H   TYR A 391      -3.782   2.974  13.028  1.00  0.00           H
ATOM   4743  HA  TYR A 391      -5.210   1.035  14.805  1.00  0.00           H
ATOM   4744  HB2 TYR A 391      -5.338   1.299  11.772  1.00  0.00           H
ATOM   4745  HB3 TYR A 391      -5.972  -0.052  12.648  1.00  0.00           H
ATOM   4746  HD1 TYR A 391      -7.343   0.973  14.957  1.00  0.00           H
ATOM   4747  HD2 TYR A 391      -7.176   2.581  10.946  1.00  0.00           H
ATOM   4748  HE1 TYR A 391      -9.458   2.129  15.341  1.00  0.00           H
ATOM   4749  HE2 TYR A 391      -9.346   3.717  11.329  1.00  0.00           H
ATOM   4750  HH  TYR A 391     -11.119   4.048  12.831  1.00  0.00           H
ATOM   4751  N   ASP A 392      -3.774  -0.873  14.518  1.00 20.65           N
ATOM   4752  CA  ASP A 392      -2.811  -1.941  14.772  1.00 21.18           C
ATOM   4753  C   ASP A 392      -3.252  -3.210  14.046  1.00 20.89           C
ATOM   4754  O   ASP A 392      -4.441  -3.512  13.983  1.00 20.18           O
ATOM   4755  CB  ASP A 392      -2.703  -2.290  16.286  1.00 22.25           C
ATOM   4756  CG  ASP A 392      -2.357  -1.124  17.200  1.00 21.58           C
ATOM   4757  OD1 ASP A 392      -3.059  -0.088  17.152  1.00 20.66           O
ATOM   4758  OD2 ASP A 392      -1.322  -1.161  17.893  1.00 21.72           O1-
ATOM   4759  H   ASP A 392      -4.641  -0.949  15.042  1.00  0.00           H
ATOM   4760  HA  ASP A 392      -1.839  -1.623  14.415  1.00  0.00           H
ATOM   4761  HB2 ASP A 392      -3.636  -2.725  16.645  1.00  0.00           H
ATOM   4762  HB3 ASP A 392      -1.948  -3.066  16.426  1.00  0.00           H
ATOM   4763  N   ASN A 393      -2.281  -3.980  13.561  1.00 20.94           N
ATOM   4764  CA  ASN A 393      -2.413  -5.392  13.207  1.00 20.94           C
ATOM   4765  C   ASN A 393      -1.795  -6.146  14.390  1.00 23.33           C
ATOM   4766  O   ASN A 393      -0.725  -5.736  14.857  1.00 20.26           O
ATOM   4767  CB  ASN A 393      -1.513  -5.685  11.976  1.00 21.01           C
ATOM   4768  CG  ASN A 393      -2.060  -6.839  11.143  1.00 21.80           C
ATOM   4769  OD1 ASN A 393      -3.011  -6.632  10.402  1.00 21.19           O
ATOM   4770  ND2 ASN A 393      -1.465  -8.025  11.182  1.00 18.99           N
ATOM   4771  H   ASN A 393      -1.332  -3.671  13.771  1.00  0.00           H
ATOM   4772  HA  ASN A 393      -3.455  -5.673  13.037  1.00  0.00           H
ATOM   4773  HB2 ASN A 393      -1.491  -4.816  11.319  1.00  0.00           H
ATOM   4774  HB3 ASN A 393      -0.472  -5.877  12.238  1.00  0.00           H
ATOM   4775 HD21 ASN A 393      -0.585  -8.218  11.662  1.00  0.00           H
ATOM   4776 HD22 ASN A 393      -1.903  -8.788  10.675  1.00  0.00           H
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ATOM   4777  N   CYS A 394     -2.396  -7.240  14.863  1.00 21.34           N
ATOM   4778  CA  CYS A 394     -1.775  -8.106  15.869  1.00 23.77           C
ATOM   4779  C   CYS A 394     -2.168  -9.578  15.663  1.00 23.91           C
ATOM   4780  O   CYS A 394     -3.369  -9.847  15.635  1.00 23.61           O
ATOM   4781  CB  CYS A 394     -2.049  -7.584  17.292  1.00 24.76           C
ATOM   4782  SG  CYS A 394     -1.128  -8.418  18.613  1.00 21.89           S
ATOM   4783  H   CYS A 394     -3.324  -7.498  14.512  1.00  0.00           H
ATOM   4784  HA  CYS A 394     -0.699  -8.020  15.740  1.00  0.00           H
ATOM   4785  HB2 CYS A 394     -1.831  -6.518  17.356  1.00  0.00           H
ATOM   4786  HB3 CYS A 394     -3.104  -7.690  17.531  1.00  0.00           H
ATOM   4787  N   PRO A 395     -1.209 -10.535  15.554  1.00 24.08           N
ATOM   4788  CA  PRO A 395     -1.477 -11.984  15.548  1.00 23.62           C
ATOM   4789  C   PRO A 395     -2.322 -12.419  16.758  1.00 23.97           C
ATOM   4790  O   PRO A 395     -1.967 -12.116  17.898  1.00 22.43           O
ATOM   4791  CB  PRO A 395     -0.092 -12.651  15.609  1.00 22.83           C
ATOM   4792  CG  PRO A 395      0.871 -11.622  15.059  1.00 22.60           C
ATOM   4793  CD  PRO A 395      0.221 -10.278  15.359  1.00 24.08           C
ATOM   4794  HA  PRO A 395     -1.973 -12.235  14.609  1.00  0.00           H
ATOM   4795  HB2 PRO A 395      0.199 -12.883  16.634  1.00  0.00           H
ATOM   4796  HB3 PRO A 395     -0.055 -13.587  15.053  1.00  0.00           H
ATOM   4797  HG2 PRO A 395      1.875 -11.727  15.467  1.00  0.00           H
ATOM   4798  HG3 PRO A 395      0.950 -11.739  13.980  1.00  0.00           H
ATOM   4799  HD2 PRO A 395      0.646  -9.861  16.272  1.00  0.00           H
ATOM   4800  HD3 PRO A 395      0.394  -9.584  14.539  1.00  0.00           H
ATOM   4801  N   LEU A 396     -3.449 -13.100  16.519  1.00 23.38           N
ATOM   4802  CA  LEU A 396     -4.422 -13.479  17.549  1.00 25.21           C
ATOM   4803  C   LEU A 396     -4.337 -14.969  17.913  1.00 27.18           C
ATOM   4804  O   LEU A 396     -5.199 -15.484  18.630  1.00 29.80           O
ATOM   4805  CB  LEU A 396     -5.851 -13.155  17.069  1.00 24.81           C
ATOM   4806  CG  LEU A 396     -6.100 -11.674  16.733  1.00 23.79           C
ATOM   4807  CD1 LEU A 396     -7.545 -11.488  16.267  1.00 23.36           C
ATOM   4808  CD2 LEU A 396     -5.775 -10.743  17.912  1.00 21.88           C
ATOM   4809  H   LEU A 396     -3.677 -13.269  15.552  1.00  0.00           H
ATOM   4810  HA  LEU A 396     -4.235 -12.933  18.475  1.00  0.00           H
ATOM   4811  HB2 LEU A 396     -6.098 -13.765  16.203  1.00  0.00           H
ATOM   4812  HB3 LEU A 396     -6.561 -13.447  17.844  1.00  0.00           H
ATOM   4813  HG  LEU A 396     -5.462 -11.382  15.897  1.00  0.00           H
ATOM   4814 HD11 LEU A 396     -7.744 -10.439  16.041  1.00  0.00           H
ATOM   4815 HD12 LEU A 396     -7.738 -12.063  15.362  1.00  0.00           H
ATOM   4816 HD13 LEU A 396     -8.253 -11.810  17.027  1.00  0.00           H
ATOM   4817 HD21 LEU A 396     -6.104  -9.726  17.709  1.00  0.00           H
ATOM   4818 HD22 LEU A 396     -6.255 -11.069  18.830  1.00  0.00           H
ATOM   4819 HD23 LEU A 396     -4.700 -10.690  18.092  1.00  0.00           H
ATOM   4820  N   ASP A 397     -3.284 -15.667  17.478  1.00 26.31           N
ATOM   4821  CA  ASP A 397     -2.899 -17.022  17.884  1.00 26.97           C
ATOM   4822  C   ASP A 397     -2.353 -16.979  19.335  1.00 27.26           C
ATOM   4823  O   ASP A 397     -2.519 -15.984  20.046  1.00 24.89           O
ATOM   4824  CB  ASP A 397     -1.813 -17.519  16.901  1.00 27.87           C
ATOM   4825  CG  ASP A 397     -0.502 -16.767  17.062  1.00 31.48           C
ATOM   4826  OD1 ASP A 397     -0.475 -15.595  16.658  1.00 33.62           O
ATOM   4827  OD2 ASP A 397      0.402 -17.318  17.719  1.00 32.96           O1-
ATOM   4828  H   ASP A 397     -2.537 -15.150  17.011  1.00  0.00           H
ATOM   4829  HA  ASP A 397     -3.764 -17.681  17.838  1.00  0.00           H
ATOM   4830  HB2 ASP A 397     -1.623 -18.582  17.043  1.00  0.00           H
ATOM   4831  HB3 ASP A 397     -2.146 -17.410  15.869  1.00  0.00           H
ATOM   4832  N   LYS A 398     -1.751 -18.067  19.819  1.00 27.55           N
ATOM   4833  CA  LYS A 398     -1.114 -18.156  21.127  1.00 28.98           C
ATOM   4834  C   LYS A 398      0.232 -18.904  21.028  1.00 28.03           C
ATOM   4835  O   LYS A 398      0.658 -19.505  22.015  1.00 27.56           O
ATOM   4836  CB  LYS A 398     -2.099 -18.743  22.180  1.00 32.65           C
ATOM   4837  CG  LYS A 398     -3.501 -18.086  22.279  1.00 38.44           C
ATOM   4838  CD  LYS A 398     -3.523 -16.693  22.945  1.00 40.86           C
ATOM   4839  CE  LYS A 398     -4.815 -15.896  22.656  1.00 42.41           C
ATOM   4840  NZ  LYS A 398     -4.685 -15.035  21.470  1.00 44.87           N1+
ATOM   4841  H   LYS A 398     -1.604 -18.886  19.213  1.00  0.00           H
ATOM   4842  HA  LYS A 398     -0.831 -17.154  21.455  1.00  0.00           H
ATOM   4843  HB2 LYS A 398     -2.236 -19.800  21.945  1.00  0.00           H
ATOM   4844  HB3 LYS A 398     -1.625 -18.728  23.163  1.00  0.00           H
ATOM   4845  HG2 LYS A 398     -3.965 -18.047  21.295  1.00  0.00           H
ATOM   4846  HG3 LYS A 398     -4.146 -18.744  22.861  1.00  0.00           H
ATOM   4847  HD2 LYS A 398     -3.425 -16.834  24.023  1.00  0.00           H
ATOM   4848  HD3 LYS A 398     -2.650 -16.103  22.660  1.00  0.00           H
ATOM   4849  HE2 LYS A 398     -5.669 -16.563  22.536  1.00  0.00           H
ATOM   4850  HE3 LYS A 398     -5.041 -15.242  23.499  1.00  0.00           H
ATOM   4851  HZ1 LYS A 398     -5.569 -14.618  21.170  1.00  0.00           H
ATOM   4852  HZ2 LYS A 398     -4.048 -14.269  21.713  1.00  0.00           H
ATOM   4853  HZ3 LYS A 398     -4.258 -15.515  20.683  1.00  0.00           H
ATOM   4854  N   GLU A 399      0.908 -18.883  19.870  1.00 29.00           N
ATOM   4855  CA  GLU A 399      2.080 -19.704  19.563  1.00 29.56           C
ATOM   4856  C   GLU A 399      3.131 -18.942  18.740  1.00 27.81           C
ATOM   4857  O   GLU A 399      4.253 -18.739  19.204  1.00 26.43           O
ATOM   4858  CB  GLU A 399      1.678 -21.066  18.945  1.00 34.33           C
ATOM   4859  CG  GLU A 399      0.602 -21.020  17.831  1.00 42.27           C
ATOM   4860  CD  GLU A 399     -0.774 -21.432  18.320  1.00 46.74           C
ATOM   4861  OE1 GLU A 399     -1.574 -20.579  18.777  1.00 49.38           O
ATOM   4862  OE2 GLU A 399     -1.104 -22.636  18.281  1.00 48.28           O1-
ATOM   4863  H   GLU A 399      0.560 -18.296  19.098  1.00  0.00           H
ATOM   4864  HA  GLU A 399      2.595 -19.934  20.499  1.00  0.00           H
ATOM   4865  HB2 GLU A 399      2.572 -21.550  18.548  1.00  0.00           H
ATOM   4866  HB3 GLU A 399      1.344 -21.726  19.747  1.00  0.00           H
ATOM   4867  HG2 GLU A 399      0.534 -20.039  17.366  1.00  0.00           H
ATOM   4868  HG3 GLU A 399      0.881 -21.710  17.034  1.00  0.00           H
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ATOM   4869  N   VAL A 400       2.758 -18.487  17.540  1.00 26.01           N
ATOM   4870  CA  VAL A 400       3.561 -17.709  16.598  1.00 24.53           C
ATOM   4871  C   VAL A 400       3.796 -16.308  17.187  1.00 24.42           C
ATOM   4872  O   VAL A 400       4.921 -15.813  17.127  1.00 22.04           O
ATOM   4873  CB  VAL A 400       2.824 -17.621  15.229  1.00 24.87           C
ATOM   4874  CG1 VAL A 400       3.621 -16.852  14.154  1.00 22.22           C
ATOM   4875  CG2 VAL A 400       2.442 -19.011  14.682  1.00 22.82           C
ATOM   4876  H   VAL A 400       1.748 -18.401  17.405  1.00  0.00           H
ATOM   4877  HA  VAL A 400       4.524 -18.206  16.466  1.00  0.00           H
ATOM   4878  HB  VAL A 400       1.894 -17.068  15.377  1.00  0.00           H
ATOM   4879 HG11 VAL A 400       3.073 -16.811  13.213  1.00  0.00           H
ATOM   4880 HG12 VAL A 400       3.808 -15.816  14.443  1.00  0.00           H
ATOM   4881 HG13 VAL A 400       4.583 -17.324  13.955  1.00  0.00           H
ATOM   4882 HG21 VAL A 400       1.950 -18.929  13.713  1.00  0.00           H
ATOM   4883 HG22 VAL A 400       3.322 -19.642  14.556  1.00  0.00           H
ATOM   4884 HG23 VAL A 400       1.750 -19.532  15.342  1.00  0.00           H
ATOM   4885  N   TYR A 401       2.772 -15.742  17.843  1.00 25.28           N
ATOM   4886  CA  TYR A 401       2.801 -14.517  18.642  1.00 27.50           C
ATOM   4887  C   TYR A 401       3.923 -14.548  19.700  1.00 27.74           C
ATOM   4888  O   TYR A 401       4.744 -13.633  19.799  1.00 28.01           O
ATOM   4889  CB  TYR A 401       1.400 -14.330  19.271  1.00 26.68           C
ATOM   4890  CG  TYR A 401       1.233 -13.189  20.262  1.00 28.89           C
ATOM   4891  CD1 TYR A 401       1.379 -13.427  21.646  1.00 27.82           C
ATOM   4892  CD2 TYR A 401       0.905 -11.894  19.810  1.00 27.03           C
ATOM   4893  CE1 TYR A 401       1.187 -12.383  22.570  1.00 26.44           C
ATOM   4894  CE2 TYR A 401       0.725 -10.850  20.738  1.00 26.20           C
ATOM   4895  CZ  TYR A 401       0.850 -11.095  22.118  1.00 27.15           C
ATOM   4896  OH  TYR A 401       0.617 -10.100  23.021  1.00 23.75           O
ATOM   4897  H   TYR A 401       1.863 -16.210  17.752  1.00  0.00           H
ATOM   4898  HA  TYR A 401       2.990 -13.690  17.962  1.00  0.00           H
ATOM   4899  HB2 TYR A 401       0.670 -14.184  18.476  1.00  0.00           H
ATOM   4900  HB3 TYR A 401       1.094 -15.253  19.767  1.00  0.00           H
ATOM   4901  HD1 TYR A 401       1.641 -14.409  22.012  1.00  0.00           H
ATOM   4902  HD2 TYR A 401       0.786 -11.693  18.754  1.00  0.00           H
ATOM   4903  HE1 TYR A 401       1.299 -12.571  23.628  1.00  0.00           H
ATOM   4904  HE2 TYR A 401       0.476  -9.861  20.389  1.00  0.00           H
ATOM   4905  HH  TYR A 401       0.468  -9.243  22.619  1.00  0.00           H
ATOM   4906  N   ASN A 402       3.991 -15.655  20.452  1.00 27.33           N
ATOM   4907  CA  ASN A 402       4.944 -15.856  21.548  1.00 29.34           C
ATOM   4908  C   ASN A 402       6.348 -16.215  21.038  1.00 27.72           C
ATOM   4909  O   ASN A 402       7.321 -16.034  21.763  1.00 27.54           O
ATOM   4910  CB  ASN A 402       4.470 -17.010  22.469  1.00 30.12           C
ATOM   4911  CG  ASN A 402       3.273 -16.636  23.342  1.00 33.27           C
ATOM   4912  OD1 ASN A 402       3.292 -15.634  24.044  1.00 33.60           O
ATOM   4913  ND2 ASN A 402       2.191 -17.404  23.320  1.00 34.63           N
ATOM   4914  H   ASN A 402       3.340 -16.393  20.236  1.00  0.00           H
ATOM   4915  HA  ASN A 402       5.033 -14.934  22.129  1.00  0.00           H
ATOM   4916  HB2 ASN A 402       4.257 -17.905  21.884  1.00  0.00           H
ATOM   4917  HB3 ASN A 402       5.272 -17.283  23.157  1.00  0.00           H
ATOM   4918 HD21 ASN A 402       2.123 -18.258  22.776  1.00  0.00           H
ATOM   4919 HD22 ASN A 402       1.436 -17.135  23.929  1.00  0.00           H
ATOM   4920  N   SER A 403       6.468 -16.705  19.798  1.00 27.84           N
ATOM   4921  CA  SER A 403       7.741 -17.098  19.192  1.00 28.74           C
ATOM   4922  C   SER A 403       8.419 -15.919  18.464  1.00 28.13           C
ATOM   4923  O   SER A 403       9.545 -16.067  17.994  1.00 27.53           O
ATOM   4924  CB  SER A 403       7.454 -18.180  18.130  1.00 28.94           C
ATOM   4925  OG  SER A 403       6.883 -19.337  18.720  1.00 35.87           O
ATOM   4926  H   SER A 403       5.631 -16.813  19.244  1.00  0.00           H
ATOM   4927  HA  SER A 403       8.431 -17.489  19.942  1.00  0.00           H
ATOM   4928  HB2 SER A 403       6.795 -17.805  17.347  1.00  0.00           H
ATOM   4929  HB3 SER A 403       8.382 -18.478  17.639  1.00  0.00           H
ATOM   4930  HG  SER A 403       6.003 -19.118  19.023  1.00  0.00           H
ATOM   4931  N   ASN A 404       7.743 -14.767  18.334  1.00 25.90           N
ATOM   4932  CA  ASN A 404       8.145 -13.656  17.464  1.00 25.37           C
ATOM   4933  C   ASN A 404       8.113 -12.305  18.179  1.00 25.69           C
ATOM   4934  O   ASN A 404       8.037 -11.270  17.524  1.00 25.02           O
ATOM   4935  CB  ASN A 404       7.386 -13.672  16.113  1.00 26.10           C
ATOM   4936  CG  ASN A 404       7.777 -14.836  15.202  1.00 26.26           C
ATOM   4937  OD1 ASN A 404       8.875 -14.884  14.651  1.00 29.36           O
ATOM   4938  ND2 ASN A 404       6.895 -15.816  15.060  1.00 28.99           N
ATOM   4939  H   ASN A 404       6.821 -14.714  18.748  1.00  0.00           H
ATOM   4940  HA  ASN A 404       9.204 -13.762  17.220  1.00  0.00           H
ATOM   4941  HB2 ASN A 404       6.309 -13.665  16.288  1.00  0.00           H
ATOM   4942  HB3 ASN A 404       7.585 -12.762  15.550  1.00  0.00           H
ATOM   4943 HD21 ASN A 404       6.031 -15.773  15.597  1.00  0.00           H
ATOM   4944 HD22 ASN A 404       7.108 -16.582  14.444  1.00  0.00           H
ATOM   4945  N   ASN A 405       8.196 -12.289  19.518  1.00 25.25           N
ATOM   4946  CA  ASN A 405       8.391 -11.100  20.372  1.00 26.77           C
ATOM   4947  C   ASN A 405       7.282 -10.046  20.177  1.00 26.11           C
ATOM   4948  O   ASN A 405       7.572  -8.853  20.115  1.00 25.19           O
ATOM   4949  CB  ASN A 405       9.770 -10.414  20.146  1.00 28.88           C
ATOM   4950  CG  ASN A 405      11.010 -11.282  20.312  1.00 29.98           C
ATOM   4951  OD1 ASN A 405      11.018 -12.260  21.052  1.00 31.34           O
ATOM   4952  ND2 ASN A 405      12.075 -10.936  19.602  1.00 32.27           N
ATOM   4953  H   ASN A 405       8.287 -13.188  19.971  1.00  0.00           H
ATOM   4954  HA  ASN A 405       8.338 -11.436  21.408  1.00  0.00           H
ATOM   4955  HB2 ASN A 405       9.788  -9.971  19.150  1.00  0.00           H
ATOM   4956  HB3 ASN A 405       9.886  -9.585  20.846  1.00  0.00           H
ATOM   4957 HD21 ASN A 405      12.031 -10.102  18.998  1.00  0.00           H
ATOM   4958 HD22 ASN A 405      12.922 -11.470  19.683  1.00  0.00           H
ATOM   4959  N   CYS A 406       6.031 -10.466  19.970  1.00 25.69           N
ATOM   4960  CA  CYS A 406       4.951  -9.589  19.526  1.00 25.23           C
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ATOM   4961  C   CYS A 406      4.456  -8.648  20.638  1.00 26.10           C
ATOM   4962  O   CYS A 406      3.544  -8.978  21.392  1.00 26.16           O
ATOM   4963  CB  CYS A 406      3.803 -10.463  19.011  1.00 27.05           C
ATOM   4964  SG  CYS A 406      4.124 -11.264  17.414  1.00 25.91           S
ATOM   4965  H   CYS A 406      5.842 -11.460  19.994  1.00  0.00           H
ATOM   4966  HA  CYS A 406      5.293  -8.964  18.704  1.00  0.00           H
ATOM   4967  HB2 CYS A 406      3.568 -11.231  19.749  1.00  0.00           H
ATOM   4968  HB3 CYS A 406      2.896  -9.872  18.892  1.00  0.00           H
ATOM   4969  N   GLU A 407      5.035  -7.442  20.694  1.00 25.27           N
ATOM   4970  CA  GLU A 407      4.730  -6.333  21.605  1.00 25.75           C
ATOM   4971  C   GLU A 407      3.348  -5.689  21.314  1.00 24.42           C
ATOM   4972  O   GLU A 407      3.248  -4.466  21.210  1.00 22.09           O
ATOM   4973  CB  GLU A 407      5.831  -5.257  21.418  1.00 29.18           C
ATOM   4974  CG  GLU A 407      7.283  -5.693  21.711  1.00 35.84           C
ATOM   4975  CD  GLU A 407      8.300  -4.854  20.943  1.00 38.75           C
ATOM   4976  OE1 GLU A 407      9.359  -5.417  20.585  1.00 41.17           O
ATOM   4977  OE2 GLU A 407      7.999  -3.673  20.657  1.00 43.63           O1-
ATOM   4978  H   GLU A 407      5.872  -7.330  20.131  1.00  0.00           H
ATOM   4979  HA  GLU A 407      4.735  -6.696  22.634  1.00  0.00           H
ATOM   4980  HB2 GLU A 407      5.770  -4.887  20.393  1.00  0.00           H
ATOM   4981  HB3 GLU A 407      5.624  -4.391  22.050  1.00  0.00           H
ATOM   4982  HG2 GLU A 407      7.496  -5.616  22.777  1.00  0.00           H
ATOM   4983  HG3 GLU A 407      7.447  -6.733  21.443  1.00  0.00           H
ATOM   4984  N   CYS A 408      2.286  -6.481  21.125  1.00 23.64           N
ATOM   4985  CA  CYS A 408      0.985  -6.015  20.649  1.00 21.06           C
ATOM   4986  C   CYS A 408     -0.192  -6.588  21.426  1.00 21.00           C
ATOM   4987  O   CYS A 408     -0.145  -7.695  21.969  1.00 19.91           O
ATOM   4988  CB  CYS A 408      0.862  -6.150  19.123  1.00 20.88           C
ATOM   4989  SG  CYS A 408      0.808  -7.807  18.379  1.00 22.25           S
ATOM   4990  H   CYS A 408      2.406  -7.479  21.286  1.00  0.00           H
ATOM   4991  HA  CYS A 408      0.929  -4.941  20.846  1.00  0.00           H
ATOM   4992  HB2 CYS A 408     -0.000  -5.585  18.767  1.00  0.00           H
ATOM   4993  HB3 CYS A 408      1.728  -5.667  18.698  1.00  0.00           H
ATOM   4994  N   ASP A 409     -1.257  -5.790  21.455  1.00 17.35           N
ATOM   4995  CA  ASP A 409     -2.463  -5.951  22.244  1.00 19.95           C
ATOM   4996  C   ASP A 409     -3.434  -6.841  21.455  1.00 21.68           C
ATOM   4997  O   ASP A 409     -4.139  -6.379  20.556  1.00 21.54           O
ATOM   4998  CB  ASP A 409     -3.107  -4.549  22.458  1.00 20.43           C
ATOM   4999  CG  ASP A 409     -2.111  -3.463  22.852  1.00 23.66           C
ATOM   5000  OD1 ASP A 409     -1.849  -3.296  24.057  1.00 21.49           O
ATOM   5001  OD2 ASP A 409     -1.516  -2.857  21.927  1.00 21.32           O1-
ATOM   5002  H   ASP A 409     -1.156  -4.859  21.061  1.00  0.00           H
ATOM   5003  HA  ASP A 409     -2.215  -6.389  23.212  1.00  0.00           H
ATOM   5004  HB2 ASP A 409     -3.580  -4.190  21.545  1.00  0.00           H
ATOM   5005  HB3 ASP A 409     -3.892  -4.597  23.213  1.00  0.00           H
ATOM   5006  N   GLN A 410     -3.534  -8.128  21.816  1.00 19.59           N
ATOM   5007  CA  GLN A 410     -4.428  -9.119  21.191  1.00 20.13           C
ATOM   5008  C   GLN A 410     -5.935  -8.871  21.454  1.00 21.87           C
ATOM   5009  O   GLN A 410     -6.774  -9.699  21.088  1.00 20.41           O
ATOM   5010  CB  GLN A 410     -4.070 -10.531  21.696  1.00 20.31           C
ATOM   5011  CG  GLN A 410     -2.686 -11.022  21.246  1.00 21.69           C
ATOM   5012  CD  GLN A 410     -2.570 -12.539  21.380  1.00 20.78           C
ATOM   5013  OE1 GLN A 410     -3.049 -13.133  22.345  1.00 24.03           O
ATOM   5014  NE2 GLN A 410     -2.050 -13.215  20.370  1.00 20.56           N
ATOM   5015  H   GLN A 410     -2.863  -8.457  22.498  1.00  0.00           H
ATOM   5016  HA  GLN A 410     -4.285  -9.077  20.109  1.00  0.00           H
ATOM   5017  HB2 GLN A 410     -4.144 -10.578  22.783  1.00  0.00           H
ATOM   5018  HB3 GLN A 410     -4.811 -11.239  21.317  1.00  0.00           H
ATOM   5019  HG2 GLN A 410     -2.504 -10.737  20.208  1.00  0.00           H
ATOM   5020  HG3 GLN A 410     -1.907 -10.546  21.840  1.00  0.00           H
ATOM   5021 HE21 GLN A 410     -1.741 -12.703  19.536  1.00  0.00           H
ATOM   5022 HE22 GLN A 410     -1.896 -14.217  20.391  1.00  0.00           H
ATOM   5023  N   GLY A 411     -6.277  -7.741  22.079  1.00 24.50           N
ATOM   5024  CA  GLY A 411     -7.621  -7.235  22.309  1.00 26.96           C
ATOM   5025  C   GLY A 411     -7.870  -5.905  21.591  1.00 27.55           C
ATOM   5026  O   GLY A 411     -8.981  -5.393  21.687  1.00 30.46           O
ATOM   5027  H   GLY A 411     -5.516  -7.119  22.312  1.00  0.00           H
ATOM   5028  HA2 GLY A 411     -8.384  -7.948  21.994  1.00  0.00           H
ATOM   5029  HA3 GLY A 411     -7.759  -7.076  23.379  1.00  0.00           H
ATOM   5030  N   ASN A 412     -6.885  -5.370  20.847  1.00 27.68           N
ATOM   5031  CA  ASN A 412     -6.958  -4.104  20.101  1.00 25.90           C
ATOM   5032  C   ASN A 412     -6.326  -4.227  18.705  1.00 24.16           C
ATOM   5033  O   ASN A 412     -5.838  -3.244  18.141  1.00 24.85           O
ATOM   5034  CB  ASN A 412     -6.480  -2.874  20.917  1.00 26.56           C
ATOM   5035  CG  ASN A 412     -7.391  -2.510  22.088  1.00 27.79           C
ATOM   5036  OD1 ASN A 412     -7.132  -2.880  23.228  1.00 32.66           O
ATOM   5037  ND2 ASN A 412     -8.463  -1.771  21.833  1.00 25.88           N
ATOM   5038  H   ASN A 412     -5.994  -5.852  20.778  1.00  0.00           H
ATOM   5039  HA  ASN A 412     -8.008  -3.919  19.863  1.00  0.00           H
ATOM   5040  HB2 ASN A 412     -5.474  -3.039  21.296  1.00  0.00           H
ATOM   5041  HB3 ASN A 412     -6.410  -1.995  20.275  1.00  0.00           H
ATOM   5042 HD21 ASN A 412     -8.713  -1.535  20.862  1.00  0.00           H
ATOM   5043 HD22 ASN A 412     -9.083  -1.549  22.591  1.00  0.00           H
ATOM   5044  N   ASP A 413     -6.370  -5.437  18.127  1.00 22.31           N
ATOM   5045  CA  ASP A 413     -6.103  -5.695  16.708  1.00 22.05           C
ATOM   5046  C   ASP A 413     -7.250  -5.078  15.893  1.00 21.82           C
ATOM   5047  O   ASP A 413     -8.413  -5.207  16.277  1.00 21.38           O
ATOM   5048  CB  ASP A 413     -6.036  -7.224  16.442  1.00 20.91           C
ATOM   5049  CG  ASP A 413     -6.173  -7.615  14.970  1.00 19.89           C
ATOM   5050  OD1 ASP A 413     -5.295  -7.209  14.172  1.00 19.55           O
ATOM   5051  OD2 ASP A 413     -7.224  -8.186  14.615  1.00 19.62           O1-
ATOM   5052  H   ASP A 413     -6.880  -6.150  18.620  1.00  0.00           H
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ATOM   5053  HA  ASP A 413      -5.158  -5.234  16.412  1.00  0.00           H
ATOM   5054  HB2 ASP A 413      -5.119  -7.654  16.829  1.00  0.00           H
ATOM   5055  HB3 ASP A 413      -6.856  -7.711  16.967  1.00  0.00           H
ATOM   5056  N   PHE A 414      -6.934  -4.431  14.774  1.00 21.02           N
ATOM   5057  CA  PHE A 414      -7.936  -3.861  13.898  1.00 18.26           C
ATOM   5058  C   PHE A 414      -8.452  -4.892  12.881  1.00 19.44           C
ATOM   5059  O   PHE A 414      -9.568  -4.704  12.403  1.00 21.11           O
ATOM   5060  CB  PHE A 414      -7.326  -2.672  13.133  1.00 18.35           C
ATOM   5061  CG  PHE A 414      -8.349  -1.843  12.377  1.00 17.60           C
ATOM   5062  CD1 PHE A 414      -9.289  -1.071  13.089  1.00 19.23           C
ATOM   5063  CD2 PHE A 414      -8.399  -1.876  10.969  1.00 17.55           C
ATOM   5064  CE1 PHE A 414     -10.264  -0.328  12.400  1.00 20.54           C
ATOM   5065  CE2 PHE A 414      -9.359  -1.117  10.281  1.00 16.66           C
ATOM   5066  CZ  PHE A 414     -10.292  -0.344  10.995  1.00 18.35           C
ATOM   5067  H   PHE A 414      -5.955  -4.352  14.502  1.00  0.00           H
ATOM   5068  HA  PHE A 414      -8.777  -3.495  14.489  1.00  0.00           H
ATOM   5069  HB2 PHE A 414      -6.827  -2.008  13.841  1.00  0.00           H
ATOM   5070  HB3 PHE A 414      -6.551  -3.015  12.445  1.00  0.00           H
ATOM   5071  HD1 PHE A 414      -9.260  -1.043  14.169  1.00  0.00           H
ATOM   5072  HD2 PHE A 414      -7.728  -2.503  10.406  1.00  0.00           H
ATOM   5073  HE1 PHE A 414     -10.979   0.268  12.947  1.00  0.00           H
ATOM   5074  HE2 PHE A 414      -9.390  -1.155   9.203  1.00  0.00           H
ATOM   5075  HZ  PHE A 414     -11.033   0.233  10.467  1.00  0.00           H
ATOM   5076  N   THR A 415      -7.709  -5.960  12.537  1.00 20.19           N
ATOM   5077  CA  THR A 415      -7.970  -6.886  11.417  1.00 20.23           C
ATOM   5078  C   THR A 415      -9.424  -7.394  11.348  1.00 22.22           C
ATOM   5079  O   THR A 415      -9.995  -7.528  10.266  1.00 22.79           O
ATOM   5080  CB  THR A 415      -6.980  -8.082  11.431  1.00 21.37           C
ATOM   5081  OG1 THR A 415      -5.644  -7.641  11.586  1.00 17.64           O
ATOM   5082  CG2 THR A 415      -7.038  -8.941  10.154  1.00 20.76           C
ATOM   5083  H   THR A 415      -6.878  -6.170  13.086  1.00  0.00           H
ATOM   5084  HA  THR A 415      -7.790  -6.313  10.505  1.00  0.00           H
ATOM   5085  HB  THR A 415      -7.207  -8.736  12.268  1.00  0.00           H
ATOM   5086  HG1 THR A 415      -5.502  -7.490  12.539  1.00  0.00           H
ATOM   5087 HG21 THR A 415      -6.436  -9.839  10.265  1.00  0.00           H
ATOM   5088 HG22 THR A 415      -8.045  -9.298   9.941  1.00  0.00           H
ATOM   5089 HG23 THR A 415      -6.681  -8.392   9.283  1.00  0.00           H
ATOM   5090  N   PHE A 416     -10.047  -7.632  12.503  1.00 22.70           N
ATOM   5091  CA  PHE A 416     -11.370  -8.233  12.583  1.00 23.45           C
ATOM   5092  C   PHE A 416     -12.420  -7.281  13.168  1.00 22.80           C
ATOM   5093  O   PHE A 416     -13.512  -7.741  13.496  1.00 25.25           O
ATOM   5094  CB  PHE A 416     -11.259  -9.576  13.330  1.00 20.24           C
ATOM   5095  CG  PHE A 416     -10.300 -10.544  12.659  1.00 20.62           C
ATOM   5096  CD1 PHE A 416     -10.680 -11.231  11.489  1.00 20.38           C
ATOM   5097  CD2 PHE A 416      -8.986 -10.679  13.147  1.00 18.91           C
ATOM   5098  CE1 PHE A 416      -9.740 -12.005  10.786  1.00 19.44           C
ATOM   5099  CE2 PHE A 416      -8.049 -11.469  12.457  1.00 18.21           C
ATOM   5100  CZ  PHE A 416      -8.423 -12.120  11.268  1.00 20.50           C
ATOM   5101  H   PHE A 416      -9.490  -7.533  13.349  1.00  0.00           H
ATOM   5102  HA  PHE A 416     -11.752  -8.465  11.589  1.00  0.00           H
ATOM   5103  HB2 PHE A 416     -10.929  -9.409  14.356  1.00  0.00           H
ATOM   5104  HB3 PHE A 416     -12.240 -10.047  13.388  1.00  0.00           H
ATOM   5105  HD1 PHE A 416     -11.679 -11.129  11.107  1.00  0.00           H
ATOM   5106  HD2 PHE A 416      -8.668 -10.119  14.015  1.00  0.00           H
ATOM   5107  HE1 PHE A 416     -10.015 -12.475   9.855  1.00  0.00           H
ATOM   5108  HE2 PHE A 416      -7.029 -11.520  12.814  1.00  0.00           H
ATOM   5109  HZ  PHE A 416      -7.687 -12.682  10.717  1.00  0.00           H
ATOM   5110  N   GLN A 417     -12.135  -5.974  13.296  1.00 23.60           N
ATOM   5111  CA  GLN A 417     -13.076  -4.957  13.786  1.00 22.99           C
ATOM   5112  C   GLN A 417     -14.139  -4.576  12.729  1.00 22.57           C
ATOM   5113  O   GLN A 417     -14.238  -5.209  11.675  1.00 22.49           O
ATOM   5114  CB  GLN A 417     -12.297  -3.709  14.248  1.00 22.97           C
ATOM   5115  CG  GLN A 417     -11.539  -3.951  15.567  1.00 23.29           C
ATOM   5116  CD  GLN A 417     -11.085  -2.684  16.296  1.00 26.35           C
ATOM   5117  OE1 GLN A 417     -10.465  -2.766  17.350  1.00 25.95           O
ATOM   5118  NE2 GLN A 417     -11.406  -1.497  15.794  1.00 24.11           N
ATOM   5119  H   GLN A 417     -11.218  -5.660  12.984  1.00  0.00           H
ATOM   5120  HA  GLN A 417     -13.630  -5.357  14.633  1.00  0.00           H
ATOM   5121  HB2 GLN A 417     -11.618  -3.350  13.473  1.00  0.00           H
ATOM   5122  HB3 GLN A 417     -13.006  -2.907  14.429  1.00  0.00           H
ATOM   5123  HG2 GLN A 417     -12.190  -4.477  16.263  1.00  0.00           H
ATOM   5124  HG3 GLN A 417     -10.685  -4.603  15.396  1.00  0.00           H
ATOM   5125 HE21 GLN A 417     -11.981  -1.401  14.964  1.00  0.00           H
ATOM   5126 HE22 GLN A 417     -11.126  -0.658  16.305  1.00  0.00           H
ATOM   5127  N   GLY A 418     -14.966  -3.562  13.009  1.00 22.92           N
ATOM   5128  CA  GLY A 418     -16.213  -3.297  12.295  1.00 21.05           C
ATOM   5129  C   GLY A 418     -16.058  -2.251  11.193  1.00 21.18           C
ATOM   5130  O   GLY A 418     -16.753  -2.350  10.187  1.00 21.14           O
ATOM   5131  H   GLY A 418     -14.801  -3.016  13.846  1.00  0.00           H
ATOM   5132  HA2 GLY A 418     -16.630  -4.212  11.870  1.00  0.00           H
ATOM   5133  HA3 GLY A 418     -16.948  -2.921  13.007  1.00  0.00           H
ATOM   5134  N   TYR A 419     -15.096  -1.329  11.317  1.00 20.25           N
ATOM   5135  CA  TYR A 419     -14.689  -0.423  10.237  1.00 21.27           C
ATOM   5136  C   TYR A 419     -13.559  -1.072   9.403  1.00 20.92           C
ATOM   5137  O   TYR A 419     -13.069  -0.504   8.428  1.00 19.73           O
ATOM   5138  CB  TYR A 419     -14.176   0.884  10.881  1.00 21.11           C
ATOM   5139  CG  TYR A 419     -14.154   2.084   9.953  1.00 22.25           C
ATOM   5140  CD1 TYR A 419     -15.327   2.841   9.766  1.00 23.37           C
ATOM   5141  CD2 TYR A 419     -12.972   2.459   9.284  1.00 21.83           C
ATOM   5142  CE1 TYR A 419     -15.308   3.985   8.949  1.00 23.61           C
ATOM   5143  CE2 TYR A 419     -12.963   3.572   8.426  1.00 24.89           C
ATOM   5144  CZ  TYR A 419     -14.131   4.341   8.275  1.00 22.99           C
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ATOM  5145  OH  TYR A 419     -14.120   5.471   7.522  1.00 26.03           O
ATOM  5146  H   TYR A 419     -14.590  -1.254  12.193  1.00  0.00           H
ATOM  5147  HA  TYR A 419     -15.536  -0.198   9.586  1.00  0.00           H
ATOM  5148  HB2 TYR A 419     -14.820   1.154  11.719  1.00  0.00           H
ATOM  5149  HB3 TYR A 419     -13.187   0.743  11.318  1.00  0.00           H
ATOM  5150  HD1 TYR A 419     -16.241   2.558  10.264  1.00  0.00           H
ATOM  5151  HD2 TYR A 419     -12.067   1.895   9.428  1.00  0.00           H
ATOM  5152  HE1 TYR A 419     -16.197   4.590   8.841  1.00  0.00           H
ATOM  5153  HE2 TYR A 419     -12.049   3.846   7.919  1.00  0.00           H
ATOM  5154  HH  TYR A 419     -13.423   5.485   6.847  1.00  0.00           H
ATOM  5155  N   SER A 420     -13.133  -2.277   9.789  1.00 19.72           N
ATOM  5156  CA  SER A 420     -12.083  -3.044   9.148  1.00 19.12           C
ATOM  5157  C   SER A 420     -12.677  -3.958   8.072  1.00 19.14           C
ATOM  5158  O   SER A 420     -13.886  -4.220   8.038  1.00 18.72           O
ATOM  5159  CB  SER A 420     -11.415  -3.902  10.227  1.00 20.59           C
ATOM  5160  OG  SER A 420     -10.250  -4.552   9.767  1.00 18.07           O
ATOM  5161  H   SER A 420     -13.660  -2.731  10.517  1.00  0.00           H
ATOM  5162  HA  SER A 420     -11.344  -2.376   8.712  1.00  0.00           H
ATOM  5163  HB2 SER A 420     -11.140  -3.263  11.066  1.00  0.00           H
ATOM  5164  HB3 SER A 420     -12.086  -4.665  10.611  1.00  0.00           H
ATOM  5165  HG  SER A 420      -9.733  -4.718  10.554  1.00  0.00           H
ATOM  5166  N   CYS A 421     -11.782  -4.468   7.226  1.00 20.98           N
ATOM  5167  CA  CYS A 421     -12.060  -5.378   6.127  1.00 19.83           C
ATOM  5168  C   CYS A 421     -11.107  -6.582   6.117  1.00 21.04           C
ATOM  5169  O   CYS A 421     -11.010  -7.284   5.111  1.00 23.25           O
ATOM  5170  CB  CYS A 421     -12.143  -4.616   4.794  1.00 20.05           C
ATOM  5171  SG  CYS A 421     -13.619  -3.579   4.584  1.00 22.53           S
ATOM  5172  H   CYS A 421     -10.808  -4.232   7.407  1.00  0.00           H
ATOM  5173  HA  CYS A 421     -13.040  -5.827   6.286  1.00  0.00           H
ATOM  5174  HB2 CYS A 421     -11.256  -3.998   4.652  1.00  0.00           H
ATOM  5175  HB3 CYS A 421     -12.143  -5.327   3.968  1.00  0.00           H
ATOM  5176  N   GLY A 422     -10.443  -6.896   7.237  1.00 20.19           N
ATOM  5177  CA  GLY A 422      -9.473  -7.991   7.274  1.00 22.14           C
ATOM  5178  C   GLY A 422     -10.174  -9.334   7.479  1.00 22.26           C
ATOM  5179  O   GLY A 422      -9.770 -10.329   6.876  1.00 19.11           O
ATOM  5180  H   GLY A 422     -10.516  -6.299   8.054  1.00  0.00           H
ATOM  5181  HA2 GLY A 422      -8.893  -8.038   6.352  1.00  0.00           H
ATOM  5182  HA3 GLY A 422      -8.755  -7.818   8.072  1.00  0.00           H
ATOM  5183  N   LYS A 423     -11.313  -9.355   8.193  1.00 24.00           N
ATOM  5184  CA  LYS A 423     -12.236 -10.489   8.189  1.00 25.44           C
ATOM  5185  C   LYS A 423     -12.783 -10.714   6.768  1.00 25.53           C
ATOM  5186  O   LYS A 423     -12.774 -11.842   6.287  1.00 26.66           O
ATOM  5187  CB  LYS A 423     -13.412 -10.283   9.174  1.00 26.73           C
ATOM  5188  CG  LYS A 423     -14.149 -11.614   9.456  1.00 31.23           C
ATOM  5189  CD  LYS A 423     -15.556 -11.512  10.069  1.00 34.49           C
ATOM  5190  CE  LYS A 423     -16.555 -10.600   9.333  1.00 36.84           C
ATOM  5191  NZ  LYS A 423     -16.740 -10.927   7.909  1.00 39.84           N1+
ATOM  5192  H   LYS A 423     -11.571  -8.488   8.645  1.00  0.00           H
ATOM  5193  HA  LYS A 423     -11.670 -11.373   8.487  1.00  0.00           H
ATOM  5194  HB2 LYS A 423     -13.072  -9.838  10.107  1.00  0.00           H
ATOM  5195  HB3 LYS A 423     -14.094  -9.550   8.751  1.00  0.00           H
ATOM  5196  HG2 LYS A 423     -14.231 -12.189   8.537  1.00  0.00           H
ATOM  5197  HG3 LYS A 423     -13.526 -12.233  10.101  1.00  0.00           H
ATOM  5198  HD2 LYS A 423     -15.979 -12.515  10.107  1.00  0.00           H
ATOM  5199  HD3 LYS A 423     -15.465 -11.176  11.103  1.00  0.00           H
ATOM  5200  HE2 LYS A 423     -17.528 -10.652   9.821  1.00  0.00           H
ATOM  5201  HE3 LYS A 423     -16.242  -9.560   9.417  1.00  0.00           H
ATOM  5202  HZ1 LYS A 423     -16.483 -10.080   7.378  1.00  0.00           H
ATOM  5203  HZ2 LYS A 423     -16.221 -11.762   7.568  1.00  0.00           H
ATOM  5204  HZ3 LYS A 423     -17.703 -11.096   7.686  1.00  0.00           H
ATOM  5205  N   GLU A 424     -13.216  -9.638   6.103  1.00 23.69           N
ATOM  5206  CA  GLU A 424     -13.801  -9.613   4.764  1.00 23.47           C
ATOM  5207  C   GLU A 424     -12.814 -10.161   3.722  1.00 23.14           C
ATOM  5208  O   GLU A 424     -13.220 -10.955   2.878  1.00 18.61           O
ATOM  5209  CB  GLU A 424     -14.237  -8.170   4.415  1.00 24.63           C
ATOM  5210  CG  GLU A 424     -15.509  -7.648   5.121  1.00 25.57           C
ATOM  5211  CD  GLU A 424     -15.578  -7.877   6.623  1.00 28.25           C
ATOM  5212  OE1 GLU A 424     -14.639  -7.527   7.371  1.00 27.71           O
ATOM  5213  OE2 GLU A 424     -16.566  -8.490   7.084  1.00 33.30           O1-
ATOM  5214  H   GLU A 424     -13.277  -8.762   6.619  1.00  0.00           H
ATOM  5215  HA  GLU A 424     -14.678 -10.263   4.757  1.00  0.00           H
ATOM  5216  HB2 GLU A 424     -13.425  -7.472   4.591  1.00  0.00           H
ATOM  5217  HB3 GLU A 424     -14.422  -8.108   3.341  1.00  0.00           H
ATOM  5218  HG2 GLU A 424     -15.611  -6.579   4.938  1.00  0.00           H
ATOM  5219  HG3 GLU A 424     -16.384  -8.113   4.666  1.00  0.00           H
ATOM  5220  N   TYR A 425     -11.518  -9.829   3.832  1.00 21.56           N
ATOM  5221  CA  TYR A 425     -10.433 -10.446   3.065  1.00 21.96           C
ATOM  5222  C   TYR A 425     -10.376 -11.968   3.295  1.00 23.23           C
ATOM  5223  O   TYR A 425     -10.478 -12.746   2.345  1.00 21.80           O
ATOM  5224  CB  TYR A 425      -9.076  -9.785   3.402  1.00 21.92           C
ATOM  5225  CG  TYR A 425      -7.909 -10.490   2.734  1.00 20.41           C
ATOM  5226  CD1 TYR A 425      -7.772 -10.414   1.335  1.00 20.32           C
ATOM  5227  CD2 TYR A 425      -7.036 -11.313   3.483  1.00 20.40           C
ATOM  5228  CE1 TYR A 425      -6.798 -11.186   0.682  1.00 17.64           C
ATOM  5229  CE2 TYR A 425      -6.054 -12.079   2.825  1.00 18.10           C
ATOM  5230  CZ  TYR A 425      -5.950 -12.024   1.423  1.00 19.87           C
ATOM  5231  OH  TYR A 425      -5.069 -12.812   0.751  1.00 16.52           O
ATOM  5232  H   TYR A 425     -11.275  -9.108   4.507  1.00  0.00           H
ATOM  5233  HA  TYR A 425     -10.639 -10.291   2.005  1.00  0.00           H
ATOM  5234  HB2 TYR A 425      -9.077  -8.741   3.086  1.00  0.00           H
ATOM  5235  HB3 TYR A 425      -8.911  -9.769   4.479  1.00  0.00           H
ATOM  5236  HD1 TYR A 425      -8.438  -9.791   0.756  1.00  0.00           H
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ATOM   5237  HD2 TYR A 425      -7.138 -11.387   4.557  1.00  0.00           H
ATOM   5238  HE1 TYR A 425      -6.717 -11.153  -0.393  1.00  0.00           H
ATOM   5239  HE2 TYR A 425      -5.412 -12.731   3.398  1.00  0.00           H
ATOM   5240  HH  TYR A 425      -4.272 -13.056   1.205  1.00  0.00           H
ATOM   5241  N   TYR A 426     -10.259 -12.391   4.563  1.00 21.99           N
ATOM   5242  CA  TYR A 426     -10.213 -13.794   4.976  1.00 23.50           C
ATOM   5243  C   TYR A 426     -11.433 -14.601   4.493  1.00 23.34           C
ATOM   5244  O   TYR A 426     -11.283 -15.747   4.070  1.00 24.05           O
ATOM   5245  CB  TYR A 426     -10.086 -13.888   6.513  1.00 22.73           C
ATOM   5246  CG  TYR A 426      -8.688 -14.098   7.064  1.00 23.27           C
ATOM   5247  CD1 TYR A 426      -7.983 -13.042   7.676  1.00 22.47           C
ATOM   5248  CD2 TYR A 426      -8.118 -15.386   7.053  1.00 22.87           C
ATOM   5249  CE1 TYR A 426      -6.743 -13.282   8.293  1.00 21.19           C
ATOM   5250  CE2 TYR A 426      -6.858 -15.619   7.635  1.00 22.99           C
ATOM   5251  CZ  TYR A 426      -6.182 -14.571   8.282  1.00 22.86           C
ATOM   5252  OH  TYR A 426      -5.006 -14.807   8.924  1.00 23.29           O
ATOM   5253  H   TYR A 426     -10.194 -11.682   5.286  1.00  0.00           H
ATOM   5254  HA  TYR A 426      -9.332 -14.247   4.515  1.00  0.00           H
ATOM   5255  HB2 TYR A 426     -10.530 -13.015   6.990  1.00  0.00           H
ATOM   5256  HB3 TYR A 426     -10.674 -14.730   6.876  1.00  0.00           H
ATOM   5257  HD1 TYR A 426      -8.391 -12.047   7.722  1.00  0.00           H
ATOM   5258  HD2 TYR A 426      -8.664 -16.215   6.640  1.00  0.00           H
ATOM   5259  HE1 TYR A 426      -6.235 -12.468   8.787  1.00  0.00           H
ATOM   5260  HE2 TYR A 426      -6.437 -16.613   7.619  1.00  0.00           H
ATOM   5261  HH  TYR A 426      -4.525 -15.553   8.592  1.00  0.00           H
ATOM   5262  N   ASP A 427     -12.628 -14.006   4.550  1.00 22.93           N
ATOM   5263  CA  ASP A 427     -13.904 -14.616   4.167  1.00 24.60           C
ATOM   5264  C   ASP A 427     -14.091 -14.624   2.640  1.00 23.59           C
ATOM   5265  O   ASP A 427     -14.616 -15.604   2.115  1.00 22.45           O
ATOM   5266  CB  ASP A 427     -15.093 -13.861   4.820  1.00 25.71           C
ATOM   5267  CG  ASP A 427     -15.157 -13.939   6.346  1.00 25.52           C
ATOM   5268  OD1 ASP A 427     -14.473 -14.803   6.943  1.00 30.54           O
ATOM   5269  OD2 ASP A 427     -15.897 -13.127   6.946  1.00 26.99          O1-
ATOM   5270  H   ASP A 427     -12.665 -13.078   4.969  1.00  0.00           H
ATOM   5271  HA  ASP A 427     -13.919 -15.654   4.505  1.00  0.00           H
ATOM   5272  HB2 ASP A 427     -15.069 -12.809   4.531  1.00  0.00           H
ATOM   5273  HB3 ASP A 427     -16.034 -14.260   4.442  1.00  0.00           H
ATOM   5274  N   ALA A 428     -13.611 -13.599   1.916  1.00 23.60           N
ATOM   5275  CA  ALA A 428     -13.616 -13.537   0.448  1.00 22.71           C
ATOM   5276  C   ALA A 428     -12.604 -14.523  -0.163  1.00 22.99           C
ATOM   5277  O   ALA A 428     -12.827 -15.074  -1.248  1.00 21.89           O
ATOM   5278  CB  ALA A 428     -13.242 -12.117  -0.007  1.00 22.18           C
ATOM   5279  H   ALA A 428     -13.247 -12.786   2.408  1.00  0.00           H
ATOM   5280  HA  ALA A 428     -14.613 -13.785   0.079  1.00  0.00           H
ATOM   5281  HB1 ALA A 428     -13.191 -12.049  -1.094  1.00  0.00           H
ATOM   5282  HB2 ALA A 428     -13.985 -11.391   0.324  1.00  0.00           H
ATOM   5283  HB3 ALA A 428     -12.273 -11.805   0.384  1.00  0.00           H
ATOM   5284  N   GLN A 429     -11.495 -14.778   0.545  1.00 21.48           N
ATOM   5285  CA  GLN A 429     -10.572 -15.863   0.242  1.00 23.47           C
ATOM   5286  C   GLN A 429     -11.241 -17.215   0.554  1.00 23.16           C
ATOM   5287  O   GLN A 429     -11.350 -18.055  -0.343  1.00 24.44           O
ATOM   5288  CB  GLN A 429      -9.258 -15.703   1.041  1.00 24.04           C
ATOM   5289  CG  GLN A 429      -8.302 -14.615   0.503  1.00 23.93           C
ATOM   5290  CD  GLN A 429      -7.594 -15.010  -0.798  1.00 27.30           C
ATOM   5291  OE1 GLN A 429      -8.108 -15.804  -1.580  1.00 28.29           O
ATOM   5292  NE2 GLN A 429      -6.408 -14.480  -1.048  1.00 21.69           N
ATOM   5293  H   GLN A 429     -11.310 -14.192   1.355  1.00  0.00           H
ATOM   5294  HA  GLN A 429     -10.368 -15.838  -0.824  1.00  0.00           H
ATOM   5295  HB2 GLN A 429      -9.478 -15.497   2.088  1.00  0.00           H
ATOM   5296  HB3 GLN A 429      -8.717 -16.650   1.036  1.00  0.00           H
ATOM   5297  HG2 GLN A 429      -8.830 -13.674   0.352  1.00  0.00           H
ATOM   5298  HG3 GLN A 429      -7.541 -14.419   1.259  1.00  0.00           H
ATOM   5299 HE21 GLN A 429      -5.951 -13.835  -0.398  1.00  0.00           H
ATOM   5300 HE22 GLN A 429      -5.905 -14.758  -1.895  1.00  0.00           H
ATOM   5301  N   GLY A 430     -11.742 -17.374   1.784  1.00 24.56           N
ATOM   5302  CA  GLY A 430     -12.432 -18.559   2.298  1.00 25.89           C
ATOM   5303  C   GLY A 430     -11.667 -19.217   3.456  1.00 27.73           C
ATOM   5304  O   GLY A 430     -11.913 -20.374   3.785  1.00 27.40           O
ATOM   5305  H   GLY A 430     -11.660 -16.589   2.423  1.00  0.00           H
ATOM   5306  HA2 GLY A 430     -13.418 -18.260   2.654  1.00  0.00           H
ATOM   5307  HA3 GLY A 430     -12.593 -19.301   1.514  1.00  0.00           H
ATOM   5308  N   LEU A 431     -10.703 -18.503   4.046  1.00 26.14           N
ATOM   5309  CA  LEU A 431      -9.684 -19.024   4.946  1.00 27.26           C
ATOM   5310  C   LEU A 431     -10.104 -18.914   6.426  1.00 25.34           C
ATOM   5311  O   LEU A 431     -10.875 -18.032   6.831  1.00 25.57           O
ATOM   5312  CB  LEU A 431      -8.406 -18.179   4.730  1.00 26.32           C
ATOM   5313  CG  LEU A 431      -7.680 -18.429   3.391  1.00 26.85           C
ATOM   5314  CD1 LEU A 431      -6.667 -17.307   3.110  1.00 28.01           C
ATOM   5315  CD2 LEU A 431      -6.983 -19.798   3.348  1.00 26.82           C
ATOM   5316  H   LEU A 431     -10.669 -17.512   3.834  1.00  0.00           H
ATOM   5317  HA  LEU A 431      -9.489 -20.073   4.717  1.00  0.00           H
ATOM   5318  HB2 LEU A 431      -8.687 -17.127   4.757  1.00  0.00           H
ATOM   5319  HB3 LEU A 431      -7.699 -18.325   5.549  1.00  0.00           H
ATOM   5320  HG  LEU A 431      -8.416 -18.407   2.586  1.00  0.00           H
ATOM   5321 HD11 LEU A 431      -6.191 -17.438   2.137  1.00  0.00           H
ATOM   5322 HD12 LEU A 431      -7.143 -16.326   3.104  1.00  0.00           H
ATOM   5323 HD13 LEU A 431      -5.877 -17.284   3.862  1.00  0.00           H
ATOM   5324 HD21 LEU A 431      -6.455 -19.935   2.403  1.00  0.00           H
ATOM   5325 HD22 LEU A 431      -6.248 -19.898   4.148  1.00  0.00           H
ATOM   5326 HD23 LEU A 431      -7.691 -20.621   3.435  1.00  0.00           H
ATOM   5327  N   VAL A 432      -9.544 -19.819   7.239  1.00 24.67           N
ATOM   5328  CA  VAL A 432      -9.646 -19.889   8.697  1.00 24.91           C
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ATOM   5329  C   VAL A 432      -8.798 -18.752   9.303  1.00 24.65          C
ATOM   5330  O   VAL A 432      -7.767 -18.385   8.747  1.00 23.35          O
ATOM   5331  CB  VAL A 432      -9.132 -21.281   9.170  1.00 26.40          C
ATOM   5332  CG1 VAL A 432      -9.257 -21.489  10.694  1.00 27.65          C
ATOM   5333  CG2 VAL A 432      -9.842 -22.443   8.444  1.00 27.01          C
ATOM   5334  H   VAL A 432      -8.872 -20.443   6.819  1.00  0.00          H
ATOM   5335  HA  VAL A 432     -10.692 -19.761   8.979  1.00  0.00          H
ATOM   5336  HB  VAL A 432      -8.069 -21.350   8.926  1.00  0.00          H
ATOM   5337 HG11 VAL A 432      -8.915 -22.484  10.981  1.00  0.00          H
ATOM   5338 HG12 VAL A 432      -8.649 -20.781  11.258  1.00  0.00          H
ATOM   5339 HG13 VAL A 432     -10.290 -21.389  11.029  1.00  0.00          H
ATOM   5340 HG21 VAL A 432      -9.486 -23.409   8.804  1.00  0.00          H
ATOM   5341 HG22 VAL A 432     -10.920 -22.410   8.599  1.00  0.00          H
ATOM   5342 HG23 VAL A 432      -9.664 -22.430   7.368  1.00  0.00          H
ATOM   5343  N   LYS A 433      -9.261 -18.182  10.419  1.00 25.23          N
ATOM   5344  CA  LYS A 433      -8.762 -16.947  11.026  1.00 27.01          C
ATOM   5345  C   LYS A 433      -8.170 -17.240  12.427  1.00 28.68          C
ATOM   5346  O   LYS A 433      -8.583 -18.228  13.044  1.00 29.12          O
ATOM   5347  CB  LYS A 433      -9.971 -15.990  11.094  1.00 26.07          C
ATOM   5348  CG  LYS A 433     -10.383 -15.452   9.708  1.00 25.95          C
ATOM   5349  CD  LYS A 433     -11.838 -14.959   9.626  1.00 27.29          C
ATOM   5350  CE  LYS A 433     -12.846 -16.094   9.367  1.00 27.92          C
ATOM   5351  NZ  LYS A 433     -12.909 -16.487   7.947  1.00 27.82          N1+
ATOM   5352  H   LYS A 433      -9.987 -18.656  10.930  1.00  0.00          H
ATOM   5353  HA  LYS A 433      -7.986 -16.506  10.397  1.00  0.00          H
ATOM   5354  HB2 LYS A 433     -10.808 -16.506  11.562  1.00  0.00          H
ATOM   5355  HB3 LYS A 433      -9.750 -15.140  11.739  1.00  0.00          H
ATOM   5356  HG2 LYS A 433      -9.705 -14.633   9.475  1.00  0.00          H
ATOM   5357  HG3 LYS A 433     -10.209 -16.192   8.927  1.00  0.00          H
ATOM   5358  HD2 LYS A 433     -12.085 -14.446  10.556  1.00  0.00          H
ATOM   5359  HD3 LYS A 433     -11.940 -14.198   8.849  1.00  0.00          H
ATOM   5360  HE2 LYS A 433     -12.614 -16.964   9.983  1.00  0.00          H
ATOM   5361  HE3 LYS A 433     -13.845 -15.762   9.652  1.00  0.00          H
ATOM   5362  HZ1 LYS A 433     -13.485 -17.298   7.816  1.00  0.00          H
ATOM   5363  HZ2 LYS A 433     -13.426 -15.728   7.443  1.00  0.00          H
ATOM   5364  HZ3 LYS A 433     -12.009 -16.668   7.514  1.00  0.00          H
ATOM   5365  N   PRO A 434      -7.218 -16.423  12.939  1.00 29.99          N
ATOM   5366  CA  PRO A 434      -6.467 -16.702  14.176  1.00 31.36          C
ATOM   5367  C   PRO A 434      -7.297 -16.552  15.470  1.00 32.47          C
ATOM   5368  O   PRO A 434      -8.217 -15.742  15.549  1.00 33.32          O
ATOM   5369  CB  PRO A 434      -5.269 -15.741  14.130  1.00 31.69          C
ATOM   5370  CG  PRO A 434      -5.743 -14.565  13.290  1.00 29.64          C
ATOM   5371  CD  PRO A 434      -6.749 -15.182  12.317  1.00 30.38          C
ATOM   5372  HA  PRO A 434      -6.097 -17.728  14.124  1.00  0.00          H
ATOM   5373  HB2 PRO A 434      -4.904 -15.441  15.110  1.00  0.00          H
ATOM   5374  HB3 PRO A 434      -4.435 -16.227  13.621  1.00  0.00          H
ATOM   5375  HG2 PRO A 434      -6.253 -13.834  13.918  1.00  0.00          H
ATOM   5376  HG3 PRO A 434      -4.929 -14.046  12.781  1.00  0.00          H
ATOM   5377  HD2 PRO A 434      -7.572 -14.499  12.125  1.00  0.00          H
ATOM   5378  HD3 PRO A 434      -6.254 -15.401  11.370  1.00  0.00          H
ATOM   5379  N   LYS A 435      -6.942 -17.374  16.468  1.00 34.56          N
ATOM   5380  CA  LYS A 435      -7.638 -17.817  17.689  1.00 36.88          C
ATOM   5381  C   LYS A 435      -8.632 -16.926  18.470  1.00 37.85          C
ATOM   5382  O   LYS A 435      -9.360 -17.473  19.297  1.00 39.08          O
ATOM   5383  CB  LYS A 435      -6.654 -18.547  18.631  1.00 38.28          C
ATOM   5384  CG  LYS A 435      -6.081 -19.859  18.067  1.00 40.34          C
ATOM   5385  CD  LYS A 435      -5.083 -20.504  19.039  1.00 42.32          C
ATOM   5386  CE  LYS A 435      -4.520 -21.839  18.529  1.00 43.22          C
ATOM   5387  NZ  LYS A 435      -3.419 -22.295  19.383  1.00 42.23          N1+
ATOM   5388  H   LYS A 435      -6.091 -17.880  16.283  1.00  0.00          H
ATOM   5389  HA  LYS A 435      -8.306 -18.591  17.307  1.00  0.00          H
ATOM   5390  HB2 LYS A 435      -5.843 -17.875  18.903  1.00  0.00          H
ATOM   5391  HB3 LYS A 435      -7.154 -18.781  19.573  1.00  0.00          H
ATOM   5392  HG2 LYS A 435      -6.897 -20.553  17.858  1.00  0.00          H
ATOM   5393  HG3 LYS A 435      -5.582 -19.672  17.115  1.00  0.00          H
ATOM   5394  HD2 LYS A 435      -4.259 -19.807  19.203  1.00  0.00          H
ATOM   5395  HD3 LYS A 435      -5.558 -20.653  20.011  1.00  0.00          H
ATOM   5396  HE2 LYS A 435      -5.294 -22.606  18.476  1.00  0.00          H
ATOM   5397  HE3 LYS A 435      -4.116 -21.713  17.523  1.00  0.00          H
ATOM   5398  HZ1 LYS A 435      -2.844 -23.009  18.934  1.00  0.00          H
ATOM   5399  HZ2 LYS A 435      -2.691 -21.556  19.323  1.00  0.00          H
ATOM   5400  HZ3 LYS A 435      -3.621 -22.510  20.340  1.00  0.00          H
ATOM   5401  N   ASN A 436      -8.716 -15.610  18.248  1.00 38.38          N
ATOM   5402  CA  ASN A 436      -9.706 -14.735  18.894  1.00 38.54          C
ATOM   5403  C   ASN A 436     -10.368 -13.703  17.973  1.00 36.60          C
ATOM   5404  O   ASN A 436     -11.004 -12.771  18.465  1.00 35.38          O
ATOM   5405  CB  ASN A 436      -9.329 -14.252  20.320  1.00 41.89          C
ATOM   5406  CG  ASN A 436      -8.100 -13.347  20.430  1.00 46.16          C
ATOM   5407  OD1 ASN A 436      -6.999 -13.820  20.709  1.00 46.58          O
ATOM   5408  ND2 ASN A 436      -8.294 -12.038  20.304  1.00 48.00          N
ATOM   5409  H   ASN A 436      -8.118 -15.226  17.525  1.00  0.00          H
ATOM   5410  HA  ASN A 436     -10.576 -15.369  19.078  1.00  0.00          H
ATOM   5411  HB2 ASN A 436     -10.177 -13.738  20.773  1.00  0.00          H
ATOM   5412  HB3 ASN A 436      -9.156 -15.123  20.953  1.00  0.00          H
ATOM   5413 HD21 ASN A 436      -9.200 -11.669  20.053  1.00  0.00          H
ATOM   5414 HD22 ASN A 436      -7.541 -11.371  20.478  1.00  0.00          H
ATOM   5415  N   TRP A 437     -10.275 -13.912  16.649  1.00 33.69          N
ATOM   5416  CA  TRP A 437     -10.812 -13.084  15.560  1.00 32.40          C
ATOM   5417  C   TRP A 437     -12.258 -12.587  15.753  1.00 31.88          C
ATOM   5418  O   TRP A 437     -12.572 -11.427  15.504  1.00 31.51          O
ATOM   5419  CB  TRP A 437     -10.661 -13.841  14.220  1.00 31.53          C
ATOM   5420  CG  TRP A 437     -11.533 -15.051  14.005  1.00 29.81          C
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ATOM   5421  CD1 TRP A 437     -11.237 -16.323  14.354  1.00 30.15           C
ATOM   5422  CD2 TRP A 437     -12.856 -15.115  13.385  1.00 29.74           C
ATOM   5423  NE1 TRP A 437     -12.273 -17.161  13.998  1.00 29.97           N
ATOM   5424  CE3 TRP A 437     -13.734 -14.159  12.822  1.00 28.47           C
ATOM   5425  CE2 TRP A 437     -13.303 -16.472  13.398  1.00 28.86           C
ATOM   5426  CZ3 TRP A 437     -14.991 -14.536  12.307  1.00 29.95           C
ATOM   5427  CZ2 TRP A 437     -14.548 -16.862  12.876  1.00 30.78           C
ATOM   5428  CH2 TRP A 437     -15.397 -15.884  12.327  1.00 28.37           C
ATOM   5429  H   TRP A 437      -9.688 -14.686  16.351  1.00  0.00           H
ATOM   5430  HA  TRP A 437     -10.187 -12.191  15.508  1.00  0.00           H
ATOM   5431  HB2 TRP A 437     -10.873 -13.156  13.402  1.00  0.00           H
ATOM   5432  HB3 TRP A 437      -9.618 -14.124  14.076  1.00  0.00           H
ATOM   5433  HD1 TRP A 437     -10.322 -16.637  14.832  1.00  0.00           H
ATOM   5434  HE1 TRP A 437     -12.237 -18.157  14.171  1.00  0.00           H
ATOM   5435  HE3 TRP A 437     -13.435 -13.120  12.799  1.00  0.00           H
ATOM   5436  HZ3 TRP A 437     -15.649 -13.786  11.897  1.00  0.00           H
ATOM   5437  HZ2 TRP A 437     -14.855 -17.897  12.902  1.00  0.00           H
ATOM   5438  HH2 TRP A 437     -16.360 -16.167  11.925  1.00  0.00           H
ATOM   5439  N   LYS A 438     -13.153 -13.480  16.196  1.00 30.82           N
ATOM   5440  CA  LYS A 438     -14.598 -13.250  16.225  1.00 31.39           C
ATOM   5441  C   LYS A 438     -14.980 -12.162  17.250  1.00 29.84           C
ATOM   5442  O   LYS A 438     -15.951 -11.442  17.031  1.00 28.51           O
ATOM   5443  CB  LYS A 438     -15.305 -14.596  16.539  1.00 33.89           C
ATOM   5444  CG  LYS A 438     -16.743 -14.769  15.988  1.00 35.72           C
ATOM   5445  CD  LYS A 438     -17.776 -13.800  16.586  1.00 37.55           C
ATOM   5446  CE  LYS A 438     -19.244 -14.222  16.450  1.00 37.38           C
ATOM   5447  NZ  LYS A 438     -20.110 -13.268  17.162  1.00 33.68           N1+
ATOM   5448  H   LYS A 438     -12.808 -14.413  16.359  1.00  0.00           H
ATOM   5449  HA  LYS A 438     -14.898 -12.907  15.233  1.00  0.00           H
ATOM   5450  HB2 LYS A 438     -14.716 -15.407  16.105  1.00  0.00           H
ATOM   5451  HB3 LYS A 438     -15.296 -14.783  17.615  1.00  0.00           H
ATOM   5452  HG2 LYS A 438     -16.737 -14.682  14.901  1.00  0.00           H
ATOM   5453  HG3 LYS A 438     -17.053 -15.793  16.203  1.00  0.00           H
ATOM   5454  HD2 LYS A 438     -17.547 -13.662  17.644  1.00  0.00           H
ATOM   5455  HD3 LYS A 438     -17.671 -12.830  16.104  1.00  0.00           H
ATOM   5456  HE2 LYS A 438     -19.534 -14.272  15.400  1.00  0.00           H
ATOM   5457  HE3 LYS A 438     -19.394 -15.213  16.882  1.00  0.00           H
ATOM   5458  HZ1 LYS A 438     -21.084 -13.510  17.113  1.00  0.00           H
ATOM   5459  HZ2 LYS A 438     -19.832 -13.310  18.171  1.00  0.00           H
ATOM   5460  HZ3 LYS A 438     -19.954 -12.316  16.863  1.00  0.00           H
ATOM   5461  N   LYS A 439     -14.203 -11.989  18.331  1.00 29.46           N
ATOM   5462  CA  LYS A 439     -14.496 -11.051  19.421  1.00 32.01           C
ATOM   5463  C   LYS A 439     -14.551  -9.576  18.988  1.00 31.47           C
ATOM   5464  O   LYS A 439     -15.211  -8.769  19.641  1.00 31.96           O
ATOM   5465  CB  LYS A 439     -13.452 -11.219  20.548  1.00 33.79           C
ATOM   5466  CG  LYS A 439     -13.547 -12.544  21.335  1.00 37.29           C
ATOM   5467  CD  LYS A 439     -14.932 -12.858  21.940  1.00 37.29           C
ATOM   5468  CE  LYS A 439     -15.509 -11.745  22.838  1.00 40.03           C
ATOM   5469  NZ  LYS A 439     -16.879 -12.061  23.270  1.00 40.12           N1+
ATOM   5470  H   LYS A 439     -13.326 -12.494  18.365  1.00  0.00           H
ATOM   5471  HA  LYS A 439     -15.495 -11.276  19.793  1.00  0.00           H
ATOM   5472  HB2 LYS A 439     -12.449 -11.119  20.129  1.00  0.00           H
ATOM   5473  HB3 LYS A 439     -13.536 -10.388  21.250  1.00  0.00           H
ATOM   5474  HG2 LYS A 439     -13.254 -13.367  20.681  1.00  0.00           H
ATOM   5475  HG3 LYS A 439     -12.801 -12.526  22.131  1.00  0.00           H
ATOM   5476  HD2 LYS A 439     -15.630 -13.079  21.131  1.00  0.00           H
ATOM   5477  HD3 LYS A 439     -14.856 -13.784  22.512  1.00  0.00           H
ATOM   5478  HE2 LYS A 439     -14.873 -11.584  23.710  1.00  0.00           H
ATOM   5479  HE3 LYS A 439     -15.557 -10.799  22.297  1.00  0.00           H
ATOM   5480  HZ1 LYS A 439     -17.294 -11.306  23.790  1.00  0.00           H
ATOM   5481  HZ2 LYS A 439     -17.459 -12.174  22.399  1.00  0.00           H
ATOM   5482  HZ3 LYS A 439     -16.939 -12.929  23.773  1.00  0.00           H
ATOM   5483  N   PHE A 440     -13.904  -9.242  17.873  1.00 29.67           N
ATOM   5484  CA  PHE A 440     -13.850  -7.901  17.309  1.00 30.46           C
ATOM   5485  C   PHE A 440     -15.077  -7.604  16.418  1.00 32.12           C
ATOM   5486  O   PHE A 440     -15.354  -6.441  16.139  1.00 32.41           O
ATOM   5487  CB  PHE A 440     -12.561  -7.822  16.486  1.00 27.41           C
ATOM   5488  CG  PHE A 440     -11.298  -7.923  17.318  1.00 25.90           C
ATOM   5489  CD1 PHE A 440     -10.803  -6.770  17.958  1.00 25.42           C
ATOM   5490  CD2 PHE A 440     -10.611  -9.148  17.455  1.00 24.33           C
ATOM   5491  CE1 PHE A 440      -9.625  -6.835  18.716  1.00 23.50           C
ATOM   5492  CE2 PHE A 440      -9.437  -9.212  18.230  1.00 24.72           C
ATOM   5493  CZ  PHE A 440      -8.940  -8.055  18.856  1.00 23.12           C
ATOM   5494  H   PHE A 440     -13.371  -9.956  17.395  1.00  0.00           H
ATOM   5495  HA  PHE A 440     -13.815  -7.152  18.103  1.00  0.00           H
ATOM   5496  HB2 PHE A 440     -12.555  -8.604  15.731  1.00  0.00           H
ATOM   5497  HB3 PHE A 440     -12.520  -6.871  15.961  1.00  0.00           H
ATOM   5498  HD1 PHE A 440     -11.299  -5.817  17.857  1.00  0.00           H
ATOM   5499  HD2 PHE A 440     -10.964 -10.037  16.958  1.00  0.00           H
ATOM   5500  HE1 PHE A 440      -9.246  -5.928  19.159  1.00  0.00           H
ATOM   5501  HE2 PHE A 440      -8.893 -10.137  18.325  1.00  0.00           H
ATOM   5502  HZ  PHE A 440      -8.021  -8.100  19.419  1.00  0.00           H
ATOM   5503  N   ARG A 441     -15.886  -8.617  16.063  1.00 33.77           N
ATOM   5504  CA  ARG A 441     -17.260  -8.454  15.574  1.00 36.52           C
ATOM   5505  C   ARG A 441     -18.213  -8.921  16.697  1.00 38.32           C
ATOM   5506  O   ARG A 441     -19.146  -9.698  16.467  1.00 39.68           O
ATOM   5507  CB  ARG A 441     -17.498  -9.235  14.253  1.00 36.16           C
ATOM   5508  CG  ARG A 441     -16.596  -8.864  13.054  1.00 36.35           C
ATOM   5509  CD  ARG A 441     -16.655  -7.395  12.568  1.00 37.85           C
ATOM   5510  NE  ARG A 441     -17.267  -7.246  11.230  1.00 37.46           N
ATOM   5511  CZ  ARG A 441     -16.661  -7.059  10.044  1.00 38.15           C
ATOM   5512  NH1 ARG A 441     -15.341  -6.995   9.895  1.00 39.40           N
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ATOM   5513  NH2 ARG A 441     -17.443  -6.967   8.981  1.00 37.27          N1+
ATOM   5514  H   ARG A 441     -15.637  -9.541  16.400  1.00  0.00           H
ATOM   5515  HA  ARG A 441     -17.493  -7.402  15.405  1.00  0.00           H
ATOM   5516  HB2 ARG A 441     -17.382 -10.302  14.451  1.00  0.00           H
ATOM   5517  HB3 ARG A 441     -18.537  -9.101  13.949  1.00  0.00           H
ATOM   5518  HG2 ARG A 441     -15.568  -9.114  13.312  1.00  0.00           H
ATOM   5519  HG3 ARG A 441     -16.841  -9.526  12.225  1.00  0.00           H
ATOM   5520  HD2 ARG A 441     -17.194  -6.759  13.269  1.00  0.00           H
ATOM   5521  HD3 ARG A 441     -15.650  -6.996  12.539  1.00  0.00           H
ATOM   5522  HE  ARG A 441     -18.275  -7.172  11.211  1.00  0.00           H
ATOM   5523 HH11 ARG A 441     -14.763  -6.536  10.607  1.00  0.00           H
ATOM   5524 HH12 ARG A 441     -14.941  -7.042   8.927  1.00  0.00           H
ATOM   5525 HH21 ARG A 441     -17.348  -6.047   8.506  1.00  0.00           H
ATOM   5526 HH22 ARG A 441     -17.160  -7.600   8.192  1.00  0.00           H
ATOM   5527  N   GLU A 442     -17.935  -8.449  17.920  1.00 40.76           N
ATOM   5528  CA  GLU A 442     -18.749  -8.511  19.134  1.00 41.35           C
ATOM   5529  C   GLU A 442     -18.525  -7.234  19.951  1.00 40.88           C
ATOM   5530  O   GLU A 442     -19.485  -6.616  20.399  1.00 41.44           O
ATOM   5531  CB  GLU A 442     -18.500  -9.786  19.969  1.00 43.85           C
ATOM   5532  CG  GLU A 442     -18.833 -11.083  19.222  1.00 47.68           C
ATOM   5533  CD  GLU A 442     -18.798 -12.334  20.079  1.00 49.70           C
ATOM   5534  OE1 GLU A 442     -18.204 -12.305  21.177  1.00 49.65           O
ATOM   5535  OE2 GLU A 442     -19.336 -13.339  19.571  1.00 50.39          O1-
ATOM   5536  H   GLU A 442     -17.148  -7.817  17.971  1.00  0.00           H
ATOM   5537  HA  GLU A 442     -19.799  -8.499  18.832  1.00  0.00           H
ATOM   5538  HB2 GLU A 442     -17.468  -9.818  20.313  1.00  0.00           H
ATOM   5539  HB3 GLU A 442     -19.113  -9.733  20.870  1.00  0.00           H
ATOM   5540  HG2 GLU A 442     -19.831 -10.991  18.794  1.00  0.00           H
ATOM   5541  HG3 GLU A 442     -18.134 -11.230  18.402  1.00  0.00           H
ATOM   5542  N   NMA A 442A    -17.258  -6.835  20.126  1.00  0.00           N
ATOM   5543  CA  NMA A 442A    -16.882  -5.601  20.800  1.00  0.00           C
ATOM   5544  H   NMA A 442A    -16.506  -7.456  19.833  1.00  0.00           H
ATOM   5545 1HA  NMA A 442A    -15.797  -5.497  20.821  1.00  0.00           H
ATOM   5546 2HA  NMA A 442A    -17.296  -4.735  20.280  1.00  0.00           H
ATOM   5547 3HA  NMA A 442A    -17.249  -5.589  21.827  1.00  0.00           H
TER    5548      NMA A 442A
HETATM 5549  O   SPC     5      -1.787  -0.676  20.490  1.00  0.00           O
HETATM 5550  H1  SPC     5      -1.750  -1.523  21.054  1.00  0.00           H
HETATM 5551  H2  SPC     5      -1.620  -0.930  19.523  1.00  0.00           H
HETATM 5552  O   SPC     9      -3.587   8.608  14.915  1.00  0.00           O
HETATM 5553  H1  SPC     9      -2.962   9.373  14.713  1.00  0.00           H
HETATM 5554  H2  SPC     9      -3.287   8.172  15.770  1.00  0.00           H
HETATM 5555  O   SPC    12      -7.884   6.548  17.755  1.00  0.00           O
HETATM 5556  H1  SPC    12      -8.537   6.035  17.181  1.00  0.00           H
HETATM 5557  H2  SPC    12      -7.789   7.482  17.382  1.00  0.00           H
HETATM 5558  O   SPC    13      -3.068   5.289  18.275  1.00  0.00           O
HETATM 5559  H1  SPC    13      -2.741   6.200  17.991  1.00  0.00           H
HETATM 5560  H2  SPC    13      -4.050   5.360  18.510  1.00  0.00           H
HETATM 5561  O   SPC    14       4.961   2.374  22.034  1.00  0.00           O
HETATM 5562  H1  SPC    14       4.064   2.276  22.486  1.00  0.00           H
HETATM 5563  H2  SPC    14       5.315   1.449  21.833  1.00  0.00           H
HETATM 5564  O   SPC    15       2.192   7.524  17.105  1.00  0.00           O
HETATM 5565  H1  SPC    15       2.970   8.043  17.488  1.00  0.00           H
HETATM 5566  H2  SPC    15       1.788   8.090  16.364  1.00  0.00           H
HETATM 5567  O   SPC    17       4.280   9.272  17.556  1.00  0.00           O
HETATM 5568  H1  SPC    17       4.572   9.273  16.590  1.00  0.00           H
HETATM 5569  H2  SPC    17       5.044   8.926  18.119  1.00  0.00           H
HETATM 5570  O   SPC    19      -5.779   2.881  19.693  1.00  0.00           O
HETATM 5571  H1  SPC    19      -6.144   2.618  20.589  1.00  0.00           H
HETATM 5572  H2  SPC    19      -4.976   2.298  19.493  1.00  0.00           H
HETATM 5573  O   SPC    21      -5.008   8.255  18.191  1.00  0.00           O
HETATM 5574  H1  SPC    21      -5.236   7.401  18.679  1.00  0.00           H
HETATM 5575  H2  SPC    21      -5.831   8.559  17.686  1.00  0.00           H
HETATM 5576  O   SPC    22      -7.241   3.083  17.330  1.00  0.00           O
HETATM 5577  H1  SPC    22      -6.454   3.124  16.700  1.00  0.00           H
HETATM 5578  H2  SPC    22      -6.884   3.088  18.274  1.00  0.00           H
HETATM 5579  O   SPC    26       6.343   7.949  18.824  1.00  0.00           O
HETATM 5580  H1  SPC    26       6.326   7.671  19.787  1.00  0.00           H
HETATM 5581  H2  SPC    26       6.155   7.131  18.250  1.00  0.00           H
HETATM 5582  O   SPC    31      -0.269   6.175  16.886  1.00  0.00           O
HETATM 5583  H1  SPC    31       0.589   6.667  17.083  1.00  0.00           H
HETATM 5584  H2  SPC    31      -1.044   6.794  17.076  1.00  0.00           H
HETATM 5585  O   SPC    32       5.796   5.816  17.303  1.00  0.00           O
HETATM 5586  H1  SPC    32       6.552   5.383  16.797  1.00  0.00           H
HETATM 5587  H2  SPC    32       4.918   5.477  16.934  1.00  0.00           H
HETATM 5588  O   SPC    34       1.435   4.788  22.040  1.00  0.00           O
HETATM 5589  H1  SPC    34       1.336   5.348  21.210  1.00  0.00           H
HETATM 5590  H2  SPC    34       0.549   4.329  22.224  1.00  0.00           H
HETATM 5591  O   SPC    35       0.598  -1.917  23.259  1.00  0.00           O
HETATM 5592  H1  SPC    35      -0.159  -2.289  22.691  1.00  0.00           H
HETATM 5593  H2  SPC    35       0.411  -2.183  24.209  1.00  0.00           H
HETATM 5594  O   SPC    37      -1.873   3.334  19.691  1.00  0.00           O
HETATM 5595  H1  SPC    37      -2.495   2.539  19.621  1.00  0.00           H
HETATM 5596  H2  SPC    37      -2.312   4.125  19.235  1.00  0.00           H
HETATM 5597  O   SPC    38       1.995   5.728  19.369  1.00  0.00           O
HETATM 5598  H1  SPC    38       2.898   5.494  19.758  1.00  0.00           H
HETATM 5599  H2  SPC    38       2.121   6.409  18.638  1.00  0.00           H
HETATM 5600  O   SPC    39       4.018   4.756  20.991  1.00  0.00           O
HETATM 5601  H1  SPC    39       3.216   4.827  21.598  1.00  0.00           H
HETATM 5602  H2  SPC    39       4.602   4.002  21.324  1.00  0.00           H
HETATM 5603  O   SPC    41      -5.668   5.595  18.950  1.00  0.00           O
HETATM 5604  H1  SPC    41      -6.557   5.877  18.552  1.00  0.00           H
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HETATM 5605  H2  SPC    41      -5.761   4.659  19.316  1.00  0.00           H
HETATM 5606  O   SPC    44       3.117  -1.850  22.033  1.00  0.00           O
HETATM 5607  H1  SPC    44       3.229  -2.794  21.696  1.00  0.00           H
HETATM 5608  H2  SPC    44       2.243  -1.798  22.537  1.00  0.00           H
HETATM 5609  O   SPC    46       3.365   5.212  16.150  1.00  0.00           O
HETATM 5610  H1  SPC    46       2.873   6.045  16.436  1.00  0.00           H
HETATM 5611  H2  SPC    46       3.499   5.238  15.149  1.00  0.00           H
HETATM 5612  O   SPC    52       2.267   2.120  22.483  1.00  0.00           O
HETATM 5613  H1  SPC    52       1.468   1.507  22.570  1.00  0.00           H
HETATM 5614  H2  SPC    52       1.945   3.075  22.542  1.00  0.00           H
HETATM 5615  O   SPC    53      -7.173   8.999  16.697  1.00  0.00           O
HETATM 5616  H1  SPC    53      -7.583   9.922  16.726  1.00  0.00           H
HETATM 5617  H2  SPC    53      -6.818   8.844  15.763  1.00  0.00           H
HETATM 5618  O   SPC    55      -2.467   7.833  17.396  1.00  0.00           O
HETATM 5619  H1  SPC    55      -1.952   8.707  17.409  1.00  0.00           H
HETATM 5620  H2  SPC    55      -3.396   8.009  17.765  1.00  0.00           H
HETATM 5621  O   SPC    57       5.270  -0.229  21.279  1.00  0.00           O
HETATM 5622  H1  SPC    57       6.071  -0.721  20.913  1.00  0.00           H
HETATM 5623  H2  SPC    57       4.614  -0.901  21.654  1.00  0.00           H
HETATM 5624  O   SPC    59       0.048   0.501  22.134  1.00  0.00           O
HETATM 5625  H1  SPC    59      -0.658   0.196  21.475  1.00  0.00           H
HETATM 5626  H2  SPC    59       0.310  -0.301  22.693  1.00  0.00           H
HETATM 5627  O   SPC    61      -0.729   3.182  22.180  1.00  0.00           O
HETATM 5628  H1  SPC    61      -0.587   2.196  22.339  1.00  0.00           H
HETATM 5629  H2  SPC    61      -1.273   3.295  21.337  1.00  0.00           H
HETATM 5630  O   SPC    62       0.812   3.272  19.166  1.00  0.00           O
HETATM 5631  H1  SPC    62       1.146   4.227  19.187  1.00  0.00           H
HETATM 5632  H2  SPC    62      -0.180   3.274  19.370  1.00  0.00           H
HETATM 5633  O   SPC    65      -3.541   1.200  19.398  1.00  0.00           O
HETATM 5634  H1  SPC    65      -3.455   0.770  18.483  1.00  0.00           H
HETATM 5635  H2  SPC    65      -3.095   0.586  20.066  1.00  0.00           H
HETATM 5636  O   SPC   384       1.183   1.583 -20.781  1.00  0.00           O
HETATM 5637  H1  SPC   384       0.393   0.938 -20.706  1.00  0.00           H
HETATM 5638  H2  SPC   384       0.834   2.443 -21.157  1.00  0.00           H
HETATM 5639  O   SPC   406       5.989   9.518 -15.895  1.00  0.00           O
HETATM 5640  H1  SPC   406       6.056  10.520 -15.846  1.00  0.00           H
HETATM 5641  H2  SPC   406       6.752   9.131 -15.353  1.00  0.00           H
HETATM 5642  O   SPC   447      -0.096   8.392 -16.270  1.00  0.00           O
HETATM 5643  H1  SPC   447      -0.617   7.976 -17.039  1.00  0.00           H
HETATM 5644  H2  SPC   447      -0.644   9.161 -15.903  1.00  0.00           H
HETATM 5645  O   SPC   454      -7.271  21.926   5.533  1.00  0.00           O
HETATM 5646  H1  SPC   454      -7.424  20.975   5.832  1.00  0.00           H
HETATM 5647  H2  SPC   454      -7.670  22.548   6.221  1.00  0.00           H
HETATM 5648  O   SPC   455       5.467  27.040  -7.135  1.00  0.00           O
HETATM 5649  H1  SPC   455       6.350  27.276  -7.563  1.00  0.00           H
HETATM 5650  H2  SPC   455       5.586  26.168  -6.633  1.00  0.00           H
HETATM 5651  O   SPC   457       4.454  21.779  -0.122  1.00  0.00           O
HETATM 5652  H1  SPC   457       4.073  21.072  -0.744  1.00  0.00           H
HETATM 5653  H2  SPC   457       3.704  22.378   0.195  1.00  0.00           H
HETATM 5654  O   SPC   458      -0.599  17.268   2.834  1.00  0.00           O
HETATM 5655  H1  SPC   458      -0.698  16.272   2.952  1.00  0.00           H
HETATM 5656  H2  SPC   458      -0.365  17.454   1.867  1.00  0.00           H
HETATM 5657  O   SPC   459       5.900  23.353  -8.395  1.00  0.00           O
HETATM 5658  H1  SPC   459       5.516  22.427  -8.539  1.00  0.00           H
HETATM 5659  H2  SPC   459       5.250  24.030  -8.777  1.00  0.00           H
HETATM 5660  O   SPC   460      -0.274  25.849  -5.145  1.00  0.00           O
HETATM 5661  H1  SPC   460       0.124  25.039  -4.687  1.00  0.00           H
HETATM 5662  H2  SPC   460      -1.266  25.875  -4.935  1.00  0.00           H
HETATM 5663  O   SPC   461      -3.229  18.133   6.871  1.00  0.00           O
HETATM 5664  H1  SPC   461      -3.156  18.141   5.865  1.00  0.00           H
HETATM 5665  H2  SPC   461      -3.893  18.840   7.158  1.00  0.00           H
HETATM 5666  O   SPC   462      -8.256  23.212   7.775  1.00  0.00           O
HETATM 5667  H1  SPC   462      -8.963  23.895   7.971  1.00  0.00           H
HETATM 5668  H2  SPC   462      -8.567  22.311   8.117  1.00  0.00           H
HETATM 5669  O   SPC   463       8.074  23.178   1.035  1.00  0.00           O
HETATM 5670  H1  SPC   463       8.714  22.582   1.552  1.00  0.00           H
HETATM 5671  H2  SPC   463       8.528  23.462   0.175  1.00  0.00           H
HETATM 5672  O   SPC   464       4.757  23.113  -4.187  1.00  0.00           O
HETATM 5673  H1  SPC   464       4.095  23.817  -3.886  1.00  0.00           H
HETATM 5674  H2  SPC   464       5.347  22.882  -3.400  1.00  0.00           H
HETATM 5675  O   SPC   466      -3.563  23.209   7.360  1.00  0.00           O
HETATM 5676  H1  SPC   466      -4.112  23.041   6.527  1.00  0.00           H
HETATM 5677  H2  SPC   466      -2.770  23.779   7.095  1.00  0.00           H
HETATM 5678  O   SPC   467      -0.900  19.568   7.105  1.00  0.00           O
HETATM 5679  H1  SPC   467      -1.028  20.293   7.799  1.00  0.00           H
HETATM 5680  H2  SPC   467      -1.732  18.995   7.088  1.00  0.00           H
HETATM 5681  O   SPC   468       7.733  28.420  -0.918  1.00  0.00           O
HETATM 5682  H1  SPC   468       8.430  27.749  -0.622  1.00  0.00           H
HETATM 5683  H2  SPC   468       7.664  28.391  -1.927  1.00  0.00           H
HETATM 5684  O   SPC   469       7.781  28.267  -3.632  1.00  0.00           O
HETATM 5685  H1  SPC   469       7.827  27.371  -4.102  1.00  0.00           H
HETATM 5686  H2  SPC   469       8.705  28.679  -3.647  1.00  0.00           H
HETATM 5687  O   SPC   470      -3.920  23.932   0.144  1.00  0.00           O
HETATM 5688  H1  SPC   470      -4.105  24.017  -0.840  1.00  0.00           H
HETATM 5689  H2  SPC   470      -4.786  24.066   0.652  1.00  0.00           H
HETATM 5690  O   SPC   471       3.333  26.305   0.790  1.00  0.00           O
HETATM 5691  H1  SPC   471       4.206  26.815   0.771  1.00  0.00           H
HETATM 5692  H2  SPC   471       2.787  26.558  -0.025  1.00  0.00           H
HETATM 5693  O   SPC   472      -5.385  19.301   4.566  1.00  0.00           O
HETATM 5694  H1  SPC   472      -4.460  18.930   4.415  1.00  0.00           H
HETATM 5695  H2  SPC   472      -5.484  20.149   4.035  1.00  0.00           H
HETATM 5696  O   SPC   473       5.862  27.352   0.734  1.00  0.00           O
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HETATM 5697  H1  SPC   473       6.418  27.920   0.106  1.00  0.00           H
HETATM 5698  H2  SPC   473       6.485  26.731   1.235  1.00  0.00           H
HETATM 5699  O   SPC   475       3.241  25.054  -3.181  1.00  0.00           O
HETATM 5700  H1  SPC   475       2.731  25.907  -3.366  1.00  0.00           H
HETATM 5701  H2  SPC   475       3.934  25.245  -2.471  1.00  0.00           H
HETATM 5702  O   SPC   476      -3.662  26.481  -7.208  1.00  0.00           O
HETATM 5703  H1  SPC   476      -3.319  25.922  -7.972  1.00  0.00           H
HETATM 5704  H2  SPC   476      -4.231  27.220  -7.572  1.00  0.00           H
HETATM 5705  O   SPC   477      -1.992  25.201   1.609  1.00  0.00           O
HETATM 5706  H1  SPC   477      -2.682  24.817   0.976  1.00  0.00           H
HETATM 5707  H2  SPC   477      -2.376  25.175   2.547  1.00  0.00           H
HETATM 5708  O   SPC   478       6.636  23.990   7.075  1.00  0.00           O
HETATM 5709  H1  SPC   478       7.477  24.365   7.493  1.00  0.00           H
HETATM 5710  H2  SPC   478       5.843  24.338   7.591  1.00  0.00           H
HETATM 5711  O   SPC   479       6.019  24.633  -6.017  1.00  0.00           O
HETATM 5712  H1  SPC   479       6.036  24.102  -6.879  1.00  0.00           H
HETATM 5713  H2  SPC   479       5.559  24.073  -5.310  1.00  0.00           H
HETATM 5714  O   SPC   480      -4.805  22.863   4.935  1.00  0.00           O
HETATM 5715  H1  SPC   480      -4.263  22.150   4.469  1.00  0.00           H
HETATM 5716  H2  SPC   480      -5.760  22.537   5.035  1.00  0.00           H
HETATM 5717  O   SPC   481       7.585  25.678   1.992  1.00  0.00           O
HETATM 5718  H1  SPC   481       7.068  25.700   2.858  1.00  0.00           H
HETATM 5719  H2  SPC   481       7.717  24.712   1.719  1.00  0.00           H
HETATM 5720  O   SPC   483       0.892  25.104   7.062  1.00  0.00           O
HETATM 5721  H1  SPC   483       1.460  24.553   7.690  1.00  0.00           H
HETATM 5722  H2  SPC   483       1.320  25.095   6.148  1.00  0.00           H
HETATM 5723  O   SPC   484       3.943  26.345   6.085  1.00  0.00           O
HETATM 5724  H1  SPC   484       3.847  27.330   6.252  1.00  0.00           H
HETATM 5725  H2  SPC   484       4.147  25.891   6.963  1.00  0.00           H
HETATM 5726  O   SPC   485       2.851  23.661   1.178  1.00  0.00           O
HETATM 5727  H1  SPC   485       3.055  24.631   0.970  1.00  0.00           H
HETATM 5728  H2  SPC   485       1.850  23.541   1.184  1.00  0.00           H
HETATM 5729  O   SPC   486       6.285  21.280   1.739  1.00  0.00           O
HETATM 5730  H1  SPC   486       7.000  21.926   1.424  1.00  0.00           H
HETATM 5731  H2  SPC   486       5.536  21.291   1.054  1.00  0.00           H
HETATM 5732  O   SPC   487       2.095  24.974   4.601  1.00  0.00           O
HETATM 5733  H1  SPC   487       2.844  25.474   5.062  1.00  0.00           H
HETATM 5734  H2  SPC   487       1.724  25.562   3.862  1.00  0.00           H
HETATM 5735  O   SPC   488       1.358  22.470   3.787  1.00  0.00           O
HETATM 5736  H1  SPC   488       1.711  23.359   4.123  1.00  0.00           H
HETATM 5737  H2  SPC   488       0.985  22.609   2.861  1.00  0.00           H
HETATM 5738  O   SPC   490      -2.400  21.926   1.289  1.00  0.00           O
HETATM 5739  H1  SPC   490      -2.994  22.627   0.865  1.00  0.00           H
HETATM 5740  H2  SPC   490      -1.448  22.262   1.265  1.00  0.00           H
HETATM 5741  O   SPC   491       5.026  23.480   2.847  1.00  0.00           O
HETATM 5742  H1  SPC   491       5.476  22.656   2.478  1.00  0.00           H
HETATM 5743  H2  SPC   491       4.139  23.587   2.373  1.00  0.00           H
HETATM 5744  O   SPC   492      -2.733  18.484   4.136  1.00  0.00           O
HETATM 5745  H1  SPC   492      -1.859  18.069   3.840  1.00  0.00           H
HETATM 5746  H2  SPC   492      -2.666  19.490   4.031  1.00  0.00           H
HETATM 5747  O   SPC   493      -0.356  24.731  -7.698  1.00  0.00           O
HETATM 5748  H1  SPC   493      -0.263  25.318  -6.880  1.00  0.00           H
HETATM 5749  H2  SPC   493       0.395  24.939  -8.341  1.00  0.00           H
HETATM 5750  O   SPC   494      -1.438  24.262   6.092  1.00  0.00           O
HETATM 5751  H1  SPC   494      -0.640  24.715   6.522  1.00  0.00           H
HETATM 5752  H2  SPC   494      -1.161  23.334   5.804  1.00  0.00           H
HETATM 5753  O   SPC   495      -2.925  25.567  -4.642  1.00  0.00           O
HETATM 5754  H1  SPC   495      -3.330  24.694  -4.336  1.00  0.00           H
HETATM 5755  H2  SPC   495      -3.364  25.851  -5.506  1.00  0.00           H
HETATM 5756  O   SPC   497       6.199  23.012  -1.865  1.00  0.00           O
HETATM 5757  H1  SPC   497       6.056  24.002  -1.716  1.00  0.00           H
HETATM 5758  H2  SPC   497       5.656  22.504  -1.181  1.00  0.00           H
HETATM 5759  O   SPC   498      -7.238  19.307   6.480  1.00  0.00           O
HETATM 5760  H1  SPC   498      -6.590  19.259   5.700  1.00  0.00           H
HETATM 5761  H2  SPC   498      -7.574  18.368   6.665  1.00  0.00           H
HETATM 5762  O   SPC   499      -3.129  24.852   4.031  1.00  0.00           O
HETATM 5763  H1  SPC   499      -3.885  24.241   4.301  1.00  0.00           H
HETATM 5764  H2  SPC   499      -2.444  24.854   4.774  1.00  0.00           H
HETATM 5765  O   SPC   500      -8.696  20.615   8.473  1.00  0.00           O
HETATM 5766  H1  SPC   500      -8.187  20.073   7.789  1.00  0.00           H
HETATM 5767  H2  SPC   500      -8.190  20.577   9.351  1.00  0.00           H
HETATM 5768  O   SPC   502      -2.716  24.497  -9.025  1.00  0.00           O
HETATM 5769  H1  SPC   502      -2.453  24.264  -9.978  1.00  0.00           H
HETATM 5770  H2  SPC   502      -1.866  24.562  -8.477  1.00  0.00           H
HETATM 5771  O   SPC   503       2.742  20.397   5.052  1.00  0.00           O
HETATM 5772  H1  SPC   503       2.485  19.561   4.551  1.00  0.00           H
HETATM 5773  H2  SPC   503       2.351  21.193   4.567  1.00  0.00           H
HETATM 5774  O   SPC   504      -8.894  24.106   1.332  1.00  0.00           O
HETATM 5775  H1  SPC   504      -9.246  23.594   0.539  1.00  0.00           H
HETATM 5776  H2  SPC   504      -7.895  24.187   1.257  1.00  0.00           H
HETATM 5777  O   SPC   505       0.641  24.078  -1.252  1.00  0.00           O
HETATM 5778  H1  SPC   505       1.006  25.018  -1.203  1.00  0.00           H
HETATM 5779  H2  SPC   505       0.637  23.790  -2.219  1.00  0.00           H
HETATM 5780  O   SPC   506       1.286  26.507   2.541  1.00  0.00           O
HETATM 5781  H1  SPC   506       0.539  26.901   1.993  1.00  0.00           H
HETATM 5782  H2  SPC   506       2.118  26.474   1.967  1.00  0.00           H
HETATM 5783  O   SPC   507       3.441  21.044   7.660  1.00  0.00           O
HETATM 5784  H1  SPC   507       2.830  20.464   8.221  1.00  0.00           H
HETATM 5785  H2  SPC   507       3.278  20.826   6.685  1.00  0.00           H
HETATM 5786  O   SPC   508      -5.171  23.606 -10.125  1.00  0.00           O
HETATM 5787  H1  SPC   508      -5.155  23.483 -11.126  1.00  0.00           H
HETATM 5788  H2  SPC   508      -4.286  23.991  -9.839  1.00  0.00           H
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HETATM 5789  O   SPC   509     -0.765  21.709   5.301  1.00  0.00           O
HETATM 5790  H1  SPC   509      0.097  21.901   4.806  1.00  0.00           H
HETATM 5791  H2  SPC   509     -0.616  20.930   5.927  1.00  0.00           H
HETATM 5792  O   SPC   510      2.570  23.522   8.509  1.00  0.00           O
HETATM 5793  H1  SPC   510      2.916  22.641   8.152  1.00  0.00           H
HETATM 5794  H2  SPC   510      3.345  24.162   8.594  1.00  0.00           H
HETATM 5795  O   SPC   511      1.001  23.730  -4.028  1.00  0.00           O
HETATM 5796  H1  SPC   511      1.953  24.005  -3.833  1.00  0.00           H
HETATM 5797  H2  SPC   511      0.997  23.041  -4.765  1.00  0.00           H
HETATM 5798  O   SPC   512     -2.939  21.151   3.805  1.00  0.00           O
HETATM 5799  H1  SPC   512     -2.171  21.466   4.387  1.00  0.00           H
HETATM 5800  H2  SPC   512     -2.774  21.470   2.857  1.00  0.00           H
HETATM 5801  O   SPC   513      8.127  25.890  -4.867  1.00  0.00           O
HETATM 5802  H1  SPC   513      8.656  25.170  -4.395  1.00  0.00           H
HETATM 5803  H2  SPC   513      7.340  25.452  -5.331  1.00  0.00           H
HETATM 5804  O   SPC   514      7.275  23.491   4.517  1.00  0.00           O
HETATM 5805  H1  SPC   514      7.006  23.690   5.475  1.00  0.00           H
HETATM 5806  H2  SPC   514      6.460  23.586   3.932  1.00  0.00           H
HETATM 5807  O   SPC   515     -6.096  24.140   1.747  1.00  0.00           O
HETATM 5808  H1  SPC   515     -6.166  23.199   2.109  1.00  0.00           H
HETATM 5809  H2  SPC   515     -6.094  24.782   2.518  1.00  0.00           H
HETATM 5810  O   SPC   516      0.047  23.339   1.255  1.00  0.00           O
HETATM 5811  H1  SPC   516      0.235  23.483   0.267  1.00  0.00           H
HETATM 5812  H2  SPC   516     -0.550  24.092   1.571  1.00  0.00           H
HETATM 5813  O   SPC   520     -4.919  19.990  12.295  1.00  0.00           O
HETATM 5814  H1  SPC   520     -4.287  20.574  12.829  1.00  0.00           H
HETATM 5815  H2  SPC   520     -4.871  19.048  12.668  1.00  0.00           H
HETATM 5816  O   SPC   522      4.740  25.341   8.616  1.00  0.00           O
HETATM 5817  H1  SPC   522      5.305  26.174   8.479  1.00  0.00           H
HETATM 5818  H2  SPC   522      4.794  25.077   9.592  1.00  0.00           H
HETATM 5819  O   SPC   523      5.027  20.715  12.148  1.00  0.00           O
HETATM 5820  H1  SPC   523      4.056  20.821  12.400  1.00  0.00           H
HETATM 5821  H2  SPC   523      5.158  21.141  11.241  1.00  0.00           H
HETATM 5822  O   SPC   525      0.163  12.189  18.519  1.00  0.00           O
HETATM 5823  H1  SPC   525     -0.140  12.368  19.458  1.00  0.00           H
HETATM 5824  H2  SPC   525     -0.008  13.021  17.962  1.00  0.00           H
HETATM 5825  O   SPC   531      5.172  21.868   9.675  1.00  0.00           O
HETATM 5826  H1  SPC   531      6.141  21.601   9.589  1.00  0.00           H
HETATM 5827  H2  SPC   531      4.662  21.525   8.872  1.00  0.00           H
HETATM 5828  O   SPC   534     -6.528  16.319   9.592  1.00  0.00           O
HETATM 5829  H1  SPC   534     -7.471  16.527   9.889  1.00  0.00           H
HETATM 5830  H2  SPC   534     -6.032  15.949  10.393  1.00  0.00           H
HETATM 5831  O   SPC   542      3.493  23.646  13.482  1.00  0.00           O
HETATM 5832  H1  SPC   542      3.150  24.438  13.992  1.00  0.00           H
HETATM 5833  H2  SPC   542      3.895  22.988  14.142  1.00  0.00           H
HETATM 5834  O   SPC   543      0.858  18.602  15.556  1.00  0.00           O
HETATM 5835  H1  SPC   543      0.889  17.618  15.767  1.00  0.00           H
HETATM 5836  H2  SPC   543      1.803  18.952  15.520  1.00  0.00           H
HETATM 5837  O   SPC   546      3.961  18.088  10.045  1.00  0.00           O
HETATM 5838  H1  SPC   546      3.216  18.697   9.730  1.00  0.00           H
HETATM 5839  H2  SPC   546      4.228  17.498   9.268  1.00  0.00           H
HETATM 5840  O   SPC   547      6.716  20.132  14.258  1.00  0.00           O
HETATM 5841  H1  SPC   547      6.150  20.479  13.495  1.00  0.00           H
HETATM 5842  H2  SPC   547      6.446  19.175  14.433  1.00  0.00           H
HETATM 5843  O   SPC   551      6.849  18.740  11.530  1.00  0.00           O
HETATM 5844  H1  SPC   551      6.516  17.793  11.599  1.00  0.00           H
HETATM 5845  H2  SPC   551      6.086  19.364  11.749  1.00  0.00           H
HETATM 5846  O   SPC   557      4.082  15.717  15.901  1.00  0.00           O
HETATM 5847  H1  SPC   557      4.636  16.402  15.411  1.00  0.00           H
HETATM 5848  H2  SPC   557      4.694  15.011  16.273  1.00  0.00           H
HETATM 5849  O   SPC   559     -0.323  14.351  16.997  1.00  0.00           O
HETATM 5850  H1  SPC   559      0.320  14.990  16.553  1.00  0.00           H
HETATM 5851  H2  SPC   559     -1.187  14.360  16.476  1.00  0.00           H
HETATM 5852  O   SPC   560     -6.931  20.723  10.544  1.00  0.00           O
HETATM 5853  H1  SPC   560     -6.328  20.396  11.286  1.00  0.00           H
HETATM 5854  H2  SPC   560     -6.442  21.442  10.032  1.00  0.00           H
HETATM 5855  O   SPC   562     -0.037  19.831  11.108  1.00  0.00           O
HETATM 5856  H1  SPC   562     -0.413  19.644  12.026  1.00  0.00           H
HETATM 5857  H2  SPC   562     -0.040  20.825  10.951  1.00  0.00           H
HETATM 5858  O   SPC   565     -2.886  21.248  13.592  1.00  0.00           O
HETATM 5859  H1  SPC   565     -2.511  22.085  13.991  1.00  0.00           H
HETATM 5860  H2  SPC   565     -2.186  20.519  13.644  1.00  0.00           H
HETATM 5861  O   SPC   566     -6.318  11.668  14.026  1.00  0.00           O
HETATM 5862  H1  SPC   566     -6.426  12.621  13.715  1.00  0.00           H
HETATM 5863  H2  SPC   566     -6.861  11.550  14.870  1.00  0.00           H
HETATM 5864  O   SPC   568      4.601  13.779  12.159  1.00  0.00           O
HETATM 5865  H1  SPC   568      4.655  13.359  13.076  1.00  0.00           H
HETATM 5866  H2  SPC   568      3.826  13.361  11.664  1.00  0.00           H
HETATM 5867  O   SPC   572      5.674  17.506  14.446  1.00  0.00           O
HETATM 5868  H1  SPC   572      5.367  17.264  13.510  1.00  0.00           H
HETATM 5869  H2  SPC   572      6.405  16.857  14.708  1.00  0.00           H
HETATM 5870  O   SPC   575      4.787  12.526  14.615  1.00  0.00           O
HETATM 5871  H1  SPC   575      5.321  12.876  15.397  1.00  0.00           H
HETATM 5872  H2  SPC   575      3.806  12.715  14.789  1.00  0.00           H
HETATM 5873  O   SPC   577     -3.885  11.143  12.904  1.00  0.00           O
HETATM 5874  H1  SPC   577     -4.790  11.306  13.327  1.00  0.00           H
HETATM 5875  H2  SPC   577     -3.919  10.278  12.378  1.00  0.00           H
HETATM 5876  O   SPC   583     -3.340  19.774  10.072  1.00  0.00           O
HETATM 5877  H1  SPC   583     -3.970  19.702   9.286  1.00  0.00           H
HETATM 5878  H2  SPC   583     -3.892  19.885  10.913  1.00  0.00           H
HETATM 5879  O   SPC   587     -2.243  14.043   9.447  1.00  0.00           O
HETATM 5880  H1  SPC   587     -2.262  13.369   8.697  1.00  0.00           H
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HETATM 5881  H2  SPC   587      -2.774  14.855   9.163  1.00  0.00           H
HETATM 5882  O   SPC   591      -1.845  10.854  14.607  1.00  0.00           O
HETATM 5883  H1  SPC   591      -1.113  11.510  14.370  1.00  0.00           H
HETATM 5884  H2  SPC   591      -2.636  11.042  14.003  1.00  0.00           H
HETATM 5885  O   SPC   593      -4.233  13.118  11.076  1.00  0.00           O
HETATM 5886  H1  SPC   593      -3.437  13.395  10.517  1.00  0.00           H
HETATM 5887  H2  SPC   593      -3.928  12.442  11.765  1.00  0.00           H
HETATM 5888  O   SPC   596       2.582  18.787  12.425  1.00  0.00           O
HETATM 5889  H1  SPC   596       3.115  18.491  11.621  1.00  0.00           H
HETATM 5890  H2  SPC   596       2.193  19.700  12.231  1.00  0.00           H
HETATM 5891  O   SPC   597       4.465  21.775  15.175  1.00  0.00           O
HETATM 5892  H1  SPC   597       3.929  20.920  15.212  1.00  0.00           H
HETATM 5893  H2  SPC   597       5.440  21.536  15.204  1.00  0.00           H
HETATM 5894  O   SPC   598       4.847  24.155  11.107  1.00  0.00           O
HETATM 5895  H1  SPC   598       4.887  23.284  10.592  1.00  0.00           H
HETATM 5896  H2  SPC   598       4.300  24.010  11.944  1.00  0.00           H
HETATM 5897  O   SPC   599       7.407  15.489  14.870  1.00  0.00           O
HETATM 5898  H1  SPC   599       8.289  15.906  15.137  1.00  0.00           H
HETATM 5899  H2  SPC   599       7.507  15.045  13.964  1.00  0.00           H
HETATM 5900  O   SPC   600      -7.158  14.115  16.470  1.00  0.00           O
HETATM 5901  H1  SPC   600      -6.179  13.841  16.450  1.00  0.00           H
HETATM 5902  H2  SPC   600      -7.273  14.828  17.165  1.00  0.00           H
HETATM 5903  O   SPC   601      -6.337  11.440  10.409  1.00  0.00           O
HETATM 5904  H1  SPC   601      -5.656  12.166  10.580  1.00  0.00           H
HETATM 5905  H2  SPC   601      -5.881  10.679   9.928  1.00  0.00           H
HETATM 5906  O   SPC   607       7.274  14.286  12.448  1.00  0.00           O
HETATM 5907  H1  SPC   607       6.308  14.075  12.241  1.00  0.00           H
HETATM 5908  H2  SPC   607       7.625  14.919  11.745  1.00  0.00           H
HETATM 5909  O   SPC   612       2.197  13.068  15.098  1.00  0.00           O
HETATM 5910  H1  SPC   612       2.172  12.440  15.892  1.00  0.00           H
HETATM 5911  H2  SPC   612       1.889  13.981  15.393  1.00  0.00           H
HETATM 5912  O   SPC   614      -4.986  19.975   7.883  1.00  0.00           O
HETATM 5913  H1  SPC   614      -5.170  20.912   8.216  1.00  0.00           H
HETATM 5914  H2  SPC   614      -5.826  19.629   7.444  1.00  0.00           H
HETATM 5915  O   SPC   617       0.801  17.469   7.555  1.00  0.00           O
HETATM 5916  H1  SPC   617       0.174  18.200   7.242  1.00  0.00           H
HETATM 5917  H2  SPC   617       1.079  16.916   6.765  1.00  0.00           H
HETATM 5918  O   SPC   625       8.146  11.877  17.211  1.00  0.00           O
HETATM 5919  H1  SPC   625       7.322  12.425  17.020  1.00  0.00           H
HETATM 5920  H2  SPC   625       8.674  11.776  16.356  1.00  0.00           H
HETATM 5921  O   SPC   626       6.216  13.903  16.643  1.00  0.00           O
HETATM 5922  H1  SPC   626       6.679  14.429  15.909  1.00  0.00           H
HETATM 5923  H2  SPC   626       6.450  14.332  17.523  1.00  0.00           H
HETATM 5924  O   SPC   628      -1.765  16.589  13.242  1.00  0.00           O
HETATM 5925  H1  SPC   628      -0.768  16.440  13.290  1.00  0.00           H
HETATM 5926  H2  SPC   628      -2.012  16.753  12.273  1.00  0.00           H
HETATM 5927  O   SPC   630       1.441  15.787  15.430  1.00  0.00           O
HETATM 5928  H1  SPC   630       1.300  15.987  14.448  1.00  0.00           H
HETATM 5929  H2  SPC   630       2.433  15.843  15.634  1.00  0.00           H
HETATM 5930  O   SPC   631      -9.068  16.813  10.486  1.00  0.00           O
HETATM 5931  H1  SPC   631      -9.083  17.600  11.107  1.00  0.00           H
HETATM 5932  H2  SPC   631      -9.604  17.041   9.656  1.00  0.00           H
HETATM 5933  O   SPC   633      -3.805  16.218   8.774  1.00  0.00           O
HETATM 5934  H1  SPC   633      -4.804  16.229   8.927  1.00  0.00           H
HETATM 5935  H2  SPC   633      -3.588  16.852   8.016  1.00  0.00           H
HETATM 5936  O   SPC   634       1.487   9.360  15.289  1.00  0.00           O
HETATM 5937  H1  SPC   634       1.417   9.684  14.332  1.00  0.00           H
HETATM 5938  H2  SPC   634       1.727  10.145  15.875  1.00  0.00           H
HETATM 5939  O   SPC   639       7.679  15.920  18.114  1.00  0.00           O
HETATM 5940  H1  SPC   639       7.358  16.645  18.726  1.00  0.00           H
HETATM 5941  H2  SPC   639       8.227  16.338  17.373  1.00  0.00           H
HETATM 5942  O   SPC   641      -0.299  13.072  11.139  1.00  0.00           O
HETATM 5943  H1  SPC   641      -0.587  12.108  11.036  1.00  0.00           H
HETATM 5944  H2  SPC   641      -0.886  13.641  10.543  1.00  0.00           H
HETATM 5945  O   SPC   642      -7.225  14.300  13.720  1.00  0.00           O
HETATM 5946  H1  SPC   642      -7.230  14.387  14.726  1.00  0.00           H
HETATM 5947  H2  SPC   642      -8.103  13.893  13.427  1.00  0.00           H
HETATM 5948  O   SPC   643      -2.290  14.367  15.032  1.00  0.00           O
HETATM 5949  H1  SPC   643      -2.351  15.213  14.488  1.00  0.00           H
HETATM 5950  H2  SPC   643      -1.622  13.752  14.587  1.00  0.00           H
HETATM 5951  O   SPC   646      -4.586  13.402  16.402  1.00  0.00           O
HETATM 5952  H1  SPC   646      -3.764  13.720  15.909  1.00  0.00           H
HETATM 5953  H2  SPC   646      -4.380  12.513  16.839  1.00  0.00           H
HETATM 5954  O   SPC   647      -0.266  12.950  13.855  1.00  0.00           O
HETATM 5955  H1  SPC   647       0.690  12.908  14.182  1.00  0.00           H
HETATM 5956  H2  SPC   647      -0.258  13.079  12.851  1.00  0.00           H
HETATM 5957  O   SPC   648       2.718  15.051   9.701  1.00  0.00           O
HETATM 5958  H1  SPC   648       1.839  15.515   9.884  1.00  0.00           H
HETATM 5959  H2  SPC   648       2.674  14.120  10.082  1.00  0.00           H
HETATM 5960  O   SPC   649      -4.042  10.978  17.607  1.00  0.00           O
HETATM 5961  H1  SPC   649      -3.059  10.768  17.526  1.00  0.00           H
HETATM 5962  H2  SPC   649      -4.520  10.160  17.943  1.00  0.00           H
HETATM 5963  O   SPC   651       3.498  19.189  14.926  1.00  0.00           O
HETATM 5964  H1  SPC   651       3.099  19.072  14.002  1.00  0.00           H
HETATM 5965  H2  SPC   651       4.311  18.598  14.993  1.00  0.00           H
HETATM 5966  O   SPC   658       0.592  22.393  10.133  1.00  0.00           O
HETATM 5967  H1  SPC   658      -0.250  22.247   9.593  1.00  0.00           H
HETATM 5968  H2  SPC   658       1.254  22.902   9.564  1.00  0.00           H
HETATM 5969  O   SPC   666      -7.879  16.818   7.183  1.00  0.00           O
HETATM 5970  H1  SPC   666      -8.823  16.910   7.537  1.00  0.00           H
HETATM 5971  H2  SPC   666      -7.277  16.531   7.943  1.00  0.00           H
HETATM 5972  O   SPC   670      -1.726  21.595   8.813  1.00  0.00           O
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HETATM 5973  H1  SPC   670      -2.386  22.197   8.344  1.00  0.00          H
HETATM 5974  H2  SPC   670      -2.240  20.961   9.413  1.00  0.00          H
HETATM 5975  O   SPC   676      -6.187   8.971  14.161  1.00  0.00          O
HETATM 5976  H1  SPC   676      -5.221   8.728  14.346  1.00  0.00          H
HETATM 5977  H2  SPC   676      -6.232   9.959  13.951  1.00  0.00          H
HETATM 5978  O   SPC   679      -4.454  17.477  13.164  1.00  0.00          O
HETATM 5979  H1  SPC   679      -4.921  16.717  12.688  1.00  0.00          H
HETATM 5980  H2  SPC   679      -3.542  17.162  13.450  1.00  0.00          H
HETATM 5981  O   SPC   686       1.819  19.425   9.153  1.00  0.00          O
HETATM 5982  H1  SPC   686       1.475  18.692   8.548  1.00  0.00          H
HETATM 5983  H2  SPC   686       1.127  19.591   9.875  1.00  0.00          H
HETATM 5984  O   SPC   687       2.321  11.262  17.094  1.00  0.00          O
HETATM 5985  H1  SPC   687       3.011  10.648  17.503  1.00  0.00          H
HETATM 5986  H2  SPC   687       1.632  11.501  17.795  1.00  0.00          H
HETATM 5987  O   SPC   688      -5.755  22.463   8.772  1.00  0.00          O
HETATM 5988  H1  SPC   688      -6.567  22.937   8.406  1.00  0.00          H
HETATM 5989  H2  SPC   688      -4.925  22.913   8.408  1.00  0.00          H
HETATM 5990  O   SPC   691       0.369  16.418  10.073  1.00  0.00          O
HETATM 5991  H1  SPC   691      -0.563  16.711  10.336  1.00  0.00          H
HETATM 5992  H2  SPC   691       0.547  16.748   9.134  1.00  0.00          H
HETATM 5993  O   SPC   692      -1.396  10.292  17.229  1.00  0.00          O
HETATM 5994  H1  SPC   692      -1.439  10.509  16.240  1.00  0.00          H
HETATM 5995  H2  SPC   692      -0.759  10.937  17.675  1.00  0.00          H
HETATM 5996  O   SPC   693      -8.120  11.529  16.133  1.00  0.00          O
HETATM 5997  H1  SPC   693      -7.929  12.487  16.391  1.00  0.00          H
HETATM 5998  H2  SPC   693      -9.066  11.463  15.787  1.00  0.00          H
HETATM 5999  O   SPC   697       7.424  24.547  12.007  1.00  0.00          O
HETATM 6000  H1  SPC   697       7.684  23.654  12.399  1.00  0.00          H
HETATM 6001  H2  SPC   697       6.464  24.499  11.699  1.00  0.00          H
HETATM 6002  O   SPC   698      -5.524  15.318  11.900  1.00  0.00          O
HETATM 6003  H1  SPC   698      -6.195  15.013  12.596  1.00  0.00          H
HETATM 6004  H2  SPC   698      -5.006  14.507  11.583  1.00  0.00          H
HETATM 6005  O   SPC   703       5.082  16.541  11.978  1.00  0.00          O
HETATM 6006  H1  SPC   703       4.798  15.572  11.965  1.00  0.00          H
HETATM 6007  H2  SPC   703       4.602  17.027  11.231  1.00  0.00          H
HETATM 6008  O   SPC   706      -2.165  17.301  10.658  1.00  0.00          O
HETATM 6009  H1  SPC   706      -2.343  18.289  10.550  1.00  0.00          H
HETATM 6010  H2  SPC   706      -2.794  16.801  10.044  1.00  0.00          H
HETATM 6011  O   SPC   707      -1.001  19.269  13.676  1.00  0.00          O
HETATM 6012  H1  SPC   707      -0.308  19.179  14.410  1.00  0.00          H
HETATM 6013  H2  SPC   707      -1.448  18.374  13.556  1.00  0.00          H
HETATM 6014  O   SPC   709       2.340  21.557  12.117  1.00  0.00          O
HETATM 6015  H1  SPC   709       2.635  22.377  12.628  1.00  0.00          H
HETATM 6016  H2  SPC   709       1.708  21.848  11.384  1.00  0.00          H
HETATM 6017  O   SPC   712       1.000  16.557  12.809  1.00  0.00          O
HETATM 6018  H1  SPC   712       0.817  16.292  11.852  1.00  0.00          H
HETATM 6019  H2  SPC   712       1.532  17.417  12.796  1.00  0.00          H
HETATM 6020  O   SPC  1025       7.440  20.546 -14.013  1.00  0.00          O
HETATM 6021  H1  SPC  1025       8.158  19.838 -14.059  1.00  0.00          H
HETATM 6022  H2  SPC  1025       6.867  20.476 -14.838  1.00  0.00          H
HETATM 6023  O   SPC  1030       1.492  24.846  -9.774  1.00  0.00          O
HETATM 6024  H1  SPC  1030       0.994  25.105 -10.606  1.00  0.00          H
HETATM 6025  H2  SPC  1030       1.920  23.949  -9.921  1.00  0.00          H
HETATM 6026  O   SPC  1049       3.830  18.202 -16.012  1.00  0.00          O
HETATM 6027  H1  SPC  1049       4.609  18.837 -16.084  1.00  0.00          H
HETATM 6028  H2  SPC  1049       2.976  18.735 -16.140  1.00  0.00          H
HETATM 6029  O   SPC  1052       4.378  21.603 -12.241  1.00  0.00          O
HETATM 6030  H1  SPC  1052       3.574  20.995 -12.220  1.00  0.00          H
HETATM 6031  H2  SPC  1052       4.694  21.690 -13.188  1.00  0.00          H
HETATM 6032  O   SPC  1058       5.955  20.088 -16.432  1.00  0.00          O
HETATM 6033  H1  SPC  1058       5.584  20.713 -17.123  1.00  0.00          H
HETATM 6034  H2  SPC  1058       6.866  19.766 -16.736  1.00  0.00          H
HETATM 6035  O   SPC  1061       3.032  15.563 -15.566  1.00  0.00          O
HETATM 6036  H1  SPC  1061       3.334  16.530 -15.543  1.00  0.00          H
HETATM 6037  H2  SPC  1061       2.572  15.401 -16.441  1.00  0.00          H
HETATM 6038  O   SPC  1083       8.059   8.772 -14.282  1.00  0.00          O
HETATM 6039  H1  SPC  1083       8.477   8.040 -13.731  1.00  0.00          H
HETATM 6040  H2  SPC  1083       8.719   9.540 -14.333  1.00  0.00          H
HETATM 6041  O   SPC  1095      -0.017  22.081 -12.539  1.00  0.00          O
HETATM 6042  H1  SPC  1095       0.801  21.504 -12.641  1.00  0.00          H
HETATM 6043  H2  SPC  1095      -0.339  22.343 -13.462  1.00  0.00          H
HETATM 6044  O   SPC  1096       9.155  15.095 -17.067  1.00  0.00          O
HETATM 6045  H1  SPC  1096       8.317  15.589 -17.340  1.00  0.00          H
HETATM 6046  H2  SPC  1096       9.864  15.772 -16.827  1.00  0.00          H
HETATM 6047  O   SPC  1097       7.007  16.778 -17.525  1.00  0.00          O
HETATM 6048  H1  SPC  1097       6.031  17.000 -17.480  1.00  0.00          H
HETATM 6049  H2  SPC  1097       7.541  17.624 -17.393  1.00  0.00          H
HETATM 6050  O   SPC  1101      -0.902   9.747 -19.145  1.00  0.00          O
HETATM 6051  H1  SPC  1101      -1.105   8.787 -18.886  1.00  0.00          H
HETATM 6052  H2  SPC  1101      -1.770  10.239 -19.225  1.00  0.00          H
HETATM 6053  O   SPC  1102       8.444  19.067 -16.915  1.00  0.00          O
HETATM 6054  H1  SPC  1102       8.642  18.773 -15.962  1.00  0.00          H
HETATM 6055  H2  SPC  1102       9.316  19.351 -17.335  1.00  0.00          H
HETATM 6056  O   SPC  1109       7.103  21.687 -11.543  1.00  0.00          O
HETATM 6057  H1  SPC  1109       7.376  21.287 -12.431  1.00  0.00          H
HETATM 6058  H2  SPC  1109       6.097  21.744 -11.521  1.00  0.00          H
HETATM 6059  O   SPC  1111       1.716  19.841 -16.346  1.00  0.00          O
HETATM 6060  H1  SPC  1111       1.539  20.716 -15.891  1.00  0.00          H
HETATM 6061  H2  SPC  1111       1.198  19.852 -17.223  1.00  0.00          H
HETATM 6062  O   SPC  1113      -2.076  23.745 -11.540  1.00  0.00          O
HETATM 6063  H1  SPC  1113      -1.308  23.194 -11.895  1.00  0.00          H
HETATM 6064  H2  SPC  1113      -2.844  23.686 -12.191  1.00  0.00          H
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HETATM 6065  O   SPC  1128      4.148  25.327  -8.971  1.00  0.00           O
HETATM 6066  H1  SPC  1128      3.173  25.419  -9.205  1.00  0.00           H
HETATM 6067  H2  SPC  1128      4.433  26.122  -8.422  1.00  0.00           H
HETATM 6068  O   SPC  1147     -0.631  27.331   0.631  1.00  0.00           O
HETATM 6069  H1  SPC  1147     -1.145  26.516   0.947  1.00  0.00           H
HETATM 6070  H2  SPC  1147     -1.261  28.108   0.584  1.00  0.00           H
HETATM 6071  O   SPC  1155      5.435  25.667  -1.568  1.00  0.00           O
HETATM 6072  H1  SPC  1155      5.555  26.081  -0.659  1.00  0.00           H
HETATM 6073  H2  SPC  1155      5.389  26.415  -2.253  1.00  0.00           H
HETATM 6074  O   SPC  1178      3.643  28.334  -5.555  1.00  0.00           O
HETATM 6075  H1  SPC  1178      4.284  27.834  -6.161  1.00  0.00           H
HETATM 6076  H2  SPC  1178      3.454  29.230  -5.961  1.00  0.00           H
HETATM 6077  O   SPC  1184      5.597  25.911   3.956  1.00  0.00           O
HETATM 6078  H1  SPC  1184      5.264  25.088   3.471  1.00  0.00           H
HETATM 6079  H2  SPC  1184      4.983  26.085   4.741  1.00  0.00           H
HETATM 6080  O   SPC  1190      6.278  27.463   7.954  1.00  0.00           O
HETATM 6081  H1  SPC  1190      6.456  27.713   6.992  1.00  0.00           H
HETATM 6082  H2  SPC  1190      7.049  27.792   8.518  1.00  0.00           H
HETATM 6083  O   SPC  1196      1.707  27.258  -3.851  1.00  0.00           O
HETATM 6084  H1  SPC  1196      2.347  27.713  -4.486  1.00  0.00           H
HETATM 6085  H2  SPC  1196      0.927  26.894  -4.384  1.00  0.00           H
HETATM 6086  O   SPC  1211      9.104  30.619  -0.072  1.00  0.00           O
HETATM 6087  H1  SPC  1211      8.538  29.862  -0.430  1.00  0.00           H
HETATM 6088  H2  SPC  1211      8.617  31.040   0.704  1.00  0.00           H
HETATM 6089  O   SPC  1220      7.684  31.439   2.166  1.00  0.00           O
HETATM 6090  H1  SPC  1220      7.105  32.256   2.169  1.00  0.00           H
HETATM 6091  H2  SPC  1220      7.111  30.637   2.415  1.00  0.00           H
HETATM 6092  O   SPC  1223      5.143  27.699  -3.294  1.00  0.00           O
HETATM 6093  H1  SPC  1223      4.542  27.970  -4.057  1.00  0.00           H
HETATM 6094  H2  SPC  1223      6.065  28.079  -3.458  1.00  0.00           H
HETATM 6095  O   SPC  1228      6.204  29.316   2.862  1.00  0.00           O
HETATM 6096  H1  SPC  1228      5.873  28.616   2.219  1.00  0.00           H
HETATM 6097  H2  SPC  1228      6.284  28.906   3.779  1.00  0.00           H
HETATM 6098  O   SPC  1230      1.459  26.742  -1.128  1.00  0.00           O
HETATM 6099  H1  SPC  1230      1.447  27.109  -2.070  1.00  0.00           H
HETATM 6100  H2  SPC  1230      0.652  27.090  -0.627  1.00  0.00           H
HETATM 6101  O   SPC  1254      6.867  27.968   5.285  1.00  0.00           O
HETATM 6102  H1  SPC  1254      6.605  27.127   4.790  1.00  0.00           H
HETATM 6103  H2  SPC  1254      7.860  28.123   5.168  1.00  0.00           H
HETATM 6104  O   SPC  1358      8.483  28.254   9.444  1.00  0.00           O
HETATM 6105  H1  SPC  1358      8.763  27.455  10.003  1.00  0.00           H
HETATM 6106  H2  SPC  1358      8.535  29.077  10.013  1.00  0.00           H
HETATM 6107  O   SPC  3122     23.161   9.323  -2.732  1.00  0.00           O
HETATM 6108  H1  SPC  3122     23.834   8.947  -3.372  1.00  0.00           H
HETATM 6109  H2  SPC  3122     23.044   8.667  -1.964  1.00  0.00           H
HETATM 6110  O   SPC  3135     23.397  11.320   0.840  1.00  0.00           O
HETATM 6111  H1  SPC  3135     23.010  11.529  -0.067  1.00  0.00           H
HETATM 6112  H2  SPC  3135     23.590  10.331   0.891  1.00  0.00           H
HETATM 6113  O   SPC  3137     20.457   8.941  -3.230  1.00  0.00           O
HETATM 6114  H1  SPC  3137     20.165   9.380  -4.091  1.00  0.00           H
HETATM 6115  H2  SPC  3137     21.442   9.105  -3.097  1.00  0.00           H
HETATM 6116  O   SPC  3144     24.182   8.672   1.437  1.00  0.00           O
HETATM 6117  H1  SPC  3144     23.999   8.739   2.433  1.00  0.00           H
HETATM 6118  H2  SPC  3144     25.115   8.329   1.310  1.00  0.00           H
HETATM 6119  O   SPC  3156     22.889   7.636  -0.713  1.00  0.00           O
HETATM 6120  H1  SPC  3156     23.289   7.977   0.150  1.00  0.00           H
HETATM 6121  H2  SPC  3156     22.381   6.784  -0.519  1.00  0.00           H
HETATM 6122  O   SPC  3162     23.945   9.034   4.084  1.00  0.00           O
HETATM 6123  H1  SPC  3162     24.076  10.035   4.025  1.00  0.00           H
HETATM 6124  H2  SPC  3162     23.833   8.774   5.052  1.00  0.00           H
HETATM 6125  O   SPC  3189     10.833   7.642  17.521  1.00  0.00           O
HETATM 6126  H1  SPC  3189     10.526   6.733  17.841  1.00  0.00           H
HETATM 6127  H2  SPC  3189     10.043   8.275  17.570  1.00  0.00           H
HETATM 6128  O   SPC  3194     13.254   8.849  17.446  1.00  0.00           O
HETATM 6129  H1  SPC  3194     12.398   8.308  17.366  1.00  0.00           H
HETATM 6130  H2  SPC  3194     13.365   9.118  18.406  1.00  0.00           H
HETATM 6131  O   SPC  3212      9.622   5.260  18.260  1.00  0.00           O
HETATM 6132  H1  SPC  3212      8.963   5.019  17.536  1.00  0.00           H
HETATM 6133  H2  SPC  3212      9.425   4.709  19.074  1.00  0.00           H
HETATM 6134  O   SPC  3266      8.587   9.173  17.704  1.00  0.00           O
HETATM 6135  H1  SPC  3266      7.778   8.734  18.119  1.00  0.00           H
HETATM 6136  H2  SPC  3266      8.411  10.165  17.630  1.00  0.00           H
HETATM 6137  O   SPC  3271     15.895   8.722  16.479  1.00  0.00           O
HETATM 6138  H1  SPC  3271     16.251   9.668  16.404  1.00  0.00           H
HETATM 6139  H2  SPC  3271     14.935   8.766  16.794  1.00  0.00           H
HETATM 6140  O   SPC  3671     16.116   8.365 -15.223  1.00  0.00           O
HETATM 6141  H1  SPC  3671     15.333   7.785 -14.950  1.00  0.00           H
HETATM 6142  H2  SPC  3671     16.420   8.904 -14.423  1.00  0.00           H
HETATM 6143  O   SPC  3690     12.427  10.272 -12.939  1.00  0.00           O
HETATM 6144  H1  SPC  3690     13.205  10.675 -13.439  1.00  0.00           H
HETATM 6145  H2  SPC  3690     12.779   9.900 -12.058  1.00  0.00           H
HETATM 6146  O   SPC  3693     18.907   8.236 -12.009  1.00  0.00           O
HETATM 6147  H1  SPC  3693     18.954   7.930 -11.049  1.00  0.00           H
HETATM 6148  H2  SPC  3693     19.030   7.430 -12.608  1.00  0.00           H
HETATM 6149  O   SPC  3704     18.958   6.038 -13.604  1.00  0.00           O
HETATM 6150  H1  SPC  3704     18.769   6.293 -14.561  1.00  0.00           H
HETATM 6151  H2  SPC  3704     18.373   5.260 -13.358  1.00  0.00           H
HETATM 6152  O   SPC  3725     16.406   4.854 -14.653  1.00  0.00           O
HETATM 6153  H1  SPC  3725     15.679   5.502 -14.389  1.00  0.00           H
HETATM 6154  H2  SPC  3725     17.036   5.322 -15.285  1.00  0.00           H
HETATM 6155  O   SPC  3734     14.176   6.501 -14.614  1.00  0.00           O
HETATM 6156  H1  SPC  3734     13.352   6.947 -14.222  1.00  0.00           H
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HETATM 6157  H2  SPC  3734      13.879   5.686 -15.130  1.00  0.00           H
HETATM 6158  O   SPC  3757      18.809   4.418  -9.082  1.00  0.00           O
HETATM 6159  H1  SPC  3757      19.058   3.634  -8.483  1.00  0.00           H
HETATM 6160  H2  SPC  3757      17.926   4.213  -9.519  1.00  0.00           H
HETATM 6161  O   SPC  3761      19.245   7.163  -9.408  1.00  0.00           O
HETATM 6162  H1  SPC  3761      18.970   6.195  -9.290  1.00  0.00           H
HETATM 6163  H2  SPC  3761      20.242   7.217  -9.326  1.00  0.00           H
HETATM 6164  O   SPC  3778      14.000   3.933 -15.679  1.00  0.00           O
HETATM 6165  H1  SPC  3778      13.579   3.098 -15.319  1.00  0.00           H
HETATM 6166  H2  SPC  3778      14.962   3.974 -15.375  1.00  0.00           H
HETATM 6167  O   SPC  3781      11.952   7.674 -13.685  1.00  0.00           O
HETATM 6168  H1  SPC  3781      12.112   8.636 -13.418  1.00  0.00           H
HETATM 6169  H2  SPC  3781      11.009   7.425 -13.438  1.00  0.00           H
HETATM 6170  O   SPC  3783      17.964   6.638 -16.122  1.00  0.00           O
HETATM 6171  H1  SPC  3783      18.297   6.859 -17.040  1.00  0.00           H
HETATM 6172  H2  SPC  3783      17.294   7.347 -15.841  1.00  0.00           H
HETATM 6173  O   SPC  3785      18.585   9.582  -7.872  1.00  0.00           O
HETATM 6174  H1  SPC  3785      17.604   9.788  -7.725  1.00  0.00           H
HETATM 6175  H2  SPC  3785      18.662   8.719  -8.389  1.00  0.00           H
HETATM 6176  O   SPC  3790      17.668  22.388   1.342  1.00  0.00           O
HETATM 6177  H1  SPC  3790      18.141  21.491   1.305  1.00  0.00           H
HETATM 6178  H2  SPC  3790      17.888  22.829   2.225  1.00  0.00           H
HETATM 6179  O   SPC  3794       9.181  22.208   8.354  1.00  0.00           O
HETATM 6180  H1  SPC  3794       9.025  23.199   8.235  1.00  0.00           H
HETATM 6181  H2  SPC  3794       8.505  21.844   9.011  1.00  0.00           H
HETATM 6182  O   SPC  3796      22.414  11.803  -1.813  1.00  0.00           O
HETATM 6183  H1  SPC  3796      22.773  10.894  -2.071  1.00  0.00           H
HETATM 6184  H2  SPC  3796      21.842  12.135  -2.575  1.00  0.00           H
HETATM 6185  O   SPC  3798      18.872  19.950   1.338  1.00  0.00           O
HETATM 6186  H1  SPC  3798      19.791  19.712   1.705  1.00  0.00           H
HETATM 6187  H2  SPC  3798      18.359  19.096   1.223  1.00  0.00           H
HETATM 6188  O   SPC  3799      15.340  28.615  -0.569  1.00  0.00           O
HETATM 6189  H1  SPC  3799      14.712  29.070   0.076  1.00  0.00           H
HETATM 6190  H2  SPC  3799      15.826  27.875  -0.087  1.00  0.00           H
HETATM 6191  O   SPC  3800      13.245  22.630   8.679  1.00  0.00           O
HETATM 6192  H1  SPC  3800      12.726  22.949   7.870  1.00  0.00           H
HETATM 6193  H2  SPC  3800      14.216  22.881   8.549  1.00  0.00           H
HETATM 6194  O   SPC  3803      16.074  20.278   8.469  1.00  0.00           O
HETATM 6195  H1  SPC  3803      15.215  20.204   8.995  1.00  0.00           H
HETATM 6196  H2  SPC  3803      16.461  19.345   8.383  1.00  0.00           H
HETATM 6197  O   SPC  3808      11.184  23.544   2.653  1.00  0.00           O
HETATM 6198  H1  SPC  3808      10.514  22.792   2.519  1.00  0.00           H
HETATM 6199  H2  SPC  3808      11.634  23.724   1.764  1.00  0.00           H
HETATM 6200  O   SPC  3810      14.917  22.513   1.185  1.00  0.00           O
HETATM 6201  H1  SPC  3810      14.624  22.769   0.256  1.00  0.00           H
HETATM 6202  H2  SPC  3810      15.915  22.356   1.180  1.00  0.00           H
HETATM 6203  O   SPC  3811       8.098  21.767  -3.430  1.00  0.00           O
HETATM 6204  H1  SPC  3811       7.453  22.178  -2.768  1.00  0.00           H
HETATM 6205  H2  SPC  3811       8.879  22.394  -3.543  1.00  0.00           H
HETATM 6206  O   SPC  3812      13.647  25.581   3.270  1.00  0.00           O
HETATM 6207  H1  SPC  3812      13.567  25.735   2.272  1.00  0.00           H
HETATM 6208  H2  SPC  3812      13.886  24.611   3.429  1.00  0.00           H
HETATM 6209  O   SPC  3813      13.811  24.281  -4.012  1.00  0.00           O
HETATM 6210  H1  SPC  3813      13.857  23.347  -4.401  1.00  0.00           H
HETATM 6211  H2  SPC  3813      13.411  24.892  -4.705  1.00  0.00           H
HETATM 6212  O   SPC  3814      14.377  23.600  -1.419  1.00  0.00           O
HETATM 6213  H1  SPC  3814      15.348  23.827  -1.262  1.00  0.00           H
HETATM 6214  H2  SPC  3814      14.138  23.864  -2.368  1.00  0.00           H
HETATM 6215  O   SPC  3815      16.080  10.619  -7.447  1.00  0.00           O
HETATM 6216  H1  SPC  3815      16.206  11.596  -7.234  1.00  0.00           H
HETATM 6217  H2  SPC  3815      15.583  10.542  -8.331  1.00  0.00           H
HETATM 6218  O   SPC  3818      19.574  10.374  -5.386  1.00  0.00           O
HETATM 6219  H1  SPC  3818      19.298  10.077  -6.314  1.00  0.00           H
HETATM 6220  H2  SPC  3818      18.773  10.775  -4.925  1.00  0.00           H
HETATM 6221  O   SPC  3822      21.500  14.360  -0.836  1.00  0.00           O
HETATM 6222  H1  SPC  3822      22.126  13.598  -1.045  1.00  0.00           H
HETATM 6223  H2  SPC  3822      20.593  14.133  -1.227  1.00  0.00           H
HETATM 6224  O   SPC  3823      13.385  25.995   0.611  1.00  0.00           O
HETATM 6225  H1  SPC  3823      13.173  26.647  -0.132  1.00  0.00           H
HETATM 6226  H2  SPC  3823      12.891  25.132   0.424  1.00  0.00           H
HETATM 6227  O   SPC  3825       9.896  27.584  -6.086  1.00  0.00           O
HETATM 6228  H1  SPC  3825      10.174  28.258  -5.390  1.00  0.00           H
HETATM 6229  H2  SPC  3825       9.280  26.910  -5.651  1.00  0.00           H
HETATM 6230  O   SPC  3826      12.043  25.678  -5.759  1.00  0.00           O
HETATM 6231  H1  SPC  3826      11.535  24.864  -6.078  1.00  0.00           H
HETATM 6232  H2  SPC  3826      11.600  26.495  -6.146  1.00  0.00           H
HETATM 6233  O   SPC  3827      11.267  20.788  -4.441  1.00  0.00           O
HETATM 6234  H1  SPC  3827      11.170  20.914  -5.438  1.00  0.00           H
HETATM 6235  H2  SPC  3827      10.608  20.093  -4.132  1.00  0.00           H
HETATM 6236  O   SPC  3829      11.375  26.199  -3.170  1.00  0.00           O
HETATM 6237  H1  SPC  3829      12.068  26.555  -2.523  1.00  0.00           H
HETATM 6238  H2  SPC  3829      11.825  26.021  -4.058  1.00  0.00           H
HETATM 6239  O   SPC  3831      16.590  13.295  -6.662  1.00  0.00           O
HETATM 6240  H1  SPC  3831      17.513  13.226  -6.248  1.00  0.00           H
HETATM 6241  H2  SPC  3831      16.682  13.713  -7.579  1.00  0.00           H
HETATM 6242  O   SPC  3832      15.059  27.279   4.765  1.00  0.00           O
HETATM 6243  H1  SPC  3832      14.508  26.677   4.162  1.00  0.00           H
HETATM 6244  H2  SPC  3832      14.890  26.998   5.716  1.00  0.00           H
HETATM 6245  O   SPC  3839      12.010  23.450   6.385  1.00  0.00           O
HETATM 6246  H1  SPC  3839      12.115  22.634   5.797  1.00  0.00           H
HETATM 6247  H2  SPC  3839      11.151  23.913   6.125  1.00  0.00           H
HETATM 6248  O   SPC  3843      11.262  26.587   4.081  1.00  0.00           O
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HETATM 6249  H1  SPC  3843      12.186  26.234   3.866  1.00  0.00          H
HETATM 6250  H2  SPC  3843      10.709  25.824   4.449  1.00  0.00          H
HETATM 6251  O   SPC  3845      19.089  13.653  -1.829  1.00  0.00          O
HETATM 6252  H1  SPC  3845      18.801  12.849  -2.365  1.00  0.00          H
HETATM 6253  H2  SPC  3845      18.419  14.396  -1.970  1.00  0.00          H
HETATM 6254  O   SPC  3847      11.674  21.481  -7.134  1.00  0.00          O
HETATM 6255  H1  SPC  3847      11.593  21.242  -8.114  1.00  0.00          H
HETATM 6256  H2  SPC  3847      12.646  21.619  -6.918  1.00  0.00          H
HETATM 6257  O   SPC  3848      12.052  23.717   0.061  1.00  0.00          O
HETATM 6258  H1  SPC  3848      12.790  23.506  -0.597  1.00  0.00          H
HETATM 6259  H2  SPC  3848      11.171  23.746  -0.433  1.00  0.00          H
HETATM 6260  O   SPC  3850      16.374  17.727  -6.248  1.00  0.00          O
HETATM 6261  H1  SPC  3850      15.924  18.629  -6.212  1.00  0.00          H
HETATM 6262  H2  SPC  3850      16.384  17.416  -7.211  1.00  0.00          H
HETATM 6263  O   SPC  3851      18.290  23.862   3.673  1.00  0.00          O
HETATM 6264  H1  SPC  3851      19.280  23.972   3.785  1.00  0.00          H
HETATM 6265  H2  SPC  3851      17.884  24.771   3.471  1.00  0.00          H
HETATM 6266  O   SPC  3853       9.821  24.036  -3.754  1.00  0.00          O
HETATM 6267  H1  SPC  3853      10.477  24.758  -3.483  1.00  0.00          H
HETATM 6268  H2  SPC  3853      10.044  23.741  -4.697  1.00  0.00          H
HETATM 6269  O   SPC  3855      16.182  23.723   5.554  1.00  0.00          O
HETATM 6270  H1  SPC  3855      17.053  23.778   5.050  1.00  0.00          H
HETATM 6271  H2  SPC  3855      15.471  23.394   4.911  1.00  0.00          H
HETATM 6272  O   SPC  3858      21.229  12.287  -4.333  1.00  0.00          O
HETATM 6273  H1  SPC  3858      20.668  11.522  -4.688  1.00  0.00          H
HETATM 6274  H2  SPC  3858      21.972  12.466  -4.982  1.00  0.00          H
HETATM 6275  O   SPC  3859      17.540  15.856  -2.213  1.00  0.00          O
HETATM 6276  H1  SPC  3859      17.167  15.688  -3.142  1.00  0.00          H
HETATM 6277  H2  SPC  3859      18.131  16.664  -2.252  1.00  0.00          H
HETATM 6278  O   SPC  3860      24.306  11.681   3.392  1.00  0.00          O
HETATM 6279  H1  SPC  3860      23.917  11.601   2.460  1.00  0.00          H
HETATM 6280  H2  SPC  3860      24.925  12.467   3.414  1.00  0.00          H
HETATM 6281  O   SPC  3862       9.568  24.161  -1.010  1.00  0.00          O
HETATM 6282  H1  SPC  3862       9.568  25.141  -0.762  1.00  0.00          H
HETATM 6283  H2  SPC  3862       9.531  24.079  -2.016  1.00  0.00          H
HETATM 6284  O   SPC  3863      14.347  22.944   3.747  1.00  0.00          O
HETATM 6285  H1  SPC  3863      13.662  22.270   4.058  1.00  0.00          H
HETATM 6286  H2  SPC  3863      14.574  22.743   2.777  1.00  0.00          H
HETATM 6287  O   SPC  3864      18.873  13.511  -5.231  1.00  0.00          O
HETATM 6288  H1  SPC  3864      19.731  13.229  -4.783  1.00  0.00          H
HETATM 6289  H2  SPC  3864      18.584  14.399  -4.860  1.00  0.00          H
HETATM 6290  O   SPC  3870      12.052  21.600   4.376  1.00  0.00          O
HETATM 6291  H1  SPC  3870      11.828  22.406   3.809  1.00  0.00          H
HETATM 6292  H2  SPC  3870      11.635  20.789   3.937  1.00  0.00          H
HETATM 6293  O   SPC  3872      15.933  22.924   8.170  1.00  0.00          O
HETATM 6294  H1  SPC  3872      16.128  23.267   7.239  1.00  0.00          H
HETATM 6295  H2  SPC  3872      16.101  21.923   8.184  1.00  0.00          H
HETATM 6296  O   SPC  3873      12.989  27.645  -1.554  1.00  0.00          O
HETATM 6297  H1  SPC  3873      13.950  27.952  -1.468  1.00  0.00          H
HETATM 6298  H2  SPC  3873      12.389  28.451  -1.438  1.00  0.00          H
HETATM 6299  O   SPC  3874      12.312  26.182   8.592  1.00  0.00          O
HETATM 6300  H1  SPC  3874      11.563  26.645   8.097  1.00  0.00          H
HETATM 6301  H2  SPC  3874      13.052  25.973   7.937  1.00  0.00          H
HETATM 6302  O   SPC  3876      14.083  25.285   6.636  1.00  0.00          O
HETATM 6303  H1  SPC  3876      13.313  24.654   6.464  1.00  0.00          H
HETATM 6304  H2  SPC  3876      14.936  24.832   6.346  1.00  0.00          H
HETATM 6305  O   SPC  3877       7.736  21.081  10.381  1.00  0.00          O
HETATM 6306  H1  SPC  3877       7.590  20.110  10.626  1.00  0.00          H
HETATM 6307  H2  SPC  3877       7.962  21.584  11.229  1.00  0.00          H
HETATM 6308  O   SPC  3879       8.884  24.936   8.285  1.00  0.00          O
HETATM 6309  H1  SPC  3879       8.933  25.271   9.237  1.00  0.00          H
HETATM 6310  H2  SPC  3879       9.365  25.601   7.697  1.00  0.00          H
HETATM 6311  O   SPC  3881       9.449  26.650   0.222  1.00  0.00          O
HETATM 6312  H1  SPC  3881       8.830  26.287   0.935  1.00  0.00          H
HETATM 6313  H2  SPC  3881      10.160  27.210   0.675  1.00  0.00          H
HETATM 6314  O   SPC  3883      16.096  26.230   0.691  1.00  0.00          O
HETATM 6315  H1  SPC  3883      16.509  25.489   0.141  1.00  0.00          H
HETATM 6316  H2  SPC  3883      15.092  26.103   0.694  1.00  0.00          H
HETATM 6317  O   SPC  3888      10.282  23.671  -6.419  1.00  0.00          O
HETATM 6318  H1  SPC  3888       9.587  23.911  -7.116  1.00  0.00          H
HETATM 6319  H2  SPC  3888      10.762  22.832  -6.723  1.00  0.00          H
HETATM 6320  O   SPC  3890      16.901  15.527  -4.798  1.00  0.00          O
HETATM 6321  H1  SPC  3890      16.570  14.769  -5.373  1.00  0.00          H
HETATM 6322  H2  SPC  3890      16.723  16.397  -5.289  1.00  0.00          H
HETATM 6323  O   SPC  3891      17.045  24.043  -0.731  1.00  0.00          O
HETATM 6324  H1  SPC  3891      17.750  24.024  -1.443  1.00  0.00          H
HETATM 6325  H2  SPC  3891      17.327  23.423   0.020  1.00  0.00          H
HETATM 6326  O   SPC  3895      13.746  21.824  -5.072  1.00  0.00          O
HETATM 6327  H1  SPC  3895      12.924  21.359  -4.713  1.00  0.00          H
HETATM 6328  H2  SPC  3895      14.354  21.139  -5.499  1.00  0.00          H
HETATM 6329  O   SPC  3898       9.853  24.382   4.832  1.00  0.00          O
HETATM 6330  H1  SPC  3898      10.338  24.090   3.991  1.00  0.00          H
HETATM 6331  H2  SPC  3898       8.885  24.100   4.754  1.00  0.00          H
HETATM 6332  O   SPC  3899      17.173  26.254   3.213  1.00  0.00          O
HETATM 6333  H1  SPC  3899      16.821  26.328   2.268  1.00  0.00          H
HETATM 6334  H2  SPC  3899      16.517  26.696   3.837  1.00  0.00          H
HETATM 6335  O   SPC  3903      13.888  20.582  12.719  1.00  0.00          O
HETATM 6336  H1  SPC  3903      13.862  21.591  12.752  1.00  0.00          H
HETATM 6337  H2  SPC  3903      13.119  20.221  13.267  1.00  0.00          H
HETATM 6338  O   SPC  3911       9.298  19.526  15.250  1.00  0.00          O
HETATM 6339  H1  SPC  3911       8.367  19.668  14.887  1.00  0.00          H
HETATM 6340  H2  SPC  3911       9.667  20.427  15.532  1.00  0.00          H
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HETATM 6341  O   SPC  3923       9.382  16.915  16.159  1.00  0.00           O
HETATM 6342  H1  SPC  3923       9.448  17.883  15.869  1.00  0.00           H
HETATM 6343  H2  SPC  3923      10.308  16.576  16.378  1.00  0.00           H
HETATM 6344  O   SPC  3942       8.285  22.096  12.870  1.00  0.00           O
HETATM 6345  H1  SPC  3942       7.888  21.433  13.516  1.00  0.00           H
HETATM 6346  H2  SPC  3942       9.262  22.220  13.089  1.00  0.00           H
HETATM 6347  O   SPC  3960       9.260  26.058  10.788  1.00  0.00           O
HETATM 6348  H1  SPC  3960      10.187  25.725  11.015  1.00  0.00           H
HETATM 6349  H2  SPC  3960       8.585  25.545  11.347  1.00  0.00           H
HETATM 6350  O   SPC  3961      11.766  24.838  10.863  1.00  0.00           O
HETATM 6351  H1  SPC  3961      11.484  23.931  10.531  1.00  0.00           H
HETATM 6352  H2  SPC  3961      12.064  25.393  10.067  1.00  0.00           H
HETATM 6353  O   SPC  3963      13.795  20.272   9.968  1.00  0.00           O
HETATM 6354  H1  SPC  3963      13.565  21.135   9.496  1.00  0.00           H
HETATM 6355  H2  SPC  3963      13.890  20.455  10.957  1.00  0.00           H
HETATM 6356  O   SPC  3965      13.617  23.365  12.375  1.00  0.00           O
HETATM 6357  H1  SPC  3965      14.505  23.271  11.893  1.00  0.00           H
HETATM 6358  H2  SPC  3965      13.089  24.097  11.922  1.00  0.00           H
HETATM 6359  O   SPC  3970      18.873   9.474  14.275  1.00  0.00           O
HETATM 6360  H1  SPC  3970      19.749   9.782  14.653  1.00  0.00           H
HETATM 6361  H2  SPC  3970      19.000   9.269  13.294  1.00  0.00           H
HETATM 6362  O   SPC  3978      11.737  15.544  16.887  1.00  0.00           O
HETATM 6363  H1  SPC  3978      12.414  14.882  16.526  1.00  0.00           H
HETATM 6364  H2  SPC  3978      11.064  15.029  17.442  1.00  0.00           H
HETATM 6365  O   SPC  3991      11.132  19.488  11.238  1.00  0.00           O
HETATM 6366  H1  SPC  3991      11.082  20.414  10.843  1.00  0.00           H
HETATM 6367  H2  SPC  3991      11.219  19.564  12.240  1.00  0.00           H
HETATM 6368  O   SPC  3992      10.303  22.004  15.538  1.00  0.00           O
HETATM 6369  H1  SPC  3992      10.682  22.160  14.613  1.00  0.00           H
HETATM 6370  H2  SPC  3992      10.500  22.805  16.106  1.00  0.00           H
HETATM 6371  O   SPC  3996      11.077  22.423  12.948  1.00  0.00           O
HETATM 6372  H1  SPC  3996      11.988  22.847  13.046  1.00  0.00           H
HETATM 6373  H2  SPC  3996      10.916  22.272  11.962  1.00  0.00           H
HETATM 6374  O   SPC  4004      15.863  16.608  14.924  1.00  0.00           O
HETATM 6375  H1  SPC  4004      16.549  17.081  15.480  1.00  0.00           H
HETATM 6376  H2  SPC  4004      15.725  17.141  14.071  1.00  0.00           H
HETATM 6377  O   SPC  4008      17.130  11.106  15.908  1.00  0.00           O
HETATM 6378  H1  SPC  4008      17.727  10.747  15.182  1.00  0.00           H
HETATM 6379  H2  SPC  4008      16.832  12.037  15.660  1.00  0.00           H
HETATM 6380  O   SPC  4015      16.220  13.848  15.623  1.00  0.00           O
HETATM 6381  H1  SPC  4015      16.532  14.035  16.557  1.00  0.00           H
HETATM 6382  H2  SPC  4015      16.086  14.729  15.146  1.00  0.00           H
HETATM 6383  O   SPC  4018      13.442  13.662  15.943  1.00  0.00           O
HETATM 6384  H1  SPC  4018      14.429  13.592  15.756  1.00  0.00           H
HETATM 6385  H2  SPC  4018      13.065  12.729  16.056  1.00  0.00           H
HETATM 6386  O   SPC  4019      12.351  11.186  16.187  1.00  0.00           O
HETATM 6387  H1  SPC  4019      12.657  10.317  16.596  1.00  0.00           H
HETATM 6388  H2  SPC  4019      11.359  11.144  16.031  1.00  0.00           H
HETATM 6389  O   SPC  4040      15.854  22.832  10.927  1.00  0.00           O
HETATM 6390  H1  SPC  4040      15.914  23.073   9.947  1.00  0.00           H
HETATM 6391  H2  SPC  4040      16.487  22.077  11.108  1.00  0.00           H
HETATM 6392  O   SPC  4047      11.795  19.305  14.027  1.00  0.00           O
HETATM 6393  H1  SPC  4047      12.365  18.711  14.618  1.00  0.00           H
HETATM 6394  H2  SPC  4047      10.881  19.388  14.448  1.00  0.00           H
HETATM 6395  O   SPC  4049      13.226  17.546  15.588  1.00  0.00           O
HETATM 6396  H1  SPC  4049      12.723  16.893  16.172  1.00  0.00           H
HETATM 6397  H2  SPC  4049      14.147  17.179  15.413  1.00  0.00           H
HETATM 6398  O   SPC  4057      11.106  22.118  10.214  1.00  0.00           O
HETATM 6399  H1  SPC  4057      10.360  22.081   9.528  1.00  0.00           H
HETATM 6400  H2  SPC  4057      11.978  22.255   9.716  1.00  0.00           H
HETATM 6401  O   SPC  4065       9.733  14.078  18.057  1.00  0.00           O
HETATM 6402  H1  SPC  4065       9.350  13.155  17.936  1.00  0.00           H
HETATM 6403  H2  SPC  4065       8.975  14.718  18.240  1.00  0.00           H
HETATM 6404  O   SPC  4072      15.513  18.295  12.845  1.00  0.00           O
HETATM 6405  H1  SPC  4072      15.062  19.198  12.846  1.00  0.00           H
HETATM 6406  H2  SPC  4072      15.636  18.000  11.882  1.00  0.00           H
HETATM 6407  O   SPC  4392       9.308  22.416 -10.071  1.00  0.00           O
HETATM 6408  H1  SPC  4392       8.514  22.144 -10.638  1.00  0.00           H
HETATM 6409  H2  SPC  4392       9.038  23.194  -9.491  1.00  0.00           H
HETATM 6410  O   SPC  4394      11.771  16.767 -12.203  1.00  0.00           O
HETATM 6411  H1  SPC  4394      11.899  16.023 -12.873  1.00  0.00           H
HETATM 6412  H2  SPC  4394      10.799  17.067 -12.251  1.00  0.00           H
HETATM 6413  O   SPC  4398      18.529  12.049  -9.315  1.00  0.00           O
HETATM 6414  H1  SPC  4398      18.737  11.202  -8.810  1.00  0.00           H
HETATM 6415  H2  SPC  4398      17.988  11.814 -10.134  1.00  0.00           H
HETATM 6416  O   SPC  4400      14.701  11.064 -14.345  1.00  0.00           O
HETATM 6417  H1  SPC  4400      14.675  10.563 -15.214  1.00  0.00           H
HETATM 6418  H2  SPC  4400      15.513  10.761 -13.828  1.00  0.00           H
HETATM 6419  O   SPC  4410      14.153  20.477  -8.966  1.00  0.00           O
HETATM 6420  H1  SPC  4410      14.599  19.981  -9.725  1.00  0.00           H
HETATM 6421  H2  SPC  4410      13.227  20.746  -9.268  1.00  0.00           H
HETATM 6422  O   SPC  4411       8.404  24.391  -8.293  1.00  0.00           O
HETATM 6423  H1  SPC  4411       8.262  25.390  -8.284  1.00  0.00           H
HETATM 6424  H2  SPC  4411       7.502  23.940  -8.386  1.00  0.00           H
HETATM 6425  O   SPC  4416      16.240  16.914  -8.842  1.00  0.00           O
HETATM 6426  H1  SPC  4416      15.385  16.906  -9.375  1.00  0.00           H
HETATM 6427  H2  SPC  4416      16.676  16.006  -8.924  1.00  0.00           H
HETATM 6428  O   SPC  4423      15.397  20.283  -6.596  1.00  0.00           O
HETATM 6429  H1  SPC  4423      16.285  20.723  -6.742  1.00  0.00           H
HETATM 6430  H2  SPC  4423      14.890  20.284  -7.476  1.00  0.00           H
HETATM 6431  O   SPC  4433      13.520  12.662  -9.541  1.00  0.00           O
HETATM 6432  H1  SPC  4433      13.124  12.659  -8.616  1.00  0.00           H
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HETATM 6433  H2  SPC  4433      13.939  11.752  -9.713  1.00  0.00          H
HETATM 6434  O   SPC  4458      12.465  19.453 -11.980  1.00  0.00          O
HETATM 6435  H1  SPC  4458      13.458  19.454 -11.798  1.00  0.00          H
HETATM 6436  H2  SPC  4458      12.158  18.495 -12.071  1.00  0.00          H
HETATM 6437  O   SPC  4466      11.226  19.633 -17.133  1.00  0.00          O
HETATM 6438  H1  SPC  4466      11.264  19.819 -16.135  1.00  0.00          H
HETATM 6439  H2  SPC  4466      11.917  20.196 -17.589  1.00  0.00          H
HETATM 6440  O   SPC  4479      11.616  14.890 -14.340  1.00  0.00          O
HETATM 6441  H1  SPC  4479      11.497  15.627 -15.020  1.00  0.00          H
HETATM 6442  H2  SPC  4479      10.868  14.221 -14.461  1.00  0.00          H
HETATM 6443  O   SPC  4481      17.036   9.911 -13.140  1.00  0.00          O
HETATM 6444  H1  SPC  4481      16.941  10.666 -12.472  1.00  0.00          H
HETATM 6445  H2  SPC  4481      17.758   9.286 -12.802  1.00  0.00          H
HETATM 6446  O   SPC  4484       9.998  10.678 -14.206  1.00  0.00          O
HETATM 6447  H1  SPC  4484      10.867  10.553 -13.705  1.00  0.00          H
HETATM 6448  H2  SPC  4484       9.958  11.624 -14.552  1.00  0.00          H
HETATM 6449  O   SPC  4485      11.616  21.025  -9.858  1.00  0.00          O
HETATM 6450  H1  SPC  4485      11.790  20.477 -10.690  1.00  0.00          H
HETATM 6451  H2  SPC  4485      10.766  21.561 -10.002  1.00  0.00          H
HETATM 6452  O   SPC  4491      14.046  13.712 -13.592  1.00  0.00          O
HETATM 6453  H1  SPC  4491      14.200  12.792 -13.977  1.00  0.00          H
HETATM 6454  H2  SPC  4491      13.168  14.071 -13.938  1.00  0.00          H
HETATM 6455  O   SPC  4519      15.035  14.117 -11.152  1.00  0.00          O
HETATM 6456  H1  SPC  4519      14.704  14.032 -12.110  1.00  0.00          H
HETATM 6457  H2  SPC  4519      14.399  13.599 -10.551  1.00  0.00          H
HETATM 6458  O   SPC  4533      14.098  16.627 -10.687  1.00  0.00          O
HETATM 6459  H1  SPC  4533      13.179  16.670 -11.108  1.00  0.00          H
HETATM 6460  H2  SPC  4533      14.478  15.704 -10.855  1.00  0.00          H
HETATM 6461  O   SPC  4538      15.097  19.077 -11.140  1.00  0.00          O
HETATM 6462  H1  SPC  4538      14.752  18.139 -10.965  1.00  0.00          H
HETATM 6463  H2  SPC  4538      16.068  19.020 -11.380  1.00  0.00          H
HETATM 6464  O   SPC  4549       8.098  27.207  -8.155  1.00  0.00          O
HETATM 6465  H1  SPC  4549       8.790  27.424  -7.450  1.00  0.00          H
HETATM 6466  H2  SPC  4549       8.391  27.606  -9.027  1.00  0.00          H
HETATM 6467  O   SPC  4562      16.996  14.306  -9.168  1.00  0.00          O
HETATM 6468  H1  SPC  4562      17.700  13.582  -9.257  1.00  0.00          H
HETATM 6469  H2  SPC  4562      16.342  14.212  -9.932  1.00  0.00          H
HETATM 6470  O   SPC  4578       9.421  13.283 -15.071  1.00  0.00          O
HETATM 6471  H1  SPC  4578       9.382  13.870 -15.896  1.00  0.00          H
HETATM 6472  H2  SPC  4578       8.500  12.906 -14.913  1.00  0.00          H
HETATM 6473  O   SPC  4583      10.883  16.998 -16.060  1.00  0.00          O
HETATM 6474  H1  SPC  4583      10.275  17.440 -15.382  1.00  0.00          H
HETATM 6475  H2  SPC  4583      11.271  17.719 -16.647  1.00  0.00          H
HETATM 6476  O   SPC  4591      11.255  19.923 -14.452  1.00  0.00          O
HETATM 6477  H1  SPC  4591      11.740  19.938 -13.568  1.00  0.00          H
HETATM 6478  H2  SPC  4591      10.419  19.360 -14.346  1.00  0.00          H
HETATM 6479  O   SPC  4593      16.600  11.815 -11.268  1.00  0.00          O
HETATM 6480  H1  SPC  4593      15.959  11.268 -10.699  1.00  0.00          H
HETATM 6481  H2  SPC  4593      16.164  12.701 -11.468  1.00  0.00          H
HETATM 6482  O   SPC  4595       9.542  28.453   4.952  1.00  0.00          O
HETATM 6483  H1  SPC  4595      10.209  27.761   4.629  1.00  0.00          H
HETATM 6484  H2  SPC  4595       9.674  29.295   4.409  1.00  0.00          H
HETATM 6485  O   SPC  4603      14.933  29.545   3.227  1.00  0.00          O
HETATM 6486  H1  SPC  4603      14.922  28.747   3.848  1.00  0.00          H
HETATM 6487  H2  SPC  4603      15.833  29.979   3.280  1.00  0.00          H
HETATM 6488  O   SPC  4655      10.065  27.303   7.396  1.00  0.00          O
HETATM 6489  H1  SPC  4655       9.914  27.783   6.520  1.00  0.00          H
HETATM 6490  H2  SPC  4655       9.518  27.762   8.111  1.00  0.00          H
HETATM 6491  O   SPC  4664      11.016  28.200   1.887  1.00  0.00          O
HETATM 6492  H1  SPC  4664      11.149  27.545   2.647  1.00  0.00          H
HETATM 6493  H2  SPC  4664      10.569  29.028   2.254  1.00  0.00          H
HETATM 6494  O   SPC  4699      13.271  29.543   1.081  1.00  0.00          O
HETATM 6495  H1  SPC  4699      13.867  29.633   1.895  1.00  0.00          H
HETATM 6496  H2  SPC  4699      12.487  28.952   1.324  1.00  0.00          H
HETATM 6497  O   SPC  4716      10.455  28.775  -3.530  1.00  0.00          O
HETATM 6498  H1  SPC  4716      10.762  27.831  -3.341  1.00  0.00          H
HETATM 6499  H2  SPC  4716      10.852  29.385  -2.832  1.00  0.00          H
HETATM 6500  O   SPC  4729      11.515  29.914  -1.123  1.00  0.00          O
HETATM 6501  H1  SPC  4729      12.216  30.059  -0.412  1.00  0.00          H
HETATM 6502  H2  SPC  4729      10.627  30.248  -0.766  1.00  0.00          H
HETATM 6503  O   SPC  4733      10.039  30.470   3.154  1.00  0.00          O
HETATM 6504  H1  SPC  4733       9.171  30.856   2.803  1.00  0.00          H
HETATM 6505  H2  SPC  4733      10.761  31.160   3.055  1.00  0.00          H
HETATM 6506  O   SPC  A25J    -18.138   6.732   8.072  1.00  0.00          O
HETATM 6507  H1  SPC  A25J    -17.879   6.400   7.151  1.00  0.00          H
HETATM 6508  H2  SPC  A25J    -19.081   7.068   8.027  1.00  0.00          H
HETATM 6509  O   SPC  A25P    -18.393  -2.737   8.107  1.00  0.00          O
HETATM 6510  H1  SPC  A25P    -17.920  -3.570   7.797  1.00  0.00          H
HETATM 6511  H2  SPC  A25P    -17.934  -2.415   8.946  1.00  0.00          H
HETATM 6512  O   SPC  A25R    -17.559   2.493   7.450  1.00  0.00          O
HETATM 6513  H1  SPC  A25R    -16.718   2.803   7.899  1.00  0.00          H
HETATM 6514  H2  SPC  A25R    -17.586   2.881   6.520  1.00  0.00          H
HETATM 6515  O   SPC  A25S    -18.877  -3.029   3.408  1.00  0.00          O
HETATM 6516  H1  SPC  A25S    -19.850  -3.115   3.191  1.00  0.00          H
HETATM 6517  H2  SPC  A25S    -18.454  -2.384   2.755  1.00  0.00          H
HETATM 6518  O   SPC  A26K    -17.029  -4.228   5.003  1.00  0.00          O
HETATM 6519  H1  SPC  A26K    -16.163  -4.105   4.508  1.00  0.00          H
HETATM 6520  H2  SPC  A26K    -17.774  -3.828   4.446  1.00  0.00          H
HETATM 6521  O   SPC  A26V    -17.928   6.036   5.396  1.00  0.00          O
HETATM 6522  H1  SPC  A26V    -18.412   6.289   4.535  1.00  0.00          H
HETATM 6523  H2  SPC  A26V    -17.626   5.077   5.312  1.00  0.00          H
HETATM 6524  O   SPC  A278    -16.617  -4.794   7.580  1.00  0.00          O
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HETATM 6525  H1  SPC  A278     -15.649  -4.576   7.773  1.00  0.00          H
HETATM 6526  H2  SPC  A278     -16.780  -4.654   6.587  1.00  0.00          H
HETATM 6527  O   SPC  A27A     -17.053   3.432   4.867  1.00  0.00          O
HETATM 6528  H1  SPC  A27A     -16.429   3.836   4.184  1.00  0.00          H
HETATM 6529  H2  SPC  A27A     -17.063   2.432   4.730  1.00  0.00          H
HETATM 6530  O   SPC  A281    -14.606   4.639  12.680  1.00  0.00          O
HETATM 6531  H1  SPC  A281    -14.451   5.629  12.548  1.00  0.00          H
HETATM 6532  H2  SPC  A281    -14.345   4.395  13.627  1.00  0.00          H
HETATM 6533  O   SPC  A287     -8.885   8.916  13.497  1.00  0.00          O
HETATM 6534  H1  SPC  A287     -7.943   8.697  13.787  1.00  0.00          H
HETATM 6535  H2  SPC  A287     -8.831   9.498  12.669  1.00  0.00          H
HETATM 6536  O   SPC  A28N    -10.706   0.831  17.180  1.00  0.00          O
HETATM 6537  H1  SPC  A28N    -11.053   0.823  18.121  1.00  0.00          H
HETATM 6538  H2  SPC  A28N     -9.704   0.686  17.208  1.00  0.00          H
HETATM 6539  O   SPC  A291     -9.339   4.801  16.163  1.00  0.00          O
HETATM 6540  H1  SPC  A291     -9.624   4.418  15.277  1.00  0.00          H
HETATM 6541  H2  SPC  A291     -8.692   4.161  16.599  1.00  0.00          H
HETATM 6542  O   SPC  A298    -13.849   3.926  15.181  1.00  0.00          O
HETATM 6543  H1  SPC  A298    -13.328   3.062  15.218  1.00  0.00          H
HETATM 6544  H2  SPC  A298    -13.224   4.688  15.417  1.00  0.00          H
HETATM 6545  O   SPC  A29N    -18.245   0.487   9.163  1.00  0.00          O
HETATM 6546  H1  SPC  A29N    -18.080   1.247   8.515  1.00  0.00          H
HETATM 6547  H2  SPC  A29N    -18.492  -0.332   8.640  1.00  0.00          H
HETATM 6548  O   SPC  A2AC    -12.199   1.683  14.992  1.00  0.00          O
HETATM 6549  H1  SPC  A2AC    -11.626   2.313  14.449  1.00  0.00          H
HETATM 6550  H2  SPC  A2AC    -11.689   1.419  15.824  1.00  0.00          H
HETATM 6551  O   SPC  A2AJ    -17.826   5.788  10.697  1.00  0.00          O
HETATM 6552  H1  SPC  A2AJ    -17.398   6.601  11.096  1.00  0.00          H
HETATM 6553  H2  SPC  A2AJ    -17.969   5.950   9.712  1.00  0.00          H
HETATM 6554  O   SPC  A2AP    -11.960   5.890  15.529  1.00  0.00          O
HETATM 6555  H1  SPC  A2AP    -11.833   6.667  14.898  1.00  0.00          H
HETATM 6556  H2  SPC  A2AP    -11.070   5.658  15.940  1.00  0.00          H
HETATM 6557  O   SPC  A2BE    -17.671   0.893  11.836  1.00  0.00          O
HETATM 6558  H1  SPC  A2BE    -17.620   1.890  11.984  1.00  0.00          H
HETATM 6559  H2  SPC  A2BE    -17.934   0.720  10.875  1.00  0.00          H
HETATM 6560  O   SPC  A2BQ    -16.298   2.579  14.882  1.00  0.00          O
HETATM 6561  H1  SPC  A2BQ    -16.769   3.000  14.096  1.00  0.00          H
HETATM 6562  H2  SPC  A2BQ    -15.501   3.147  15.126  1.00  0.00          H
HETATM 6563  O   SPC  A2BS    -17.140   3.660  12.383  1.00  0.00          O
HETATM 6564  H1  SPC  A2BS    -16.166   3.932  12.410  1.00  0.00          H
HETATM 6565  H2  SPC  A2BS    -17.632   4.323  11.801  1.00  0.00          H
HETATM 6566  O   SPC  A2BV    -16.269   0.002  13.985  1.00  0.00          O
HETATM 6567  H1  SPC  A2BV    -16.832   0.154  13.157  1.00  0.00          H
HETATM 6568  H2  SPC  A2BV    -16.297   0.851  14.535  1.00  0.00          H
HETATM 6569  O   SPC  A2OW    -17.861   8.865   5.018  1.00  0.00          O
HETATM 6570  H1  SPC  A2OW    -18.311   8.960   4.112  1.00  0.00          H
HETATM 6571  H2  SPC  A2OW    -17.838   7.884   5.247  1.00  0.00          H
HETATM 6572  O   SPC  A2QF    -17.224  10.536   7.042  1.00  0.00          O
HETATM 6573  H1  SPC  A2QF    -17.408   9.891   6.280  1.00  0.00          H
HETATM 6574  H2  SPC  A2QF    -17.694  11.397   6.848  1.00  0.00          H
HETATM 6575  O   SPC  A2QT    -10.872  19.634   7.068  1.00  0.00          O
HETATM 6576  H1  SPC  A2QT    -10.263  20.171   7.670  1.00  0.00          H
HETATM 6577  H2  SPC  A2QT    -11.630  20.224   6.755  1.00  0.00          H
HETATM 6578  O   SPC  A2R4    -11.494   7.965  13.644  1.00  0.00          O
HETATM 6579  H1  SPC  A2R4    -10.487   8.045  13.626  1.00  0.00          H
HETATM 6580  H2  SPC  A2R4    -11.884   8.832  13.301  1.00  0.00          H
HETATM 6581  O   SPC  A2RI     -8.675  10.653  11.447  1.00  0.00          O
HETATM 6582  H1  SPC  A2RI     -9.450  10.951  10.868  1.00  0.00          H
HETATM 6583  H2  SPC  A2RI     -7.806  10.943  11.009  1.00  0.00          H
HETATM 6584  O   SPC  A2RJ    -10.957  11.694  10.410  1.00  0.00          O
HETATM 6585  H1  SPC  A2RJ    -10.806  12.692  10.437  1.00  0.00          H
HETATM 6586  H2  SPC  A2RJ    -11.788  11.505   9.864  1.00  0.00          H
HETATM 6587  O   SPC  A2RY    -16.645   8.862   9.144  1.00  0.00          O
HETATM 6588  H1  SPC  A2RY    -16.797   9.578   8.446  1.00  0.00          H
HETATM 6589  H2  SPC  A2RY    -17.069   8.008   8.813  1.00  0.00          H
HETATM 6590  O   SPC  A2S2    -14.690   9.496  10.971  1.00  0.00          O
HETATM 6591  H1  SPC  A2S2    -14.484   8.649  11.484  1.00  0.00          H
HETATM 6592  H2  SPC  A2S2    -15.483   9.316  10.366  1.00  0.00          H
HETATM 6593  O   SPC  A2S9    -10.352  14.360  10.862  1.00  0.00          O
HETATM 6594  H1  SPC  A2S9    -10.051  13.914  11.718  1.00  0.00          H
HETATM 6595  H2  SPC  A2S9     -9.818  15.210  10.742  1.00  0.00          H
HETATM 6596  O   SPC  A2T8    -12.102  15.249   8.871  1.00  0.00          O
HETATM 6597  H1  SPC  A2T8    -12.702  14.530   8.494  1.00  0.00          H
HETATM 6598  H2  SPC  A2T8    -11.604  14.874   9.665  1.00  0.00          H
HETATM 6599  O   SPC  A2TA    -10.435  10.949  14.644  1.00  0.00          O
HETATM 6600  H1  SPC  A2TA     -9.875  10.146  14.393  1.00  0.00          H
HETATM 6601  H2  SPC  A2TA    -11.348  10.837  14.234  1.00  0.00          H
HETATM 6602  O   SPC  A2TV    -12.341  10.340  12.520  1.00  0.00          O
HETATM 6603  H1  SPC  A2TV    -13.259  10.199  12.127  1.00  0.00          H
HETATM 6604  H2  SPC  A2TV    -11.771  10.818  11.839  1.00  0.00          H
HETATM 6605  O   SPC  A2UG    -13.587  13.195   7.770  1.00  0.00          O
HETATM 6606  H1  SPC  A2UG    -14.565  13.287   7.566  1.00  0.00          H
HETATM 6607  H2  SPC  A2UG    -13.445  12.324   8.268  1.00  0.00          H
HETATM 6608  O   SPC  A2UN     -9.388  12.855  12.968  1.00  0.00          O
HETATM 6609  H1  SPC  A2UN     -8.974  12.133  12.395  1.00  0.00          H
HETATM 6610  H2  SPC  A2UN     -9.902  12.404  13.710  1.00  0.00          H
HETATM 6611  O   SPC  A2V9    -10.378  17.202   8.175  1.00  0.00          O
HETATM 6612  H1  SPC  A2V9    -11.141  16.550   8.322  1.00  0.00          H
HETATM 6613  H2  SPC  A2V9    -10.746  18.048   7.759  1.00  0.00          H
HETATM 6614  O   SPC  A2W8    -13.210  10.904   9.162  1.00  0.00          O
HETATM 6615  H1  SPC  A2W8    -13.867  10.521   9.831  1.00  0.00          H
HETATM 6616  H2  SPC  A2W8    -12.795  10.136   8.656  1.00  0.00          H
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HETATM 6617  O   SPC  A4YB      2.366  12.584  10.947  1.00  0.00          O
HETATM 6618  H1  SPC  A4YB      1.404  12.865  11.098  1.00  0.00          H
HETATM 6619  H2  SPC  A4YB      2.384  11.929  10.180  1.00  0.00          H
HETATM 6620  O   SPC  A4YC     -9.844  18.352   4.868  1.00  0.00          O
HETATM 6621  H1  SPC  A4YC    -10.557  17.643   4.770  1.00  0.00          H
HETATM 6622  H2  SPC  A4YC    -10.067  18.910   5.679  1.00  0.00          H
HETATM 6623  O   SPC  A4YD    -10.026   7.976  -0.974  1.00  0.00          O
HETATM 6624  H1  SPC  A4YD     -9.887   7.126  -0.436  1.00  0.00          H
HETATM 6625  H2  SPC  A4YD    -10.967   8.303  -0.815  1.00  0.00          H
HETATM 6626  O   SPC  A4YE     -1.039   8.654   8.749  1.00  0.00          O
HETATM 6627  H1  SPC  A4YE     -1.878   8.913   8.256  1.00  0.00          H
HETATM 6628  H2  SPC  A4YE     -1.232   7.824   9.208  1.00  0.00          H
HETATM 6629  O   SPC  A4YF     -7.996   0.473  17.422  1.00  0.00          O
HETATM 6630  H1  SPC  A4YF     -7.170  -0.058  17.171  1.00  0.00          H
HETATM 6631  H2  SPC  A4YF     -7.758   1.456  17.399  1.00  0.00          H
HETATM 6632  O   SPC  A4YG      2.047  18.922  -3.818  1.00  0.00          O
HETATM 6633  H1  SPC  A4YG      2.691  18.236  -4.178  1.00  0.00          H
HETATM 6634  H2  SPC  A4YG      1.194  18.869  -4.353  1.00  0.00          H
HETATM 6635  O   SPC  A4YH      2.070  10.796   8.543  1.00  0.00          O
HETATM 6636  H1  SPC  A4YH      2.791  11.263   8.045  1.00  0.00          H
HETATM 6637  H2  SPC  A4YH      1.335  10.764   7.903  1.00  0.00          H
HETATM 6638  O   SPC  A4YJ      2.919   3.315  -3.117  1.00  0.00          O
HETATM 6639  H1  SPC  A4YJ      3.228   2.767  -3.900  1.00  0.00          H
HETATM 6640  H2  SPC  A4YJ      3.387   4.209  -3.148  1.00  0.00          H
HETATM 6641  O   SPC  A4YK    -13.619  -0.488  13.928  1.00  0.00          O
HETATM 6642  H1  SPC  A4YK    -13.126   0.329  14.260  1.00  0.00          H
HETATM 6643  H2  SPC  A4YK    -14.614  -0.314  14.015  1.00  0.00          H
HETATM 6644  O   SPC  A4YL      8.967  18.044   3.354  1.00  0.00          O
HETATM 6645  H1  SPC  A4YL      9.760  18.621   3.087  1.00  0.00          H
HETATM 6646  H2  SPC  A4YL      8.334  17.985   2.564  1.00  0.00          H
HETATM 6647  O   SPC  A4YM      4.255  16.357   7.957  1.00  0.00          O
HETATM 6648  H1  SPC  A4YM      4.130  15.965   7.041  1.00  0.00          H
HETATM 6649  H2  SPC  A4YM      3.704  15.814   8.614  1.00  0.00          H
HETATM 6650  O   SPC  A4YN    -12.196   5.435   5.725  1.00  0.00          O
HETATM 6651  H1  SPC  A4YN    -12.047   4.478   5.437  1.00  0.00          H
HETATM 6652  H2  SPC  A4YN    -12.120   6.035   4.924  1.00  0.00          H
HETATM 6653  O   SPC  A4YO      5.971   6.015   2.406  1.00  0.00          O
HETATM 6654  H1  SPC  A4YO      6.390   5.457   3.128  1.00  0.00          H
HETATM 6655  H2  SPC  A4YO      5.860   6.959   2.739  1.00  0.00          H
HETATM 6656  O   SPC  A4YP     -3.630   8.940  11.325  1.00  0.00          O
HETATM 6657  H1  SPC  A4YP     -3.432   7.956  11.427  1.00  0.00          H
HETATM 6658  H2  SPC  A4YP     -4.279   9.058  10.557  1.00  0.00          H
HETATM 6659  O   SPC  A4YQ      3.774  19.834  -1.835  1.00  0.00          O
HETATM 6660  H1  SPC  A4YQ      3.123  19.606  -2.573  1.00  0.00          H
HETATM 6661  H2  SPC  A4YQ      4.628  19.307  -1.975  1.00  0.00          H
HETATM 6662  O   SPC  A4YS      1.446  10.380  12.781  1.00  0.00          O
HETATM 6663  H1  SPC  A4YS      0.617  10.222  12.230  1.00  0.00          H
HETATM 6664  H2  SPC  A4YS      2.030  11.043  12.301  1.00  0.00          H
HETATM 6665  O   SPC  A4YT      4.563  20.965  -8.476  1.00  0.00          O
HETATM 6666  H1  SPC  A4YT      4.770  20.251  -9.159  1.00  0.00          H
HETATM 6667  H2  SPC  A4YT      3.564  20.969  -8.306  1.00  0.00          H
HETATM 6668  O   SPC  A4YU     -5.659  -0.813  16.836  1.00  0.00          O
HETATM 6669  H1  SPC  A4YU     -5.755  -1.720  17.272  1.00  0.00          H
HETATM 6670  H2  SPC  A4YU     -4.726  -0.467  17.021  1.00  0.00          H
HETATM 6671  O   SPC  A4YV     -1.113  22.505 -15.049  1.00  0.00          O
HETATM 6672  H1  SPC  A4YV     -1.288  21.526 -14.872  1.00  0.00          H
HETATM 6673  H2  SPC  A4YV     -0.654  22.576 -15.956  1.00  0.00          H
HETATM 6674  O   SPC  A4YY    -12.024   4.623  11.536  1.00  0.00          O
HETATM 6675  H1  SPC  A4YY    -12.071   5.293  10.784  1.00  0.00          H
HETATM 6676  H2  SPC  A4YY    -12.966   4.360  11.784  1.00  0.00          H
HETATM 6677  O   SPC  A4YZ      1.851   8.178   8.660  1.00  0.00          O
HETATM 6678  H1  SPC  A4YZ      2.674   7.691   8.817  1.00  0.00          H
HETATM 6679  H2  SPC  A4YZ      2.069   9.144   8.728  1.00  0.00          H
HETATM 6680  O   SPC  A4Z0      1.937  18.157   3.512  1.00  0.00          O
HETATM 6681  H1  SPC  A4Z0      0.961  18.057   3.273  1.00  0.00          H
HETATM 6682  H2  SPC  A4Z0      2.484  18.077   2.669  1.00  0.00          H
HETATM 6683  O   SPC  A4Z2     -5.270   9.225   9.187  1.00  0.00          O
HETATM 6684  H1  SPC  A4Z2     -4.590   9.216   8.440  1.00  0.00          H
HETATM 6685  H2  SPC  A4Z2     -6.140   8.865   8.836  1.00  0.00          H
HETATM 6686  O   SPC  A4Z3      7.055  18.573   1.538  1.00  0.00          O
HETATM 6687  H1  SPC  A4Z3      6.691  19.502   1.403  1.00  0.00          H
HETATM 6688  H2  SPC  A4Z3      6.984  18.072   0.655  1.00  0.00          H
HETATM 6689  O   SPC  A4Z5     -0.929  10.228  10.999  1.00  0.00          O
HETATM 6690  H1  SPC  A4Z5     -1.808   9.925  11.270  1.00  0.00          H
HETATM 6691  H2  SPC  A4Z5     -0.800   9.801  10.135  1.00  0.00          H
HETATM 6692  O   SPC  A4Z6    -13.730   7.206  12.161  1.00  0.00          O
HETATM 6693  H1  SPC  A4Z6    -13.358   6.966  11.251  1.00  0.00          H
HETATM 6694  H2  SPC  A4Z6    -12.958   7.325  12.801  1.00  0.00          H
HETATM 6695  O   SPC  A4Z7     -9.161  -1.259  19.198  1.00  0.00          O
HETATM 6696  H1  SPC  A4Z7     -9.647  -1.923  18.611  1.00  0.00          H
HETATM 6697  H2  SPC  A4Z7     -8.649  -0.624  18.603  1.00  0.00          H
HETATM 6698  O   SPC  A4Z8      4.938  20.921  -5.757  1.00  0.00          O
HETATM 6699  H1  SPC  A4Z8      4.685  21.772  -5.272  1.00  0.00          H
HETATM 6700  H2  SPC  A4Z8      4.744  21.034  -6.743  1.00  0.00          H
HETATM 6701  O   SPC  A4Z9      1.953  20.866  -7.725  1.00  0.00          O
HETATM 6702  H1  SPC  A4Z9      1.965  19.891  -7.469  1.00  0.00          H
HETATM 6703  H2  SPC  A4Z9      1.272  21.348  -7.154  1.00  0.00          H
HETATM 6704  O   SPC  A4ZA     -1.081  14.483   4.286  1.00  0.00          O
HETATM 6705  H1  SPC  A4ZA     -0.831  13.613   4.666  1.00  0.00          H
HETATM 6706  H2  SPC  A4ZA     -2.021  14.529   4.502  1.00  0.00          H
HETATM 6707  O   SPC  A4ZB      0.055  22.363  -6.375  1.00  0.00          O
HETATM 6708  H1  SPC  A4ZB     -0.852  22.209  -5.947  1.00  0.00          H
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HETATM 6709  H2  SPC  A4ZB      -0.010  23.193  -6.947  1.00  0.00          H
HETATM 6710  O   SPC  A4ZC     -12.716   6.630   9.717  1.00  0.00          O
HETATM 6711  H1  SPC  A4ZC     -12.303   7.413   9.234  1.00  0.00          H
HETATM 6712  H2  SPC  A4ZC     -13.326   6.148   9.072  1.00  0.00          H
HETATM 6713  C1  MMA A 901      -7.107   6.983   7.119  1.00 38.63          C
HETATM 6714  C2  MMA A 901      -6.496   7.940   6.109  1.00 39.79          C
HETATM 6715  O1  MMA A 901      -7.997   7.701   7.939  1.00 38.68          O
HETATM 6716  C3  MMA A 901      -7.600   8.471   5.210  1.00 38.55          C
HETATM 6717  C7  MMA A 901      -8.569   6.888   8.950  1.00 39.29          C
HETATM 6718  O2  MMA A 901      -5.555   7.195   5.379  1.00 42.66          O
HETATM 6719  C4  MMA A 901      -8.218   7.295   4.472  1.00 38.26          C
HETATM 6720  O3  MMA A 901      -7.140   9.487   4.351  1.00 36.39          O
HETATM 6721  C5  MMA A 901      -8.686   6.225   5.480  1.00 38.04          C
HETATM 6722  O4  MMA A 901      -9.296   7.812   3.728  1.00 36.12          O
HETATM 6723  C6  MMA A 901      -8.971   4.911   4.784  1.00 39.02          C
HETATM 6724  O5  MMA A 901      -7.708   5.903   6.478  1.00 38.49          O
HETATM 6725  O6  MMA A 901      -7.813   4.558   4.063  1.00 37.72          O
HETATM 6726  H1  MMA A 901      -6.309   6.548   7.733  1.00  0.00          H
HETATM 6727  H2  MMA A 901      -6.019   8.786   6.622  1.00  0.00          H
HETATM 6728  H3  MMA A 901      -8.356   8.945   5.846  1.00  0.00          H
HETATM 6729  H71 MMA A 901      -9.111   7.546   9.631  1.00  0.00          H
HETATM 6730  H72 MMA A 901      -9.248   6.143   8.524  1.00  0.00          H
HETATM 6731  H73 MMA A 901      -7.788   6.365   9.518  1.00  0.00          H
HETATM 6732  HO2 MMA A 901      -4.768   7.773   5.195  1.00  0.00          H
HETATM 6733  H4  MMA A 901      -7.466   6.850   3.816  1.00  0.00          H
HETATM 6734  HO3 MMA A 901      -6.472   9.153   3.728  1.00  0.00          H
HETATM 6735  H5  MMA A 901      -9.601   6.582   5.973  1.00  0.00          H
HETATM 6736  HO4 MMA A 901      -9.831   7.128   3.260  1.00  0.00          H
HETATM 6737  H61 MMA A 901      -9.227   4.160   5.543  1.00  0.00          H
HETATM 6738  H62 MMA A 901      -9.835   5.035   4.122  1.00  0.00          H
HETATM 6739  HO6 MMA A 901      -7.969   3.710   3.612  1.00  0.00          H
HETATM 6740  PB  GDP A 904      -2.486   8.899   5.845  1.00 26.19          P
HETATM 6741  O1B GDP A 904      -3.544   8.618   4.782  1.00 27.84          O
HETATM 6742  O2B GDP A 904      -1.441   7.787   5.925  1.00 26.32          O1-
HETATM 6743  O3B GDP A 904      -3.036   9.306   7.225  1.00 26.19          O1-
HETATM 6744  O3A GDP A 904      -1.751  10.259   5.272  1.00 25.44          O
HETATM 6745  PA  GDP A 904      -0.250  10.811   5.435  1.00 25.23          P
HETATM 6746  O1A GDP A 904       0.505   9.947   6.437  1.00 25.43          O
HETATM 6747  O2A GDP A 904      -0.274  12.293   5.651  1.00 26.02          O1-
HETATM 6748  O5' GDP A 904       0.338  10.627   3.946  1.00 25.21          O
HETATM 6749  C5' GDP A 904       0.604   9.352   3.389  1.00 23.27          C
HETATM 6750  C4' GDP A 904       2.079   9.300   2.946  1.00 23.57          C
HETATM 6751  O4' GDP A 904       2.308  10.376   2.040  1.00 24.01          O
HETATM 6752  C3' GDP A 904       3.099   9.475   4.079  1.00 23.80          C
HETATM 6753  O3' GDP A 904       4.213   8.633   3.839  1.00 22.36          O
HETATM 6754  C2' GDP A 904       3.551  10.924   3.964  1.00 23.31          C
HETATM 6755  O2' GDP A 904       4.901  10.995   4.392  1.00 21.65          O
HETATM 6756  C1' GDP A 904       3.365  11.183   2.465  1.00 24.11          C
HETATM 6757  N9  GDP A 904       2.989  12.604   2.190  1.00 24.67          N
HETATM 6758  C8  GDP A 904       1.782  13.231   2.400  1.00 24.89          C
HETATM 6759  N7  GDP A 904       1.764  14.493   2.067  1.00 24.52          N
HETATM 6760  C5  GDP A 904       3.047  14.729   1.588  1.00 24.90          C
HETATM 6761  C6  GDP A 904       3.641  15.944   1.112  1.00 26.54          C
HETATM 6762  O6  GDP A 904       3.147  17.077   1.111  1.00 27.33          O
HETATM 6763  N1  GDP A 904       4.948  15.750   0.667  1.00 26.79          N
HETATM 6764  C2  GDP A 904       5.635  14.550   0.766  1.00 25.66          C
HETATM 6765  N2  GDP A 904       6.910  14.569   0.384  1.00 26.54          N
HETATM 6766  N3  GDP A 904       5.108  13.438   1.245  1.00 26.00          N
HETATM 6767  C4  GDP A 904       3.803  13.574   1.641  1.00 24.67          C
HETATM 6768 H5'1 GDP A 904       0.393   8.541   4.089  1.00  0.00          H
HETATM 6769 H5'2 GDP A 904      -0.056   9.181   2.535  1.00  0.00          H
HETATM 6770  H4' GDP A 904       2.243   8.356   2.423  1.00  0.00          H
HETATM 6771  H3' GDP A 904       2.702   9.257   5.069  1.00  0.00          H
HETATM 6772  HO3 GDP A 904       4.957   9.236   3.934  1.00  0.00          H
HETATM 6773  H2' GDP A 904       2.897  11.575   4.546  1.00  0.00          H
HETATM 6774  HO2 GDP A 904       5.002  11.807   4.910  1.00  0.00          H
HETATM 6775  H1' GDP A 904       4.258  10.973   1.878  1.00  0.00          H
HETATM 6776  H8  GDP A 904       0.913  12.731   2.801  1.00  0.00          H
HETATM 6777  HN1 GDP A 904       5.440  16.551   0.252  1.00  0.00          H
HETATM 6778  HN2 GDP A 904       7.561  13.872   0.737  1.00  0.00          H
HETATM 6779  H1  GDP A 904       7.267  15.421  -0.047  1.00  0.00          H
HETATM 6780 MN1   MN A 909       0.343   7.887   7.096  1.00 24.77         Mn2+
HETATM 6781  C1  0MA   2      -3.631   5.443   3.822  0.00  0.00          C1+
HETATM 6782  C2  0MA   2      -2.408   6.133   3.317  0.00  0.00          C
HETATM 6783  O2  0MA   2      -1.431   5.139   3.327  0.00  0.00          O
HETATM 6784  C3  0MA   2      -2.627   6.842   1.950  0.00  0.00          C
HETATM 6785  O3  0MA   2      -1.439   6.731   1.210  0.00  0.00          O
HETATM 6786  C4  0MA   2      -3.827   6.242   1.229  0.00  0.00          C
HETATM 6787  O4  0MA   2      -4.186   6.977   0.095  0.00  0.00          O
HETATM 6788  C5  0MA   2      -5.062   6.286   2.117  0.00  0.00          C
HETATM 6789  O5  0MA   2      -4.778   5.488   3.330  0.00  0.00          O
HETATM 6790  C6  0MA   2      -6.333   5.724   1.486  0.00  0.00          C
HETATM 6791  O6  0MA   2      -7.320   6.710   1.549  0.00  0.00          O
HETATM 6792  H1  0MA   2      -3.529   4.776   4.681  0.00  0.00          H
HETATM 6793  H2  0MA   2      -2.206   6.894   4.088  0.00  0.00          H
HETATM 6794  H2O 0MA   2      -0.615   5.499   3.740  0.00  0.00          H
HETATM 6795  H3  0MA   2      -2.872   7.896   2.147  0.00  0.00          H
HETATM 6796  H3O 0MA   2      -1.617   6.799   0.242  0.00  0.00          H
HETATM 6797  H4  0MA   2      -3.569   5.199   0.983  0.00  0.00          H
HETATM 6798  H4O 0MA   2      -3.430   6.919  -0.541  0.00  0.00          H
HETATM 6799  H5  0MA   2      -5.248   7.309   2.463  0.00  0.00          H
HETATM 6800  H61 0MA   2      -6.621   4.823   2.038  0.00  0.00          H
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HETATM 6801  H62 0MA     2      -6.099   5.457   0.446  0.00  0.00           H
HETATM 6802  H6O 0MA     2      -8.192   6.342   1.258  0.00  0.00           H
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(f) The Cartesian coordinates (in the PDB format) of the M06-2X:OPLS2005 optimized oxocarbenium ion intermediate **2B** (**WT_Mn**).

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REMARK 888
REMARK 888 WRITTEN BY MAESTRO (A PRODUCT OF SCHRODINGER, LLC)
TITLE     2B (WT_Mn)
MODEL        1
ATOM      1  CH3 ACE A 103      -7.055 -19.282 -19.425  1.00  0.00          C
ATOM      2  C   ACE A 103      -5.973 -18.239 -19.657  1.00  0.00          C
ATOM      3  O   ACE A 103      -5.272 -18.291 -20.669  1.00  0.00          O
ATOM      4 1H   ACE A 103      -8.036 -18.808 -19.415  1.00  0.00          H
ATOM      5 2H   ACE A 103      -7.040 -20.042 -20.205  1.00  0.00          H
ATOM      6 3H   ACE A 103      -6.911 -19.767 -18.459  1.00  0.00          H
ATOM      7  N   LYS A 104      -5.838 -17.295 -18.725  1.00 36.95          N
ATOM      8  CA  LYS A 104      -4.831 -16.245 -18.701  1.00 37.33          C
ATOM      9  C   LYS A 104      -4.816 -15.643 -17.297  1.00 36.73          C
ATOM     10  O   LYS A 104      -5.650 -14.775 -17.008  1.00 37.03          O
ATOM     11  CB  LYS A 104      -5.119 -15.158 -19.773  1.00 38.20          C
ATOM     12  CG  LYS A 104      -4.014 -14.079 -19.896  1.00 40.08          C
ATOM     13  CD  LYS A 104      -4.507 -12.614 -19.865  1.00 40.86          C
ATOM     14  CE  LYS A 104      -4.401 -11.913 -18.492  1.00 41.37          C
ATOM     15  NZ  LYS A 104      -5.554 -12.160 -17.608  1.00 44.72          N1+
ATOM     16  HA  LYS A 104      -3.859 -16.700 -18.903  1.00  0.00          H
ATOM     17  HB2 LYS A 104      -5.239 -15.633 -20.747  1.00  0.00          H
ATOM     18  HB3 LYS A 104      -6.086 -14.697 -19.569  1.00  0.00          H
ATOM     19  HG2 LYS A 104      -3.228 -14.225 -19.153  1.00  0.00          H
ATOM     20  HG3 LYS A 104      -3.510 -14.247 -20.849  1.00  0.00          H
ATOM     21  HD2 LYS A 104      -3.859 -12.052 -20.540  1.00  0.00          H
ATOM     22  HD3 LYS A 104      -5.506 -12.514 -20.292  1.00  0.00          H
ATOM     23  HE2 LYS A 104      -3.477 -12.191 -17.990  1.00  0.00          H
ATOM     24  HE3 LYS A 104      -4.339 -10.834 -18.643  1.00  0.00          H
ATOM     25  HZ1 LYS A 104      -5.391 -11.686 -16.719  1.00  0.00          H
ATOM     26  HZ2 LYS A 104      -6.398 -11.759 -18.010  1.00  0.00          H
ATOM     27  HZ3 LYS A 104      -5.687 -13.156 -17.422  1.00  0.00          H
ATOM     28  H2  LYS A 104      -6.415 -17.405 -17.870  1.00  0.00          H
ATOM     29  N   THR A 105      -3.823 -15.981 -16.463  1.00 34.30          N
ATOM     30  CA  THR A 105      -3.620 -15.264 -15.210  1.00 33.23          C
ATOM     31  C   THR A 105      -2.985 -13.903 -15.556  1.00 32.56          C
ATOM     32  O   THR A 105      -2.181 -13.787 -16.485  1.00 32.13          O
ATOM     33  CB  THR A 105      -2.767 -16.075 -14.188  1.00 32.21          C
ATOM     34  OG1 THR A 105      -1.369 -15.814 -14.166  1.00 35.33          O
ATOM     35  CG2 THR A 105      -3.000 -17.593 -14.216  1.00 33.79          C
ATOM     36  H   THR A 105      -3.097 -16.621 -16.754  1.00  0.00          H
ATOM     37  HA  THR A 105      -4.604 -15.115 -14.762  1.00  0.00          H
ATOM     38  HB  THR A 105      -3.118 -15.728 -13.217  1.00  0.00          H
ATOM     39  HG1 THR A 105      -0.938 -16.196 -14.959  1.00  0.00          H
ATOM     40 HG21 THR A 105      -2.535 -18.076 -13.358  1.00  0.00          H
ATOM     41 HG22 THR A 105      -4.066 -17.823 -14.191  1.00  0.00          H
ATOM     42 HG23 THR A 105      -2.581 -18.045 -15.116  1.00  0.00          H
ATOM     43  N   THR A 106      -3.340 -12.853 -14.821  1.00 30.71          N
ATOM     44  CA  THR A 106      -2.715 -11.537 -14.948  1.00 29.71          C
ATOM     45  C   THR A 106      -1.397 -11.494 -14.128  1.00 28.38          C
ATOM     46  O   THR A 106      -0.647 -10.522 -14.212  1.00 26.84          O
ATOM     47  CB  THR A 106      -3.763 -10.470 -14.540  1.00 29.60          C
ATOM     48  OG1 THR A 106      -4.854 -10.545 -15.454  1.00 29.62          O
ATOM     49  CG2 THR A 106      -3.273  -9.016 -14.639  1.00 29.22          C
ATOM     50  H   THR A 106      -3.974 -13.035 -14.026  1.00  0.00          H
ATOM     51  HA  THR A 106      -2.431 -11.350 -15.985  1.00  0.00          H
ATOM     52  HB  THR A 106      -4.128 -10.674 -13.533  1.00  0.00          H
ATOM     53  HG1 THR A 106      -5.385  -9.757 -15.331  1.00  0.00          H
ATOM     54 HG21 THR A 106      -4.071  -8.305 -14.437  1.00  0.00          H
ATOM     55 HG22 THR A 106      -2.474  -8.801 -13.931  1.00  0.00          H
ATOM     56 HG23 THR A 106      -2.889  -8.794 -15.629  1.00  0.00          H
ATOM     57  N   MET A 107      -1.025 -12.597 -13.449  1.00 27.33          N
ATOM     58  CA  MET A 107       0.309 -12.801 -12.884  1.00 27.87          C
ATOM     59  C   MET A 107       1.340 -13.023 -14.002  1.00 27.83          C
ATOM     60  O   MET A 107       2.516 -12.741 -13.798  1.00 28.87          O
ATOM     61  CB  MET A 107       0.331 -14.041 -11.958  1.00 25.92          C
ATOM     62  CG  MET A 107       1.127 -13.838 -10.656  1.00 26.21          C
ATOM     63  SD  MET A 107       2.939 -13.730 -10.759  1.00 27.25          S
ATOM     64  CE  MET A 107       3.449 -15.170  -9.775  1.00 24.40          C
ATOM     65  H   MET A 107      -1.632 -13.405 -13.518  1.00  0.00          H
ATOM     66  HA  MET A 107       0.583 -11.910 -12.319  1.00  0.00          H
ATOM     67  HB2 MET A 107      -0.690 -14.294 -11.682  1.00  0.00          H
ATOM     68  HB3 MET A 107       0.696 -14.929 -12.479  1.00  0.00          H
ATOM     69  HG2 MET A 107       0.758 -12.953 -10.137  1.00  0.00          H
ATOM     70  HG3 MET A 107       0.912 -14.683 -10.011  1.00  0.00          H
ATOM     71  HE1 MET A 107       4.527 -15.305  -9.838  1.00  0.00          H
ATOM     72  HE2 MET A 107       3.191 -15.039  -8.725  1.00  0.00          H
ATOM     73  HE3 MET A 107       2.976 -16.083 -10.138  1.00  0.00          H
ATOM     74  N   ASP A 108       0.944 -13.494 -15.191  1.00 28.14          N
ATOM     75  CA  ASP A 108       1.872 -13.859 -16.272  1.00 28.57          C
ATOM     76  C   ASP A 108       2.475 -12.667 -17.034  1.00 28.39          C
ATOM     77  O   ASP A 108       3.243 -12.843 -17.978  1.00 28.31          O
ATOM     78  CB  ASP A 108       1.243 -14.905 -17.213  1.00 29.94          C
ATOM     79  CG  ASP A 108       1.153 -16.252 -16.507  1.00 31.66          C
ATOM     80  OD1 ASP A 108       2.242 -16.784 -16.185  1.00 31.67          O
ATOM     81  OD2 ASP A 108       0.011 -16.669 -16.205  1.00 33.98          O1-
ATOM     82  H   ASP A 108      -0.022 -13.780 -15.305  1.00  0.00          H
ATOM     83  HA  ASP A 108       2.735 -14.315 -15.802  1.00  0.00          H
ATOM     84  HB2 ASP A 108       0.257 -14.591 -17.555  1.00  0.00          H
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ATOM     85  HB3 ASP A 108       1.855 -15.052 -18.104  1.00  0.00           H
ATOM     86  N   TYR A 109       2.234 -11.444 -16.550  1.00 29.03           N
ATOM     87  CA  TYR A 109       3.039 -10.263 -16.861  1.00 29.95           C
ATOM     88  C   TYR A 109       4.179 -10.077 -15.826  1.00 29.37           C
ATOM     89  O   TYR A 109       4.960  -9.135 -15.950  1.00 30.93           O
ATOM     90  CB  TYR A 109       2.125  -9.019 -16.803  1.00 32.34           C
ATOM     91  CG  TYR A 109       0.935  -9.044 -17.754  1.00 34.77           C
ATOM     92  CD1 TYR A 109      -0.379  -8.944 -17.250  1.00 34.89           C
ATOM     93  CD2 TYR A 109       1.134  -9.186 -19.145  1.00 35.80           C
ATOM     94  CE1 TYR A 109      -1.481  -9.019 -18.125  1.00 34.99           C
ATOM     95  CE2 TYR A 109       0.031  -9.259 -20.018  1.00 35.75           C
ATOM     96  CZ  TYR A 109      -1.279  -9.189 -19.505  1.00 36.34           C
ATOM     97  OH  TYR A 109      -2.360  -9.294 -20.328  1.00 36.60           O
ATOM     98  H   TYR A 109       1.559 -11.382 -15.802  1.00  0.00           H
ATOM     99  HA  TYR A 109       3.489 -10.344 -17.852  1.00  0.00           H
ATOM    100  HB2 TYR A 109       1.761  -8.877 -15.784  1.00  0.00           H
ATOM    101  HB3 TYR A 109       2.712  -8.131 -17.037  1.00  0.00           H
ATOM    102  HD1 TYR A 109      -0.550  -8.832 -16.188  1.00  0.00           H
ATOM    103  HD2 TYR A 109       2.133  -9.266 -19.547  1.00  0.00           H
ATOM    104  HE1 TYR A 109      -2.489  -8.961 -17.746  1.00  0.00           H
ATOM    105  HE2 TYR A 109       0.202  -9.389 -21.076  1.00  0.00           H
ATOM    106  HH  TYR A 109      -2.141  -9.286 -21.248  1.00  0.00           H
ATOM    107  N   ILE A 110       4.270 -10.943 -14.803  1.00 28.23           N
ATOM    108  CA  ILE A 110       5.163 -10.873 -13.646  1.00 27.12           C
ATOM    109  C   ILE A 110       5.946 -12.189 -13.453  1.00 28.39           C
ATOM    110  O   ILE A 110       7.105 -12.119 -13.026  1.00 27.18           O
ATOM    111  CB  ILE A 110       4.379 -10.443 -12.364  1.00 26.29           C
ATOM    112  CG1 ILE A 110       3.587  -9.127 -12.544  1.00 26.10           C
ATOM    113  CG2 ILE A 110       5.274 -10.342 -11.112  1.00 24.77           C
ATOM    114  CD1 ILE A 110       2.103  -9.343 -12.871  1.00 26.96           C
ATOM    115  H   ILE A 110       3.559 -11.668 -14.747  1.00  0.00           H
ATOM    116  HA  ILE A 110       5.916 -10.106 -13.840  1.00  0.00           H
ATOM    117  HB  ILE A 110       3.659 -11.226 -12.130  1.00  0.00           H
ATOM    118 HG12 ILE A 110       3.632  -8.554 -11.620  1.00  0.00           H
ATOM    119 HG13 ILE A 110       4.057  -8.495 -13.299  1.00  0.00           H
ATOM    120 HG21 ILE A 110       4.706 -10.009 -10.244  1.00  0.00           H
ATOM    121 HG22 ILE A 110       5.705 -11.304 -10.840  1.00  0.00           H
ATOM    122 HG23 ILE A 110       6.090  -9.637 -11.268  1.00  0.00           H
ATOM    123 HD11 ILE A 110       1.598  -8.403 -13.093  1.00  0.00           H
ATOM    124 HD12 ILE A 110       1.966  -9.992 -13.732  1.00  0.00           H
ATOM    125 HD13 ILE A 110       1.582  -9.804 -12.033  1.00  0.00           H
ATOM    126  N   THR A 111       5.356 -13.364 -13.756  1.00 28.11           N
ATOM    127  CA  THR A 111       5.927 -14.718 -13.619  1.00 29.58           C
ATOM    128  C   THR A 111       7.445 -14.908 -13.879  1.00 30.49           C
ATOM    129  O   THR A 111       8.090 -15.523 -13.024  1.00 30.80           O
ATOM    130  CB  THR A 111       5.017 -15.844 -14.191  1.00 29.32           C
ATOM    131  OG1 THR A 111       4.713 -15.644 -15.554  1.00 32.94           O
ATOM    132  CG2 THR A 111       3.725 -16.061 -13.397  1.00 28.93           C
ATOM    133  H   THR A 111       4.385 -13.339 -14.051  1.00  0.00           H
ATOM    134  HA  THR A 111       5.864 -14.861 -12.539  1.00  0.00           H
ATOM    135  HB  THR A 111       5.567 -16.786 -14.140  1.00  0.00           H
ATOM    136  HG1 THR A 111       3.904 -16.135 -15.778  1.00  0.00           H
ATOM    137 HG21 THR A 111       3.160 -16.909 -13.784  1.00  0.00           H
ATOM    138 HG22 THR A 111       3.940 -16.274 -12.351  1.00  0.00           H
ATOM    139 HG23 THR A 111       3.072 -15.195 -13.435  1.00  0.00           H
ATOM    140  N   PRO A 112       8.070 -14.349 -14.947  1.00 32.29           N
ATOM    141  CA  PRO A 112       9.537 -14.287 -15.105  1.00 33.46           C
ATOM    142  C   PRO A 112      10.346 -13.822 -13.874  1.00 35.96           C
ATOM    143  O   PRO A 112      11.374 -14.420 -13.564  1.00 35.45           O
ATOM    144  CB  PRO A 112       9.773 -13.345 -16.294  1.00 33.51           C
ATOM    145  CG  PRO A 112       8.523 -13.492 -17.144  1.00 31.85           C
ATOM    146  CD  PRO A 112       7.410 -13.809 -16.144  1.00 31.36           C
ATOM    147  HA  PRO A 112       9.867 -15.293 -15.371  1.00  0.00           H
ATOM    148  HB2 PRO A 112       9.856 -12.309 -15.962  1.00  0.00           H
ATOM    149  HB3 PRO A 112      10.683 -13.588 -16.844  1.00  0.00           H
ATOM    150  HG2 PRO A 112       8.308 -12.610 -17.748  1.00  0.00           H
ATOM    151  HG3 PRO A 112       8.644 -14.336 -17.826  1.00  0.00           H
ATOM    152  HD2 PRO A 112       6.866 -12.895 -15.917  1.00  0.00           H
ATOM    153  HD3 PRO A 112       6.703 -14.515 -16.577  1.00  0.00           H
ATOM    154  N   SER A 113       9.880 -12.806 -13.130  1.00 36.66           N
ATOM    155  CA  SER A 113      10.559 -12.309 -11.924  1.00 35.89           C
ATOM    156  C   SER A 113      10.375 -13.257 -10.713  1.00 36.89           C
ATOM    157  O   SER A 113      11.121 -13.170  -9.739  1.00 37.22           O
ATOM    158  CB  SER A 113      10.083 -10.863 -11.629  1.00 35.80           C
ATOM    159  OG  SER A 113       8.725 -10.735 -11.225  1.00 33.01           O
ATOM    160  H   SER A 113       8.975 -12.410 -13.363  1.00  0.00           H
ATOM    161  HA  SER A 113      11.631 -12.262 -12.129  1.00  0.00           H
ATOM    162  HB2 SER A 113      10.706 -10.437 -10.840  1.00  0.00           H
ATOM    163  HB3 SER A 113      10.251 -10.236 -12.506  1.00  0.00           H
ATOM    164  HG  SER A 113       8.158 -11.153 -11.876  1.00  0.00           H
ATOM    165  N   PHE A 114       9.442 -14.213 -10.806  1.00 37.03           N
ATOM    166  CA  PHE A 114       9.181 -15.268  -9.829  1.00 38.15           C
ATOM    167  C   PHE A 114       9.872 -16.587 -10.215  1.00 40.29           C
ATOM    168  O   PHE A 114       9.699 -17.585  -9.512  1.00 41.86           O
ATOM    169  CB  PHE A 114       7.652 -15.485  -9.713  1.00 37.24           C
ATOM    170  CG  PHE A 114       7.023 -14.607  -8.653  1.00 37.59           C
ATOM    171  CD1 PHE A 114       6.940 -13.213  -8.851  1.00 37.08           C
ATOM    172  CD2 PHE A 114       6.546 -15.179  -7.456  1.00 36.59           C
ATOM    173  CE1 PHE A 114       6.408 -12.394  -7.842  1.00 37.47           C
ATOM    174  CE2 PHE A 114       6.019 -14.359  -6.445  1.00 35.73           C
ATOM    175  CZ  PHE A 114       5.961 -12.970  -6.639  1.00 36.89           C
ATOM    176  H   PHE A 114       8.918 -14.274 -11.672  1.00  0.00           H
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ATOM    177  HA  PHE A 114       9.576 -14.990  -8.849  1.00  0.00           H
ATOM    178  HB2 PHE A 114       7.150 -15.295 -10.659  1.00  0.00           H
ATOM    179  HB3 PHE A 114       7.401 -16.519  -9.473  1.00  0.00           H
ATOM    180  HD1 PHE A 114       7.293 -12.765  -9.769  1.00  0.00           H
ATOM    181  HD2 PHE A 114       6.582 -16.246  -7.300  1.00  0.00           H
ATOM    182  HE1 PHE A 114       6.342 -11.326  -7.991  1.00  0.00           H
ATOM    183  HE2 PHE A 114       5.667 -14.788  -5.519  1.00  0.00           H
ATOM    184  HZ  PHE A 114       5.569 -12.347  -5.857  1.00  0.00           H
ATOM    185  N   ALA A 115      10.692 -16.609 -11.278  1.00 -1.00           N
ATOM    186  CA  ALA A 115      11.521 -17.757 -11.656  1.00 -1.00           C
ATOM    187  C   ALA A 115      12.826 -17.805 -10.834  1.00 -1.00           C
ATOM    188  O   ALA A 115      13.495 -18.833 -10.791  1.00 -1.00           O
ATOM    189  CB  ALA A 115      11.904 -17.619 -13.137  1.00 -1.00           C
ATOM    190  H   ALA A 115      10.752 -15.778 -11.855  1.00 -1.00           H
ATOM    191  HA  ALA A 115      10.970 -18.688 -11.508  1.00 -1.00           H
ATOM    192  HB1 ALA A 115      12.453 -18.496 -13.481  1.00 -1.00           H
ATOM    193  HB2 ALA A 115      11.018 -17.521 -13.766  1.00 -1.00           H
ATOM    194  HB3 ALA A 115      12.537 -16.749 -13.316  1.00 -1.00           H
ATOM    195  N   ASN A 116      13.167 -16.710 -10.142  1.00 -1.00           N
ATOM    196  CA  ASN A 116      14.376 -16.459  -9.339  1.00 -1.00           C
ATOM    197  C   ASN A 116      14.380 -17.235  -7.989  1.00 -1.00           C
ATOM    198  O   ASN A 116      15.011 -16.822  -7.011  1.00 -1.00           O
ATOM    199  CB  ASN A 116      14.407 -14.923  -9.126  1.00 -1.00           C
ATOM    200  CG  ASN A 116      15.690 -14.363  -8.506  1.00 -1.00           C
ATOM    201  OD1 ASN A 116      16.783 -14.548  -9.029  1.00 -1.00           O
ATOM    202  ND2 ASN A 116      15.566 -13.688  -7.372  1.00 -1.00           N
ATOM    203  H   ASN A 116      12.519 -15.941 -10.220  1.00 -1.00           H
ATOM    204  HA  ASN A 116      15.252 -16.768  -9.912  1.00 -1.00           H
ATOM    205  HB2 ASN A 116      14.307 -14.426 -10.092  1.00 -1.00           H
ATOM    206  HB3 ASN A 116      13.539 -14.609  -8.548  1.00 -1.00           H
ATOM    207 HD21 ASN A 116      16.375 -13.251  -6.947  1.00 -1.00           H
ATOM    208 HD22 ASN A 116      14.644 -13.620  -6.934  1.00 -1.00           H
ATOM    209  N   LYS A 117      13.688 -18.381  -7.930  1.00 -1.00           N
ATOM    210  CA  LYS A 117      13.458 -19.267  -6.782  1.00 -1.00           C
ATOM    211  C   LYS A 117      14.735 -20.008  -6.325  1.00 -1.00           C
ATOM    212  O   LYS A 117      14.816 -21.235  -6.316  1.00 -1.00           O
ATOM    213  CB  LYS A 117      12.319 -20.247  -7.147  1.00 -1.00           C
ATOM    214  CG  LYS A 117      10.923 -19.606  -7.048  1.00 -1.00           C
ATOM    215  CD  LYS A 117       9.828 -20.482  -7.687  1.00 -1.00           C
ATOM    216  CE  LYS A 117       8.379 -20.094  -7.334  1.00 -1.00           C
ATOM    217  NZ  LYS A 117       8.078 -18.690  -7.631  1.00 -1.00          N1+
ATOM    218  H   LYS A 117      13.338 -18.706  -8.824  1.00 -1.00           H
ATOM    219  HA  LYS A 117      13.143 -18.658  -5.938  1.00 -1.00           H
ATOM    220  HB2 LYS A 117      12.491 -20.656  -8.144  1.00 -1.00           H
ATOM    221  HB3 LYS A 117      12.326 -21.103  -6.469  1.00 -1.00           H
ATOM    222  HG2 LYS A 117      10.710 -19.427  -5.996  1.00 -1.00           H
ATOM    223  HG3 LYS A 117      10.936 -18.623  -7.517  1.00 -1.00           H
ATOM    224  HD2 LYS A 117       9.957 -20.472  -8.770  1.00 -1.00           H
ATOM    225  HD3 LYS A 117       9.979 -21.519  -7.381  1.00 -1.00           H
ATOM    226  HE2 LYS A 117       7.691 -20.711  -7.914  1.00 -1.00           H
ATOM    227  HE3 LYS A 117       8.155 -20.292  -6.287  1.00 -1.00           H
ATOM    228  HZ1 LYS A 117       7.050 -18.597  -7.806  1.00 -1.00           H
ATOM    229  HZ2 LYS A 117       8.287 -18.094  -6.830  1.00 -1.00           H
ATOM    230  HZ3 LYS A 117       8.582 -18.355  -8.447  1.00 -1.00           H
ATOM    231  N   ALA A 118      15.750 -19.222  -5.966  1.00 -1.00           N
ATOM    232  CA  ALA A 118      17.014 -19.613  -5.364  1.00 -1.00           C
ATOM    233  C   ALA A 118      17.651 -18.437  -4.610  1.00 -1.00           C
ATOM    234  O   ALA A 118      18.334 -18.647  -3.610  1.00 -1.00           O
ATOM    235  CB  ALA A 118      17.961 -20.214  -6.416  1.00 -1.00           C
ATOM    236  H   ALA A 118      15.556 -18.233  -6.088  1.00 -1.00           H
ATOM    237  HA  ALA A 118      16.800 -20.382  -4.619  1.00 -1.00           H
ATOM    238  HB1 ALA A 118      18.912 -20.501  -5.966  1.00 -1.00           H
ATOM    239  HB2 ALA A 118      17.531 -21.109  -6.867  1.00 -1.00           H
ATOM    240  HB3 ALA A 118      18.171 -19.503  -7.216  1.00 -1.00           H
ATOM    241  N   GLY A 119      17.422 -17.195  -5.060  1.00 49.69           N
ATOM    242  CA  GLY A 119      18.056 -15.993  -4.527  1.00 48.49           C
ATOM    243  C   GLY A 119      17.042 -15.031  -3.909  1.00 47.46           C
ATOM    244  O   GLY A 119      15.848 -15.331  -3.826  1.00 48.38           O
ATOM    245  H   GLY A 119      16.820 -17.067  -5.866  1.00 -1.00           H
ATOM    246  HA2 GLY A 119      18.829 -16.222  -3.792  1.00  0.00           H
ATOM    247  HA3 GLY A 119      18.553 -15.486  -5.356  1.00  0.00           H
ATOM    248  N   LYS A 120      17.521 -13.857  -3.478  1.00 45.71           N
ATOM    249  CA  LYS A 120      16.686 -12.688  -3.193  1.00 42.69           C
ATOM    250  C   LYS A 120      16.312 -12.062  -4.555  1.00 40.13           C
ATOM    251  O   LYS A 120      17.151 -12.096  -5.463  1.00 39.70           O
ATOM    252  CB  LYS A 120      17.523 -11.609  -2.454  1.00 44.31           C
ATOM    253  CG  LYS A 120      17.862 -11.851  -0.968  1.00 45.11           C
ATOM    254  CD  LYS A 120      18.779 -10.722  -0.436  1.00 45.84           C
ATOM    255  CE  LYS A 120      18.923 -10.628   1.098  1.00 46.18           C
ATOM    256  NZ  LYS A 120      17.836  -9.852   1.711  1.00 44.91          N1+
ATOM    257  H   LYS A 120      18.491 -13.660  -3.673  1.00  0.00           H
ATOM    258  HA  LYS A 120      15.805 -12.971  -2.615  1.00  0.00           H
ATOM    259  HB2 LYS A 120      18.444 -11.424  -3.010  1.00  0.00           H
ATOM    260  HB3 LYS A 120      16.974 -10.664  -2.496  1.00  0.00           H
ATOM    261  HG2 LYS A 120      16.939 -11.902  -0.391  1.00  0.00           H
ATOM    262  HG3 LYS A 120      18.352 -12.817  -0.843  1.00  0.00           H
ATOM    263  HD2 LYS A 120      19.771 -10.873  -0.865  1.00  0.00           H
ATOM    264  HD3 LYS A 120      18.448  -9.755  -0.821  1.00  0.00           H
ATOM    265  HE2 LYS A 120      18.965 -11.619   1.552  1.00  0.00           H
ATOM    266  HE3 LYS A 120      19.858 -10.125   1.349  1.00  0.00           H
ATOM    267  HZ1 LYS A 120      17.267 -10.478   2.323  1.00  0.00           H
ATOM    268  HZ2 LYS A 120      18.140  -9.040   2.245  1.00  0.00           H
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ATOM    269  HZ3 LYS A 120      17.164  -9.551   1.018  1.00  0.00           H
ATOM    270  N   PRO A 121      15.125 -11.446  -4.712  1.00 37.16           N
ATOM    271  CA  PRO A 121      14.862 -10.546  -5.841  1.00 35.52           C
ATOM    272  C   PRO A 121      15.539  -9.184  -5.584  1.00 33.34           C
ATOM    273  O   PRO A 121      16.063  -8.938  -4.493  1.00 31.34           O
ATOM    274  CB  PRO A 121      13.335 -10.415  -5.856  1.00 35.26           C
ATOM    275  CG  PRO A 121      12.921 -10.582  -4.399  1.00 37.08           C
ATOM    276  CD  PRO A 121      13.974 -11.525  -3.809  1.00 36.33           C
ATOM    277  HA  PRO A 121      15.221 -10.958  -6.786  1.00  0.00           H
ATOM    278  HB2 PRO A 121      12.991  -9.475  -6.285  1.00  0.00           H
ATOM    279  HB3 PRO A 121      12.905 -11.220  -6.454  1.00  0.00           H
ATOM    280  HG2 PRO A 121      12.974  -9.612  -3.905  1.00  0.00           H
ATOM    281  HG3 PRO A 121      11.903 -10.959  -4.286  1.00  0.00           H
ATOM    282  HD2 PRO A 121      14.230 -11.229  -2.790  1.00  0.00           H
ATOM    283  HD3 PRO A 121      13.598 -12.549  -3.785  1.00  0.00           H
ATOM    284  N   LYS A 122      15.490  -8.264  -6.558  1.00 31.90           N
ATOM    285  CA  LYS A 122      15.860  -6.873  -6.317  1.00 31.10           C
ATOM    286  C   LYS A 122      14.667  -6.241  -5.574  1.00 29.95           C
ATOM    287  O   LYS A 122      13.633  -5.963  -6.179  1.00 31.41           O
ATOM    288  CB  LYS A 122      16.111  -6.129  -7.653  1.00 33.97           C
ATOM    289  CG  LYS A 122      17.123  -6.811  -8.596  1.00 35.41           C
ATOM    290  CD  LYS A 122      17.753  -5.872  -9.650  1.00 40.19           C
ATOM    291  CE  LYS A 122      16.929  -5.607 -10.930  1.00 42.24           C
ATOM    292  NZ  LYS A 122      15.713  -4.820 -10.688  1.00 43.94           N1+
ATOM    293  H   LYS A 122      15.010  -8.478  -7.420  1.00  0.00           H
ATOM    294  HA  LYS A 122      16.764  -6.815  -5.706  1.00  0.00           H
ATOM    295  HB2 LYS A 122      15.176  -5.977  -8.184  1.00  0.00           H
ATOM    296  HB3 LYS A 122      16.483  -5.133  -7.405  1.00  0.00           H
ATOM    297  HG2 LYS A 122      17.934  -7.208  -7.984  1.00  0.00           H
ATOM    298  HG3 LYS A 122      16.666  -7.676  -9.082  1.00  0.00           H
ATOM    299  HD2 LYS A 122      18.057  -4.932  -9.186  1.00  0.00           H
ATOM    300  HD3 LYS A 122      18.687  -6.335  -9.972  1.00  0.00           H
ATOM    301  HE2 LYS A 122      17.546  -5.051 -11.638  1.00  0.00           H
ATOM    302  HE3 LYS A 122      16.652  -6.543 -11.418  1.00  0.00           H
ATOM    303  HZ1 LYS A 122      15.357  -4.414 -11.537  1.00  0.00           H
ATOM    304  HZ2 LYS A 122      14.979  -5.495 -10.375  1.00  0.00           H
ATOM    305  HZ3 LYS A 122      15.884  -4.090 -10.002  1.00  0.00           H
ATOM    306  N   ALA A 123      14.802  -6.042  -4.264  1.00 25.55           N
ATOM    307  CA  ALA A 123      13.798  -5.454  -3.388  1.00 25.13           C
ATOM    308  C   ALA A 123      14.454  -4.377  -2.529  1.00 23.88           C
ATOM    309  O   ALA A 123      15.653  -4.453  -2.259  1.00 23.84           O
ATOM    310  CB  ALA A 123      13.145  -6.551  -2.538  1.00 23.35           C
ATOM    311  H   ALA A 123      15.686  -6.260  -3.825  1.00  0.00           H
ATOM    312  HA  ALA A 123      13.028  -4.972  -3.988  1.00  0.00           H
ATOM    313  HB1 ALA A 123      12.286  -6.156  -1.995  1.00  0.00           H
ATOM    314  HB2 ALA A 123      12.800  -7.382  -3.150  1.00  0.00           H
ATOM    315  HB3 ALA A 123      13.838  -6.956  -1.804  1.00  0.00           H
ATOM    316  N   CYS A 124      13.663  -3.403  -2.083  1.00 25.75           N
ATOM    317  CA  CYS A 124      14.067  -2.303  -1.218  1.00 23.52           C
ATOM    318  C   CYS A 124      12.955  -2.032  -0.204  1.00 23.67           C
ATOM    319  O   CYS A 124      11.804  -2.423  -0.421  1.00 24.40           O
ATOM    320  CB  CYS A 124      14.442  -1.068  -2.070  1.00 22.25           C
ATOM    321  SG  CYS A 124      13.004  -0.364  -2.951  1.00 23.91           S
ATOM    322  H   CYS A 124      12.688  -3.397  -2.350  1.00  0.00           H
ATOM    323  HA  CYS A 124      14.948  -2.605  -0.649  1.00  0.00           H
ATOM    324  HB2 CYS A 124      14.876  -0.289  -1.443  1.00  0.00           H
ATOM    325  HB3 CYS A 124      15.207  -1.336  -2.796  1.00  0.00           H
ATOM    326  HG  CYS A 124      12.469   0.223  -1.875  1.00  0.00           H
ATOM    327  N   TYR A 125      13.259  -1.269   0.847  1.00 21.36           N
ATOM    328  CA  TYR A 125      12.243  -0.486   1.543  1.00 22.40           C
ATOM    329  C   TYR A 125      12.063   0.797   0.719  1.00 21.88           C
ATOM    330  O   TYR A 125      13.053   1.365   0.253  1.00 20.40           O
ATOM    331  CB  TYR A 125      12.710  -0.085   2.954  1.00 21.32           C
ATOM    332  CG  TYR A 125      13.238  -1.203   3.832  1.00 22.30           C
ATOM    333  CD1 TYR A 125      12.366  -2.073   4.519  1.00 20.05           C
ATOM    334  CD2 TYR A 125      14.631  -1.353   3.979  1.00 18.10           C
ATOM    335  CE1 TYR A 125      12.893  -3.097   5.333  1.00 20.76           C
ATOM    336  CE2 TYR A 125      15.152  -2.373   4.788  1.00 18.47           C
ATOM    337  CZ  TYR A 125      14.286  -3.256   5.458  1.00 18.41           C
ATOM    338  OH  TYR A 125      14.797  -4.261   6.222  1.00 19.18           O
ATOM    339  H   TYR A 125      14.229  -0.974   0.956  1.00  0.00           H
ATOM    340  HA  TYR A 125      11.314  -1.036   1.603  1.00  0.00           H
ATOM    341  HB2 TYR A 125      13.491   0.664   2.876  1.00  0.00           H
ATOM    342  HB3 TYR A 125      11.893   0.410   3.481  1.00  0.00           H
ATOM    343  HD1 TYR A 125      11.296  -1.959   4.432  1.00  0.00           H
ATOM    344  HD2 TYR A 125      15.311  -0.681   3.478  1.00  0.00           H
ATOM    345  HE1 TYR A 125      12.228  -3.760   5.865  1.00  0.00           H
ATOM    346  HE2 TYR A 125      16.223  -2.459   4.879  1.00  0.00           H
ATOM    347  HH  TYR A 125      15.753  -4.262   6.194  1.00  0.00           H
ATOM    348  N   VAL A 126      10.822   1.243   0.525  1.00 22.88           N
ATOM    349  CA  VAL A 126      10.497   2.522  -0.084  1.00 20.05           C
ATOM    350  C   VAL A 126       9.743   3.349   0.960  1.00 20.90           C
ATOM    351  O   VAL A 126       8.863   2.848   1.668  1.00 19.39           O
ATOM    352  CB  VAL A 126       9.748   2.351  -1.431  1.00 21.97           C
ATOM    353  CG1 VAL A 126       8.340   1.752  -1.317  1.00 21.20           C
ATOM    354  CG2 VAL A 126       9.688   3.678  -2.210  1.00 17.14           C
ATOM    355  H   VAL A 126      10.051   0.741   0.966  1.00  0.00           H
ATOM    356  HA  VAL A 126      11.422   3.044  -0.316  1.00  0.00           H
ATOM    357  HB  VAL A 126      10.339   1.656  -2.028  1.00  0.00           H
ATOM    358 HG11 VAL A 126       7.913   1.582  -2.306  1.00  0.00           H
ATOM    359 HG12 VAL A 126       8.367   0.798  -0.794  1.00  0.00           H
ATOM    360 HG13 VAL A 126       7.656   2.412  -0.784  1.00  0.00           H
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ATOM    361 HG21 VAL A 126       9.254   3.538  -3.200  1.00  0.00           H
ATOM    362 HG22 VAL A 126       9.086   4.425  -1.695  1.00  0.00           H
ATOM    363 HG23 VAL A 126      10.686   4.097  -2.350  1.00  0.00           H
ATOM    364  N   THR A 127      10.099   4.625   1.043  1.00 20.50           N
ATOM    365  CA  THR A 127       9.540   5.585   1.964  1.00 20.93           C
ATOM    366  C   THR A 127       9.362   6.902   1.212  1.00 21.13           C
ATOM    367  O   THR A 127      10.340   7.609   0.992  1.00 23.81           O
ATOM    368  CB  THR A 127      10.463   5.654   3.206  1.00 22.06           C
ATOM    369  OG1 THR A 127      10.314   4.479   3.986  1.00 22.71           O
ATOM    370  CG2 THR A 127      10.181   6.829   4.141  1.00 19.49           C
ATOM    371  H   THR A 127      10.905   4.930   0.499  1.00  0.00           H
ATOM    372  HA  THR A 127       8.546   5.268   2.279  1.00  0.00           H
ATOM    373  HB  THR A 127      11.504   5.724   2.881  1.00  0.00           H
ATOM    374  HG1 THR A 127       9.375   4.303   4.066  1.00  0.00           H
ATOM    375 HG21 THR A 127      10.873   6.806   4.975  1.00  0.00           H
ATOM    376 HG22 THR A 127      10.353   7.777   3.635  1.00  0.00           H
ATOM    377 HG23 THR A 127       9.159   6.821   4.521  1.00  0.00           H
ATOM    378  N   LEU A 128       8.122   7.269   0.872  1.00 20.38           N
ATOM    379  CA  LEU A 128       7.779   8.648   0.543  1.00 18.73           C
ATOM    380  C   LEU A 128       7.530   9.351   1.880  1.00 18.52           C
ATOM    381  O   LEU A 128       6.816   8.814   2.732  1.00 17.90           O
ATOM    382  CB  LEU A 128       6.509   8.671  -0.326  1.00 18.41           C
ATOM    383  CG  LEU A 128       6.012  10.071  -0.761  1.00 18.76           C
ATOM    384  CD1 LEU A 128       7.121  10.992  -1.296  1.00 18.77           C
ATOM    385  CD2 LEU A 128       4.881   9.919  -1.783  1.00 14.06           C
ATOM    386  H   LEU A 128       7.353   6.677   1.174  1.00  0.00           H
ATOM    387  HA  LEU A 128       8.593   9.125   0.011  1.00  0.00           H
ATOM    388  HB2 LEU A 128       6.702   8.074  -1.219  1.00  0.00           H
ATOM    389  HB3 LEU A 128       5.702   8.165   0.206  1.00  0.00           H
ATOM    390  HG  LEU A 128       5.592  10.575   0.108  1.00  0.00           H
ATOM    391 HD11 LEU A 128       6.705  11.898  -1.738  1.00  0.00           H
ATOM    392 HD12 LEU A 128       7.780  11.329  -0.498  1.00  0.00           H
ATOM    393 HD13 LEU A 128       7.739  10.498  -2.044  1.00  0.00           H
ATOM    394 HD21 LEU A 128       4.519  10.885  -2.118  1.00  0.00           H
ATOM    395 HD22 LEU A 128       5.203   9.364  -2.665  1.00  0.00           H
ATOM    396 HD23 LEU A 128       4.035   9.392  -1.344  1.00  0.00           H
ATOM    397  N   VAL A 129       8.188  10.488   2.093  1.00 18.42           N
ATOM    398  CA  VAL A 129       8.235  11.190   3.361  1.00 18.44           C
ATOM    399  C   VAL A 129       8.421  12.695   3.121  1.00 18.85           C
ATOM    400  O   VAL A 129       8.978  13.099   2.100  1.00 19.12           O
ATOM    401  CB  VAL A 129       9.267  10.480   4.280  1.00 19.71           C
ATOM    402  CG1 VAL A 129      10.709  10.563   3.742  1.00 19.20           C
ATOM    403  CG2 VAL A 129       9.167  10.903   5.749  1.00 16.64           C
ATOM    404  H   VAL A 129       8.817  10.843   1.373  1.00  0.00           H
ATOM    405  HA  VAL A 129       7.263  11.086   3.828  1.00  0.00           H
ATOM    406  HB  VAL A 129       8.989   9.427   4.289  1.00  0.00           H
ATOM    407 HG11 VAL A 129      11.383   9.915   4.297  1.00  0.00           H
ATOM    408 HG12 VAL A 129      10.769  10.242   2.702  1.00  0.00           H
ATOM    409 HG13 VAL A 129      11.094  11.582   3.789  1.00  0.00           H
ATOM    410 HG21 VAL A 129       9.695  10.219   6.407  1.00  0.00           H
ATOM    411 HG22 VAL A 129       9.587  11.890   5.911  1.00  0.00           H
ATOM    412 HG23 VAL A 129       8.126  10.909   6.069  1.00  0.00           H
ATOM    413  N   ARG A 130       7.956  13.526   4.058  1.00 21.17           N
ATOM    414  CA  ARG A 130       8.297  14.943   4.153  1.00 21.51           C
ATOM    415  C   ARG A 130       9.510  15.087   5.089  1.00 21.74           C
ATOM    416  O   ARG A 130       9.673  14.297   6.018  1.00 18.71           O
ATOM    417  CB  ARG A 130       7.118  15.681   4.827  1.00 24.72           C
ATOM    418  CG  ARG A 130       5.879  15.759   3.927  1.00 26.46           C
ATOM    419  CD  ARG A 130       4.615  16.282   4.622  1.00 30.21           C
ATOM    420  NE  ARG A 130       3.902  15.179   5.281  1.00 33.85           N
ATOM    421  CZ  ARG A 130       2.585  14.955   5.401  1.00 35.23           C
ATOM    422  NH1 ARG A 130       1.671  15.817   4.953  1.00 35.12           N
ATOM    423  NH2 ARG A 130       2.190  13.842   6.005  1.00 31.29           N1+
ATOM    424  H   ARG A 130       7.417  13.134   4.822  1.00  0.00           H
ATOM    425  HA  ARG A 130       8.521  15.369   3.172  1.00  0.00           H
ATOM    426  HB2 ARG A 130       6.869  15.207   5.777  1.00  0.00           H
ATOM    427  HB3 ARG A 130       7.412  16.696   5.074  1.00  0.00           H
ATOM    428  HG2 ARG A 130       6.112  16.389   3.068  1.00  0.00           H
ATOM    429  HG3 ARG A 130       5.672  14.768   3.526  1.00  0.00           H
ATOM    430  HD2 ARG A 130       4.835  17.088   5.322  1.00  0.00           H
ATOM    431  HD3 ARG A 130       3.966  16.698   3.858  1.00  0.00           H
ATOM    432  HE  ARG A 130       4.532  14.366   5.509  1.00  0.00           H
ATOM    433 HH11 ARG A 130       1.935  16.658   4.426  1.00  0.00           H
ATOM    434 HH12 ARG A 130       0.705  15.498   4.836  1.00  0.00           H
ATOM    435 HH21 ARG A 130       2.880  13.207   6.471  1.00  0.00           H
ATOM    436 HH22 ARG A 130       1.228  13.480   6.003  1.00  0.00           H
ATOM    437  N   ASN A 131      10.305  16.157   4.952  1.00 21.83           N
ATOM    438  CA  ASN A 131      11.427  16.487   5.858  1.00 20.92           C
ATOM    439  C   ASN A 131      10.961  16.720   7.314  1.00 21.34           C
ATOM    440  O   ASN A 131      11.683  16.457   8.279  1.00 20.83           O
ATOM    441  CB  ASN A 131      12.236  17.706   5.353  1.00 24.29           C
ATOM    442  CG  ASN A 131      13.084  17.412   4.113  1.00 24.72           C
ATOM    443  OD1 ASN A 131      13.915  16.511   4.116  1.00 26.89           O
ATOM    444  ND2 ASN A 131      12.863  18.121   3.013  1.00 26.08           N
ATOM    445  H   ASN A 131      10.045  16.821   4.220  1.00  0.00           H
ATOM    446  HA  ASN A 131      12.084  15.621   5.877  1.00  0.00           H
ATOM    447  HB2 ASN A 131      11.580  18.559   5.175  1.00  0.00           H
ATOM    448  HB3 ASN A 131      12.940  18.027   6.125  1.00  0.00           H
ATOM    449 HD21 ASN A 131      12.127  18.842   2.970  1.00  0.00           H
ATOM    450 HD22 ASN A 131      13.501  18.037   2.219  1.00  0.00           H
ATOM    451  N   LYS A 132       9.689  17.112   7.454  1.00 21.47           N
ATOM    452  CA  LYS A 132       8.907  17.252   8.679  1.00 21.50           C
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ATOM    453  C   LYS A 132      8.670  15.899   9.376  1.00 20.13           C
ATOM    454  O   LYS A 132      8.542  15.841  10.597  1.00 20.64           O
ATOM    455  CB  LYS A 132      7.526  17.835   8.290  1.00 18.17           C
ATOM    456  CG  LYS A 132      7.577  19.246   7.676  1.00 -1.00          C
ATOM    457  CD  LYS A 132      7.565  19.244   6.143  1.00 -1.00          C
ATOM    458  CE  LYS A 132      7.807  20.621   5.519  1.00 -1.00          C
ATOM    459  NZ  LYS A 132      7.820  20.519   4.052  1.00 -1.00          N1+
ATOM    460  H   LYS A 132      9.199  17.267   6.588  1.00  0.00           H
ATOM    461  HA  LYS A 132      9.421  17.921   9.372  1.00  0.00           H
ATOM    462  HB2 LYS A 132      6.988  17.154   7.629  1.00  0.00           H
ATOM    463  HB3 LYS A 132      6.905  17.879   9.182  1.00  0.00           H
ATOM    464  HG2 LYS A 132      6.717  19.819   8.026  1.00 -1.00          H
ATOM    465  HG3 LYS A 132      8.461  19.764   8.045  1.00 -1.00          H
ATOM    466  HD2 LYS A 132      8.349  18.583   5.787  1.00 -1.00          H
ATOM    467  HD3 LYS A 132      6.615  18.839   5.791  1.00 -1.00          H
ATOM    468  HE2 LYS A 132      7.042  21.326   5.843  1.00 -1.00          H
ATOM    469  HE3 LYS A 132      8.771  21.016   5.843  1.00 -1.00          H
ATOM    470  HZ1 LYS A 132      6.924  20.678   3.610  1.00 -1.00          H
ATOM    471  HZ2 LYS A 132      8.469  21.192   3.629  1.00 -1.00          H
ATOM    472  HZ3 LYS A 132      8.176  19.611   3.762  1.00 -1.00          H
ATOM    473  N   GLU A 133      8.615  14.805   8.609  1.00 20.07           N
ATOM    474  CA  GLU A 133      8.251  13.474   9.076  1.00 17.67           C
ATOM    475  C   GLU A 133      9.482  12.601   9.338  1.00 18.46           C
ATOM    476  O   GLU A 133      9.297  11.454   9.736  1.00 15.28           O
ATOM    477  CB  GLU A 133      7.345  12.808   8.031  1.00 17.59           C
ATOM    478  CG  GLU A 133      5.877  13.199   8.240  1.00 20.24           C
ATOM    479  CD  GLU A 133      5.018  12.827   7.053  1.00 23.42           C
ATOM    480  OE1 GLU A 133      3.898  12.317   7.244  1.00 24.54           O
ATOM    481  OE2 GLU A 133      5.402  13.140   5.907  1.00 22.56           O1-
ATOM    482  H   GLU A 133      8.831  14.886   7.620  1.00  0.00           H
ATOM    483  HA  GLU A 133      7.707  13.522  10.018  1.00  0.00           H
ATOM    484  HB2 GLU A 133      7.679  13.056   7.025  1.00  0.00           H
ATOM    485  HB3 GLU A 133      7.395  11.723   8.101  1.00  0.00           H
ATOM    486  HG2 GLU A 133      5.480  12.732   9.141  1.00  0.00           H
ATOM    487  HG3 GLU A 133      5.794  14.275   8.382  1.00  0.00           H
ATOM    488  N   LEU A 134     10.717  13.133   9.264  1.00 18.65           N
ATOM    489  CA  LEU A 134     11.936  12.496   9.801  1.00 19.98           C
ATOM    490  C   LEU A 134     11.714  12.067  11.257  1.00 18.99           C
ATOM    491  O   LEU A 134     11.931  10.923  11.645  1.00 19.26           O
ATOM    492  CB  LEU A 134     13.132  13.478   9.728  1.00 19.11           C
ATOM    493  CG  LEU A 134     14.460  12.986  10.358  1.00 23.22           C
ATOM    494  CD1 LEU A 134     15.040  11.769   9.619  1.00 21.36           C
ATOM    495  CD2 LEU A 134     15.470  14.138  10.452  1.00 21.65           C
ATOM    496  H   LEU A 134     10.792  14.063   8.874  1.00  0.00           H
ATOM    497  HA  LEU A 134     12.150  11.612   9.198  1.00  0.00           H
ATOM    498  HB2 LEU A 134     13.309  13.764   8.699  1.00  0.00           H
ATOM    499  HB3 LEU A 134     12.857  14.407  10.219  1.00  0.00           H
ATOM    500  HG  LEU A 134     14.288  12.676  11.387  1.00  0.00           H
ATOM    501 HD11 LEU A 134     15.960  11.420  10.086  1.00  0.00           H
ATOM    502 HD12 LEU A 134     14.349  10.926   9.620  1.00  0.00           H
ATOM    503 HD13 LEU A 134     15.269  12.004   8.583  1.00  0.00           H
ATOM    504 HD21 LEU A 134     16.482  13.785  10.637  1.00  0.00           H
ATOM    505 HD22 LEU A 134     15.483  14.741   9.543  1.00  0.00           H
ATOM    506 HD23 LEU A 134     15.239  14.808  11.275  1.00  0.00           H
ATOM    507  N   LYS A 135     11.189  13.024  12.020  1.00 17.87           N
ATOM    508  CA  LYS A 135     10.898  13.010  13.438  1.00 18.77           C
ATOM    509  C   LYS A 135      9.833  11.964  13.838  1.00 18.88           C
ATOM    510  O   LYS A 135      9.709  11.646  15.021  1.00 18.40           O
ATOM    511  CB  LYS A 135     10.471  14.448  13.806  1.00 18.36           C
ATOM    512  CG  LYS A 135     11.542  15.527  13.514  1.00 19.77           C
ATOM    513  CD  LYS A 135     11.511  16.206  12.120  1.00 16.28           C
ATOM    514  CE  LYS A 135     12.873  16.856  11.805  1.00 18.85           C
ATOM    515  NZ  LYS A 135     12.966  17.519  10.492  1.00 18.17           N1+
ATOM    516  H   LYS A 135     10.979  13.889  11.549  1.00  0.00           H
ATOM    517  HA  LYS A 135     11.815  12.760  13.970  1.00  0.00           H
ATOM    518  HB2 LYS A 135      9.550  14.725  13.304  1.00  0.00           H
ATOM    519  HB3 LYS A 135     10.246  14.462  14.873  1.00  0.00           H
ATOM    520  HG2 LYS A 135     11.414  16.322  14.246  1.00  0.00           H
ATOM    521  HG3 LYS A 135     12.528  15.106  13.715  1.00  0.00           H
ATOM    522  HD2 LYS A 135     11.253  15.503  11.333  1.00  0.00           H
ATOM    523  HD3 LYS A 135     10.719  16.956  12.106  1.00  0.00           H
ATOM    524  HE2 LYS A 135     13.108  17.593  12.569  1.00  0.00           H
ATOM    525  HE3 LYS A 135     13.657  16.108  11.859  1.00  0.00           H
ATOM    526  HZ1 LYS A 135     13.968  17.690  10.299  1.00  0.00           H
ATOM    527  HZ2 LYS A 135     12.588  16.986   9.717  1.00  0.00           H
ATOM    528  HZ3 LYS A 135     12.491  18.421  10.533  1.00  0.00           H
ATOM    529  N   GLY A 136      9.124  11.380  12.864  1.00 19.43           N
ATOM    530  CA  GLY A 136      8.199  10.265  13.023  1.00 17.22           C
ATOM    531  C   GLY A 136      8.719   9.007  12.317  1.00 19.59           C
ATOM    532  O   GLY A 136      8.516   7.897  12.804  1.00 18.34           O
ATOM    533  H   GLY A 136      9.297  11.705  11.923  1.00  0.00           H
ATOM    534  HA2 GLY A 136      7.995  10.041  14.072  1.00  0.00           H
ATOM    535  HA3 GLY A 136      7.248  10.545  12.570  1.00  0.00           H
ATOM    536  N   LEU A 137      9.424   9.143  11.186  1.00 18.36           N
ATOM    537  CA  LEU A 137     10.045   8.059  10.423  1.00 21.19           C
ATOM    538  C   LEU A 137     11.149   7.343  11.204  1.00 22.14           C
ATOM    539  O   LEU A 137     11.344   6.142  11.028  1.00 24.02           O
ATOM    540  CB  LEU A 137     10.612   8.624   9.105  1.00 21.04           C
ATOM    541  CG  LEU A 137     11.201   7.579   8.136  1.00 21.35           C
ATOM    542  CD1 LEU A 137     10.124   6.637   7.571  1.00 23.22           C
ATOM    543  CD2 LEU A 137     11.996   8.273   7.029  1.00 20.28           C
ATOM    544  H   LEU A 137      9.512  10.076  10.785  1.00  0.00           H
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ATOM    545  HA  LEU A 137       9.284   7.312  10.225  1.00  0.00           H
ATOM    546  HB2 LEU A 137       9.842   9.183   8.579  1.00  0.00           H
ATOM    547  HB3 LEU A 137      11.386   9.353   9.350  1.00  0.00           H
ATOM    548  HG  LEU A 137      11.926   6.964   8.664  1.00  0.00           H
ATOM    549 HD11 LEU A 137      10.570   5.856   6.956  1.00  0.00           H
ATOM    550 HD12 LEU A 137       9.574   6.124   8.356  1.00  0.00           H
ATOM    551 HD13 LEU A 137       9.397   7.179   6.965  1.00  0.00           H
ATOM    552 HD21 LEU A 137      12.520   7.549   6.417  1.00  0.00           H
ATOM    553 HD22 LEU A 137      11.353   8.842   6.365  1.00  0.00           H
ATOM    554 HD23 LEU A 137      12.751   8.946   7.437  1.00  0.00           H
ATOM    555  N   LEU A 138     11.840   8.049  12.102  1.00 21.78           N
ATOM    556  CA  LEU A 138     12.830   7.472  13.001  1.00 22.46           C
ATOM    557  C   LEU A 138     12.245   6.377  13.919  1.00 21.43           C
ATOM    558  O   LEU A 138     12.979   5.446  14.242  1.00 22.46           O
ATOM    559  CB  LEU A 138     13.519   8.595  13.794  1.00 19.96           C
ATOM    560  CG  LEU A 138     14.461   9.476  12.935  1.00 22.18           C
ATOM    561 CD1 LEU A 138     14.664  10.847  13.591  1.00 21.53           C
ATOM    562 CD2 LEU A 138     15.811   8.807  12.653  1.00 21.97           C
ATOM    563  H   LEU A 138     11.696   9.057  12.125  1.00  0.00           H
ATOM    564  HA  LEU A 138     13.577   6.975  12.382  1.00  0.00           H
ATOM    565  HB2 LEU A 138     12.746   9.216  14.250  1.00  0.00           H
ATOM    566  HB3 LEU A 138     14.078   8.173  14.629  1.00  0.00           H
ATOM    567  HG  LEU A 138     14.003   9.650  11.963  1.00  0.00           H
ATOM    568 HD11 LEU A 138     15.417  11.440  13.071  1.00  0.00           H
ATOM    569 HD12 LEU A 138     13.739  11.422  13.592  1.00  0.00           H
ATOM    570 HD13 LEU A 138     14.969  10.746  14.630  1.00  0.00           H
ATOM    571 HD21 LEU A 138     16.409   9.414  11.972  1.00  0.00           H
ATOM    572 HD22 LEU A 138     16.380   8.691  13.570  1.00  0.00           H
ATOM    573 HD23 LEU A 138     15.691   7.830  12.185  1.00  0.00           H
ATOM    574  N   SER A 139     10.934   6.411  14.228  1.00 20.82           N
ATOM    575  CA  SER A 139     10.205   5.326  14.896  1.00 20.60           C
ATOM    576  C   SER A 139     10.132   4.097  13.979  1.00 21.37           C
ATOM    577  O   SER A 139     10.468   2.991  14.402  1.00 21.68           O
ATOM    578  CB  SER A 139      8.767   5.784  15.269  1.00 19.65           C
ATOM    579  OG  SER A 139      8.011   4.787  15.955  1.00 22.99           O
ATOM    580  H   SER A 139     10.388   7.188  13.881  1.00  0.00           H
ATOM    581  HA  SER A 139     10.750   5.053  15.802  1.00  0.00           H
ATOM    582  HB2 SER A 139      8.805   6.684  15.885  1.00  0.00           H
ATOM    583  HB3 SER A 139      8.199   6.044  14.377  1.00  0.00           H
ATOM    584  HG  SER A 139      7.805   4.090  15.327  1.00  0.00           H
ATOM    585  N   SER A 140      9.737   4.305  12.713  1.00 20.33           N
ATOM    586  CA  SER A 140      9.587   3.269  11.701  1.00 20.38           C
ATOM    587  C   SER A 140     10.937   2.582  11.454  1.00 20.79           C
ATOM    588  O   SER A 140     11.015   1.357  11.519  1.00 19.68           O
ATOM    589  CB  SER A 140      9.071   3.897  10.389  1.00 18.81           C
ATOM    590  OG  SER A 140      8.029   4.842  10.595  1.00 20.17           O
ATOM    591  H   SER A 140      9.491   5.238  12.413  1.00  0.00           H
ATOM    592  HA  SER A 140      8.869   2.534  12.068  1.00  0.00           H
ATOM    593  HB2 SER A 140      9.871   4.380   9.828  1.00  0.00           H
ATOM    594  HB3 SER A 140      8.694   3.101   9.746  1.00  0.00           H
ATOM    595  HG  SER A 140      7.563   4.901   9.755  1.00  0.00           H
ATOM    596  N   ILE A 141     12.001   3.377  11.253  1.00 20.52           N
ATOM    597  CA  ILE A 141     13.370   2.909  11.071  1.00 22.74           C
ATOM    598  C   ILE A 141     13.849   2.124  12.301  1.00 22.91           C
ATOM    599  O   ILE A 141     14.191   0.957  12.137  1.00 25.89           O
ATOM    600  CB  ILE A 141     14.334   4.066  10.685  1.00 21.78           C
ATOM    601 CG1 ILE A 141     13.937   4.727   9.342  1.00 21.69           C
ATOM    602 CG2 ILE A 141     15.791   3.563  10.596  1.00 19.44           C
ATOM    603 CD1 ILE A 141     14.589   6.100   9.104  1.00 20.88           C
ATOM    604  H   ILE A 141     11.837   4.381  11.238  1.00  0.00           H
ATOM    605  HA  ILE A 141     13.362   2.201  10.243  1.00  0.00           H
ATOM    606  HB  ILE A 141     14.280   4.824  11.468  1.00  0.00           H
ATOM    607 HG12 ILE A 141     14.188   4.061   8.514  1.00  0.00           H
ATOM    608 HG13 ILE A 141     12.858   4.858   9.283  1.00  0.00           H
ATOM    609 HG21 ILE A 141     16.462   4.324  10.213  1.00  0.00           H
ATOM    610 HG22 ILE A 141     16.189   3.254  11.562  1.00  0.00           H
ATOM    611 HG23 ILE A 141     15.865   2.701   9.931  1.00  0.00           H
ATOM    612 HD11 ILE A 141     14.262   6.516   8.151  1.00  0.00           H
ATOM    613 HD12 ILE A 141     14.317   6.811   9.885  1.00  0.00           H
ATOM    614 HD13 ILE A 141     15.676   6.041   9.061  1.00  0.00           H
ATOM    615  N   LYS A 142     13.859   2.719  13.510  1.00 22.93           N
ATOM    616  CA  LYS A 142     14.374   2.072  14.726  1.00 24.30           C
ATOM    617  C   LYS A 142     13.665   0.748  15.076  1.00 23.46           C
ATOM    618  O   LYS A 142     14.305  -0.141  15.640  1.00 20.35           O
ATOM    619  CB  LYS A 142     14.376   3.031  15.948  1.00 26.67           C
ATOM    620  CG  LYS A 142     15.725   3.731  16.237  1.00 31.03           C
ATOM    621  CD  LYS A 142     15.974   5.050  15.482  1.00 35.34           C
ATOM    622  CE  LYS A 142     17.341   5.671  15.848  1.00 39.87           C
ATOM    623  NZ  LYS A 142     17.538   7.002  15.250  1.00 41.29          N1+
ATOM    624  H   LYS A 142     13.476   3.655  13.602  1.00  0.00           H
ATOM    625  HA  LYS A 142     15.404   1.786  14.508  1.00  0.00           H
ATOM    626  HB2 LYS A 142     13.548   3.737  15.912  1.00  0.00           H
ATOM    627  HB3 LYS A 142     14.162   2.442  16.842  1.00  0.00           H
ATOM    628  HG2 LYS A 142     15.754   3.953  17.305  1.00  0.00           H
ATOM    629  HG3 LYS A 142     16.546   3.034  16.064  1.00  0.00           H
ATOM    630  HD2 LYS A 142     15.909   4.873  14.408  1.00  0.00           H
ATOM    631  HD3 LYS A 142     15.176   5.752  15.730  1.00  0.00           H
ATOM    632  HE2 LYS A 142     17.431   5.775  16.930  1.00  0.00           H
ATOM    633  HE3 LYS A 142     18.150   5.012  15.530  1.00  0.00           H
ATOM    634  HZ1 LYS A 142     18.497   7.323  15.334  1.00  0.00           H
ATOM    635  HZ2 LYS A 142     17.309   7.016  14.272  1.00  0.00           H
ATOM    636  HZ3 LYS A 142     16.930   7.688  15.727  1.00  0.00           H
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ATOM    637  N   TYR A 143      12.383   0.594  14.717  1.00 22.06           N
ATOM    638  CA  TYR A 143      11.684  -0.681  14.818  1.00 22.59           C
ATOM    639  C   TYR A 143      12.116  -1.641  13.689  1.00 21.72           C
ATOM    640  O   TYR A 143      12.695  -2.684  13.997  1.00 22.10           O
ATOM    641  CB  TYR A 143      10.149  -0.472  14.836  1.00 20.02           C
ATOM    642  CG  TYR A 143       9.519  -0.606  16.217  1.00 21.94           C
ATOM    643  CD1 TYR A 143       9.740  -1.782  16.962  1.00 23.77           C
ATOM    644  CD2 TYR A 143       8.685   0.398  16.759  1.00 22.49           C
ATOM    645  CE1 TYR A 143       9.095  -1.987  18.191  1.00 22.37           C
ATOM    646  CE2 TYR A 143       8.016   0.180  17.986  1.00 23.21           C
ATOM    647  CZ  TYR A 143       8.201  -1.027  18.692  1.00 22.87           C
ATOM    648  OH  TYR A 143       7.516  -1.287  19.845  1.00 21.97           O
ATOM    649  H   TYR A 143      11.894   1.383  14.308  1.00  0.00           H
ATOM    650  HA  TYR A 143      11.988  -1.157  15.752  1.00  0.00           H
ATOM    651  HB2 TYR A 143       9.874   0.481  14.385  1.00  0.00           H
ATOM    652  HB3 TYR A 143       9.659  -1.225  14.219  1.00  0.00           H
ATOM    653  HD1 TYR A 143      10.377  -2.565  16.584  1.00  0.00           H
ATOM    654  HD2 TYR A 143       8.532   1.326  16.226  1.00  0.00           H
ATOM    655  HE1 TYR A 143       9.265  -2.904  18.734  1.00  0.00           H
ATOM    656  HE2 TYR A 143       7.352   0.932  18.384  1.00  0.00           H
ATOM    657  HH  TYR A 143       7.734  -2.187  20.181  1.00  0.00           H
ATOM    658  N   VAL A 144      11.900  -1.296  12.404  1.00 22.79           N
ATOM    659  CA  VAL A 144      12.214  -2.115  11.213  1.00 22.01           C
ATOM    660  C   VAL A 144      13.668  -2.627  11.192  1.00 23.35           C
ATOM    661  O   VAL A 144      13.928  -3.770  10.811  1.00 21.03           O
ATOM    662  CB  VAL A 144      11.836  -1.331   9.919  1.00 21.23           C
ATOM    663  CG1 VAL A 144      12.323  -1.972   8.601  1.00 23.80           C
ATOM    664  CG2 VAL A 144      10.321  -1.073   9.798  1.00 17.15           C
ATOM    665  H   VAL A 144      11.528  -0.369  12.216  1.00  0.00           H
ATOM    666  HA  VAL A 144      11.596  -3.011  11.267  1.00  0.00           H
ATOM    667  HB  VAL A 144      12.332  -0.363   9.993  1.00  0.00           H
ATOM    668 HG11 VAL A 144      11.979  -1.404   7.735  1.00  0.00           H
ATOM    669 HG12 VAL A 144      13.410  -2.009   8.528  1.00  0.00           H
ATOM    670 HG13 VAL A 144      11.951  -2.991   8.489  1.00  0.00           H
ATOM    671 HG21 VAL A 144      10.127  -0.260   9.099  1.00  0.00           H
ATOM    672 HG22 VAL A 144       9.798  -1.947   9.413  1.00  0.00           H
ATOM    673 HG23 VAL A 144       9.857  -0.803  10.747  1.00  0.00           H
ATOM    674  N   GLU A 145      14.606  -1.797  11.658  1.00 23.20           N
ATOM    675  CA  GLU A 145      16.032  -2.076  11.721  1.00 23.64           C
ATOM    676  C   GLU A 145      16.365  -3.330  12.530  1.00 24.71           C
ATOM    677  O   GLU A 145      17.193  -4.145  12.132  1.00 23.64           O
ATOM    678  CB  GLU A 145      16.735  -0.862  12.352  1.00 25.26           C
ATOM    679  CG  GLU A 145      17.413  -0.013  11.274  1.00 25.70           C
ATOM    680  CD  GLU A 145      18.702  -0.666  10.799  1.00 24.54           C
ATOM    681  OE1 GLU A 145      19.468  -1.140  11.664  1.00 27.65           O
ATOM    682  OE2 GLU A 145      18.944  -0.700   9.580  1.00 28.24           O1-
ATOM    683  H   GLU A 145      14.313  -0.854  11.907  1.00  0.00           H
ATOM    684  HA  GLU A 145      16.367  -2.222  10.702  1.00  0.00           H
ATOM    685  HB2 GLU A 145      16.058  -0.265  12.954  1.00  0.00           H
ATOM    686  HB3 GLU A 145      17.477  -1.174  13.085  1.00  0.00           H
ATOM    687  HG2 GLU A 145      16.745   0.156  10.428  1.00  0.00           H
ATOM    688  HG3 GLU A 145      17.637   0.965  11.679  1.00  0.00           H
ATOM    689  N   ASN A 146      15.728  -3.452  13.691  1.00 25.05           N
ATOM    690  CA  ASN A 146      16.047  -4.484  14.669  1.00 28.02           C
ATOM    691  C   ASN A 146      15.030  -5.623  14.546  1.00 26.91           C
ATOM    692  O   ASN A 146      15.400  -6.781  14.720  1.00 26.71           O
ATOM    693  CB  ASN A 146      16.026  -3.865  16.083  1.00 31.59           C
ATOM    694  CG  ASN A 146      17.030  -2.709  16.233  1.00 35.43           C
ATOM    695  OD1 ASN A 146      18.219  -2.837  15.941  1.00 38.91           O
ATOM    696  ND2 ASN A 146      16.566  -1.520  16.593  1.00 38.29           N
ATOM    697  H   ASN A 146      14.986  -2.793  13.891  1.00  0.00           H
ATOM    698  HA  ASN A 146      17.040  -4.904  14.492  1.00  0.00           H
ATOM    699  HB2 ASN A 146      15.020  -3.523  16.333  1.00  0.00           H
ATOM    700  HB3 ASN A 146      16.279  -4.630  16.819  1.00  0.00           H
ATOM    701 HD21 ASN A 146      15.564  -1.338  16.631  1.00  0.00           H
ATOM    702 HD22 ASN A 146      17.201  -0.753  16.721  1.00  0.00           H
ATOM    703  N   LYS A 147      13.780  -5.317  14.158  1.00 25.17           N
ATOM    704  CA  LYS A 147      12.721  -6.298  13.936  1.00 25.56           C
ATOM    705  C   LYS A 147      12.930  -7.113  12.647  1.00 23.80           C
ATOM    706  O   LYS A 147      12.408  -8.227  12.569  1.00 24.25           O
ATOM    707  CB  LYS A 147      11.352  -5.582  13.870  1.00 26.51           C
ATOM    708  CG  LYS A 147      10.899  -5.008  15.228  1.00 27.65           C
ATOM    709  CD  LYS A 147      10.326  -6.085  16.161  1.00 29.92           C
ATOM    710  CE  LYS A 147      10.186  -5.675  17.631  1.00 29.66           C
ATOM    711  NZ  LYS A 147       9.873  -6.822  18.497  1.00 34.14           N1+
ATOM    712  H   LYS A 147      13.530  -4.340  14.034  1.00  0.00           H
ATOM    713  HA  LYS A 147      12.729  -7.006  14.764  1.00  0.00           H
ATOM    714  HB2 LYS A 147      11.393  -4.785  13.126  1.00  0.00           H
ATOM    715  HB3 LYS A 147      10.581  -6.267  13.510  1.00  0.00           H
ATOM    716  HG2 LYS A 147      11.729  -4.496  15.715  1.00  0.00           H
ATOM    717  HG3 LYS A 147      10.138  -4.250  15.052  1.00  0.00           H
ATOM    718  HD2 LYS A 147       9.355  -6.393  15.784  1.00  0.00           H
ATOM    719  HD3 LYS A 147      10.973  -6.953  16.118  1.00  0.00           H
ATOM    720  HE2 LYS A 147      11.110  -5.226  17.997  1.00  0.00           H
ATOM    721  HE3 LYS A 147       9.398  -4.932  17.748  1.00  0.00           H
ATOM    722  HZ1 LYS A 147       9.809  -6.422  19.452  1.00  0.00           H
ATOM    723  HZ2 LYS A 147       8.941  -7.174  18.312  1.00  0.00           H
ATOM    724  HZ3 LYS A 147      10.579  -7.563  18.425  1.00  0.00           H
ATOM    725  N   ILE A 148      13.721  -6.615  11.681  1.00 24.02           N
ATOM    726  CA  ILE A 148      14.149  -7.355  10.495  1.00 21.98           C
ATOM    727  C   ILE A 148      15.575  -7.029  10.013  1.00 23.64           C
ATOM    728  O   ILE A 148      16.371  -7.957   9.877  1.00 24.28           O
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ATOM    729  CB  ILE A 148      13.062  -7.409   9.389  1.00 21.36           C
ATOM    730  CG1 ILE A 148      13.501  -8.290   8.193  1.00 23.00           C
ATOM    731  CG2 ILE A 148      12.609  -6.011   8.928  1.00 19.78           C
ATOM    732  CD1 ILE A 148      12.361  -9.065   7.526  1.00 19.41           C
ATOM    733  H   ILE A 148      14.079  -5.674  11.792  1.00  0.00           H
ATOM    734  HA  ILE A 148      14.242  -8.391  10.823  1.00  0.00           H
ATOM    735  HB  ILE A 148      12.196  -7.890   9.839  1.00  0.00           H
ATOM    736 HG12 ILE A 148      14.036  -7.690   7.454  1.00  0.00           H
ATOM    737 HG13 ILE A 148      14.212  -9.039   8.538  1.00  0.00           H
ATOM    738 HG21 ILE A 148      11.857  -6.081   8.152  1.00  0.00           H
ATOM    739 HG22 ILE A 148      12.170  -5.442   9.747  1.00  0.00           H
ATOM    740 HG23 ILE A 148      13.432  -5.429   8.514  1.00  0.00           H
ATOM    741 HD11 ILE A 148      12.723  -9.611   6.654  1.00  0.00           H
ATOM    742 HD12 ILE A 148      11.943  -9.800   8.213  1.00  0.00           H
ATOM    743 HD13 ILE A 148      11.554  -8.417   7.203  1.00  0.00           H
ATOM    744  N   ASN A 149      15.893  -5.761   9.707  1.00 22.03           N
ATOM    745  CA  ASN A 149      17.009  -5.365   8.817  1.00 24.97           C
ATOM    746  C   ASN A 149      18.393  -5.920   9.206  1.00 27.08           C
ATOM    747  O   ASN A 149      19.130  -6.390   8.345  1.00 26.94           O
ATOM    748  CB  ASN A 149      17.078  -3.826   8.686  1.00 24.58           C
ATOM    749  CG  ASN A 149      17.757  -3.331   7.406  1.00 26.06           C
ATOM    750  OD1 ASN A 149      17.556  -3.897   6.332  1.00 24.50           O
ATOM    751  ND2 ASN A 149      18.546  -2.270   7.488  1.00 25.60           N
ATOM    752  H   ASN A 149      15.182  -5.059   9.888  1.00  0.00           H
ATOM    753  HA  ASN A 149      16.755  -5.793   7.846  1.00  0.00           H
ATOM    754  HB2 ASN A 149      16.076  -3.395   8.702  1.00  0.00           H
ATOM    755  HB3 ASN A 149      17.631  -3.421   9.532  1.00  0.00           H
ATOM    756 HD21 ASN A 149      18.689  -1.743   8.372  1.00  0.00           H
ATOM    757 HD22 ASN A 149      18.978  -1.878   6.650  1.00  0.00           H
ATOM    758  N   LYS A 150      18.729  -5.930  10.501  1.00 30.35           N
ATOM    759  CA  LYS A 150      20.000  -6.460  11.003  1.00 31.86           C
ATOM    760  C   LYS A 150      20.080  -8.001  10.981  1.00 30.69           C
ATOM    761  O   LYS A 150      21.164  -8.551  11.158  1.00 31.66           O
ATOM    762  CB  LYS A 150      20.199  -5.995  12.458  1.00 34.31           C
ATOM    763  CG  LYS A 150      20.574  -4.512  12.575  1.00 37.03           C
ATOM    764  CD  LYS A 150      20.904  -4.137  14.025  1.00 39.82           C
ATOM    765  CE  LYS A 150      21.228  -2.651  14.209  1.00 41.88           C
ATOM    766  NZ  LYS A 150      20.031  -1.820  14.034  1.00 43.28           N1+
ATOM    767  H   LYS A 150      18.101  -5.465  11.152  1.00  0.00           H
ATOM    768  HA  LYS A 150      20.820  -6.087  10.384  1.00  0.00           H
ATOM    769  HB2 LYS A 150      19.303  -6.209  13.045  1.00  0.00           H
ATOM    770  HB3 LYS A 150      21.001  -6.577  12.916  1.00  0.00           H
ATOM    771  HG2 LYS A 150      21.437  -4.301  11.939  1.00  0.00           H
ATOM    772  HG3 LYS A 150      19.764  -3.894  12.187  1.00  0.00           H
ATOM    773  HD2 LYS A 150      20.081  -4.426  14.682  1.00  0.00           H
ATOM    774  HD3 LYS A 150      21.765  -4.724  14.349  1.00  0.00           H
ATOM    775  HE2 LYS A 150      21.606  -2.491  15.219  1.00  0.00           H
ATOM    776  HE3 LYS A 150      22.011  -2.330  13.522  1.00  0.00           H
ATOM    777  HZ1 LYS A 150      20.203  -0.875  14.322  1.00  0.00           H
ATOM    778  HZ2 LYS A 150      19.793  -1.733  13.021  1.00  0.00           H
ATOM    779  HZ3 LYS A 150      19.246  -2.214  14.543  1.00  0.00           H
ATOM    780  N   LYS A 151      18.950  -8.693  10.794  1.00 29.61           N
ATOM    781  CA  LYS A 151      18.883 -10.144  10.642  1.00 28.95           C
ATOM    782  C   LYS A 151      18.801 -10.484   9.140  1.00 28.12           C
ATOM    783  O   LYS A 151      19.462 -11.416   8.688  1.00 26.36           O
ATOM    784  CB  LYS A 151      17.610 -10.670  11.357  1.00 30.41           C
ATOM    785  CG  LYS A 151      17.561 -10.343  12.870  1.00 32.64           C
ATOM    786  CD  LYS A 151      16.274 -10.792  13.595  1.00 35.44           C
ATOM    787  CE  LYS A 151      15.031 -10.007  13.147  1.00 35.31           C
ATOM    788  NZ  LYS A 151      13.827 -10.310  13.933  1.00 36.53           N1+
ATOM    789  H   LYS A 151      18.109  -8.166  10.590  1.00  0.00           H
ATOM    790  HA  LYS A 151      19.764 -10.631  11.065  1.00  0.00           H
ATOM    791  HB2 LYS A 151      16.724 -10.276  10.862  1.00  0.00           H
ATOM    792  HB3 LYS A 151      17.561 -11.752  11.227  1.00  0.00           H
ATOM    793  HG2 LYS A 151      18.420 -10.813  13.351  1.00  0.00           H
ATOM    794  HG3 LYS A 151      17.688  -9.271  13.027  1.00  0.00           H
ATOM    795  HD2 LYS A 151      16.118 -11.863  13.451  1.00  0.00           H
ATOM    796  HD3 LYS A 151      16.416 -10.645  14.667  1.00  0.00           H
ATOM    797  HE2 LYS A 151      15.217  -8.934  13.197  1.00  0.00           H
ATOM    798  HE3 LYS A 151      14.807 -10.244  12.107  1.00  0.00           H
ATOM    799  HZ1 LYS A 151      13.039  -9.947  13.411  1.00  0.00           H
ATOM    800  HZ2 LYS A 151      13.694 -11.308  14.084  1.00  0.00           H
ATOM    801  HZ3 LYS A 151      13.792  -9.829  14.851  1.00  0.00           H
ATOM    802  N   PHE A 152      18.008  -9.726   8.366  1.00 26.10           N
ATOM    803  CA  PHE A 152      17.729  -9.950   6.947  1.00 27.49           C
ATOM    804  C   PHE A 152      17.742  -8.595   6.213  1.00 27.68           C
ATOM    805  O   PHE A 152      16.699  -7.938   6.169  1.00 27.95           O
ATOM    806  CB  PHE A 152      16.400 -10.724   6.785  1.00 28.65           C
ATOM    807  CG  PHE A 152      16.335 -12.037   7.549  1.00 30.27           C
ATOM    808  CD1 PHE A 152      17.040 -13.168   7.086  1.00 29.39           C
ATOM    809  CD2 PHE A 152      15.627 -12.106   8.767  1.00 29.26           C
ATOM    810  CE1 PHE A 152      17.031 -14.363   7.832  1.00 29.40           C
ATOM    811  CE2 PHE A 152      15.651 -13.289   9.527  1.00 30.84           C
ATOM    812  CZ  PHE A 152      16.340 -14.422   9.056  1.00 29.38           C
ATOM    813  H   PHE A 152      17.505  -8.962   8.809  1.00  0.00           H
ATOM    814  HA  PHE A 152      18.501 -10.589   6.520  1.00  0.00           H
ATOM    815  HB2 PHE A 152      15.561 -10.100   7.089  1.00  0.00           H
ATOM    816  HB3 PHE A 152      16.237 -10.924   5.727  1.00  0.00           H
ATOM    817  HD1 PHE A 152      17.608 -13.115   6.169  1.00  0.00           H
ATOM    818  HD2 PHE A 152      15.091 -11.244   9.138  1.00  0.00           H
ATOM    819  HE1 PHE A 152      17.579 -15.224   7.478  1.00  0.00           H
ATOM    820  HE2 PHE A 152      15.143 -13.327  10.476  1.00  0.00           H
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ATOM    821  HZ  PHE A 152      16.345 -15.331   9.642  1.00  0.00           H
ATOM    822  N   PRO A 153      18.898  -8.133   5.684  1.00 27.92           N
ATOM    823  CA  PRO A 153      19.053  -6.757   5.191  1.00 26.86           C
ATOM    824  C   PRO A 153      18.482  -6.506   3.786  1.00 25.61           C
ATOM    825  O   PRO A 153      18.483  -7.401   2.929  1.00 23.81           O
ATOM    826  CB  PRO A 153      20.571  -6.514   5.210  1.00 28.24           C
ATOM    827  CG  PRO A 153      21.183  -7.893   5.014  1.00 29.29           C
ATOM    828  CD  PRO A 153      20.183  -8.838   5.683  1.00 28.25           C
ATOM    829  HA  PRO A 153      18.571  -6.077   5.888  1.00  0.00           H
ATOM    830  HB2 PRO A 153      20.912  -5.791   4.467  1.00  0.00           H
ATOM    831  HB3 PRO A 153      20.855  -6.125   6.189  1.00  0.00           H
ATOM    832  HG2 PRO A 153      21.246  -8.115   3.948  1.00  0.00           H
ATOM    833  HG3 PRO A 153      22.186  -7.974   5.433  1.00  0.00           H
ATOM    834  HD2 PRO A 153      20.131  -9.791   5.157  1.00  0.00           H
ATOM    835  HD3 PRO A 153      20.482  -9.032   6.716  1.00  0.00           H
ATOM    836  N   TYR A 154      18.066  -5.250   3.565  1.00 23.90           N
ATOM    837  CA  TYR A 154      17.638  -4.631   2.306  1.00 25.51           C
ATOM    838  C   TYR A 154      18.066  -3.148   2.264  1.00 24.53           C
ATOM    839  O   TYR A 154      18.274  -2.564   3.332  1.00 23.72           O
ATOM    840  CB  TYR A 154      16.120  -4.825   2.080  1.00 24.29           C
ATOM    841  CG  TYR A 154      15.755  -6.208   1.581  1.00 25.02           C
ATOM    842  CD1 TYR A 154      16.068  -6.576   0.256  1.00 24.50           C
ATOM    843  CD2 TYR A 154      15.160  -7.146   2.448  1.00 23.16           C
ATOM    844  CE1 TYR A 154      15.829  -7.885  -0.192  1.00 26.82           C
ATOM    845  CE2 TYR A 154      14.924  -8.458   2.002  1.00 25.35           C
ATOM    846  CZ  TYR A 154      15.279  -8.829   0.689  1.00 26.98           C
ATOM    847  OH  TYR A 154      15.214 -10.129   0.296  1.00 26.94           O
ATOM    848  H   TYR A 154      18.097  -4.609   4.355  1.00  0.00           H
ATOM    849  HA  TYR A 154      18.181  -5.135   1.506  1.00  0.00           H
ATOM    850  HB2 TYR A 154      15.572  -4.606   2.998  1.00  0.00           H
ATOM    851  HB3 TYR A 154      15.744  -4.106   1.350  1.00  0.00           H
ATOM    852  HD1 TYR A 154      16.523  -5.866  -0.417  1.00  0.00           H
ATOM    853  HD2 TYR A 154      14.926  -6.876   3.470  1.00  0.00           H
ATOM    854  HE1 TYR A 154      16.095  -8.167  -1.202  1.00  0.00           H
ATOM    855  HE2 TYR A 154      14.509  -9.179   2.691  1.00  0.00           H
ATOM    856  HH  TYR A 154      14.861 -10.724   0.992  1.00  0.00           H
ATOM    857  N   PRO A 155      18.202  -2.521   1.073  1.00 24.68           N
ATOM    858  CA  PRO A 155      18.446  -1.075   0.933  1.00 23.85           C
ATOM    859  C   PRO A 155      17.152  -0.266   1.158  1.00 24.27           C
ATOM    860  O   PRO A 155      16.052  -0.806   1.001  1.00 23.44           O
ATOM    861  CB  PRO A 155      18.945  -0.910  -0.510  1.00 23.62           C
ATOM    862  CG  PRO A 155      18.298  -2.055  -1.272  1.00 23.92           C
ATOM    863  CD  PRO A 155      18.154  -3.170  -0.240  1.00 24.00           C
ATOM    864  HA  PRO A 155      19.210  -0.750   1.639  1.00  0.00           H
ATOM    865  HB2 PRO A 155      18.721   0.065  -0.948  1.00  0.00           H
ATOM    866  HB3 PRO A 155      20.027  -1.023  -0.545  1.00  0.00           H
ATOM    867  HG2 PRO A 155      17.314  -1.745  -1.626  1.00  0.00           H
ATOM    868  HG3 PRO A 155      18.878  -2.358  -2.145  1.00  0.00           H
ATOM    869  HD2 PRO A 155      17.223  -3.710  -0.394  1.00  0.00           H
ATOM    870  HD3 PRO A 155      18.982  -3.874  -0.333  1.00  0.00           H
ATOM    871  N   TRP A 156      17.275   1.017   1.519  1.00 23.62           N
ATOM    872  CA  TRP A 156      16.153   1.906   1.825  1.00 24.34           C
ATOM    873  C   TRP A 156      16.159   3.117   0.882  1.00 24.58           C
ATOM    874  O   TRP A 156      17.052   3.960   0.943  1.00 24.78           O
ATOM    875  CB  TRP A 156      16.203   2.310   3.317  1.00 22.47           C
ATOM    876  CG  TRP A 156      14.882   2.609   3.969  1.00 23.60           C
ATOM    877  CD1 TRP A 156      13.860   3.314   3.424  1.00 23.21           C
ATOM    878  CD2 TRP A 156      14.397   2.158   5.274  1.00 24.20           C
ATOM    879  NE1 TRP A 156      12.788   3.321   4.292  1.00 23.02           N
ATOM    880  CE3 TRP A 156      14.937   1.381   6.328  1.00 22.06           C
ATOM    881  CE2 TRP A 156      13.062   2.630   5.446  1.00 24.32           C
ATOM    882  CZ3 TRP A 156      14.178   1.079   7.479  1.00 23.14           C
ATOM    883  CZ2 TRP A 156      12.304   2.357   6.592  1.00 23.17           C
ATOM    884  CH2 TRP A 156      12.860   1.562   7.608  1.00 23.12           C
ATOM    885  H   TRP A 156      18.214   1.400   1.615  1.00  0.00           H
ATOM    886  HA  TRP A 156      15.220   1.369   1.665  1.00  0.00           H
ATOM    887  HB2 TRP A 156      16.641   1.490   3.887  1.00  0.00           H
ATOM    888  HB3 TRP A 156      16.868   3.157   3.472  1.00  0.00           H
ATOM    889  HD1 TRP A 156      13.880   3.789   2.454  1.00  0.00           H
ATOM    890  HE1 TRP A 156      11.888   3.782   4.084  1.00  0.00           H
ATOM    891  HE3 TRP A 156      15.942   0.993   6.236  1.00  0.00           H
ATOM    892  HZ3 TRP A 156      14.609   0.463   8.256  1.00  0.00           H
ATOM    893  HZ2 TRP A 156      11.302   2.744   6.673  1.00  0.00           H
ATOM    894  HH2 TRP A 156      12.269   1.321   8.477  1.00  0.00           H
ATOM    895  N   VAL A 157      15.141   3.210   0.023  1.00 24.62           N
ATOM    896  CA  VAL A 157      14.918   4.312  -0.900  1.00 22.16           C
ATOM    897  C   VAL A 157      13.960   5.302  -0.212  1.00 21.82           C
ATOM    898  O   VAL A 157      12.780   5.011   0.006  1.00 22.52           O
ATOM    899  CB  VAL A 157      14.288   3.737  -2.199  1.00 20.88           C
ATOM    900  CG1 VAL A 157      13.854   4.840  -3.181  1.00 19.19           C
ATOM    901  CG2 VAL A 157      15.252   2.763  -2.904  1.00 20.83           C
ATOM    902  H   VAL A 157      14.408   2.504   0.062  1.00  0.00           H
ATOM    903  HA  VAL A 157      15.857   4.812  -1.147  1.00  0.00           H
ATOM    904  HB  VAL A 157      13.394   3.168  -1.938  1.00  0.00           H
ATOM    905 HG11 VAL A 157      13.624   4.435  -4.164  1.00  0.00           H
ATOM    906 HG12 VAL A 157      12.960   5.353  -2.833  1.00  0.00           H
ATOM    907 HG13 VAL A 157      14.636   5.587  -3.306  1.00  0.00           H
ATOM    908 HG21 VAL A 157      14.781   2.304  -3.772  1.00  0.00           H
ATOM    909 HG22 VAL A 157      16.154   3.270  -3.250  1.00  0.00           H
ATOM    910 HG23 VAL A 157      15.564   1.946  -2.253  1.00  0.00           H
ATOM    911  N   PHE A 158      14.470   6.482   0.126  1.00 22.60           N
ATOM    912  CA  PHE A 158      13.714   7.590   0.681  1.00 21.72           C
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ATOM    913  C   PHE A 158      13.376   8.538  -0.482  1.00 21.85           C
ATOM    914  O   PHE A 158      14.254   8.929  -1.255  1.00 21.79           O
ATOM    915  CB  PHE A 158      14.594   8.311   1.721  1.00 22.82           C
ATOM    916  CG  PHE A 158      14.986   7.431   2.895  1.00 22.97           C
ATOM    917  CD1 PHE A 158      14.040   7.111   3.891  1.00 20.44           C
ATOM    918  CD2 PHE A 158      16.282   6.881   2.962  1.00 23.38           C
ATOM    919  CE1 PHE A 158      14.388   6.233   4.936  1.00 23.63           C
ATOM    920  CE2 PHE A 158      16.625   6.011   4.012  1.00 22.41           C
ATOM    921  CZ  PHE A 158      15.682   5.693   5.004  1.00 21.10           C
ATOM    922  H   PHE A 158      15.452   6.670  -0.084  1.00  0.00           H
ATOM    923  HA  PHE A 158      12.808   7.236   1.170  1.00  0.00           H
ATOM    924  HB2 PHE A 158      15.491   8.717   1.251  1.00  0.00           H
ATOM    925  HB3 PHE A 158      14.054   9.159   2.133  1.00  0.00           H
ATOM    926  HD1 PHE A 158      13.037   7.507   3.831  1.00  0.00           H
ATOM    927  HD2 PHE A 158      17.013   7.102   2.196  1.00  0.00           H
ATOM    928  HE1 PHE A 158      13.656   5.920   5.664  1.00  0.00           H
ATOM    929  HE2 PHE A 158      17.608   5.572   4.042  1.00  0.00           H
ATOM    930  HZ  PHE A 158      15.931   4.997   5.790  1.00  0.00           H
ATOM    931  N   LEU A 159      12.094   8.887  -0.610  1.00 22.19           N
ATOM    932  CA  LEU A 159      11.505   9.735  -1.639  1.00 20.94           C
ATOM    933  C   LEU A 159      10.856  10.955  -0.960  1.00 21.28           C
ATOM    934  O   LEU A 159      10.334  10.841   0.150  1.00 22.09           O
ATOM    935  CB  LEU A 159      10.465   8.924  -2.448  1.00 22.79           C
ATOM    936  CG  LEU A 159      11.003   7.637  -3.116  1.00 22.80           C
ATOM    937  CD1 LEU A 159       9.871   6.813  -3.747  1.00 23.75           C
ATOM    938  CD2 LEU A 159      12.088   7.938  -4.159  1.00 19.61           C
ATOM    939  H   LEU A 159      11.433   8.509   0.070  1.00  0.00           H
ATOM    940  HA  LEU A 159      12.277  10.079  -2.318  1.00  0.00           H
ATOM    941  HB2 LEU A 159       9.640   8.645  -1.799  1.00  0.00           H
ATOM    942  HB3 LEU A 159      10.033   9.575  -3.206  1.00  0.00           H
ATOM    943  HG  LEU A 159      11.444   7.010  -2.340  1.00  0.00           H
ATOM    944 HD11 LEU A 159      10.250   5.866  -4.132  1.00  0.00           H
ATOM    945 HD12 LEU A 159       9.091   6.585  -3.021  1.00  0.00           H
ATOM    946 HD13 LEU A 159       9.409   7.333  -4.585  1.00  0.00           H
ATOM    947 HD21 LEU A 159      12.412   7.031  -4.671  1.00  0.00           H
ATOM    948 HD22 LEU A 159      11.721   8.628  -4.917  1.00  0.00           H
ATOM    949 HD23 LEU A 159      12.974   8.380  -3.704  1.00  0.00           H
ATOM    950  N   ASN A 160      10.887  12.124  -1.606  1.00 21.67           N
ATOM    951  CA  ASN A 160      10.425  13.413  -1.073  1.00 21.59           C
ATOM    952  C   ASN A 160       9.931  14.291  -2.233  1.00 22.22           C
ATOM    953  O   ASN A 160      10.101  13.935  -3.396  1.00 22.40           O
ATOM    954  CB  ASN A 160      11.574  14.038  -0.250  1.00 21.73           C
ATOM    955  CG  ASN A 160      11.223  15.147   0.745  1.00 20.70           C
ATOM    956  OD1 ASN A 160      10.223  15.855   0.626  1.00 17.56           O
ATOM    957  ND2 ASN A 160      12.071  15.314   1.752  1.00 20.24           N
ATOM    958  H   ASN A 160      11.350  12.162  -2.507  1.00  0.00           H
ATOM    959  HA  ASN A 160       9.569  13.233  -0.423  1.00  0.00           H
ATOM    960  HB2 ASN A 160      11.992  13.247   0.359  1.00  0.00           H
ATOM    961  HB3 ASN A 160      12.378  14.372  -0.907  1.00  0.00           H
ATOM    962 HD21 ASN A 160      12.885  14.718   1.825  1.00  0.00           H
ATOM    963 HD22 ASN A 160      11.966  16.089   2.388  1.00  0.00           H
ATOM    964  N   ASP A 161       9.330  15.443  -1.932  1.00 22.62           N
ATOM    965  CA  ASP A 161       8.861  16.444  -2.899  1.00 21.64           C
ATOM    966  C   ASP A 161       9.567  17.798  -2.669  1.00 24.09           C
ATOM    967  O   ASP A 161       9.579  18.656  -3.553  1.00 24.64           O
ATOM    968  CB  ASP A 161       7.313  16.501  -2.893  1.00 22.24           C
ATOM    969  CG  ASP A 161       6.654  17.494  -1.939  1.00 22.54           C
ATOM    970  OD1 ASP A 161       6.780  17.318  -0.707  1.00 19.79           O
ATOM    971  OD2 ASP A 161       5.957  18.400  -2.458  1.00 25.86           O1-
ATOM    972  H   ASP A 161       9.317  15.692  -0.947  1.00  0.00           H
ATOM    973  HA  ASP A 161       9.160  16.136  -3.903  1.00  0.00           H
ATOM    974  HB2 ASP A 161       6.982  16.734  -3.904  1.00  0.00           H
ATOM    975  HB3 ASP A 161       6.903  15.512  -2.692  1.00  0.00           H
ATOM    976  N   GLU A 162      10.226  17.962  -1.523  1.00 25.03           N
ATOM    977  CA  GLU A 162      11.349  18.868  -1.327  1.00 25.78           C
ATOM    978  C   GLU A 162      12.635  18.058  -1.593  1.00 26.36           C
ATOM    979  O   GLU A 162      12.580  16.825  -1.626  1.00 26.47           O
ATOM    980  CB  GLU A 162      11.357  19.248   0.165  1.00 28.39           C
ATOM    981  CG  GLU A 162      10.265  20.265   0.520  1.00 34.38           C
ATOM    982  CD  GLU A 162      10.237  20.588   2.000  1.00 38.51           C
ATOM    983  OE1 GLU A 162      10.795  19.835   2.829  1.00 40.07           O
ATOM    984  OE2 GLU A 162       9.580  21.580   2.379  1.00 39.26           O1-
ATOM    985  H   GLU A 162      10.206  17.186  -0.873  1.00  0.00           H
ATOM    986  HA  GLU A 162      11.298  19.748  -1.969  1.00  0.00           H
ATOM    987  HB2 GLU A 162      11.244  18.347   0.770  1.00  0.00           H
ATOM    988  HB3 GLU A 162      12.318  19.672   0.458  1.00  0.00           H
ATOM    989  HG2 GLU A 162      10.419  21.188  -0.040  1.00  0.00           H
ATOM    990  HG3 GLU A 162       9.284  19.884   0.234  1.00  0.00           H
ATOM    991  N   PRO A 163      13.814  18.705  -1.691  1.00 25.77           N
ATOM    992  CA  PRO A 163      15.086  17.999  -1.537  1.00 25.31           C
ATOM    993  C   PRO A 163      15.260  17.572  -0.065  1.00 24.48           C
ATOM    994  O   PRO A 163      14.697  18.189   0.846  1.00 23.95           O
ATOM    995  CB  PRO A 163      16.147  19.008  -1.998  1.00 25.46           C
ATOM    996  CG  PRO A 163      15.523  20.373  -1.740  1.00 26.93           C
ATOM    997  CD  PRO A 163      14.013  20.145  -1.863  1.00 25.47           C
ATOM    998  HA  PRO A 163      15.106  17.114  -2.177  1.00  0.00           H
ATOM    999  HB2 PRO A 163      17.107  18.889  -1.494  1.00  0.00           H
ATOM   1000  HB3 PRO A 163      16.319  18.883  -3.068  1.00  0.00           H
ATOM   1001  HG2 PRO A 163      15.760  20.685  -0.722  1.00  0.00           H
ATOM   1002  HG3 PRO A 163      15.888  21.147  -2.417  1.00  0.00           H
ATOM   1003  HD2 PRO A 163      13.470  20.747  -1.135  1.00  0.00           H
ATOM   1004  HD3 PRO A 163      13.662  20.425  -2.855  1.00  0.00           H
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ATOM   1005  N   PHE A 164      16.026  16.508   0.181  1.00 23.91           N
ATOM   1006  CA  PHE A 164      16.273  16.004   1.529  1.00 22.65           C
ATOM   1007  C   PHE A 164      17.283  16.906   2.238  1.00 22.61           C
ATOM   1008  O   PHE A 164      18.392  17.106   1.730  1.00 20.34           O
ATOM   1009  CB  PHE A 164      16.837  14.575   1.459  1.00 21.23           C
ATOM   1010  CG  PHE A 164      15.744  13.535   1.383  1.00 21.71           C
ATOM   1011  CD1 PHE A 164      14.998  13.239   2.542  1.00 21.29           C
ATOM   1012  CD2 PHE A 164      15.443  12.889   0.168  1.00 20.13           C
ATOM   1013  CE1 PHE A 164      13.964  12.291   2.492  1.00 22.86           C
ATOM   1014  CE2 PHE A 164      14.419  11.928   0.128  1.00 22.82           C
ATOM   1015  CZ  PHE A 164      13.681  11.628   1.288  1.00 20.54           C
ATOM   1016  H   PHE A 164      16.500  16.064  -0.603  1.00  0.00           H
ATOM   1017  HA  PHE A 164      15.341  15.998   2.094  1.00  0.00           H
ATOM   1018  HB2 PHE A 164      17.532  14.462   0.625  1.00  0.00           H
ATOM   1019  HB3 PHE A 164      17.414  14.350   2.358  1.00  0.00           H
ATOM   1020  HD1 PHE A 164      15.206  13.751   3.471  1.00  0.00           H
ATOM   1021  HD2 PHE A 164      15.988  13.125  -0.736  1.00  0.00           H
ATOM   1022  HE1 PHE A 164      13.383  12.079   3.376  1.00  0.00           H
ATOM   1023  HE2 PHE A 164      14.181  11.434  -0.800  1.00  0.00           H
ATOM   1024  HZ  PHE A 164      12.869  10.918   1.245  1.00  0.00           H
ATOM   1025  N   THR A 165      16.892  17.441   3.400  1.00 23.48           N
ATOM   1026  CA  THR A 165      17.708  18.263   4.283  1.00 23.94           C
ATOM   1027  C   THR A 165      18.849  17.422   4.882  1.00 26.62           C
ATOM   1028  O   THR A 165      18.690  16.226   5.140  1.00 21.92           O
ATOM   1029  CB  THR A 165      16.778  18.870   5.368  1.00 25.32           C
ATOM   1030  OG1 THR A 165      15.999  17.880   6.021  1.00 27.19           O
ATOM   1031  CG2 THR A 165      15.823  19.931   4.802  1.00 25.62           C
ATOM   1032  H   THR A 165      15.980  17.202   3.782  1.00  0.00           H
ATOM   1033  HA  THR A 165      18.151  19.073   3.702  1.00  0.00           H
ATOM   1034  HB  THR A 165      17.394  19.353   6.128  1.00  0.00           H
ATOM   1035  HG1 THR A 165      16.307  17.789   6.938  1.00  0.00           H
ATOM   1036 HG21 THR A 165      15.191  20.350   5.586  1.00  0.00           H
ATOM   1037 HG22 THR A 165      16.376  20.755   4.351  1.00  0.00           H
ATOM   1038 HG23 THR A 165      15.169  19.520   4.033  1.00  0.00           H
ATOM   1039  N   GLU A 166      20.029  18.027   5.056  1.00 27.49           N
ATOM   1040  CA  GLU A 166      21.264  17.358   5.472  1.00 30.60           C
ATOM   1041  C   GLU A 166      21.128  16.622   6.815  1.00 29.25           C
ATOM   1042  O   GLU A 166      21.606  15.498   6.946  1.00 31.53           O
ATOM   1043  CB  GLU A 166      22.460  18.339   5.441  1.00 34.11           C
ATOM   1044  CG  GLU A 166      22.524  19.304   4.225  1.00 40.02           C
ATOM   1045  CD  GLU A 166      22.143  18.656   2.898  1.00 44.19           C
ATOM   1046  OE1 GLU A 166      21.054  18.993   2.392  1.00 48.52           O
ATOM   1047  OE2 GLU A 166      22.810  17.690   2.477  1.00 46.29           O1-
ATOM   1048  H   GLU A 166      20.150  18.921   4.595  1.00  0.00           H
ATOM   1049  HA  GLU A 166      21.476  16.585   4.740  1.00  0.00           H
ATOM   1050  HB2 GLU A 166      22.467  18.939   6.351  1.00  0.00           H
ATOM   1051  HB3 GLU A 166      23.381  17.755   5.468  1.00  0.00           H
ATOM   1052  HG2 GLU A 166      21.863  20.154   4.391  1.00  0.00           H
ATOM   1053  HG3 GLU A 166      23.528  19.716   4.129  1.00  0.00           H
ATOM   1054  N   GLU A 167      20.384  17.217   7.758  1.00 29.61           N
ATOM   1055  CA  GLU A 167      19.970  16.631   9.032  1.00 30.74           C
ATOM   1056  C   GLU A 167      19.191  15.309   8.874  1.00 29.24           C
ATOM   1057  O   GLU A 167      19.419  14.386   9.654  1.00 26.20           O
ATOM   1058  CB  GLU A 167      19.279  17.727   9.898  1.00 33.76           C
ATOM   1059  CG  GLU A 167      17.947  17.400  10.617  1.00 39.85           C
ATOM   1060  CD  GLU A 167      16.703  17.533   9.742  1.00 43.67           C
ATOM   1061  OE1 GLU A 167      16.846  17.750   8.517  1.00 45.84           O
ATOM   1062  OE2 GLU A 167      15.593  17.507  10.323  1.00 45.11           O1-
ATOM   1063  H   GLU A 167      19.955  18.092   7.502  1.00  0.00           H
ATOM   1064  HA  GLU A 167      20.893  16.356   9.547  1.00  0.00           H
ATOM   1065  HB2 GLU A 167      19.993  18.027  10.664  1.00  0.00           H
ATOM   1066  HB3 GLU A 167      19.128  18.634   9.311  1.00  0.00           H
ATOM   1067  HG2 GLU A 167      17.965  16.415  11.084  1.00  0.00           H
ATOM   1068  HG3 GLU A 167      17.828  18.111  11.433  1.00  0.00           H
ATOM   1069  N   PHE A 168      18.332  15.187   7.851  1.00 26.92           N
ATOM   1070  CA  PHE A 168      17.577  13.981   7.503  1.00 25.65           C
ATOM   1071  C   PHE A 168      18.536  12.837   7.190  1.00 24.16           C
ATOM   1072  O   PHE A 168      18.460  11.764   7.785  1.00 21.85           O
ATOM   1073  CB  PHE A 168      16.635  14.251   6.300  1.00 25.88           C
ATOM   1074  CG  PHE A 168      15.462  13.294   6.144  1.00 25.83           C
ATOM   1075  CD1 PHE A 168      15.652  11.924   5.849  1.00 27.41           C
ATOM   1076  CD2 PHE A 168      14.154  13.793   6.286  1.00 26.00           C
ATOM   1077  CE1 PHE A 168      14.546  11.053   5.788  1.00 27.73           C
ATOM   1078  CE2 PHE A 168      13.047  12.926   6.210  1.00 24.69           C
ATOM   1079  CZ  PHE A 168      13.248  11.553   5.995  1.00 24.72           C
ATOM   1080  H   PHE A 168      18.178  16.008   7.278  1.00  0.00           H
ATOM   1081  HA  PHE A 168      16.988  13.687   8.364  1.00  0.00           H
ATOM   1082  HB2 PHE A 168      16.236  15.261   6.385  1.00  0.00           H
ATOM   1083  HB3 PHE A 168      17.181  14.241   5.357  1.00  0.00           H
ATOM   1084  HD1 PHE A 168      16.642  11.525   5.685  1.00  0.00           H
ATOM   1085  HD2 PHE A 168      14.010  14.846   6.480  1.00  0.00           H
ATOM   1086  HE1 PHE A 168      14.694  10.003   5.577  1.00  0.00           H
ATOM   1087  HE2 PHE A 168      12.045  13.307   6.337  1.00  0.00           H
ATOM   1088  HZ  PHE A 168      12.398  10.893   5.965  1.00  0.00           H
ATOM   1089  N   LYS A 169      19.470  13.100   6.275  1.00 24.01           N
ATOM   1090  CA  LYS A 169      20.428  12.134   5.765  1.00 26.45           C
ATOM   1091  C   LYS A 169      21.431  11.736   6.866  1.00 26.84           C
ATOM   1092  O   LYS A 169      21.703  10.547   7.031  1.00 27.09           O
ATOM   1093  CB  LYS A 169      21.101  12.746   4.520  1.00 29.03           C
ATOM   1094  CG  LYS A 169      20.072  13.021   3.395  1.00 31.88           C
ATOM   1095  CD  LYS A 169      20.607  13.747   2.152  1.00 35.09           C
ATOM   1096  CE  LYS A 169      21.042  15.184   2.468  1.00 37.28           C
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ATOM   1097  NZ  LYS A 169      21.160  16.054   1.294  1.00 38.69          N1+
ATOM   1098  H   LYS A 169      19.496  14.042   5.907  1.00  0.00           H
ATOM   1099  HA  LYS A 169      19.888  11.234   5.467  1.00  0.00           H
ATOM   1100  HB2 LYS A 169      21.632  13.658   4.797  1.00  0.00           H
ATOM   1101  HB3 LYS A 169      21.853  12.052   4.145  1.00  0.00           H
ATOM   1102  HG2 LYS A 169      19.654  12.069   3.078  1.00  0.00           H
ATOM   1103  HG3 LYS A 169      19.226  13.593   3.776  1.00  0.00           H
ATOM   1104  HD2 LYS A 169      21.433  13.184   1.715  1.00  0.00           H
ATOM   1105  HD3 LYS A 169      19.817  13.758   1.400  1.00  0.00           H
ATOM   1106  HE2 LYS A 169      20.319  15.653   3.130  1.00  0.00           H
ATOM   1107  HE3 LYS A 169      22.003  15.170   2.983  1.00  0.00           H
ATOM   1108  HZ1 LYS A 169      21.840  16.788   1.568  1.00  0.00           H
ATOM   1109  HZ2 LYS A 169      21.478  15.539   0.470  1.00  0.00           H
ATOM   1110  HZ3 LYS A 169      20.282  16.525   1.123  1.00  0.00           H
ATOM   1111  N   GLU A 170      21.875  12.693   7.698  1.00 26.50           N
ATOM   1112  CA  GLU A 170      22.719  12.470   8.877  1.00 27.91           C
ATOM   1113  C   GLU A 170      21.981  11.603   9.925  1.00 26.70           C
ATOM   1114  O   GLU A 170      22.541  10.626  10.431  1.00 25.68           O
ATOM   1115  CB  GLU A 170      23.128  13.843   9.486  1.00 30.74           C
ATOM   1116  CG  GLU A 170      24.614  13.970   9.883  1.00 38.58           C
ATOM   1117  CD  GLU A 170      25.049  12.915  10.882  1.00 44.74           C
ATOM   1118  OE1 GLU A 170      24.350  12.721  11.901  1.00 47.54           O
ATOM   1119  OE2 GLU A 170      25.985  12.144  10.576  1.00 48.23          O1-
ATOM   1120  H   GLU A 170      21.616  13.653   7.487  1.00  0.00           H
ATOM   1121  HA  GLU A 170      23.610  11.934   8.541  1.00  0.00           H
ATOM   1122  HB2 GLU A 170      22.945  14.644   8.777  1.00  0.00           H
ATOM   1123  HB3 GLU A 170      22.506  14.088  10.348  1.00  0.00           H
ATOM   1124  HG2 GLU A 170      25.244  13.897   8.996  1.00  0.00           H
ATOM   1125  HG3 GLU A 170      24.803  14.950  10.320  1.00  0.00           H
ATOM   1126  N   ALA A 171      20.709  11.916  10.216  1.00 23.76           N
ATOM   1127  CA  ALA A 171      19.893  11.232  11.216  1.00 23.64           C
ATOM   1128  C   ALA A 171      19.468   9.826  10.769  1.00 23.90           C
ATOM   1129  O   ALA A 171      19.365   8.938  11.618  1.00 22.94           O
ATOM   1130  CB  ALA A 171      18.625  12.050  11.486  1.00 23.80           C
ATOM   1131  H   ALA A 171      20.315  12.749   9.783  1.00  0.00           H
ATOM   1132  HA  ALA A 171      20.471  11.148  12.137  1.00  0.00           H
ATOM   1133  HB1 ALA A 171      17.966  11.555  12.200  1.00  0.00           H
ATOM   1134  HB2 ALA A 171      18.868  13.032  11.892  1.00  0.00           H
ATOM   1135  HB3 ALA A 171      18.065  12.201  10.563  1.00  0.00           H
ATOM   1136  N   VAL A 172      19.247   9.611   9.464  1.00 24.62           N
ATOM   1137  CA  VAL A 172      19.063   8.302   8.837  1.00 25.76           C
ATOM   1138  C   VAL A 172      20.363   7.478   8.939  1.00 26.15           C
ATOM   1139  O   VAL A 172      20.307   6.312   9.332  1.00 25.46           O
ATOM   1140  CB  VAL A 172      18.560   8.489   7.380  1.00 25.40           C
ATOM   1141  CG1 VAL A 172      18.727   7.255   6.478  1.00 25.21           C
ATOM   1142  CG2 VAL A 172      17.076   8.901   7.372  1.00 22.74           C
ATOM   1143  H   VAL A 172      19.241  10.425   8.850  1.00  0.00           H
ATOM   1144  HA  VAL A 172      18.298   7.760   9.395  1.00  0.00           H
ATOM   1145  HB  VAL A 172      19.137   9.290   6.916  1.00  0.00           H
ATOM   1146 HG11 VAL A 172      18.310   7.443   5.492  1.00  0.00           H
ATOM   1147 HG12 VAL A 172      19.773   6.987   6.324  1.00  0.00           H
ATOM   1148 HG13 VAL A 172      18.209   6.391   6.886  1.00  0.00           H
ATOM   1149 HG21 VAL A 172      16.741   9.119   6.359  1.00  0.00           H
ATOM   1150 HG22 VAL A 172      16.440   8.104   7.756  1.00  0.00           H
ATOM   1151 HG23 VAL A 172      16.887   9.787   7.976  1.00  0.00           H
ATOM   1152  N   THR A 173      21.533   8.104   8.740  1.00 26.81           N
ATOM   1153  CA  THR A 173      22.874   7.527   8.945  1.00 28.03           C
ATOM   1154  C   THR A 173      23.237   7.542  10.464  1.00 27.32           C
ATOM   1155  O   THR A 173      24.391   7.679  10.872  1.00 26.39           O
ATOM   1156  CB  THR A 173      23.899   8.335   8.090  1.00 27.81           C
ATOM   1157  OG1 THR A 173      23.402   8.522   6.773  1.00 30.64           O
ATOM   1158  CG2 THR A 173      25.252   7.631   7.886  1.00 27.52           C
ATOM   1159  H   THR A 173      21.501   9.072   8.441  1.00  0.00           H
ATOM   1160  HA  THR A 173      22.866   6.489   8.605  1.00  0.00           H
ATOM   1161  HB  THR A 173      24.068   9.320   8.530  1.00  0.00           H
ATOM   1162  HG1 THR A 173      22.710   9.187   6.816  1.00  0.00           H
ATOM   1163 HG21 THR A 173      25.901   8.217   7.234  1.00  0.00           H
ATOM   1164 HG22 THR A 173      25.794   7.486   8.819  1.00  0.00           H
ATOM   1165 HG23 THR A 173      25.123   6.652   7.424  1.00  0.00           H
ATOM   1166  N   LYS A 174      22.224   7.444  11.329  1.00 27.78           N
ATOM   1167  CA  LYS A 174      22.247   7.222  12.770  1.00 31.22           C
ATOM   1168  C   LYS A 174      20.927   6.548  13.188  1.00 30.61           C
ATOM   1169  O   LYS A 174      20.377   6.782  14.270  1.00 30.04           O
ATOM   1170  CB  LYS A 174      22.663   8.504  13.533  1.00 32.27           C
ATOM   1171  CG  LYS A 174      24.049   8.380  14.201  1.00 36.69           C
ATOM   1172  CD  LYS A 174      24.771   9.727  14.381  1.00 39.08           C
ATOM   1173  CE  LYS A 174      25.745  10.062  13.237  1.00 41.57           C
ATOM   1174  NZ  LYS A 174      25.071  10.150  11.939  1.00 43.16          N1+
ATOM   1175  H   LYS A 174      21.306   7.423  10.900  1.00  0.00           H
ATOM   1176  HA  LYS A 174      22.995   6.447  12.949  1.00  0.00           H
ATOM   1177  HB2 LYS A 174      22.641   9.353  12.849  1.00  0.00           H
ATOM   1178  HB3 LYS A 174      21.934   8.762  14.301  1.00  0.00           H
ATOM   1179  HG2 LYS A 174      23.918   7.902  15.172  1.00  0.00           H
ATOM   1180  HG3 LYS A 174      24.699   7.710  13.635  1.00  0.00           H
ATOM   1181  HD2 LYS A 174      24.052  10.537  14.519  1.00  0.00           H
ATOM   1182  HD3 LYS A 174      25.349   9.692  15.305  1.00  0.00           H
ATOM   1183  HE2 LYS A 174      26.213  11.030  13.427  1.00  0.00           H
ATOM   1184  HE3 LYS A 174      26.549   9.329  13.170  1.00  0.00           H
ATOM   1185  HZ1 LYS A 174      25.657  10.698  11.290  1.00  0.00           H
ATOM   1186  HZ2 LYS A 174      24.774   9.274  11.523  1.00  0.00           H
ATOM   1187  HZ3 LYS A 174      24.311  10.829  11.991  1.00  0.00           H
ATOM   1188  N   ALA A 175      20.385   5.735  12.278  1.00 28.23           N
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ATOM   1189  CA  ALA A 175      19.142   5.008  12.403  1.00 26.89           C
ATOM   1190  C   ALA A 175      19.259   3.692  11.643  1.00 26.79           C
ATOM   1191  O   ALA A 175      19.205   2.645  12.278  1.00 27.40           O
ATOM   1192  CB  ALA A 175      17.948   5.889  12.001  1.00 24.63           C
ATOM   1193  H   ALA A 175      20.911   5.557  11.428  1.00  0.00           H
ATOM   1194  HA  ALA A 175      19.022   4.734  13.451  1.00  0.00           H
ATOM   1195  HB1 ALA A 175      17.003   5.421  12.273  1.00  0.00           H
ATOM   1196  HB2 ALA A 175      17.990   6.862  12.483  1.00  0.00           H
ATOM   1197  HB3 ALA A 175      17.932   6.066  10.926  1.00  0.00           H
ATOM   1198  N   VAL A 176      19.448   3.766  10.319  1.00 27.12           N
ATOM   1199  CA  VAL A 176      19.598   2.626   9.415  1.00 25.91           C
ATOM   1200  C   VAL A 176      21.040   2.077   9.523  1.00 26.78           C
ATOM   1201  O   VAL A 176      21.971   2.829   9.827  1.00 26.76           O
ATOM   1202  CB  VAL A 176      19.302   3.094   7.954  1.00 24.16           C
ATOM   1203  CG1 VAL A 176      19.368   1.950   6.923  1.00 25.45           C
ATOM   1204  CG2 VAL A 176      17.933   3.780   7.811  1.00 19.93           C
ATOM   1205  H   VAL A 176      19.620   4.674   9.899  1.00  0.00           H
ATOM   1206  HA  VAL A 176      18.878   1.861   9.694  1.00  0.00           H
ATOM   1207  HB  VAL A 176      20.058   3.830   7.668  1.00  0.00           H
ATOM   1208 HG11 VAL A 176      18.922   2.227   5.968  1.00  0.00           H
ATOM   1209 HG12 VAL A 176      20.398   1.685   6.703  1.00  0.00           H
ATOM   1210 HG13 VAL A 176      18.848   1.056   7.272  1.00  0.00           H
ATOM   1211 HG21 VAL A 176      17.773   4.097   6.781  1.00  0.00           H
ATOM   1212 HG22 VAL A 176      17.122   3.097   8.062  1.00  0.00           H
ATOM   1213 HG23 VAL A 176      17.849   4.668   8.434  1.00  0.00           H
ATOM   1214  N   SER A 177      21.218   0.780   9.250  1.00 24.88           N
ATOM   1215  CA  SER A 177      22.494   0.071   9.205  1.00 26.57           C
ATOM   1216  C   SER A 177      22.650  -0.806   7.946  1.00 27.23           C
ATOM   1217  O   SER A 177      23.410  -1.773   7.929  1.00 28.95           O
ATOM   1218  CB  SER A 177      22.840  -0.535  10.584  1.00 24.99           C
ATOM   1219  OG  SER A 177      21.999  -1.599  11.002  1.00 23.21           O
ATOM   1220  H   SER A 177      20.375   0.197   9.164  1.00  0.00           H
ATOM   1221  HA  SER A 177      23.265   0.825   9.036  1.00  0.00           H
ATOM   1222  HB2 SER A 177      23.863  -0.914  10.560  1.00  0.00           H
ATOM   1223  HB3 SER A 177      22.820   0.247  11.344  1.00  0.00           H
ATOM   1224  HG  SER A 177      21.074  -1.318  10.972  1.00  0.00           H
ATOM   1225  N   SER A 178      21.983  -0.402   6.860  1.00 26.97           N
ATOM   1226  CA  SER A 178      22.122  -0.896   5.496  1.00 26.31           C
ATOM   1227  C   SER A 178      22.316   0.305   4.543  1.00 26.98           C
ATOM   1228  O   SER A 178      22.587   1.418   5.000  1.00 27.69           O
ATOM   1229  CB  SER A 178      20.951  -1.854   5.179  1.00 26.87           C
ATOM   1230  OG  SER A 178      19.697  -1.191   5.194  1.00 26.69           O
ATOM   1231  H   SER A 178      21.421   0.431   6.945  1.00  0.00           H
ATOM   1232  HA  SER A 178      23.047  -1.470   5.426  1.00  0.00           H
ATOM   1233  HB2 SER A 178      21.093  -2.298   4.193  1.00  0.00           H
ATOM   1234  HB3 SER A 178      20.933  -2.685   5.885  1.00  0.00           H
ATOM   1235  HG  SER A 178      19.131  -1.593   4.528  1.00  0.00           H
ATOM   1236  N   GLU A 179      22.238   0.080   3.224  1.00 28.23           N
ATOM   1237  CA  GLU A 179      22.416   1.098   2.188  1.00 30.32           C
ATOM   1238  C   GLU A 179      21.145   1.968   2.084  1.00 29.86           C
ATOM   1239  O   GLU A 179      20.039   1.501   2.372  1.00 29.62           O
ATOM   1240  CB  GLU A 179      22.718   0.367   0.861  1.00 30.92           C
ATOM   1241  CG  GLU A 179      23.308   1.255  -0.260  1.00 36.26           C
ATOM   1242  CD  GLU A 179      22.431   1.340  -1.501  1.00 40.60           C
ATOM   1243  OE1 GLU A 179      21.220   1.615  -1.373  1.00 42.26           O
ATOM   1244  OE2 GLU A 179      22.960   1.149  -2.617  1.00 41.15           O1-
ATOM   1245  H   GLU A 179      21.899  -0.812   2.911  1.00  0.00           H
ATOM   1246  HA  GLU A 179      23.265   1.728   2.462  1.00  0.00           H
ATOM   1247  HB2 GLU A 179      23.440  -0.428   1.048  1.00  0.00           H
ATOM   1248  HB3 GLU A 179      21.819  -0.142   0.513  1.00  0.00           H
ATOM   1249  HG2 GLU A 179      23.490   2.271   0.087  1.00  0.00           H
ATOM   1250  HG3 GLU A 179      24.280   0.864  -0.563  1.00  0.00           H
ATOM   1251  N   VAL A 180      21.319   3.244   1.729  1.00 28.50           N
ATOM   1252  CA  VAL A 180      20.294   4.278   1.730  1.00 27.87           C
ATOM   1253  C   VAL A 180      20.408   5.120   0.452  1.00 27.26           C
ATOM   1254  O   VAL A 180      21.525   5.438   0.034  1.00 25.36           O
ATOM   1255  CB  VAL A 180      20.351   5.107   3.048  1.00 28.46           C
ATOM   1256  CG1 VAL A 180      19.973   4.264   4.279  1.00 25.72           C
ATOM   1257  CG2 VAL A 180      21.705   5.802   3.297  1.00 29.12           C
ATOM   1258  H   VAL A 180      22.211   3.529   1.354  1.00  0.00           H
ATOM   1259  HA  VAL A 180      19.327   3.786   1.689  1.00  0.00           H
ATOM   1260  HB  VAL A 180      19.603   5.895   2.951  1.00  0.00           H
ATOM   1261 HG11 VAL A 180      19.844   4.885   5.164  1.00  0.00           H
ATOM   1262 HG12 VAL A 180      19.043   3.722   4.113  1.00  0.00           H
ATOM   1263 HG13 VAL A 180      20.740   3.525   4.511  1.00  0.00           H
ATOM   1264 HG21 VAL A 180      21.669   6.423   4.193  1.00  0.00           H
ATOM   1265 HG22 VAL A 180      22.509   5.078   3.433  1.00  0.00           H
ATOM   1266 HG23 VAL A 180      21.985   6.454   2.470  1.00  0.00           H
ATOM   1267  N   LYS A 181      19.273   5.519  -0.134  1.00 26.75           N
ATOM   1268  CA  LYS A 181      19.173   6.423  -1.280  1.00 27.00           C
ATOM   1269  C   LYS A 181      18.100   7.482  -1.005  1.00 26.79           C
ATOM   1270  O   LYS A 181      17.091   7.186  -0.365  1.00 26.53           O
ATOM   1271  CB  LYS A 181      18.941   5.653  -2.596  1.00 28.69           C
ATOM   1272  CG  LYS A 181      20.063   4.650  -2.917  1.00 31.19           C
ATOM   1273  CD  LYS A 181      20.067   4.166  -4.376  1.00 35.82           C
ATOM   1274  CE  LYS A 181      21.208   3.181  -4.654  1.00 35.27           C
ATOM   1275  NZ  LYS A 181      20.920   1.854  -4.112  1.00 36.42           N1+
ATOM   1276  H   LYS A 181      18.392   5.202   0.265  1.00  0.00           H
ATOM   1277  HA  LYS A 181      20.115   6.967  -1.376  1.00  0.00           H
ATOM   1278  HB2 LYS A 181      17.979   5.138  -2.573  1.00  0.00           H
ATOM   1279  HB3 LYS A 181      18.876   6.383  -3.404  1.00  0.00           H
ATOM   1280  HG2 LYS A 181      21.027   5.113  -2.703  1.00  0.00           H
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ATOM   1281  HG3 LYS A 181      19.982   3.797  -2.241  1.00  0.00           H
ATOM   1282  HD2 LYS A 181      19.108   3.719  -4.648  1.00  0.00           H
ATOM   1283  HD3 LYS A 181      20.200   5.029  -5.030  1.00  0.00           H
ATOM   1284  HE2 LYS A 181      21.364   3.075  -5.729  1.00  0.00           H
ATOM   1285  HE3 LYS A 181      22.143   3.543  -4.226  1.00  0.00           H
ATOM   1286  HZ1 LYS A 181      21.796   1.395  -3.837  1.00  0.00           H
ATOM   1287  HZ2 LYS A 181      20.450   1.889  -3.214  1.00  0.00           H
ATOM   1288  HZ3 LYS A 181      20.403   1.308  -4.819  1.00  0.00           H
ATOM   1289  N   PHE A 182      18.328   8.711  -1.474  1.00 25.47           N
ATOM   1290  CA  PHE A 182      17.573   9.917  -1.154  1.00 24.54           C
ATOM   1291  C   PHE A 182      17.224  10.636  -2.464  1.00 23.94           C
ATOM   1292  O   PHE A 182      18.085  11.304  -3.043  1.00 25.57           O
ATOM   1293  CB  PHE A 182      18.434  10.812  -0.235  1.00 24.23           C
ATOM   1294  CG  PHE A 182      18.838  10.206   1.096  1.00 25.85           C
ATOM   1295  CD1 PHE A 182      17.919  10.142   2.164  1.00 25.40           C
ATOM   1296  CD2 PHE A 182      20.153   9.724   1.270  1.00 27.19           C
ATOM   1297  CE1 PHE A 182      18.319   9.603   3.402  1.00 27.01           C
ATOM   1298  CE2 PHE A 182      20.552   9.193   2.509  1.00 25.63           C
ATOM   1299  CZ  PHE A 182      19.637   9.134   3.575  1.00 26.56           C
ATOM   1300  H   PHE A 182      19.149   8.834  -2.077  1.00  0.00           H
ATOM   1301  HA  PHE A 182      16.648   9.671  -0.632  1.00  0.00           H
ATOM   1302  HB2 PHE A 182      19.344  11.109  -0.758  1.00  0.00           H
ATOM   1303  HB3 PHE A 182      17.908  11.742  -0.027  1.00  0.00           H
ATOM   1304  HD1 PHE A 182      16.911  10.512   2.038  1.00  0.00           H
ATOM   1305  HD2 PHE A 182      20.862   9.763   0.455  1.00  0.00           H
ATOM   1306  HE1 PHE A 182      17.612   9.549   4.216  1.00  0.00           H
ATOM   1307  HE2 PHE A 182      21.563   8.835   2.641  1.00  0.00           H
ATOM   1308  HZ  PHE A 182      19.960   8.730   4.521  1.00  0.00           H
ATOM   1309  N   GLY A 183      15.984  10.514  -2.945  1.00 24.28           N
ATOM   1310  CA  GLY A 183      15.533  11.083  -4.215  1.00 21.73           C
ATOM   1311  C   GLY A 183      14.369  12.054  -4.045  1.00 22.11           C
ATOM   1312  O   GLY A 183      13.563  11.907  -3.128  1.00 22.30           O
ATOM   1313  H   GLY A 183      15.305   9.970  -2.412  1.00  0.00           H
ATOM   1314  HA2 GLY A 183      16.345  11.569  -4.754  1.00  0.00           H
ATOM   1315  HA3 GLY A 183      15.182  10.276  -4.857  1.00  0.00           H
ATOM   1316  N   ILE A 184      14.235  13.023  -4.955  1.00 24.31           N
ATOM   1317  CA  ILE A 184      13.020  13.822  -5.089  1.00 25.05           C
ATOM   1318  C   ILE A 184      12.108  13.103  -6.103  1.00 27.69           C
ATOM   1319  O   ILE A 184      12.584  12.420  -7.016  1.00 27.87           O
ATOM   1320  CB  ILE A 184      13.382  15.261  -5.567  1.00 25.38           C
ATOM   1321  CG1 ILE A 184      12.266  16.264  -5.201  1.00 25.06           C
ATOM   1322  CG2 ILE A 184      13.754  15.381  -7.062  1.00 20.90           C
ATOM   1323  CD1 ILE A 184      12.686  17.732  -5.337  1.00 26.79           C
ATOM   1324  H   ILE A 184      14.915  13.075  -5.711  1.00  0.00           H
ATOM   1325  HA  ILE A 184      12.523  13.889  -4.122  1.00  0.00           H
ATOM   1326  HB  ILE A 184      14.254  15.564  -4.989  1.00  0.00           H
ATOM   1327 HG12 ILE A 184      11.379  16.085  -5.807  1.00  0.00           H
ATOM   1328 HG13 ILE A 184      11.959  16.101  -4.167  1.00  0.00           H
ATOM   1329 HG21 ILE A 184      14.185  16.355  -7.281  1.00  0.00           H
ATOM   1330 HG22 ILE A 184      14.486  14.634  -7.364  1.00  0.00           H
ATOM   1331 HG23 ILE A 184      12.885  15.268  -7.712  1.00  0.00           H
ATOM   1332 HD11 ILE A 184      11.884  18.375  -4.985  1.00  0.00           H
ATOM   1333 HD12 ILE A 184      13.576  17.952  -4.747  1.00  0.00           H
ATOM   1334 HD13 ILE A 184      12.888  18.006  -6.373  1.00  0.00           H
ATOM   1335  N   LEU A 185      10.795  13.268  -5.961  1.00 28.44           N
ATOM   1336  CA  LEU A 185       9.801  12.890  -6.955  1.00 29.84           C
ATOM   1337  C   LEU A 185       9.612  14.067  -7.937  1.00 29.59           C
ATOM   1338  O   LEU A 185       9.517  15.204  -7.464  1.00 31.09           O
ATOM   1339  CB  LEU A 185       8.449  12.670  -6.246  1.00 30.35           C
ATOM   1340  CG  LEU A 185       8.427  11.536  -5.201  1.00 31.80           C
ATOM   1341  CD1 LEU A 185       6.992  11.334  -4.707  1.00 29.02           C
ATOM   1342  CD2 LEU A 185       9.040  10.231  -5.726  1.00 32.61           C
ATOM   1343  H   LEU A 185      10.466  13.777  -5.144  1.00  0.00           H
ATOM   1344  HA  LEU A 185      10.110  11.975  -7.454  1.00  0.00           H
ATOM   1345  HB2 LEU A 185       8.120  13.595  -5.768  1.00  0.00           H
ATOM   1346  HB3 LEU A 185       7.701  12.454  -7.011  1.00  0.00           H
ATOM   1347  HG  LEU A 185       9.021  11.831  -4.336  1.00  0.00           H
ATOM   1348 HD11 LEU A 185       6.886  10.429  -4.112  1.00  0.00           H
ATOM   1349 HD12 LEU A 185       6.681  12.181  -4.096  1.00  0.00           H
ATOM   1350 HD13 LEU A 185       6.293  11.262  -5.536  1.00  0.00           H
ATOM   1351 HD21 LEU A 185       8.738   9.377  -5.125  1.00  0.00           H
ATOM   1352 HD22 LEU A 185       8.754  10.032  -6.754  1.00  0.00           H
ATOM   1353 HD23 LEU A 185      10.130  10.277  -5.705  1.00  0.00           H
ATOM   1354  N   PRO A 186       9.530  13.820  -9.268  1.00 28.92           N
ATOM   1355  CA  PRO A 186       9.215  14.822 -10.301  1.00 29.13           C
ATOM   1356  C   PRO A 186       8.016  15.725  -9.953  1.00 28.44           C
ATOM   1357  O   PRO A 186       6.887  15.254  -9.778  1.00 28.12           O
ATOM   1358  CB  PRO A 186       8.964  14.015 -11.584  1.00 30.26           C
ATOM   1359  CG  PRO A 186       9.736  12.723 -11.395  1.00 28.14           C
ATOM   1360  CD  PRO A 186       9.788  12.517  -9.885  1.00 28.20           C
ATOM   1361  HA  PRO A 186      10.111  15.431 -10.431  1.00  0.00           H
ATOM   1362  HB2 PRO A 186       7.906  13.783 -11.710  1.00  0.00           H
ATOM   1363  HB3 PRO A 186       9.296  14.549 -12.474  1.00  0.00           H
ATOM   1364  HG2 PRO A 186       9.284  11.878 -11.914  1.00  0.00           H
ATOM   1365  HG3 PRO A 186      10.750  12.843 -11.781  1.00  0.00           H
ATOM   1366  HD2 PRO A 186       9.012  11.821  -9.574  1.00  0.00           H
ATOM   1367  HD3 PRO A 186      10.758  12.107  -9.597  1.00  0.00           H
ATOM   1368  N   LYS A 187       8.273  17.035  -9.866  1.00 28.27           N
ATOM   1369  CA  LYS A 187       7.334  18.074  -9.457  1.00 28.97           C
ATOM   1370  C   LYS A 187       6.228  18.313 -10.500  1.00 26.32           C
ATOM   1371  O   LYS A 187       5.155  18.808 -10.156  1.00 25.20           O
ATOM   1372  CB  LYS A 187       8.110  19.378  -9.211  1.00 32.18           C
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ATOM   1373  CG  LYS A 187       8.981  19.360  -7.937  1.00 34.77           C
ATOM   1374  CD  LYS A 187       8.317  19.961  -6.682  1.00 38.08           C
ATOM   1375  CE  LYS A 187       7.536  18.956  -5.818  1.00 37.86           C
ATOM   1376  NZ  LYS A 187       6.960  19.619  -4.633  1.00 39.41          N1+
ATOM   1377  H   LYS A 187       9.167  17.342 -10.232  1.00  0.00           H
ATOM   1378  HA  LYS A 187       6.875  17.762  -8.525  1.00  0.00           H
ATOM   1379  HB2 LYS A 187       8.746  19.571 -10.078  1.00  0.00           H
ATOM   1380  HB3 LYS A 187       7.429  20.231  -9.173  1.00  0.00           H
ATOM   1381  HG2 LYS A 187       9.388  18.367  -7.737  1.00  0.00           H
ATOM   1382  HG3 LYS A 187       9.849  19.975  -8.160  1.00  0.00           H
ATOM   1383  HD2 LYS A 187       9.106  20.387  -6.062  1.00  0.00           H
ATOM   1384  HD3 LYS A 187       7.683  20.804  -6.960  1.00  0.00           H
ATOM   1385  HE2 LYS A 187       6.723  18.515  -6.391  1.00  0.00           H
ATOM   1386  HE3 LYS A 187       8.182  18.131  -5.521  1.00  0.00           H
ATOM   1387  HZ1 LYS A 187       6.619  18.992  -3.900  1.00  0.00           H
ATOM   1388  HZ2 LYS A 187       7.608  20.275  -4.190  1.00  0.00           H
ATOM   1389  HZ3 LYS A 187       6.157  20.171  -4.959  1.00  0.00           H
ATOM   1390  N   GLU A 188       6.482  17.899 -11.746  1.00 26.19           N
ATOM   1391  CA  GLU A 188       5.584  17.862 -12.897  1.00 25.89           C
ATOM   1392  C   GLU A 188       4.387  16.950 -12.608  1.00 25.60           C
ATOM   1393  O   GLU A 188       3.232  17.379 -12.615  1.00 25.35           O
ATOM   1394  CB  GLU A 188       6.320  17.336 -14.166  1.00 28.34           C
ATOM   1395  CG  GLU A 188       7.655  16.589 -13.961  1.00 32.78           C
ATOM   1396  CD  GLU A 188       8.804  17.525 -13.641  1.00 33.60           C
ATOM   1397  OE1 GLU A 188       9.306  17.468 -12.504  1.00 31.32           O
ATOM   1398  OE2 GLU A 188       9.148  18.353 -14.512  1.00 35.45          O1-
ATOM   1399  H   GLU A 188       7.443  17.595 -11.903  1.00  0.00           H
ATOM   1400  HA  GLU A 188       5.207  18.869 -13.084  1.00  0.00           H
ATOM   1401  HB2 GLU A 188       5.667  16.692 -14.758  1.00  0.00           H
ATOM   1402  HB3 GLU A 188       6.506  18.180 -14.823  1.00  0.00           H
ATOM   1403  HG2 GLU A 188       7.551  15.825 -13.193  1.00  0.00           H
ATOM   1404  HG3 GLU A 188       7.915  16.056 -14.874  1.00  0.00           H
ATOM   1405  N   HIS A 189       4.687  15.679 -12.321  1.00 23.36           N
ATOM   1406  CA  HIS A 189       3.707  14.619 -12.095  1.00 23.70           C
ATOM   1407  C   HIS A 189       3.049  14.768 -10.713  1.00 22.66           C
ATOM   1408  O   HIS A 189       1.897  14.378 -10.523  1.00 23.19           O
ATOM   1409  CB  HIS A 189       4.394  13.245 -12.218  1.00 22.55           C
ATOM   1410  CG  HIS A 189       5.197  13.035 -13.487  1.00 24.25           C
ATOM   1411  ND1 HIS A 189       4.908  13.649 -14.702  1.00 24.12           N
ATOM   1412  CD2 HIS A 189       6.292  12.237 -13.739  1.00 22.85           C
ATOM   1413  CE1 HIS A 189       5.818  13.245 -15.587  1.00 22.58           C
ATOM   1414  NE2 HIS A 189       6.674  12.368 -15.076  1.00 24.93           N
ATOM   1415  H   HIS A 189       5.664  15.422 -12.338  1.00  0.00           H
ATOM   1416  HA  HIS A 189       2.937  14.697 -12.862  1.00  0.00           H
ATOM   1417  HB2 HIS A 189       5.060  13.075 -11.371  1.00  0.00           H
ATOM   1418  HB3 HIS A 189       3.636  12.462 -12.167  1.00  0.00           H
ATOM   1419  HD1 HIS A 189       4.177  14.346 -14.912  1.00  0.00           H
ATOM   1420  HD2 HIS A 189       6.829  11.578 -13.068  1.00  0.00           H
ATOM   1421  HE1 HIS A 189       5.857  13.593 -16.612  1.00  0.00           H
ATOM   1422  N   TRP A 190       3.737  15.458  -9.797  1.00 21.90           N
ATOM   1423  CA  TRP A 190       3.248  15.970  -8.522  1.00 22.07           C
ATOM   1424  C   TRP A 190       2.512  17.326  -8.706  1.00 22.09           C
ATOM   1425  O   TRP A 190       2.405  18.118  -7.769  1.00 23.25           O
ATOM   1426  CB  TRP A 190       4.487  16.166  -7.631  1.00 20.63           C
ATOM   1427  CG  TRP A 190       4.289  16.255  -6.154  1.00 20.86           C
ATOM   1428  CD1 TRP A 190       4.312  17.399  -5.436  1.00 20.30           C
ATOM   1429  CD2 TRP A 190       4.151  15.175  -5.184  1.00 20.57           C
ATOM   1430  NE1 TRP A 190       4.235  17.099  -4.095  1.00 22.97           N
ATOM   1431  CE3 TRP A 190       4.117  13.765  -5.263  1.00 20.34           C
ATOM   1432  CE2 TRP A 190       4.082  15.750  -3.882  1.00 21.62           C
ATOM   1433  CZ3 TRP A 190       4.026  12.975  -4.099  1.00 20.80           C
ATOM   1434  CZ2 TRP A 190       3.967  14.977  -2.719  1.00 20.94           C
ATOM   1435  CH2 TRP A 190       3.942  13.579  -2.827  1.00 23.55           C
ATOM   1436  H   TRP A 190       4.680  15.728 -10.056  1.00  0.00           H
ATOM   1437  HA  TRP A 190       2.573  15.238  -8.077  1.00  0.00           H
ATOM   1438  HB2 TRP A 190       5.197  15.352  -7.784  1.00  0.00           H
ATOM   1439  HB3 TRP A 190       4.995  17.073  -7.943  1.00  0.00           H
ATOM   1440  HD1 TRP A 190       4.443  18.380  -5.870  1.00  0.00           H
ATOM   1441  HE1 TRP A 190       4.604  17.731  -3.364  1.00  0.00           H
ATOM   1442  HE3 TRP A 190       4.193  13.289  -6.228  1.00  0.00           H
ATOM   1443  HZ3 TRP A 190       4.030  11.900  -4.187  1.00  0.00           H
ATOM   1444  HZ2 TRP A 190       3.930  15.453  -1.753  1.00  0.00           H
ATOM   1445  HH2 TRP A 190       3.876  12.983  -1.929  1.00  0.00           H
ATOM   1446  N   SER A 191       1.975  17.598  -9.900  1.00 23.12           N
ATOM   1447  CA  SER A 191       1.105  18.717 -10.237  1.00 23.81           C
ATOM   1448  C   SER A 191      -0.076  18.194 -11.072  1.00 24.41           C
ATOM   1449  O   SER A 191      -0.287  16.981 -11.151  1.00 24.90           O
ATOM   1450  CB  SER A 191       1.926  19.910 -10.783  1.00 25.10           C
ATOM   1451  OG  SER A 191       2.171  19.876 -12.181  1.00 24.23           O
ATOM   1452  H   SER A 191       2.086  16.910 -10.632  1.00  0.00           H
ATOM   1453  HA  SER A 191       0.648  19.066  -9.312  1.00  0.00           H
ATOM   1454  HB2 SER A 191       1.400  20.838 -10.555  1.00  0.00           H
ATOM   1455  HB3 SER A 191       2.876  19.981 -10.260  1.00  0.00           H
ATOM   1456  HG  SER A 191       2.541  19.011 -12.391  1.00  0.00           H
ATOM   1457  N   TYR A 192      -0.878  19.098 -11.639  1.00 24.18           N
ATOM   1458  CA  TYR A 192      -2.094  18.796 -12.387  1.00 22.22           C
ATOM   1459  C   TYR A 192      -1.742  18.909 -13.880  1.00 21.91           C
ATOM   1460  O   TYR A 192      -1.460  20.024 -14.317  1.00 20.67           O
ATOM   1461  CB  TYR A 192      -3.145  19.894 -12.067  1.00 22.43           C
ATOM   1462  CG  TYR A 192      -3.435  20.083 -10.589  1.00 24.33           C
ATOM   1463  CD1 TYR A 192      -4.524  19.432  -9.978  1.00 24.83           C
ATOM   1464  CD2 TYR A 192      -2.589  20.904  -9.815  1.00 24.09           C
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ATOM   1465  CE1 TYR A 192      -4.721  19.551  -8.589  1.00 24.93           C
ATOM   1466  CE2 TYR A 192      -2.783  21.014  -8.430  1.00 24.35           C
ATOM   1467  CZ  TYR A 192      -3.830  20.306  -7.811  1.00 24.98           C
ATOM   1468  OH  TYR A 192      -3.961  20.317  -6.457  1.00 28.04           O
ATOM   1469  H   TYR A 192      -0.585  20.068 -11.656  1.00  0.00           H
ATOM   1470  HA  TYR A 192      -2.501  17.819 -12.124  1.00  0.00           H
ATOM   1471  HB2 TYR A 192      -2.832  20.868 -12.447  1.00  0.00           H
ATOM   1472  HB3 TYR A 192      -4.077  19.667 -12.587  1.00  0.00           H
ATOM   1473  HD1 TYR A 192      -5.188  18.815 -10.564  1.00  0.00           H
ATOM   1474  HD2 TYR A 192      -1.766  21.431 -10.275  1.00  0.00           H
ATOM   1475  HE1 TYR A 192      -5.535  19.037  -8.104  1.00  0.00           H
ATOM   1476  HE2 TYR A 192      -2.104  21.621  -7.853  1.00  0.00           H
ATOM   1477  HH  TYR A 192      -3.392  20.982  -6.044  1.00  0.00           H
ATOM   1478  N   PRO A 193      -1.735  17.822 -14.680  1.00 22.36           N
ATOM   1479  CA  PRO A 193      -1.617  17.899 -16.143  1.00 24.02           C
ATOM   1480  C   PRO A 193      -2.662  18.815 -16.807  1.00 24.39           C
ATOM   1481  O   PRO A 193      -3.752  19.045 -16.280  1.00 24.70           O
ATOM   1482  CB  PRO A 193      -1.813  16.460 -16.634  1.00 24.46           C
ATOM   1483  CG  PRO A 193      -1.458  15.578 -15.453  1.00 25.42           C
ATOM   1484  CD  PRO A 193      -1.713  16.436 -14.217  1.00 24.13           C
ATOM   1485  HA  PRO A 193      -0.611  18.250 -16.384  1.00  0.00           H
ATOM   1486  HB2 PRO A 193      -2.855  16.278 -16.901  1.00  0.00           H
ATOM   1487  HB3 PRO A 193      -1.213  16.237 -17.516  1.00  0.00           H
ATOM   1488  HG2 PRO A 193      -2.034  14.651 -15.440  1.00  0.00           H
ATOM   1489  HG3 PRO A 193      -0.401  15.320 -15.511  1.00  0.00           H
ATOM   1490  HD2 PRO A 193      -2.662  16.162 -13.764  1.00  0.00           H
ATOM   1491  HD3 PRO A 193      -0.932  16.287 -13.475  1.00  0.00           H
ATOM   1492  N   GLU A 194      -2.348  19.303 -18.003  1.00 22.73           N
ATOM   1493  CA  GLU A 194      -3.154  20.238 -18.779  1.00 23.46           C
ATOM   1494  C   GLU A 194      -4.393  19.561 -19.413  1.00 23.36           C
ATOM   1495  O   GLU A 194      -5.232  20.257 -19.981  1.00 21.68           O
ATOM   1496  CB  GLU A 194      -2.243  20.847 -19.875  1.00 25.61           C
ATOM   1497  CG  GLU A 194      -1.223  21.902 -19.363  1.00 28.09           C
ATOM   1498  CD  GLU A 194      -0.220  21.395 -18.327  1.00 32.73           C
ATOM   1499  OE1 GLU A 194       0.054  22.138 -17.361  1.00 31.59           O
ATOM   1500  OE2 GLU A 194       0.200  20.219 -18.434  1.00 33.69           O1-
ATOM   1501  H   GLU A 194      -1.359  19.271 -18.271  1.00  0.00           H
ATOM   1502  HA  GLU A 194      -3.518  21.035 -18.128  1.00  0.00           H
ATOM   1503  HB2 GLU A 194      -1.715  20.055 -20.407  1.00  0.00           H
ATOM   1504  HB3 GLU A 194      -2.862  21.339 -20.626  1.00  0.00           H
ATOM   1505  HG2 GLU A 194      -0.650  22.293 -20.203  1.00  0.00           H
ATOM   1506  HG3 GLU A 194      -1.758  22.749 -18.935  1.00  0.00           H
ATOM   1507  N   TRP A 195      -4.543  18.231 -19.283  1.00 22.03           N
ATOM   1508  CA  TRP A 195      -5.757  17.497 -19.653  1.00 22.35           C
ATOM   1509  C   TRP A 195      -6.793  17.473 -18.509  1.00 22.75           C
ATOM   1510  O   TRP A 195      -7.941  17.098 -18.739  1.00 21.13           O
ATOM   1511  CB  TRP A 195      -5.405  16.035 -20.029  1.00 22.81           C
ATOM   1512  CG  TRP A 195      -4.790  15.113 -19.007  1.00 23.84           C
ATOM   1513  CD1 TRP A 195      -5.435  14.562 -17.952  1.00 25.41           C
ATOM   1514  CD2 TRP A 195      -3.447  14.535 -18.989  1.00 23.39           C
ATOM   1515  NE1 TRP A 195      -4.585  13.714 -17.273  1.00 26.41           N
ATOM   1516  CE3 TRP A 195      -2.300  14.656 -19.808  1.00 23.41           C
ATOM   1517  CE2 TRP A 195      -3.368  13.606 -17.905  1.00 24.13           C
ATOM   1518  CZ3 TRP A 195      -1.146  13.879 -19.573  1.00 26.61           C
ATOM   1519  CZ2 TRP A 195      -2.234  12.811 -17.673  1.00 24.83           C
ATOM   1520  CH2 TRP A 195      -1.115  12.952 -18.513  1.00 23.38           C
ATOM   1521  H   TRP A 195      -3.811  17.730 -18.804  1.00  0.00           H
ATOM   1522  HA  TRP A 195      -6.228  17.970 -20.516  1.00  0.00           H
ATOM   1523  HB2 TRP A 195      -6.316  15.541 -20.371  1.00  0.00           H
ATOM   1524  HB3 TRP A 195      -4.753  16.039 -20.902  1.00  0.00           H
ATOM   1525  HD1 TRP A 195      -6.476  14.735 -17.713  1.00  0.00           H
ATOM   1526  HE1 TRP A 195      -4.898  13.105 -16.509  1.00  0.00           H
ATOM   1527  HE3 TRP A 195      -2.324  15.328 -20.652  1.00  0.00           H
ATOM   1528  HZ3 TRP A 195      -0.297  13.965 -20.235  1.00  0.00           H
ATOM   1529  HZ2 TRP A 195      -2.231  12.085 -16.873  1.00  0.00           H
ATOM   1530  HH2 TRP A 195      -0.250  12.321 -18.366  1.00  0.00           H
ATOM   1531  N   ILE A 196      -6.404  17.838 -17.279  1.00 22.64           N
ATOM   1532  CA  ILE A 196      -7.265  17.810 -16.099  1.00 24.40           C
ATOM   1533  C   ILE A 196      -8.220  19.014 -16.177  1.00 23.38           C
ATOM   1534  O   ILE A 196      -7.794  20.135 -16.465  1.00 23.92           O
ATOM   1535  CB  ILE A 196      -6.380  17.918 -14.815  1.00 23.65           C
ATOM   1536  CG1 ILE A 196      -5.301  16.816 -14.719  1.00 23.75           C
ATOM   1537  CG2 ILE A 196      -7.162  17.990 -13.486  1.00 25.15           C
ATOM   1538  CD1 ILE A 196      -5.821  15.394 -14.498  1.00 22.43           C
ATOM   1539  H   ILE A 196      -5.472  18.215 -17.164  1.00  0.00           H
ATOM   1540  HA  ILE A 196      -7.837  16.881 -16.088  1.00  0.00           H
ATOM   1541  HB  ILE A 196      -5.846  18.867 -14.883  1.00  0.00           H
ATOM   1542 HG12 ILE A 196      -4.685  16.804 -15.615  1.00  0.00           H
ATOM   1543 HG13 ILE A 196      -4.631  17.076 -13.902  1.00  0.00           H
ATOM   1544 HG21 ILE A 196      -6.483  18.045 -12.635  1.00  0.00           H
ATOM   1545 HG22 ILE A 196      -7.799  18.871 -13.432  1.00  0.00           H
ATOM   1546 HG23 ILE A 196      -7.788  17.109 -13.351  1.00  0.00           H
ATOM   1547 HD11 ILE A 196      -4.998  14.679 -14.489  1.00  0.00           H
ATOM   1548 HD12 ILE A 196      -6.337  15.309 -13.548  1.00  0.00           H
ATOM   1549 HD13 ILE A 196      -6.508  15.086 -15.287  1.00  0.00           H
ATOM   1550  N   ASN A 197      -9.501  18.809 -15.847  1.00 22.81           N
ATOM   1551  CA  ASN A 197     -10.467  19.878 -15.604  1.00 22.80           C
ATOM   1552  C   ASN A 197     -10.072  20.598 -14.296  1.00 21.04           C
ATOM   1553  O   ASN A 197     -10.529  20.273 -13.198  1.00 21.74           O
ATOM   1554  CB  ASN A 197     -11.903  19.292 -15.559  1.00  0.00           C
ATOM   1555  CG  ASN A 197     -12.970  20.281 -15.075  1.00  0.00           C
ATOM   1556  OD1 ASN A 197     -13.525  20.095 -14.003  1.00  0.00           O
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ATOM   1557  ND2 ASN A 197     -13.262  21.353 -15.798  1.00  0.00           N
ATOM   1558  H   ASN A 197      -9.787  17.851 -15.643  1.00  0.00           H
ATOM   1559  HA  ASN A 197     -10.418  20.595 -16.426  1.00  0.00           H
ATOM   1560  HB2 ASN A 197     -12.187  18.918 -16.542  1.00  0.00           H
ATOM   1561  HB3 ASN A 197     -11.935  18.432 -14.892  1.00  0.00           H
ATOM   1562 HD22 ASN A 197     -13.884  22.030 -15.349  1.00  0.00           H
ATOM   1563 HD21 ASN A 197     -12.863  21.531 -16.704  1.00  0.00           H
ATOM   1564  N   GLN A 198      -9.218  21.617 -14.424  1.00 20.33           N
ATOM   1565  CA  GLN A 198      -8.799  22.532 -13.364  1.00 20.78           C
ATOM   1566  C   GLN A 198      -9.904  23.571 -13.049  1.00 22.61           C
ATOM   1567  O   GLN A 198      -9.611  24.726 -12.754  1.00 19.79           O
ATOM   1568  CB  GLN A 198      -7.436  23.164 -13.740  1.00 22.47           C
ATOM   1569  CG  GLN A 198      -6.328  22.093 -13.926  1.00 22.31           C
ATOM   1570  CD  GLN A 198      -4.897  22.627 -13.829  1.00 23.01           C
ATOM   1571  OE1 GLN A 198      -4.552  23.336 -12.884  1.00 21.95           O
ATOM   1572  NE2 GLN A 198      -4.036  22.255 -14.771  1.00 23.94           N
ATOM   1573  H   GLN A 198      -8.789  21.727 -15.336  1.00  0.00           H
ATOM   1574  HA  GLN A 198      -8.652  21.983 -12.440  1.00  0.00           H
ATOM   1575  HB2 GLN A 198      -7.526  23.768 -14.644  1.00  0.00           H
ATOM   1576  HB3 GLN A 198      -7.142  23.856 -12.948  1.00  0.00           H
ATOM   1577  HG2 GLN A 198      -6.425  21.327 -13.156  1.00  0.00           H
ATOM   1578  HG3 GLN A 198      -6.461  21.582 -14.878  1.00  0.00           H
ATOM   1579 HE21 GLN A 198      -4.321  21.625 -15.509  1.00  0.00           H
ATOM   1580 HE22 GLN A 198      -3.074  22.594 -14.776  1.00  0.00           H
ATOM   1581  N   THR A 199     -11.171  23.127 -13.055  1.00 22.32           N
ATOM   1582  CA  THR A 199     -12.304  23.772 -12.409  1.00 22.52           C
ATOM   1583  C   THR A 199     -12.707  22.814 -11.277  1.00 21.34           C
ATOM   1584  O   THR A 199     -12.483  23.171 -10.128  1.00 21.66           O
ATOM   1585  CB  THR A 199     -13.424  24.195 -13.405  1.00 21.15           C
ATOM   1586  OG1 THR A 199     -14.350  23.178 -13.734  1.00 24.02           O
ATOM   1587  CG2 THR A 199     -12.896  24.825 -14.704  1.00 20.12           C
ATOM   1588  H   THR A 199     -11.305  22.147 -13.265  1.00  0.00           H
ATOM   1589  HA  THR A 199     -11.962  24.692 -11.931  1.00  0.00           H
ATOM   1590  HB  THR A 199     -14.016  24.959 -12.897  1.00  0.00           H
ATOM   1591  HG1 THR A 199     -14.948  23.142 -12.973  1.00  0.00           H
ATOM   1592 HG21 THR A 199     -13.713  25.222 -15.305  1.00  0.00           H
ATOM   1593 HG22 THR A 199     -12.215  25.648 -14.484  1.00  0.00           H
ATOM   1594 HG23 THR A 199     -12.354  24.101 -15.312  1.00  0.00           H
ATOM   1595  N   LYS A 200     -13.134  21.561 -11.533  1.00 21.45           N
ATOM   1596  CA  LYS A 200     -13.511  20.596 -10.483  1.00 22.36           C
ATOM   1597  C   LYS A 200     -12.307  20.251  -9.585  1.00 21.80           C
ATOM   1598  O   LYS A 200     -12.447  20.127  -8.369  1.00 21.82           O
ATOM   1599  CB  LYS A 200     -14.114  19.321 -11.117  1.00 23.43           C
ATOM   1600  CG  LYS A 200     -14.778  18.348 -10.118  1.00 27.52           C
ATOM   1601  CD  LYS A 200     -15.288  17.063 -10.796  1.00 27.63           C
ATOM   1602  CE  LYS A 200     -15.794  16.003  -9.794  1.00 27.92           C
ATOM   1603  NZ  LYS A 200     -15.816  14.654 -10.391  1.00 31.29          N1+
ATOM   1604  H   LYS A 200     -13.358  21.309 -12.493  1.00  0.00           H
ATOM   1605  HA  LYS A 200     -14.275  21.060  -9.860  1.00  0.00           H
ATOM   1606  HB2 LYS A 200     -14.875  19.625 -11.837  1.00  0.00           H
ATOM   1607  HB3 LYS A 200     -13.343  18.800 -11.687  1.00  0.00           H
ATOM   1608  HG2 LYS A 200     -14.063  18.081  -9.339  1.00  0.00           H
ATOM   1609  HG3 LYS A 200     -15.599  18.858  -9.609  1.00  0.00           H
ATOM   1610  HD2 LYS A 200     -16.076  17.314 -11.509  1.00  0.00           H
ATOM   1611  HD3 LYS A 200     -14.470  16.654 -11.391  1.00  0.00           H
ATOM   1612  HE2 LYS A 200     -15.147  15.965  -8.919  1.00  0.00           H
ATOM   1613  HE3 LYS A 200     -16.784  16.263  -9.417  1.00  0.00           H
ATOM   1614  HZ1 LYS A 200     -15.763  13.926  -9.642  1.00  0.00           H
ATOM   1615  HZ2 LYS A 200     -16.646  14.489 -10.933  1.00  0.00           H
ATOM   1616  HZ3 LYS A 200     -14.997  14.496 -10.955  1.00  0.00           H
ATOM   1617  N   ALA A 201     -11.099  20.195 -10.167  1.00 21.18           N
ATOM   1618  CA  ALA A 201      -9.843  20.072  -9.428  1.00 21.35           C
ATOM   1619  C   ALA A 201      -9.424  21.368  -8.702  1.00 21.94           C
ATOM   1620  O   ALA A 201      -8.417  21.345  -7.999  1.00 19.69           O
ATOM   1621  CB  ALA A 201      -8.720  19.644 -10.391  1.00 16.72           C
ATOM   1622  H   ALA A 201     -11.065  20.321 -11.174  1.00  0.00           H
ATOM   1623  HA  ALA A 201      -9.960  19.309  -8.661  1.00  0.00           H
ATOM   1624  HB1 ALA A 201      -7.735  19.730  -9.931  1.00  0.00           H
ATOM   1625  HB2 ALA A 201      -8.837  18.611 -10.708  1.00  0.00           H
ATOM   1626  HB3 ALA A 201      -8.699  20.249 -11.288  1.00  0.00           H
ATOM   1627  N   ALA A 202     -10.157  22.481  -8.847  1.00 20.87           N
ATOM   1628  CA  ALA A 202      -9.987  23.736  -8.113  1.00 22.47           C
ATOM   1629  C   ALA A 202     -11.132  23.915  -7.094  1.00 22.33           C
ATOM   1630  O   ALA A 202     -10.864  24.204  -5.930  1.00 22.37           O
ATOM   1631  CB  ALA A 202      -9.973  24.920  -9.096  1.00 19.99           C
ATOM   1632  H   ALA A 202     -10.998  22.422  -9.415  1.00  0.00           H
ATOM   1633  HA  ALA A 202      -9.037  23.744  -7.584  1.00  0.00           H
ATOM   1634  HB1 ALA A 202      -9.753  25.850  -8.572  1.00  0.00           H
ATOM   1635  HB2 ALA A 202      -9.204  24.788  -9.858  1.00  0.00           H
ATOM   1636  HB3 ALA A 202     -10.923  25.060  -9.608  1.00  0.00           H
ATOM   1637  N   GLU A 203     -12.391  23.689  -7.501  1.00 22.02           N
ATOM   1638  CA  GLU A 203     -13.627  23.795  -6.714  1.00 23.59           C
ATOM   1639  C   GLU A 203     -13.557  22.931  -5.440  1.00 23.77           C
ATOM   1640  O   GLU A 203     -13.756  23.405  -4.318  1.00 22.97           O
ATOM   1641  CB  GLU A 203     -14.826  23.343  -7.587  1.00 24.19           C
ATOM   1642  CG  GLU A 203     -15.170  24.232  -8.814  1.00 28.14           C
ATOM   1643  CD  GLU A 203     -15.817  23.444  -9.962  1.00 30.24           C
ATOM   1644  OE1 GLU A 203     -16.492  22.436  -9.663  1.00 31.20           O
ATOM   1645  OE2 GLU A 203     -15.576  23.815 -11.136  1.00 32.85          O1-
ATOM   1646  H   GLU A 203     -12.523  23.481  -8.493  1.00  0.00           H
ATOM   1647  HA  GLU A 203     -13.764  24.835  -6.416  1.00  0.00           H
ATOM   1648  HB2 GLU A 203     -14.637  22.323  -7.924  1.00  0.00           H
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ATOM   1649  HB3 GLU A 203     -15.725  23.269  -6.973  1.00  0.00           H
ATOM   1650  HG2 GLU A 203     -15.849  25.031  -8.520  1.00  0.00           H
ATOM   1651  HG3 GLU A 203     -14.280  24.722  -9.204  1.00  0.00           H
ATOM   1652  N   ILE A 204     -13.196  21.656  -5.618  1.00 23.93           N
ATOM   1653  CA  ILE A 204     -13.187  20.636  -4.574  1.00 24.60           C
ATOM   1654  C   ILE A 204     -11.849  20.671  -3.787  1.00 24.13           C
ATOM   1655  O   ILE A 204     -11.643  19.853  -2.890  1.00 26.89           O
ATOM   1656  CB  ILE A 204     -13.516  19.259  -5.239  1.00 24.83           C
ATOM   1657  CG1 ILE A 204     -14.775  19.324  -6.155  1.00 27.64           C
ATOM   1658  CG2 ILE A 204     -13.693  18.098  -4.238  1.00 22.97           C
ATOM   1659  CD1 ILE A 204     -16.077  19.744  -5.455  1.00 28.38           C
ATOM   1660  H   ILE A 204     -13.029  21.342  -6.569  1.00  0.00           H
ATOM   1661  HA  ILE A 204     -13.973  20.856  -3.850  1.00  0.00           H
ATOM   1662  HB  ILE A 204     -12.678  18.991  -5.885  1.00  0.00           H
ATOM   1663 HG12 ILE A 204     -14.608  19.996  -6.995  1.00  0.00           H
ATOM   1664 HG13 ILE A 204     -14.937  18.353  -6.620  1.00  0.00           H
ATOM   1665 HG21 ILE A 204     -14.110  17.218  -4.726  1.00  0.00           H
ATOM   1666 HG22 ILE A 204     -12.751  17.785  -3.796  1.00  0.00           H
ATOM   1667 HG23 ILE A 204     -14.368  18.373  -3.428  1.00  0.00           H
ATOM   1668 HD11 ILE A 204     -16.905  19.755  -6.164  1.00  0.00           H
ATOM   1669 HD12 ILE A 204     -16.341  19.061  -4.649  1.00  0.00           H
ATOM   1670 HD13 ILE A 204     -16.005  20.747  -5.035  1.00  0.00           H
ATOM   1671  N   ARG A 205     -10.967  21.664  -4.020  1.00 23.13           N
ATOM   1672  CA  ARG A 205      -9.857  21.995  -3.111  1.00 25.14           C
ATOM   1673  C   ARG A 205     -10.406  22.738  -1.878  1.00 25.07           C
ATOM   1674  O   ARG A 205      -9.821  22.646  -0.799  1.00 22.75           O
ATOM   1675  CB  ARG A 205      -8.841  22.971  -3.762  1.00 25.21           C
ATOM   1676  CG  ARG A 205      -8.247  22.555  -5.116  1.00 29.73           C
ATOM   1677  CD  ARG A 205      -6.956  21.719  -5.069  1.00 29.20           C
ATOM   1678  NE  ARG A 205      -5.769  22.501  -5.455  1.00 29.90           N
ATOM   1679  CZ  ARG A 205      -5.407  22.916  -6.679  1.00 28.96           C
ATOM   1680  NH1 ARG A 205      -6.197  22.795  -7.744  1.00 29.65           N
ATOM   1681  NH2 ARG A 205      -4.208  23.462  -6.832  1.00 28.01           N1+
ATOM   1682  H   ARG A 205     -11.198  22.331  -4.748  1.00  0.00           H
ATOM   1683  HA  ARG A 205      -9.345  21.087  -2.793  1.00  0.00           H
ATOM   1684  HB2 ARG A 205      -9.326  23.938  -3.906  1.00  0.00           H
ATOM   1685  HB3 ARG A 205      -8.026  23.177  -3.066  1.00  0.00           H
ATOM   1686  HG2 ARG A 205      -9.005  22.034  -5.696  1.00  0.00           H
ATOM   1687  HG3 ARG A 205      -8.036  23.474  -5.661  1.00  0.00           H
ATOM   1688  HD2 ARG A 205      -6.798  21.295  -4.077  1.00  0.00           H
ATOM   1689  HD3 ARG A 205      -7.030  20.870  -5.750  1.00  0.00           H
ATOM   1690  HE  ARG A 205      -5.055  22.656  -4.708  1.00  0.00           H
ATOM   1691 HH11 ARG A 205      -7.065  22.249  -7.718  1.00  0.00           H
ATOM   1692 HH12 ARG A 205      -5.875  23.086  -8.685  1.00  0.00           H
ATOM   1693 HH21 ARG A 205      -3.487  23.206  -6.132  1.00  0.00           H
ATOM   1694 HH22 ARG A 205      -3.847  23.816  -7.717  1.00  0.00           H
ATOM   1695  N   ALA A 206     -11.495  23.502  -2.056  1.00 24.01           N
ATOM   1696  CA  ALA A 206     -12.116  24.325  -1.027  1.00 24.47           C
ATOM   1697  C   ALA A 206     -13.243  23.541  -0.344  1.00 24.30           C
ATOM   1698  O   ALA A 206     -13.196  23.365   0.869  1.00 25.49           O
ATOM   1699  CB  ALA A 206     -12.713  25.579  -1.690  1.00 23.88           C
ATOM   1700  H   ALA A 206     -11.926  23.504  -2.973  1.00  0.00           H
ATOM   1701  HA  ALA A 206     -11.384  24.628  -0.275  1.00  0.00           H
ATOM   1702  HB1 ALA A 206     -13.208  26.211  -0.951  1.00  0.00           H
ATOM   1703  HB2 ALA A 206     -11.931  26.179  -2.156  1.00  0.00           H
ATOM   1704  HB3 ALA A 206     -13.445  25.339  -2.462  1.00  0.00           H
ATOM   1705  N   ASP A 207     -14.235  23.055  -1.114  1.00 23.97           N
ATOM   1706  CA  ASP A 207     -15.451  22.369  -0.626  1.00 24.82           C
ATOM   1707  C   ASP A 207     -15.131  21.211   0.345  1.00 24.07           C
ATOM   1708  O   ASP A 207     -15.731  21.073   1.413  1.00 24.77           O
ATOM   1709  CB  ASP A 207     -16.365  21.968  -1.831  1.00 25.95           C
ATOM   1710  CG  ASP A 207     -16.943  20.549  -1.838  1.00 28.75           C
ATOM   1711  OD1 ASP A 207     -18.163  20.368  -1.638  1.00 30.03           O
ATOM   1712  OD2 ASP A 207     -16.181  19.567  -1.997  1.00 31.14           O1-
ATOM   1713  H   ASP A 207     -14.179  23.242  -2.108  1.00  0.00           H
ATOM   1714  HA  ASP A 207     -16.003  23.099  -0.031  1.00  0.00           H
ATOM   1715  HB2 ASP A 207     -17.197  22.669  -1.899  1.00  0.00           H
ATOM   1716  HB3 ASP A 207     -15.824  22.074  -2.771  1.00  0.00           H
ATOM   1717  N   ALA A 208     -14.140  20.399  -0.036  1.00 23.20           N
ATOM   1718  CA  ALA A 208     -13.770  19.166   0.634  1.00 22.76           C
ATOM   1719  C   ALA A 208     -13.073  19.400   1.984  1.00 22.38           C
ATOM   1720  O   ALA A 208     -13.051  18.490   2.814  1.00 24.01           O
ATOM   1721  CB  ALA A 208     -12.852  18.379  -0.299  1.00 19.96           C
ATOM   1722  H   ALA A 208     -13.755  20.570  -0.953  1.00  0.00           H
ATOM   1723  HA  ALA A 208     -14.673  18.587   0.807  1.00  0.00           H
ATOM   1724  HB1 ALA A 208     -12.505  17.466   0.173  1.00  0.00           H
ATOM   1725  HB2 ALA A 208     -13.371  18.097  -1.214  1.00  0.00           H
ATOM   1726  HB3 ALA A 208     -11.982  18.966  -0.575  1.00  0.00           H
ATOM   1727  N   ALA A 209     -12.587  20.626   2.244  1.00 22.75           N
ATOM   1728  CA  ALA A 209     -12.045  21.067   3.533  1.00 22.99           C
ATOM   1729  C   ALA A 209     -13.127  21.108   4.626  1.00 24.29           C
ATOM   1730  O   ALA A 209     -12.812  21.049   5.815  1.00 25.18           O
ATOM   1731  CB  ALA A 209     -11.448  22.473   3.379  1.00 23.91           C
ATOM   1732  H   ALA A 209     -12.724  21.342   1.538  1.00  0.00           H
ATOM   1733  HA  ALA A 209     -11.265  20.372   3.841  1.00  0.00           H
ATOM   1734  HB1 ALA A 209     -10.858  22.746   4.254  1.00  0.00           H
ATOM   1735  HB2 ALA A 209     -10.797  22.541   2.508  1.00  0.00           H
ATOM   1736  HB3 ALA A 209     -12.223  23.232   3.262  1.00  0.00           H
ATOM   1737  N   THR A 210     -14.394  21.160   4.211  1.00 22.25           N
ATOM   1738  CA  THR A 210     -15.594  21.109   5.028  1.00 22.42           C
ATOM   1739  C   THR A 210     -16.423  19.846   4.711  1.00 21.18           C
ATOM   1740  O   THR A 210     -17.615  19.818   5.010  1.00 19.00           O
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ATOM   1741  CB  THR A 210     -16.357  22.454   4.868  1.00 24.82           C
ATOM   1742  OG1 THR A 210     -16.471  22.856   3.511  1.00 24.17           O
ATOM   1743  CG2 THR A 210     -15.673  23.611   5.610  1.00 24.26           C
ATOM   1744  H   THR A 210     -14.556  21.299   3.219  1.00  0.00           H
ATOM   1745  HA  THR A 210     -15.327  21.001   6.080  1.00  0.00           H
ATOM   1746  HB  THR A 210     -17.366  22.347   5.271  1.00  0.00           H
ATOM   1747  HG1 THR A 210     -16.693  22.110   2.962  1.00  0.00           H
ATOM   1748 HG21 THR A 210     -16.250  24.531   5.514  1.00  0.00           H
ATOM   1749 HG22 THR A 210     -15.572  23.392   6.673  1.00  0.00           H
ATOM   1750 HG23 THR A 210     -14.676  23.804   5.214  1.00  0.00           H
ATOM   1751  N   LYS A 211     -15.806  18.790   4.146  1.00 20.79           N
ATOM   1752  CA  LYS A 211     -16.446  17.488   3.932  1.00 22.47           C
ATOM   1753  C   LYS A 211     -15.658  16.328   4.557  1.00 22.13           C
ATOM   1754  O   LYS A 211     -16.282  15.433   5.124  1.00 22.26           O
ATOM   1755  CB  LYS A 211     -16.741  17.203   2.439  1.00 24.94           C
ATOM   1756  CG  LYS A 211     -17.643  18.238   1.730  1.00 30.95           C
ATOM   1757  CD  LYS A 211     -18.762  17.621   0.871  1.00 35.72           C
ATOM   1758  CE  LYS A 211     -18.299  16.869  -0.390  1.00 40.53           C
ATOM   1759  NZ  LYS A 211     -17.990  17.771  -1.510  1.00 39.99           N1+
ATOM   1760  H   LYS A 211     -14.821  18.878   3.932  1.00  0.00           H
ATOM   1761  HA  LYS A 211     -17.409  17.471   4.447  1.00  0.00           H
ATOM   1762  HB2 LYS A 211     -15.809  17.077   1.891  1.00  0.00           H
ATOM   1763  HB3 LYS A 211     -17.224  16.225   2.394  1.00  0.00           H
ATOM   1764  HG2 LYS A 211     -18.123  18.870   2.478  1.00  0.00           H
ATOM   1765  HG3 LYS A 211     -17.041  18.914   1.126  1.00  0.00           H
ATOM   1766  HD2 LYS A 211     -19.334  16.937   1.501  1.00  0.00           H
ATOM   1767  HD3 LYS A 211     -19.467  18.405   0.589  1.00  0.00           H
ATOM   1768  HE2 LYS A 211     -17.444  16.224  -0.184  1.00  0.00           H
ATOM   1769  HE3 LYS A 211     -19.109  16.217  -0.719  1.00  0.00           H
ATOM   1770  HZ1 LYS A 211     -18.053  17.360  -2.422  1.00  0.00           H
ATOM   1771  HZ2 LYS A 211     -18.529  18.646  -1.503  1.00  0.00           H
ATOM   1772  HZ3 LYS A 211     -17.072  18.238  -1.462  1.00  0.00           H
ATOM   1773  N   TYR A 212     -14.323  16.277   4.421  1.00 21.51           N
ATOM   1774  CA  TYR A 212     -13.554  15.087   4.797  1.00 22.30           C
ATOM   1775  C   TYR A 212     -12.067  15.345   5.064  1.00 19.69           C
ATOM   1776  O   TYR A 212     -11.494  16.315   4.569  1.00 19.22           O
ATOM   1777  CB  TYR A 212     -13.791  13.940   3.784  1.00 22.78           C
ATOM   1778  CG  TYR A 212     -13.627  14.306   2.315  1.00 23.36           C
ATOM   1779  CD1 TYR A 212     -12.353  14.578   1.775  1.00 23.83           C
ATOM   1780  CD2 TYR A 212     -14.758  14.352   1.475  1.00 26.25           C
ATOM   1781  CE1 TYR A 212     -12.217  14.852   0.402  1.00 23.80           C
ATOM   1782  CE2 TYR A 212     -14.617  14.621   0.101  1.00 24.56           C
ATOM   1783  CZ  TYR A 212     -13.341  14.854  -0.441  1.00 23.94           C
ATOM   1784  OH  TYR A 212     -13.190  15.081  -1.776  1.00 25.44           O
ATOM   1785  H   TYR A 212     -13.816  17.012   3.937  1.00  0.00           H
ATOM   1786  HA  TYR A 212     -13.945  14.756   5.759  1.00  0.00           H
ATOM   1787  HB2 TYR A 212     -13.119  13.107   3.998  1.00  0.00           H
ATOM   1788  HB3 TYR A 212     -14.790  13.530   3.935  1.00  0.00           H
ATOM   1789  HD1 TYR A 212     -11.473  14.556   2.401  1.00  0.00           H
ATOM   1790  HD2 TYR A 212     -15.738  14.165   1.887  1.00  0.00           H
ATOM   1791  HE1 TYR A 212     -11.242  15.060  -0.003  1.00  0.00           H
ATOM   1792  HE2 TYR A 212     -15.489  14.625  -0.534  1.00  0.00           H
ATOM   1793  HH  TYR A 212     -13.987  14.927  -2.262  1.00  0.00           H
ATOM   1794  N   ILE A 213     -11.450  14.425   5.819  1.00 19.76           N
ATOM   1795  CA  ILE A 213     -10.020  14.228   6.075  1.00 18.38           C
ATOM   1796  C   ILE A 213      -9.163  14.287   4.789  1.00 19.12           C
ATOM   1797  O   ILE A 213      -9.421  13.551   3.832  1.00 20.73           O
ATOM   1798  CB  ILE A 213      -9.844  12.935   6.933  1.00 18.18           C
ATOM   1799  CG1 ILE A 213      -8.392  12.498   7.228  1.00 16.52           C
ATOM   1800  CG2 ILE A 213     -10.600  11.720   6.366  1.00 15.90           C
ATOM   1801  CD1 ILE A 213      -7.520  13.543   7.928  1.00 15.33           C
ATOM   1802  H   ILE A 213     -12.053  13.735   6.252  1.00  0.00           H
ATOM   1803  HA  ILE A 213      -9.719  15.064   6.701  1.00  0.00           H
ATOM   1804  HB  ILE A 213     -10.297  13.151   7.902  1.00  0.00           H
ATOM   1805 HG12 ILE A 213      -8.414  11.617   7.871  1.00  0.00           H
ATOM   1806 HG13 ILE A 213      -7.907  12.169   6.311  1.00  0.00           H
ATOM   1807 HG21 ILE A 213     -10.476  10.872   7.035  1.00  0.00           H
ATOM   1808 HG22 ILE A 213     -11.673  11.884   6.269  1.00  0.00           H
ATOM   1809 HG23 ILE A 213     -10.219  11.428   5.387  1.00  0.00           H
ATOM   1810 HD11 ILE A 213      -6.577  13.101   8.250  1.00  0.00           H
ATOM   1811 HD12 ILE A 213      -7.259  14.356   7.257  1.00  0.00           H
ATOM   1812 HD13 ILE A 213      -8.011  13.955   8.811  1.00  0.00           H
ATOM   1813  N   TYR A 214      -8.175  15.195   4.757  1.00 17.70           N
ATOM   1814  CA  TYR A 214      -7.223  15.454   3.670  1.00 17.21           C
ATOM   1815  C   TYR A 214      -7.920  16.007   2.405  1.00 16.96           C
ATOM   1816  O   TYR A 214      -7.448  15.844   1.280  1.00 18.78           O
ATOM   1817  CB  TYR A 214      -6.277  14.256   3.376  1.00 16.51           C
ATOM   1818  CG  TYR A 214      -5.445  13.719   4.517  1.00 22.99           C
ATOM   1819  CD1 TYR A 214      -4.473  14.481   5.175  1.00 22.50           C
ATOM   1820  CD2 TYR A 214      -5.546  12.368   4.854  1.00 22.11           C
ATOM   1821  CE1 TYR A 214      -3.637  13.914   6.133  1.00 25.16           C
ATOM   1822  CE2 TYR A 214      -4.725  11.786   5.811  1.00 24.75           C
ATOM   1823  CZ  TYR A 214      -3.757  12.559   6.457  1.00 24.22           C
ATOM   1824  OH  TYR A 214      -2.946  12.057   7.416  1.00 26.19           O
ATOM   1825  H   TYR A 214      -8.052  15.762   5.595  1.00  0.00           H
ATOM   1826  HA  TYR A 214      -6.601  16.277   4.027  1.00  0.00           H
ATOM   1827  HB2 TYR A 214      -6.875  13.436   2.979  1.00  0.00           H
ATOM   1828  HB3 TYR A 214      -5.597  14.538   2.565  1.00  0.00           H
ATOM   1829  HD1 TYR A 214      -4.360  15.538   4.939  1.00  0.00           H
ATOM   1830  HD2 TYR A 214      -6.273  11.733   4.353  1.00  0.00           H
ATOM   1831  HE1 TYR A 214      -2.889  14.510   6.647  1.00  0.00           H
ATOM   1832  HE2 TYR A 214      -4.826  10.730   6.041  1.00  0.00           H
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ATOM   1833  HH  TYR A 214      -2.990  11.074   7.416  1.00  0.00           H
ATOM   1834  N   GLY A 215      -9.045  16.702   2.582  1.00 19.32           N
ATOM   1835  CA  GLY A 215      -9.892  17.224   1.516  1.00 20.66           C
ATOM   1836  C   GLY A 215      -9.594  18.700   1.269  1.00 20.07           C
ATOM   1837  O   GLY A 215      -9.617  19.146   0.123  1.00 23.01           O
ATOM   1838  H   GLY A 215      -9.355  16.858   3.536  1.00  0.00           H
ATOM   1839  HA2 GLY A 215      -9.770  16.664   0.589  1.00  0.00           H
ATOM   1840  HA3 GLY A 215     -10.931  17.123   1.828  1.00  0.00           H
ATOM   1841  N   GLY A 216      -9.134  19.411   2.300  1.00 20.86           N
ATOM   1842  CA  GLY A 216      -8.554  20.745   2.201  1.00 19.87           C
ATOM   1843  C   GLY A 216      -7.031  20.640   2.093  1.00 20.78           C
ATOM   1844  O   GLY A 216      -6.303  21.553   2.480  1.00 20.29           O
ATOM   1845  H   GLY A 216      -9.189  18.992   3.230  1.00  0.00           H
ATOM   1846  HA2 GLY A 216      -8.950  21.301   1.351  1.00  0.00           H
ATOM   1847  HA3 GLY A 216      -8.802  21.309   3.099  1.00  0.00           H
ATOM   1848  N   SER A 217      -6.530  19.503   1.596  1.00 19.48           N
ATOM   1849  CA  SER A 217      -5.138  19.280   1.270  1.00 20.05           C
ATOM   1850  C   SER A 217      -4.965  19.507  -0.234  1.00 20.74           C
ATOM   1851  O   SER A 217      -5.795  19.089  -1.053  1.00 20.42           O
ATOM   1852  CB  SER A 217      -4.766  17.815   1.563  1.00 20.42           C
ATOM   1853  OG  SER A 217      -3.360  17.652   1.509  1.00 20.14           O
ATOM   1854  H   SER A 217      -7.193  18.815   1.269  1.00  0.00           H
ATOM   1855  HA  SER A 217      -4.493  19.950   1.842  1.00  0.00           H
ATOM   1856  HB2 SER A 217      -5.109  17.509   2.551  1.00  0.00           H
ATOM   1857  HB3 SER A 217      -5.238  17.143   0.846  1.00  0.00           H
ATOM   1858  HG  SER A 217      -3.013  17.926   2.356  1.00  0.00           H
ATOM   1859  N   GLU A 218      -3.839  20.125  -0.572  1.00 21.33           N
ATOM   1860  CA  GLU A 218      -3.291  20.206  -1.907  1.00 22.53           C
ATOM   1861  C   GLU A 218      -2.540  18.888  -2.190  1.00 21.12           C
ATOM   1862  O   GLU A 218      -2.949  18.094  -3.038  1.00 21.10           O
ATOM   1863  CB  GLU A 218      -2.327  21.415  -1.879  1.00 25.65           C
ATOM   1864  CG  GLU A 218      -1.669  21.797  -3.202  1.00 26.70           C
ATOM   1865  CD  GLU A 218      -2.646  22.340  -4.225  1.00 27.03           C
ATOM   1866  OE1 GLU A 218      -3.679  22.952  -3.879  1.00 26.49           O
ATOM   1867  OE2 GLU A 218      -2.383  22.157  -5.428  1.00 26.09           O1-
ATOM   1868  H   GLU A 218      -3.259  20.492   0.177  1.00  0.00           H
ATOM   1869  HA  GLU A 218      -4.083  20.354  -2.644  1.00  0.00           H
ATOM   1870  HB2 GLU A 218      -2.871  22.287  -1.524  1.00  0.00           H
ATOM   1871  HB3 GLU A 218      -1.532  21.262  -1.151  1.00  0.00           H
ATOM   1872  HG2 GLU A 218      -0.955  22.589  -3.001  1.00  0.00           H
ATOM   1873  HG3 GLU A 218      -1.104  20.963  -3.618  1.00  0.00           H
ATOM   1874  N   SER A 219      -1.465  18.634  -1.431  1.00 19.74           N
ATOM   1875  CA  SER A 219      -0.440  17.653  -1.758  1.00 18.94           C
ATOM   1876  C   SER A 219      -0.848  16.189  -1.537  1.00 18.73           C
ATOM   1877  O   SER A 219      -0.252  15.315  -2.165  1.00 18.43           O
ATOM   1878  CB  SER A 219       0.825  18.003  -0.957  1.00 17.41           C
ATOM   1879  OG  SER A 219       0.661  17.882   0.447  1.00 21.92           O
ATOM   1880  H   SER A 219      -1.231  19.276  -0.691  1.00  0.00           H
ATOM   1881  HA  SER A 219      -0.202  17.755  -2.814  1.00  0.00           H
ATOM   1882  HB2 SER A 219       1.637  17.340  -1.266  1.00  0.00           H
ATOM   1883  HB3 SER A 219       1.163  19.014  -1.191  1.00  0.00           H
ATOM   1884  HG  SER A 219       1.546  17.663   0.754  1.00  0.00           H
ATOM   1885  N   TYR A 220      -1.889  15.894  -0.736  1.00 20.35           N
ATOM   1886  CA  TYR A 220      -2.397  14.530  -0.542  1.00 20.31           C
ATOM   1887  C   TYR A 220      -2.920  13.929  -1.867  1.00 21.43           C
ATOM   1888  O   TYR A 220      -2.801  12.731  -2.106  1.00 21.25           O
ATOM   1889  CB  TYR A 220      -3.504  14.509   0.541  1.00 18.66           C
ATOM   1890  CG  TYR A 220      -3.883  13.144   1.081  1.00 19.79           C
ATOM   1891  CD1 TYR A 220      -3.137  12.622   2.144  1.00 20.92           C
ATOM   1892  CD2 TYR A 220      -4.988  12.419   0.633  1.00 19.71           C
ATOM   1893  CE1 TYR A 220      -3.443  11.390   2.702  1.00 21.76           C
ATOM   1894  CE2 TYR A 220      -5.325  11.189   1.196  1.00 20.40           C
ATOM   1895  CZ  TYR A 220      -4.536  10.666   2.218  1.00 22.36           C
ATOM   1896  OH  TYR A 220      -4.853   9.455   2.750  1.00 20.26           O
ATOM   1897  H   TYR A 220      -2.338  16.647  -0.224  1.00  0.00           H
ATOM   1898  HA  TYR A 220      -1.564  13.918  -0.189  1.00  0.00           H
ATOM   1899  HB2 TYR A 220      -3.107  15.095   1.372  1.00  0.00           H
ATOM   1900  HB3 TYR A 220      -4.382  15.031   0.150  1.00  0.00           H
ATOM   1901  HD1 TYR A 220      -2.302  13.192   2.547  1.00  0.00           H
ATOM   1902  HD2 TYR A 220      -5.592  12.814  -0.180  1.00  0.00           H
ATOM   1903  HE1 TYR A 220      -2.856  10.997   3.527  1.00  0.00           H
ATOM   1904  HE2 TYR A 220      -6.167  10.611   0.832  1.00  0.00           H
ATOM   1905  HH  TYR A 220      -4.264   9.285   3.531  1.00  0.00           H
ATOM   1906  N   ARG A 221      -3.419  14.778  -2.773  1.00 19.98           N
ATOM   1907  CA  ARG A 221      -3.951  14.389  -4.075  1.00 19.09           C
ATOM   1908  C   ARG A 221      -2.818  14.059  -5.063  1.00 20.19           C
ATOM   1909  O   ARG A 221      -2.935  13.121  -5.850  1.00 18.27           O
ATOM   1910  CB  ARG A 221      -4.755  15.578  -4.626  1.00 19.12           C
ATOM   1911  CG  ARG A 221      -5.922  15.993  -3.715  1.00 16.39           C
ATOM   1912  CD  ARG A 221      -6.601  17.286  -4.177  1.00 17.18           C
ATOM   1913  NE  ARG A 221      -8.054  17.186  -4.007  1.00 19.14           N
ATOM   1914  CZ  ARG A 221      -8.814  17.816  -3.109  1.00 18.73           C
ATOM   1915  NH1 ARG A 221      -8.300  18.617  -2.175  1.00 18.23           N
ATOM   1916  NH2 ARG A 221     -10.123  17.616  -3.154  1.00 17.55           N1+
ATOM   1917  H   ARG A 221      -3.392  15.764  -2.547  1.00  0.00           H
ATOM   1918  HA  ARG A 221      -4.599  13.515  -3.970  1.00  0.00           H
ATOM   1919  HB2 ARG A 221      -4.098  16.433  -4.798  1.00  0.00           H
ATOM   1920  HB3 ARG A 221      -5.158  15.298  -5.599  1.00  0.00           H
ATOM   1921  HG2 ARG A 221      -6.636  15.170  -3.656  1.00  0.00           H
ATOM   1922  HG3 ARG A 221      -5.576  16.158  -2.694  1.00  0.00           H
ATOM   1923  HD2 ARG A 221      -6.184  18.151  -3.660  1.00  0.00           H
ATOM   1924  HD3 ARG A 221      -6.410  17.463  -5.235  1.00  0.00           H
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ATOM   1925  HE  ARG A 221      -8.522  16.595  -4.694  1.00  0.00          H
ATOM   1926 HH11 ARG A 221      -7.294  18.738  -2.029  1.00  0.00          H
ATOM   1927 HH12 ARG A 221      -8.890  18.974  -1.411  1.00  0.00          H
ATOM   1928 HH21 ARG A 221     -10.505  16.871  -3.748  1.00  0.00          H
ATOM   1929 HH22 ARG A 221     -10.780  18.317  -2.793  1.00  0.00          H
ATOM   1930  N   HIS A 222      -1.702  14.800  -4.986  1.00 19.92          N
ATOM   1931  CA  HIS A 222      -0.489  14.575  -5.777  1.00 20.24          C
ATOM   1932  C   HIS A 222       0.226  13.318  -5.281  1.00 19.44          C
ATOM   1933  O   HIS A 222       0.635  12.484  -6.085  1.00 21.15          O
ATOM   1934  CB  HIS A 222       0.464  15.776  -5.629  1.00 18.79          C
ATOM   1935  CG  HIS A 222      -0.109  17.058  -6.147  1.00 19.64          C
ATOM   1936  ND1 HIS A 222      -0.244  18.188  -5.338  1.00 22.12          N
ATOM   1937  CD2 HIS A 222      -0.618  17.337  -7.395  1.00 20.71          C
ATOM   1938  CE1 HIS A 222      -0.879  19.069  -6.095  1.00 20.00          C
ATOM   1939  NE2 HIS A 222      -1.132  18.617  -7.320  1.00 22.40          N
ATOM   1940  H   HIS A 222      -1.669  15.513  -4.271  1.00  0.00          H
ATOM   1941  HA  HIS A 222      -0.755  14.437  -6.827  1.00  0.00          H
ATOM   1942  HB2 HIS A 222       0.762  15.917  -4.589  1.00  0.00          H
ATOM   1943  HB3 HIS A 222       1.388  15.587  -6.173  1.00  0.00          H
ATOM   1944  HD2 HIS A 222      -0.685  16.734  -8.289  1.00  0.00          H
ATOM   1945  HE1 HIS A 222      -1.177  20.044  -5.749  1.00  0.00          H
ATOM   1946  HE2 HIS A 222      -1.673  19.109  -8.024  1.00  0.00          H
ATOM   1947  N   MET A 223       0.293  13.159  -3.953  1.00 20.38          N
ATOM   1948  CA  MET A 223       0.741  11.972  -3.239  1.00 21.04          C
ATOM   1949  C   MET A 223      -0.036  10.728  -3.684  1.00 21.36          C
ATOM   1950  O   MET A 223       0.588   9.776  -4.145  1.00 20.45          O
ATOM   1951  CB  MET A 223       0.653  12.250  -1.727  1.00 20.16          C
ATOM   1952  CG  MET A 223       1.277  11.192  -0.811  1.00 21.68          C
ATOM   1953  SD  MET A 223       0.291   9.707  -0.470  1.00 24.24          S
ATOM   1954  CE  MET A 223      -1.114  10.428   0.409  1.00 23.61          C
ATOM   1955  H   MET A 223      -0.021  13.941  -3.384  1.00  0.00          H
ATOM   1956  HA  MET A 223       1.782  11.799  -3.499  1.00  0.00          H
ATOM   1957  HB2 MET A 223       1.187  13.181  -1.532  1.00  0.00          H
ATOM   1958  HB3 MET A 223      -0.372  12.439  -1.430  1.00  0.00          H
ATOM   1959  HG2 MET A 223       2.247  10.890  -1.199  1.00  0.00          H
ATOM   1960  HG3 MET A 223       1.473  11.667   0.146  1.00  0.00          H
ATOM   1961  HE1 MET A 223      -1.776   9.640   0.767  1.00  0.00          H
ATOM   1962  HE2 MET A 223      -0.771  11.012   1.262  1.00  0.00          H
ATOM   1963  HE3 MET A 223      -1.697  11.078  -0.240  1.00  0.00          H
ATOM   1964  N   CYS A 224      -1.374  10.758  -3.633  1.00 20.63          N
ATOM   1965  CA  CYS A 224      -2.221   9.627  -4.016  1.00 20.63          C
ATOM   1966  C   CYS A 224      -2.136   9.294  -5.512  1.00 19.25          C
ATOM   1967  O   CYS A 224      -2.171   8.115  -5.860  1.00 18.72          O
ATOM   1968  CB  CYS A 224      -3.686   9.890  -3.648  1.00 18.88          C
ATOM   1969  SG  CYS A 224      -3.858   9.850  -1.848  1.00 21.25          S
ATOM   1970  H   CYS A 224      -1.827  11.556  -3.196  1.00  0.00          H
ATOM   1971  HA  CYS A 224      -1.876   8.745  -3.470  1.00  0.00          H
ATOM   1972  HB2 CYS A 224      -4.051  10.838  -4.044  1.00  0.00          H
ATOM   1973  HB3 CYS A 224      -4.318   9.101  -4.058  1.00  0.00          H
ATOM   1974  HG  CYS A 224      -3.299  11.053  -1.644  1.00  0.00          H
ATOM   1975  N   ARG A 225      -1.955  10.292  -6.394  1.00 20.13          N
ATOM   1976  CA  ARG A 225      -1.672  10.072  -7.814  1.00 18.90          C
ATOM   1977  C   ARG A 225      -0.302   9.387  -7.974  1.00 18.94          C
ATOM   1978  O   ARG A 225      -0.191   8.370  -8.660  1.00 18.24          O
ATOM   1979  CB  ARG A 225      -1.701  11.413  -8.589  1.00 19.79          C
ATOM   1980  CG  ARG A 225      -1.419  11.261 -10.101  1.00 22.48          C
ATOM   1981  CD  ARG A 225      -1.365  12.590 -10.862  1.00 21.79          C
ATOM   1982  NE  ARG A 225      -1.172  12.351 -12.295  1.00 21.49          N
ATOM   1983  CZ  ARG A 225      -0.434  12.996 -13.201  1.00 23.17          C
ATOM   1984 NH1 ARG A 225       0.334  14.031 -12.860  1.00 23.34          N
ATOM   1985 NH2 ARG A 225      -0.475  12.587 -14.466  1.00 25.08          N1+
ATOM   1986  H   ARG A 225      -1.977  11.247  -6.052  1.00  0.00          H
ATOM   1987  HA  ARG A 225      -2.440   9.412  -8.223  1.00  0.00          H
ATOM   1988  HB2 ARG A 225      -2.678  11.879  -8.459  1.00  0.00          H
ATOM   1989  HB3 ARG A 225      -0.977  12.107  -8.161  1.00  0.00          H
ATOM   1990  HG2 ARG A 225      -0.471  10.751 -10.268  1.00  0.00          H
ATOM   1991  HG3 ARG A 225      -2.188  10.624 -10.540  1.00  0.00          H
ATOM   1992  HD2 ARG A 225      -2.314  13.108 -10.745  1.00  0.00          H
ATOM   1993  HD3 ARG A 225      -0.577  13.228 -10.464  1.00  0.00          H
ATOM   1994  HE  ARG A 225      -1.820  11.596 -12.678  1.00  0.00          H
ATOM   1995 HH11 ARG A 225       0.489  14.264 -11.880  1.00  0.00          H
ATOM   1996 HH12 ARG A 225       0.843  14.571 -13.543  1.00  0.00          H
ATOM   1997 HH21 ARG A 225      -0.980  11.683 -14.698  1.00  0.00          H
ATOM   1998 HH22 ARG A 225      -0.008  13.014 -15.245  1.00  0.00          H
ATOM   1999  N   TYR A 226       0.739   9.920  -7.320  1.00 16.90          N
ATOM   2000  CA  TYR A 226       2.109   9.433  -7.444  1.00 18.14          C
ATOM   2001  C   TYR A 226       2.267   8.021  -6.848  1.00 17.98          C
ATOM   2002  O   TYR A 226       2.842   7.141  -7.491  1.00 18.92          O
ATOM   2003  CB  TYR A 226       3.101  10.427  -6.797  1.00 15.96          C
ATOM   2004  CG  TYR A 226       4.499  10.297  -7.373  1.00 20.33          C
ATOM   2005  CD1 TYR A 226       4.948  11.205  -8.359  1.00 18.06          C
ATOM   2006  CD2 TYR A 226       5.317   9.210  -7.000  1.00 19.81          C
ATOM   2007  CE1 TYR A 226       6.165  10.972  -9.030  1.00 20.94          C
ATOM   2008  CE2 TYR A 226       6.521   8.974  -7.681  1.00 22.35          C
ATOM   2009  CZ  TYR A 226       6.922   9.825  -8.726  1.00 20.61          C
ATOM   2010  OH  TYR A 226       8.014   9.504  -9.473  1.00 24.39          O
ATOM   2011  H   TYR A 226       0.584  10.759  -6.763  1.00  0.00          H
ATOM   2012  HA  TYR A 226       2.317   9.385  -8.510  1.00  0.00          H
ATOM   2013  HB2 TYR A 226       2.770  11.449  -6.978  1.00  0.00          H
ATOM   2014  HB3 TYR A 226       3.130  10.307  -5.713  1.00  0.00          H
ATOM   2015  HD1 TYR A 226       4.341  12.050  -8.649  1.00  0.00          H
ATOM   2016  HD2 TYR A 226       5.006   8.520  -6.229  1.00  0.00          H
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ATOM   2017  HE1 TYR A 226       6.487  11.638  -9.818  1.00  0.00           H
ATOM   2018  HE2 TYR A 226       7.128   8.123  -7.417  1.00  0.00           H
ATOM   2019  HH  TYR A 226       8.018   8.589  -9.740  1.00  0.00           H
ATOM   2020  N   GLN A 227       1.688   7.785  -5.663  1.00 19.29           N
ATOM   2021  CA  GLN A 227       1.674   6.497  -4.972  1.00 19.24           C
ATOM   2022  C   GLN A 227       0.701   5.505  -5.624  1.00 21.01           C
ATOM   2023  O   GLN A 227       0.743   4.324  -5.295  1.00 21.37           O
ATOM   2024  CB  GLN A 227       1.237   6.695  -3.505  1.00 19.57           C
ATOM   2025  CG  GLN A 227       2.256   7.435  -2.618  1.00 16.42           C
ATOM   2026  CD  GLN A 227       3.405   6.558  -2.124  1.00 20.53           C
ATOM   2027  OE1 GLN A 227       3.987   5.779  -2.872  1.00 21.69           O
ATOM   2028  NE2 GLN A 227       3.733   6.651  -0.842  1.00 19.47           N
ATOM   2029  H   GLN A 227       1.223   8.561  -5.189  1.00  0.00           H
ATOM   2030  HA  GLN A 227       2.669   6.052  -5.019  1.00  0.00           H
ATOM   2031  HB2 GLN A 227       0.287   7.230  -3.475  1.00  0.00           H
ATOM   2032  HB3 GLN A 227       1.027   5.728  -3.044  1.00  0.00           H
ATOM   2033  HG2 GLN A 227       2.658   8.309  -3.130  1.00  0.00           H
ATOM   2034  HG3 GLN A 227       1.724   7.804  -1.747  1.00  0.00           H
ATOM   2035 HE21 GLN A 227       3.225   7.278  -0.235  1.00  0.00           H
ATOM   2036 HE22 GLN A 227       4.479   6.080  -0.476  1.00  0.00           H
ATOM   2037  N   SER A 228      -0.153   5.927  -6.560  1.00 19.57           N
ATOM   2038  CA  SER A 228      -0.862   5.004  -7.434  1.00 20.36           C
ATOM   2039  C   SER A 228       0.020   4.695  -8.654  1.00 20.27           C
ATOM   2040  O   SER A 228       0.219   3.523  -8.972  1.00 23.07           O
ATOM   2041  CB  SER A 228      -2.173   5.638  -7.925  1.00 16.62           C
ATOM   2042  OG  SER A 228      -3.071   5.781  -6.849  1.00 18.44           O
ATOM   2043  H   SER A 228      -0.203   6.916  -6.764  1.00  0.00           H
ATOM   2044  HA  SER A 228      -1.104   4.068  -6.927  1.00  0.00           H
ATOM   2045  HB2 SER A 228      -2.011   6.613  -8.381  1.00  0.00           H
ATOM   2046  HB3 SER A 228      -2.639   4.999  -8.675  1.00  0.00           H
ATOM   2047  HG  SER A 228      -2.795   6.559  -6.359  1.00  0.00           H
ATOM   2048  N   GLY A 229       0.543   5.718  -9.338  1.00 19.50           N
ATOM   2049  CA  GLY A 229       0.906   5.606 -10.744  1.00 20.20           C
ATOM   2050  C   GLY A 229       2.342   5.903 -11.149  1.00 19.94           C
ATOM   2051  O   GLY A 229       2.658   5.726 -12.326  1.00 17.43           O
ATOM   2052  H   GLY A 229       0.347   6.663  -9.012  1.00  0.00           H
ATOM   2053  HA2 GLY A 229       0.578   4.668 -11.189  1.00  0.00           H
ATOM   2054  HA3 GLY A 229       0.338   6.378 -11.240  1.00  0.00           H
ATOM   2055  N   PHE A 230       3.189   6.411 -10.246  1.00 19.02           N
ATOM   2056  CA  PHE A 230       4.473   7.011 -10.625  1.00 20.56           C
ATOM   2057  C   PHE A 230       5.668   6.511  -9.808  1.00 21.40           C
ATOM   2058  O   PHE A 230       6.808   6.805 -10.167  1.00 24.25           O
ATOM   2059  CB  PHE A 230       4.379   8.548 -10.669  1.00 21.77           C
ATOM   2060  CG  PHE A 230       3.480   9.147 -11.737  1.00 22.64           C
ATOM   2061  CD1 PHE A 230       4.052   9.611 -12.939  1.00 24.17           C
ATOM   2062  CD2 PHE A 230       2.086   9.258 -11.541  1.00 24.47           C
ATOM   2063  CE1 PHE A 230       3.238  10.174 -13.938  1.00 25.11           C
ATOM   2064  CE2 PHE A 230       1.270   9.797 -12.554  1.00 23.94           C
ATOM   2065  CZ  PHE A 230       1.846  10.248 -13.755  1.00 26.08           C
ATOM   2066  H   PHE A 230       2.860   6.562  -9.297  1.00  0.00           H
ATOM   2067  HA  PHE A 230       4.727   6.714 -11.638  1.00  0.00           H
ATOM   2068  HB2 PHE A 230       4.074   8.918  -9.697  1.00  0.00           H
ATOM   2069  HB3 PHE A 230       5.376   8.954 -10.836  1.00  0.00           H
ATOM   2070  HD1 PHE A 230       5.118   9.535 -13.110  1.00  0.00           H
ATOM   2071  HD2 PHE A 230       1.627   8.904 -10.631  1.00  0.00           H
ATOM   2072  HE1 PHE A 230       3.681  10.529 -14.857  1.00  0.00           H
ATOM   2073  HE2 PHE A 230       0.199   9.857 -12.429  1.00  0.00           H
ATOM   2074  HZ  PHE A 230       1.217  10.629 -14.544  1.00  0.00           H
ATOM   2075  N   PHE A 231       5.449   5.761  -8.719  1.00 19.26           N
ATOM   2076  CA  PHE A 231       6.539   5.219  -7.899  1.00 21.27           C
ATOM   2077  C   PHE A 231       7.195   3.991  -8.561  1.00 20.88           C
ATOM   2078  O   PHE A 231       8.389   3.784  -8.393  1.00 21.71           O
ATOM   2079  CB  PHE A 231       6.040   4.918  -6.467  1.00 18.61           C
ATOM   2080  CG  PHE A 231       5.126   3.721  -6.252  1.00 18.09           C
ATOM   2081  CD1 PHE A 231       5.625   2.576  -5.596  1.00 16.51           C
ATOM   2082  CD2 PHE A 231       3.780   3.748  -6.672  1.00 15.34           C
ATOM   2083  CE1 PHE A 231       4.788   1.474  -5.353  1.00 15.19           C
ATOM   2084  CE2 PHE A 231       2.947   2.637  -6.438  1.00 15.58           C
ATOM   2085  CZ  PHE A 231       3.444   1.510  -5.762  1.00 17.00           C
ATOM   2086  H   PHE A 231       4.497   5.574  -8.444  1.00  0.00           H
ATOM   2087  HA  PHE A 231       7.324   5.971  -7.813  1.00  0.00           H
ATOM   2088  HB2 PHE A 231       6.918   4.787  -5.831  1.00  0.00           H
ATOM   2089  HB3 PHE A 231       5.539   5.799  -6.066  1.00  0.00           H
ATOM   2090  HD1 PHE A 231       6.653   2.536  -5.269  1.00  0.00           H
ATOM   2091  HD2 PHE A 231       3.371   4.612  -7.173  1.00  0.00           H
ATOM   2092  HE1 PHE A 231       5.183   0.598  -4.860  1.00  0.00           H
ATOM   2093  HE2 PHE A 231       1.924   2.643  -6.785  1.00  0.00           H
ATOM   2094  HZ  PHE A 231       2.797   0.667  -5.573  1.00  0.00           H
ATOM   2095  N   TRP A 232       6.454   3.259  -9.404  1.00 20.84           N
ATOM   2096  CA  TRP A 232       6.933   2.184 -10.285  1.00 21.29           C
ATOM   2097  C   TRP A 232       7.365   2.747 -11.657  1.00 22.43           C
ATOM   2098  O   TRP A 232       7.307   2.057 -12.672  1.00 24.91           O
ATOM   2099  CB  TRP A 232       5.786   1.165 -10.482  1.00 20.84           C
ATOM   2100  CG  TRP A 232       4.435   1.725 -10.824  1.00 22.17           C
ATOM   2101  CD1 TRP A 232       3.516   2.087  -9.905  1.00 22.45           C
ATOM   2102  CD2 TRP A 232       3.815   1.973 -12.126  1.00 25.05           C
ATOM   2103  NE1 TRP A 232       2.381   2.544 -10.534  1.00 24.51           N
ATOM   2104  CE3 TRP A 232       4.221   1.818 -13.473  1.00 25.82           C
ATOM   2105  CE2 TRP A 232       2.491   2.461 -11.908  1.00 26.33           C
ATOM   2106  CZ3 TRP A 232       3.364   2.140 -14.544  1.00 27.28           C
ATOM   2107  CZ2 TRP A 232       1.613   2.753 -12.970  1.00 26.19           C
ATOM   2108  CH2 TRP A 232       2.059   2.602 -14.295  1.00 25.91           C
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ATOM   2109  H   TRP A 232       5.488   3.524  -9.521  1.00  0.00           H
ATOM   2110  HA  TRP A 232       7.800   1.681  -9.852  1.00  0.00           H
ATOM   2111  HB2 TRP A 232       6.051   0.411 -11.223  1.00  0.00           H
ATOM   2112  HB3 TRP A 232       5.676   0.606  -9.553  1.00  0.00           H
ATOM   2113  HD1 TRP A 232       3.668   1.993  -8.841  1.00  0.00           H
ATOM   2114  HE1 TRP A 232       1.555   2.840 -10.009  1.00  0.00           H
ATOM   2115  HE3 TRP A 232       5.206   1.437 -13.688  1.00  0.00           H
ATOM   2116  HZ3 TRP A 232       3.707   2.015 -15.560  1.00  0.00           H
ATOM   2117  HZ2 TRP A 232       0.607   3.096 -12.783  1.00  0.00           H
ATOM   2118  HH2 TRP A 232       1.398   2.837 -15.117  1.00  0.00           H
ATOM   2119  N   ARG A 233       7.771   4.019 -11.689  1.00 22.95           N
ATOM   2120  CA  ARG A 233       8.475   4.669 -12.784  1.00 23.34           C
ATOM   2121  C   ARG A 233       9.360   5.794 -12.230  1.00 23.57           C
ATOM   2122  O   ARG A 233       9.433   6.872 -12.823  1.00 24.36           O
ATOM   2123  CB  ARG A 233       7.554   5.017 -13.978  1.00 23.72           C
ATOM   2124  CG  ARG A 233       6.262   5.767 -13.619  1.00 23.64           C
ATOM   2125  CD  ARG A 233       5.470   6.185 -14.867  1.00 22.56           C
ATOM   2126  NE  ARG A 233       4.054   6.452 -14.569  1.00 23.96           N
ATOM   2127  CZ  ARG A 233       3.200   7.200 -15.282  1.00 23.37           C
ATOM   2128  NH1 ARG A 233       3.620   8.006 -16.258  1.00 24.58           N
ATOM   2129  NH2 ARG A 233       1.900   7.107 -15.010  1.00 27.02           N1+
ATOM   2130  H   ARG A 233       7.821   4.494 -10.800  1.00  0.00           H
ATOM   2131  HA  ARG A 233       9.194   3.952 -13.177  1.00  0.00           H
ATOM   2132  HB2 ARG A 233       8.121   5.595 -14.709  1.00  0.00           H
ATOM   2133  HB3 ARG A 233       7.288   4.090 -14.488  1.00  0.00           H
ATOM   2134  HG2 ARG A 233       5.649   5.128 -12.982  1.00  0.00           H
ATOM   2135  HG3 ARG A 233       6.517   6.656 -13.042  1.00  0.00           H
ATOM   2136  HD2 ARG A 233       5.948   7.043 -15.331  1.00  0.00           H
ATOM   2137  HD3 ARG A 233       5.489   5.385 -15.607  1.00  0.00           H
ATOM   2138  HE  ARG A 233       3.668   5.954 -13.759  1.00  0.00           H
ATOM   2139 HH11 ARG A 233       4.578   8.385 -16.236  1.00  0.00           H
ATOM   2140 HH12 ARG A 233       2.946   8.496 -16.830  1.00  0.00           H
ATOM   2141 HH21 ARG A 233       1.577   6.566 -14.222  1.00  0.00           H
ATOM   2142 HH22 ARG A 233       1.160   7.631 -15.533  1.00  0.00           H
ATOM   2143  N   HIS A 234      10.001   5.558 -11.075  1.00 23.15           N
ATOM   2144  CA  HIS A 234      10.981   6.448 -10.450  1.00 24.03           C
ATOM   2145  C   HIS A 234      12.340   5.741 -10.491  1.00 25.68           C
ATOM   2146  O   HIS A 234      12.423   4.541 -10.225  1.00 24.39           O
ATOM   2147  CB  HIS A 234      10.585   6.729  -8.987  1.00 21.56           C
ATOM   2148  CG  HIS A 234      11.463   7.762  -8.328  1.00 23.59           C
ATOM   2149  ND1 HIS A 234      12.661   7.441  -7.676  1.00 24.32           N
ATOM   2150  CD2 HIS A 234      11.282   9.126  -8.279  1.00 21.93           C
ATOM   2151  CE1 HIS A 234      13.161   8.612  -7.295  1.00 24.17           C
ATOM   2152  NE2 HIS A 234      12.376   9.642  -7.607  1.00 23.23           N
ATOM   2153  H   HIS A 234      10.006   4.599 -10.740  1.00  0.00           H
ATOM   2154  HA  HIS A 234      11.052   7.396 -10.988  1.00  0.00           H
ATOM   2155  HB2 HIS A 234       9.560   7.098  -8.957  1.00  0.00           H
ATOM   2156  HB3 HIS A 234      10.599   5.815  -8.391  1.00  0.00           H
ATOM   2157  HD2 HIS A 234      10.503   9.749  -8.693  1.00  0.00           H
ATOM   2158  HE1 HIS A 234      14.105   8.727  -6.782  1.00  0.00           H
ATOM   2159  HE2 HIS A 234      12.586  10.625  -7.442  1.00  0.00           H
ATOM   2160  N   GLU A 235      13.405   6.480 -10.799  1.00 26.94           N
ATOM   2161  CA  GLU A 235      14.766   6.019 -11.040  1.00 29.85           C
ATOM   2162  C   GLU A 235      15.392   5.210  -9.887  1.00 27.43           C
ATOM   2163  O   GLU A 235      16.189   4.305 -10.141  1.00 27.58           O
ATOM   2164  CB  GLU A 235      15.637   7.238 -11.413  1.00 32.61           C
ATOM   2165  CG  GLU A 235      15.771   8.354 -10.345  1.00 40.85           C
ATOM   2166  CD  GLU A 235      14.658   9.395 -10.342  1.00 45.22           C
ATOM   2167  OE1 GLU A 235      13.569   9.156 -10.900  1.00 46.95           O
ATOM   2168  OE2 GLU A 235      14.922  10.485  -9.787  1.00 48.79           O1-
ATOM   2169  H   GLU A 235      13.279   7.496 -10.906  1.00  0.00           H
ATOM   2170  HA  GLU A 235      14.727   5.353 -11.904  1.00  0.00           H
ATOM   2171  HB2 GLU A 235      16.635   6.870 -11.650  1.00  0.00           H
ATOM   2172  HB3 GLU A 235      15.271   7.672 -12.343  1.00  0.00           H
ATOM   2173  HG2 GLU A 235      15.872   7.946  -9.342  1.00  0.00           H
ATOM   2174  HG3 GLU A 235      16.699   8.892 -10.530  1.00  0.00           H
ATOM   2175  N   LEU A 236      15.017   5.494  -8.632  1.00 26.47           N
ATOM   2176  CA  LEU A 236      15.490   4.750  -7.464  1.00 26.49           C
ATOM   2177  C   LEU A 236      14.648   3.486  -7.221  1.00 26.64           C
ATOM   2178  O   LEU A 236      15.015   2.687  -6.365  1.00 25.30           O
ATOM   2179  CB  LEU A 236      15.401   5.627  -6.194  1.00 24.84           C
ATOM   2180  CG  LEU A 236      16.329   6.859  -6.146  1.00 24.56           C
ATOM   2181  CD1 LEU A 236      16.138   7.622  -4.829  1.00 23.65           C
ATOM   2182  CD2 LEU A 236      17.805   6.479  -6.291  1.00 22.45           C
ATOM   2183  H   LEU A 236      14.320   6.220  -8.492  1.00  0.00           H
ATOM   2184  HA  LEU A 236      16.519   4.416  -7.606  1.00  0.00           H
ATOM   2185  HB2 LEU A 236      14.367   5.940  -6.040  1.00  0.00           H
ATOM   2186  HB3 LEU A 236      15.656   5.003  -5.336  1.00  0.00           H
ATOM   2187  HG  LEU A 236      16.072   7.528  -6.968  1.00  0.00           H
ATOM   2188 HD11 LEU A 236      16.759   8.516  -4.812  1.00  0.00           H
ATOM   2189 HD12 LEU A 236      15.101   7.926  -4.692  1.00  0.00           H
ATOM   2190 HD13 LEU A 236      16.420   7.015  -3.968  1.00  0.00           H
ATOM   2191 HD21 LEU A 236      18.464   7.331  -6.123  1.00  0.00           H
ATOM   2192 HD22 LEU A 236      18.072   5.700  -5.581  1.00  0.00           H
ATOM   2193 HD23 LEU A 236      18.019   6.101  -7.287  1.00  0.00           H
ATOM   2194  N   LEU A 237      13.547   3.279  -7.957  1.00 25.05           N
ATOM   2195  CA  LEU A 237      12.665   2.124  -7.827  1.00 27.46           C
ATOM   2196  C   LEU A 237      12.690   1.232  -9.071  1.00 27.75           C
ATOM   2197  O   LEU A 237      12.455   0.034  -8.926  1.00 28.17           O
ATOM   2198  CB  LEU A 237      11.234   2.557  -7.433  1.00 25.77           C
ATOM   2199  CG  LEU A 237      10.812   2.013  -6.050  1.00 26.56           C
ATOM   2200  CD1 LEU A 237      11.631   2.633  -4.911  1.00 26.59           C
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ATOM   2201  CD2 LEU A 237       9.315   2.214  -5.797  1.00 27.15           C
ATOM   2202  H   LEU A 237      13.304   3.966  -8.666  1.00  0.00           H
ATOM   2203  HA  LEU A 237      13.043   1.467  -7.045  1.00  0.00           H
ATOM   2204  HB2 LEU A 237      11.134   3.642  -7.453  1.00  0.00           H
ATOM   2205  HB3 LEU A 237      10.525   2.198  -8.182  1.00  0.00           H
ATOM   2206  HG  LEU A 237      11.000   0.940  -6.043  1.00  0.00           H
ATOM   2207 HD11 LEU A 237      11.363   2.195  -3.953  1.00  0.00           H
ATOM   2208 HD12 LEU A 237      12.698   2.455  -5.035  1.00  0.00           H
ATOM   2209 HD13 LEU A 237      11.476   3.710  -4.851  1.00  0.00           H
ATOM   2210 HD21 LEU A 237       9.004   1.735  -4.869  1.00  0.00           H
ATOM   2211 HD22 LEU A 237       9.065   3.273  -5.738  1.00  0.00           H
ATOM   2212 HD23 LEU A 237       8.725   1.783  -6.605  1.00  0.00           H
ATOM   2213  N   GLU A 238      13.071   1.734 -10.256  1.00 28.09           N
ATOM   2214  CA  GLU A 238      13.342   0.913 -11.452  1.00 29.19           C
ATOM   2215  C   GLU A 238      14.642   0.095 -11.303  1.00 29.11           C
ATOM   2216  O   GLU A 238      14.860  -0.892 -12.006  1.00 28.86           O
ATOM   2217  CB  GLU A 238      13.374   1.790 -12.728  1.00 32.53           C
ATOM   2218  CG  GLU A 238      12.080   2.591 -13.027  1.00 39.05           C
ATOM   2219  CD  GLU A 238      10.801   1.825 -12.722  1.00 42.35           C
ATOM   2220  OE1 GLU A 238      10.326   1.062 -13.585  1.00 44.53           O
ATOM   2221  OE2 GLU A 238      10.340   1.896 -11.562  1.00 42.36           O1-
ATOM   2222  H   GLU A 238      13.061   2.745 -10.361  1.00  0.00           H
ATOM   2223  HA  GLU A 238      12.568   0.160 -11.569  1.00  0.00           H
ATOM   2224  HB2 GLU A 238      14.215   2.482 -12.677  1.00  0.00           H
ATOM   2225  HB3 GLU A 238      13.571   1.140 -13.582  1.00  0.00           H
ATOM   2226  HG2 GLU A 238      12.062   3.511 -12.451  1.00  0.00           H
ATOM   2227  HG3 GLU A 238      12.050   2.899 -14.071  1.00  0.00           H
ATOM   2228  N   GLU A 239      15.447   0.443 -10.294  1.00 30.17           N
ATOM   2229  CA  GLU A 239      16.510  -0.355  -9.702  1.00 30.22           C
ATOM   2230  C   GLU A 239      15.965  -1.688  -9.110  1.00 30.36           C
ATOM   2231  O   GLU A 239      16.660  -2.707  -9.120  1.00 29.89           O
ATOM   2232  CB  GLU A 239      17.196   0.564  -8.660  1.00 31.52           C
ATOM   2233  CG  GLU A 239      18.515   0.054  -8.045  1.00 34.59           C
ATOM   2234  CD  GLU A 239      19.197   1.104  -7.163  1.00 35.31           C
ATOM   2235  OE1 GLU A 239      19.256   2.287  -7.559  1.00 38.54           O
ATOM   2236  OE2 GLU A 239      19.670   0.721  -6.067  1.00 36.01           O1-
ATOM   2237  H   GLU A 239      15.195   1.293  -9.810  1.00  0.00           H
ATOM   2238  HA  GLU A 239      17.226  -0.598 -10.488  1.00  0.00           H
ATOM   2239  HB2 GLU A 239      17.403   1.524  -9.138  1.00  0.00           H
ATOM   2240  HB3 GLU A 239      16.500   0.792  -7.852  1.00  0.00           H
ATOM   2241  HG2 GLU A 239      18.336  -0.847  -7.458  1.00  0.00           H
ATOM   2242  HG3 GLU A 239      19.216  -0.215  -8.834  1.00  0.00           H
ATOM   2243  N   TYR A 240      14.688  -1.739  -8.693  1.00 29.40           N
ATOM   2244  CA  TYR A 240      14.069  -2.814  -7.916  1.00 26.76           C
ATOM   2245  C   TYR A 240      12.840  -3.413  -8.616  1.00 26.94           C
ATOM   2246  O   TYR A 240      12.176  -2.779  -9.434  1.00 26.38           O
ATOM   2247  CB  TYR A 240      13.753  -2.303  -6.495  1.00 25.17           C
ATOM   2248  CG  TYR A 240      14.998  -1.848  -5.757  1.00 22.76           C
ATOM   2249  CD1 TYR A 240      15.938  -2.791  -5.299  1.00 23.97           C
ATOM   2250  CD2 TYR A 240      15.266  -0.474  -5.600  1.00 23.51           C
ATOM   2251  CE1 TYR A 240      17.146  -2.372  -4.718  1.00 21.82           C
ATOM   2252  CE2 TYR A 240      16.481  -0.049  -5.037  1.00 21.33           C
ATOM   2253  CZ  TYR A 240      17.426  -1.001  -4.613  1.00 21.91           C
ATOM   2254  OH  TYR A 240      18.643  -0.599  -4.170  1.00 23.59           O
ATOM   2255  H   TYR A 240      14.097  -0.927  -8.849  1.00  0.00           H
ATOM   2256  HA  TYR A 240      14.781  -3.629  -7.808  1.00  0.00           H
ATOM   2257  HB2 TYR A 240      13.028  -1.487  -6.535  1.00  0.00           H
ATOM   2258  HB3 TYR A 240      13.281  -3.090  -5.906  1.00  0.00           H
ATOM   2259  HD1 TYR A 240      15.759  -3.841  -5.420  1.00  0.00           H
ATOM   2260  HD2 TYR A 240      14.558   0.263  -5.941  1.00  0.00           H
ATOM   2261  HE1 TYR A 240      17.875  -3.098  -4.391  1.00  0.00           H
ATOM   2262  HE2 TYR A 240      16.698   1.008  -4.969  1.00  0.00           H
ATOM   2263  HH  TYR A 240      19.054  -0.088  -4.894  1.00  0.00           H
ATOM   2264  N   ASP A 241      12.547  -4.676  -8.306  1.00 27.29           N
ATOM   2265  CA  ASP A 241      11.427  -5.472  -8.814  1.00 26.93           C
ATOM   2266  C   ASP A 241      10.330  -5.589  -7.752  1.00 26.42           C
ATOM   2267  O   ASP A 241       9.190  -5.902  -8.085  1.00 27.05           O
ATOM   2268  CB  ASP A 241      11.905  -6.907  -9.127  1.00 27.77           C
ATOM   2269  CG  ASP A 241      12.792  -6.968 -10.354  1.00 27.65           C
ATOM   2270  OD1 ASP A 241      12.262  -7.338 -11.419  1.00 25.77           O
ATOM   2271  OD2 ASP A 241      13.985  -6.610 -10.223  1.00 26.65           O1-
ATOM   2272  H   ASP A 241      13.115  -5.142  -7.600  1.00  0.00           H
ATOM   2273  HA  ASP A 241      10.992  -5.032  -9.713  1.00  0.00           H
ATOM   2274  HB2 ASP A 241      12.465  -7.325  -8.292  1.00  0.00           H
ATOM   2275  HB3 ASP A 241      11.055  -7.570  -9.295  1.00  0.00           H
ATOM   2276  N   TRP A 242      10.654  -5.347  -6.477  1.00 24.04           N
ATOM   2277  CA  TRP A 242       9.755  -5.383  -5.330  1.00 24.23           C
ATOM   2278  C   TRP A 242      10.002  -4.163  -4.441  1.00 23.82           C
ATOM   2279  O   TRP A 242      11.059  -3.534  -4.517  1.00 22.71           O
ATOM   2280  CB  TRP A 242       9.905  -6.686  -4.517  1.00 23.96           C
ATOM   2281  CG  TRP A 242       9.679  -8.032  -5.143  1.00 23.75           C
ATOM   2282  CD1 TRP A 242      10.395  -8.570  -6.155  1.00 26.08           C
ATOM   2283  CD2 TRP A 242       8.762  -9.084  -4.714  1.00 25.48           C
ATOM   2284  NE1 TRP A 242      10.001  -9.874  -6.373  1.00 23.93           N
ATOM   2285  CE3 TRP A 242       7.741  -9.178  -3.739  1.00 25.82           C
ATOM   2286  CE2 TRP A 242       9.067 -10.272  -5.445  1.00 25.93           C
ATOM   2287  CZ3 TRP A 242       7.117 -10.406  -3.451  1.00 26.34           C
ATOM   2288  CZ2 TRP A 242       8.468 -11.505  -5.156  1.00 26.43           C
ATOM   2289  CH2 TRP A 242       7.505 -11.573  -4.137  1.00 24.99           C
ATOM   2290  H   TRP A 242      11.605  -5.066  -6.277  1.00  0.00           H
ATOM   2291  HA  TRP A 242       8.732  -5.283  -5.679  1.00  0.00           H
ATOM   2292  HB2 TRP A 242      10.908  -6.713  -4.100  1.00  0.00           H
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ATOM   2293  HB3 TRP A 242       9.244  -6.634  -3.654  1.00  0.00           H
ATOM   2294  HD1 TRP A 242      11.198  -8.058  -6.657  1.00  0.00           H
ATOM   2295  HE1 TRP A 242      10.456 -10.483  -7.044  1.00  0.00           H
ATOM   2296  HE3 TRP A 242       7.462  -8.299  -3.178  1.00  0.00           H
ATOM   2297  HZ3 TRP A 242       6.346 -10.457  -2.696  1.00  0.00           H
ATOM   2298  HZ2 TRP A 242       8.732 -12.391  -5.716  1.00  0.00           H
ATOM   2299  HH2 TRP A 242       7.035 -12.518  -3.911  1.00  0.00           H
ATOM   2300  N   TYR A 243       9.039  -3.860  -3.571  1.00 22.84           N
ATOM   2301  CA  TYR A 243       9.057  -2.762  -2.622  1.00 21.90           C
ATOM   2302  C   TYR A 243       8.447  -3.213  -1.295  1.00 22.39           C
ATOM   2303  O   TYR A 243       7.448  -3.936  -1.284  1.00 22.11           O
ATOM   2304  CB  TYR A 243       8.359  -1.522  -3.218  1.00 22.85           C
ATOM   2305  CG  TYR A 243       6.834  -1.571  -3.317  1.00 20.92           C
ATOM   2306  CD1 TYR A 243       6.202  -2.383  -4.281  1.00 18.97           C
ATOM   2307  CD2 TYR A 243       6.034  -0.813  -2.435  1.00 20.38           C
ATOM   2308  CE1 TYR A 243       4.804  -2.388  -4.412  1.00 18.11           C
ATOM   2309  CE2 TYR A 243       4.630  -0.832  -2.548  1.00 20.28           C
ATOM   2310  CZ  TYR A 243       4.016  -1.606  -3.548  1.00 19.55           C
ATOM   2311  OH  TYR A 243       2.663  -1.595  -3.692  1.00 19.44           O
ATOM   2312  H   TYR A 243       8.200  -4.443  -3.545  1.00  0.00           H
ATOM   2313  HA  TYR A 243      10.098  -2.492  -2.431  1.00  0.00           H
ATOM   2314  HB2 TYR A 243       8.639  -0.660  -2.617  1.00  0.00           H
ATOM   2315  HB3 TYR A 243       8.767  -1.314  -4.205  1.00  0.00           H
ATOM   2316  HD1 TYR A 243       6.776  -3.020  -4.931  1.00  0.00           H
ATOM   2317  HD2 TYR A 243       6.488  -0.216  -1.663  1.00  0.00           H
ATOM   2318  HE1 TYR A 243       4.345  -3.012  -5.167  1.00  0.00           H
ATOM   2319  HE2 TYR A 243       4.020  -0.243  -1.878  1.00  0.00           H
ATOM   2320  HH  TYR A 243       2.206  -1.200  -2.919  1.00  0.00           H
ATOM   2321  N   TRP A 244       9.029  -2.771  -0.177  1.00 20.85           N
ATOM   2322  CA  TRP A 244       8.367  -2.720   1.117  1.00 20.48           C
ATOM   2323  C   TRP A 244       8.030  -1.244   1.331  1.00 21.37           C
ATOM   2324  O   TRP A 244       8.931  -0.442   1.573  1.00 18.99           O
ATOM   2325  CB  TRP A 244       9.316  -3.201   2.232  1.00 20.36           C
ATOM   2326  CG  TRP A 244       8.691  -3.578   3.539  1.00 22.78           C
ATOM   2327  CD1 TRP A 244       7.499  -3.169   4.038  1.00 24.36           C
ATOM   2328  CD2 TRP A 244       9.224  -4.520   4.510  1.00 23.95           C
ATOM   2329  NE1 TRP A 244       7.269  -3.790   5.247  1.00 23.22           N
ATOM   2330  CE3 TRP A 244      10.392  -5.311   4.565  1.00 24.80           C
ATOM   2331  CE2 TRP A 244       8.298  -4.640   5.588  1.00 24.71           C
ATOM   2332  CZ3 TRP A 244      10.623  -6.192   5.636  1.00 26.03           C
ATOM   2333  CZ2 TRP A 244       8.520  -5.510   6.668  1.00 26.18           C
ATOM   2334  CH2 TRP A 244       9.680  -6.302   6.675  1.00 24.87           C
ATOM   2335  H   TRP A 244       9.933  -2.312  -0.255  1.00  0.00           H
ATOM   2336  HA  TRP A 244       7.490  -3.356   1.132  1.00  0.00           H
ATOM   2337  HB2 TRP A 244       9.836  -4.088   1.887  1.00  0.00           H
ATOM   2338  HB3 TRP A 244      10.104  -2.492   2.454  1.00  0.00           H
ATOM   2339  HD1 TRP A 244       6.818  -2.486   3.550  1.00  0.00           H
ATOM   2340  HE1 TRP A 244       6.386  -3.704   5.737  1.00  0.00           H
ATOM   2341  HE3 TRP A 244      11.119  -5.240   3.769  1.00  0.00           H
ATOM   2342  HZ3 TRP A 244      11.526  -6.784   5.648  1.00  0.00           H
ATOM   2343  HZ2 TRP A 244       7.798  -5.599   7.466  1.00  0.00           H
ATOM   2344  HH2 TRP A 244       9.854  -6.996   7.480  1.00  0.00           H
ATOM   2345  N   ARG A 245       6.757  -0.855   1.226  1.00 21.39           N
ATOM   2346  CA  ARG A 245       6.338   0.498   1.571  1.00 21.27           C
ATOM   2347  C   ARG A 245       6.304   0.622   3.099  1.00 18.90           C
ATOM   2348  O   ARG A 245       5.504  -0.040   3.761  1.00 20.72           O
ATOM   2349  CB  ARG A 245       4.966   0.836   0.959  1.00 22.80           C
ATOM   2350  CG  ARG A 245       4.465   2.242   1.349  1.00 24.05           C
ATOM   2351  CD  ARG A 245       3.498   2.831   0.333  1.00 22.81           C
ATOM   2352  NE  ARG A 245       2.772   3.908   0.994  1.00 24.70           N
ATOM   2353  CZ  ARG A 245       1.531   4.273   0.622  1.00 24.50           C
ATOM   2354  NH1 ARG A 245       1.125   3.968  -0.606  1.00 21.87           N
ATOM   2355  NH2 ARG A 245       0.763   4.935   1.474  1.00 25.57           N1+
ATOM   2356  H   ARG A 245       6.055  -1.575   1.048  1.00  0.00           H
ATOM   2357  HA  ARG A 245       7.055   1.209   1.166  1.00  0.00           H
ATOM   2358  HB2 ARG A 245       5.065   0.784  -0.124  1.00  0.00           H
ATOM   2359  HB3 ARG A 245       4.217   0.089   1.233  1.00  0.00           H
ATOM   2360  HG2 ARG A 245       4.005   2.191   2.341  1.00  0.00           H
ATOM   2361  HG3 ARG A 245       5.316   2.923   1.438  1.00  0.00           H
ATOM   2362  HD2 ARG A 245       4.066   3.189  -0.530  1.00  0.00           H
ATOM   2363  HD3 ARG A 245       2.808   2.047   0.016  1.00  0.00           H
ATOM   2364  HE  ARG A 245       3.073   4.201   1.909  1.00  0.00           H
ATOM   2365 HH11 ARG A 245       1.778   3.632  -1.311  1.00  0.00           H
ATOM   2366 HH12 ARG A 245       0.154   4.183  -0.908  1.00  0.00           H
ATOM   2367 HH21 ARG A 245       1.024   5.052   2.454  1.00  0.00           H
ATOM   2368 HH22 ARG A 245      -0.170   5.269   1.237  1.00  0.00           H
ATOM   2369  N   VAL A 246       7.177   1.480   3.632  1.00 18.37           N
ATOM   2370  CA  VAL A 246       7.241   1.851   5.034  1.00 17.88           C
ATOM   2371  C   VAL A 246       6.936   3.355   5.087  1.00 17.66           C
ATOM   2372  O   VAL A 246       7.580   4.165   4.415  1.00 16.95           O
ATOM   2373  CB  VAL A 246       8.632   1.496   5.630  1.00 20.27           C
ATOM   2374  CG1 VAL A 246       8.690   1.795   7.141  1.00 18.44           C
ATOM   2375  CG2 VAL A 246       9.031   0.027   5.378  1.00 22.05           C
ATOM   2376  H   VAL A 246       7.809   1.967   2.998  1.00  0.00           H
ATOM   2377  HA  VAL A 246       6.477   1.313   5.599  1.00  0.00           H
ATOM   2378  HB  VAL A 246       9.387   2.114   5.139  1.00  0.00           H
ATOM   2379 HG11 VAL A 246       9.643   1.485   7.569  1.00  0.00           H
ATOM   2380 HG12 VAL A 246       8.576   2.860   7.342  1.00  0.00           H
ATOM   2381 HG13 VAL A 246       7.905   1.264   7.680  1.00  0.00           H
ATOM   2382 HG21 VAL A 246       9.992  -0.207   5.836  1.00  0.00           H
ATOM   2383 HG22 VAL A 246       8.291  -0.666   5.780  1.00  0.00           H
ATOM   2384 HG23 VAL A 246       9.133  -0.187   4.314  1.00  0.00           H
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ATOM   2385  N   GLU A 247      5.931   3.728   5.877  1.00 18.37           N
ATOM   2386  CA  GLU A 247      5.509   5.107   6.104  1.00 17.71           C
ATOM   2387  C   GLU A 247      6.153   5.649   7.400  1.00 18.77           C
ATOM   2388  O   GLU A 247      6.692   4.873   8.199  1.00 19.80           O
ATOM   2389  CB  GLU A 247      3.967   5.087   6.263  1.00 17.17           C
ATOM   2390  CG  GLU A 247      3.254   5.387   4.941  1.00 16.44           C
ATOM   2391  CD  GLU A 247      1.902   6.075   5.071  1.00 20.59           C
ATOM   2392  OE1 GLU A 247      1.792   6.965   5.958  1.00 21.32           O
ATOM   2393  OE2 GLU A 247      1.043   5.776   4.214  1.00 23.91           O1-
ATOM   2394  H   GLU A 247      5.448   3.008   6.392  1.00  0.00           H
ATOM   2395  HA  GLU A 247      5.830   5.750   5.284  1.00  0.00           H
ATOM   2396  HB2 GLU A 247      3.622   4.121   6.636  1.00  0.00           H
ATOM   2397  HB3 GLU A 247      3.669   5.789   7.045  1.00  0.00           H
ATOM   2398  HG2 GLU A 247      3.851   6.090   4.355  1.00  0.00           H
ATOM   2399  HG3 GLU A 247      3.182   4.458   4.377  1.00  0.00           H
ATOM   2400  N   PRO A 248      6.089   6.976   7.647  1.00 19.92           N
ATOM   2401  CA  PRO A 248      6.518   7.574   8.913  1.00 20.59           C
ATOM   2402  C   PRO A 248      5.520   7.282  10.048  1.00 20.76           C
ATOM   2403  O   PRO A 248      4.325   7.127   9.798  1.00 20.31           O
ATOM   2404  CB  PRO A 248      6.623   9.076   8.621  1.00 22.82           C
ATOM   2405  CG  PRO A 248      5.641   9.319   7.486  1.00 21.16           C
ATOM   2406  CD  PRO A 248      5.597   8.000   6.721  1.00 20.35           C
ATOM   2407  HA  PRO A 248      7.491   7.176   9.178  1.00  0.00           H
ATOM   2408  HB2 PRO A 248      6.425   9.710   9.487  1.00  0.00           H
ATOM   2409  HB3 PRO A 248      7.628   9.308   8.273  1.00  0.00           H
ATOM   2410  HG2 PRO A 248      4.653   9.540   7.893  1.00  0.00           H
ATOM   2411  HG3 PRO A 248      5.924  10.152   6.844  1.00  0.00           H
ATOM   2412  HD2 PRO A 248      4.582   7.802   6.377  1.00  0.00           H
ATOM   2413  HD3 PRO A 248      6.248   8.050   5.846  1.00  0.00           H
ATOM   2414  N   ASP A 249      6.025   7.189  11.287  1.00 20.20           N
ATOM   2415  CA  ASP A 249      5.278   6.997  12.540  1.00 19.81           C
ATOM   2416  C   ASP A 249      4.827   5.541  12.754  1.00 20.04           C
ATOM   2417  O   ASP A 249      3.900   5.282  13.521  1.00 20.11           O
ATOM   2418  CB  ASP A 249      4.181   8.077  12.791  1.00  0.00           C
ATOM   2419  CG  ASP A 249      4.649   9.216  13.695  1.00  0.00           C
ATOM   2420  OD1 ASP A 249      5.000   9.068  14.865  1.00  0.00           O
ATOM   2421  OD2 ASP A 249      4.642  10.420  13.066  1.00  0.00           O
ATOM   2422  H   ASP A 249      7.028   7.262  11.400  1.00  0.00           H
ATOM   2423  HA  ASP A 249      6.030   7.112  13.321  1.00  0.00           H
ATOM   2424  HB2 ASP A 249      3.770   8.484  11.868  1.00  0.00           H
ATOM   2425  HB3 ASP A 249      3.323   7.652  13.307  1.00  0.00           H
ATOM   2426  HD2 ASP A 249      4.798  11.141  13.687  1.00  0.00           H
ATOM   2427  N   ILE A 250      5.472   4.581  12.082  1.00 19.14           N
ATOM   2428  CA  ILE A 250      5.133   3.161  12.124  1.00 20.37           C
ATOM   2429  C   ILE A 250      5.825   2.483  13.320  1.00 19.83           C
ATOM   2430  O   ILE A 250      6.856   2.937  13.830  1.00 20.11           O
ATOM   2431  CB  ILE A 250      5.490   2.516  10.737  1.00 21.38           C
ATOM   2432  CG1 ILE A 250      4.243   2.449   9.833  1.00 23.63           C
ATOM   2433  CG2 ILE A 250      6.154   1.118  10.749  1.00 22.17           C
ATOM   2434  CD1 ILE A 250      3.571   3.792   9.550  1.00 20.80           C
ATOM   2435  H   ILE A 250      6.299   4.839  11.555  1.00  0.00           H
ATOM   2436  HA  ILE A 250      4.061   3.069  12.291  1.00  0.00           H
ATOM   2437  HB  ILE A 250      6.203   3.157  10.226  1.00  0.00           H
ATOM   2438 HG12 ILE A 250      4.514   2.003   8.875  1.00  0.00           H
ATOM   2439 HG13 ILE A 250      3.504   1.786  10.286  1.00  0.00           H
ATOM   2440 HG21 ILE A 250      6.388   0.789   9.736  1.00  0.00           H
ATOM   2441 HG22 ILE A 250      7.096   1.113  11.297  1.00  0.00           H
ATOM   2442 HG23 ILE A 250      5.501   0.364  11.190  1.00  0.00           H
ATOM   2443 HD11 ILE A 250      2.784   3.665   8.808  1.00  0.00           H
ATOM   2444 HD12 ILE A 250      3.120   4.220  10.444  1.00  0.00           H
ATOM   2445 HD13 ILE A 250      4.278   4.519   9.164  1.00  0.00           H
ATOM   2446  N   LYS A 251      5.219   1.372  13.746  1.00 20.52           N
ATOM   2447  CA  LYS A 251      5.708   0.416  14.725  1.00 20.36           C
ATOM   2448  C   LYS A 251      5.613  -0.965  14.054  1.00 21.67           C
ATOM   2449  O   LYS A 251      4.602  -1.246  13.405  1.00 19.23           O
ATOM   2450  CB  LYS A 251      4.830   0.481  16.000  1.00 20.47           C
ATOM   2451  CG  LYS A 251      4.616   1.899  16.588  1.00 20.09           C
ATOM   2452  CD  LYS A 251      3.450   1.980  17.586  1.00 22.23           C
ATOM   2453  CE  LYS A 251      3.805   1.609  19.028  1.00 20.07           C
ATOM   2454  NZ  LYS A 251      2.586   1.350  19.814  1.00 21.10           N1+
ATOM   2455  H   LYS A 251      4.367   1.098  13.267  1.00  0.00           H
ATOM   2456  HA  LYS A 251      6.747   0.631  14.966  1.00  0.00           H
ATOM   2457  HB2 LYS A 251      3.859   0.046  15.765  1.00  0.00           H
ATOM   2458  HB3 LYS A 251      5.256  -0.171  16.765  1.00  0.00           H
ATOM   2459  HG2 LYS A 251      5.539   2.278  17.030  1.00  0.00           H
ATOM   2460  HG3 LYS A 251      4.369   2.596  15.789  1.00  0.00           H
ATOM   2461  HD2 LYS A 251      3.063   3.000  17.593  1.00  0.00           H
ATOM   2462  HD3 LYS A 251      2.627   1.361  17.237  1.00  0.00           H
ATOM   2463  HE2 LYS A 251      4.455   0.737  19.044  1.00  0.00           H
ATOM   2464  HE3 LYS A 251      4.367   2.424  19.482  1.00  0.00           H
ATOM   2465  HZ1 LYS A 251      1.913   2.111  19.663  1.00  0.00           H
ATOM   2466  HZ2 LYS A 251      2.121   0.495  19.514  1.00  0.00           H
ATOM   2467  HZ3 LYS A 251      2.774   1.311  20.813  1.00  0.00           H
ATOM   2468  N   LEU A 252      6.632  -1.818  14.212  1.00 19.01           N
ATOM   2469  CA  LEU A 252      6.561  -3.256  13.949  1.00 20.86           C
ATOM   2470  C   LEU A 252      6.736  -3.909  15.314  1.00 19.45           C
ATOM   2471  O   LEU A 252      7.788  -3.762  15.925  1.00 21.96           O
ATOM   2472  CB  LEU A 252      7.713  -3.732  13.028  1.00 21.87           C
ATOM   2473  CG  LEU A 252      7.382  -3.781  11.524  1.00 22.64           C
ATOM   2474  CD1 LEU A 252      8.638  -4.176  10.737  1.00 23.58           C
ATOM   2475  CD2 LEU A 252      6.258  -4.782  11.211  1.00 23.00           C
ATOM   2476  H   LEU A 252      7.376  -1.553  14.845  1.00  0.00           H
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ATOM   2477  HA  LEU A 252       5.590  -3.549  13.553  1.00  0.00           H
ATOM   2478  HB2 LEU A 252       8.595  -3.114  13.199  1.00  0.00           H
ATOM   2479  HB3 LEU A 252       8.021  -4.740  13.317  1.00  0.00           H
ATOM   2480  HG  LEU A 252       7.070  -2.786  11.201  1.00  0.00           H
ATOM   2481 HD11 LEU A 252       8.470  -4.135   9.660  1.00  0.00           H
ATOM   2482 HD12 LEU A 252       9.464  -3.513  10.973  1.00  0.00           H
ATOM   2483 HD13 LEU A 252       8.961  -5.188  10.987  1.00  0.00           H
ATOM   2484 HD21 LEU A 252       6.121  -4.908  10.137  1.00  0.00           H
ATOM   2485 HD22 LEU A 252       6.485  -5.763  11.630  1.00  0.00           H
ATOM   2486 HD23 LEU A 252       5.300  -4.468  11.616  1.00  0.00           H
ATOM   2487  N   TYR A 253       5.710  -4.598  15.801  1.00 20.60           N
ATOM   2488  CA  TYR A 253       5.690  -5.154  17.145  1.00 20.37           C
ATOM   2489  C   TYR A 253       6.318  -6.548  17.156  1.00 19.45           C
ATOM   2490  O   TYR A 253       7.093  -6.865  18.052  1.00 22.46           O
ATOM   2491  CB  TYR A 253       4.223  -5.306  17.569  1.00 19.57           C
ATOM   2492  CG  TYR A 253       3.460  -4.000  17.688  1.00 20.14           C
ATOM   2493  CD1 TYR A 253       3.930  -2.994  18.552  1.00 20.07           C
ATOM   2494  CD2 TYR A 253       2.230  -3.824  17.020  1.00 19.83           C
ATOM   2495  CE1 TYR A 253       3.150  -1.852  18.788  1.00 20.33           C
ATOM   2496  CE2 TYR A 253       1.450  -2.681  17.262  1.00 19.82           C
ATOM   2497  CZ  TYR A 253       1.904  -1.694  18.156  1.00 18.82           C
ATOM   2498  OH  TYR A 253       1.130  -0.606  18.431  1.00 18.72           O
ATOM   2499  H   TYR A 253       4.909  -4.764  15.201  1.00  0.00           H
ATOM   2500  HA  TYR A 253       6.232  -4.516  17.849  1.00  0.00           H
ATOM   2501  HB2 TYR A 253       3.690  -5.978  16.896  1.00  0.00           H
ATOM   2502  HB3 TYR A 253       4.184  -5.786  18.546  1.00  0.00           H
ATOM   2503  HD1 TYR A 253       4.857  -3.114  19.097  1.00  0.00           H
ATOM   2504  HD2 TYR A 253       1.830  -4.596  16.383  1.00  0.00           H
ATOM   2505  HE1 TYR A 253       3.500  -1.145  19.518  1.00  0.00           H
ATOM   2506  HE2 TYR A 253       0.485  -2.597  16.785  1.00  0.00           H
ATOM   2507  HH  TYR A 253       0.188  -0.812  18.255  1.00  0.00           H
ATOM   2508  N   CYS A 254       6.006  -7.382  16.159  1.00 22.80           N
ATOM   2509  CA  CYS A 254       6.552  -8.731  16.054  1.00 23.68           C
ATOM   2510  C   CYS A 254       7.867  -8.655  15.282  1.00 22.63           C
ATOM   2511  O   CYS A 254       7.971  -7.954  14.272  1.00 23.04           O
ATOM   2512  CB  CYS A 254       5.586  -9.629  15.273  1.00 23.53           C
ATOM   2513  SG  CYS A 254       3.941  -9.792  16.024  1.00 25.59           S
ATOM   2514  H   CYS A 254       5.473  -7.023  15.380  1.00  0.00           H
ATOM   2515  HA  CYS A 254       6.723  -9.160  17.041  1.00  0.00           H
ATOM   2516  HB2 CYS A 254       5.458  -9.252  14.258  1.00  0.00           H
ATOM   2517  HB3 CYS A 254       6.004 -10.632  15.164  1.00  0.00           H
ATOM   2518  N   ASP A 255       8.867  -9.383  15.777  1.00 22.72           N
ATOM   2519  CA  ASP A 255      10.138  -9.650  15.127  1.00 23.70           C
ATOM   2520  C   ASP A 255       9.870 -10.601  13.971  1.00 24.37           C
ATOM   2521  O   ASP A 255       9.422 -11.724  14.176  1.00 24.71           O
ATOM   2522  CB  ASP A 255      11.105 -10.337  16.118  1.00 25.02           C
ATOM   2523  CG  ASP A 255      12.041  -9.346  16.769  1.00 25.86           C
ATOM   2524  OD1 ASP A 255      11.668  -8.787  17.828  1.00 25.31           O
ATOM   2525  OD2 ASP A 255      13.118  -9.158  16.164  1.00 30.23           O1-
ATOM   2526  H   ASP A 255       8.622 -10.020  16.538  1.00  0.00           H
ATOM   2527  HA  ASP A 255      10.567  -8.725  14.737  1.00  0.00           H
ATOM   2528  HB2 ASP A 255      10.569 -10.890  16.887  1.00  0.00           H
ATOM   2529  HB3 ASP A 255      11.726 -11.078  15.618  1.00  0.00           H
ATOM   2530  N   ILE A 256      10.151 -10.143  12.755  1.00 23.24           N
ATOM   2531  CA  ILE A 256       9.974 -10.913  11.540  1.00 25.08           C
ATOM   2532  C   ILE A 256      11.308 -11.662  11.400  1.00 24.17           C
ATOM   2533  O   ILE A 256      12.372 -11.053  11.260  1.00 23.01           O
ATOM   2534  CB  ILE A 256       9.710  -9.943  10.357  1.00 24.13           C
ATOM   2535  CG1 ILE A 256       8.576  -8.934  10.680  1.00 24.74           C
ATOM   2536  CG2 ILE A 256       9.374 -10.735   9.076  1.00 23.47           C
ATOM   2537  CD1 ILE A 256       8.424  -7.801   9.662  1.00 24.32           C
ATOM   2538  H   ILE A 256      10.579  -9.232  12.656  1.00  0.00           H
ATOM   2539  HA  ILE A 256       9.136 -11.608  11.638  1.00  0.00           H
ATOM   2540  HB  ILE A 256      10.619  -9.373  10.174  1.00  0.00           H
ATOM   2541 HG12 ILE A 256       7.637  -9.472  10.787  1.00  0.00           H
ATOM   2542 HG13 ILE A 256       8.737  -8.448  11.641  1.00  0.00           H
ATOM   2543 HG21 ILE A 256       9.264 -10.074   8.221  1.00  0.00           H
ATOM   2544 HG22 ILE A 256      10.151 -11.453   8.818  1.00  0.00           H
ATOM   2545 HG23 ILE A 256       8.439 -11.290   9.181  1.00  0.00           H
ATOM   2546 HD11 ILE A 256       7.606  -7.139   9.945  1.00  0.00           H
ATOM   2547 HD12 ILE A 256       9.334  -7.203   9.619  1.00  0.00           H
ATOM   2548 HD13 ILE A 256       8.204  -8.174   8.663  1.00  0.00           H
ATOM   2549  N   ASN A 257      11.256 -12.983  11.573  1.00 25.64           N
ATOM   2550  CA  ASN A 257      12.425 -13.848  11.753  1.00 27.73           C
ATOM   2551  C   ASN A 257      12.655 -14.717  10.512  1.00 27.85           C
ATOM   2552  O   ASN A 257      13.136 -15.844  10.594  1.00 27.48           O
ATOM   2553  CB  ASN A 257      12.303 -14.666  13.060  1.00 29.60           C
ATOM   2554  CG  ASN A 257      12.407 -13.782  14.305  1.00 31.61           C
ATOM   2555  OD1 ASN A 257      13.327 -12.971  14.425  1.00 33.94           O
ATOM   2556  ND2 ASN A 257      11.442 -13.864  15.211  1.00 33.79           N
ATOM   2557  H   ASN A 257      10.346 -13.394  11.735  1.00  0.00           H
ATOM   2558  HA  ASN A 257      13.331 -13.246  11.835  1.00  0.00           H
ATOM   2559  HB2 ASN A 257      11.372 -15.235  13.068  1.00  0.00           H
ATOM   2560  HB3 ASN A 257      13.109 -15.398  13.126  1.00  0.00           H
ATOM   2561 HD21 ASN A 257      10.593 -14.406  15.021  1.00  0.00           H
ATOM   2562 HD22 ASN A 257      11.475 -13.297  16.040  1.00  0.00           H
ATOM   2563  N   TYR A 258      12.349 -14.149   9.346  1.00 29.16           N
ATOM   2564  CA  TYR A 258      12.643 -14.651   8.017  1.00 29.16           C
ATOM   2565  C   TYR A 258      12.791 -13.443   7.086  1.00 28.34           C
ATOM   2566  O   TYR A 258      12.280 -12.360   7.380  1.00 28.39           O
ATOM   2567  CB  TYR A 258      11.598 -15.695   7.569  1.00 29.46           C
ATOM   2568  CG  TYR A 258      10.183 -15.164   7.418  1.00 30.02           C
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ATOM   2569  CD1 TYR A 258       9.330 -15.094   8.539  1.00 31.04          C
ATOM   2570  CD2 TYR A 258       9.721 -14.722   6.160  1.00 30.30          C
ATOM   2571  CE1 TYR A 258       8.029 -14.573   8.405  1.00 29.83          C
ATOM   2572  CE2 TYR A 258       8.416 -14.216   6.025  1.00 30.49          C
ATOM   2573  CZ  TYR A 258       7.574 -14.135   7.148  1.00 31.23          C
ATOM   2574  OH  TYR A 258       6.322 -13.626   7.006  1.00 30.56          O
ATOM   2575  H   TYR A 258      11.988 -13.203   9.351  1.00  0.00          H
ATOM   2576  HA  TYR A 258      13.618 -15.141   8.057  1.00  0.00          H
ATOM   2577  HB2 TYR A 258      11.905 -16.128   6.617  1.00  0.00          H
ATOM   2578  HB3 TYR A 258      11.584 -16.528   8.273  1.00  0.00          H
ATOM   2579  HD1 TYR A 258       9.669 -15.430   9.507  1.00  0.00          H
ATOM   2580  HD2 TYR A 258      10.365 -14.762   5.295  1.00  0.00          H
ATOM   2581  HE1 TYR A 258       7.379 -14.512   9.267  1.00  0.00          H
ATOM   2582  HE2 TYR A 258       8.052 -13.887   5.064  1.00  0.00          H
ATOM   2583  HH  TYR A 258       5.828 -13.566   7.853  1.00  0.00          H
ATOM   2584  N   ASP A 259      13.482 -13.622   5.957  1.00 26.74          N
ATOM   2585  CA  ASP A 259      13.617 -12.610   4.914  1.00 25.98          C
ATOM   2586  C   ASP A 259      12.351 -12.682   4.046  1.00 26.85          C
ATOM   2587  O   ASP A 259      12.123 -13.688   3.371  1.00 26.32          O
ATOM   2588  CB  ASP A 259      14.877 -12.939   4.087  1.00 24.33          C
ATOM   2589  CG  ASP A 259      15.187 -11.942   2.975  1.00 23.76          C
ATOM   2590  OD1 ASP A 259      14.337 -11.687   2.091  1.00 24.79          O
ATOM   2591  OD2 ASP A 259      16.320 -11.417   2.977  1.00 24.27          O1-
ATOM   2592  H   ASP A 259      13.855 -14.536   5.762  1.00  0.00          H
ATOM   2593  HA  ASP A 259      13.724 -11.616   5.354  1.00  0.00          H
ATOM   2594  HB2 ASP A 259      15.740 -12.971   4.746  1.00  0.00          H
ATOM   2595  HB3 ASP A 259      14.814 -13.939   3.668  1.00  0.00          H
ATOM   2596  N   VAL A 260      11.506 -11.647   4.118  1.00 27.13          N
ATOM   2597  CA  VAL A 260      10.179 -11.611   3.508  1.00 26.80          C
ATOM   2598  C   VAL A 260      10.206 -11.771   1.977  1.00 26.31          C
ATOM   2599  O   VAL A 260       9.433 -12.560   1.442  1.00 25.15          O
ATOM   2600  CB  VAL A 260       9.409 -10.341   3.959  1.00 27.92          C
ATOM   2601  CG1 VAL A 260       9.141 -10.362   5.474  1.00 27.39          C
ATOM   2602  CG2 VAL A 260      10.065  -9.005   3.555  1.00 30.01          C
ATOM   2603  H   VAL A 260      11.729 -10.909   4.767  1.00  0.00          H
ATOM   2604  HA  VAL A 260       9.636 -12.478   3.891  1.00  0.00          H
ATOM   2605  HB  VAL A 260       8.430 -10.372   3.476  1.00  0.00          H
ATOM   2606 HG11 VAL A 260       8.541  -9.506   5.784  1.00  0.00          H
ATOM   2607 HG12 VAL A 260       8.593 -11.259   5.768  1.00  0.00          H
ATOM   2608 HG13 VAL A 260      10.068 -10.342   6.047  1.00  0.00          H
ATOM   2609 HG21 VAL A 260       9.471  -8.162   3.910  1.00  0.00          H
ATOM   2610 HG22 VAL A 260      11.068  -8.895   3.966  1.00  0.00          H
ATOM   2611 HG23 VAL A 260      10.126  -8.895   2.474  1.00  0.00          H
ATOM   2612  N   PHE A 261      11.113 -11.094   1.262  1.00 25.12          N
ATOM   2613  CA  PHE A 261      11.144 -11.125  -0.203  1.00 24.42          C
ATOM   2614  C   PHE A 261      11.830 -12.394  -0.721  1.00 26.37          C
ATOM   2615  O   PHE A 261      11.448 -12.899  -1.775  1.00 26.96          O
ATOM   2616  CB  PHE A 261      11.887  -9.897  -0.746  1.00 24.90          C
ATOM   2617  CG  PHE A 261      11.157  -8.597  -0.492  1.00 24.87          C
ATOM   2618  CD1 PHE A 261       9.956  -8.334  -1.178  1.00 23.69          C
ATOM   2619  CD2 PHE A 261      11.659  -7.660   0.434  1.00 24.07          C
ATOM   2620  CE1 PHE A 261       9.241  -7.152  -0.921  1.00 23.05          C
ATOM   2621  CE2 PHE A 261      10.946  -6.477   0.692  1.00 26.09          C
ATOM   2622  CZ  PHE A 261       9.731  -6.236   0.024  1.00 24.79          C
ATOM   2623  H   PHE A 261      11.798 -10.537   1.751  1.00  0.00          H
ATOM   2624  HA  PHE A 261      10.124 -11.120  -0.595  1.00  0.00          H
ATOM   2625  HB2 PHE A 261      12.886  -9.840  -0.333  1.00  0.00          H
ATOM   2626  HB3 PHE A 261      12.012  -9.989  -1.824  1.00  0.00          H
ATOM   2627  HD1 PHE A 261       9.578  -9.051  -1.890  1.00  0.00          H
ATOM   2628  HD2 PHE A 261      12.583  -7.843   0.957  1.00  0.00          H
ATOM   2629  HE1 PHE A 261       8.309  -6.948  -1.429  1.00  0.00          H
ATOM   2630  HE2 PHE A 261      11.329  -5.763   1.405  1.00  0.00          H
ATOM   2631  HZ  PHE A 261       9.155  -5.355   0.241  1.00  0.00          H
ATOM   2632  N   LYS A 262      12.768 -12.975   0.043  1.00 25.29          N
ATOM   2633  CA  LYS A 262      13.308 -14.306  -0.219  1.00 27.76          C
ATOM   2634  C   LYS A 262      12.236 -15.392  -0.006  1.00 27.08          C
ATOM   2635  O   LYS A 262      12.353 -16.438  -0.634  1.00 27.65          O
ATOM   2636  CB  LYS A 262      14.502 -14.548   0.730  1.00 27.98          C
ATOM   2637  CG  LYS A 262      15.204 -15.926   0.708  1.00 31.68          C
ATOM   2638  CD  LYS A 262      16.070 -16.210  -0.534  1.00 35.77          C
ATOM   2639  CE  LYS A 262      15.600 -17.416  -1.371  1.00 38.98          C
ATOM   2640  NZ  LYS A 262      14.467 -17.073  -2.234  1.00 38.71          N1+
ATOM   2641  H   LYS A 262      13.089 -12.495   0.887  1.00  0.00          H
ATOM   2642  HA  LYS A 262      13.650 -14.345  -1.255  1.00  0.00          H
ATOM   2643  HB2 LYS A 262      15.246 -13.764   0.585  1.00  0.00          H
ATOM   2644  HB3 LYS A 262      14.116 -14.415   1.736  1.00  0.00          H
ATOM   2645  HG2 LYS A 262      15.863 -15.952   1.577  1.00  0.00          H
ATOM   2646  HG3 LYS A 262      14.496 -16.735   0.893  1.00  0.00          H
ATOM   2647  HD2 LYS A 262      16.172 -15.315  -1.148  1.00  0.00          H
ATOM   2648  HD3 LYS A 262      17.082 -16.431  -0.190  1.00  0.00          H
ATOM   2649  HE2 LYS A 262      16.409 -17.761  -2.012  1.00  0.00          H
ATOM   2650  HE3 LYS A 262      15.328 -18.260  -0.736  1.00  0.00          H
ATOM   2651  HZ1 LYS A 262      14.107 -17.932  -2.703  1.00  0.00          H
ATOM   2652  HZ2 LYS A 262      13.664 -16.752  -1.699  1.00  0.00          H
ATOM   2653  HZ3 LYS A 262      14.724 -16.400  -2.950  1.00  0.00          H
ATOM   2654  N   TRP A 263      11.240 -15.168   0.861  1.00 26.32          N
ATOM   2655  CA  TRP A 263      10.188 -16.122   1.215  1.00 26.06          C
ATOM   2656  C   TRP A 263       8.959 -15.977   0.296  1.00 28.00          C
ATOM   2657  O   TRP A 263       8.467 -16.984  -0.219  1.00 26.85          O
ATOM   2658  CB  TRP A 263       9.779 -15.842   2.678  1.00 25.69          C
ATOM   2659  CG  TRP A 263       8.730 -16.724   3.290  1.00 24.08          C
ATOM   2660  CD1 TRP A 263       8.962 -17.892   3.931  1.00 24.32          C
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ATOM   2661  CD2 TRP A 263       7.289 -16.502   3.371  1.00 24.24           C
ATOM   2662  NE1 TRP A 263       7.766 -18.413   4.385  1.00 24.75           N
ATOM   2663  CE3 TRP A 263       6.414 -15.482   2.929  1.00 25.60           C
ATOM   2664  CE2 TRP A 263       6.699 -17.594   4.076  1.00 24.89           C
ATOM   2665  CZ3 TRP A 263       5.026 -15.549   3.162  1.00 24.08           C
ATOM   2666  CZ2 TRP A 263       5.316 -17.675   4.315  1.00 24.80           C
ATOM   2667  CH2 TRP A 263       4.476 -16.646   3.851  1.00 25.33           C
ATOM   2668  H   TRP A 263      11.274 -14.300   1.383  1.00  0.00           H
ATOM   2669  HA  TRP A 263      10.567 -17.144   1.139  1.00  0.00           H
ATOM   2670  HB2 TRP A 263      10.668 -15.943   3.300  1.00  0.00           H
ATOM   2671  HB3 TRP A 263       9.450 -14.811   2.804  1.00  0.00           H
ATOM   2672  HD1 TRP A 263       9.942 -18.327   4.071  1.00  0.00           H
ATOM   2673  HE1 TRP A 263       7.697 -19.253   4.943  1.00  0.00           H
ATOM   2674  HE3 TRP A 263       6.822 -14.632   2.412  1.00  0.00           H
ATOM   2675  HZ3 TRP A 263       4.382 -14.750   2.820  1.00  0.00           H
ATOM   2676  HZ2 TRP A 263       4.899 -18.517   4.847  1.00  0.00           H
ATOM   2677  HH2 TRP A 263       3.412 -16.691   4.032  1.00  0.00           H
ATOM   2678  N   MET A 264       8.468 -14.747   0.066  1.00 26.69           N
ATOM   2679  CA  MET A 264       7.252 -14.421  -0.702  1.00 27.66           C
ATOM   2680  C   MET A 264       7.331 -14.919  -2.157  1.00 28.61           C
ATOM   2681  O   MET A 264       6.347 -15.389  -2.727  1.00 28.17           O
ATOM   2682  CB  MET A 264       7.042 -12.887  -0.713  1.00 26.75           C
ATOM   2683  CG  MET A 264       6.477 -12.277   0.582  1.00 27.80           C
ATOM   2684  SD  MET A 264       4.688 -12.441   0.805  1.00 32.27           S
ATOM   2685  CE  MET A 264       4.115 -11.115  -0.290  1.00 29.89           C
ATOM   2686  H   MET A 264       8.921 -13.971   0.548  1.00  0.00           H
ATOM   2687  HA  MET A 264       6.393 -14.904  -0.232  1.00  0.00           H
ATOM   2688  HB2 MET A 264       7.988 -12.401  -0.953  1.00  0.00           H
ATOM   2689  HB3 MET A 264       6.372 -12.614  -1.527  1.00  0.00           H
ATOM   2690  HG2 MET A 264       6.960 -12.708   1.454  1.00  0.00           H
ATOM   2691  HG3 MET A 264       6.717 -11.214   0.613  1.00  0.00           H
ATOM   2692  HE1 MET A 264       3.028 -11.126  -0.353  1.00  0.00           H
ATOM   2693  HE2 MET A 264       4.435 -10.146   0.091  1.00  0.00           H
ATOM   2694  HE3 MET A 264       4.511 -11.230  -1.296  1.00  0.00           H
ATOM   2695  N   GLN A 265       8.538 -14.840  -2.728  1.00 28.33           N
ATOM   2696  CA  GLN A 265       8.893 -15.226  -4.086  1.00 30.41           C
ATOM   2697  C   GLN A 265       8.737 -16.743  -4.331  1.00 30.83           C
ATOM   2698  O   GLN A 265       8.365 -17.150  -5.435  1.00 30.37           O
ATOM   2699  CB  GLN A 265      10.348 -14.760  -4.287  1.00 27.86           C
ATOM   2700  CG  GLN A 265      10.922 -14.905  -5.707  1.00 30.57           C
ATOM   2701  CD  GLN A 265      12.441 -14.799  -5.678  1.00 32.16           C
ATOM   2702  OE1 GLN A 265      13.030 -13.844  -6.175  1.00 31.72           O
ATOM   2703  NE2 GLN A 265      13.102 -15.787  -5.098  1.00 32.89           N
ATOM   2704  H   GLN A 265       9.276 -14.443  -2.164  1.00  0.00           H
ATOM   2705  HA  GLN A 265       8.242 -14.694  -4.781  1.00  0.00           H
ATOM   2706  HB2 GLN A 265      10.425 -13.706  -4.020  1.00  0.00           H
ATOM   2707  HB3 GLN A 265      10.977 -15.290  -3.569  1.00  0.00           H
ATOM   2708  HG2 GLN A 265      10.673 -15.873  -6.143  1.00  0.00           H
ATOM   2709  HG3 GLN A 265      10.507 -14.147  -6.373  1.00  0.00           H
ATOM   2710 HE21 GLN A 265      12.570 -16.602  -4.717  1.00  0.00           H
ATOM   2711 HE22 GLN A 265      14.103 -15.833  -5.217  1.00  0.00           H
ATOM   2712  N   GLU A 266       8.986 -17.582  -3.314  1.00 31.44           N
ATOM   2713  CA  GLU A 266       8.920 -19.042  -3.431  1.00 33.01           C
ATOM   2714  C   GLU A 266       7.501 -19.519  -3.110  1.00 32.66           C
ATOM   2715  O   GLU A 266       6.984 -20.415  -3.771  1.00 32.48           O
ATOM   2716  CB  GLU A 266       9.878 -19.761  -2.446  1.00 34.36           C
ATOM   2717  CG  GLU A 266      11.173 -19.033  -2.060  1.00 44.11           C
ATOM   2718  CD  GLU A 266      12.126 -18.707  -3.202  1.00 48.33           C
ATOM   2719  OE1 GLU A 266      13.294 -19.145  -3.144  1.00 49.69           O
ATOM   2720  OE2 GLU A 266      11.818 -17.810  -4.008  1.00 50.67           O1-
ATOM   2721  H   GLU A 266       9.337 -17.192  -2.453  1.00  0.00           H
ATOM   2722  HA  GLU A 266       9.179 -19.343  -4.443  1.00  0.00           H
ATOM   2723  HB2 GLU A 266       9.368 -19.983  -1.507  1.00  0.00           H
ATOM   2724  HB3 GLU A 266      10.134 -20.736  -2.864  1.00  0.00           H
ATOM   2725  HG2 GLU A 266      10.904 -18.112  -1.552  1.00  0.00           H
ATOM   2726  HG3 GLU A 266      11.714 -19.632  -1.327  1.00  0.00           H
ATOM   2727  N   ASN A 267       6.873 -18.884  -2.110  1.00 29.70           N
ATOM   2728  CA  ASN A 267       5.528 -19.192  -1.614  1.00 28.37           C
ATOM   2729  C   ASN A 267       4.427 -18.661  -2.542  1.00 26.52           C
ATOM   2730  O   ASN A 267       3.246 -18.898  -2.280  1.00 27.70           O
ATOM   2731  CB  ASN A 267       5.326 -18.562  -0.215  1.00 29.57           C
ATOM   2732  CG  ASN A 267       6.007 -19.364   0.890  1.00 30.12           C
ATOM   2733  OD1 ASN A 267       5.416 -20.270   1.466  1.00 32.14           O
ATOM   2734  ND2 ASN A 267       7.247 -19.034   1.216  1.00 27.84           N
ATOM   2735  H   ASN A 267       7.388 -18.145  -1.648  1.00  0.00           H
ATOM   2736  HA  ASN A 267       5.399 -20.275  -1.553  1.00  0.00           H
ATOM   2737  HB2 ASN A 267       5.660 -17.524  -0.195  1.00  0.00           H
ATOM   2738  HB3 ASN A 267       4.267 -18.533   0.049  1.00  0.00           H
ATOM   2739 HD21 ASN A 267       7.712 -18.261   0.746  1.00  0.00           H
ATOM   2740 HD22 ASN A 267       7.643 -19.437   2.051  1.00  0.00           H
ATOM   2741  N   GLU A 268       4.800 -17.946  -3.614  1.00 28.56           N
ATOM   2742  CA  GLU A 268       3.958 -17.492  -4.716  1.00 29.03           C
ATOM   2743  C   GLU A 268       3.026 -16.367  -4.249  1.00 27.53           C
ATOM   2744  O   GLU A 268       1.811 -16.478  -4.372  1.00 29.81           O
ATOM   2745  CB  GLU A 268       3.233 -18.690  -5.391  1.00 31.12           C
ATOM   2746  CG  GLU A 268       4.123 -19.462  -6.382  1.00 34.99           C
ATOM   2747  CD  GLU A 268       4.394 -18.647  -7.635  1.00 36.24           C
ATOM   2748  OE1 GLU A 268       3.398 -18.132  -8.188  1.00 38.70           O
ATOM   2749  OE2 GLU A 268       5.586 -18.503  -7.980  1.00 37.35           O1-
ATOM   2750  H   GLU A 268       5.789 -17.765  -3.698  1.00  0.00           H
ATOM   2751  HA  GLU A 268       4.618 -17.021  -5.445  1.00  0.00           H
ATOM   2752  HB2 GLU A 268       2.819 -19.389  -4.668  1.00  0.00           H
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ATOM   2753  HB3 GLU A 268       2.355 -18.328  -5.918  1.00  0.00           H
ATOM   2754  HG2 GLU A 268       5.061 -19.753  -5.908  1.00  0.00           H
ATOM   2755  HG3 GLU A 268       3.628 -20.384  -6.686  1.00  0.00           H
ATOM   2756  N   LYS A 269       3.570 -15.323  -3.622  1.00 25.71           N
ATOM   2757  CA  LYS A 269       2.814 -14.214  -3.052  1.00 25.50           C
ATOM   2758  C   LYS A 269       3.416 -12.921  -3.617  1.00 24.82           C
ATOM   2759  O   LYS A 269       4.602 -12.670  -3.430  1.00 25.11           O
ATOM   2760  CB  LYS A 269       2.839 -14.323  -1.511  1.00 23.34           C
ATOM   2761  CG  LYS A 269       2.313 -15.658  -0.921  1.00 24.75           C
ATOM   2762  CD  LYS A 269       0.804 -15.916  -1.120  1.00 23.23           C
ATOM   2763  CE  LYS A 269       0.389 -17.403  -1.158  1.00 22.16           C
ATOM   2764  NZ  LYS A 269       0.685 -18.026  -2.458  1.00 22.20           N1+
ATOM   2765  H   LYS A 269       4.578 -15.292  -3.489  1.00  0.00           H
ATOM   2766  HA  LYS A 269       1.776 -14.244  -3.376  1.00  0.00           H
ATOM   2767  HB2 LYS A 269       3.874 -14.206  -1.189  1.00  0.00           H
ATOM   2768  HB3 LYS A 269       2.294 -13.483  -1.082  1.00  0.00           H
ATOM   2769  HG2 LYS A 269       2.892 -16.480  -1.334  1.00  0.00           H
ATOM   2770  HG3 LYS A 269       2.528 -15.679   0.148  1.00  0.00           H
ATOM   2771  HD2 LYS A 269       0.253 -15.446  -0.306  1.00  0.00           H
ATOM   2772  HD3 LYS A 269       0.447 -15.417  -2.018  1.00  0.00           H
ATOM   2773  HE2 LYS A 269       0.864 -17.971  -0.358  1.00  0.00           H
ATOM   2774  HE3 LYS A 269      -0.687 -17.482  -0.993  1.00  0.00           H
ATOM   2775  HZ1 LYS A 269      -0.092 -18.606  -2.835  1.00  0.00           H
ATOM   2776  HZ2 LYS A 269       0.805 -17.315  -3.173  1.00  0.00           H
ATOM   2777  HZ3 LYS A 269       1.545 -18.566  -2.434  1.00  0.00           H
ATOM   2778  N   VAL A 270       2.621 -12.145  -4.363  1.00 24.36           N
ATOM   2779  CA  VAL A 270       3.046 -11.004  -5.182  1.00 23.54           C
ATOM   2780  C   VAL A 270       2.626  -9.678  -4.517  1.00 22.50           C
ATOM   2781  O   VAL A 270       3.251  -8.645  -4.764  1.00 23.72           O
ATOM   2782  CB  VAL A 270       2.409 -11.142  -6.602  1.00 23.18           C
ATOM   2783  CG1 VAL A 270       2.892 -10.069  -7.597  1.00 22.05           C
ATOM   2784  CG2 VAL A 270       2.644 -12.516  -7.267  1.00 23.42           C
ATOM   2785  H   VAL A 270       1.630 -12.373  -4.385  1.00  0.00           H
ATOM   2786  HA  VAL A 270       4.130 -10.969  -5.269  1.00  0.00           H
ATOM   2787  HB  VAL A 270       1.331 -11.024  -6.484  1.00  0.00           H
ATOM   2788 HG11 VAL A 270       2.460 -10.218  -8.588  1.00  0.00           H
ATOM   2789 HG12 VAL A 270       2.630  -9.060  -7.283  1.00  0.00           H
ATOM   2790 HG13 VAL A 270       3.974 -10.116  -7.718  1.00  0.00           H
ATOM   2791 HG21 VAL A 270       1.924 -12.672  -8.069  1.00  0.00           H
ATOM   2792 HG22 VAL A 270       3.625 -12.577  -7.730  1.00  0.00           H
ATOM   2793 HG23 VAL A 270       2.557 -13.365  -6.590  1.00  0.00           H
ATOM   2794  N   TYR A 271       1.604  -9.700  -3.653  1.00 21.55           N
ATOM   2795  CA  TYR A 271       1.136  -8.562  -2.875  1.00 22.01           C
ATOM   2796  C   TYR A 271       0.884  -9.059  -1.452  1.00 20.85           C
ATOM   2797  O   TYR A 271      -0.001  -9.888  -1.242  1.00 21.84           O
ATOM   2798  CB  TYR A 271      -0.093  -7.923  -3.556  1.00 19.56           C
ATOM   2799  CG  TYR A 271      -0.633  -6.683  -2.865  1.00 18.54           C
ATOM   2800  CD1 TYR A 271      -0.169  -5.402  -3.233  1.00 18.88           C
ATOM   2801  CD2 TYR A 271      -1.594  -6.804  -1.839  1.00 19.17           C
ATOM   2802  CE1 TYR A 271      -0.659  -4.257  -2.576  1.00 16.85           C
ATOM   2803  CE2 TYR A 271      -2.081  -5.657  -1.184  1.00 18.66           C
ATOM   2804  CZ  TYR A 271      -1.621  -4.381  -1.556  1.00 18.55           C
ATOM   2805  OH  TYR A 271      -2.108  -3.273  -0.926  1.00 19.00           O
ATOM   2806  H   TYR A 271       1.133 -10.581  -3.479  1.00  0.00           H
ATOM   2807  HA  TYR A 271       1.919  -7.806  -2.824  1.00  0.00           H
ATOM   2808  HB2 TYR A 271       0.161  -7.654  -4.582  1.00  0.00           H
ATOM   2809  HB3 TYR A 271      -0.899  -8.656  -3.632  1.00  0.00           H
ATOM   2810  HD1 TYR A 271       0.567  -5.289  -4.016  1.00  0.00           H
ATOM   2811  HD2 TYR A 271      -1.957  -7.777  -1.538  1.00  0.00           H
ATOM   2812  HE1 TYR A 271      -0.290  -3.283  -2.855  1.00  0.00           H
ATOM   2813  HE2 TYR A 271      -2.807  -5.762  -0.392  1.00  0.00           H
ATOM   2814  HH  TYR A 271      -1.581  -2.473  -1.087  1.00  0.00           H
ATOM   2815  N   GLY A 272       1.671  -8.586  -0.487  1.00 20.02           N
ATOM   2816  CA  GLY A 272       1.568  -8.925   0.919  1.00 19.98           C
ATOM   2817  C   GLY A 272       1.292  -7.666   1.731  1.00 19.55           C
ATOM   2818  O   GLY A 272       2.021  -6.684   1.596  1.00 20.95           O
ATOM   2819  H   GLY A 272       2.423  -7.940  -0.713  1.00  0.00           H
ATOM   2820  HA2 GLY A 272       0.822  -9.688   1.098  1.00  0.00           H
ATOM   2821  HA3 GLY A 272       2.516  -9.348   1.235  1.00  0.00           H
ATOM   2822  N   PHE A 273       0.264  -7.695   2.579  1.00 19.12           N
ATOM   2823  CA  PHE A 273      -0.215  -6.563   3.369  1.00 19.96           C
ATOM   2824  C   PHE A 273      -0.506  -7.004   4.818  1.00 20.73           C
ATOM   2825  O   PHE A 273      -0.297  -8.162   5.187  1.00 21.45           O
ATOM   2826  CB  PHE A 273      -1.400  -5.876   2.637  1.00 20.09           C
ATOM   2827  CG  PHE A 273      -2.700  -6.662   2.695  1.00 21.22           C
ATOM   2828  CD1 PHE A 273      -2.910  -7.760   1.836  1.00 20.84           C
ATOM   2829  CD2 PHE A 273      -3.664  -6.355   3.678  1.00 20.08           C
ATOM   2830  CE1 PHE A 273      -4.034  -8.589   2.013  1.00 20.71           C
ATOM   2831  CE2 PHE A 273      -4.773  -7.198   3.868  1.00 20.46           C
ATOM   2832  CZ  PHE A 273      -4.954  -8.317   3.040  1.00 22.49           C
ATOM   2833  H   PHE A 273      -0.285  -8.550   2.646  1.00  0.00           H
ATOM   2834  HA  PHE A 273       0.586  -5.826   3.440  1.00  0.00           H
ATOM   2835  HB2 PHE A 273      -1.568  -4.887   3.065  1.00  0.00           H
ATOM   2836  HB3 PHE A 273      -1.138  -5.689   1.595  1.00  0.00           H
ATOM   2837  HD1 PHE A 273      -2.185  -8.004   1.073  1.00  0.00           H
ATOM   2838  HD2 PHE A 273      -3.529  -5.507   4.332  1.00  0.00           H
ATOM   2839  HE1 PHE A 273      -4.179  -9.447   1.377  1.00  0.00           H
ATOM   2840  HE2 PHE A 273      -5.474  -6.999   4.662  1.00  0.00           H
ATOM   2841  HZ  PHE A 273      -5.805  -8.959   3.188  1.00  0.00           H
ATOM   2842  N   THR A 274      -0.996  -6.073   5.641  1.00 20.67           N
ATOM   2843  CA  THR A 274      -1.473  -6.308   7.001  1.00 19.86           C
ATOM   2844  C   THR A 274      -2.878  -5.702   7.144  1.00 23.58           C
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ATOM   2845  O   THR A 274      -3.879  -6.341   6.824  1.00 27.01           O
ATOM   2846  CB  THR A 274      -0.421  -5.837   8.041  1.00 23.05           C
ATOM   2847  OG1 THR A 274       0.035  -4.519   7.769  1.00 20.98           O
ATOM   2848  CG2 THR A 274       0.779  -6.780   8.194  1.00 20.44           C
ATOM   2849  H   THR A 274      -1.186  -5.157   5.263  1.00  0.00           H
ATOM   2850  HA  THR A 274      -1.627  -7.378   7.162  1.00  0.00           H
ATOM   2851  HB  THR A 274      -0.908  -5.782   9.008  1.00  0.00           H
ATOM   2852  HG1 THR A 274       0.721  -4.582   7.116  1.00  0.00           H
ATOM   2853 HG21 THR A 274       1.495  -6.401   8.924  1.00  0.00           H
ATOM   2854 HG22 THR A 274       0.449  -7.759   8.544  1.00  0.00           H
ATOM   2855 HG23 THR A 274       1.303  -6.933   7.252  1.00  0.00           H
ATOM   2856  N   VAL A 275      -2.967  -4.451   7.594  1.00 21.17           N
ATOM   2857  CA  VAL A 275      -4.223  -3.783   7.916  1.00 19.25           C
ATOM   2858  C   VAL A 275      -5.047  -3.529   6.628  1.00 18.02           C
ATOM   2859  O   VAL A 275      -4.502  -3.214   5.568  1.00 19.67           O
ATOM   2860  CB  VAL A 275      -3.910  -2.462   8.669  1.00 17.62           C
ATOM   2861  CG1 VAL A 275      -5.176  -1.836   9.282  1.00 17.33           C
ATOM   2862  CG2 VAL A 275      -2.867  -2.636   9.793  1.00 17.17           C
ATOM   2863  H   VAL A 275      -2.095  -3.979   7.796  1.00  0.00           H
ATOM   2864  HA  VAL A 275      -4.784  -4.448   8.577  1.00  0.00           H
ATOM   2865  HB  VAL A 275      -3.491  -1.775   7.936  1.00  0.00           H
ATOM   2866 HG11 VAL A 275      -4.951  -0.937   9.854  1.00  0.00           H
ATOM   2867 HG12 VAL A 275      -5.916  -1.560   8.530  1.00  0.00           H
ATOM   2868 HG13 VAL A 275      -5.635  -2.540   9.974  1.00  0.00           H
ATOM   2869 HG21 VAL A 275      -2.697  -1.701  10.329  1.00  0.00           H
ATOM   2870 HG22 VAL A 275      -3.203  -3.375  10.523  1.00  0.00           H
ATOM   2871 HG23 VAL A 275      -1.899  -2.962   9.412  1.00  0.00           H
ATOM   2872  N   SER A 276      -6.370  -3.670   6.725  1.00 18.71           N
ATOM   2873  CA  SER A 276      -7.343  -3.502   5.653  1.00 19.95           C
ATOM   2874  C   SER A 276      -8.612  -2.882   6.249  1.00 18.73           C
ATOM   2875  O   SER A 276      -8.964  -3.183   7.391  1.00 22.68           O
ATOM   2876  CB  SER A 276      -7.504  -4.828   4.885  1.00 18.49           C
ATOM   2877  OG  SER A 276      -7.652  -5.921   5.770  1.00 20.03           O
ATOM   2878  H   SER A 276      -6.784  -3.883   7.623  1.00  0.00           H
ATOM   2879  HA  SER A 276      -6.953  -2.760   4.953  1.00  0.00           H
ATOM   2880  HB2 SER A 276      -8.362  -4.787   4.213  1.00  0.00           H
ATOM   2881  HB3 SER A 276      -6.627  -5.011   4.267  1.00  0.00           H
ATOM   2882  HG  SER A 276      -6.841  -6.003   6.258  1.00  0.00           H
ATOM   2883  N   ILE A 277      -9.251  -1.957   5.531  1.00 19.56           N
ATOM   2884  CA  ILE A 277     -10.158  -0.959   6.089  1.00 18.81           C
ATOM   2885  C   ILE A 277     -11.249  -0.580   5.076  1.00 17.40           C
ATOM   2886  O   ILE A 277     -11.130  -0.871   3.883  1.00 17.52           O
ATOM   2887  CB  ILE A 277      -9.302   0.218   6.656  1.00 16.88           C
ATOM   2888  CG1 ILE A 277     -10.081   1.162   7.594  1.00 21.77           C
ATOM   2889  CG2 ILE A 277      -8.616   1.021   5.544  1.00 21.13           C
ATOM   2890  CD1 ILE A 277      -9.185   2.060   8.464  1.00 19.17           C
ATOM   2891  H   ILE A 277      -9.010  -1.838   4.548  1.00  0.00           H
ATOM   2892  HA  ILE A 277     -10.694  -1.419   6.915  1.00  0.00           H
ATOM   2893  HB  ILE A 277      -8.510  -0.222   7.263  1.00  0.00           H
ATOM   2894 HG12 ILE A 277     -10.765   1.790   7.027  1.00  0.00           H
ATOM   2895 HG13 ILE A 277     -10.703   0.558   8.249  1.00  0.00           H
ATOM   2896 HG21 ILE A 277      -7.947   1.768   5.959  1.00  0.00           H
ATOM   2897 HG22 ILE A 277      -8.028   0.390   4.877  1.00  0.00           H
ATOM   2898 HG23 ILE A 277      -9.353   1.551   4.946  1.00  0.00           H
ATOM   2899 HD11 ILE A 277      -9.787   2.643   9.160  1.00  0.00           H
ATOM   2900 HD12 ILE A 277      -8.481   1.469   9.051  1.00  0.00           H
ATOM   2901 HD13 ILE A 277      -8.611   2.768   7.866  1.00  0.00           H
ATOM   2902  N   HIS A 278     -12.293   0.093   5.569  1.00 17.40           N
ATOM   2903  CA  HIS A 278     -13.310   0.808   4.806  1.00 18.62           C
ATOM   2904  C   HIS A 278     -12.731   2.137   4.297  1.00 20.19           C
ATOM   2905  O   HIS A 278     -11.990   2.807   5.021  1.00 22.16           O
ATOM   2906  CB  HIS A 278     -14.464   1.182   5.765  1.00 19.60           C
ATOM   2907  CG  HIS A 278     -15.673   0.307   5.672  1.00 19.20           C
ATOM   2908  ND1 HIS A 278     -16.718   0.589   4.786  1.00 19.72           N
ATOM   2909  CD2 HIS A 278     -15.987  -0.821   6.394  1.00 19.63           C
ATOM   2910  CE1 HIS A 278     -17.622  -0.354   5.016  1.00 18.30           C
ATOM   2911  NE2 HIS A 278     -17.248  -1.204   5.972  1.00 20.42           N
ATOM   2912  H   HIS A 278     -12.319   0.233   6.572  1.00  0.00           H
ATOM   2913  HA  HIS A 278     -13.668   0.202   3.972  1.00  0.00           H
ATOM   2914  HB2 HIS A 278     -14.126   1.193   6.801  1.00  0.00           H
ATOM   2915  HB3 HIS A 278     -14.818   2.200   5.596  1.00  0.00           H
ATOM   2916  HD2 HIS A 278     -15.445  -1.347   7.164  1.00  0.00           H
ATOM   2917  HE1 HIS A 278     -18.569  -0.415   4.499  1.00  0.00           H
ATOM   2918  HE2 HIS A 278     -17.806  -1.962   6.361  1.00  0.00           H
ATOM   2919  N   GLU A 279     -13.111   2.563   3.090  1.00 18.56           N
ATOM   2920  CA  GLU A 279     -12.887   3.919   2.598  1.00 20.35           C
ATOM   2921  C   GLU A 279     -14.136   4.776   2.854  1.00 20.15           C
ATOM   2922  O   GLU A 279     -15.244   4.254   3.004  1.00 21.21           O
ATOM   2923  CB  GLU A 279     -12.574   3.891   1.077  1.00 18.12           C
ATOM   2924  CG  GLU A 279     -12.065   5.215   0.450  1.00 19.55           C
ATOM   2925  CD  GLU A 279     -10.920   5.882   1.211  1.00 21.45           C
ATOM   2926  OE1 GLU A 279     -11.162   6.378   2.332  1.00 21.73           O
ATOM   2927  OE2 GLU A 279      -9.796   5.954   0.672  1.00 20.95           O1-
ATOM   2928  H   GLU A 279     -13.692   1.946   2.531  1.00  0.00           H
ATOM   2929  HA  GLU A 279     -12.056   4.343   3.152  1.00  0.00           H
ATOM   2930  HB2 GLU A 279     -11.828   3.132   0.867  1.00  0.00           H
ATOM   2931  HB3 GLU A 279     -13.462   3.568   0.532  1.00  0.00           H
ATOM   2932  HG2 GLU A 279     -11.740   5.028  -0.572  1.00  0.00           H
ATOM   2933  HG3 GLU A 279     -12.877   5.935   0.366  1.00  0.00           H
ATOM   2934  N   TYR A 280     -13.953   6.098   2.872  1.00 20.93           N
ATOM   2935  CA  TYR A 280     -15.039   7.071   2.919  1.00 21.95           C
ATOM   2936  C   TYR A 280     -15.545   7.238   1.477  1.00 20.59           C
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ATOM   2937  O   TYR A 280     -14.834   7.779   0.624  1.00 20.61           O
ATOM   2938  CB  TYR A 280     -14.497   8.441   3.373  1.00 23.30           C
ATOM   2939  CG  TYR A 280     -13.748   8.475   4.686  1.00 26.62           C
ATOM   2940  CD1 TYR A 280     -14.432   8.387   5.915  1.00 30.13           C
ATOM   2941  CD2 TYR A 280     -12.351   8.629   4.674  1.00 30.20           C
ATOM   2942  CE1 TYR A 280     -13.717   8.464   7.125  1.00 31.13           C
ATOM   2943  CE2 TYR A 280     -11.639   8.687   5.882  1.00 32.21           C
ATOM   2944  CZ  TYR A 280     -12.318   8.609   7.108  1.00 32.49           C
ATOM   2945  OH  TYR A 280     -11.618   8.696   8.277  1.00 34.99           O
ATOM   2946  H   TYR A 280     -13.006   6.432   2.679  1.00  0.00           H
ATOM   2947  HA  TYR A 280     -15.837   6.742   3.588  1.00  0.00           H
ATOM   2948  HB2 TYR A 280     -13.826   8.848   2.619  1.00  0.00           H
ATOM   2949  HB3 TYR A 280     -15.325   9.145   3.450  1.00  0.00           H
ATOM   2950  HD1 TYR A 280     -15.503   8.260   5.941  1.00  0.00           H
ATOM   2951  HD2 TYR A 280     -11.817   8.700   3.736  1.00  0.00           H
ATOM   2952  HE1 TYR A 280     -14.257   8.391   8.058  1.00  0.00           H
ATOM   2953  HE2 TYR A 280     -10.570   8.807   5.850  1.00  0.00           H
ATOM   2954  HH  TYR A 280     -10.680   8.730   8.120  1.00  0.00           H
ATOM   2955  N   GLU A 281     -16.773   6.791   1.207  1.00 22.29           N
ATOM   2956  CA  GLU A 281     -17.546   6.948  -0.027  1.00 20.70           C
ATOM   2957  C   GLU A 281     -17.459   8.360  -0.647  1.00 20.87           C
ATOM   2958  O   GLU A 281     -17.202   8.493  -1.844  1.00 18.87           O
ATOM   2959  CB  GLU A 281     -18.991   6.436   0.223  1.00 21.60           C
ATOM   2960  CG  GLU A 281     -19.926   7.328   1.081  1.00 27.54           C
ATOM   2961  CD  GLU A 281     -19.310   7.673   2.428  1.00 30.84           C
ATOM   2962  OE1 GLU A 281     -18.963   6.731   3.169  1.00 32.62           O
ATOM   2963  OE2 GLU A 281     -18.943   8.850   2.620  1.00 35.66           O1-
ATOM   2964  H   GLU A 281     -17.319   6.466   2.006  1.00  0.00           H
ATOM   2965  HA  GLU A 281     -17.087   6.267  -0.745  1.00  0.00           H
ATOM   2966  HB2 GLU A 281     -19.471   6.286  -0.744  1.00  0.00           H
ATOM   2967  HB3 GLU A 281     -18.945   5.447   0.678  1.00  0.00           H
ATOM   2968  HG2 GLU A 281     -20.176   8.249   0.555  1.00  0.00           H
ATOM   2969  HG3 GLU A 281     -20.868   6.812   1.263  1.00  0.00           H
ATOM   2970  N   VAL A 282     -17.589   9.405   0.181  1.00 20.46           N
ATOM   2971  CA  VAL A 282     -17.531  10.819  -0.180  1.00 20.98           C
ATOM   2972  C   VAL A 282     -16.171  11.273  -0.773  1.00 20.93           C
ATOM   2973  O   VAL A 282     -16.132  12.296  -1.461  1.00 18.59           O
ATOM   2974  CB  VAL A 282     -17.959  11.652   1.064  1.00 21.34           C
ATOM   2975  CG1 VAL A 282     -16.985  11.544   2.255  1.00 22.74           C
ATOM   2976  CG2 VAL A 282     -18.294  13.120   0.737  1.00 22.47           C
ATOM   2977  H   VAL A 282     -17.903   9.195   1.136  1.00  0.00           H
ATOM   2978  HA  VAL A 282     -18.276  10.967  -0.964  1.00  0.00           H
ATOM   2979  HB  VAL A 282     -18.902  11.223   1.411  1.00  0.00           H
ATOM   2980 HG11 VAL A 282     -17.327  12.139   3.102  1.00  0.00           H
ATOM   2981 HG12 VAL A 282     -16.917  10.516   2.606  1.00  0.00           H
ATOM   2982 HG13 VAL A 282     -15.977  11.869   2.003  1.00  0.00           H
ATOM   2983 HG21 VAL A 282     -18.681  13.636   1.617  1.00  0.00           H
ATOM   2984 HG22 VAL A 282     -17.423  13.669   0.388  1.00  0.00           H
ATOM   2985 HG23 VAL A 282     -19.056  13.179  -0.039  1.00  0.00           H
ATOM   2986  N   THR A 283     -15.072  10.529  -0.563  1.00 19.91           N
ATOM   2987  CA  THR A 283     -13.761  10.848  -1.144  1.00 18.39           C
ATOM   2988  C   THR A 283     -13.586  10.228  -2.548  1.00 19.45           C
ATOM   2989  O   THR A 283     -12.705  10.663  -3.290  1.00 20.36           O
ATOM   2990  CB  THR A 283     -12.623  10.361  -0.200  1.00 20.55           C
ATOM   2991  OG1 THR A 283     -12.523   8.955  -0.059  1.00 18.62           O
ATOM   2992  CG2 THR A 283     -12.659  10.995   1.193  1.00 17.56           C
ATOM   2993  H   THR A 283     -15.170   9.663  -0.045  1.00  0.00           H
ATOM   2994  HA  THR A 283     -13.657  11.930  -1.253  1.00  0.00           H
ATOM   2995  HB  THR A 283     -11.681  10.669  -0.653  1.00  0.00           H
ATOM   2996  HG1 THR A 283     -13.351   8.589   0.261  1.00  0.00           H
ATOM   2997 HG21 THR A 283     -11.872  10.597   1.835  1.00  0.00           H
ATOM   2998 HG22 THR A 283     -12.489  12.063   1.107  1.00  0.00           H
ATOM   2999 HG23 THR A 283     -13.615  10.858   1.695  1.00  0.00           H
ATOM   3000  N   ILE A 284     -14.434   9.256  -2.927  1.00 16.54           N
ATOM   3001  CA  ILE A 284     -14.311   8.417  -4.120  1.00 16.06           C
ATOM   3002  C   ILE A 284     -15.519   8.380  -5.111  1.00 16.32           C
ATOM   3003  O   ILE A 284     -15.595   7.374  -5.826  1.00 18.94           O
ATOM   3004  CB  ILE A 284     -13.838   6.997  -3.666  1.00 14.12           C
ATOM   3005  CG1 ILE A 284     -14.887   6.246  -2.812  1.00 16.19           C
ATOM   3006  CG2 ILE A 284     -12.485   7.028  -2.938  1.00 14.01           C
ATOM   3007  CD1 ILE A 284     -14.566   4.760  -2.619  1.00 12.12           C
ATOM   3008  H   ILE A 284     -15.190   9.017  -2.296  1.00  0.00           H
ATOM   3009  HA  ILE A 284     -13.513   8.822  -4.743  1.00  0.00           H
ATOM   3010  HB  ILE A 284     -13.676   6.410  -4.564  1.00  0.00           H
ATOM   3011 HG12 ILE A 284     -14.976   6.723  -1.836  1.00  0.00           H
ATOM   3012 HG13 ILE A 284     -15.873   6.320  -3.271  1.00  0.00           H
ATOM   3013 HG21 ILE A 284     -12.006   6.050  -2.925  1.00  0.00           H
ATOM   3014 HG22 ILE A 284     -11.796   7.730  -3.401  1.00  0.00           H
ATOM   3015 HG23 ILE A 284     -12.610   7.323  -1.902  1.00  0.00           H
ATOM   3016 HD11 ILE A 284     -15.360   4.272  -2.058  1.00  0.00           H
ATOM   3017 HD12 ILE A 284     -14.467   4.247  -3.575  1.00  0.00           H
ATOM   3018 HD13 ILE A 284     -13.642   4.615  -2.060  1.00  0.00           H
ATOM   3019  N   PRO A 285     -16.443   9.379  -5.223  1.00 17.10           N
ATOM   3020  CA  PRO A 285     -17.629   9.356  -6.112  1.00 18.10           C
ATOM   3021  C   PRO A 285     -17.495   8.788  -7.535  1.00 18.61           C
ATOM   3022  O   PRO A 285     -18.432   8.146  -8.013  1.00 21.16           O
ATOM   3023  CB  PRO A 285     -18.139  10.801  -6.177  1.00 19.30           C
ATOM   3024  CG  PRO A 285     -17.741  11.390  -4.844  1.00 19.72           C
ATOM   3025  CD  PRO A 285     -16.471  10.632  -4.460  1.00 17.67           C
ATOM   3026  HA  PRO A 285     -18.371   8.747  -5.592  1.00  0.00           H
ATOM   3027  HB2 PRO A 285     -17.640  11.350  -6.977  1.00  0.00           H
ATOM   3028  HB3 PRO A 285     -19.213  10.856  -6.358  1.00  0.00           H
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ATOM   3029  HG2 PRO A 285     -17.599  12.470  -4.875  1.00  0.00           H
ATOM   3030  HG3 PRO A 285     -18.520  11.181  -4.109  1.00  0.00           H
ATOM   3031  HD2 PRO A 285     -15.570  11.207  -4.670  1.00  0.00           H
ATOM   3032  HD3 PRO A 285     -16.526  10.445  -3.394  1.00  0.00           H
ATOM   3033  N   THR A 286     -16.358   8.994  -8.213  1.00 19.69           N
ATOM   3034  CA  THR A 286     -16.142   8.503  -9.567  1.00 19.30           C
ATOM   3035  C   THR A 286     -14.977   7.498  -9.678  1.00 20.60           C
ATOM   3036  O   THR A 286     -14.740   7.004 -10.779  1.00 18.78           O
ATOM   3037  CB  THR A 286     -16.194   9.671 -10.599  1.00 21.39           C
ATOM   3038  OG1 THR A 286     -15.147  10.615 -10.476  1.00 21.34           O
ATOM   3039  CG2 THR A 286     -17.515  10.453 -10.585  1.00 19.97           C
ATOM   3040  H   THR A 286     -15.672   9.664  -7.845  1.00  0.00           H
ATOM   3041  HA  THR A 286     -16.982   7.871  -9.851  1.00  0.00           H
ATOM   3042  HB  THR A 286     -16.089   9.231 -11.593  1.00  0.00           H
ATOM   3043  HG1 THR A 286     -15.194  11.040  -9.609  1.00  0.00           H
ATOM   3044 HG21 THR A 286     -17.556  11.167 -11.407  1.00  0.00           H
ATOM   3045 HG22 THR A 286     -18.369   9.785 -10.689  1.00  0.00           H
ATOM   3046 HG23 THR A 286     -17.642  11.009  -9.655  1.00  0.00           H
ATOM   3047  N   LEU A 287     -14.314   7.101  -8.574  1.00 19.85           N
ATOM   3048  CA  LEU A 287     -13.154   6.184  -8.557  1.00 20.60           C
ATOM   3049  C   LEU A 287     -13.573   4.792  -9.043  1.00 20.95           C
ATOM   3050  O   LEU A 287     -13.055   4.287 -10.042  1.00 18.74           O
ATOM   3051  CB  LEU A 287     -12.566   6.090  -7.125  1.00 19.84           C
ATOM   3052  CG  LEU A 287     -11.126   5.521  -6.979  1.00 24.19           C
ATOM   3053  CD1 LEU A 287     -10.638   5.690  -5.534  1.00 17.69           C
ATOM   3054  CD2 LEU A 287     -10.957   4.045  -7.382  1.00 20.76           C
ATOM   3055  H   LEU A 287     -14.609   7.504  -7.690  1.00  0.00           H
ATOM   3056  HA  LEU A 287     -12.390   6.566  -9.234  1.00  0.00           H
ATOM   3057  HB2 LEU A 287     -12.560   7.097  -6.707  1.00  0.00           H
ATOM   3058  HB3 LEU A 287     -13.235   5.516  -6.485  1.00  0.00           H
ATOM   3059  HG  LEU A 287     -10.462   6.111  -7.612  1.00  0.00           H
ATOM   3060 HD11 LEU A 287      -9.583   5.434  -5.435  1.00  0.00           H
ATOM   3061 HD12 LEU A 287     -10.751   6.719  -5.197  1.00  0.00           H
ATOM   3062 HD13 LEU A 287     -11.196   5.049  -4.852  1.00  0.00           H
ATOM   3063 HD21 LEU A 287      -9.989   3.656  -7.066  1.00  0.00           H
ATOM   3064 HD22 LEU A 287     -11.722   3.411  -6.932  1.00  0.00           H
ATOM   3065 HD23 LEU A 287     -10.990   3.914  -8.462  1.00  0.00           H
ATOM   3066  N   TRP A 288     -14.560   4.195  -8.362  1.00 18.96           N
ATOM   3067  CA  TRP A 288     -15.086   2.873  -8.691  1.00 20.78           C
ATOM   3068  C   TRP A 288     -15.785   2.890 -10.059  1.00 21.73           C
ATOM   3069  O   TRP A 288     -15.681   1.926 -10.807  1.00 21.01           O
ATOM   3070  CB  TRP A 288     -16.074   2.409  -7.607  1.00 16.55           C
ATOM   3071  CG  TRP A 288     -16.742   1.100  -7.909  1.00 19.20           C
ATOM   3072  CD1 TRP A 288     -18.027   0.956  -8.302  1.00 17.19           C
ATOM   3073  CD2 TRP A 288     -16.173  -0.246  -7.884  1.00 18.61           C
ATOM   3074  NE1 TRP A 288     -18.285  -0.375  -8.542  1.00 18.83           N
ATOM   3075  CE3 TRP A 288     -14.907  -0.786  -7.556  1.00 16.92           C
ATOM   3076  CE2 TRP A 288     -17.187  -1.169  -8.281  1.00 18.36           C
ATOM   3077  CZ3 TRP A 288     -14.667  -2.175  -7.611  1.00 21.22           C
ATOM   3078  CZ2 TRP A 288     -16.961  -2.555  -8.337  1.00 20.24           C
ATOM   3079  CH2 TRP A 288     -15.693  -3.060  -7.997  1.00 22.41           C
ATOM   3080  H   TRP A 288     -14.926   4.680  -7.555  1.00  0.00           H
ATOM   3081  HA  TRP A 288     -14.255   2.166  -8.733  1.00  0.00           H
ATOM   3082  HB2 TRP A 288     -15.558   2.305  -6.651  1.00  0.00           H
ATOM   3083  HB3 TRP A 288     -16.849   3.162  -7.459  1.00  0.00           H
ATOM   3084  HD1 TRP A 288     -18.722   1.772  -8.444  1.00  0.00           H
ATOM   3085  HE1 TRP A 288     -19.182  -0.698  -8.926  1.00  0.00           H
ATOM   3086  HE3 TRP A 288     -14.112  -0.125  -7.244  1.00  0.00           H
ATOM   3087  HZ3 TRP A 288     -13.692  -2.563  -7.353  1.00  0.00           H
ATOM   3088  HZ2 TRP A 288     -17.754  -3.224  -8.631  1.00  0.00           H
ATOM   3089  HH2 TRP A 288     -15.502  -4.122  -8.035  1.00  0.00           H
ATOM   3090  N   GLN A 289     -16.445   4.002 -10.406  1.00 23.21           N
ATOM   3091  CA  GLN A 289     -17.110   4.202 -11.690  1.00 24.00           C
ATOM   3092  C   GLN A 289     -16.085   4.173 -12.840  1.00 23.78           C
ATOM   3093  O   GLN A 289     -16.253   3.411 -13.784  1.00 21.70           O
ATOM   3094  CB  GLN A 289     -17.905   5.520 -11.621  1.00 26.05           C
ATOM   3095  CG  GLN A 289     -18.837   5.766 -12.826  1.00 30.79           C
ATOM   3096  CD  GLN A 289     -19.849   6.901 -12.632  1.00 32.56           C
ATOM   3097  OE1 GLN A 289     -20.622   7.190 -13.535  1.00 33.91           O
ATOM   3098  NE2 GLN A 289     -19.896   7.560 -11.478  1.00 33.71           N
ATOM   3099  H   GLN A 289     -16.419   4.767  -9.752  1.00  0.00           H
ATOM   3100  HA  GLN A 289     -17.808   3.375 -11.838  1.00  0.00           H
ATOM   3101  HB2 GLN A 289     -18.499   5.498 -10.707  1.00  0.00           H
ATOM   3102  HB3 GLN A 289     -17.221   6.363 -11.537  1.00  0.00           H
ATOM   3103  HG2 GLN A 289     -18.252   5.974 -13.723  1.00  0.00           H
ATOM   3104  HG3 GLN A 289     -19.406   4.861 -13.042  1.00  0.00           H
ATOM   3105 HE21 GLN A 289     -19.310   7.320 -10.694  1.00  0.00           H
ATOM   3106 HE22 GLN A 289     -20.590   8.286 -11.393  1.00  0.00           H
ATOM   3107  N   THR A 290     -14.968   4.897 -12.700  1.00 23.31           N
ATOM   3108  CA  THR A 290     -13.883   4.933 -13.684  1.00 22.84           C
ATOM   3109  C   THR A 290     -13.103   3.594 -13.706  1.00 22.38           C
ATOM   3110  O   THR A 290     -12.577   3.210 -14.748  1.00 22.84           O
ATOM   3111  CB  THR A 290     -12.958   6.128 -13.339  1.00 24.30           C
ATOM   3112  OG1 THR A 290     -13.737   7.311 -13.233  1.00 25.09           O
ATOM   3113  CG2 THR A 290     -11.887   6.422 -14.392  1.00 22.40           C
ATOM   3114  H   THR A 290     -14.862   5.480 -11.879  1.00  0.00           H
ATOM   3115  HA  THR A 290     -14.316   5.090 -14.674  1.00  0.00           H
ATOM   3116  HB  THR A 290     -12.466   5.955 -12.378  1.00  0.00           H
ATOM   3117  HG1 THR A 290     -14.181   7.262 -12.385  1.00  0.00           H
ATOM   3118 HG21 THR A 290     -11.304   7.305 -14.135  1.00  0.00           H
ATOM   3119 HG22 THR A 290     -11.183   5.597 -14.477  1.00  0.00           H
ATOM   3120 HG23 THR A 290     -12.322   6.587 -15.379  1.00  0.00           H
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ATOM   3121  N   SER A 291     -13.093   2.838 -12.595  1.00 19.88           N
ATOM   3122  CA  SER A 291     -12.555   1.476 -12.542  1.00 20.14           C
ATOM   3123  C   SER A 291     -13.506   0.481 -13.243  1.00 20.06           C
ATOM   3124  O   SER A 291     -13.052  -0.466 -13.886  1.00 19.13           O
ATOM   3125  CB  SER A 291     -12.381   1.048 -11.069  1.00 19.42           C
ATOM   3126  OG  SER A 291     -11.468   1.901 -10.393  1.00 19.96           O
ATOM   3127  H   SER A 291     -13.514   3.219 -11.759  1.00  0.00           H
ATOM   3128  HA  SER A 291     -11.594   1.451 -13.058  1.00  0.00           H
ATOM   3129  HB2 SER A 291     -13.330   1.029 -10.538  1.00  0.00           H
ATOM   3130  HB3 SER A 291     -11.996   0.027 -11.027  1.00  0.00           H
ATOM   3131  HG  SER A 291     -11.842   2.781 -10.370  1.00  0.00           H
ATOM   3132  N   MET A 292     -14.824   0.721 -13.197  1.00 22.05           N
ATOM   3133  CA  MET A 292     -15.840   0.001 -13.963  1.00 23.75           C
ATOM   3134  C   MET A 292     -15.613   0.253 -15.465  1.00 23.08           C
ATOM   3135  O   MET A 292     -15.580  -0.697 -16.234  1.00 23.18           O
ATOM   3136  CB  MET A 292     -17.261   0.427 -13.514  1.00 23.46           C
ATOM   3137  CG  MET A 292     -18.190  -0.734 -13.112  1.00 23.79           C
ATOM   3138  SD  MET A 292     -19.026  -1.607 -14.470  1.00 24.01           S
ATOM   3139  CE  MET A 292     -17.880  -2.987 -14.752  1.00 23.71           C
ATOM   3140  H   MET A 292     -15.145   1.484 -12.609  1.00  0.00           H
ATOM   3141  HA  MET A 292     -15.698  -1.063 -13.766  1.00  0.00           H
ATOM   3142  HB2 MET A 292     -17.180   1.066 -12.636  1.00  0.00           H
ATOM   3143  HB3 MET A 292     -17.746   1.059 -14.259  1.00  0.00           H
ATOM   3144  HG2 MET A 292     -17.676  -1.447 -12.465  1.00  0.00           H
ATOM   3145  HG3 MET A 292     -18.988  -0.317 -12.495  1.00  0.00           H
ATOM   3146  HE1 MET A 292     -18.279  -3.660 -15.511  1.00  0.00           H
ATOM   3147  HE2 MET A 292     -16.915  -2.628 -15.102  1.00  0.00           H
ATOM   3148  HE3 MET A 292     -17.726  -3.557 -13.835  1.00  0.00           H
ATOM   3149  N   ASP A 293     -15.310   1.489 -15.880  1.00 25.20           N
ATOM   3150  CA  ASP A 293     -14.897   1.864 -17.249  1.00 24.42           C
ATOM   3151  C   ASP A 293     -13.420   1.524 -17.569  1.00 24.19           C
ATOM   3152  O   ASP A 293     -12.845   1.995 -18.559  1.00 22.66           O
ATOM   3153  CB  ASP A 293     -15.237   3.346 -17.533  1.00 25.99           C
ATOM   3154  CG  ASP A 293     -16.747   3.543 -17.606  1.00 25.87           C
ATOM   3155  OD1 ASP A 293     -17.423   3.575 -16.556  1.00 25.88           O
ATOM   3156  OD2 ASP A 293     -17.328   3.425 -18.705  1.00 26.97           O1-
ATOM   3157  H   ASP A 293     -15.445   2.249 -15.217  1.00  0.00           H
ATOM   3158  HA  ASP A 293     -15.462   1.259 -17.957  1.00  0.00           H
ATOM   3159  HB2 ASP A 293     -14.820   3.999 -16.767  1.00  0.00           H
ATOM   3160  HB3 ASP A 293     -14.817   3.672 -18.486  1.00  0.00           H
ATOM   3161  N   PHE A 294     -12.824   0.622 -16.782  1.00 22.53           N
ATOM   3162  CA  PHE A 294     -11.739  -0.260 -17.187  1.00 21.67           C
ATOM   3163  C   PHE A 294     -12.317  -1.678 -17.352  1.00 22.37           C
ATOM   3164  O   PHE A 294     -12.202  -2.245 -18.430  1.00 23.42           O
ATOM   3165  CB  PHE A 294     -10.600  -0.229 -16.152  1.00 21.57           C
ATOM   3166  CG  PHE A 294      -9.435  -1.136 -16.493  1.00 21.32           C
ATOM   3167  CD1 PHE A 294      -8.485  -0.743 -17.458  1.00 23.19           C
ATOM   3168  CD2 PHE A 294      -9.314  -2.391 -15.859  1.00 21.72           C
ATOM   3169  CE1 PHE A 294      -7.396  -1.584 -17.753  1.00 21.37           C
ATOM   3170  CE2 PHE A 294      -8.235  -3.235 -16.172  1.00 24.26           C
ATOM   3171  CZ  PHE A 294      -7.261  -2.817 -17.092  1.00 21.92           C
ATOM   3172  H   PHE A 294     -13.354   0.334 -15.971  1.00  0.00           H
ATOM   3173  HA  PHE A 294     -11.329   0.043 -18.150  1.00  0.00           H
ATOM   3174  HB2 PHE A 294     -10.220   0.788 -16.054  1.00  0.00           H
ATOM   3175  HB3 PHE A 294     -10.959  -0.501 -15.162  1.00  0.00           H
ATOM   3176  HD1 PHE A 294      -8.567   0.207 -17.966  1.00  0.00           H
ATOM   3177  HD2 PHE A 294     -10.047  -2.718 -15.136  1.00  0.00           H
ATOM   3178  HE1 PHE A 294      -6.657  -1.284 -18.482  1.00  0.00           H
ATOM   3179  HE2 PHE A 294      -8.139  -4.202 -15.706  1.00  0.00           H
ATOM   3180  HZ  PHE A 294      -6.407  -3.448 -17.284  1.00  0.00           H
ATOM   3181  N   ILE A 295     -12.998  -2.239 -16.343  1.00 24.85           N
ATOM   3182  CA  ILE A 295     -13.554  -3.605 -16.357  1.00 26.88           C
ATOM   3183  C   ILE A 295     -14.650  -3.846 -17.439  1.00 27.94           C
ATOM   3184  O   ILE A 295     -14.868  -4.986 -17.839  1.00 27.36           O
ATOM   3185  CB  ILE A 295     -14.005  -3.961 -14.904  1.00 28.74           C
ATOM   3186  CG1 ILE A 295     -12.830  -3.929 -13.889  1.00 30.86           C
ATOM   3187  CG2 ILE A 295     -14.781  -5.289 -14.764  1.00 29.65           C
ATOM   3188  CD1 ILE A 295     -11.749  -5.004 -14.099  1.00 31.32           C
ATOM   3189  H   ILE A 295     -13.065  -1.727 -15.471  1.00  0.00           H
ATOM   3190  HA  ILE A 295     -12.743  -4.278 -16.641  1.00  0.00           H
ATOM   3191  HB  ILE A 295     -14.696  -3.178 -14.591  1.00  0.00           H
ATOM   3192 HG12 ILE A 295     -12.346  -2.953 -13.897  1.00  0.00           H
ATOM   3193 HG13 ILE A 295     -13.229  -4.035 -12.879  1.00  0.00           H
ATOM   3194 HG21 ILE A 295     -14.983  -5.523 -13.719  1.00  0.00           H
ATOM   3195 HG22 ILE A 295     -15.744  -5.251 -15.272  1.00  0.00           H
ATOM   3196 HG23 ILE A 295     -14.221  -6.122 -15.191  1.00  0.00           H
ATOM   3197 HD11 ILE A 295     -10.965  -4.914 -13.346  1.00  0.00           H
ATOM   3198 HD12 ILE A 295     -12.157  -6.012 -14.023  1.00  0.00           H
ATOM   3199 HD13 ILE A 295     -11.263  -4.916 -15.072  1.00  0.00           H
ATOM   3200  N   LYS A 296     -15.300  -2.797 -17.966  1.00 27.30           N
ATOM   3201  CA  LYS A 296     -16.204  -2.853 -19.126  1.00 29.16           C
ATOM   3202  C   LYS A 296     -15.431  -2.937 -20.460  1.00 29.60           C
ATOM   3203  O   LYS A 296     -16.017  -3.280 -21.484  1.00 30.49           O
ATOM   3204  CB  LYS A 296     -16.970  -1.509 -19.240  1.00 30.80           C
ATOM   3205  CG  LYS A 296     -18.070  -1.195 -18.210  1.00 35.46           C
ATOM   3206  CD  LYS A 296     -18.485   0.282 -18.363  1.00 37.53           C
ATOM   3207  CE  LYS A 296     -19.374   0.858 -17.253  1.00 39.57           C
ATOM   3208  NZ  LYS A 296     -19.489   2.322 -17.387  1.00 42.84           N1+
ATOM   3209  H   LYS A 296     -15.174  -1.902 -17.500  1.00  0.00           H
ATOM   3210  HA  LYS A 296     -16.892  -3.697 -19.050  1.00  0.00           H
ATOM   3211  HB2 LYS A 296     -16.230  -0.706 -19.232  1.00  0.00           H
ATOM   3212  HB3 LYS A 296     -17.445  -1.442 -20.222  1.00  0.00           H
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ATOM   3213  HG2 LYS A 296     -18.925  -1.856 -18.355  1.00  0.00          H
ATOM   3214  HG3 LYS A 296     -17.711  -1.385 -17.202  1.00  0.00          H
ATOM   3215  HD2 LYS A 296     -17.578   0.880 -18.398  1.00  0.00          H
ATOM   3216  HD3 LYS A 296     -18.963   0.425 -19.333  1.00  0.00          H
ATOM   3217  HE2 LYS A 296     -20.362   0.400 -17.287  1.00  0.00          H
ATOM   3218  HE3 LYS A 296     -18.947   0.646 -16.274  1.00  0.00          H
ATOM   3219  HZ1 LYS A 296     -20.253   2.740 -16.891  1.00  0.00          H
ATOM   3220  HZ2 LYS A 296     -18.620   2.774 -17.020  1.00  0.00          H
ATOM   3221  HZ3 LYS A 296     -19.432   2.627 -18.350  1.00  0.00          H
ATOM   3222  N   LYS A 297    -14.170  -2.494 -20.460  1.00 28.79          N
ATOM   3223  CA  LYS A 297    -13.382  -2.117 -21.630  1.00 30.07          C
ATOM   3224  C   LYS A 297    -12.215  -3.088 -21.843  1.00 29.13          C
ATOM   3225  O   LYS A 297    -11.854  -3.348 -22.987  1.00 30.10          O
ATOM   3226  CB  LYS A 297    -12.867  -0.687 -21.339  1.00 31.69          C
ATOM   3227  CG  LYS A 297    -11.953  -0.033 -22.394  1.00 36.08          C
ATOM   3228  CD  LYS A 297    -11.497   1.367 -21.946  1.00 40.63          C
ATOM   3229  CE  LYS A 297    -10.387   1.344 -20.872  1.00 42.81          C
ATOM   3230  NZ  LYS A 297    -10.473   2.527 -20.001  1.00 42.47          N1+
ATOM   3231  H   LYS A 297    -13.727  -2.362 -19.559  1.00  0.00          H
ATOM   3232  HA  LYS A 297    -13.995  -2.113 -22.533  1.00  0.00          H
ATOM   3233  HB2 LYS A 297    -13.731  -0.040 -21.185  1.00  0.00          H
ATOM   3234  HB3 LYS A 297    -12.338  -0.697 -20.390  1.00  0.00          H
ATOM   3235  HG2 LYS A 297    -11.079  -0.654 -22.601  1.00  0.00          H
ATOM   3236  HG3 LYS A 297    -12.499   0.040 -23.335  1.00  0.00          H
ATOM   3237  HD2 LYS A 297    -11.135   1.919 -22.814  1.00  0.00          H
ATOM   3238  HD3 LYS A 297    -12.372   1.913 -21.590  1.00  0.00          H
ATOM   3239  HE2 LYS A 297    -10.461   0.464 -20.236  1.00  0.00          H
ATOM   3240  HE3 LYS A 297     -9.404   1.294 -21.344  1.00  0.00          H
ATOM   3241  HZ1 LYS A 297     -9.655   2.599 -19.384  1.00  0.00          H
ATOM   3242  HZ2 LYS A 297    -10.504   3.371 -20.546  1.00  0.00          H
ATOM   3243  HZ3 LYS A 297    -11.311   2.456 -19.425  1.00  0.00          H
ATOM   3244  N   ASN A 298    -11.641  -3.604 -20.751  1.00 28.47          N
ATOM   3245  CA  ASN A 298    -10.451  -4.450 -20.709  1.00 26.71          C
ATOM   3246  C   ASN A 298    -10.728  -5.737 -19.909  1.00 25.72          C
ATOM   3247  O   ASN A 298    -10.226  -5.873 -18.786  1.00 23.38          O
ATOM   3248  CB  ASN A 298     -9.257  -3.649 -20.131  1.00 27.91          C
ATOM   3249  CG  ASN A 298     -8.661  -2.638 -21.106  1.00 28.07          C
ATOM   3250  OD1 ASN A 298     -8.929  -1.437 -21.028  1.00 30.60          O
ATOM   3251  ND2 ASN A 298     -7.812  -3.118 -22.003  1.00 28.22          N
ATOM   3252  H   ASN A 298    -11.974  -3.283 -19.848  1.00  0.00          H
ATOM   3253  HA  ASN A 298    -10.179  -4.766 -21.717  1.00  0.00          H
ATOM   3254  HB2 ASN A 298     -9.545  -3.142 -19.210  1.00  0.00          H
ATOM   3255  HB3 ASN A 298     -8.456  -4.333 -19.854  1.00  0.00          H
ATOM   3256 HD21 ASN A 298     -7.657  -4.154 -22.018  1.00  0.00          H
ATOM   3257 HD22 ASN A 298     -7.353  -2.538 -22.679  1.00  0.00          H
ATOM   3258  N   PRO A 299    -11.547  -6.685 -20.422  1.00 25.00          N
ATOM   3259  CA  PRO A 299    -11.813  -7.959 -19.740  1.00 25.78          C
ATOM   3260  C   PRO A 299    -10.650  -8.970 -19.817  1.00 25.64          C
ATOM   3261  O   PRO A 299    -10.611  -9.890 -19.004  1.00 25.28          O
ATOM   3262  CB  PRO A 299    -13.069  -8.511 -20.431  1.00 26.77          C
ATOM   3263  CG  PRO A 299    -13.000  -7.948 -21.843  1.00 25.54          C
ATOM   3264  CD  PRO A 299    -12.317  -6.591 -21.668  1.00 25.40          C
ATOM   3265  HA  PRO A 299    -12.028  -7.782 -18.684  1.00  0.00          H
ATOM   3266  HB2 PRO A 299    -13.131  -9.600 -20.415  1.00  0.00          H
ATOM   3267  HB3 PRO A 299    -13.955  -8.125 -19.926  1.00  0.00          H
ATOM   3268  HG2 PRO A 299    -12.367  -8.589 -22.461  1.00  0.00          H
ATOM   3269  HG3 PRO A 299    -13.974  -7.874 -22.327  1.00  0.00          H
ATOM   3270  HD2 PRO A 299    -11.704  -6.335 -22.532  1.00  0.00          H
ATOM   3271  HD3 PRO A 299    -13.076  -5.818 -21.556  1.00  0.00          H
ATOM   3272  N   GLU A 300     -9.703  -8.822 -20.752  1.00 27.36          N
ATOM   3273  CA  GLU A 300     -8.507  -9.649 -20.896  1.00 30.62          C
ATOM   3274  C   GLU A 300     -7.500  -9.386 -19.760  1.00 31.01          C
ATOM   3275  O   GLU A 300     -6.858 -10.321 -19.281  1.00 30.85          O
ATOM   3276  CB  GLU A 300     -7.876  -9.378 -22.292  1.00 33.91          C
ATOM   3277  CG  GLU A 300     -7.158  -8.020 -22.538  1.00 38.15          C
ATOM   3278  CD  GLU A 300     -8.071  -6.807 -22.401  1.00 41.20          C
ATOM   3279  OE1 GLU A 300     -9.283  -6.968 -22.645  1.00 42.55          O
ATOM   3280  OE2 GLU A 300     -7.595  -5.757 -21.932  1.00 42.55          O1-
ATOM   3281  H   GLU A 300     -9.769  -8.047 -21.430  1.00  0.00          H
ATOM   3282  HA  GLU A 300     -8.811 -10.696 -20.845  1.00  0.00          H
ATOM   3283  HB2 GLU A 300     -7.147 -10.166 -22.483  1.00  0.00          H
ATOM   3284  HB3 GLU A 300     -8.641  -9.513 -23.058  1.00  0.00          H
ATOM   3285  HG2 GLU A 300     -6.302  -7.897 -21.875  1.00  0.00          H
ATOM   3286  HG3 GLU A 300     -6.756  -8.000 -23.550  1.00  0.00          H
ATOM   3287  N   TYR A 301     -7.377  -8.133 -19.305  1.00 29.28          N
ATOM   3288  CA  TYR A 301     -6.463  -7.713 -18.243  1.00 27.29          C
ATOM   3289  C   TYR A 301     -6.983  -8.066 -16.834  1.00 26.08          C
ATOM   3290  O   TYR A 301     -6.208  -8.061 -15.876  1.00 25.20          O
ATOM   3291  CB  TYR A 301     -6.259  -6.184 -18.343  1.00 25.45          C
ATOM   3292  CG  TYR A 301     -5.344  -5.651 -19.448  1.00 24.93          C
ATOM   3293  CD1 TYR A 301     -4.355  -6.448 -20.073  1.00 25.31          C
ATOM   3294  CD2 TYR A 301     -5.453  -4.295 -19.830  1.00 23.92          C
ATOM   3295  CE1 TYR A 301     -3.493  -5.890 -21.038  1.00 25.27          C
ATOM   3296  CE2 TYR A 301     -4.570  -3.730 -20.766  1.00 26.82          C
ATOM   3297  CZ  TYR A 301     -3.581  -4.525 -21.365  1.00 25.82          C
ATOM   3298  OH  TYR A 301     -2.695  -3.967 -22.238  1.00 26.18          O
ATOM   3299  H   TYR A 301     -7.878  -7.409 -19.810  1.00  0.00          H
ATOM   3300  HA  TYR A 301     -5.513  -8.237 -18.336  1.00  0.00          H
ATOM   3301  HB2 TYR A 301     -7.232  -5.699 -18.430  1.00  0.00          H
ATOM   3302  HB3 TYR A 301     -5.844  -5.816 -17.405  1.00  0.00          H
ATOM   3303  HD1 TYR A 301     -4.232  -7.491 -19.834  1.00  0.00          H
ATOM   3304  HD2 TYR A 301     -6.219  -3.665 -19.413  1.00  0.00          H
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ATOM   3305  HE1 TYR A 301      -2.739  -6.503 -21.506  1.00  0.00           H
ATOM   3306  HE2 TYR A 301      -4.654  -2.687 -21.030  1.00  0.00           H
ATOM   3307  HH  TYR A 301      -2.411  -3.077 -21.944  1.00  0.00           H
ATOM   3308  N   LEU A 302      -8.257  -8.450 -16.699  1.00 26.08           N
ATOM   3309  CA  LEU A 302      -8.824  -9.060 -15.498  1.00 25.64           C
ATOM   3310  C   LEU A 302      -8.316 -10.514 -15.401  1.00 26.50           C
ATOM   3311  O   LEU A 302      -8.141 -11.189 -16.420  1.00 26.41           O
ATOM   3312  CB  LEU A 302     -10.367  -9.005 -15.638  1.00 26.41           C
ATOM   3313  CG  LEU A 302     -11.224  -9.683 -14.544  1.00 28.11           C
ATOM   3314  CD1 LEU A 302     -10.969  -9.121 -13.140  1.00 26.19           C
ATOM   3315  CD2 LEU A 302     -12.716  -9.578 -14.895  1.00 28.85           C
ATOM   3316  H   LEU A 302      -8.790  -8.544 -17.553  1.00  0.00           H
ATOM   3317  HA  LEU A 302      -8.506  -8.497 -14.618  1.00  0.00           H
ATOM   3318  HB2 LEU A 302     -10.669  -7.961 -15.730  1.00  0.00           H
ATOM   3319  HB3 LEU A 302     -10.637  -9.470 -16.584  1.00  0.00           H
ATOM   3320  HG  LEU A 302     -10.982 -10.745 -14.530  1.00  0.00           H
ATOM   3321 HD11 LEU A 302     -11.602  -9.618 -12.404  1.00  0.00           H
ATOM   3322 HD12 LEU A 302      -9.940  -9.287 -12.830  1.00  0.00           H
ATOM   3323 HD13 LEU A 302     -11.171  -8.051 -13.092  1.00  0.00           H
ATOM   3324 HD21 LEU A 302     -13.331 -10.102 -14.163  1.00  0.00           H
ATOM   3325 HD22 LEU A 302     -13.045  -8.539 -14.931  1.00  0.00           H
ATOM   3326 HD23 LEU A 302     -12.919 -10.024 -15.870  1.00  0.00           H
ATOM   3327  N   ASP A 303      -8.043 -10.990 -14.182  1.00 26.14           N
ATOM   3328  CA  ASP A 303      -7.729 -12.390 -13.903  1.00 26.40           C
ATOM   3329  C   ASP A 303      -9.043 -13.145 -13.661  1.00 26.12           C
ATOM   3330  O   ASP A 303      -9.960 -12.619 -13.023  1.00 26.00           O
ATOM   3331  CB  ASP A 303      -6.883 -12.485 -12.616  1.00 24.91           C
ATOM   3332  CG  ASP A 303      -6.083 -13.777 -12.577  1.00 24.80           C
ATOM   3333  OD1 ASP A 303      -6.687 -14.859 -12.395  1.00 24.92           O
ATOM   3334  OD2 ASP A 303      -4.855 -13.666 -12.764  1.00 22.64           O1-
ATOM   3335  H   ASP A 303      -8.144 -10.384 -13.375  1.00  0.00           H
ATOM   3336  HA  ASP A 303      -7.182 -12.827 -14.742  1.00  0.00           H
ATOM   3337  HB2 ASP A 303      -6.173 -11.659 -12.574  1.00  0.00           H
ATOM   3338  HB3 ASP A 303      -7.487 -12.408 -11.711  1.00  0.00           H
ATOM   3339  N   GLU A 304      -9.136 -14.383 -14.142  1.00 27.08           N
ATOM   3340  CA  GLU A 304     -10.280 -15.271 -13.960  1.00 27.05           C
ATOM   3341  C   GLU A 304     -10.353 -15.829 -12.519  1.00 26.35           C
ATOM   3342  O   GLU A 304     -11.440 -16.156 -12.046  1.00 25.01           O
ATOM   3343  CB  GLU A 304     -10.150 -16.409 -14.996  1.00 29.55           C
ATOM   3344  CG  GLU A 304      -8.868 -17.268 -14.886  1.00 34.94           C
ATOM   3345  CD  GLU A 304      -8.405 -17.832 -16.221  1.00 38.80           C
ATOM   3346  OE1 GLU A 304      -9.274 -18.246 -17.015  1.00 40.86           O
ATOM   3347  OE2 GLU A 304      -7.175 -17.822 -16.439  1.00 37.70           O1-
ATOM   3348  H   GLU A 304      -8.323 -14.783 -14.593  1.00  0.00           H
ATOM   3349  HA  GLU A 304     -11.200 -14.718 -14.158  1.00  0.00           H
ATOM   3350  HB2 GLU A 304     -11.015 -17.070 -14.931  1.00  0.00           H
ATOM   3351  HB3 GLU A 304     -10.206 -15.969 -15.993  1.00  0.00           H
ATOM   3352  HG2 GLU A 304      -8.040 -16.674 -14.507  1.00  0.00           H
ATOM   3353  HG3 GLU A 304      -9.013 -18.091 -14.186  1.00  0.00           H
ATOM   3354  N   ASN A 305      -9.228 -15.881 -11.791  1.00 25.29           N
ATOM   3355  CA  ASN A 305      -9.092 -16.487 -10.458  1.00 24.94           C
ATOM   3356  C   ASN A 305      -9.120 -15.384  -9.373  1.00 25.14           C
ATOM   3357  O   ASN A 305      -8.529 -15.539  -8.301  1.00 24.32           O
ATOM   3358  CB  ASN A 305      -7.724 -17.208 -10.336  1.00 26.38           C
ATOM   3359  CG  ASN A 305      -7.353 -18.151 -11.476  1.00 26.41           C
ATOM   3360  OD1 ASN A 305      -7.651 -19.340 -11.422  1.00 28.64           O
ATOM   3361  ND2 ASN A 305      -6.669 -17.628 -12.488  1.00 27.76           N
ATOM   3362  H   ASN A 305      -8.366 -15.510 -12.207  1.00  0.00           H
ATOM   3363  HA  ASN A 305      -9.897 -17.200 -10.275  1.00  0.00           H
ATOM   3364  HB2 ASN A 305      -6.938 -16.471 -10.269  1.00  0.00           H
ATOM   3365  HB3 ASN A 305      -7.685 -17.777  -9.407  1.00  0.00           H
ATOM   3366 HD21 ASN A 305      -6.522 -16.605 -12.517  1.00  0.00           H
ATOM   3367 HD22 ASN A 305      -6.494 -18.175 -13.319  1.00  0.00           H
ATOM   3368  N   ASN A 306      -9.744 -14.242  -9.679  1.00 24.92           N
ATOM   3369  CA  ASN A 306      -9.762 -12.997  -8.905  1.00 24.17           C
ATOM   3370  C   ASN A 306     -10.447 -13.085  -7.521  1.00 23.07           C
ATOM   3371  O   ASN A 306     -11.074 -14.080  -7.150  1.00 22.07           O
ATOM   3372  CB  ASN A 306     -10.409 -11.865  -9.748  1.00 24.78           C
ATOM   3373  CG  ASN A 306     -11.872 -12.094 -10.133  1.00 23.30           C
ATOM   3374  OD1 ASN A 306     -12.765 -11.957  -9.301  1.00 23.64           O
ATOM   3375  ND2 ASN A 306     -12.135 -12.434 -11.387  1.00 30.14           N
ATOM   3376  H   ASN A 306     -10.191 -14.241 -10.585  1.00  0.00           H
ATOM   3377  HA  ASN A 306      -8.719 -12.726  -8.724  1.00  0.00           H
ATOM   3378  HB2 ASN A 306     -10.377 -10.929  -9.199  1.00  0.00           H
ATOM   3379  HB3 ASN A 306      -9.808 -11.684 -10.639  1.00  0.00           H
ATOM   3380 HD21 ASN A 306     -11.365 -12.513 -12.064  1.00  0.00           H
ATOM   3381 HD22 ASN A 306     -13.075 -12.656 -11.665  1.00  0.00           H
ATOM   3382  N   LEU A 307     -10.347 -11.987  -6.766  1.00 22.52           N
ATOM   3383  CA  LEU A 307     -10.924 -11.752  -5.451  1.00 20.85           C
ATOM   3384  C   LEU A 307     -11.914 -10.567  -5.537  1.00 21.65           C
ATOM   3385  O   LEU A 307     -11.954  -9.716  -4.648  1.00 22.08           O
ATOM   3386  CB  LEU A 307      -9.758 -11.503  -4.460  1.00 21.68           C
ATOM   3387  CG  LEU A 307     -10.124 -11.540  -2.959  1.00 24.57           C
ATOM   3388  CD1 LEU A 307     -10.278 -12.965  -2.426  1.00 25.54           C
ATOM   3389  CD2 LEU A 307      -9.089 -10.775  -2.127  1.00 24.54           C
ATOM   3390  H   LEU A 307      -9.817 -11.202  -7.150  1.00  0.00           H
ATOM   3391  HA  LEU A 307     -11.489 -12.627  -5.129  1.00  0.00           H
ATOM   3392  HB2 LEU A 307      -8.958 -12.221  -4.641  1.00  0.00           H
ATOM   3393  HB3 LEU A 307      -9.318 -10.534  -4.697  1.00  0.00           H
ATOM   3394  HG  LEU A 307     -11.082 -11.051  -2.809  1.00  0.00           H
ATOM   3395 HD11 LEU A 307     -10.501 -12.951  -1.360  1.00  0.00           H
ATOM   3396 HD12 LEU A 307     -11.091 -13.491  -2.927  1.00  0.00           H
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ATOM   3397 HD13 LEU A 307      -9.358 -13.531  -2.558  1.00  0.00           H
ATOM   3398 HD21 LEU A 307      -9.366 -10.774  -1.074  1.00  0.00           H
ATOM   3399 HD22 LEU A 307      -8.103 -11.228  -2.213  1.00  0.00           H
ATOM   3400 HD23 LEU A 307      -9.009  -9.734  -2.446  1.00  0.00           H
ATOM   3401  N   MET A 308     -12.755 -10.498  -6.584  1.00 20.81           N
ATOM   3402  CA  MET A 308     -13.810  -9.478  -6.747  1.00 22.78           C
ATOM   3403  C   MET A 308     -14.792  -9.431  -5.553  1.00 22.78           C
ATOM   3404  O   MET A 308     -15.319  -8.370  -5.217  1.00 22.72           O
ATOM   3405  CB  MET A 308     -14.551  -9.715  -8.085  1.00 21.26           C
ATOM   3406  CG  MET A 308     -15.682  -8.723  -8.411  1.00 20.59           C
ATOM   3407  SD  MET A 308     -15.174  -6.998  -8.654  1.00 23.31           S
ATOM   3408  CE  MET A 308     -14.754  -7.027 -10.421  1.00 20.96           C
ATOM   3409  H   MET A 308     -12.656 -11.192  -7.322  1.00  0.00           H
ATOM   3410  HA  MET A 308     -13.315  -8.506  -6.790  1.00  0.00           H
ATOM   3411  HB2 MET A 308     -13.834  -9.688  -8.903  1.00  0.00           H
ATOM   3412  HB3 MET A 308     -14.968 -10.724  -8.085  1.00  0.00           H
ATOM   3413  HG2 MET A 308     -16.206  -9.054  -9.309  1.00  0.00           H
ATOM   3414  HG3 MET A 308     -16.427  -8.743  -7.621  1.00  0.00           H
ATOM   3415  HE1 MET A 308     -14.345  -6.064 -10.728  1.00  0.00           H
ATOM   3416  HE2 MET A 308     -14.015  -7.798 -10.637  1.00  0.00           H
ATOM   3417  HE3 MET A 308     -15.638  -7.230 -11.024  1.00  0.00           H
ATOM   3418  N   SER A 309     -14.973 -10.561  -4.864  1.00 22.41           N
ATOM   3419  CA  SER A 309     -15.772 -10.734  -3.658  1.00 23.60           C
ATOM   3420  C   SER A 309     -15.223  -9.986  -2.424  1.00 22.97           C
ATOM   3421  O   SER A 309     -15.951  -9.825  -1.446  1.00 22.64           O
ATOM   3422  CB  SER A 309     -15.851 -12.252  -3.398  1.00 24.95           C
ATOM   3423  OG  SER A 309     -14.558 -12.853  -3.375  1.00 30.97           O
ATOM   3424  H   SER A 309     -14.463 -11.383  -5.155  1.00  0.00           H
ATOM   3425  HA  SER A 309     -16.778 -10.351  -3.846  1.00  0.00           H
ATOM   3426  HB2 SER A 309     -16.356 -12.442  -2.449  1.00  0.00           H
ATOM   3427  HB3 SER A 309     -16.454 -12.731  -4.171  1.00  0.00           H
ATOM   3428  HG  SER A 309     -14.642 -13.733  -3.035  1.00  0.00           H
ATOM   3429  N   PHE A 310     -13.971  -9.502  -2.456  1.00 22.04           N
ATOM   3430  CA  PHE A 310     -13.430  -8.611  -1.429  1.00 21.22           C
ATOM   3431  C   PHE A 310     -13.854  -7.161  -1.707  1.00 21.27           C
ATOM   3432  O   PHE A 310     -14.054  -6.407  -0.759  1.00 20.91           O
ATOM   3433  CB  PHE A 310     -11.886  -8.691  -1.438  1.00 20.01           C
ATOM   3434  CG  PHE A 310     -11.158  -7.704  -0.539  1.00 20.57           C
ATOM   3435  CD1 PHE A 310     -11.354  -7.739   0.856  1.00 21.24           C
ATOM   3436  CD2 PHE A 310     -10.312  -6.723  -1.100  1.00 21.25           C
ATOM   3437  CE1 PHE A 310     -10.707  -6.804   1.683  1.00 21.69           C
ATOM   3438  CE2 PHE A 310      -9.676  -5.781  -0.271  1.00 21.89           C
ATOM   3439  CZ  PHE A 310      -9.869  -5.823   1.123  1.00 21.34           C
ATOM   3440  H   PHE A 310     -13.406  -9.678  -3.281  1.00  0.00           H
ATOM   3441  HA  PHE A 310     -13.797  -8.898  -0.441  1.00  0.00           H
ATOM   3442  HB2 PHE A 310     -11.590  -9.687  -1.115  1.00  0.00           H
ATOM   3443  HB3 PHE A 310     -11.507  -8.566  -2.452  1.00  0.00           H
ATOM   3444  HD1 PHE A 310     -12.014  -8.474   1.294  1.00  0.00           H
ATOM   3445  HD2 PHE A 310     -10.151  -6.681  -2.168  1.00  0.00           H
ATOM   3446  HE1 PHE A 310     -10.852  -6.839   2.748  1.00  0.00           H
ATOM   3447  HE2 PHE A 310      -9.013  -5.045  -0.702  1.00  0.00           H
ATOM   3448  HZ  PHE A 310      -9.364  -5.114   1.762  1.00  0.00           H
ATOM   3449  N   LEU A 311     -14.008  -6.769  -2.979  1.00 20.63           N
ATOM   3450  CA  LEU A 311     -14.255  -5.386  -3.382  1.00 22.79           C
ATOM   3451  C   LEU A 311     -15.750  -5.072  -3.499  1.00 24.02           C
ATOM   3452  O   LEU A 311     -16.132  -3.905  -3.445  1.00 26.14           O
ATOM   3453  CB  LEU A 311     -13.713  -5.177  -4.815  1.00 23.27           C
ATOM   3454  CG  LEU A 311     -12.222  -5.483  -5.031  1.00 24.44           C
ATOM   3455  CD1 LEU A 311     -11.909  -5.349  -6.527  1.00 21.83           C
ATOM   3456  CD2 LEU A 311     -11.309  -4.581  -4.186  1.00 24.33           C
ATOM   3457  H   LEU A 311     -13.916  -7.461  -3.710  1.00  0.00           H
ATOM   3458  HA  LEU A 311     -13.798  -4.680  -2.685  1.00  0.00           H
ATOM   3459  HB2 LEU A 311     -14.288  -5.792  -5.511  1.00  0.00           H
ATOM   3460  HB3 LEU A 311     -13.900  -4.145  -5.119  1.00  0.00           H
ATOM   3461  HG  LEU A 311     -12.025  -6.519  -4.751  1.00  0.00           H
ATOM   3462 HD11 LEU A 311     -10.864  -5.560  -6.734  1.00  0.00           H
ATOM   3463 HD12 LEU A 311     -12.501  -6.046  -7.120  1.00  0.00           H
ATOM   3464 HD13 LEU A 311     -12.116  -4.345  -6.895  1.00  0.00           H
ATOM   3465 HD21 LEU A 311     -10.263  -4.843  -4.338  1.00  0.00           H
ATOM   3466 HD22 LEU A 311     -11.428  -3.529  -4.445  1.00  0.00           H
ATOM   3467 HD23 LEU A 311     -11.508  -4.687  -3.119  1.00  0.00           H
ATOM   3468  N   SER A 312     -16.597  -6.074  -3.733  1.00 24.95           N
ATOM   3469  CA  SER A 312     -17.926  -5.879  -4.284  1.00 24.03           C
ATOM   3470  C   SER A 312     -18.981  -6.662  -3.505  1.00 25.46           C
ATOM   3471  O   SER A 312     -18.711  -7.739  -2.977  1.00 23.59           O
ATOM   3472  CB  SER A 312     -17.866  -6.186  -5.791  1.00 22.48           C
ATOM   3473  OG  SER A 312     -19.104  -5.953  -6.435  1.00 23.27           O
ATOM   3474  H   SER A 312     -16.235  -7.020  -3.742  1.00  0.00           H
ATOM   3475  HA  SER A 312     -18.210  -4.831  -4.176  1.00  0.00           H
ATOM   3476  HB2 SER A 312     -17.106  -5.568  -6.273  1.00  0.00           H
ATOM   3477  HB3 SER A 312     -17.568  -7.223  -5.943  1.00  0.00           H
ATOM   3478  HG  SER A 312     -19.285  -5.007  -6.354  1.00  0.00           H
ATOM   3479  N   ASN A 313     -20.195  -6.100  -3.453  1.00 27.59           N
ATOM   3480  CA  ASN A 313     -21.356  -6.667  -2.764  1.00 30.50           C
ATOM   3481  C   ASN A 313     -22.069  -7.647  -3.711  1.00 30.83           C
ATOM   3482  O   ASN A 313     -22.577  -8.676  -3.274  1.00 32.14           O
ATOM   3483  CB  ASN A 313     -22.394  -5.556  -2.435  1.00 29.50           C
ATOM   3484  CG  ASN A 313     -21.808  -4.296  -1.797  1.00 31.80           C
ATOM   3485  OD1 ASN A 313     -21.475  -4.277  -0.619  1.00 30.49           O
ATOM   3486  ND2 ASN A 313     -21.649  -3.239  -2.586  1.00 31.11           N
ATOM   3487  H   ASN A 313     -20.316  -5.213  -3.919  1.00  0.00           H
ATOM   3488  HA  ASN A 313     -21.046  -7.177  -1.849  1.00  0.00           H
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ATOM   3489  HB2 ASN A 313     -22.957  -5.261  -3.323  1.00  0.00          H
ATOM   3490  HB3 ASN A 313     -23.137  -5.960  -1.746  1.00  0.00          H
ATOM   3491 HD21 ASN A 313     -21.950  -3.289  -3.564  1.00  0.00          H
ATOM   3492 HD22 ASN A 313     -21.224  -2.392  -2.227  1.00  0.00          H
ATOM   3493  N   ASP A 314     -22.133  -7.305  -5.006  1.00 32.03          N
ATOM   3494  CA  ASP A 314     -22.845  -8.047  -6.051  1.00 31.57          C
ATOM   3495  C   ASP A 314     -21.865  -8.888  -6.893  1.00 32.42          C
ATOM   3496  O   ASP A 314     -22.286  -9.867  -7.507  1.00 29.58          O
ATOM   3497  CB  ASP A 314     -23.548  -7.028  -6.988  1.00 33.24          C
ATOM   3498  CG  ASP A 314     -22.604  -6.165  -7.818  1.00 33.93          C
ATOM   3499  OD1 ASP A 314     -22.032  -5.208  -7.261  1.00 33.28          O
ATOM   3500  OD2 ASP A 314     -22.377  -6.494  -8.999  1.00 35.28          O1-
ATOM   3501  H   ASP A 314     -21.694  -6.440  -5.293  1.00  0.00          H
ATOM   3502  HA  ASP A 314     -23.593  -8.710  -5.612  1.00  0.00          H
ATOM   3503  HB2 ASP A 314     -24.205  -7.565  -7.673  1.00  0.00          H
ATOM   3504  HB3 ASP A 314     -24.197  -6.372  -6.408  1.00  0.00          H
ATOM   3505  N   ASN A 315     -20.584  -8.495  -6.945  1.00 31.75          N
ATOM   3506  CA  ASN A 315     -19.501  -9.019  -7.781  1.00 32.79          C
ATOM   3507  C   ASN A 315     -19.365  -8.229  -9.089  1.00 31.79          C
ATOM   3508  O   ASN A 315     -19.571  -8.760 -10.183  1.00 30.01          O
ATOM   3509  CB  ASN A 315     -19.398 -10.559  -7.921  1.00 34.98          C
ATOM   3510  CG  ASN A 315     -19.149 -11.265  -6.590  1.00 39.86          C
ATOM   3511  OD1 ASN A 315     -18.013 -11.399  -6.149  1.00 41.48          O
ATOM   3512  ND2 ASN A 315     -20.209 -11.716  -5.932  1.00 39.98          N
ATOM   3513  H   ASN A 315     -20.363  -7.640  -6.447  1.00  0.00          H
ATOM   3514  HA  ASN A 315     -18.611  -8.744  -7.219  1.00  0.00          H
ATOM   3515  HB2 ASN A 315     -20.265 -10.982  -8.426  1.00  0.00          H
ATOM   3516  HB3 ASN A 315     -18.552 -10.799  -8.568  1.00  0.00          H
ATOM   3517 HD21 ASN A 315     -21.134 -11.519  -6.295  1.00  0.00          H
ATOM   3518 HD22 ASN A 315     -20.081 -12.142  -5.029  1.00  0.00          H
ATOM   3519  N   GLY A 316     -19.047  -6.938  -8.983  1.00 29.91          N
ATOM   3520  CA  GLY A 316     -18.430  -6.135 -10.031  1.00 28.90          C
ATOM   3521  C   GLY A 316     -19.178  -4.879 -10.469  1.00 29.49          C
ATOM   3522  O   GLY A 316     -18.618  -4.142 -11.275  1.00 31.30          O
ATOM   3523  H   GLY A 316     -19.037  -6.542  -8.038  1.00  0.00          H
ATOM   3524  HA2 GLY A 316     -17.469  -5.792  -9.653  1.00  0.00          H
ATOM   3525  HA3 GLY A 316     -18.207  -6.731 -10.918  1.00  0.00          H
ATOM   3526  N   LYS A 317     -20.407  -4.611  -9.999  1.00 28.46          N
ATOM   3527  CA  LYS A 317     -21.112  -3.373 -10.343  1.00 29.26          C
ATOM   3528  C   LYS A 317     -21.013  -2.358  -9.189  1.00 28.45          C
ATOM   3529  O   LYS A 317     -20.761  -1.181  -9.445  1.00 29.61          O
ATOM   3530  CB  LYS A 317     -22.596  -3.653 -10.681  1.00 30.65          C
ATOM   3531  CG  LYS A 317     -22.842  -4.274 -12.081  1.00 32.56          C
ATOM   3532  CD  LYS A 317     -23.148  -5.788 -12.105  1.00 33.46          C
ATOM   3533  CE  LYS A 317     -21.909  -6.705 -12.197  1.00 35.75          C
ATOM   3534  NZ  LYS A 317     -21.909  -7.722 -11.134  1.00 33.98          N1+
ATOM   3535  H   LYS A 317     -20.857  -5.237  -9.328  1.00  0.00          H
ATOM   3536  HA  LYS A 317     -20.668  -2.884 -11.213  1.00  0.00          H
ATOM   3537  HB2 LYS A 317     -23.089  -4.220  -9.894  1.00  0.00          H
ATOM   3538  HB3 LYS A 317     -23.111  -2.690 -10.678  1.00  0.00          H
ATOM   3539  HG2 LYS A 317     -23.721  -3.774 -12.491  1.00  0.00          H
ATOM   3540  HG3 LYS A 317     -22.035  -4.023 -12.772  1.00  0.00          H
ATOM   3541  HD2 LYS A 317     -23.776  -6.041 -11.249  1.00  0.00          H
ATOM   3542  HD3 LYS A 317     -23.772  -5.991 -12.976  1.00  0.00          H
ATOM   3543  HE2 LYS A 317     -21.873  -7.203 -13.166  1.00  0.00          H
ATOM   3544  HE3 LYS A 317     -20.992  -6.124 -12.130  1.00  0.00          H
ATOM   3545  HZ1 LYS A 317     -21.001  -8.170 -11.014  1.00  0.00          H
ATOM   3546  HZ2 LYS A 317     -22.090  -7.224 -10.232  1.00  0.00          H
ATOM   3547  HZ3 LYS A 317     -22.628  -8.413 -11.240  1.00  0.00          H
ATOM   3548  N   THR A 318     -21.170  -2.781  -7.931  1.00 28.25          N
ATOM   3549  CA  THR A 318     -21.100  -1.934  -6.739  1.00 25.97          C
ATOM   3550  C   THR A 318     -19.792  -2.215  -5.976  1.00 24.96          C
ATOM   3551  O   THR A 318     -19.318  -3.352  -5.956  1.00 24.07          O
ATOM   3552  CB  THR A 318     -22.339  -2.227  -5.847  1.00 27.38          C
ATOM   3553  OG1 THR A 318     -22.341  -3.540  -5.306  1.00 30.36          O
ATOM   3554  CG2 THR A 318     -23.679  -2.002  -6.563  1.00 28.55          C
ATOM   3555  H   THR A 318     -21.393  -3.771  -7.763  1.00  0.00          H
ATOM   3556  HA  THR A 318     -21.117  -0.878  -7.017  1.00  0.00          H
ATOM   3557  HB  THR A 318     -22.304  -1.541  -4.999  1.00  0.00          H
ATOM   3558  HG1 THR A 318     -22.276  -4.163  -6.053  1.00  0.00          H
ATOM   3559 HG21 THR A 318     -24.515  -2.116  -5.872  1.00  0.00          H
ATOM   3560 HG22 THR A 318     -23.734  -0.999  -6.986  1.00  0.00          H
ATOM   3561 HG23 THR A 318     -23.828  -2.714  -7.377  1.00  0.00          H
ATOM   3562  N   TYR A 319     -19.226  -1.194  -5.323  1.00 22.19          N
ATOM   3563  CA  TYR A 319     -18.093  -1.312  -4.406  1.00 21.55          C
ATOM   3564  C   TYR A 319     -18.672  -1.469  -2.989  1.00 20.73          C
ATOM   3565  O   TYR A 319     -19.707  -0.868  -2.688  1.00 22.78          O
ATOM   3566  CB  TYR A 319     -17.285   0.011  -4.471  1.00 17.02          C
ATOM   3567  CG  TYR A 319     -15.870   0.017  -3.902  1.00 18.70          C
ATOM   3568  CD1 TYR A 319     -15.020  -1.101  -4.041  1.00 15.33          C
ATOM   3569  CD2 TYR A 319     -15.374   1.173  -3.264  1.00 16.65          C
ATOM   3570  CE1 TYR A 319     -13.749  -1.116  -3.439  1.00 16.26          C
ATOM   3571  CE2 TYR A 319     -14.081   1.179  -2.703  1.00 16.78          C
ATOM   3572  CZ  TYR A 319     -13.288   0.020  -2.752  1.00 15.64          C
ATOM   3573  OH  TYR A 319     -12.086  -0.009  -2.116  1.00 14.07          O
ATOM   3574  H   TYR A 319     -19.687  -0.299  -5.338  1.00  0.00          H
ATOM   3575  HA  TYR A 319     -17.484  -2.168  -4.690  1.00  0.00          H
ATOM   3576  HB2 TYR A 319     -17.189   0.310  -5.506  1.00  0.00          H
ATOM   3577  HB3 TYR A 319     -17.854   0.814  -3.999  1.00  0.00          H
ATOM   3578  HD1 TYR A 319     -15.328  -1.966  -4.605  1.00  0.00          H
ATOM   3579  HD2 TYR A 319     -15.985   2.061  -3.196  1.00  0.00          H
ATOM   3580  HE1 TYR A 319     -13.133  -2.001  -3.510  1.00  0.00          H
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ATOM   3581  HE2 TYR A 319     -13.713   2.056  -2.190  1.00  0.00           H
ATOM   3582  HH  TYR A 319     -11.931  -0.868  -1.716  1.00  0.00           H
ATOM   3583  N   ASN A 320     -18.039  -2.269  -2.123  1.00 18.73           N
ATOM   3584  CA  ASN A 320     -18.440  -2.434  -0.714  1.00 19.06           C
ATOM   3585  C   ASN A 320     -17.672  -1.483   0.230  1.00 16.51           C
ATOM   3586  O   ASN A 320     -17.989  -1.433   1.417  1.00 16.08           O
ATOM   3587  CB  ASN A 320     -18.244  -3.900  -0.237  1.00 19.10           C
ATOM   3588  CG  ASN A 320     -16.817  -4.448  -0.267  1.00 19.82           C
ATOM   3589  OD1 ASN A 320     -15.852  -3.708  -0.420  1.00 21.01           O
ATOM   3590  ND2 ASN A 320     -16.656  -5.759  -0.176  1.00 17.92           N
ATOM   3591  H   ASN A 320     -17.216  -2.782  -2.443  1.00  0.00           H
ATOM   3592  HA  ASN A 320     -19.499  -2.200  -0.596  1.00  0.00           H
ATOM   3593  HB2 ASN A 320     -18.624  -4.010   0.779  1.00  0.00           H
ATOM   3594  HB3 ASN A 320     -18.862  -4.551  -0.855  1.00  0.00           H
ATOM   3595 HD21 ASN A 320     -17.428  -6.402  -0.101  1.00  0.00           H
ATOM   3596 HD22 ASN A 320     -15.696  -6.102  -0.252  1.00  0.00           H
ATOM   3597  N   LEU A 321     -16.666  -0.765  -0.297  1.00 16.54           N
ATOM   3598  CA  LEU A 321     -15.781   0.212   0.349  1.00 16.81           C
ATOM   3599  C   LEU A 321     -14.457  -0.366   0.885  1.00 19.47           C
ATOM   3600  O   LEU A 321     -13.607   0.405   1.334  1.00 17.04           O
ATOM   3601  CB  LEU A 321     -16.487   1.203   1.314  1.00 17.52           C
ATOM   3602  CG  LEU A 321     -17.673   2.004   0.725  1.00 19.03           C
ATOM   3603  CD1 LEU A 321     -18.484   2.682   1.839  1.00 18.92           C
ATOM   3604  CD2 LEU A 321     -17.215   3.054  -0.296  1.00 19.85           C
ATOM   3605  H   LEU A 321     -16.458  -0.966  -1.264  1.00  0.00           H
ATOM   3606  HA  LEU A 321     -15.439   0.828  -0.476  1.00  0.00           H
ATOM   3607  HB2 LEU A 321     -16.830   0.643   2.181  1.00  0.00           H
ATOM   3608  HB3 LEU A 321     -15.758   1.907   1.715  1.00  0.00           H
ATOM   3609  HG  LEU A 321     -18.349   1.312   0.223  1.00  0.00           H
ATOM   3610 HD11 LEU A 321     -19.389   3.145   1.445  1.00  0.00           H
ATOM   3611 HD12 LEU A 321     -18.791   1.966   2.602  1.00  0.00           H
ATOM   3612 HD13 LEU A 321     -17.906   3.465   2.330  1.00  0.00           H
ATOM   3613 HD21 LEU A 321     -18.063   3.609  -0.696  1.00  0.00           H
ATOM   3614 HD22 LEU A 321     -16.529   3.772   0.156  1.00  0.00           H
ATOM   3615 HD23 LEU A 321     -16.711   2.589  -1.138  1.00  0.00           H
ATOM   3616  N   CYS A 322     -14.247  -1.688   0.834  1.00 19.78           N
ATOM   3617  CA  CYS A 322     -13.089  -2.352   1.438  1.00 21.80           C
ATOM   3618  C   CYS A 322     -11.816  -2.206   0.593  1.00 21.81           C
ATOM   3619  O   CYS A 322     -11.859  -2.256  -0.640  1.00 21.18           O
ATOM   3620  CB  CYS A 322     -13.359  -3.861   1.579  1.00 20.40           C
ATOM   3621  SG  CYS A 322     -14.512  -4.325   2.902  1.00 21.81           S
ATOM   3622  H   CYS A 322     -14.944  -2.288   0.398  1.00  0.00           H
ATOM   3623  HA  CYS A 322     -12.911  -1.918   2.421  1.00  0.00           H
ATOM   3624  HB2 CYS A 322     -13.694  -4.282   0.634  1.00  0.00           H
ATOM   3625  HB3 CYS A 322     -12.427  -4.383   1.797  1.00  0.00           H
ATOM   3626  N   HIS A 323     -10.670  -2.050   1.262  1.00 21.47           N
ATOM   3627  CA  HIS A 323      -9.345  -1.984   0.656  1.00 21.03           C
ATOM   3628  C   HIS A 323      -8.253  -2.429   1.642  1.00 21.77           C
ATOM   3629  O   HIS A 323      -8.483  -2.506   2.851  1.00 21.97           O
ATOM   3630  CB  HIS A 323      -9.104  -0.589   0.055  1.00 19.56           C
ATOM   3631  CG  HIS A 323      -9.049   0.538   1.042  1.00 20.31           C
ATOM   3632  ND1 HIS A 323     -10.161   1.226   1.483  1.00 18.55           N
ATOM   3633  CD2 HIS A 323      -7.983   1.076   1.718  1.00 19.48           C
ATOM   3634  CE1 HIS A 323      -9.725   2.171   2.314  1.00 19.82           C
ATOM   3635  NE2 HIS A 323      -8.410   2.146   2.495  1.00 17.55           N
ATOM   3636  H   HIS A 323     -10.703  -1.886   2.267  1.00  0.00           H
ATOM   3637  HA  HIS A 323      -9.322  -2.707  -0.160  1.00  0.00           H
ATOM   3638  HB2 HIS A 323      -8.146  -0.568  -0.454  1.00  0.00           H
ATOM   3639  HB3 HIS A 323      -9.848  -0.361  -0.705  1.00  0.00           H
ATOM   3640  HD1 HIS A 323     -11.134   1.030   1.264  1.00  0.00           H
ATOM   3641  HD2 HIS A 323      -6.951   0.776   1.694  1.00  0.00           H
ATOM   3642  HE1 HIS A 323     -10.367   2.878   2.813  1.00  0.00           H
ATOM   3643  N   PHE A 324      -7.059  -2.711   1.119  1.00 20.35           N
ATOM   3644  CA  PHE A 324      -5.812  -2.993   1.824  1.00 21.54           C
ATOM   3645  C   PHE A 324      -5.154  -1.633   2.113  1.00 21.67           C
ATOM   3646  O   PHE A 324      -5.072  -0.794   1.215  1.00 19.86           O
ATOM   3647  CB  PHE A 324      -4.894  -3.787   0.863  1.00 21.99           C
ATOM   3648  CG  PHE A 324      -5.513  -5.026   0.222  1.00 23.32           C
ATOM   3649  CD1 PHE A 324      -6.228  -5.959   0.998  1.00 23.40           C
ATOM   3650  CD2 PHE A 324      -5.370  -5.252  -1.164  1.00 21.47           C
ATOM   3651  CE1 PHE A 324      -6.782  -7.105   0.400  1.00 23.76           C
ATOM   3652  CE2 PHE A 324      -5.933  -6.394  -1.767  1.00 21.69           C
ATOM   3653  CZ  PHE A 324      -6.639  -7.325  -0.983  1.00 21.06           C
ATOM   3654  H   PHE A 324      -6.938  -2.582   0.110  1.00  0.00           H
ATOM   3655  HA  PHE A 324      -5.991  -3.545   2.742  1.00  0.00           H
ATOM   3656  HB2 PHE A 324      -4.547  -3.135   0.060  1.00  0.00           H
ATOM   3657  HB3 PHE A 324      -3.992  -4.099   1.392  1.00  0.00           H
ATOM   3658  HD1 PHE A 324      -6.346  -5.812   2.059  1.00  0.00           H
ATOM   3659  HD2 PHE A 324      -4.806  -4.551  -1.764  1.00  0.00           H
ATOM   3660  HE1 PHE A 324      -7.324  -7.807   1.011  1.00  0.00           H
ATOM   3661  HE2 PHE A 324      -5.819  -6.565  -2.827  1.00  0.00           H
ATOM   3662  HZ  PHE A 324      -7.069  -8.204  -1.440  1.00  0.00           H
ATOM   3663  N   TRP A 325      -4.741  -1.373   3.361  1.00 22.91           N
ATOM   3664  CA  TRP A 325      -4.259  -0.066   3.812  1.00 25.28           C
ATOM   3665  C   TRP A 325      -2.766   0.036   3.428  1.00 26.42           C
ATOM   3666  O   TRP A 325      -1.899  -0.557   4.073  1.00 30.29           O
ATOM   3667  CB  TRP A 325      -4.483   0.017   5.351  1.00 24.63           C
ATOM   3668  CG  TRP A 325      -4.836   1.343   5.972  1.00 24.92           C
ATOM   3669  CD1 TRP A 325      -5.477   2.371   5.370  1.00 22.73           C
ATOM   3670  CD2 TRP A 325      -4.595   1.790   7.346  1.00 22.74           C
ATOM   3671  NE1 TRP A 325      -5.682   3.392   6.277  1.00 25.68           N
ATOM   3672  CE3 TRP A 325      -3.935   1.238   8.467  1.00 22.84           C
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ATOM   3673  CE2 TRP A 325      -5.164   3.088   7.517  1.00 24.25           C
ATOM   3674  CZ3 TRP A 325      -3.864   1.918   9.696  1.00 20.89           C
ATOM   3675  CZ2 TRP A 325      -5.115   3.772   8.746  1.00 22.79           C
ATOM   3676  CH2 TRP A 325      -4.456   3.184   9.838  1.00 24.61           C
ATOM   3677  H   TRP A 325     -4.705  -2.128   4.041  1.00  0.00           H
ATOM   3678  HA  TRP A 325     -4.832   0.710   3.305  1.00  0.00           H
ATOM   3679  HB2 TRP A 325     -5.318  -0.627   5.629  1.00  0.00           H
ATOM   3680  HB3 TRP A 325     -3.626  -0.390   5.887  1.00  0.00           H
ATOM   3681  HD1 TRP A 325     -5.833   2.371   4.350  1.00  0.00           H
ATOM   3682  HE1 TRP A 325     -6.230   4.223   6.038  1.00  0.00           H
ATOM   3683  HE3 TRP A 325     -3.464   0.277   8.376  1.00  0.00           H
ATOM   3684  HZ3 TRP A 325     -3.354   1.465  10.536  1.00  0.00           H
ATOM   3685  HZ2 TRP A 325     -5.567   4.741   8.862  1.00  0.00           H
ATOM   3686  HH2 TRP A 325     -4.396   3.704  10.782  1.00  0.00           H
ATOM   3687  N   SER A 326     -2.482   0.747   2.329  1.00 24.03           N
ATOM   3688  CA  SER A 326     -1.239   0.736   1.548  1.00 22.71           C
ATOM   3689  C   SER A 326      0.038   1.227   2.263  1.00 21.08           C
ATOM   3690  O   SER A 326      1.144   1.060   1.758  1.00 19.92           O
ATOM   3691  CB  SER A 326     -1.494   1.534   0.254  1.00 22.45           C
ATOM   3692  OG  SER A 326     -2.030   2.822   0.534  1.00 23.98           O
ATOM   3693  H   SER A 326     -3.241   1.218   1.860  1.00  0.00           H
ATOM   3694  HA  SER A 326     -1.062  -0.302   1.272  1.00  0.00           H
ATOM   3695  HB2 SER A 326     -0.568   1.640  -0.313  1.00  0.00           H
ATOM   3696  HB3 SER A 326     -2.173   0.983  -0.395  1.00  0.00           H
ATOM   3697  HG  SER A 326     -1.867   3.388  -0.237  1.00  0.00           H
ATOM   3698  N   ASN A 327     -0.084   1.771   3.473  1.00 18.51           N
ATOM   3699  CA  ASN A 327      0.987   2.132   4.405  1.00 18.42           C
ATOM   3700  C   ASN A 327      1.874   0.939   4.867  1.00 19.32           C
ATOM   3701  O   ASN A 327      2.897   1.154   5.525  1.00 18.72           O
ATOM   3702  CB  ASN A 327      0.357   2.867   5.619  1.00 18.64           C
ATOM   3703  CG  ASN A 327     -0.900   2.236   6.187  1.00 18.91           C
ATOM   3704  OD1 ASN A 327     -2.008   2.601   5.825  1.00 17.18           O
ATOM   3705  ND2 ASN A 327     -0.736   1.285   7.146  1.00 16.88           N
ATOM   3706  H   ASN A 327     -1.039   1.873   3.790  1.00  0.00           H
ATOM   3707  HA  ASN A 327      1.651   2.817   3.876  1.00  0.00           H
ATOM   3708  HB2 ASN A 327      1.101   3.019   6.409  1.00  0.00           H
ATOM   3709  HB3 ASN A 327      0.058   3.848   5.242  1.00  0.00           H
ATOM   3710 HD21 ASN A 327      0.186   0.923   7.372  1.00  0.00           H
ATOM   3711 HD22 ASN A 327     -1.542   0.710   7.343  1.00  0.00           H
ATOM   3712  N   PHE A 328      1.486  -0.303   4.545  1.00 18.00           N
ATOM   3713  CA  PHE A 328      2.286  -1.518   4.650  1.00 19.94           C
ATOM   3714  C   PHE A 328      1.964  -2.402   3.450  1.00 20.27           C
ATOM   3715  O   PHE A 328      0.909  -3.039   3.425  1.00 20.85           O
ATOM   3716  CB  PHE A 328      2.044  -2.238   5.986  1.00 20.17           C
ATOM   3717  CG  PHE A 328      2.974  -3.408   6.276  1.00 21.71           C
ATOM   3718  CD1 PHE A 328      2.684  -4.698   5.781  1.00 20.89           C
ATOM   3719  CD2 PHE A 328      4.137  -3.207   7.047  1.00 21.40           C
ATOM   3720  CE1 PHE A 328      3.542  -5.776   6.068  1.00 23.81           C
ATOM   3721  CE2 PHE A 328      4.979  -4.290   7.359  1.00 23.59           C
ATOM   3722  CZ  PHE A 328      4.682  -5.574   6.866  1.00 20.62           C
ATOM   3723  H   PHE A 328      0.624  -0.403   4.020  1.00  0.00           H
ATOM   3724  HA  PHE A 328      3.343  -1.247   4.603  1.00  0.00           H
ATOM   3725  HB2 PHE A 328      2.162  -1.523   6.786  1.00  0.00           H
ATOM   3726  HB3 PHE A 328      1.008  -2.576   6.049  1.00  0.00           H
ATOM   3727  HD1 PHE A 328      1.811  -4.864   5.167  1.00  0.00           H
ATOM   3728  HD2 PHE A 328      4.384  -2.222   7.409  1.00  0.00           H
ATOM   3729  HE1 PHE A 328      3.324  -6.762   5.679  1.00  0.00           H
ATOM   3730  HE2 PHE A 328      5.860  -4.132   7.964  1.00  0.00           H
ATOM   3731  HZ  PHE A 328      5.333  -6.406   7.088  1.00  0.00           H
ATOM   3732  N   GLU A 329      2.878  -2.453   2.483  1.00 21.96           N
ATOM   3733  CA  GLU A 329      2.837  -3.338   1.330  1.00 21.09           C
ATOM   3734  C   GLU A 329      4.240  -3.909   1.180  1.00 20.76           C
ATOM   3735  O   GLU A 329      5.168  -3.131   0.977  1.00 20.35           O
ATOM   3736  CB  GLU A 329      2.408  -2.560   0.074  1.00 20.27           C
ATOM   3737  CG  GLU A 329      0.966  -2.048   0.160  1.00 21.97           C
ATOM   3738  CD  GLU A 329      0.555  -1.212  -1.034  1.00 23.07           C
ATOM   3739  OE1 GLU A 329      1.411  -0.610  -1.711  1.00 20.27           O
ATOM   3740  OE2 GLU A 329     -0.661  -1.155  -1.324  1.00 25.60           O1-
ATOM   3741  H   GLU A 329      3.723  -1.909   2.586  1.00  0.00           H
ATOM   3742  HA  GLU A 329      2.132  -4.154   1.497  1.00  0.00           H
ATOM   3743  HB2 GLU A 329      3.089  -1.724  -0.091  1.00  0.00           H
ATOM   3744  HB3 GLU A 329      2.503  -3.201  -0.805  1.00  0.00           H
ATOM   3745  HG2 GLU A 329      0.280  -2.887   0.274  1.00  0.00           H
ATOM   3746  HG3 GLU A 329      0.847  -1.428   1.043  1.00  0.00           H
ATOM   3747  N   ILE A 330      4.390  -5.230   1.283  1.00 20.01           N
ATOM   3748  CA  ILE A 330      5.547  -5.999   0.838  1.00 21.19           C
ATOM   3749  C   ILE A 330      5.042  -6.590  -0.485  1.00 21.93           C
ATOM   3750  O   ILE A 330      4.292  -7.568  -0.484  1.00 20.27           O
ATOM   3751  CB  ILE A 330      5.855  -7.113   1.887  1.00 20.93           C
ATOM   3752  CG1 ILE A 330      6.330  -6.502   3.224  1.00 21.73           C
ATOM   3753  CG2 ILE A 330      6.884  -8.163   1.406  1.00 18.92           C
ATOM   3754  CD1 ILE A 330      6.370  -7.487   4.401  1.00 23.49           C
ATOM   3755  H   ILE A 330      3.538  -5.773   1.427  1.00  0.00           H
ATOM   3756  HA  ILE A 330      6.426  -5.377   0.671  1.00  0.00           H
ATOM   3757  HB  ILE A 330      4.921  -7.638   2.069  1.00  0.00           H
ATOM   3758 HG12 ILE A 330      7.322  -6.073   3.083  1.00  0.00           H
ATOM   3759 HG13 ILE A 330      5.688  -5.669   3.513  1.00  0.00           H
ATOM   3760 HG21 ILE A 330      6.917  -9.021   2.074  1.00  0.00           H
ATOM   3761 HG22 ILE A 330      6.661  -8.562   0.418  1.00  0.00           H
ATOM   3762 HG23 ILE A 330      7.888  -7.744   1.379  1.00  0.00           H
ATOM   3763 HD11 ILE A 330      6.787  -7.015   5.285  1.00  0.00           H
ATOM   3764 HD12 ILE A 330      5.370  -7.820   4.669  1.00  0.00           H
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ATOM   3765 HD13 ILE A 330       6.979  -8.365   4.197  1.00  0.00           H
ATOM   3766  N   ALA A 331       5.362  -5.950  -1.609  1.00 21.39           N
ATOM   3767  CA  ALA A 331       4.757  -6.245  -2.900  1.00 22.41           C
ATOM   3768  C   ALA A 331       5.767  -6.127  -4.037  1.00 21.44           C
ATOM   3769  O   ALA A 331       6.831  -5.527  -3.889  1.00 20.66           O
ATOM   3770  CB  ALA A 331       3.480  -5.412  -3.089  1.00 21.06           C
ATOM   3771  H   ALA A 331       6.011  -5.164  -1.572  1.00  0.00           H
ATOM   3772  HA  ALA A 331       4.463  -7.296  -2.910  1.00  0.00           H
ATOM   3773  HB1 ALA A 331       3.040  -5.569  -4.075  1.00  0.00           H
ATOM   3774  HB2 ALA A 331       2.727  -5.666  -2.344  1.00  0.00           H
ATOM   3775  HB3 ALA A 331       3.683  -4.349  -2.981  1.00  0.00           H
ATOM   3776  N   ASN A 332       5.436  -6.744  -5.168  1.00 22.89           N
ATOM   3777  CA  ASN A 332       6.202  -6.717  -6.407  1.00 20.34           C
ATOM   3778  C   ASN A 332       5.805  -5.442  -7.181  1.00 21.01           C
ATOM   3779  O   ASN A 332       4.620  -5.144  -7.315  1.00 20.20           O
ATOM   3780  CB  ASN A 332       5.803  -7.978  -7.193  1.00 21.25           C
ATOM   3781  CG  ASN A 332       6.626  -8.190  -8.458  1.00 19.39           C
ATOM   3782  OD1 ASN A 332       6.275  -7.650  -9.496  1.00 19.86           O
ATOM   3783  ND2 ASN A 332       7.696  -8.976  -8.413  1.00 20.38           N
ATOM   3784  H   ASN A 332       4.537  -7.216  -5.193  1.00  0.00           H
ATOM   3785  HA  ASN A 332       7.269  -6.751  -6.199  1.00  0.00           H
ATOM   3786  HB2 ASN A 332       5.897  -8.863  -6.562  1.00  0.00           H
ATOM   3787  HB3 ASN A 332       4.753  -7.915  -7.480  1.00  0.00           H
ATOM   3788 HD21 ASN A 332       8.056  -9.335  -7.537  1.00  0.00           H
ATOM   3789 HD22 ASN A 332       8.186  -9.180  -9.274  1.00  0.00           H
ATOM   3790  N   LEU A 333       6.789  -4.698  -7.699  1.00 20.23           N
ATOM   3791  CA  LEU A 333       6.600  -3.467  -8.472  1.00 22.19           C
ATOM   3792  C   LEU A 333       6.257  -3.783  -9.932  1.00 22.56           C
ATOM   3793  O   LEU A 333       5.585  -2.986 -10.585  1.00 23.16           O
ATOM   3794  CB  LEU A 333       7.921  -2.656  -8.513  1.00 20.41           C
ATOM   3795  CG  LEU A 333       8.298  -1.956  -7.197  1.00 19.24           C
ATOM   3796  CD1 LEU A 333       9.768  -1.521  -7.186  1.00 21.42           C
ATOM   3797  CD2 LEU A 333       7.381  -0.752  -6.920  1.00 20.07           C
ATOM   3798  H   LEU A 333       7.733  -5.082  -7.672  1.00  0.00           H
ATOM   3799  HA  LEU A 333       5.787  -2.874  -8.051  1.00  0.00           H
ATOM   3800  HB2 LEU A 333       8.731  -3.317  -8.819  1.00  0.00           H
ATOM   3801  HB3 LEU A 333       7.871  -1.892  -9.294  1.00  0.00           H
ATOM   3802  HG  LEU A 333       8.200  -2.684  -6.397  1.00  0.00           H
ATOM   3803 HD11 LEU A 333      10.053  -1.131  -6.210  1.00  0.00           H
ATOM   3804 HD12 LEU A 333      10.429  -2.361  -7.392  1.00  0.00           H
ATOM   3805 HD13 LEU A 333       9.964  -0.744  -7.925  1.00  0.00           H
ATOM   3806 HD21 LEU A 333       7.639  -0.264  -5.981  1.00  0.00           H
ATOM   3807 HD22 LEU A 333       7.458  -0.003  -7.710  1.00  0.00           H
ATOM   3808 HD23 LEU A 333       6.333  -1.041  -6.846  1.00  0.00           H
ATOM   3809  N   ASN A 334       6.683  -4.942 -10.456  1.00 22.33           N
ATOM   3810  CA  ASN A 334       6.448  -5.339 -11.850  1.00 23.39           C
ATOM   3811  C   ASN A 334       4.963  -5.662 -12.100  1.00 23.98           C
ATOM   3812  O   ASN A 334       4.509  -5.575 -13.237  1.00 23.96           O
ATOM   3813  CB  ASN A 334       7.336  -6.526 -12.302  1.00 25.18           C
ATOM   3814  CG  ASN A 334       8.841  -6.282 -12.143  1.00 27.49           C
ATOM   3815  OD1 ASN A 334       9.311  -5.151 -12.269  1.00 28.65           O
ATOM   3816  ND2 ASN A 334       9.600  -7.325 -11.827  1.00 26.16           N
ATOM   3817  H   ASN A 334       7.153  -5.605  -9.850  1.00  0.00           H
ATOM   3818  HA  ASN A 334       6.706  -4.484 -12.469  1.00  0.00           H
ATOM   3819  HB2 ASN A 334       7.053  -7.445 -11.794  1.00  0.00           H
ATOM   3820  HB3 ASN A 334       7.154  -6.717 -13.361  1.00  0.00           H
ATOM   3821 HD21 ASN A 334       9.196  -8.240 -11.705  1.00  0.00           H
ATOM   3822 HD22 ASN A 334      10.632  -7.225 -11.740  1.00  0.00           H
ATOM   3823  N   LEU A 335       4.186  -5.920 -11.035  1.00 23.74           N
ATOM   3824  CA  LEU A 335       2.721  -5.958 -11.029  1.00 22.83           C
ATOM   3825  C   LEU A 335       2.123  -4.594 -11.406  1.00 23.38           C
ATOM   3826  O   LEU A 335       1.151  -4.532 -12.155  1.00 20.24           O
ATOM   3827  CB  LEU A 335       2.230  -6.408  -9.631  1.00 22.39           C
ATOM   3828  CG  LEU A 335       0.695  -6.490  -9.436  1.00 22.32           C
ATOM   3829  CD1 LEU A 335       0.034  -7.507 -10.380  1.00 21.69           C
ATOM   3830  CD2 LEU A 335       0.350  -6.789  -7.970  1.00 20.81           C
ATOM   3831  H   LEU A 335       4.663  -6.031 -10.151  1.00  0.00           H
ATOM   3832  HA  LEU A 335       2.391  -6.670 -11.782  1.00  0.00           H
ATOM   3833  HB2 LEU A 335       2.669  -7.379  -9.397  1.00  0.00           H
ATOM   3834  HB3 LEU A 335       2.627  -5.717  -8.886  1.00  0.00           H
ATOM   3835  HG  LEU A 335       0.255  -5.516  -9.651  1.00  0.00           H
ATOM   3836 HD11 LEU A 335      -1.029  -7.621 -10.164  1.00  0.00           H
ATOM   3837 HD12 LEU A 335       0.109  -7.197 -11.422  1.00  0.00           H
ATOM   3838 HD13 LEU A 335       0.494  -8.490 -10.297  1.00  0.00           H
ATOM   3839 HD21 LEU A 335      -0.730  -6.818  -7.815  1.00  0.00           H
ATOM   3840 HD22 LEU A 335       0.758  -7.747  -7.653  1.00  0.00           H
ATOM   3841 HD23 LEU A 335       0.752  -6.021  -7.307  1.00  0.00           H
ATOM   3842  N   TRP A 336       2.719  -3.495 -10.936  1.00 20.71           N
ATOM   3843  CA  TRP A 336       2.261  -2.147 -11.249  1.00 21.14           C
ATOM   3844  C   TRP A 336       2.836  -1.667 -12.594  1.00 20.82           C
ATOM   3845  O   TRP A 336       2.189  -0.895 -13.295  1.00 21.72           O
ATOM   3846  CB  TRP A 336       2.671  -1.192 -10.121  1.00 19.56           C
ATOM   3847  CG  TRP A 336       2.273  -1.554  -8.715  1.00 21.10           C
ATOM   3848  CD1 TRP A 336       3.031  -1.304  -7.622  1.00 20.91           C
ATOM   3849  CD2 TRP A 336       1.057  -2.205  -8.210  1.00 20.60           C
ATOM   3850  NE1 TRP A 336       2.352  -1.701  -6.488  1.00 21.76           N
ATOM   3851  CE3 TRP A 336      -0.103  -2.777  -8.787  1.00 21.74           C
ATOM   3852  CE2 TRP A 336       1.126  -2.236  -6.785  1.00 18.03           C
ATOM   3853  CZ3 TRP A 336      -1.139  -3.309  -7.993  1.00 18.29           C
ATOM   3854  CZ2 TRP A 336       0.093  -2.738  -5.981  1.00 20.48           C
ATOM   3855  CH2 TRP A 336      -1.054  -3.272  -6.589  1.00 21.36           C
ATOM   3856  H   TRP A 336       3.547  -3.591 -10.363  1.00  0.00           H
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ATOM   3857  HA  TRP A 336       1.179  -2.134 -11.336  1.00  0.00           H
ATOM   3858  HB2 TRP A 336       3.748  -1.023 -10.142  1.00  0.00           H
ATOM   3859  HB3 TRP A 336       2.205  -0.231 -10.330  1.00  0.00           H
ATOM   3860  HD1 TRP A 336       4.000  -0.827  -7.649  1.00  0.00           H
ATOM   3861  HE1 TRP A 336       2.700  -1.616  -5.526  1.00  0.00           H
ATOM   3862  HE3 TRP A 336      -0.206  -2.816  -9.858  1.00  0.00           H
ATOM   3863  HZ3 TRP A 336      -2.003  -3.749  -8.465  1.00  0.00           H
ATOM   3864  HZ2 TRP A 336       0.194  -2.718  -4.908  1.00  0.00           H
ATOM   3865  HH2 TRP A 336      -1.855  -3.661  -5.983  1.00  0.00           H
ATOM   3866  N   ARG A 337       3.990  -2.194 -13.023  1.00 21.65           N
ATOM   3867  CA  ARG A 337       4.530  -1.953 -14.364  1.00 20.04           C
ATOM   3868  C   ARG A 337       3.827  -2.806 -15.443  1.00 18.23           C
ATOM   3869  O   ARG A 337       4.125  -2.616 -16.626  1.00 17.77           O
ATOM   3870  CB  ARG A 337       6.035  -2.300 -14.410  1.00 21.14           C
ATOM   3871  CG  ARG A 337       6.905  -1.461 -13.462  1.00 20.85           C
ATOM   3872  CD  ARG A 337       8.382  -1.873 -13.488  1.00 23.87           C
ATOM   3873  NE  ARG A 337       9.143  -1.062 -12.539  1.00 23.95           N
ATOM   3874  CZ  ARG A 337       9.838  -1.446 -11.468  1.00 25.49           C
ATOM   3875  NH1 ARG A 337      10.064  -2.725 -11.169  1.00 26.97           N
ATOM   3876  NH2 ARG A 337      10.317  -0.507 -10.666  1.00 26.66           N1+
ATOM   3877  H   ARG A 337       4.497  -2.790 -12.381  1.00  0.00           H
ATOM   3878  HA  ARG A 337       4.398  -0.902 -14.628  1.00  0.00           H
ATOM   3879  HB2 ARG A 337       6.170  -3.362 -14.216  1.00  0.00           H
ATOM   3880  HB3 ARG A 337       6.410  -2.147 -15.423  1.00  0.00           H
ATOM   3881  HG2 ARG A 337       6.819  -0.406 -13.724  1.00  0.00           H
ATOM   3882  HG3 ARG A 337       6.538  -1.545 -12.442  1.00  0.00           H
ATOM   3883  HD2 ARG A 337       8.486  -2.931 -13.258  1.00  0.00           H
ATOM   3884  HD3 ARG A 337       8.806  -1.719 -14.481  1.00  0.00           H
ATOM   3885  HE  ARG A 337       9.397  -0.109 -12.907  1.00  0.00           H
ATOM   3886 HH11 ARG A 337       9.740  -3.515 -11.737  1.00  0.00           H
ATOM   3887 HH12 ARG A 337      10.783  -2.918 -10.468  1.00  0.00           H
ATOM   3888 HH21 ARG A 337      10.250   0.500 -10.984  1.00  0.00           H
ATOM   3889 HH22 ARG A 337      10.985  -0.666  -9.915  1.00  0.00           H
ATOM   3890  N   SER A 338       2.928  -3.732 -15.067  1.00 17.15           N
ATOM   3891  CA  SER A 338       2.211  -4.619 -15.985  1.00 19.46           C
ATOM   3892  C   SER A 338       1.159  -3.831 -16.800  1.00 20.12           C
ATOM   3893  O   SER A 338       0.588  -2.879 -16.257  1.00 21.09           O
ATOM   3894  CB  SER A 338       1.525  -5.768 -15.201  1.00 20.32           C
ATOM   3895  OG  SER A 338       0.339  -5.404 -14.513  1.00 21.76           O
ATOM   3896  H   SER A 338       2.721  -3.816 -14.084  1.00  0.00           H
ATOM   3897  HA  SER A 338       2.971  -5.057 -16.629  1.00  0.00           H
ATOM   3898  HB2 SER A 338       1.230  -6.537 -15.912  1.00  0.00           H
ATOM   3899  HB3 SER A 338       2.221  -6.246 -14.511  1.00  0.00           H
ATOM   3900  HG  SER A 338       0.583  -5.024 -13.664  1.00  0.00           H
ATOM   3901  N   PRO A 339       0.882  -4.209 -18.072  1.00 22.35           N
ATOM   3902  CA  PRO A 339      -0.166  -3.607 -18.922  1.00 21.08           C
ATOM   3903  C   PRO A 339      -1.526  -3.420 -18.220  1.00 19.47           C
ATOM   3904  O   PRO A 339      -2.088  -2.326 -18.217  1.00 20.76           O
ATOM   3905  CB  PRO A 339      -0.270  -4.540 -20.134  1.00 20.47           C
ATOM   3906  CG  PRO A 339       1.069  -5.244 -20.227  1.00 21.32           C
ATOM   3907  CD  PRO A 339       1.601  -5.261 -18.798  1.00 19.67           C
ATOM   3908  HA  PRO A 339       0.176  -2.630 -19.266  1.00  0.00           H
ATOM   3909  HB2 PRO A 339      -1.056  -5.281 -19.996  1.00  0.00           H
ATOM   3910  HB3 PRO A 339      -0.490  -3.985 -21.044  1.00  0.00           H
ATOM   3911  HG2 PRO A 339       0.991  -6.240 -20.665  1.00  0.00           H
ATOM   3912  HG3 PRO A 339       1.735  -4.656 -20.860  1.00  0.00           H
ATOM   3913  HD2 PRO A 339       1.396  -6.227 -18.335  1.00  0.00           H
ATOM   3914  HD3 PRO A 339       2.680  -5.100 -18.803  1.00  0.00           H
ATOM   3915  N   ALA A 340      -1.980  -4.465 -17.510  1.00 19.58           N
ATOM   3916  CA  ALA A 340      -3.204  -4.486 -16.716  1.00 19.57           C
ATOM   3917  C   ALA A 340      -3.311  -3.348 -15.692  1.00 19.42           C
ATOM   3918  O   ALA A 340      -4.367  -2.730 -15.586  1.00 17.04           O
ATOM   3919  CB  ALA A 340      -3.346  -5.853 -16.033  1.00 20.76           C
ATOM   3920  H   ALA A 340      -1.459  -5.324 -17.572  1.00  0.00           H
ATOM   3921  HA  ALA A 340      -4.030  -4.350 -17.412  1.00  0.00           H
ATOM   3922  HB1 ALA A 340      -4.253  -5.894 -15.427  1.00  0.00           H
ATOM   3923  HB2 ALA A 340      -3.412  -6.653 -16.770  1.00  0.00           H
ATOM   3924  HB3 ALA A 340      -2.502  -6.064 -15.374  1.00  0.00           H
ATOM   3925  N   TYR A 341      -2.225  -3.031 -14.972  1.00 18.41           N
ATOM   3926  CA  TYR A 341      -2.234  -1.917 -14.027  1.00 20.02           C
ATOM   3927  C   TYR A 341      -1.935  -0.579 -14.723  1.00 20.29           C
ATOM   3928  O   TYR A 341      -2.472   0.442 -14.299  1.00 20.54           O
ATOM   3929  CB  TYR A 341      -1.197  -2.128 -12.916  1.00 19.15           C
ATOM   3930  CG  TYR A 341      -1.348  -1.117 -11.786  1.00 19.29           C
ATOM   3931  CD1 TYR A 341      -2.349  -1.285 -10.811  1.00 18.41           C
ATOM   3932  CD2 TYR A 341      -0.536   0.032 -11.741  1.00 17.75           C
ATOM   3933  CE1 TYR A 341      -2.497  -0.355  -9.760  1.00 19.60           C
ATOM   3934  CE2 TYR A 341      -0.692   0.965 -10.707  1.00 19.82           C
ATOM   3935  CZ  TYR A 341      -1.648   0.764  -9.698  1.00 19.34           C
ATOM   3936  OH  TYR A 341      -1.740   1.657  -8.672  1.00 19.62           O
ATOM   3937  H   TYR A 341      -1.360  -3.525 -15.153  1.00  0.00           H
ATOM   3938  HA  TYR A 341      -3.212  -1.856 -13.551  1.00  0.00           H
ATOM   3939  HB2 TYR A 341      -1.306  -3.127 -12.492  1.00  0.00           H
ATOM   3940  HB3 TYR A 341      -0.188  -2.087 -13.327  1.00  0.00           H
ATOM   3941  HD1 TYR A 341      -3.000  -2.138 -10.884  1.00  0.00           H
ATOM   3942  HD2 TYR A 341       0.196   0.218 -12.512  1.00  0.00           H
ATOM   3943  HE1 TYR A 341      -3.252  -0.498  -9.001  1.00  0.00           H
ATOM   3944  HE2 TYR A 341      -0.066   1.837 -10.713  1.00  0.00           H
ATOM   3945  HH  TYR A 341      -1.029   2.289  -8.756  1.00  0.00           H
ATOM   3946  N   ARG A 342      -1.120  -0.561 -15.787  1.00 20.95           N
ATOM   3947  CA  ARG A 342      -0.766   0.645 -16.540  1.00 21.79           C
ATOM   3948  C   ARG A 342      -2.004   1.307 -17.150  1.00 22.81           C
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ATOM   3949  O   ARG A 342      -2.310   2.459 -16.840  1.00 22.78           O
ATOM   3950  CB  ARG A 342       0.192   0.295 -17.684  1.00 23.26           C
ATOM   3951  CG  ARG A 342       1.632  -0.015 -17.294  1.00 23.00           C
ATOM   3952  CD  ARG A 342       2.333  -0.724 -18.460  1.00 25.52           C
ATOM   3953  NE  ARG A 342       3.775  -0.484 -18.429  1.00 27.12           N
ATOM   3954  CZ  ARG A 342       4.428   0.459 -19.118  1.00 24.20           C
ATOM   3955  NH1 ARG A 342       3.784   1.289 -19.947  1.00 21.44           N
ATOM   3956  NH2 ARG A 342       5.747   0.574 -18.956  1.00 25.12           N1+
ATOM   3957  H   ARG A 342      -0.730  -1.445 -16.100  1.00  0.00           H
ATOM   3958  HA  ARG A 342      -0.294   1.359 -15.865  1.00  0.00           H
ATOM   3959  HB2 ARG A 342      -0.218  -0.548 -18.240  1.00  0.00           H
ATOM   3960  HB3 ARG A 342       0.217   1.122 -18.394  1.00  0.00           H
ATOM   3961  HG2 ARG A 342       2.137   0.914 -17.036  1.00  0.00           H
ATOM   3962  HG3 ARG A 342       1.666  -0.634 -16.398  1.00  0.00           H
ATOM   3963  HD2 ARG A 342       2.170  -1.795 -18.397  1.00  0.00           H
ATOM   3964  HD3 ARG A 342       1.920  -0.437 -19.425  1.00  0.00           H
ATOM   3965  HE  ARG A 342       4.228  -1.170 -17.817  1.00  0.00           H
ATOM   3966 HH11 ARG A 342       2.760   1.223 -20.125  1.00  0.00           H
ATOM   3967 HH12 ARG A 342       4.228   2.015 -20.482  1.00  0.00           H
ATOM   3968 HH21 ARG A 342       6.241  -0.036 -18.320  1.00  0.00           H
ATOM   3969 HH22 ARG A 342       6.289   1.277 -19.434  1.00  0.00           H
ATOM   3970  N   GLU A 343      -2.733   0.550 -17.974  1.00 24.14           N
ATOM   3971  CA  GLU A 343      -3.903   1.018 -18.697  1.00 24.75           C
ATOM   3972  C   GLU A 343      -5.097   1.196 -17.732  1.00 24.10           C
ATOM   3973  O   GLU A 343      -5.976   2.019 -18.001  1.00 24.31           O
ATOM   3974  CB  GLU A 343      -4.232   0.004 -19.815  1.00 25.68           C
ATOM   3975  CG  GLU A 343      -3.343   0.145 -21.079  1.00 30.62           C
ATOM   3976  CD  GLU A 343      -1.959  -0.499 -20.988  1.00 30.71           C
ATOM   3977  OE1 GLU A 343      -1.864  -1.691 -21.347  1.00 32.63           O
ATOM   3978  OE2 GLU A 343      -0.998   0.205 -20.598  1.00 29.45           O1-
ATOM   3979  H   GLU A 343      -2.386  -0.380 -18.210  1.00  0.00           H
ATOM   3980  HA  GLU A 343      -3.689   1.993 -19.139  1.00  0.00           H
ATOM   3981  HB2 GLU A 343      -4.182  -1.017 -19.433  1.00  0.00           H
ATOM   3982  HB3 GLU A 343      -5.265   0.144 -20.134  1.00  0.00           H
ATOM   3983  HG2 GLU A 343      -3.851  -0.329 -21.920  1.00  0.00           H
ATOM   3984  HG3 GLU A 343      -3.227   1.192 -21.354  1.00  0.00           H
ATOM   3985  N   TYR A 344      -5.103   0.507 -16.576  1.00 22.33           N
ATOM   3986  CA  TYR A 344      -6.013   0.773 -15.458  1.00 19.95           C
ATOM   3987  C   TYR A 344      -5.683   2.127 -14.821  1.00 21.16           C
ATOM   3988  O   TYR A 344      -6.572   2.968 -14.711  1.00 19.78           O
ATOM   3989  CB  TYR A 344      -5.939  -0.340 -14.389  1.00 17.99           C
ATOM   3990  CG  TYR A 344      -6.718  -0.066 -13.107  1.00 21.67           C
ATOM   3991  CD1 TYR A 344      -8.122   0.018 -13.150  1.00 21.18           C
ATOM   3992  CD2 TYR A 344      -6.047   0.146 -11.882  1.00 21.43           C
ATOM   3993  CE1 TYR A 344      -8.847   0.352 -11.994  1.00 20.99           C
ATOM   3994  CE2 TYR A 344      -6.779   0.463 -10.719  1.00 21.57           C
ATOM   3995  CZ  TYR A 344      -8.179   0.599 -10.781  1.00 21.53           C
ATOM   3996  OH  TYR A 344      -8.887   0.995  -9.682  1.00 19.87           O
ATOM   3997  H   TYR A 344      -4.365  -0.171 -16.442  1.00  0.00           H
ATOM   3998  HA  TYR A 344      -7.033   0.827 -15.835  1.00  0.00           H
ATOM   3999  HB2 TYR A 344      -6.319  -1.267 -14.816  1.00  0.00           H
ATOM   4000  HB3 TYR A 344      -4.903  -0.531 -14.126  1.00  0.00           H
ATOM   4001  HD1 TYR A 344      -8.643  -0.149 -14.079  1.00  0.00           H
ATOM   4002  HD2 TYR A 344      -4.969   0.084 -11.829  1.00  0.00           H
ATOM   4003  HE1 TYR A 344      -9.916   0.426 -12.051  1.00  0.00           H
ATOM   4004  HE2 TYR A 344      -6.261   0.625  -9.787  1.00  0.00           H
ATOM   4005  HH  TYR A 344      -9.783   1.257  -9.896  1.00  0.00           H
ATOM   4006  N   PHE A 345      -4.419   2.365 -14.441  1.00 20.71           N
ATOM   4007  CA  PHE A 345      -3.985   3.618 -13.838  1.00 20.36           C
ATOM   4008  C   PHE A 345      -4.215   4.801 -14.786  1.00 21.44           C
ATOM   4009  O   PHE A 345      -4.775   5.808 -14.361  1.00 22.30           O
ATOM   4010  CB  PHE A 345      -2.512   3.570 -13.366  1.00 18.78           C
ATOM   4011  CG  PHE A 345      -2.081   4.913 -12.792  1.00 18.84           C
ATOM   4012  CD1 PHE A 345      -2.654   5.366 -11.584  1.00 19.24           C
ATOM   4013  CD2 PHE A 345      -1.298   5.793 -13.571  1.00 17.98           C
ATOM   4014  CE1 PHE A 345      -2.506   6.711 -11.197  1.00 17.82           C
ATOM   4015  CE2 PHE A 345      -1.149   7.135 -13.174  1.00 18.95           C
ATOM   4016  CZ  PHE A 345      -1.766   7.598 -11.997  1.00 18.47           C
ATOM   4017  H   PHE A 345      -3.718   1.634 -14.560  1.00  0.00           H
ATOM   4018  HA  PHE A 345      -4.615   3.780 -12.962  1.00  0.00           H
ATOM   4019  HB2 PHE A 345      -2.385   2.798 -12.605  1.00  0.00           H
ATOM   4020  HB3 PHE A 345      -1.856   3.295 -14.194  1.00  0.00           H
ATOM   4021  HD1 PHE A 345      -3.285   4.708 -11.004  1.00  0.00           H
ATOM   4022  HD2 PHE A 345      -0.898   5.476 -14.525  1.00  0.00           H
ATOM   4023  HE1 PHE A 345      -2.996   7.085 -10.314  1.00  0.00           H
ATOM   4024  HE2 PHE A 345      -0.607   7.832 -13.796  1.00  0.00           H
ATOM   4025  HZ  PHE A 345      -1.688   8.639 -11.723  1.00  0.00           H
ATOM   4026  N   ASP A 346      -3.849   4.691 -16.068  1.00 21.25           N
ATOM   4027  CA  ASP A 346      -4.023   5.800 -17.009  1.00 20.54           C
ATOM   4028  C   ASP A 346      -5.510   6.078 -17.315  1.00 20.57           C
ATOM   4029  O   ASP A 346      -5.881   7.234 -17.501  1.00 18.80           O
ATOM   4030  CB  ASP A 346      -3.194   5.588 -18.290  1.00 21.13           C
ATOM   4031  CG  ASP A 346      -2.610   6.918 -18.754  1.00 21.90           C
ATOM   4032  OD1 ASP A 346      -1.575   7.343 -18.191  1.00 20.23           O
ATOM   4033  OD2 ASP A 346      -3.232   7.557 -19.625  1.00 24.56           O1-
ATOM   4034  H   ASP A 346      -3.354   3.855 -16.378  1.00  0.00           H
ATOM   4035  HA  ASP A 346      -3.634   6.682 -16.497  1.00  0.00           H
ATOM   4036  HB2 ASP A 346      -2.354   4.919 -18.107  1.00  0.00           H
ATOM   4037  HB3 ASP A 346      -3.783   5.139 -19.090  1.00  0.00           H
ATOM   4038  N   THR A 347      -6.397   5.071 -17.199  1.00 20.11           N
ATOM   4039  CA  THR A 347      -7.856   5.258 -17.178  1.00 20.50           C
ATOM   4040  C   THR A 347      -8.315   6.129 -15.974  1.00 19.74           C
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ATOM   4041  O   THR A 347      -9.324   6.821 -16.088  1.00 19.02           O
ATOM   4042  CB  THR A 347      -8.588   3.876 -17.213  1.00 17.98           C
ATOM   4043  OG1 THR A 347      -8.348   3.205 -18.445  1.00 21.15           O
ATOM   4044  CG2 THR A 347     -10.120   3.936 -17.087  1.00 18.73           C
ATOM   4045  H   THR A 347      -6.028   4.154 -16.986  1.00  0.00           H
ATOM   4046  HA  THR A 347      -8.128   5.815 -18.077  1.00  0.00           H
ATOM   4047  HB  THR A 347      -8.227   3.237 -16.413  1.00  0.00           H
ATOM   4048  HG1 THR A 347      -7.426   2.912 -18.411  1.00  0.00           H
ATOM   4049 HG21 THR A 347     -10.572   2.950 -17.184  1.00  0.00           H
ATOM   4050 HG22 THR A 347     -10.416   4.296 -16.104  1.00  0.00           H
ATOM   4051 HG23 THR A 347     -10.566   4.602 -17.826  1.00  0.00           H
ATOM   4052  N   LEU A 348      -7.583   6.141 -14.848  1.00 20.95           N
ATOM   4053  CA  LEU A 348      -7.834   7.018 -13.702  1.00 20.70           C
ATOM   4054  C   LEU A 348      -7.142   8.384 -13.905  1.00 20.77           C
ATOM   4055  O   LEU A 348      -7.701   9.420 -13.535  1.00 22.33           O
ATOM   4056  CB  LEU A 348      -7.249   6.380 -12.409  1.00 19.16           C
ATOM   4057  CG  LEU A 348      -7.759   4.963 -12.051  1.00 19.34           C
ATOM   4058  CD1 LEU A 348      -6.974   4.400 -10.861  1.00 18.78           C
ATOM   4059  CD2 LEU A 348      -9.268   4.877 -11.768  1.00 16.55           C
ATOM   4060  H   LEU A 348      -6.731   5.590 -14.826  1.00  0.00           H
ATOM   4061  HA  LEU A 348      -8.905   7.187 -13.583  1.00  0.00           H
ATOM   4062  HB2 LEU A 348      -6.164   6.335 -12.484  1.00  0.00           H
ATOM   4063  HB3 LEU A 348      -7.399   7.044 -11.561  1.00  0.00           H
ATOM   4064  HG  LEU A 348      -7.559   4.311 -12.898  1.00  0.00           H
ATOM   4065 HD11 LEU A 348      -7.302   3.388 -10.623  1.00  0.00           H
ATOM   4066 HD12 LEU A 348      -5.906   4.354 -11.072  1.00  0.00           H
ATOM   4067 HD13 LEU A 348      -7.109   5.012  -9.970  1.00  0.00           H
ATOM   4068 HD21 LEU A 348      -9.576   3.835 -11.664  1.00  0.00           H
ATOM   4069 HD22 LEU A 348      -9.536   5.381 -10.840  1.00  0.00           H
ATOM   4070 HD23 LEU A 348      -9.856   5.304 -12.577  1.00  0.00           H
ATOM   4071  N   ASP A 349      -5.934   8.393 -14.483  1.00 21.51           N
ATOM   4072  CA  ASP A 349      -5.052   9.562 -14.586  1.00 21.24           C
ATOM   4073  C   ASP A 349      -5.481  10.533 -15.696  1.00 21.96           C
ATOM   4074  O   ASP A 349      -5.520  11.745 -15.472  1.00 19.94           O
ATOM   4075  CB  ASP A 349      -3.607   9.094 -14.870  1.00 18.89           C
ATOM   4076  CG  ASP A 349      -2.565  10.081 -14.366  1.00 19.84           C
ATOM   4077  OD1 ASP A 349      -2.704  10.580 -13.230  1.00 20.50           O
ATOM   4078  OD2 ASP A 349      -1.564  10.343 -15.068  1.00 19.99           O1-
ATOM   4079  H   ASP A 349      -5.525   7.489 -14.707  1.00  0.00           H
ATOM   4080  HA  ASP A 349      -5.101  10.086 -13.629  1.00  0.00           H
ATOM   4081  HB2 ASP A 349      -3.413   8.152 -14.361  1.00  0.00           H
ATOM   4082  HB3 ASP A 349      -3.439   8.908 -15.932  1.00  0.00           H
ATOM   4083  N   HIS A 350      -5.878  10.007 -16.866  1.00 22.62           N
ATOM   4084  CA  HIS A 350      -6.463  10.781 -17.969  1.00 23.51           C
ATOM   4085  C   HIS A 350      -7.947  11.115 -17.717  1.00 22.85           C
ATOM   4086  O   HIS A 350      -8.546  11.851 -18.498  1.00 22.01           O
ATOM   4087  CB  HIS A 350      -6.304  10.045 -19.324  1.00  0.00           C
ATOM   4088  CG  HIS A 350      -5.175  10.573 -20.177  1.00  0.00           C
ATOM   4089  ND1 HIS A 350      -4.000   9.879 -20.414  1.00  0.00           N
ATOM   4090  CD2 HIS A 350      -5.039  11.760 -20.865  1.00  0.00           C
ATOM   4091  CE1 HIS A 350      -3.248  10.624 -21.223  1.00  0.00           C
ATOM   4092  NE2 HIS A 350      -3.815  11.784 -21.538  1.00  0.00           N
ATOM   4093  H   HIS A 350      -5.784   9.002 -17.008  1.00  0.00           H
ATOM   4094  HA  HIS A 350      -5.956  11.738 -18.053  1.00  0.00           H
ATOM   4095  HB2 HIS A 350      -6.189   8.971 -19.201  1.00  0.00           H
ATOM   4096  HB3 HIS A 350      -7.199  10.161 -19.937  1.00  0.00           H
ATOM   4097  HD1 HIS A 350      -3.729   8.914 -20.075  1.00  0.00           H
ATOM   4098  HD2 HIS A 350      -5.728  12.590 -20.929  1.00  0.00           H
ATOM   4099  HE1 HIS A 350      -2.277  10.311 -21.581  1.00  0.00           H
ATOM   4100  N   GLN A 351      -8.538  10.626 -16.614  1.00 22.30           N
ATOM   4101  CA  GLN A 351      -9.806  11.124 -16.088  1.00 23.00           C
ATOM   4102  C   GLN A 351      -9.467  12.349 -15.219  1.00 22.67           C
ATOM   4103  O   GLN A 351      -9.844  13.464 -15.576  1.00 19.82           O
ATOM   4104  CB  GLN A 351     -10.520   9.999 -15.292  1.00 23.52           C
ATOM   4105  CG  GLN A 351     -12.042  10.176 -15.087  1.00 26.12           C
ATOM   4106  CD  GLN A 351     -12.445  10.725 -13.718  1.00 28.38           C
ATOM   4107  OE1 GLN A 351     -11.833  11.647 -13.197  1.00 27.29           O
ATOM   4108  NE2 GLN A 351     -13.473  10.155 -13.104  1.00 27.43           N
ATOM   4109  H   GLN A 351      -7.962  10.051 -16.018  1.00  0.00           H
ATOM   4110  HA  GLN A 351     -10.447  11.438 -16.915  1.00  0.00           H
ATOM   4111  HB2 GLN A 351     -10.399   9.080 -15.863  1.00  0.00           H
ATOM   4112  HB3 GLN A 351     -10.035   9.801 -14.338  1.00  0.00           H
ATOM   4113  HG2 GLN A 351     -12.460  10.821 -15.861  1.00  0.00           H
ATOM   4114  HG3 GLN A 351     -12.523   9.207 -15.223  1.00  0.00           H
ATOM   4115 HE21 GLN A 351     -13.815   9.264 -13.460  1.00  0.00           H
ATOM   4116 HE22 GLN A 351     -13.791  10.496 -12.204  1.00  0.00           H
ATOM   4117  N   GLY A 352      -8.693  12.162 -14.139  1.00 21.90           N
ATOM   4118  CA  GLY A 352      -8.144  13.231 -13.297  1.00 22.88           C
ATOM   4119  C   GLY A 352      -8.591  13.169 -11.830  1.00 23.50           C
ATOM   4120  O   GLY A 352      -8.041  13.870 -10.978  1.00 20.98           O
ATOM   4121  H   GLY A 352      -8.361  11.219 -13.954  1.00  0.00           H
ATOM   4122  HA2 GLY A 352      -7.059  13.132 -13.323  1.00  0.00           H
ATOM   4123  HA3 GLY A 352      -8.388  14.219 -13.687  1.00  0.00           H
ATOM   4124  N   GLY A 353      -9.579  12.313 -11.550  1.00 21.49           N
ATOM   4125  CA  GLY A 353     -10.154  11.830 -10.296  1.00 20.56           C
ATOM   4126  C   GLY A 353      -9.533  12.239  -8.960  1.00 21.34           C
ATOM   4127  O   GLY A 353     -10.207  12.852  -8.131  1.00 20.96           O
ATOM   4128  H   GLY A 353     -10.028  11.929 -12.378  1.00  0.00           H
ATOM   4129  HA2 GLY A 353     -11.225  12.038 -10.288  1.00  0.00           H
ATOM   4130  HA3 GLY A 353     -10.046  10.758 -10.356  1.00  0.00           H
ATOM   4131  N   PHE A 354      -8.243  11.923  -8.768  1.00 21.51           N
ATOM   4132  CA  PHE A 354      -7.402  12.232  -7.603  1.00 21.68           C
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ATOM   4133 C   PHE A 354      -7.508  13.694  -7.146  1.00 22.65           C
ATOM   4134 O   PHE A 354      -7.491  13.990  -5.952  1.00 23.57           O
ATOM   4135 CB  PHE A 354      -5.932  11.876  -7.916  1.00 20.06           C
ATOM   4136 CG  PHE A 354      -5.697  10.431  -8.320  1.00 22.30           C
ATOM   4137 CD1 PHE A 354      -5.591   9.435  -7.329  1.00 22.41           C
ATOM   4138 CD2 PHE A 354      -5.585  10.077  -9.682  1.00 19.69           C
ATOM   4139 CE1 PHE A 354      -5.411   8.088  -7.694  1.00 22.82           C
ATOM   4140 CE2 PHE A 354      -5.399   8.729 -10.047  1.00 19.35           C
ATOM   4141 CZ  PHE A 354      -5.325   7.733  -9.053  1.00 19.73           C
ATOM   4142 H   PHE A 354      -7.789  11.420  -9.517  1.00  0.00           H
ATOM   4143 HA  PHE A 354      -7.743  11.617  -6.771  1.00  0.00           H
ATOM   4144 HB2 PHE A 354      -5.548  12.529  -8.703  1.00  0.00           H
ATOM   4145 HB3 PHE A 354      -5.312  12.086  -7.042  1.00  0.00           H
ATOM   4146 HD1 PHE A 354      -5.655   9.697  -6.283  1.00  0.00           H
ATOM   4147 HD2 PHE A 354      -5.638  10.828 -10.458  1.00  0.00           H
ATOM   4148 HE1 PHE A 354      -5.334   7.328  -6.929  1.00  0.00           H
ATOM   4149 HE2 PHE A 354      -5.307   8.464 -11.092  1.00  0.00           H
ATOM   4150 HZ  PHE A 354      -5.186   6.698  -9.331  1.00  0.00           H
ATOM   4151 N   PHE A 355      -7.643  14.599  -8.118  1.00 22.12           N
ATOM   4152 CA  PHE A 355      -7.747  16.032  -7.916  1.00 21.19           C
ATOM   4153 C   PHE A 355      -9.210  16.481  -7.833  1.00 20.42           C
ATOM   4154 O   PHE A 355      -9.515  17.398  -7.076  1.00 20.48           O
ATOM   4155 CB  PHE A 355      -7.106  16.704  -9.141  1.00 22.36           C
ATOM   4156 CG  PHE A 355      -5.663  16.293  -9.384  1.00 24.02           C
ATOM   4157 CD1 PHE A 355      -4.735  16.306  -8.323  1.00 22.48           C
ATOM   4158 CD2 PHE A 355      -5.248  15.882 -10.666  1.00 24.49           C
ATOM   4159 CE1 PHE A 355      -3.409  15.902  -8.538  1.00 22.98           C
ATOM   4160 CE2 PHE A 355      -3.908  15.512 -10.890  1.00 25.14           C
ATOM   4161 CZ  PHE A 355      -2.986  15.535  -9.827  1.00 26.02           C
ATOM   4162 H   PHE A 355      -7.648  14.260  -9.078  1.00  0.00           H
ATOM   4163 HA  PHE A 355      -7.237  16.332  -7.003  1.00  0.00           H
ATOM   4164 HB2 PHE A 355      -7.690  16.499 -10.040  1.00  0.00           H
ATOM   4165 HB3 PHE A 355      -7.129  17.782  -9.004  1.00  0.00           H
ATOM   4166 HD1 PHE A 355      -5.026  16.638  -7.340  1.00  0.00           H
ATOM   4167 HD2 PHE A 355      -5.955  15.851 -11.479  1.00  0.00           H
ATOM   4168 HE1 PHE A 355      -2.725  15.887  -7.706  1.00  0.00           H
ATOM   4169 HE2 PHE A 355      -3.593  15.200 -11.876  1.00  0.00           H
ATOM   4170 HZ  PHE A 355      -1.954  15.265  -9.999  1.00  0.00           H
ATOM   4171 N   TYR A 356     -10.104  15.831  -8.589  1.00 19.12           N
ATOM   4172 CA  TYR A 356     -11.517  16.186  -8.735  1.00 18.71           C
ATOM   4173 C   TYR A 356     -12.346  15.832  -7.503  1.00 20.13           C
ATOM   4174 O   TYR A 356     -13.335  16.496  -7.211  1.00 17.47           O
ATOM   4175 CB  TYR A 356     -12.116  15.336  -9.868  1.00 17.74           C
ATOM   4176 CG  TYR A 356     -11.687  15.618 -11.288  1.00 21.18           C
ATOM   4177 CD1 TYR A 356     -10.977  16.783 -11.642  1.00 20.84           C
ATOM   4178 CD2 TYR A 356     -12.025  14.681 -12.280  1.00 21.61           C
ATOM   4179 CE1 TYR A 356     -10.542  16.964 -12.964  1.00 22.87           C
ATOM   4180 CE2 TYR A 356     -11.610  14.878 -13.606  1.00 22.71           C
ATOM   4181 CZ  TYR A 356     -10.830  15.998 -13.942  1.00 24.04           C
ATOM   4182 OH  TYR A 356     -10.326  16.130 -15.200  1.00 25.85           O
ATOM   4183 H   TYR A 356      -9.770  15.038  -9.120  1.00  0.00           H
ATOM   4184 HA  TYR A 356     -11.633  17.255  -8.920  1.00  0.00           H
ATOM   4185 HB2 TYR A 356     -11.935  14.279  -9.668  1.00  0.00           H
ATOM   4186 HB3 TYR A 356     -13.193  15.439  -9.863  1.00  0.00           H
ATOM   4187 HD1 TYR A 356     -10.739  17.538 -10.912  1.00  0.00           H
ATOM   4188 HD2 TYR A 356     -12.572  13.784 -12.031  1.00  0.00           H
ATOM   4189 HE1 TYR A 356      -9.969  17.839 -13.220  1.00  0.00           H
ATOM   4190 HE2 TYR A 356     -11.864  14.135 -14.348  1.00  0.00           H
ATOM   4191 HH  TYR A 356     -10.207  15.261 -15.597  1.00  0.00           H
ATOM   4192 N   GLU A 357     -11.976  14.751  -6.825  1.00 19.72           N
ATOM   4193 CA  GLU A 357     -12.524  14.319  -5.558  1.00 19.69           C
ATOM   4194 C   GLU A 357     -11.300  14.273  -4.640  1.00 21.19           C
ATOM   4195 O   GLU A 357     -10.597  15.283  -4.521  1.00 22.16           O
ATOM   4196 CB  GLU A 357     -13.320  13.008  -5.764  1.00 19.32           C
ATOM   4197 CG  GLU A 357     -14.668  13.233  -6.496  1.00 20.09           C
ATOM   4198 CD  GLU A 357     -14.932  12.305  -7.677  1.00 23.06           C
ATOM   4199 OE1 GLU A 357     -14.657  11.088  -7.595  1.00 20.05           O
ATOM   4200 OE2 GLU A 357     -15.462  12.809  -8.692  1.00 23.66           O1-
ATOM   4201 H   GLU A 357     -11.170  14.235  -7.169  1.00  0.00           H
ATOM   4202 HA  GLU A 357     -13.188  15.073  -5.133  1.00  0.00           H
ATOM   4203 HB2 GLU A 357     -12.699  12.289  -6.297  1.00  0.00           H
ATOM   4204 HB3 GLU A 357     -13.544  12.557  -4.799  1.00  0.00           H
ATOM   4205 HG2 GLU A 357     -15.495  13.148  -5.797  1.00  0.00           H
ATOM   4206 HG3 GLU A 357     -14.727  14.254  -6.870  1.00  0.00           H
ATOM   4207 N   ARG A 358     -11.018  13.140  -4.002  1.00 19.68           N
ATOM   4208 CA  ARG A 358      -9.808  12.928  -3.224  1.00 19.97           C
ATOM   4209 C   ARG A 358      -9.541  11.427  -3.201  1.00 20.10           C
ATOM   4210 O   ARG A 358      -9.543  10.824  -2.130  1.00 19.00           O
ATOM   4211 CB  ARG A 358      -9.929  13.603  -1.840  1.00 19.86           C
ATOM   4212 CG  ARG A 358      -8.647  13.565  -0.983  1.00 19.86           C
ATOM   4213 CD  ARG A 358      -8.882  13.015   0.430  1.00 19.26           C
ATOM   4214 NE  ARG A 358      -9.117  11.567   0.397  1.00 20.24           N
ATOM   4215 CZ  ARG A 358      -9.042  10.720   1.426  1.00 19.04           C
ATOM   4216 NH1 ARG A 358      -8.861  11.156   2.669  1.00 17.28           N
ATOM   4217 NH2 ARG A 358      -9.142   9.417   1.208  1.00 18.85           N1+
ATOM   4218 H   ARG A 358     -11.635  12.338  -4.099  1.00  0.00           H
ATOM   4219 HA  ARG A 358      -8.967  13.382  -3.753  1.00  0.00           H
ATOM   4220 HB2 ARG A 358     -10.218  14.646  -1.968  1.00  0.00           H
ATOM   4221 HB3 ARG A 358     -10.755  13.132  -1.305  1.00  0.00           H
ATOM   4222 HG2 ARG A 358      -7.866  12.981  -1.472  1.00  0.00           H
ATOM   4223 HG3 ARG A 358      -8.237  14.573  -0.913  1.00  0.00           H
ATOM   4224 HD2 ARG A 358      -7.983  13.188   1.015  1.00  0.00           H
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ATOM   4225  HD3 ARG A 358      -9.697  13.524   0.942  1.00  0.00           H
ATOM   4226  HE  ARG A 358      -9.272  11.177  -0.548  1.00  0.00           H
ATOM   4227 HH11 ARG A 358      -8.988  12.133   2.952  1.00  0.00           H
ATOM   4228 HH12 ARG A 358      -8.532  10.509   3.389  1.00  0.00           H
ATOM   4229 HH21 ARG A 358      -9.337   9.003   0.283  1.00  0.00           H
ATOM   4230 HH22 ARG A 358      -9.085   8.749   1.978  1.00  0.00           H
ATOM   4231  N   TRP A 359      -9.375  10.817  -4.380  1.00 19.26           N
ATOM   4232  CA  TRP A 359      -9.151   9.379  -4.521  1.00 19.61           C
ATOM   4233  C   TRP A 359      -7.820   8.983  -3.874  1.00 18.49           C
ATOM   4234  O   TRP A 359      -6.817   9.672  -4.065  1.00 21.29           O
ATOM   4235  CB  TRP A 359      -9.104   8.970  -6.006  1.00 19.93           C
ATOM   4236  CG  TRP A 359     -10.301   9.207  -6.876  1.00 23.18           C
ATOM   4237  CD1 TRP A 359     -11.474   9.783  -6.524  1.00 23.43           C
ATOM   4238  CD2 TRP A 359     -10.433   8.870  -8.287  1.00 22.00           C
ATOM   4239  NE1 TRP A 359     -12.308   9.852  -7.622  1.00 26.12           N
ATOM   4240  CE3 TRP A 359      -9.588   8.256  -9.242  1.00 22.65           C
ATOM   4241  CE2 TRP A 359     -11.716   9.304  -8.738  1.00 24.16           C
ATOM   4242  CZ3 TRP A 359     -10.009   8.085 -10.576  1.00 21.38           C
ATOM   4243  CZ2 TRP A 359     -12.126   9.146 -10.070  1.00 24.29           C
ATOM   4244  CH2 TRP A 359     -11.275   8.521 -10.992  1.00 23.99           C
ATOM   4245  H   TRP A 359      -9.390  11.376  -5.218  1.00  0.00           H
ATOM   4246  HA  TRP A 359      -9.966   8.854  -4.021  1.00  0.00           H
ATOM   4247  HB2 TRP A 359      -8.262   9.458  -6.494  1.00  0.00           H
ATOM   4248  HB3 TRP A 359      -8.878   7.905  -6.073  1.00  0.00           H
ATOM   4249  HD1 TRP A 359     -11.706  10.155  -5.538  1.00  0.00           H
ATOM   4250  HE1 TRP A 359     -13.237  10.334  -7.604  1.00  0.00           H
ATOM   4251  HE3 TRP A 359      -8.603   7.925  -8.946  1.00  0.00           H
ATOM   4252  HZ3 TRP A 359      -9.361   7.636 -11.303  1.00  0.00           H
ATOM   4253  HZ2 TRP A 359     -13.083   9.499 -10.393  1.00  0.00           H
ATOM   4254  HH2 TRP A 359     -11.577   8.401 -12.021  1.00  0.00           H
ATOM   4255  N   GLY A 360      -7.819   7.867  -3.149  1.00 20.56           N
ATOM   4256  CA  GLY A 360      -6.673   7.373  -2.412  1.00 19.56           C
ATOM   4257  C   GLY A 360      -6.011   6.229  -3.173  1.00 19.97           C
ATOM   4258  O   GLY A 360      -6.675   5.461  -3.871  1.00 19.92           O
ATOM   4259  H   GLY A 360      -8.702   7.412  -2.968  1.00  0.00           H
ATOM   4260  HA2 GLY A 360      -5.966   8.166  -2.189  1.00  0.00           H
ATOM   4261  HA3 GLY A 360      -7.024   6.996  -1.452  1.00  0.00           H
ATOM   4262  N   ASP A 361      -4.693   6.088  -3.013  1.00 18.87           N
ATOM   4263  CA  ASP A 361      -3.874   5.037  -3.624  1.00 20.81           C
ATOM   4264  C   ASP A 361      -4.204   3.640  -3.061  1.00 20.03           C
ATOM   4265  O   ASP A 361      -4.081   2.652  -3.783  1.00 22.19           O
ATOM   4266  CB  ASP A 361      -2.370   5.351  -3.414  1.00 21.93           C
ATOM   4267  CG  ASP A 361      -1.938   5.458  -1.957  1.00 21.87           C
ATOM   4268  OD1 ASP A 361      -2.205   6.510  -1.337  1.00 25.70           O
ATOM   4269  OD2 ASP A 361      -1.399   4.474  -1.413  1.00 23.34           O1-
ATOM   4270  H   ASP A 361      -4.201   6.766  -2.445  1.00  0.00           H
ATOM   4271  HA  ASP A 361      -4.091   5.018  -4.690  1.00  0.00           H
ATOM   4272  HB2 ASP A 361      -1.767   4.582  -3.896  1.00  0.00           H
ATOM   4273  HB3 ASP A 361      -2.113   6.283  -3.915  1.00  0.00           H
ATOM   4274  N   ALA A 362      -4.650   3.545  -1.801  1.00 20.12           N
ATOM   4275  CA  ALA A 362      -5.011   2.292  -1.134  1.00 19.36           C
ATOM   4276  C   ALA A 362      -6.176   1.532  -1.814  1.00 19.28           C
ATOM   4277  O   ALA A 362      -5.954   0.379  -2.196  1.00 17.72           O
ATOM   4278  CB  ALA A 362      -5.262   2.531   0.359  1.00 20.36           C
ATOM   4279  H   ALA A 362      -4.707   4.405  -1.279  1.00  0.00           H
ATOM   4280  HA  ALA A 362      -4.135   1.649  -1.214  1.00  0.00           H
ATOM   4281  HB1 ALA A 362      -5.156   1.603   0.905  1.00  0.00           H
ATOM   4282  HB2 ALA A 362      -4.531   3.203   0.793  1.00  0.00           H
ATOM   4283  HB3 ALA A 362      -6.248   2.929   0.572  1.00  0.00           H
ATOM   4284  N   PRO A 363      -7.367   2.134  -2.071  1.00 17.22           N
ATOM   4285  CA  PRO A 363      -8.393   1.508  -2.917  1.00 17.69           C
ATOM   4286  C   PRO A 363      -7.946   1.221  -4.360  1.00 17.56           C
ATOM   4287  O   PRO A 363      -8.207   0.117  -4.831  1.00 18.84           O
ATOM   4288  CB  PRO A 363      -9.644   2.392  -2.811  1.00 18.18           C
ATOM   4289  CG  PRO A 363      -9.135   3.740  -2.336  1.00 20.02           C
ATOM   4290  CD  PRO A 363      -7.843   3.430  -1.578  1.00 17.04           C
ATOM   4291  HA  PRO A 363      -8.643   0.541  -2.483  1.00  0.00           H
ATOM   4292  HB2 PRO A 363     -10.212   2.458  -3.741  1.00  0.00           H
ATOM   4293  HB3 PRO A 363     -10.313   1.980  -2.055  1.00  0.00           H
ATOM   4294  HG2 PRO A 363      -8.913   4.363  -3.203  1.00  0.00           H
ATOM   4295  HG3 PRO A 363      -9.857   4.281  -1.725  1.00  0.00           H
ATOM   4296  HD2 PRO A 363      -7.122   4.235  -1.656  1.00  0.00           H
ATOM   4297  HD3 PRO A 363      -8.095   3.324  -0.522  1.00  0.00           H
ATOM   4298  N   VAL A 364      -7.208   2.123  -5.026  1.00 15.81           N
ATOM   4299  CA  VAL A 364      -6.635   1.907  -6.366  1.00 13.67           C
ATOM   4300  C   VAL A 364      -5.701   0.674  -6.410  1.00 15.13           C
ATOM   4301  O   VAL A 364      -5.815  -0.160  -7.308  1.00 12.77           O
ATOM   4302  CB  VAL A 364      -5.951   3.219  -6.846  1.00 16.16           C
ATOM   4303  CG1 VAL A 364      -5.145   3.073  -8.151  1.00 13.85           C
ATOM   4304  CG2 VAL A 364      -6.982   4.349  -7.019  1.00 15.04           C
ATOM   4305  H   VAL A 364      -7.027   3.018  -4.590  1.00  0.00           H
ATOM   4306  HA  VAL A 364      -7.462   1.687  -7.046  1.00  0.00           H
ATOM   4307  HB  VAL A 364      -5.243   3.535  -6.080  1.00  0.00           H
ATOM   4308 HG11 VAL A 364      -4.769   4.037  -8.489  1.00  0.00           H
ATOM   4309 HG12 VAL A 364      -4.281   2.419  -8.031  1.00  0.00           H
ATOM   4310 HG13 VAL A 364      -5.761   2.664  -8.950  1.00  0.00           H
ATOM   4311 HG21 VAL A 364      -6.498   5.285  -7.296  1.00  0.00           H
ATOM   4312 HG22 VAL A 364      -7.705   4.106  -7.798  1.00  0.00           H
ATOM   4313 HG23 VAL A 364      -7.540   4.537  -6.104  1.00  0.00           H
ATOM   4314  N   HIS A 365      -4.835   0.500  -5.400  1.00 14.05           N
ATOM   4315  CA  HIS A 365      -3.976  -0.682  -5.263  1.00 17.18           C
ATOM   4316  C   HIS A 365      -4.794  -1.948  -4.981  1.00 16.98           C
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ATOM   4317  O   HIS A 365     -4.417  -3.021  -5.438  1.00 19.79          O
ATOM   4318  CB  HIS A 365     -2.992  -0.542  -4.084  1.00 16.11          C
ATOM   4319  CG  HIS A 365     -1.863   0.442  -4.223  1.00 19.71          C
ATOM   4320  ND1 HIS A 365     -0.841   0.448  -3.299  1.00 19.57          N1+
ATOM   4321  CD2 HIS A 365     -1.590   1.455  -5.125  1.00 18.63          C
ATOM   4322  CE1 HIS A 365      0.005   1.410  -3.622  1.00 21.02          C
ATOM   4323  NE2 HIS A 365     -0.412   2.055  -4.703  1.00 20.54          N
ATOM   4324  H   HIS A 365     -4.763   1.240  -4.704  1.00  0.00          H
ATOM   4325  HA  HIS A 365     -3.417  -0.835  -6.190  1.00  0.00          H
ATOM   4326  HB2 HIS A 365     -3.531  -0.304  -3.166  1.00  0.00          H
ATOM   4327  HB3 HIS A 365     -2.516  -1.509  -3.901  1.00  0.00          H
ATOM   4328  HD1 HIS A 365     -0.699  -0.214  -2.484  1.00  0.00          H
ATOM   4329  HD2 HIS A 365     -2.134   1.811  -5.990  1.00  0.00          H
ATOM   4330  HE1 HIS A 365      0.899   1.639  -3.057  1.00  0.00          H
ATOM   4331  HE2 HIS A 365      0.047   2.907  -5.064  1.00  0.00          H
ATOM   4332  N   SER A 366     -5.899  -1.839  -4.236  1.00 18.87          N
ATOM   4333  CA  SER A 366     -6.687  -2.986  -3.797  1.00 18.88          C
ATOM   4334  C   SER A 366     -7.630  -3.473  -4.898  1.00 19.48          C
ATOM   4335  O   SER A 366     -7.740  -4.680  -5.098  1.00 17.62          O
ATOM   4336  CB  SER A 366     -7.542  -2.572  -2.598  1.00 18.94          C
ATOM   4337  OG  SER A 366     -6.688  -2.188  -1.540  1.00 19.20          O
ATOM   4338  H   SER A 366     -6.178  -0.917  -3.927  1.00  0.00          H
ATOM   4339  HA  SER A 366     -6.029  -3.811  -3.519  1.00  0.00          H
ATOM   4340  HB2 SER A 366     -8.224  -1.757  -2.844  1.00  0.00          H
ATOM   4341  HB3 SER A 366     -8.153  -3.413  -2.266  1.00  0.00          H
ATOM   4342  HG  SER A 366     -6.200  -1.406  -1.805  1.00  0.00          H
ATOM   4343  N   ILE A 367     -8.267  -2.552  -5.640  1.00 19.28          N
ATOM   4344  CA  ILE A 367     -9.078  -2.851  -6.821  1.00 18.73          C
ATOM   4345  C   ILE A 367     -8.209  -3.535  -7.893  1.00 19.02          C
ATOM   4346  O   ILE A 367     -8.667  -4.471  -8.540  1.00 20.14          O
ATOM   4347  CB  ILE A 367     -9.804  -1.564  -7.320  1.00 16.72          C
ATOM   4348  CG1 ILE A 367    -10.828  -1.053  -6.271  1.00 15.35          C
ATOM   4349  CG2 ILE A 367    -10.515  -1.758  -8.678  1.00 14.85          C
ATOM   4350  CD1 ILE A 367    -11.237   0.415  -6.462  1.00 15.61          C
ATOM   4351  H   ILE A 367     -8.134  -1.566  -5.418  1.00  0.00          H
ATOM   4352  HA  ILE A 367     -9.834  -3.572  -6.522  1.00  0.00          H
ATOM   4353  HB  ILE A 367     -9.043  -0.794  -7.460  1.00  0.00          H
ATOM   4354 HG12 ILE A 367    -11.714  -1.688  -6.276  1.00  0.00          H
ATOM   4355 HG13 ILE A 367    -10.422  -1.146  -5.264  1.00  0.00          H
ATOM   4356 HG21 ILE A 367    -11.053  -0.863  -8.982  1.00  0.00          H
ATOM   4357 HG22 ILE A 367     -9.805  -1.969  -9.480  1.00  0.00          H
ATOM   4358 HG23 ILE A 367    -11.228  -2.582  -8.642  1.00  0.00          H
ATOM   4359 HD11 ILE A 367    -11.904   0.736  -5.661  1.00  0.00          H
ATOM   4360 HD12 ILE A 367    -10.364   1.068  -6.444  1.00  0.00          H
ATOM   4361 HD13 ILE A 367    -11.753   0.581  -7.408  1.00  0.00          H
ATOM   4362  N   ALA A 368     -6.937  -3.138  -8.007  1.00 17.53          N
ATOM   4363  CA  ALA A 368     -5.956  -3.807  -8.843  1.00 16.44          C
ATOM   4364  C   ALA A 368     -5.513  -5.159  -8.257  1.00 18.86          C
ATOM   4365  O   ALA A 368     -5.669  -6.180  -8.918  1.00 20.08          O
ATOM   4366  CB  ALA A 368     -4.739  -2.897  -8.980  1.00 16.29          C
ATOM   4367  H   ALA A 368     -6.643  -2.323  -7.486  1.00  0.00          H
ATOM   4368  HA  ALA A 368     -6.387  -3.983  -9.831  1.00  0.00          H
ATOM   4369  HB1 ALA A 368     -3.949  -3.424  -9.508  1.00  0.00          H
ATOM   4370  HB2 ALA A 368     -4.998  -2.004  -9.548  1.00  0.00          H
ATOM   4371  HB3 ALA A 368     -4.339  -2.579  -8.018  1.00  0.00          H
ATOM   4372  N   ALA A 369     -4.981  -5.205  -7.027  1.00 18.52          N
ATOM   4373  CA  ALA A 369     -4.403  -6.409  -6.412  1.00 20.68          C
ATOM   4374  C   ALA A 369     -5.408  -7.552  -6.202  1.00 20.05          C
ATOM   4375  O   ALA A 369     -5.004  -8.708  -6.136  1.00 18.61          O
ATOM   4376  CB  ALA A 369     -3.763  -6.056  -5.060  1.00 20.85          C
ATOM   4377  H   ALA A 369     -4.880  -4.332  -6.511  1.00  0.00          H
ATOM   4378  HA  ALA A 369     -3.623  -6.787  -7.077  1.00  0.00          H
ATOM   4379  HB1 ALA A 369     -3.396  -6.948  -4.548  1.00  0.00          H
ATOM   4380  HB2 ALA A 369     -2.909  -5.394  -5.183  1.00  0.00          H
ATOM   4381  HB3 ALA A 369     -4.471  -5.564  -4.395  1.00  0.00          H
ATOM   4382  N   ALA A 370     -6.706  -7.246  -6.113  1.00 20.81          N
ATOM   4383  CA  ALA A 370     -7.766  -8.240  -6.012  1.00 23.03          C
ATOM   4384  C   ALA A 370     -8.257  -8.728  -7.389  1.00 24.19          C
ATOM   4385  O   ALA A 370     -8.974  -9.726  -7.428  1.00 25.96          O
ATOM   4386  CB  ALA A 370     -8.953  -7.591  -5.287  1.00 24.55          C
ATOM   4387  H   ALA A 370     -6.968  -6.266  -6.112  1.00  0.00          H
ATOM   4388  HA  ALA A 370     -7.429  -9.104  -5.441  1.00  0.00          H
ATOM   4389  HB1 ALA A 370     -9.807  -8.264  -5.219  1.00  0.00          H
ATOM   4390  HB2 ALA A 370     -8.682  -7.301  -4.272  1.00  0.00          H
ATOM   4391  HB3 ALA A 370     -9.282  -6.696  -5.809  1.00  0.00          H
ATOM   4392  N   LEU A 371     -7.914  -8.056  -8.500  1.00 24.56          N
ATOM   4393  CA  LEU A 371     -8.417  -8.363  -9.846  1.00 24.21          C
ATOM   4394  C   LEU A 371     -7.312  -8.712 -10.848  1.00 24.41          C
ATOM   4395  O   LEU A 371     -7.573  -9.445 -11.799  1.00 21.31          O
ATOM   4396  CB  LEU A 371     -9.259  -7.190 -10.394  1.00 24.83          C
ATOM   4397  CG  LEU A 371    -10.524  -6.841  -9.582  1.00 27.38          C
ATOM   4398  CD1 LEU A 371    -11.279  -5.669 -10.229  1.00 25.79          C
ATOM   4399  CD2 LEU A 371    -11.466  -8.033  -9.372  1.00 27.66          C
ATOM   4400  H   LEU A 371     -7.298  -7.256  -8.402  1.00  0.00          H
ATOM   4401  HA  LEU A 371     -9.046  -9.249  -9.826  1.00  0.00          H
ATOM   4402  HB2 LEU A 371     -8.623  -6.304 -10.462  1.00  0.00          H
ATOM   4403  HB3 LEU A 371     -9.550  -7.405 -11.421  1.00  0.00          H
ATOM   4404  HG  LEU A 371    -10.194  -6.517  -8.598  1.00  0.00          H
ATOM   4405 HD11 LEU A 371    -12.111  -5.343  -9.605  1.00  0.00          H
ATOM   4406 HD12 LEU A 371    -10.623  -4.808 -10.368  1.00  0.00          H
ATOM   4407 HD13 LEU A 371    -11.677  -5.944 -11.205  1.00  0.00          H
ATOM   4408 HD21 LEU A 371    -12.375  -7.713  -8.870  1.00  0.00          H
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ATOM   4409 HD22 LEU A 371     -11.744  -8.502 -10.314  1.00  0.00          H
ATOM   4410 HD23 LEU A 371     -11.023  -8.792  -8.733  1.00  0.00          H
ATOM   4411  N   PHE A 372      -6.101  -8.178 -10.670  1.00 22.29          N
ATOM   4412  CA  PHE A 372      -4.957  -8.344 -11.570  1.00 20.76          C
ATOM   4413  C   PHE A 372      -3.945  -9.334 -10.975  1.00 22.10          C
ATOM   4414  O   PHE A 372      -2.827  -9.455 -11.470  1.00 20.77          O
ATOM   4415  CB  PHE A 372      -4.260  -6.979 -11.786  1.00 20.58          C
ATOM   4416  CG  PHE A 372      -5.125  -5.837 -12.304  1.00 20.46          C
ATOM   4417  CD1 PHE A 372      -6.370  -6.066 -12.934  1.00 19.24          C
ATOM   4418  CD2 PHE A 372      -4.680  -4.514 -12.119  1.00 17.33          C
ATOM   4419  CE1 PHE A 372      -7.200  -4.987 -13.278  1.00 21.85          C
ATOM   4420  CE2 PHE A 372      -5.501  -3.432 -12.487  1.00 20.11          C
ATOM   4421  CZ  PHE A 372      -6.769  -3.668 -13.047  1.00 20.51          C
ATOM   4422  H   PHE A 372      -5.978  -7.499  -9.919  1.00  0.00          H
ATOM   4423  HA  PHE A 372      -5.280  -8.745 -12.531  1.00  0.00          H
ATOM   4424  HB2 PHE A 372      -3.807  -6.657 -10.847  1.00  0.00          H
ATOM   4425  HB3 PHE A 372      -3.428  -7.090 -12.482  1.00  0.00          H
ATOM   4426  HD1 PHE A 372      -6.722  -7.066 -13.137  1.00  0.00          H
ATOM   4427  HD2 PHE A 372      -3.713  -4.326 -11.676  1.00  0.00          H
ATOM   4428  HE1 PHE A 372      -8.168  -5.177 -13.717  1.00  0.00          H
ATOM   4429  HE2 PHE A 372      -5.163  -2.421 -12.330  1.00  0.00          H
ATOM   4430  HZ  PHE A 372      -7.405  -2.838 -13.317  1.00  0.00          H
ATOM   4431  N   LEU A 373      -4.338 -10.058  -9.927  1.00 21.49          N
ATOM   4432  CA  LEU A 373      -3.660 -11.238  -9.429  1.00 22.37          C
ATOM   4433  C   LEU A 373      -4.685 -12.373  -9.369  1.00 22.61          C
ATOM   4434  O   LEU A 373      -5.837 -12.110  -9.003  1.00 21.20          O
ATOM   4435  CB  LEU A 373      -3.106 -10.987  -8.010  1.00 21.57          C
ATOM   4436  CG  LEU A 373      -1.890 -10.046  -7.918  1.00 21.65          C
ATOM   4437  CD1 LEU A 373      -1.541  -9.765  -6.447  1.00 25.02          C
ATOM   4438  CD2 LEU A 373      -0.667 -10.610  -8.658  1.00 24.25          C
ATOM   4439  H   LEU A 373      -5.294  -9.947  -9.619  1.00  0.00          H
ATOM   4440  HA  LEU A 373      -2.859 -11.514 -10.112  1.00  0.00          H
ATOM   4441  HB2 LEU A 373      -3.913 -10.603  -7.386  1.00  0.00          H
ATOM   4442  HB3 LEU A 373      -2.847 -11.943  -7.563  1.00  0.00          H
ATOM   4443  HG  LEU A 373      -2.155  -9.094  -8.380  1.00  0.00          H
ATOM   4444 HD11 LEU A 373      -0.680  -9.105  -6.362  1.00  0.00          H
ATOM   4445 HD12 LEU A 373      -2.372  -9.281  -5.933  1.00  0.00          H
ATOM   4446 HD13 LEU A 373      -1.309 -10.682  -5.905  1.00  0.00          H
ATOM   4447 HD21 LEU A 373       0.195  -9.964  -8.512  1.00  0.00          H
ATOM   4448 HD22 LEU A 373      -0.402 -11.605  -8.304  1.00  0.00          H
ATOM   4449 HD23 LEU A 373      -0.833 -10.665  -9.734  1.00  0.00          H
ATOM   4450  N   PRO A 374      -4.264 -13.635  -9.598  1.00 23.37          N
ATOM   4451  CA  PRO A 374      -5.053 -14.798  -9.204  1.00 23.61          C
ATOM   4452  C   PRO A 374      -4.961 -14.909  -7.672  1.00 24.19          C
ATOM   4453  O   PRO A 374      -3.877 -14.729  -7.113  1.00 25.28          O
ATOM   4454  CB  PRO A 374      -4.393 -15.974  -9.943  1.00 21.86          C
ATOM   4455  CG  PRO A 374      -2.948 -15.563 -10.164  1.00 25.99          C
ATOM   4456  CD  PRO A 374      -2.984 -14.032 -10.192  1.00 23.76          C
ATOM   4457  HA  PRO A 374      -6.089 -14.658  -9.513  1.00  0.00          H
ATOM   4458  HB2 PRO A 374      -4.493 -16.930  -9.427  1.00  0.00          H
ATOM   4459  HB3 PRO A 374      -4.851 -16.085 -10.926  1.00  0.00          H
ATOM   4460  HG2 PRO A 374      -2.353 -15.922  -9.336  1.00  0.00          H
ATOM   4461  HG3 PRO A 374      -2.522 -15.991 -11.071  1.00  0.00          H
ATOM   4462  HD2 PRO A 374      -2.141 -13.612  -9.645  1.00  0.00          H
ATOM   4463  HD3 PRO A 374      -2.930 -13.667 -11.217  1.00  0.00          H
ATOM   4464  N   LYS A 375      -6.082 -15.119  -6.968  1.00 23.78          N
ATOM   4465  CA  LYS A 375      -6.209 -14.806  -5.538  1.00 23.97          C
ATOM   4466  C   LYS A 375      -5.278 -15.573  -4.570  1.00 22.75          C
ATOM   4467  O   LYS A 375      -5.169 -15.183  -3.409  1.00 21.14          O
ATOM   4468  CB  LYS A 375      -7.688 -14.874  -5.104  1.00 23.67          C
ATOM   4469  CG  LYS A 375      -8.314 -16.273  -4.942  1.00 25.99          C
ATOM   4470  CD  LYS A 375      -9.787 -16.173  -4.501  1.00 27.02          C
ATOM   4471  CE  LYS A 375     -10.237 -17.328  -3.594  1.00 27.83          C
ATOM   4472  NZ  LYS A 375     -11.544 -17.053  -2.967  1.00 29.10          N1+
ATOM   4473  H   LYS A 375      -6.950 -15.255  -7.487  1.00  0.00          H
ATOM   4474  HA  LYS A 375      -5.910 -13.760  -5.449  1.00  0.00          H
ATOM   4475  HB2 LYS A 375      -7.764 -14.355  -4.147  1.00  0.00          H
ATOM   4476  HB3 LYS A 375      -8.287 -14.287  -5.801  1.00  0.00          H
ATOM   4477  HG2 LYS A 375      -8.237 -16.838  -5.872  1.00  0.00          H
ATOM   4478  HG3 LYS A 375      -7.743 -16.827  -4.196  1.00  0.00          H
ATOM   4479  HD2 LYS A 375      -9.917 -15.243  -3.953  1.00  0.00          H
ATOM   4480  HD3 LYS A 375     -10.425 -16.087  -5.382  1.00  0.00          H
ATOM   4481  HE2 LYS A 375     -10.283 -18.261  -4.156  1.00  0.00          H
ATOM   4482  HE3 LYS A 375      -9.514 -17.486  -2.794  1.00  0.00          H
ATOM   4483  HZ1 LYS A 375     -11.677 -17.690  -2.184  1.00  0.00          H
ATOM   4484  HZ2 LYS A 375     -11.576 -16.120  -2.572  1.00  0.00          H
ATOM   4485  HZ3 LYS A 375     -12.293 -17.147  -3.633  1.00  0.00          H
ATOM   4486  N   ASP A 376      -4.560 -16.602  -5.049  1.00 22.97          N
ATOM   4487  CA  ASP A 376      -3.415 -17.241  -4.379  1.00 23.49          C
ATOM   4488  C   ASP A 376      -2.304 -16.221  -4.050  1.00 24.05          C
ATOM   4489  O   ASP A 376      -1.674 -16.304  -3.003  1.00 23.37          O
ATOM   4490  CB  ASP A 376      -2.885 -18.433  -5.239  1.00 26.21          C
ATOM   4491  CG  ASP A 376      -1.443 -18.896  -4.964  1.00 25.03          C
ATOM   4492  OD1 ASP A 376      -0.623 -18.882  -5.911  1.00 24.00          O
ATOM   4493  OD2 ASP A 376      -1.139 -19.226  -3.797  1.00 25.73          O1-
ATOM   4494  H   ASP A 376      -4.681 -16.783  -6.034  1.00  0.00          H
ATOM   4495  HA  ASP A 376      -3.757 -17.641  -3.423  1.00  0.00          H
ATOM   4496  HB2 ASP A 376      -3.540 -19.295  -5.116  1.00  0.00          H
ATOM   4497  HB3 ASP A 376      -2.932 -18.166  -6.295  1.00  0.00          H
ATOM   4498  N   LYS A 377      -2.064 -15.246  -4.934  1.00 23.50          N
ATOM   4499  CA  LYS A 377      -0.881 -14.389  -4.891  1.00 22.56          C
ATOM   4500  C   LYS A 377      -1.024 -13.183  -3.947  1.00 21.29          C
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ATOM   4501  O   LYS A 377      -0.105 -12.363  -3.865  1.00 20.97           O
ATOM   4502  CB  LYS A 377      -0.596 -13.851  -6.305  1.00 21.84           C
ATOM   4503  CG  LYS A 377      -0.586 -14.899  -7.429  1.00 23.25           C
ATOM   4504  CD  LYS A 377       0.408 -16.058  -7.285  1.00 21.18           C
ATOM   4505  CE  LYS A 377       0.202 -17.138  -8.366  1.00 22.85           C
ATOM   4506  NZ  LYS A 377       0.847 -18.400  -8.000  1.00 23.32           N1+
ATOM   4507  H   LYS A 377      -2.682 -15.163  -5.738  1.00  0.00           H
ATOM   4508  HA  LYS A 377      -0.033 -14.970  -4.550  1.00  0.00           H
ATOM   4509  HB2 LYS A 377      -1.348 -13.105  -6.552  1.00  0.00           H
ATOM   4510  HB3 LYS A 377       0.347 -13.315  -6.298  1.00  0.00           H
ATOM   4511  HG2 LYS A 377      -1.576 -15.332  -7.483  1.00  0.00           H
ATOM   4512  HG3 LYS A 377      -0.433 -14.384  -8.371  1.00  0.00           H
ATOM   4513  HD2 LYS A 377       1.437 -15.698  -7.285  1.00  0.00           H
ATOM   4514  HD3 LYS A 377       0.242 -16.517  -6.313  1.00  0.00           H
ATOM   4515  HE2 LYS A 377      -0.859 -17.362  -8.475  1.00  0.00           H
ATOM   4516  HE3 LYS A 377       0.571 -16.811  -9.338  1.00  0.00           H
ATOM   4517  HZ1 LYS A 377       0.449 -18.680  -7.085  1.00  0.00           H
ATOM   4518  HZ2 LYS A 377       0.649 -19.121  -8.668  1.00  0.00           H
ATOM   4519  HZ3 LYS A 377       1.878 -18.278  -7.961  1.00  0.00           H
ATOM   4520  N   ILE A 378      -2.153 -13.069  -3.248  1.00 20.46           N
ATOM   4521  CA  ILE A 378      -2.448 -12.021  -2.286  1.00 19.71           C
ATOM   4522  C   ILE A 378      -2.198 -12.659  -0.903  1.00 21.20           C
ATOM   4523  O   ILE A 378      -2.713 -13.743  -0.623  1.00 23.96           O
ATOM   4524  CB  ILE A 378      -3.937 -11.584  -2.442  1.00 19.96           C
ATOM   4525  CG1 ILE A 378      -4.360 -11.343  -3.917  1.00 16.92           C
ATOM   4526  CG2 ILE A 378      -4.205 -10.314  -1.609  1.00 15.66           C
ATOM   4527  CD1 ILE A 378      -5.873 -11.184  -4.115  1.00 19.39           C
ATOM   4528  H   ILE A 378      -2.796 -13.850  -3.274  1.00  0.00           H
ATOM   4529  HA  ILE A 378      -1.799 -11.160  -2.446  1.00  0.00           H
ATOM   4530  HB  ILE A 378      -4.569 -12.385  -2.054  1.00  0.00           H
ATOM   4531 HG12 ILE A 378      -3.842 -10.471  -4.318  1.00  0.00           H
ATOM   4532 HG13 ILE A 378      -4.062 -12.177  -4.553  1.00  0.00           H
ATOM   4533 HG21 ILE A 378      -5.246 -10.003  -1.653  1.00  0.00           H
ATOM   4534 HG22 ILE A 378      -3.966 -10.474  -0.559  1.00  0.00           H
ATOM   4535 HG23 ILE A 378      -3.603  -9.476  -1.960  1.00  0.00           H
ATOM   4536 HD11 ILE A 378      -6.111 -11.131  -5.179  1.00  0.00           H
ATOM   4537 HD12 ILE A 378      -6.417 -12.031  -3.698  1.00  0.00           H
ATOM   4538 HD13 ILE A 378      -6.249 -10.271  -3.656  1.00  0.00           H
ATOM   4539  N   HIS A 379      -1.408 -12.010  -0.042  1.00 20.04           N
ATOM   4540  CA  HIS A 379      -1.042 -12.491   1.289  1.00 20.47           C
ATOM   4541  C   HIS A 379      -1.429 -11.459   2.353  1.00 21.04           C
ATOM   4542  O   HIS A 379      -1.191 -10.267   2.180  1.00 19.94           O
ATOM   4543  CB  HIS A 379       0.464 -12.816   1.331  1.00 21.51           C
ATOM   4544  CG  HIS A 379       0.942 -13.394   2.636  1.00 21.45           C
ATOM   4545  ND1 HIS A 379       0.376 -14.543   3.197  1.00 20.38           N
ATOM   4546  CD2 HIS A 379       1.948 -12.951   3.460  1.00 22.37           C
ATOM   4547  CE1 HIS A 379       1.035 -14.727   4.336  1.00 22.41           C
ATOM   4548  NE2 HIS A 379       1.986 -13.816   4.540  1.00 22.62           N
ATOM   4549  H   HIS A 379      -1.005 -11.121  -0.339  1.00  0.00           H
ATOM   4550  HA  HIS A 379      -1.580 -13.414   1.514  1.00  0.00           H
ATOM   4551  HB2 HIS A 379       0.707 -13.527   0.551  1.00  0.00           H
ATOM   4552  HB3 HIS A 379       1.054 -11.927   1.116  1.00  0.00           H
ATOM   4553  HD2 HIS A 379       2.616 -12.109   3.371  1.00  0.00           H
ATOM   4554  HE1 HIS A 379       0.819 -15.526   5.033  1.00  0.00           H
ATOM   4555  HE2 HIS A 379       2.596 -13.746   5.350  1.00  0.00           H
ATOM   4556  N   TYR A 380      -1.983 -11.925   3.472  1.00 21.37           N
ATOM   4557  CA  TYR A 380      -2.118 -11.159   4.704  1.00 21.69           C
ATOM   4558  C   TYR A 380      -1.095 -11.790   5.651  1.00 20.30           C
ATOM   4559  O   TYR A 380      -1.166 -12.996   5.903  1.00 21.92           O
ATOM   4560  CB  TYR A 380      -3.547 -11.332   5.267  1.00 19.97           C
ATOM   4561  CG  TYR A 380      -3.734 -10.880   6.707  1.00 21.86           C
ATOM   4562  CD1 TYR A 380      -3.855  -9.514   7.024  1.00 18.74           C
ATOM   4563  CD2 TYR A 380      -3.734 -11.834   7.744  1.00 19.94           C
ATOM   4564  CE1 TYR A 380      -3.939  -9.106   8.372  1.00 21.73           C
ATOM   4565  CE2 TYR A 380      -3.821 -11.423   9.086  1.00 22.01           C
ATOM   4566  CZ  TYR A 380      -3.894 -10.059   9.405  1.00 22.98           C
ATOM   4567  OH  TYR A 380      -3.933  -9.686  10.715  1.00 22.49           O
ATOM   4568  H   TYR A 380      -1.952 -12.928   3.608  1.00  0.00           H
ATOM   4569  HA  TYR A 380      -1.908 -10.097   4.565  1.00  0.00           H
ATOM   4570  HB2 TYR A 380      -4.244 -10.774   4.643  1.00  0.00           H
ATOM   4571  HB3 TYR A 380      -3.849 -12.378   5.201  1.00  0.00           H
ATOM   4572  HD1 TYR A 380      -3.859  -8.775   6.236  1.00  0.00           H
ATOM   4573  HD2 TYR A 380      -3.641 -12.885   7.514  1.00  0.00           H
ATOM   4574  HE1 TYR A 380      -4.026  -8.059   8.615  1.00  0.00           H
ATOM   4575  HE2 TYR A 380      -3.831 -12.153   9.880  1.00  0.00           H
ATOM   4576  HH  TYR A 380      -4.359  -8.836  10.876  1.00  0.00           H
ATOM   4577  N   PHE A 381      -0.160 -10.994   6.171  1.00 21.02           N
ATOM   4578  CA  PHE A 381       0.830 -11.445   7.143  1.00 22.01           C
ATOM   4579  C   PHE A 381       0.178 -11.489   8.535  1.00 21.75           C
ATOM   4580  O   PHE A 381       0.157 -10.497   9.266  1.00 21.88           O
ATOM   4581  CB  PHE A 381       2.006 -10.456   7.165  1.00 21.96           C
ATOM   4582  CG  PHE A 381       2.949 -10.534   5.980  1.00 23.44           C
ATOM   4583  CD1 PHE A 381       4.008 -11.465   5.990  1.00 24.95           C
ATOM   4584  CD2 PHE A 381       2.811  -9.647   4.896  1.00 24.30           C
ATOM   4585  CE1 PHE A 381       4.930 -11.503   4.927  1.00 24.65           C
ATOM   4586  CE2 PHE A 381       3.730  -9.691   3.834  1.00 24.16           C
ATOM   4587  CZ  PHE A 381       4.794 -10.611   3.849  1.00 22.13           C
ATOM   4588  H   PHE A 381      -0.168 -10.008   5.926  1.00  0.00           H
ATOM   4589  HA  PHE A 381       1.206 -12.438   6.892  1.00  0.00           H
ATOM   4590  HB2 PHE A 381       1.655  -9.432   7.285  1.00  0.00           H
ATOM   4591  HB3 PHE A 381       2.603 -10.673   8.047  1.00  0.00           H
ATOM   4592  HD1 PHE A 381       4.132 -12.139   6.829  1.00  0.00           H
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ATOM   4593  HD2 PHE A 381       2.015  -8.920   4.881  1.00  0.00           H
ATOM   4594  HE1 PHE A 381       5.743 -12.215   4.949  1.00  0.00           H
ATOM   4595  HE2 PHE A 381       3.629  -8.993   3.024  1.00  0.00           H
ATOM   4596  HZ  PHE A 381       5.504 -10.635   3.037  1.00  0.00           H
ATOM   4597  N   SER A 382      -0.358 -12.657   8.899  1.00 22.55           N
ATOM   4598  CA  SER A 382      -0.973 -12.952  10.190  1.00 23.85           C
ATOM   4599  C   SER A 382       0.052 -13.190  11.311  1.00 23.18           C
ATOM   4600  O   SER A 382      -0.331 -13.339  12.467  1.00 24.66           O
ATOM   4601  CB  SER A 382      -1.827 -14.224   9.996  1.00 23.74           C
ATOM   4602  OG  SER A 382      -1.094 -15.318   9.458  1.00 23.95           O
ATOM   4603  H   SER A 382      -0.323 -13.418   8.231  1.00  0.00           H
ATOM   4604  HA  SER A 382      -1.599 -12.116  10.503  1.00  0.00           H
ATOM   4605  HB2 SER A 382      -2.287 -14.522  10.940  1.00  0.00           H
ATOM   4606  HB3 SER A 382      -2.639 -14.011   9.310  1.00  0.00           H
ATOM   4607  HG  SER A 382      -0.314 -15.448   9.983  1.00  0.00           H
ATOM   4608  N   ASP A 383       1.332 -13.269  10.949  1.00 25.17           N
ATOM   4609  CA  ASP A 383       2.526 -13.435  11.766  1.00 23.87           C
ATOM   4610  C   ASP A 383       3.137 -12.063  12.114  1.00 23.92           C
ATOM   4611  O   ASP A 383       3.907 -11.971  13.070  1.00 24.24           O
ATOM   4612  CB  ASP A 383       3.571 -14.210  10.911  1.00 23.64           C
ATOM   4613  CG  ASP A 383       3.882 -13.619   9.528  1.00 23.19           C
ATOM   4614  OD1 ASP A 383       2.916 -13.315   8.790  1.00 22.50           O
ATOM   4615  OD2 ASP A 383       5.079 -13.477   9.209  1.00 22.18           O1-
ATOM   4616  H   ASP A 383       1.562 -13.177   9.954  1.00  0.00           H
ATOM   4617  HA  ASP A 383       2.298 -13.975  12.686  1.00  0.00           H
ATOM   4618  HB2 ASP A 383       4.506 -14.298  11.467  1.00  0.00           H
ATOM   4619  HB3 ASP A 383       3.225 -15.230  10.753  1.00  0.00           H
ATOM   4620  N   ILE A 384       2.800 -10.997  11.373  1.00 22.55           N
ATOM   4621  CA  ILE A 384       3.323  -9.656  11.591  1.00 22.33           C
ATOM   4622  C   ILE A 384       2.291  -8.861  12.405  1.00 23.48           C
ATOM   4623  O   ILE A 384       1.113  -8.756  12.058  1.00 25.39           O
ATOM   4624  CB  ILE A 384       3.644  -8.965  10.232  1.00 22.93           C
ATOM   4625  CG1 ILE A 384       4.759  -9.755   9.497  1.00 21.02           C
ATOM   4626  CG2 ILE A 384       4.055  -7.482  10.395  1.00 18.69           C
ATOM   4627  CD1 ILE A 384       5.275  -9.123   8.196  1.00 22.41           C
ATOM   4628  H   ILE A 384       2.122 -11.129  10.635  1.00  0.00           H
ATOM   4629  HA  ILE A 384       4.254  -9.709  12.159  1.00  0.00           H
ATOM   4630  HB  ILE A 384       2.741  -8.979   9.620  1.00  0.00           H
ATOM   4631 HG12 ILE A 384       5.599  -9.912  10.169  1.00  0.00           H
ATOM   4632 HG13 ILE A 384       4.411 -10.762   9.269  1.00  0.00           H
ATOM   4633 HG21 ILE A 384       4.238  -7.004   9.434  1.00  0.00           H
ATOM   4634 HG22 ILE A 384       3.279  -6.886  10.874  1.00  0.00           H
ATOM   4635 HG23 ILE A 384       4.962  -7.397  10.993  1.00  0.00           H
ATOM   4636 HD11 ILE A 384       5.912  -9.828   7.658  1.00  0.00           H
ATOM   4637 HD12 ILE A 384       4.458  -8.844   7.533  1.00  0.00           H
ATOM   4638 HD13 ILE A 384       5.871  -8.235   8.390  1.00  0.00           H
ATOM   4639  N   GLY A 385       2.785  -8.218  13.460  1.00 22.88           N
ATOM   4640  CA  GLY A 385       2.081  -7.263  14.290  1.00 21.82           C
ATOM   4641  C   GLY A 385       2.719  -5.910  14.011  1.00 20.82           C
ATOM   4642  O   GLY A 385       3.946  -5.791  13.978  1.00 19.73           O
ATOM   4643  H   GLY A 385       3.763  -8.351  13.659  1.00  0.00           H
ATOM   4644  HA2 GLY A 385       1.017  -7.261  14.063  1.00  0.00           H
ATOM   4645  HA3 GLY A 385       2.190  -7.517  15.344  1.00  0.00           H
ATOM   4646  N   TYR A 386       1.888  -4.904  13.758  1.00 21.09           N
ATOM   4647  CA  TYR A 386       2.235  -3.640  13.125  1.00 20.61           C
ATOM   4648  C   TYR A 386       1.268  -2.561  13.625  1.00 20.86           C
ATOM   4649  O   TYR A 386       0.178  -2.896  14.077  1.00 21.94           O
ATOM   4650  CB  TYR A 386       2.216  -3.860  11.592  1.00 21.65           C
ATOM   4651  CG  TYR A 386       2.197  -2.621  10.719  1.00 21.23           C
ATOM   4652  CD1 TYR A 386       3.396  -1.998  10.317  1.00 20.92           C
ATOM   4653  CD2 TYR A 386       0.959  -2.097  10.298  1.00 17.77           C
ATOM   4654  CE1 TYR A 386       3.350  -0.879   9.464  1.00 20.13           C
ATOM   4655  CE2 TYR A 386       0.914  -0.968   9.466  1.00 19.71           C
ATOM   4656  CZ  TYR A 386       2.111  -0.373   9.028  1.00 19.65           C
ATOM   4657  OH  TYR A 386       2.051   0.659   8.138  1.00 20.30           O
ATOM   4658  H   TYR A 386       0.901  -5.032  13.976  1.00  0.00           H
ATOM   4659  HA  TYR A 386       3.236  -3.346  13.436  1.00  0.00           H
ATOM   4660  HB2 TYR A 386       3.065  -4.475  11.298  1.00  0.00           H
ATOM   4661  HB3 TYR A 386       1.339  -4.451  11.322  1.00  0.00           H
ATOM   4662  HD1 TYR A 386       4.350  -2.387  10.641  1.00  0.00           H
ATOM   4663  HD2 TYR A 386       0.037  -2.569  10.607  1.00  0.00           H
ATOM   4664  HE1 TYR A 386       4.274  -0.431   9.131  1.00  0.00           H
ATOM   4665  HE2 TYR A 386      -0.043  -0.592   9.141  1.00  0.00           H
ATOM   4666  HH  TYR A 386       2.756   0.692   7.493  1.00  0.00           H
ATOM   4667  N   HIS A 387       1.620  -1.277  13.514  1.00 19.49           N
ATOM   4668  CA  HIS A 387       0.718  -0.148  13.737  1.00 20.54           C
ATOM   4669  C   HIS A 387       1.117   1.026  12.845  1.00 18.80           C
ATOM   4670  O   HIS A 387       2.252   1.490  12.933  1.00 18.62           O
ATOM   4671  CB  HIS A 387       0.620   0.193  15.243  1.00 20.00           C
ATOM   4672  CG  HIS A 387      -0.023   1.509  15.644  1.00 25.81           C
ATOM   4673  ND1 HIS A 387      -1.313   1.606  16.151  1.00 22.90           N1+
ATOM   4674  CD2 HIS A 387       0.503   2.791  15.671  1.00 23.86           C
ATOM   4675  CE1 HIS A 387      -1.515   2.870  16.493  1.00 24.18           C
ATOM   4676  NE2 HIS A 387      -0.472   3.629  16.182  1.00 25.10           N
ATOM   4677  H   HIS A 387       2.546  -1.067  13.149  1.00  0.00           H
ATOM   4678  HA  HIS A 387      -0.271  -0.453  13.401  1.00  0.00           H
ATOM   4679  HB2 HIS A 387       0.096  -0.610  15.753  1.00  0.00           H
ATOM   4680  HB3 HIS A 387       1.623   0.192  15.660  1.00  0.00           H
ATOM   4681  HD1 HIS A 387      -1.962   0.849  16.472  1.00  0.00           H
ATOM   4682  HD2 HIS A 387       1.481   3.172  15.405  1.00  0.00           H
ATOM   4683  HE1 HIS A 387      -2.402   3.214  17.006  1.00  0.00           H
ATOM   4684  HE2 HIS A 387      -0.366   4.632  16.459  1.00  0.00           H
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ATOM   4685  N   HIS A 388       0.166   1.540  12.057  1.00 18.98           N
ATOM   4686  CA  HIS A 388       0.188   2.866  11.449  1.00 18.64           C
ATOM   4687  C   HIS A 388      -0.925   3.655  12.165  1.00 20.19           C
ATOM   4688  O   HIS A 388      -2.034   3.126  12.248  1.00 20.72           O
ATOM   4689  CB  HIS A 388      -0.188   2.763   9.951  1.00  0.00           C
ATOM   4690  CG  HIS A 388      -0.400   4.013   9.146  1.00  0.00           C
ATOM   4691  ND1 HIS A 388      -1.482   4.139   8.303  1.00  0.00           N
ATOM   4692  CD2 HIS A 388       0.323   5.163   8.949  1.00  0.00           C
ATOM   4693  CE1 HIS A 388      -1.379   5.304   7.635  1.00  0.00           C
ATOM   4694  NE2 HIS A 388      -0.296   5.953   8.014  1.00  0.00           N
ATOM   4695  H   HIS A 388      -0.766   1.136  12.134  1.00  0.00           H
ATOM   4696  HA  HIS A 388       1.170   3.330  11.544  1.00  0.00           H
ATOM   4697  HB2 HIS A 388       0.627   2.191   9.514  1.00  0.00           H
ATOM   4698  HB3 HIS A 388      -1.074   2.134   9.872  1.00  0.00           H
ATOM   4699  HD1 HIS A 388      -2.209   3.450   8.141  1.00  0.00           H
ATOM   4700  HD2 HIS A 388       1.242   5.488   9.411  1.00  0.00           H
ATOM   4701  HE1 HIS A 388      -2.078   5.651   6.887  1.00  0.00           H
ATOM   4702  N   PRO A 389      -0.678   4.865  12.711  1.00 19.60           N
ATOM   4703  CA  PRO A 389      -1.686   5.656  13.437  1.00 19.62           C
ATOM   4704  C   PRO A 389      -3.033   5.816  12.686  1.00 19.23           C
ATOM   4705  O   PRO A 389      -3.004   6.253  11.530  1.00 20.06           O
ATOM   4706  CB  PRO A 389      -1.016   7.024  13.663  1.00 19.61           C
ATOM   4707  CG  PRO A 389       0.479   6.781  13.559  1.00 19.36           C
ATOM   4708  CD  PRO A 389       0.630   5.521  12.721  1.00 19.21           C
ATOM   4709  HA  PRO A 389      -1.819   5.160  14.393  1.00  0.00           H
ATOM   4710  HB2 PRO A 389      -1.309   7.745  12.897  1.00  0.00           H
ATOM   4711  HB3 PRO A 389      -1.276   7.459  14.626  1.00  0.00           H
ATOM   4712  HG2 PRO A 389       0.999   7.633  13.120  1.00  0.00           H
ATOM   4713  HG3 PRO A 389       0.903   6.616  14.548  1.00  0.00           H
ATOM   4714  HD2 PRO A 389       0.926   5.788  11.708  1.00  0.00           H
ATOM   4715  HD3 PRO A 389       1.398   4.874  13.145  1.00  0.00           H
ATOM   4716  N   PRO A 390      -4.208   5.531  13.295  1.00 19.23           N
ATOM   4717  CA  PRO A 390      -4.428   5.052  14.673  1.00 19.78           C
ATOM   4718  C   PRO A 390      -4.523   3.514  14.858  1.00 19.82           C
ATOM   4719  O   PRO A 390      -4.875   3.100  15.962  1.00 20.50           O
ATOM   4720  CB  PRO A 390      -5.801   5.655  15.021  1.00 16.45           C
ATOM   4721  CG  PRO A 390      -6.567   5.607  13.710  1.00 19.09           C
ATOM   4722  CD  PRO A 390      -5.487   5.906  12.673  1.00 19.54           C
ATOM   4723  HA  PRO A 390      -3.696   5.450  15.376  1.00  0.00           H
ATOM   4724  HB2 PRO A 390      -6.333   5.152  15.829  1.00  0.00           H
ATOM   4725  HB3 PRO A 390      -5.670   6.686  15.345  1.00  0.00           H
ATOM   4726  HG2 PRO A 390      -6.971   4.607  13.561  1.00  0.00           H
ATOM   4727  HG3 PRO A 390      -7.400   6.311  13.675  1.00  0.00           H
ATOM   4728  HD2 PRO A 390      -5.666   5.363  11.745  1.00  0.00           H
ATOM   4729  HD3 PRO A 390      -5.479   6.971  12.436  1.00  0.00           H
ATOM   4730  N   TYR A 391      -4.280   2.657  13.852  1.00 21.44           N
ATOM   4731  CA  TYR A 391      -4.721   1.250  13.860  1.00 22.01           C
ATOM   4732  C   TYR A 391      -3.583   0.227  13.785  1.00 21.91           C
ATOM   4733  O   TYR A 391      -2.576   0.427  13.101  1.00 21.23           O
ATOM   4734  CB  TYR A 391      -5.755   1.004  12.740  1.00 25.04           C
ATOM   4735  CG  TYR A 391      -7.082   1.709  12.943  1.00 26.98           C
ATOM   4736  CD1 TYR A 391      -7.745   1.584  14.180  1.00 27.76           C
ATOM   4737  CD2 TYR A 391      -7.670   2.469  11.909  1.00 28.12           C
ATOM   4738  CE1 TYR A 391      -8.965   2.236  14.397  1.00 29.80           C
ATOM   4739  CE2 TYR A 391      -8.905   3.115  12.125  1.00 28.51           C
ATOM   4740  CZ  TYR A 391      -9.545   3.001  13.375  1.00 30.11           C
ATOM   4741  OH  TYR A 391     -10.729   3.621  13.626  1.00 29.73           O
ATOM   4742  H   TYR A 391      -3.783   2.971  13.026  1.00  0.00           H
ATOM   4743  HA  TYR A 391      -5.204   1.033  14.811  1.00  0.00           H
ATOM   4744  HB2 TYR A 391      -5.342   1.284  11.777  1.00  0.00           H
ATOM   4745  HB3 TYR A 391      -5.973  -0.061  12.663  1.00  0.00           H
ATOM   4746  HD1 TYR A 391      -7.335   0.977  14.971  1.00  0.00           H
ATOM   4747  HD2 TYR A 391      -7.184   2.558  10.948  1.00  0.00           H
ATOM   4748  HE1 TYR A 391      -9.450   2.134  15.355  1.00  0.00           H
ATOM   4749  HE2 TYR A 391      -9.354   3.696  11.332  1.00  0.00           H
ATOM   4750  HH  TYR A 391     -11.118   4.039  12.839  1.00  0.00           H
ATOM   4751  N   ASP A 392      -3.771  -0.875  14.520  1.00 20.65           N
ATOM   4752  CA  ASP A 392      -2.808  -1.943  14.774  1.00 21.18           C
ATOM   4753  C   ASP A 392      -3.250  -3.213  14.049  1.00 20.89           C
ATOM   4754  O   ASP A 392      -4.439  -3.515  13.989  1.00 20.18           O
ATOM   4755  CB  ASP A 392      -2.699  -2.292  16.288  1.00 22.25           C
ATOM   4756  CG  ASP A 392      -2.353  -1.125  17.201  1.00 21.58           C
ATOM   4757  OD1 ASP A 392      -3.056  -0.089  17.154  1.00 20.66           O
ATOM   4758  OD2 ASP A 392      -1.318  -1.161  17.895  1.00 21.72           O1-
ATOM   4759  H   ASP A 392      -4.638  -0.952  15.043  1.00  0.00           H
ATOM   4760  HA  ASP A 392      -1.836  -1.625  14.416  1.00  0.00           H
ATOM   4761  HB2 ASP A 392      -3.632  -2.727  16.648  1.00  0.00           H
ATOM   4762  HB3 ASP A 392      -1.943  -3.066  16.429  1.00  0.00           H
ATOM   4763  N   ASN A 393      -2.279  -3.983  13.562  1.00 20.94           N
ATOM   4764  CA  ASN A 393      -2.412  -5.395  13.209  1.00 20.94           C
ATOM   4765  C   ASN A 393      -1.793  -6.148  14.391  1.00 23.33           C
ATOM   4766  O   ASN A 393      -0.723  -5.738  14.857  1.00 20.26           O
ATOM   4767  CB  ASN A 393      -1.515  -5.690  11.977  1.00 21.01           C
ATOM   4768  CG  ASN A 393      -2.061  -6.846  11.147  1.00 21.80           C
ATOM   4769  OD1 ASN A 393      -3.013  -6.642  10.406  1.00 21.19           O
ATOM   4770  ND2 ASN A 393      -1.466  -8.032  11.188  1.00 18.99           N
ATOM   4771  H   ASN A 393      -1.331  -3.673  13.770  1.00  0.00           H
ATOM   4772  HA  ASN A 393      -3.455  -5.676  13.040  1.00  0.00           H
ATOM   4773  HB2 ASN A 393      -1.495  -4.822  11.318  1.00  0.00           H
ATOM   4774  HB3 ASN A 393      -0.473  -5.880  12.237  1.00  0.00           H
ATOM   4775 HD21 ASN A 393      -0.585  -8.223  11.667  1.00  0.00           H
ATOM   4776 HD22 ASN A 393      -1.902  -8.796  10.682  1.00  0.00           H
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ATOM   4777  N   CYS A 394     -2.394  -7.242  14.865  1.00 21.34           N
ATOM   4778  CA  CYS A 394     -1.772  -8.108  15.872  1.00 23.77           C
ATOM   4779  C   CYS A 394     -2.165  -9.580  15.666  1.00 23.91           C
ATOM   4780  O   CYS A 394     -3.366  -9.849  15.640  1.00 23.61           O
ATOM   4781  CB  CYS A 394     -2.045  -7.585  17.295  1.00 24.76           C
ATOM   4782  SG  CYS A 394     -1.124  -8.419  18.616  1.00 21.89           S
ATOM   4783  H   CYS A 394     -3.322  -7.500  14.516  1.00  0.00           H
ATOM   4784  HA  CYS A 394     -0.696  -8.021  15.742  1.00  0.00           H
ATOM   4785  HB2 CYS A 394     -1.828  -6.519  17.359  1.00  0.00           H
ATOM   4786  HB3 CYS A 394     -3.100  -7.691  17.534  1.00  0.00           H
ATOM   4787  N   PRO A 395     -1.206 -10.536  15.556  1.00 24.08           N
ATOM   4788  CA  PRO A 395     -1.473 -11.986  15.551  1.00 23.62           C
ATOM   4789  C   PRO A 395     -2.318 -12.421  16.762  1.00 23.97           C
ATOM   4790  O   PRO A 395     -1.963 -12.118  17.901  1.00 22.43           O
ATOM   4791  CB  PRO A 395     -0.089 -12.652  15.612  1.00 22.83           C
ATOM   4792  CG  PRO A 395      0.874 -11.624  15.060  1.00 22.60           C
ATOM   4793  CD  PRO A 395      0.223 -10.279  15.361  1.00 24.08           C
ATOM   4794  HA  PRO A 395     -1.970 -12.237  14.613  1.00  0.00           H
ATOM   4795  HB2 PRO A 395      0.203 -12.884  16.636  1.00  0.00           H
ATOM   4796  HB3 PRO A 395     -0.052 -13.589  15.056  1.00  0.00           H
ATOM   4797  HG2 PRO A 395      1.878 -11.728  15.467  1.00  0.00           H
ATOM   4798  HG3 PRO A 395      0.952 -11.740  13.981  1.00  0.00           H
ATOM   4799  HD2 PRO A 395      0.650  -9.862  16.274  1.00  0.00           H
ATOM   4800  HD3 PRO A 395      0.397  -9.585  14.541  1.00  0.00           H
ATOM   4801  N   LEU A 396     -3.446 -13.102  16.523  1.00 23.38           N
ATOM   4802  CA  LEU A 396     -4.418 -13.480  17.553  1.00 25.21           C
ATOM   4803  C   LEU A 396     -4.333 -14.971  17.918  1.00 27.18           C
ATOM   4804  O   LEU A 396     -5.196 -15.485  18.635  1.00 29.80           O
ATOM   4805  CB  LEU A 396     -5.848 -13.157  17.074  1.00 24.81           C
ATOM   4806  CG  LEU A 396     -6.098 -11.676  16.738  1.00 23.79           C
ATOM   4807  CD1 LEU A 396     -7.543 -11.491  16.273  1.00 23.36           C
ATOM   4808  CD2 LEU A 396     -5.773 -10.746  17.918  1.00 21.88           C
ATOM   4809  H   LEU A 396     -3.675 -13.270  15.556  1.00  0.00           H
ATOM   4810  HA  LEU A 396     -4.232 -12.934  18.479  1.00  0.00           H
ATOM   4811  HB2 LEU A 396     -6.095 -13.767  16.207  1.00  0.00           H
ATOM   4812  HB3 LEU A 396     -6.558 -13.450  17.848  1.00  0.00           H
ATOM   4813  HG  LEU A 396     -5.460 -11.384  15.902  1.00  0.00           H
ATOM   4814 HD11 LEU A 396     -7.742 -10.442  16.047  1.00  0.00           H
ATOM   4815 HD12 LEU A 396     -7.736 -12.066  15.368  1.00  0.00           H
ATOM   4816 HD13 LEU A 396     -8.250 -11.813  17.034  1.00  0.00           H
ATOM   4817 HD21 LEU A 396     -6.104  -9.730  17.718  1.00  0.00           H
ATOM   4818 HD22 LEU A 396     -6.251 -11.074  18.837  1.00  0.00           H
ATOM   4819 HD23 LEU A 396     -4.698 -10.691  18.096  1.00  0.00           H
ATOM   4820  N   ASP A 397     -3.281 -15.668  17.482  1.00 26.31           N
ATOM   4821  CA  ASP A 397     -2.896 -17.023  17.889  1.00 26.97           C
ATOM   4822  C   ASP A 397     -2.349 -16.980  19.340  1.00 27.26           C
ATOM   4823  O   ASP A 397     -2.515 -15.985  20.050  1.00 24.89           O
ATOM   4824  CB  ASP A 397     -1.810 -17.520  16.905  1.00 27.87           C
ATOM   4825  CG  ASP A 397     -0.499 -16.768  17.066  1.00 31.48           C
ATOM   4826  OD1 ASP A 397     -0.472 -15.596  16.661  1.00 33.62           O
ATOM   4827  OD2 ASP A 397      0.406 -17.318  17.724  1.00 32.96           O1-
ATOM   4828  H   ASP A 397     -2.534 -15.152  17.015  1.00  0.00           H
ATOM   4829  HA  ASP A 397     -3.760 -17.683  17.843  1.00  0.00           H
ATOM   4830  HB2 ASP A 397     -1.619 -18.584  17.048  1.00  0.00           H
ATOM   4831  HB3 ASP A 397     -2.143 -17.412  15.873  1.00  0.00           H
ATOM   4832  N   LYS A 398     -1.747 -18.068  19.823  1.00 27.55           N
ATOM   4833  CA  LYS A 398     -1.110 -18.156  21.132  1.00 28.98           C
ATOM   4834  C   LYS A 398      0.237 -18.904  21.033  1.00 28.03           C
ATOM   4835  O   LYS A 398      0.663 -19.505  22.020  1.00 27.56           O
ATOM   4836  CB  LYS A 398     -2.094 -18.743  22.185  1.00 32.65           C
ATOM   4837  CG  LYS A 398     -3.496 -18.086  22.284  1.00 38.44           C
ATOM   4838  CD  LYS A 398     -3.518 -16.693  22.950  1.00 40.86           C
ATOM   4839  CE  LYS A 398     -4.810 -15.895  22.661  1.00 42.41           C
ATOM   4840  NZ  LYS A 398     -4.680 -15.035  21.474  1.00 44.87           N1+
ATOM   4841  H   LYS A 398     -1.600 -18.887  19.218  1.00  0.00           H
ATOM   4842  HA  LYS A 398     -0.826 -17.154  21.459  1.00  0.00           H
ATOM   4843  HB2 LYS A 398     -2.231 -19.800  21.951  1.00  0.00           H
ATOM   4844  HB3 LYS A 398     -1.620 -18.727  23.168  1.00  0.00           H
ATOM   4845  HG2 LYS A 398     -3.961 -18.048  21.300  1.00  0.00           H
ATOM   4846  HG3 LYS A 398     -4.140 -18.744  22.867  1.00  0.00           H
ATOM   4847  HD2 LYS A 398     -3.419 -16.833  24.028  1.00  0.00           H
ATOM   4848  HD3 LYS A 398     -2.645 -16.103  22.665  1.00  0.00           H
ATOM   4849  HE2 LYS A 398     -5.664 -16.563  22.542  1.00  0.00           H
ATOM   4850  HE3 LYS A 398     -5.036 -15.241  23.504  1.00  0.00           H
ATOM   4851  HZ1 LYS A 398     -5.564 -14.619  21.174  1.00  0.00           H
ATOM   4852  HZ2 LYS A 398     -4.044 -14.269  21.718  1.00  0.00           H
ATOM   4853  HZ3 LYS A 398     -4.253 -15.515  20.688  1.00  0.00           H
ATOM   4854  N   GLU A 399      0.912 -18.883  19.874  1.00 29.00           N
ATOM   4855  CA  GLU A 399      2.084 -19.704  19.567  1.00 29.56           C
ATOM   4856  C   GLU A 399      3.135 -18.942  18.743  1.00 27.81           C
ATOM   4857  O   GLU A 399      4.257 -18.738  19.207  1.00 26.43           O
ATOM   4858  CB  GLU A 399      1.683 -21.066  18.950  1.00 34.33           C
ATOM   4859  CG  GLU A 399      0.606 -21.021  17.836  1.00 42.27           C
ATOM   4860  CD  GLU A 399     -0.770 -21.433  18.326  1.00 46.74           C
ATOM   4861  OE1 GLU A 399     -1.570 -20.580  18.782  1.00 49.38           O
ATOM   4862  OE2 GLU A 399     -1.100 -22.637  18.288  1.00 48.28           O1-
ATOM   4863  H   GLU A 399      0.564 -18.296  19.102  1.00  0.00           H
ATOM   4864  HA  GLU A 399      2.599 -19.933  20.502  1.00  0.00           H
ATOM   4865  HB2 GLU A 399      2.576 -21.550  18.552  1.00  0.00           H
ATOM   4866  HB3 GLU A 399      1.349 -21.726  19.752  1.00  0.00           H
ATOM   4867  HG2 GLU A 399      0.538 -20.040  17.370  1.00  0.00           H
ATOM   4868  HG3 GLU A 399      0.884 -21.711  17.040  1.00  0.00           H
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ATOM   4869  N   VAL A 400      2.762 -18.487  17.544  1.00 26.01           N
ATOM   4870  CA  VAL A 400      3.564 -17.710  16.601  1.00 24.53           C
ATOM   4871  C   VAL A 400      3.799 -16.308  17.190  1.00 24.42           C
ATOM   4872  O   VAL A 400      4.924 -15.813  17.128  1.00 22.04           O
ATOM   4873  CB  VAL A 400      2.826 -17.622  15.232  1.00 24.87           C
ATOM   4874  CG1 VAL A 400      3.623 -16.853  14.157  1.00 22.22           C
ATOM   4875  CG2 VAL A 400      2.444 -19.012  14.686  1.00 22.82           C
ATOM   4876  H   VAL A 400      1.751 -18.402  17.408  1.00  0.00           H
ATOM   4877  HA  VAL A 400      4.527 -18.207  16.469  1.00  0.00           H
ATOM   4878  HB  VAL A 400      1.896 -17.069  15.381  1.00  0.00           H
ATOM   4879 HG11 VAL A 400      3.074 -16.813  13.215  1.00  0.00           H
ATOM   4880 HG12 VAL A 400      3.810 -15.817  14.445  1.00  0.00           H
ATOM   4881 HG13 VAL A 400      4.584 -17.325  13.957  1.00  0.00           H
ATOM   4882 HG21 VAL A 400      1.951 -18.930  13.717  1.00  0.00           H
ATOM   4883 HG22 VAL A 400      3.324 -19.643  14.559  1.00  0.00           H
ATOM   4884 HG23 VAL A 400      1.752 -19.533  15.346  1.00  0.00           H
ATOM   4885  N   TYR A 401      2.775 -15.742  17.845  1.00 25.28           N
ATOM   4886  CA  TYR A 401      2.804 -14.517  18.644  1.00 27.50           C
ATOM   4887  C   TYR A 401      3.927 -14.547  19.702  1.00 27.74           C
ATOM   4888  O   TYR A 401      4.748 -13.632  19.800  1.00 28.01           O
ATOM   4889  CB  TYR A 401      1.404 -14.330  19.274  1.00 26.68           C
ATOM   4890  CG  TYR A 401      1.237 -13.189  20.265  1.00 28.89           C
ATOM   4891  CD1 TYR A 401      1.384 -13.427  21.649  1.00 27.82           C
ATOM   4892  CD2 TYR A 401      0.909 -11.894  19.813  1.00 27.03           C
ATOM   4893  CE1 TYR A 401      1.193 -12.382  22.573  1.00 26.44           C
ATOM   4894  CE2 TYR A 401      0.730 -10.849  20.741  1.00 26.20           C
ATOM   4895  CZ  TYR A 401      0.856 -11.094  22.121  1.00 27.15           C
ATOM   4896  OH  TYR A 401      0.623 -10.099  23.024  1.00 23.75           O
ATOM   4897  H   TYR A 401      1.866 -16.210  17.755  1.00  0.00           H
ATOM   4898  HA  TYR A 401      2.993 -13.690  17.964  1.00  0.00           H
ATOM   4899  HB2 TYR A 401      0.674 -14.184  18.479  1.00  0.00           H
ATOM   4900  HB3 TYR A 401      1.098 -15.253  19.770  1.00  0.00           H
ATOM   4901  HD1 TYR A 401      1.646 -14.408  22.015  1.00  0.00           H
ATOM   4902  HD2 TYR A 401      0.790 -11.693  18.756  1.00  0.00           H
ATOM   4903  HE1 TYR A 401      1.304 -12.570  23.631  1.00  0.00           H
ATOM   4904  HE2 TYR A 401      0.481  -9.861  20.392  1.00  0.00           H
ATOM   4905  HH  TYR A 401      0.474  -9.242  22.621  1.00  0.00           H
ATOM   4906  N   ASN A 402      3.995 -15.654  20.454  1.00 27.33           N
ATOM   4907  CA  ASN A 402      4.949 -15.855  21.550  1.00 29.34           C
ATOM   4908  C   ASN A 402      6.353 -16.214  21.039  1.00 27.72           C
ATOM   4909  O   ASN A 402      7.326 -16.033  21.764  1.00 27.54           O
ATOM   4910  CB  ASN A 402      4.476 -17.008  22.471  1.00 30.12           C
ATOM   4911  CG  ASN A 402      3.278 -16.634  23.345  1.00 33.27           C
ATOM   4912  OD1 ASN A 402      3.298 -15.632  24.046  1.00 33.60           O
ATOM   4913  ND2 ASN A 402      2.196 -17.403  23.323  1.00 34.63           N
ATOM   4914  H   ASN A 402      3.345 -16.393  20.239  1.00  0.00           H
ATOM   4915  HA  ASN A 402      5.038 -14.933  22.130  1.00  0.00           H
ATOM   4916  HB2 ASN A 402      4.262 -17.904  21.887  1.00  0.00           H
ATOM   4917  HB3 ASN A 402      5.278 -17.281  23.159  1.00  0.00           H
ATOM   4918 HD21 ASN A 402      2.129 -18.257  22.779  1.00  0.00           H
ATOM   4919 HD22 ASN A 402      1.442 -17.134  23.932  1.00  0.00           H
ATOM   4920  N   SER A 403      6.472 -16.704  19.800  1.00 27.84           N
ATOM   4921  CA  SER A 403      7.745 -17.097  19.193  1.00 28.74           C
ATOM   4922  C   SER A 403      8.422 -15.918  18.464  1.00 28.13           C
ATOM   4923  O   SER A 403      9.548 -16.067  17.994  1.00 27.53           O
ATOM   4924  CB  SER A 403      7.458 -18.180  18.131  1.00 28.94           C
ATOM   4925  OG  SER A 403      6.887 -19.336  18.722  1.00 35.87           O
ATOM   4926  H   SER A 403      5.635 -16.812  19.245  1.00  0.00           H
ATOM   4927  HA  SER A 403      8.436 -17.488  19.943  1.00  0.00           H
ATOM   4928  HB2 SER A 403      6.798 -17.805  17.348  1.00  0.00           H
ATOM   4929  HB3 SER A 403      8.386 -18.478  17.640  1.00  0.00           H
ATOM   4930  HG  SER A 403      6.007 -19.117  19.026  1.00  0.00           H
ATOM   4931  N   ASN A 404      7.746 -14.766  18.334  1.00 25.90           N
ATOM   4932  CA  ASN A 404      8.148 -13.656  17.463  1.00 25.37           C
ATOM   4933  C   ASN A 404      8.117 -12.304  18.178  1.00 25.69           C
ATOM   4934  O   ASN A 404      8.040 -11.270  17.522  1.00 25.02           O
ATOM   4935  CB  ASN A 404      7.388 -13.672  16.113  1.00 26.10           C
ATOM   4936  CG  ASN A 404      7.779 -14.837  15.202  1.00 26.26           C
ATOM   4937  OD1 ASN A 404      8.876 -14.886  14.651  1.00 29.36           O
ATOM   4938  ND2 ASN A 404      6.897 -15.817  15.061  1.00 28.99           N
ATOM   4939  H   ASN A 404      6.824 -14.713  18.748  1.00  0.00           H
ATOM   4940  HA  ASN A 404      9.207 -13.762  17.219  1.00  0.00           H
ATOM   4941  HB2 ASN A 404      6.311 -13.666  16.288  1.00  0.00           H
ATOM   4942  HB3 ASN A 404      7.586 -12.763  15.549  1.00  0.00           H
ATOM   4943 HD21 ASN A 404      6.033 -15.774  15.598  1.00  0.00           H
ATOM   4944 HD22 ASN A 404      7.109 -16.583  14.445  1.00  0.00           H
ATOM   4945  N   ASN A 405      8.201 -12.288  19.516  1.00 25.25           N
ATOM   4946  CA  ASN A 405      8.396 -11.098  20.370  1.00 26.77           C
ATOM   4947  C   ASN A 405      7.287 -10.045  20.174  1.00 26.11           C
ATOM   4948  O   ASN A 405      7.577  -8.852  20.112  1.00 25.19           O
ATOM   4949  CB  ASN A 405      9.774 -10.413  20.142  1.00 28.88           C
ATOM   4950  CG  ASN A 405     11.015 -11.281  20.308  1.00 29.98           C
ATOM   4951  OD1 ASN A 405     11.023 -12.257  21.049  1.00 31.34           O
ATOM   4952  ND2 ASN A 405     12.080 -10.934  19.597  1.00 32.27           N
ATOM   4953  H   ASN A 405      8.292 -13.186  19.970  1.00  0.00           H
ATOM   4954  HA  ASN A 405      8.343 -11.434  21.406  1.00  0.00           H
ATOM   4955  HB2 ASN A 405      9.792  -9.970  19.146  1.00  0.00           H
ATOM   4956  HB3 ASN A 405      9.891  -9.583  20.842  1.00  0.00           H
ATOM   4957 HD21 ASN A 405     12.035 -10.100  18.993  1.00  0.00           H
ATOM   4958 HD22 ASN A 405     12.927 -11.468  19.678  1.00  0.00           H
ATOM   4959  N   CYS A 406      6.035 -10.464  19.969  1.00 25.69           N
ATOM   4960  CA  CYS A 406      4.955  -9.588  19.525  1.00 25.23           C
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ATOM   4961  C   CYS A 406      4.461  -8.647  20.637  1.00 26.10           C
ATOM   4962  O   CYS A 406      3.549  -8.977  21.392  1.00 26.16           O
ATOM   4963  CB  CYS A 406      3.807 -10.462  19.012  1.00 27.05           C
ATOM   4964  SG  CYS A 406      4.126 -11.263  17.414  1.00 25.91           S
ATOM   4965  H   CYS A 406      5.847 -11.459  19.993  1.00  0.00           H
ATOM   4966  HA  CYS A 406      5.296  -8.964  18.702  1.00  0.00           H
ATOM   4967  HB2 CYS A 406      3.573 -11.230  19.749  1.00  0.00           H
ATOM   4968  HB3 CYS A 406      2.899  -9.871  18.893  1.00  0.00           H
ATOM   4969  N   GLU A 407      5.040  -7.440  20.692  1.00 25.27           N
ATOM   4970  CA  GLU A 407      4.735  -6.331  21.603  1.00 25.75           C
ATOM   4971  C   GLU A 407      3.353  -5.688  21.313  1.00 24.42           C
ATOM   4972  O   GLU A 407      3.253  -4.464  21.209  1.00 22.09           O
ATOM   4973  CB  GLU A 407      5.836  -5.255  21.415  1.00 29.18           C
ATOM   4974  CG  GLU A 407      7.288  -5.691  21.707  1.00 35.84           C
ATOM   4975  CD  GLU A 407      8.305  -4.851  20.938  1.00 38.75           C
ATOM   4976  OE1 GLU A 407      9.363  -5.414  20.579  1.00 41.17           O
ATOM   4977  OE2 GLU A 407      8.003  -3.671  20.652  1.00 43.63           O1-
ATOM   4978  H   GLU A 407      5.876  -7.329  20.128  1.00  0.00           H
ATOM   4979  HA  GLU A 407      4.742  -6.693  22.632  1.00  0.00           H
ATOM   4980  HB2 GLU A 407      5.775  -4.886  20.390  1.00  0.00           H
ATOM   4981  HB3 GLU A 407      5.630  -4.389  22.046  1.00  0.00           H
ATOM   4982  HG2 GLU A 407      7.501  -5.614  22.772  1.00  0.00           H
ATOM   4983  HG3 GLU A 407      7.453  -6.730  21.438  1.00  0.00           H
ATOM   4984  N   CYS A 408      2.291  -6.480  21.124  1.00 23.64           N
ATOM   4985  CA  CYS A 408      0.990  -6.014  20.649  1.00 21.06           C
ATOM   4986  C   CYS A 408     -0.187  -6.588  21.427  1.00 21.00           C
ATOM   4987  O   CYS A 408     -0.139  -7.695  21.970  1.00 19.91           O
ATOM   4988  CB  CYS A 408      0.866  -6.150  19.123  1.00 20.88           C
ATOM   4989  SG  CYS A 408      0.812  -7.806  18.380  1.00 22.25           S
ATOM   4990  H   CYS A 408      2.411  -7.478  21.286  1.00  0.00           H
ATOM   4991  HA  CYS A 408      0.934  -4.941  20.847  1.00  0.00           H
ATOM   4992  HB2 CYS A 408      0.002  -5.585  18.769  1.00  0.00           H
ATOM   4993  HB3 CYS A 408      1.730  -5.666  18.698  1.00  0.00           H
ATOM   4994  N   ASP A 409     -1.252  -5.790  21.457  1.00 17.35           N
ATOM   4995  CA  ASP A 409     -2.457  -5.951  22.247  1.00 19.95           C
ATOM   4996  C   ASP A 409     -3.429  -6.842  21.459  1.00 21.68           C
ATOM   4997  O   ASP A 409     -4.135  -6.380  20.560  1.00 21.54           O
ATOM   4998  CB  ASP A 409     -3.102  -4.550  22.463  1.00 20.43           C
ATOM   4999  CG  ASP A 409     -2.105  -3.463  22.856  1.00 23.66           C
ATOM   5000  OD1 ASP A 409     -1.842  -3.298  24.061  1.00 21.49           O
ATOM   5001  OD2 ASP A 409     -1.511  -2.857  21.931  1.00 21.32           O1-
ATOM   5002  H   ASP A 409     -1.152  -4.859  21.063  1.00  0.00           H
ATOM   5003  HA  ASP A 409     -2.208  -6.390  23.215  1.00  0.00           H
ATOM   5004  HB2 ASP A 409     -3.575  -4.191  21.550  1.00  0.00           H
ATOM   5005  HB3 ASP A 409     -3.886  -4.598  23.218  1.00  0.00           H
ATOM   5006  N   GLN A 410     -3.528  -8.129  21.820  1.00 19.59           N
ATOM   5007  CA  GLN A 410     -4.423  -9.120  21.195  1.00 20.13           C
ATOM   5008  C   GLN A 410     -5.930  -8.872  21.459  1.00 21.87           C
ATOM   5009  O   GLN A 410     -6.769  -9.700  21.093  1.00 20.41           O
ATOM   5010  CB  GLN A 410     -4.065 -10.532  21.700  1.00 20.31           C
ATOM   5011  CG  GLN A 410     -2.680 -11.023  21.250  1.00 21.69           C
ATOM   5012  CD  GLN A 410     -2.565 -12.540  21.385  1.00 20.78           C
ATOM   5013  OE1 GLN A 410     -3.044 -13.134  22.349  1.00 24.03           O
ATOM   5014  NE2 GLN A 410     -2.046 -13.216  20.374  1.00 20.56           N
ATOM   5015  H   GLN A 410     -2.858  -8.457  22.501  1.00  0.00           H
ATOM   5016  HA  GLN A 410     -4.280  -9.078  20.113  1.00  0.00           H
ATOM   5017  HB2 GLN A 410     -4.138 -10.578  22.788  1.00  0.00           H
ATOM   5018  HB3 GLN A 410     -4.805 -11.240  21.322  1.00  0.00           H
ATOM   5019  HG2 GLN A 410     -2.499 -10.738  20.212  1.00  0.00           H
ATOM   5020  HG3 GLN A 410     -1.901 -10.547  21.844  1.00  0.00           H
ATOM   5021 HE21 GLN A 410     -1.736 -12.704  19.540  1.00  0.00           H
ATOM   5022 HE22 GLN A 410     -1.891 -14.218  20.395  1.00  0.00           H
ATOM   5023  N   GLY A 411     -6.271  -7.743  22.084  1.00 24.50           N
ATOM   5024  CA  GLY A 411     -7.616  -7.237  22.315  1.00 26.96           C
ATOM   5025  C   GLY A 411     -7.865  -5.907  21.596  1.00 27.55           C
ATOM   5026  O   GLY A 411     -8.976  -5.395  21.692  1.00 30.46           O
ATOM   5027  H   GLY A 411     -5.510  -7.120  22.317  1.00  0.00           H
ATOM   5028  HA2 GLY A 411     -8.379  -7.950  22.001  1.00  0.00           H
ATOM   5029  HA3 GLY A 411     -7.753  -7.077  23.384  1.00  0.00           H
ATOM   5030  N   ASN A 412     -6.881  -5.372  20.852  1.00 27.68           N
ATOM   5031  CA  ASN A 412     -6.954  -4.107  20.104  1.00 25.90           C
ATOM   5032  C   ASN A 412     -6.323  -4.232  18.708  1.00 24.16           C
ATOM   5033  O   ASN A 412     -5.835  -3.249  18.143  1.00 24.85           O
ATOM   5034  CB  ASN A 412     -6.476  -2.877  20.918  1.00 26.56           C
ATOM   5035  CG  ASN A 412     -7.385  -2.513  22.090  1.00 27.79           C
ATOM   5036  OD1 ASN A 412     -7.124  -2.882  23.231  1.00 32.66           O
ATOM   5037  ND2 ASN A 412     -8.458  -1.773  21.838  1.00 25.88           N
ATOM   5038  H   ASN A 412     -5.989  -5.854  20.782  1.00  0.00           H
ATOM   5039  HA  ASN A 412     -8.004  -3.923  19.867  1.00  0.00           H
ATOM   5040  HB2 ASN A 412     -5.469  -3.041  21.296  1.00  0.00           H
ATOM   5041  HB3 ASN A 412     -6.407  -1.998  20.276  1.00  0.00           H
ATOM   5042 HD21 ASN A 412     -8.709  -1.538  20.867  1.00  0.00           H
ATOM   5043 HD22 ASN A 412     -9.076  -1.551  22.597  1.00  0.00           H
ATOM   5044  N   ASP A 413     -6.367  -5.443  18.131  1.00 22.31           N
ATOM   5045  CA  ASP A 413     -6.100  -5.702  16.712  1.00 22.05           C
ATOM   5046  C   ASP A 413     -7.248  -5.086  15.898  1.00 21.82           C
ATOM   5047  O   ASP A 413     -8.410  -5.216  16.280  1.00 21.38           O
ATOM   5048  CB  ASP A 413     -6.033  -7.230  16.447  1.00 20.91           C
ATOM   5049  CG  ASP A 413     -6.170  -7.622  14.975  1.00 19.89           C
ATOM   5050  OD1 ASP A 413     -5.293  -7.216  14.177  1.00 19.55           O
ATOM   5051  OD2 ASP A 413     -7.220  -8.194  14.620  1.00 19.62           O1-
ATOM   5052  H   ASP A 413     -6.876  -6.155  18.626  1.00  0.00           H
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ATOM   5053  HA  ASP A 413      -5.155  -5.241  16.416  1.00  0.00           H
ATOM   5054  HB2 ASP A 413      -5.117  -7.661  16.835  1.00  0.00           H
ATOM   5055  HB3 ASP A 413      -6.854  -7.717  16.972  1.00  0.00           H
ATOM   5056  N   PHE A 414      -6.932  -4.438  14.778  1.00 21.02           N
ATOM   5057  CA  PHE A 414      -7.934  -3.869  13.903  1.00 18.26           C
ATOM   5058  C   PHE A 414      -8.450  -4.899  12.885  1.00 19.44           C
ATOM   5059  O   PHE A 414      -9.566  -4.710  12.407  1.00 21.11           O
ATOM   5060  CB  PHE A 414      -7.324  -2.679  13.139  1.00 18.35           C
ATOM   5061  CG  PHE A 414      -8.349  -1.850  12.384  1.00 17.60           C
ATOM   5062  CD1 PHE A 414      -9.285  -1.075  13.098  1.00 19.23           C
ATOM   5063  CD2 PHE A 414      -8.404  -1.887  10.977  1.00 17.55           C
ATOM   5064  CE1 PHE A 414     -10.263  -0.334  12.409  1.00 20.54           C
ATOM   5065  CE2 PHE A 414      -9.366  -1.130  10.289  1.00 16.66           C
ATOM   5066  CZ  PHE A 414     -10.296  -0.354  11.004  1.00 18.35           C
ATOM   5067  H   PHE A 414      -5.953  -4.358  14.507  1.00  0.00           H
ATOM   5068  HA  PHE A 414      -8.775  -3.503  14.494  1.00  0.00           H
ATOM   5069  HB2 PHE A 414      -6.826  -2.015  13.847  1.00  0.00           H
ATOM   5070  HB3 PHE A 414      -6.550  -3.021  12.450  1.00  0.00           H
ATOM   5071  HD1 PHE A 414      -9.252  -1.044  14.177  1.00  0.00           H
ATOM   5072  HD2 PHE A 414      -7.736  -2.517  10.413  1.00  0.00           H
ATOM   5073  HE1 PHE A 414     -10.976   0.264  12.957  1.00  0.00           H
ATOM   5074  HE2 PHE A 414      -9.399  -1.171   9.212  1.00  0.00           H
ATOM   5075  HZ  PHE A 414     -11.039   0.221  10.477  1.00  0.00           H
ATOM   5076  N   THR A 415      -7.707  -5.968  12.542  1.00 20.19           N
ATOM   5077  CA  THR A 415      -7.969  -6.894  11.422  1.00 20.23           C
ATOM   5078  C   THR A 415      -9.423  -7.401  11.354  1.00 22.22           C
ATOM   5079  O   THR A 415      -9.994  -7.536  10.272  1.00 22.79           O
ATOM   5080  CB  THR A 415      -6.979  -8.090  11.436  1.00 21.37           C
ATOM   5081  OG1 THR A 415      -5.643  -7.651  11.592  1.00 17.64           O
ATOM   5082  CG2 THR A 415      -7.038  -8.949  10.159  1.00 20.76           C
ATOM   5083  H   THR A 415      -6.877  -6.179  13.092  1.00  0.00           H
ATOM   5084  HA  THR A 415      -7.789  -6.322  10.510  1.00  0.00           H
ATOM   5085  HB  THR A 415      -7.206  -8.745  12.273  1.00  0.00           H
ATOM   5086  HG1 THR A 415      -5.501  -7.500  12.544  1.00  0.00           H
ATOM   5087 HG21 THR A 415      -6.435  -9.847  10.269  1.00  0.00           H
ATOM   5088 HG22 THR A 415      -8.044  -9.306   9.946  1.00  0.00           H
ATOM   5089 HG23 THR A 415      -6.681  -8.399   9.288  1.00  0.00           H
ATOM   5090  N   PHE A 416     -10.047  -7.638  12.509  1.00 22.70           N
ATOM   5091  CA  PHE A 416     -11.370  -8.239  12.589  1.00 23.45           C
ATOM   5092  C   PHE A 416     -12.420  -7.286  13.174  1.00 22.80           C
ATOM   5093  O   PHE A 416     -13.511  -7.747  13.503  1.00 25.25           O
ATOM   5094  CB  PHE A 416     -11.259  -9.582  13.335  1.00 20.24           C
ATOM   5095  CG  PHE A 416     -10.301 -10.550  12.663  1.00 20.62           C
ATOM   5096  CD1 PHE A 416     -10.680 -11.237  11.494  1.00 20.38           C
ATOM   5097  CD2 PHE A 416      -8.986 -10.685  13.152  1.00 18.91           C
ATOM   5098  CE1 PHE A 416      -9.740 -12.010  10.790  1.00 19.44           C
ATOM   5099  CE2 PHE A 416      -8.049 -11.475  12.462  1.00 18.21           C
ATOM   5100  CZ  PHE A 416      -8.424 -12.125  11.273  1.00 20.50           C
ATOM   5101  H   PHE A 416      -9.490  -7.538  13.355  1.00  0.00           H
ATOM   5102  HA  PHE A 416     -11.752  -8.470  11.595  1.00  0.00           H
ATOM   5103  HB2 PHE A 416     -10.929  -9.415  14.361  1.00  0.00           H
ATOM   5104  HB3 PHE A 416     -12.240 -10.052  13.393  1.00  0.00           H
ATOM   5105  HD1 PHE A 416     -11.679 -11.134  11.111  1.00  0.00           H
ATOM   5106  HD2 PHE A 416      -8.669 -10.126  14.020  1.00  0.00           H
ATOM   5107  HE1 PHE A 416     -10.015 -12.480   9.859  1.00  0.00           H
ATOM   5108  HE2 PHE A 416      -7.029 -11.527  12.819  1.00  0.00           H
ATOM   5109  HZ  PHE A 416      -7.687 -12.688  10.721  1.00  0.00           H
ATOM   5110  N   GLN A 417     -12.134  -5.979  13.301  1.00 23.60           N
ATOM   5111  CA  GLN A 417     -13.076  -4.962  13.792  1.00 22.99           C
ATOM   5112  C   GLN A 417     -14.140  -4.583  12.738  1.00 22.57           C
ATOM   5113  O   GLN A 417     -14.240  -5.215  11.684  1.00 22.49           O
ATOM   5114  CB  GLN A 417     -12.296  -3.714  14.253  1.00 22.97           C
ATOM   5115  CG  GLN A 417     -11.536  -3.955  15.571  1.00 23.29           C
ATOM   5116  CD  GLN A 417     -11.081  -2.688  16.299  1.00 26.35           C
ATOM   5117  OE1 GLN A 417     -10.459  -2.770  17.352  1.00 25.95           O
ATOM   5118  NE2 GLN A 417     -11.402  -1.501  15.798  1.00 24.11           N
ATOM   5119  H   GLN A 417     -11.218  -5.666  12.990  1.00  0.00           H
ATOM   5120  HA  GLN A 417     -13.627  -5.362  14.640  1.00  0.00           H
ATOM   5121  HB2 GLN A 417     -11.618  -3.355  13.477  1.00  0.00           H
ATOM   5122  HB3 GLN A 417     -13.005  -2.912  14.434  1.00  0.00           H
ATOM   5123  HG2 GLN A 417     -12.187  -4.481  16.268  1.00  0.00           H
ATOM   5124  HG3 GLN A 417     -10.682  -4.608  15.400  1.00  0.00           H
ATOM   5125 HE21 GLN A 417     -11.979  -1.405  14.969  1.00  0.00           H
ATOM   5126 HE22 GLN A 417     -11.122  -0.662  16.309  1.00  0.00           H
ATOM   5127  N   GLY A 418     -14.968  -3.569  13.020  1.00 22.92           N
ATOM   5128  CA  GLY A 418     -16.216  -3.305  12.307  1.00 21.05           C
ATOM   5129  C   GLY A 418     -16.065  -2.259  11.205  1.00 21.18           C
ATOM   5130  O   GLY A 418     -16.762  -2.358  10.201  1.00 21.14           O
ATOM   5131  H   GLY A 418     -14.802  -3.024  13.856  1.00  0.00           H
ATOM   5132  HA2 GLY A 418     -16.633  -4.220  11.883  1.00  0.00           H
ATOM   5133  HA3 GLY A 418     -16.950  -2.930  13.021  1.00  0.00           H
ATOM   5134  N   TYR A 419     -15.102  -1.338  11.326  1.00 20.25           N
ATOM   5135  CA  TYR A 419     -14.697  -0.432  10.245  1.00 21.27           C
ATOM   5136  C   TYR A 419     -13.568  -1.084   9.409  1.00 20.92           C
ATOM   5137  O   TYR A 419     -13.082  -0.519   8.431  1.00 19.73           O
ATOM   5138  CB  TYR A 419     -14.181   0.874  10.887  1.00 21.11           C
ATOM   5139  CG  TYR A 419     -14.154   2.074   9.959  1.00 22.25           C
ATOM   5140  CD1 TYR A 419     -15.323   2.837   9.771  1.00 23.37           C
ATOM   5141  CD2 TYR A 419     -12.971   2.442   9.290  1.00 21.83           C
ATOM   5142  CE1 TYR A 419     -15.298   3.980   8.953  1.00 23.61           C
ATOM   5143  CE2 TYR A 419     -12.955   3.554   8.431  1.00 24.89           C
ATOM   5144  CZ  TYR A 419     -14.119   4.329   8.278  1.00 22.99           C
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ATOM   5145  OH  TYR A 419     -14.101   5.457   7.523  1.00 26.03           O
ATOM   5146  H   TYR A 419     -14.595  -1.263  12.201  1.00  0.00           H
ATOM   5147  HA  TYR A 419     -15.545  -0.207   9.595  1.00  0.00           H
ATOM   5148  HB2 TYR A 419     -14.825   1.147  11.724  1.00  0.00           H
ATOM   5149  HB3 TYR A 419     -13.193   0.731  11.326  1.00  0.00           H
ATOM   5150  HD1 TYR A 419     -16.238   2.560  10.270  1.00  0.00           H
ATOM   5151  HD2 TYR A 419     -12.069   1.873   9.434  1.00  0.00           H
ATOM   5152  HE1 TYR A 419     -16.184   4.590   8.845  1.00  0.00           H
ATOM   5153  HE2 TYR A 419     -12.040   3.823   7.923  1.00  0.00           H
ATOM   5154  HH  TYR A 419     -13.400   5.469   6.853  1.00  0.00           H
ATOM   5155  N   SER A 420     -13.140  -2.288   9.799  1.00 19.72           N
ATOM   5156  CA  SER A 420     -12.091  -3.054   9.157  1.00 19.12           C
ATOM   5157  C   SER A 420     -12.684  -3.969   8.080  1.00 19.14           C
ATOM   5158  O   SER A 420     -13.893  -4.230   8.045  1.00 18.72           O
ATOM   5159  CB  SER A 420     -11.421  -3.913  10.235  1.00 20.59           C
ATOM   5160  OG  SER A 420     -10.255  -4.561   9.774  1.00 18.07           O
ATOM   5161  H   SER A 420     -13.664  -2.740  10.530  1.00  0.00           H
ATOM   5162  HA  SER A 420     -11.352  -2.386   8.721  1.00  0.00           H
ATOM   5163  HB2 SER A 420     -11.147  -3.274  11.075  1.00  0.00           H
ATOM   5164  HB3 SER A 420     -12.091  -4.678  10.617  1.00  0.00           H
ATOM   5165  HG  SER A 420      -9.737  -4.725  10.561  1.00  0.00           H
ATOM   5166  N   CYS A 421     -11.789  -4.480   7.234  1.00 20.98           N
ATOM   5167  CA  CYS A 421     -12.066  -5.390   6.136  1.00 19.83           C
ATOM   5168  C   CYS A 421     -11.113  -6.594   6.126  1.00 21.04           C
ATOM   5169  O   CYS A 421     -11.015  -7.295   5.119  1.00 23.25           O
ATOM   5170  CB  CYS A 421     -12.152  -4.629   4.802  1.00 20.05           C
ATOM   5171  SG  CYS A 421     -13.631  -3.596   4.590  1.00 22.53           S
ATOM   5172  H   CYS A 421     -10.815  -4.245   7.417  1.00  0.00           H
ATOM   5173  HA  CYS A 421     -13.046  -5.840   6.296  1.00  0.00           H
ATOM   5174  HB2 CYS A 421     -11.267  -4.008   4.660  1.00  0.00           H
ATOM   5175  HB3 CYS A 421     -12.149  -5.340   3.977  1.00  0.00           H
ATOM   5176  N   GLY A 422     -10.450  -6.909   7.246  1.00 20.19           N
ATOM   5177  CA  GLY A 422      -9.480  -8.004   7.282  1.00 22.14           C
ATOM   5178  C   GLY A 422     -10.180  -9.347   7.488  1.00 22.26           C
ATOM   5179  O   GLY A 422      -9.776 -10.342   6.887  1.00 19.11           O
ATOM   5180  H   GLY A 422     -10.523  -6.313   8.064  1.00  0.00           H
ATOM   5181  HA2 GLY A 422      -8.902  -8.053   6.359  1.00  0.00           H
ATOM   5182  HA3 GLY A 422      -8.759  -7.831   8.078  1.00  0.00           H
ATOM   5183  N   LYS A 423     -11.319  -9.367   8.202  1.00 24.00           N
ATOM   5184  CA  LYS A 423     -12.242 -10.501   8.198  1.00 25.44           C
ATOM   5185  C   LYS A 423     -12.787 -10.727   6.776  1.00 25.53           C
ATOM   5186  O   LYS A 423     -12.777 -11.855   6.294  1.00 26.66           O
ATOM   5187  CB  LYS A 423     -13.419 -10.295   9.181  1.00 26.73           C
ATOM   5188  CG  LYS A 423     -14.155 -11.627   9.463  1.00 31.23           C
ATOM   5189  CD  LYS A 423     -15.563 -11.524  10.075  1.00 34.49           C
ATOM   5190  CE  LYS A 423     -16.561 -10.612   9.339  1.00 36.84           C
ATOM   5191  NZ  LYS A 423     -16.745 -10.938   7.914  1.00 39.84           N1+
ATOM   5192  H   LYS A 423     -11.578  -8.500   8.653  1.00  0.00           H
ATOM   5193  HA  LYS A 423     -11.677 -11.385   8.496  1.00  0.00           H
ATOM   5194  HB2 LYS A 423     -13.080  -9.849  10.115  1.00  0.00           H
ATOM   5195  HB3 LYS A 423     -14.101  -9.563   8.758  1.00  0.00           H
ATOM   5196  HG2 LYS A 423     -14.237 -12.202   8.545  1.00  0.00           H
ATOM   5197  HG3 LYS A 423     -13.533 -12.245  10.110  1.00  0.00           H
ATOM   5198  HD2 LYS A 423     -15.987 -12.528  10.112  1.00  0.00           H
ATOM   5199  HD3 LYS A 423     -15.473 -11.190  11.109  1.00  0.00           H
ATOM   5200  HE2 LYS A 423     -17.535 -10.665   9.826  1.00  0.00           H
ATOM   5201  HE3 LYS A 423     -16.249  -9.572   9.424  1.00  0.00           H
ATOM   5202  HZ1 LYS A 423     -16.488 -10.091   7.384  1.00  0.00           H
ATOM   5203  HZ2 LYS A 423     -16.225 -11.773   7.573  1.00  0.00           H
ATOM   5204  HZ3 LYS A 423     -17.708 -11.107   7.691  1.00  0.00           H
ATOM   5205  N   GLU A 424     -13.221  -9.651   6.110  1.00 23.69           N
ATOM   5206  CA  GLU A 424     -13.803  -9.625   4.771  1.00 23.47           C
ATOM   5207  C   GLU A 424     -12.815 -10.173   3.729  1.00 23.14           C
ATOM   5208  O   GLU A 424     -13.221 -10.965   2.884  1.00 18.61           O
ATOM   5209  CB  GLU A 424     -14.240  -8.182   4.422  1.00 24.63           C
ATOM   5210  CG  GLU A 424     -15.512  -7.660   5.128  1.00 25.57           C
ATOM   5211  CD  GLU A 424     -15.580  -7.888   6.631  1.00 28.25           C
ATOM   5212  OE1 GLU A 424     -14.641  -7.538   7.378  1.00 27.71           O
ATOM   5213  OE2 GLU A 424     -16.569  -8.501   7.092  1.00 33.30           O1-
ATOM   5214  H   GLU A 424     -13.282  -8.775   6.626  1.00  0.00           H
ATOM   5215  HA  GLU A 424     -14.680 -10.275   4.762  1.00  0.00           H
ATOM   5216  HB2 GLU A 424     -13.428  -7.485   4.598  1.00  0.00           H
ATOM   5217  HB3 GLU A 424     -14.425  -8.120   3.348  1.00  0.00           H
ATOM   5218  HG2 GLU A 424     -15.614  -6.591   4.944  1.00  0.00           H
ATOM   5219  HG3 GLU A 424     -16.388  -8.126   4.674  1.00  0.00           H
ATOM   5220  N   TYR A 425     -11.519  -9.842   3.841  1.00 21.56           N
ATOM   5221  CA  TYR A 425     -10.435 -10.458   3.073  1.00 21.96           C
ATOM   5222  C   TYR A 425     -10.378 -11.980   3.303  1.00 23.23           C
ATOM   5223  O   TYR A 425     -10.480 -12.757   2.352  1.00 21.80           O
ATOM   5224  CB  TYR A 425      -9.077  -9.798   3.410  1.00 21.92           C
ATOM   5225  CG  TYR A 425      -7.910 -10.504   2.741  1.00 20.41           C
ATOM   5226  CD1 TYR A 425      -7.778 -10.432   1.342  1.00 20.32           C
ATOM   5227  CD2 TYR A 425      -7.035 -11.323   3.489  1.00 20.40           C
ATOM   5228  CE1 TYR A 425      -6.804 -11.203   0.688  1.00 17.64           C
ATOM   5229  CE2 TYR A 425      -6.053 -12.090   2.831  1.00 18.10           C
ATOM   5230  CZ  TYR A 425      -5.952 -12.038   1.429  1.00 19.87           C
ATOM   5231  OH  TYR A 425      -5.071 -12.826   0.757  1.00 16.52           O
ATOM   5232  H   TYR A 425     -11.277  -9.121   4.516  1.00  0.00           H
ATOM   5233  HA  TYR A 425     -10.641 -10.302   2.013  1.00  0.00           H
ATOM   5234  HB2 TYR A 425      -9.078  -8.754   3.095  1.00  0.00           H
ATOM   5235  HB3 TYR A 425      -8.911  -9.783   4.487  1.00  0.00           H
ATOM   5236  HD1 TYR A 425      -8.447  -9.812   0.763  1.00  0.00           H
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ATOM   5237  HD2 TYR A 425      -7.134 -11.395   4.564  1.00  0.00           H
ATOM   5238  HE1 TYR A 425      -6.725 -11.173  -0.388  1.00  0.00           H
ATOM   5239  HE2 TYR A 425      -5.409 -12.739   3.404  1.00  0.00           H
ATOM   5240  HH  TYR A 425      -4.273 -13.066   1.209  1.00  0.00           H
ATOM   5241  N   TYR A 426     -10.260 -12.403   4.570  1.00 21.99           N
ATOM   5242  CA  TYR A 426     -10.213 -13.806   4.983  1.00 23.50           C
ATOM   5243  C   TYR A 426     -11.434 -14.613   4.499  1.00 23.34           C
ATOM   5244  O   TYR A 426     -11.284 -15.758   4.075  1.00 24.05           O
ATOM   5245  CB  TYR A 426     -10.086 -13.901   6.519  1.00 22.73           C
ATOM   5246  CG  TYR A 426      -8.687 -14.109   7.070  1.00 23.27           C
ATOM   5247  CD1 TYR A 426      -7.982 -13.053   7.680  1.00 22.47           C
ATOM   5248  CD2 TYR A 426      -8.116 -15.398   7.062  1.00 22.87           C
ATOM   5249  CE1 TYR A 426      -6.742 -13.291   8.297  1.00 21.19           C
ATOM   5250  CE2 TYR A 426      -6.857 -15.628   7.643  1.00 22.99           C
ATOM   5251  CZ  TYR A 426      -6.181 -14.579   8.288  1.00 22.86           C
ATOM   5252  OH  TYR A 426      -5.003 -14.814   8.930  1.00 23.29           O
ATOM   5253  H   TYR A 426     -10.196 -11.695   5.294  1.00  0.00           H
ATOM   5254  HA  TYR A 426      -9.333 -14.259   4.521  1.00  0.00           H
ATOM   5255  HB2 TYR A 426     -10.532 -13.029   6.997  1.00  0.00           H
ATOM   5256  HB3 TYR A 426     -10.673 -14.745   6.882  1.00  0.00           H
ATOM   5257  HD1 TYR A 426      -8.390 -12.058   7.725  1.00  0.00           H
ATOM   5258  HD2 TYR A 426      -8.663 -16.227   6.651  1.00  0.00           H
ATOM   5259  HE1 TYR A 426      -6.234 -12.475   8.789  1.00  0.00           H
ATOM   5260  HE2 TYR A 426      -6.435 -16.623   7.629  1.00  0.00           H
ATOM   5261  HH  TYR A 426      -4.523 -15.561   8.599  1.00  0.00           H
ATOM   5262  N   ASP A 427     -12.629 -14.018   4.557  1.00 22.93           N
ATOM   5263  CA  ASP A 427     -13.905 -14.627   4.173  1.00 24.60           C
ATOM   5264  C   ASP A 427     -14.090 -14.635   2.646  1.00 23.59           C
ATOM   5265  O   ASP A 427     -14.615 -15.615   2.120  1.00 22.45           O
ATOM   5266  CB  ASP A 427     -15.094 -13.871   4.824  1.00 25.71           C
ATOM   5267  CG  ASP A 427     -15.160 -13.949   6.351  1.00 25.52           C
ATOM   5268  OD1 ASP A 427     -14.476 -14.812   6.948  1.00 30.54           O
ATOM   5269  OD2 ASP A 427     -15.899 -13.136   6.950  1.00 26.99           O1-
ATOM   5270  H   ASP A 427     -12.666 -13.090   4.977  1.00  0.00           H
ATOM   5271  HA  ASP A 427     -13.921 -15.665   4.511  1.00  0.00           H
ATOM   5272  HB2 ASP A 427     -15.070 -12.820   4.535  1.00  0.00           H
ATOM   5273  HB3 ASP A 427     -16.035 -14.270   4.446  1.00  0.00           H
ATOM   5274  N   ALA A 428     -13.612 -13.610   1.921  1.00 23.60           N
ATOM   5275  CA  ALA A 428     -13.617 -13.548   0.453  1.00 22.71           C
ATOM   5276  C   ALA A 428     -12.604 -14.533  -0.158  1.00 22.99           C
ATOM   5277  O   ALA A 428     -12.826 -15.083  -1.244  1.00 21.89           O
ATOM   5278  CB  ALA A 428     -13.245 -12.128  -0.002  1.00 22.18           C
ATOM   5279  H   ALA A 428     -13.248 -12.797   2.413  1.00  0.00           H
ATOM   5280  HA  ALA A 428     -14.614 -13.797   0.085  1.00  0.00           H
ATOM   5281  HB1 ALA A 428     -13.196 -12.060  -1.089  1.00  0.00           H
ATOM   5282  HB2 ALA A 428     -13.988 -11.403   0.330  1.00  0.00           H
ATOM   5283  HB3 ALA A 428     -12.275 -11.815   0.388  1.00  0.00           H
ATOM   5284  N   GLN A 429     -11.495 -14.789   0.550  1.00 21.48           N
ATOM   5285  CA  GLN A 429     -10.573 -15.873   0.246  1.00 23.47           C
ATOM   5286  C   GLN A 429     -11.241 -17.225   0.557  1.00 23.16           C
ATOM   5287  O   GLN A 429     -11.350 -18.065  -0.340  1.00 24.44           O
ATOM   5288  CB  GLN A 429      -9.258 -15.713   1.044  1.00 24.04           C
ATOM   5289  CG  GLN A 429      -8.302 -14.625   0.506  1.00 23.93           C
ATOM   5290  CD  GLN A 429      -7.595 -15.019  -0.797  1.00 27.30           C
ATOM   5291  OE1 GLN A 429      -8.111 -15.812  -1.579  1.00 28.29           O
ATOM   5292  NE2 GLN A 429      -6.408 -14.490  -1.046  1.00 21.69           N
ATOM   5293  H   GLN A 429     -11.311 -14.203   1.361  1.00  0.00           H
ATOM   5294  HA  GLN A 429     -10.369 -15.848  -0.820  1.00  0.00           H
ATOM   5295  HB2 GLN A 429      -9.478 -15.507   2.092  1.00  0.00           H
ATOM   5296  HB3 GLN A 429      -8.717 -16.660   1.038  1.00  0.00           H
ATOM   5297  HG2 GLN A 429      -8.831 -13.683   0.355  1.00  0.00           H
ATOM   5298  HG3 GLN A 429      -7.541 -14.429   1.261  1.00  0.00           H
ATOM   5299 HE21 GLN A 429      -5.950 -13.848  -0.395  1.00  0.00           H
ATOM   5300 HE22 GLN A 429      -5.906 -14.768  -1.893  1.00  0.00           H
ATOM   5301  N   GLY A 430     -11.742 -17.385   1.788  1.00 24.56           N
ATOM   5302  CA  GLY A 430     -12.431 -18.570   2.301  1.00 25.89           C
ATOM   5303  C   GLY A 430     -11.666 -19.228   3.459  1.00 27.73           C
ATOM   5304  O   GLY A 430     -11.909 -20.386   3.787  1.00 27.40           O
ATOM   5305  H   GLY A 430     -11.660 -16.600   2.427  1.00  0.00           H
ATOM   5306  HA2 GLY A 430     -13.417 -18.272   2.657  1.00  0.00           H
ATOM   5307  HA3 GLY A 430     -12.591 -19.313   1.518  1.00  0.00           H
ATOM   5308  N   LEU A 431     -10.705 -18.512   4.053  1.00 26.14           N
ATOM   5309  CA  LEU A 431      -9.685 -19.031   4.953  1.00 27.26           C
ATOM   5310  C   LEU A 431     -10.107 -18.921   6.433  1.00 25.34           C
ATOM   5311  O   LEU A 431     -10.878 -18.039   6.837  1.00 25.57           O
ATOM   5312  CB  LEU A 431      -8.409 -18.185   4.737  1.00 26.32           C
ATOM   5313  CG  LEU A 431      -7.682 -18.434   3.398  1.00 26.85           C
ATOM   5314  CD1 LEU A 431      -6.670 -17.311   3.118  1.00 28.01           C
ATOM   5315  CD2 LEU A 431      -6.984 -19.803   3.355  1.00 26.82           C
ATOM   5316  H   LEU A 431     -10.673 -17.521   3.842  1.00  0.00           H
ATOM   5317  HA  LEU A 431      -9.489 -20.080   4.725  1.00  0.00           H
ATOM   5318  HB2 LEU A 431      -8.690 -17.133   4.764  1.00  0.00           H
ATOM   5319  HB3 LEU A 431      -7.701 -18.331   5.556  1.00  0.00           H
ATOM   5320  HG  LEU A 431      -8.418 -18.412   2.593  1.00  0.00           H
ATOM   5321 HD11 LEU A 431      -6.194 -17.441   2.145  1.00  0.00           H
ATOM   5322 HD12 LEU A 431      -7.147 -16.331   3.112  1.00  0.00           H
ATOM   5323 HD13 LEU A 431      -5.880 -17.288   3.870  1.00  0.00           H
ATOM   5324 HD21 LEU A 431      -6.456 -19.939   2.410  1.00  0.00           H
ATOM   5325 HD22 LEU A 431      -6.249 -19.903   4.155  1.00  0.00           H
ATOM   5326 HD23 LEU A 431      -7.691 -20.626   3.441  1.00  0.00           H
ATOM   5327  N   VAL A 432      -9.547 -19.826   7.247  1.00 24.67           N
ATOM   5328  CA  VAL A 432      -9.650 -19.896   8.704  1.00 24.91           C
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ATOM   5329  C   VAL A 432      -8.801 -18.759   9.310  1.00 24.65          C
ATOM   5330  O   VAL A 432      -7.770 -18.392   8.755  1.00 23.35          O
ATOM   5331  CB  VAL A 432      -9.137 -21.287   9.179  1.00 26.40          C
ATOM   5332  CG1 VAL A 432      -9.263 -21.495  10.702  1.00 27.65          C
ATOM   5333  CG2 VAL A 432      -9.847 -22.449   8.452  1.00 27.01          C
ATOM   5334  H   VAL A 432      -8.875 -20.450   6.827  1.00  0.00          H
ATOM   5335  HA  VAL A 432     -10.696 -19.766   8.987  1.00  0.00          H
ATOM   5336  HB  VAL A 432      -8.074 -21.358   8.935  1.00  0.00          H
ATOM   5337 HG11 VAL A 432      -8.921 -22.490  10.989  1.00  0.00          H
ATOM   5338 HG12 VAL A 432      -8.654 -20.787  11.266  1.00  0.00          H
ATOM   5339 HG13 VAL A 432     -10.295 -21.394  11.036  1.00  0.00          H
ATOM   5340 HG21 VAL A 432      -9.492 -23.415   8.813  1.00  0.00          H
ATOM   5341 HG22 VAL A 432     -10.926 -22.416   8.607  1.00  0.00          H
ATOM   5342 HG23 VAL A 432      -9.669 -22.437   7.376  1.00  0.00          H
ATOM   5343  N   LYS A 433      -9.263 -18.188  10.426  1.00 25.23          N
ATOM   5344  CA  LYS A 433      -8.764 -16.953  11.033  1.00 27.01          C
ATOM   5345  C   LYS A 433      -8.172 -17.246  12.434  1.00 28.68          C
ATOM   5346  O   LYS A 433      -8.584 -18.233  13.052  1.00 29.12          O
ATOM   5347  CB  LYS A 433      -9.973 -15.996  11.100  1.00 26.07          C
ATOM   5348  CG  LYS A 433     -10.384 -15.458   9.715  1.00 25.95          C
ATOM   5349  CD  LYS A 433     -11.840 -14.965   9.632  1.00 27.29          C
ATOM   5350  CE  LYS A 433     -12.848 -16.101   9.374  1.00 27.92          C
ATOM   5351  NZ  LYS A 433     -12.911 -16.494   7.955  1.00 27.82          N1+
ATOM   5352  H   LYS A 433      -9.989 -18.662  10.938  1.00  0.00          H
ATOM   5353  HA  LYS A 433      -7.988 -16.513  10.404  1.00  0.00          H
ATOM   5354  HB2 LYS A 433     -10.810 -16.512  11.570  1.00  0.00          H
ATOM   5355  HB3 LYS A 433      -9.751 -15.146  11.746  1.00  0.00          H
ATOM   5356  HG2 LYS A 433      -9.707 -14.640   9.481  1.00  0.00          H
ATOM   5357  HG3 LYS A 433     -10.211 -16.198   8.934  1.00  0.00          H
ATOM   5358  HD2 LYS A 433     -12.087 -14.452  10.562  1.00  0.00          H
ATOM   5359  HD3 LYS A 433     -11.942 -14.205   8.855  1.00  0.00          H
ATOM   5360  HE2 LYS A 433     -12.616 -16.970   9.991  1.00  0.00          H
ATOM   5361  HE3 LYS A 433     -13.847 -15.768   9.660  1.00  0.00          H
ATOM   5362  HZ1 LYS A 433     -13.487 -17.306   7.825  1.00  0.00          H
ATOM   5363  HZ2 LYS A 433     -13.429 -15.736   7.450  1.00  0.00          H
ATOM   5364  HZ3 LYS A 433     -12.011 -16.676   7.522  1.00  0.00          H
ATOM   5365  N   PRO A 434      -7.219 -16.428  12.945  1.00 29.99          N
ATOM   5366  CA  PRO A 434      -6.468 -16.707  14.181  1.00 31.36          C
ATOM   5367  C   PRO A 434      -7.296 -16.556  15.476  1.00 32.47          C
ATOM   5368  O   PRO A 434      -8.217 -15.746  15.555  1.00 33.32          O
ATOM   5369  CB  PRO A 434      -5.270 -15.746  14.134  1.00 31.69          C
ATOM   5370  CG  PRO A 434      -5.744 -14.570  13.294  1.00 29.64          C
ATOM   5371  CD  PRO A 434      -6.750 -15.187  12.323  1.00 30.38          C
ATOM   5372  HA  PRO A 434      -6.097 -17.733  14.130  1.00  0.00          H
ATOM   5373  HB2 PRO A 434      -4.904 -15.445  15.114  1.00  0.00          H
ATOM   5374  HB3 PRO A 434      -4.435 -16.232  13.625  1.00  0.00          H
ATOM   5375  HG2 PRO A 434      -6.254 -13.839  13.923  1.00  0.00          H
ATOM   5376  HG3 PRO A 434      -4.930 -14.051  12.785  1.00  0.00          H
ATOM   5377  HD2 PRO A 434      -7.573 -14.504  12.130  1.00  0.00          H
ATOM   5378  HD3 PRO A 434      -6.256 -15.407  11.375  1.00  0.00          H
ATOM   5379  N   LYS A 435      -6.941 -17.377  16.475  1.00 34.56          N
ATOM   5380  CA  LYS A 435      -7.635 -17.819  17.696  1.00 36.88          C
ATOM   5381  C   LYS A 435      -8.629 -16.928  18.477  1.00 37.85          C
ATOM   5382  O   LYS A 435      -9.357 -17.475  19.305  1.00 39.08          O
ATOM   5383  CB  LYS A 435      -6.650 -18.548  18.639  1.00 38.28          C
ATOM   5384  CG  LYS A 435      -6.078 -19.861  18.075  1.00 40.34          C
ATOM   5385  CD  LYS A 435      -5.079 -20.505  19.047  1.00 42.32          C
ATOM   5386  CE  LYS A 435      -4.516 -21.841  18.538  1.00 43.22          C
ATOM   5387  NZ  LYS A 435      -3.415 -22.295  19.391  1.00 42.23          N1+
ATOM   5388  H   LYS A 435      -6.090 -17.883  16.290  1.00  0.00          H
ATOM   5389  HA  LYS A 435      -8.303 -18.594  17.316  1.00  0.00          H
ATOM   5390  HB2 LYS A 435      -5.839 -17.876  18.909  1.00  0.00          H
ATOM   5391  HB3 LYS A 435      -7.150 -18.781  19.581  1.00  0.00          H
ATOM   5392  HG2 LYS A 435      -6.894 -20.555  17.868  1.00  0.00          H
ATOM   5393  HG3 LYS A 435      -5.579 -19.675  17.123  1.00  0.00          H
ATOM   5394  HD2 LYS A 435      -4.255 -19.807  19.210  1.00  0.00          H
ATOM   5395  HD3 LYS A 435      -5.552 -20.653  20.019  1.00  0.00          H
ATOM   5396  HE2 LYS A 435      -5.289 -22.607  18.486  1.00  0.00          H
ATOM   5397  HE3 LYS A 435      -4.112 -21.715  17.531  1.00  0.00          H
ATOM   5398  HZ1 LYS A 435      -2.840 -23.010  18.942  1.00  0.00          H
ATOM   5399  HZ2 LYS A 435      -2.686 -21.556  19.330  1.00  0.00          H
ATOM   5400  HZ3 LYS A 435      -3.615 -22.510  20.349  1.00  0.00          H
ATOM   5401  N   ASN A 436      -8.713 -15.612  18.255  1.00 38.38          N
ATOM   5402  CA  ASN A 436      -9.703 -14.737  18.901  1.00 38.54          C
ATOM   5403  C   ASN A 436     -10.365 -13.706  17.980  1.00 36.60          C
ATOM   5404  O   ASN A 436     -11.001 -12.773  18.472  1.00 35.38          O
ATOM   5405  CB  ASN A 436      -9.325 -14.253  20.326  1.00 41.89          C
ATOM   5406  CG  ASN A 436      -8.097 -13.348  20.436  1.00 46.16          C
ATOM   5407  OD1 ASN A 436      -6.995 -13.821  20.714  1.00 46.58          O
ATOM   5408  ND2 ASN A 436      -8.291 -12.039  20.310  1.00 48.00          N
ATOM   5409  H   ASN A 436      -8.115 -15.229  17.532  1.00  0.00          H
ATOM   5410  HA  ASN A 436     -10.572 -15.370  19.086  1.00  0.00          H
ATOM   5411  HB2 ASN A 436     -10.173 -13.739  20.779  1.00  0.00          H
ATOM   5412  HB3 ASN A 436      -9.152 -15.124  20.960  1.00  0.00          H
ATOM   5413 HD21 ASN A 436      -9.196 -11.670  20.060  1.00  0.00          H
ATOM   5414 HD22 ASN A 436      -7.537 -11.373  20.484  1.00  0.00          H
ATOM   5415  N   TRP A 437     -10.273 -13.915  16.656  1.00 33.69          N
ATOM   5416  CA  TRP A 437     -10.810 -13.087  15.566  1.00 32.40          C
ATOM   5417  C   TRP A 437     -12.256 -12.591  15.761  1.00 31.88          C
ATOM   5418  O   TRP A 437     -12.571 -11.431  15.511  1.00 31.51          O
ATOM   5419  CB  TRP A 437     -10.660 -13.845  14.227  1.00 31.53          C
ATOM   5420  CG  TRP A 437     -11.532 -15.055  14.013  1.00 29.81          C
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ATOM   5421  CD1 TRP A 437     -11.236 -16.327  14.362  1.00 30.15           C
ATOM   5422  CD2 TRP A 437     -12.856 -15.119  13.393  1.00 29.74           C
ATOM   5423  NE1 TRP A 437     -12.272 -17.165  14.007  1.00 29.97           N
ATOM   5424  CE3 TRP A 437     -13.734 -14.163  12.830  1.00 28.47           C
ATOM   5425  CE2 TRP A 437     -13.302 -16.476  13.407  1.00 28.86           C
ATOM   5426  CZ3 TRP A 437     -14.991 -14.540  12.316  1.00 29.95           C
ATOM   5427  CZ2 TRP A 437     -14.548 -16.866  12.885  1.00 30.78           C
ATOM   5428  CH2 TRP A 437     -15.397 -15.888  12.337  1.00 28.37           C
ATOM   5429  H   TRP A 437      -9.686 -14.689  16.359  1.00  0.00           H
ATOM   5430  HA  TRP A 437     -10.185 -12.195  15.515  1.00  0.00           H
ATOM   5431  HB2 TRP A 437     -10.872 -13.161  13.408  1.00  0.00           H
ATOM   5432  HB3 TRP A 437      -9.617 -14.129  14.083  1.00  0.00           H
ATOM   5433  HD1 TRP A 437     -10.321 -16.641  14.839  1.00  0.00           H
ATOM   5434  HE1 TRP A 437     -12.236 -18.161  14.179  1.00  0.00           H
ATOM   5435  HE3 TRP A 437     -13.434 -13.124  12.807  1.00  0.00           H
ATOM   5436  HZ3 TRP A 437     -15.649 -13.790  11.906  1.00  0.00           H
ATOM   5437  HZ2 TRP A 437     -14.855 -17.901  12.911  1.00  0.00           H
ATOM   5438  HH2 TRP A 437     -16.360 -16.170  11.935  1.00  0.00           H
ATOM   5439  N   LYS A 438     -13.151 -13.484  16.204  1.00 30.82           N
ATOM   5440  CA  LYS A 438     -14.596 -13.254  16.234  1.00 31.39           C
ATOM   5441  C   LYS A 438     -14.978 -12.165  17.259  1.00 29.84           C
ATOM   5442  O   LYS A 438     -15.949 -11.446  17.040  1.00 28.51           O
ATOM   5443  CB  LYS A 438     -15.303 -14.600  16.548  1.00 33.89           C
ATOM   5444  CG  LYS A 438     -16.741 -14.773  15.997  1.00 35.72           C
ATOM   5445  CD  LYS A 438     -17.774 -13.804  16.596  1.00 37.55           C
ATOM   5446  CE  LYS A 438     -19.242 -14.226  16.461  1.00 37.38           C
ATOM   5447  NZ  LYS A 438     -20.107 -13.272  17.173  1.00 33.68           N1+
ATOM   5448  H   LYS A 438     -12.806 -14.416  16.367  1.00  0.00           H
ATOM   5449  HA  LYS A 438     -14.897 -12.911  15.242  1.00  0.00           H
ATOM   5450  HB2 LYS A 438     -14.714 -15.410  16.114  1.00  0.00           H
ATOM   5451  HB3 LYS A 438     -15.294 -14.787  17.624  1.00  0.00           H
ATOM   5452  HG2 LYS A 438     -16.736 -14.686  14.910  1.00  0.00           H
ATOM   5453  HG3 LYS A 438     -17.051 -15.797  16.212  1.00  0.00           H
ATOM   5454  HD2 LYS A 438     -17.545 -13.665  17.654  1.00  0.00           H
ATOM   5455  HD3 LYS A 438     -17.669 -12.834  16.113  1.00  0.00           H
ATOM   5456  HE2 LYS A 438     -19.533 -14.276  15.411  1.00  0.00           H
ATOM   5457  HE3 LYS A 438     -19.392 -15.217  16.893  1.00  0.00           H
ATOM   5458  HZ1 LYS A 438     -21.082 -13.514  17.124  1.00  0.00           H
ATOM   5459  HZ2 LYS A 438     -19.829 -13.314  18.182  1.00  0.00           H
ATOM   5460  HZ3 LYS A 438     -19.952 -12.319  16.873  1.00  0.00           H
ATOM   5461  N   LYS A 439     -14.201 -11.993  18.340  1.00 29.46           N
ATOM   5462  CA  LYS A 439     -14.493 -11.054  19.429  1.00 32.01           C
ATOM   5463  C   LYS A 439     -14.548  -9.580  18.996  1.00 31.47           C
ATOM   5464  O   LYS A 439     -15.208  -8.772  19.648  1.00 31.96           O
ATOM   5465  CB  LYS A 439     -13.449 -11.222  20.556  1.00 33.79           C
ATOM   5466  CG  LYS A 439     -13.543 -12.547  21.343  1.00 37.29           C
ATOM   5467  CD  LYS A 439     -14.928 -12.861  21.948  1.00 37.29           C
ATOM   5468  CE  LYS A 439     -15.505 -11.748  22.847  1.00 40.03           C
ATOM   5469  NZ  LYS A 439     -16.875 -12.065  23.279  1.00 40.12           N1+
ATOM   5470  H   LYS A 439     -13.324 -12.497  18.373  1.00  0.00           H
ATOM   5471  HA  LYS A 439     -15.492 -11.279  19.802  1.00  0.00           H
ATOM   5472  HB2 LYS A 439     -12.446 -11.122  20.137  1.00  0.00           H
ATOM   5473  HB3 LYS A 439     -13.532 -10.391  21.258  1.00  0.00           H
ATOM   5474  HG2 LYS A 439     -13.250 -13.369  20.689  1.00  0.00           H
ATOM   5475  HG3 LYS A 439     -12.797 -12.529  22.139  1.00  0.00           H
ATOM   5476  HD2 LYS A 439     -15.627 -13.082  21.139  1.00  0.00           H
ATOM   5477  HD3 LYS A 439     -14.852 -13.787  22.520  1.00  0.00           H
ATOM   5478  HE2 LYS A 439     -14.868 -11.588  23.719  1.00  0.00           H
ATOM   5479  HE3 LYS A 439     -15.553 -10.802  22.305  1.00  0.00           H
ATOM   5480  HZ1 LYS A 439     -17.289 -11.310  23.800  1.00  0.00           H
ATOM   5481  HZ2 LYS A 439     -17.455 -12.178  22.408  1.00  0.00           H
ATOM   5482  HZ3 LYS A 439     -16.934 -12.933  23.782  1.00  0.00           H
ATOM   5483  N   PHE A 440     -13.902  -9.246  17.880  1.00 29.67           N
ATOM   5484  CA  PHE A 440     -13.848  -7.905  17.316  1.00 30.46           C
ATOM   5485  C   PHE A 440     -15.075  -7.608  16.425  1.00 32.12           C
ATOM   5486  O   PHE A 440     -15.353  -6.446  16.145  1.00 32.41           O
ATOM   5487  CB  PHE A 440     -12.559  -7.826  16.493  1.00 27.41           C
ATOM   5488  CG  PHE A 440     -11.296  -7.926  17.325  1.00 25.90           C
ATOM   5489  CD1 PHE A 440     -10.802  -6.774  17.965  1.00 25.42           C
ATOM   5490  CD2 PHE A 440     -10.608  -9.152  17.461  1.00 24.33           C
ATOM   5491  CE1 PHE A 440      -9.623  -6.839  18.723  1.00 23.50           C
ATOM   5492  CE2 PHE A 440      -9.434  -9.215  18.236  1.00 24.72           C
ATOM   5493  CZ  PHE A 440      -8.937  -8.059  18.862  1.00 23.12           C
ATOM   5494  H   PHE A 440     -13.368  -9.960  17.402  1.00  0.00           H
ATOM   5495  HA  PHE A 440     -13.813  -7.155  18.110  1.00  0.00           H
ATOM   5496  HB2 PHE A 440     -12.553  -8.609  15.737  1.00  0.00           H
ATOM   5497  HB3 PHE A 440     -12.518  -6.875  15.967  1.00  0.00           H
ATOM   5498  HD1 PHE A 440     -11.298  -5.820  17.864  1.00  0.00           H
ATOM   5499  HD2 PHE A 440     -10.961 -10.041  16.964  1.00  0.00           H
ATOM   5500  HE1 PHE A 440      -9.244  -5.931  19.166  1.00  0.00           H
ATOM   5501  HE2 PHE A 440      -8.891 -10.140  18.331  1.00  0.00           H
ATOM   5502  HZ  PHE A 440      -8.019  -8.103  19.425  1.00  0.00           H
ATOM   5503  N   ARG A 441     -15.885  -8.622  16.071  1.00 33.77           N
ATOM   5504  CA  ARG A 441     -17.258  -8.459  15.583  1.00 36.52           C
ATOM   5505  C   ARG A 441     -18.212  -8.925  16.706  1.00 38.32           C
ATOM   5506  O   ARG A 441     -19.144  -9.703  16.477  1.00 39.68           O
ATOM   5507  CB  ARG A 441     -17.497  -9.242  14.263  1.00 36.16           C
ATOM   5508  CG  ARG A 441     -16.595  -8.871  13.063  1.00 36.35           C
ATOM   5509  CD  ARG A 441     -16.654  -7.403  12.576  1.00 37.85           C
ATOM   5510  NE  ARG A 441     -17.267  -7.255  11.239  1.00 37.46           N
ATOM   5511  CZ  ARG A 441     -16.663  -7.068  10.052  1.00 38.15           C
ATOM   5512  NH1 ARG A 441     -15.342  -7.004   9.902  1.00 39.40           N
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ATOM   5513  NH2 ARG A 441     -17.445  -6.977   8.989  1.00 37.27          N1+
ATOM   5514  H   ARG A 441     -15.635  -9.545  16.409  1.00  0.00           H
ATOM   5515  HA  ARG A 441     -17.492  -7.408  15.413  1.00  0.00           H
ATOM   5516  HB2 ARG A 441     -17.381 -10.309  14.461  1.00  0.00           H
ATOM   5517  HB3 ARG A 441     -18.536  -9.108  13.959  1.00  0.00           H
ATOM   5518  HG2 ARG A 441     -15.567  -9.121  13.321  1.00  0.00           H
ATOM   5519  HG3 ARG A 441     -16.840  -9.534  12.234  1.00  0.00           H
ATOM   5520  HD2 ARG A 441     -17.193  -6.766  13.277  1.00  0.00           H
ATOM   5521  HD3 ARG A 441     -15.650  -7.004  12.546  1.00  0.00           H
ATOM   5522  HE  ARG A 441     -18.276  -7.181  11.220  1.00  0.00           H
ATOM   5523 HH11 ARG A 441     -14.765  -6.545  10.615  1.00  0.00           H
ATOM   5524 HH12 ARG A 441     -14.943  -7.051   8.935  1.00  0.00           H
ATOM   5525 HH21 ARG A 441     -17.351  -6.058   8.514  1.00  0.00           H
ATOM   5526 HH22 ARG A 441     -17.162  -7.610   8.200  1.00  0.00           H
ATOM   5527  N   GLU A 442     -17.933  -8.453  17.929  1.00 40.76           N
ATOM   5528  CA  GLU A 442     -18.746  -8.515  19.143  1.00 41.35           C
ATOM   5529  C   GLU A 442     -18.522  -7.238  19.959  1.00 40.88           C
ATOM   5530  O   GLU A 442     -19.482  -6.619  20.407  1.00 41.44           O
ATOM   5531  CB  GLU A 442     -18.497  -9.790  19.978  1.00 43.85           C
ATOM   5532  CG  GLU A 442     -18.830 -11.087  19.232  1.00 47.68           C
ATOM   5533  CD  GLU A 442     -18.794 -12.337  20.089  1.00 49.70           C
ATOM   5534  OE1 GLU A 442     -18.201 -12.308  21.187  1.00 49.65           O
ATOM   5535  OE2 GLU A 442     -19.333 -13.343  19.581  1.00 50.39          O1-
ATOM   5536  H   GLU A 442     -17.145  -7.822  17.979  1.00  0.00           H
ATOM   5537  HA  GLU A 442     -19.796  -8.503  18.841  1.00  0.00           H
ATOM   5538  HB2 GLU A 442     -17.465  -9.822  20.322  1.00  0.00           H
ATOM   5539  HB3 GLU A 442     -19.110  -9.736  20.880  1.00  0.00           H
ATOM   5540  HG2 GLU A 442     -19.828 -10.995  18.805  1.00  0.00           H
ATOM   5541  HG3 GLU A 442     -18.131 -11.233  18.412  1.00  0.00           H
ATOM   5542  N   NMA A 442A    -17.255  -6.838  20.134  1.00  0.00           N
ATOM   5543  CA  NMA A 442A    -16.879  -5.604  20.807  1.00  0.00           C
ATOM   5544  H   NMA A 442A    -16.504  -7.460  19.842  1.00  0.00           H
ATOM   5545 1HA  NMA A 442A    -15.794  -5.500  20.828  1.00  0.00           H
ATOM   5546 2HA  NMA A 442A    -17.293  -4.739  20.287  1.00  0.00           H
ATOM   5547 3HA  NMA A 442A    -17.245  -5.592  21.834  1.00  0.00           H
TER    5548      NMA A 442A
HETATM 5549  O   SPC     5     -1.781  -0.676  20.493  1.00  0.00           O
HETATM 5550  H1  SPC     5     -1.745  -1.523  21.057  1.00  0.00           H
HETATM 5551  H2  SPC     5     -1.614  -0.931  19.526  1.00  0.00           H
HETATM 5552  O   SPC     9     -3.586   8.610  14.929  1.00  0.00           O
HETATM 5553  H1  SPC     9     -2.964   9.377  14.726  1.00  0.00           H
HETATM 5554  H2  SPC     9     -3.283   8.173  15.783  1.00  0.00           H
HETATM 5555  O   SPC    12     -7.875   6.550  17.759  1.00  0.00           O
HETATM 5556  H1  SPC    12     -8.530   6.039  17.186  1.00  0.00           H
HETATM 5557  H2  SPC    12     -7.779   7.485  17.389  1.00  0.00           H
HETATM 5558  O   SPC    13     -3.062   5.288  18.277  1.00  0.00           O
HETATM 5559  H1  SPC    13     -2.734   6.199  17.996  1.00  0.00           H
HETATM 5560  H2  SPC    13     -4.043   5.361  18.513  1.00  0.00           H
HETATM 5561  O   SPC    14      4.969   2.372  22.037  1.00  0.00           O
HETATM 5562  H1  SPC    14      4.072   2.274  22.488  1.00  0.00           H
HETATM 5563  H2  SPC    14      5.322   1.446  21.834  1.00  0.00           H
HETATM 5564  O   SPC    15      2.202   7.521  17.109  1.00  0.00           O
HETATM 5565  H1  SPC    15      2.980   8.039  17.494  1.00  0.00           H
HETATM 5566  H2  SPC    15      1.798   8.087  16.369  1.00  0.00           H
HETATM 5567  O   SPC    17      4.289   9.270  17.562  1.00  0.00           O
HETATM 5568  H1  SPC    17      4.577   9.274  16.596  1.00  0.00           H
HETATM 5569  H2  SPC    17      5.056   8.925  18.122  1.00  0.00           H
HETATM 5570  O   SPC    19     -5.771   2.882  19.699  1.00  0.00           O
HETATM 5571  H1  SPC    19     -6.134   2.621  20.596  1.00  0.00           H
HETATM 5572  H2  SPC    19     -4.968   2.299  19.499  1.00  0.00           H
HETATM 5573  O   SPC    21     -4.998   8.258  18.201  1.00  0.00           O
HETATM 5574  H1  SPC    21     -5.227   7.403  18.687  1.00  0.00           H
HETATM 5575  H2  SPC    21     -5.821   8.563  17.696  1.00  0.00           H
HETATM 5576  O   SPC    22     -7.236   3.083  17.338  1.00  0.00           O
HETATM 5577  H1  SPC    22     -6.450   3.125  16.706  1.00  0.00           H
HETATM 5578  H2  SPC    22     -6.877   3.089  18.282  1.00  0.00           H
HETATM 5579  O   SPC    26      6.362   7.949  18.817  1.00  0.00           O
HETATM 5580  H1  SPC    26      6.349   7.670  19.780  1.00  0.00           H
HETATM 5581  H2  SPC    26      6.171   7.134  18.243  1.00  0.00           H
HETATM 5582  O   SPC    31     -0.262   6.173  16.898  1.00  0.00           O
HETATM 5583  H1  SPC    31      0.598   6.663  17.093  1.00  0.00           H
HETATM 5584  H2  SPC    31     -1.035   6.794  17.089  1.00  0.00           H
HETATM 5585  O   SPC    32      5.808   5.819  17.296  1.00  0.00           O
HETATM 5586  H1  SPC    32      6.565   5.386  16.791  1.00  0.00           H
HETATM 5587  H2  SPC    32      4.931   5.478  16.927  1.00  0.00           H
HETATM 5588  O   SPC    34      1.445   4.786  22.042  1.00  0.00           O
HETATM 5589  H1  SPC    34      1.348   5.345  21.210  1.00  0.00           H
HETATM 5590  H2  SPC    34      0.559   4.330  22.226  1.00  0.00           H
HETATM 5591  O   SPC    35      0.604  -1.917  23.262  1.00  0.00           O
HETATM 5592  H1  SPC    35     -0.154  -2.289  22.695  1.00  0.00           H
HETATM 5593  H2  SPC    35      0.418  -2.184  24.212  1.00  0.00           H
HETATM 5594  O   SPC    37     -1.866   3.334  19.694  1.00  0.00           O
HETATM 5595  H1  SPC    37     -2.489   2.539  19.624  1.00  0.00           H
HETATM 5596  H2  SPC    37     -2.306   4.125  19.238  1.00  0.00           H
HETATM 5597  O   SPC    38      2.007   5.724  19.370  1.00  0.00           O
HETATM 5598  H1  SPC    38      2.910   5.489  19.760  1.00  0.00           H
HETATM 5599  H2  SPC    38      2.133   6.404  18.639  1.00  0.00           H
HETATM 5600  O   SPC    39      4.029   4.753  20.993  1.00  0.00           O
HETATM 5601  H1  SPC    39      3.227   4.826  21.600  1.00  0.00           H
HETATM 5602  H2  SPC    39      4.612   3.999  21.327  1.00  0.00           H
HETATM 5603  O   SPC    41     -5.660   5.597  18.956  1.00  0.00           O
HETATM 5604  H1  SPC    41     -6.549   5.879  18.557  1.00  0.00           H
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HETATM 5605  H2  SPC    41      -5.754   4.661  19.322  1.00  0.00           H
HETATM 5606  O   SPC    44       3.121  -1.849  22.032  1.00  0.00           O
HETATM 5607  H1  SPC    44       3.233  -2.794  21.695  1.00  0.00           H
HETATM 5608  H2  SPC    44       2.248  -1.797  22.538  1.00  0.00           H
HETATM 5609  O   SPC    46       3.376   5.212  16.147  1.00  0.00           O
HETATM 5610  H1  SPC    46       2.883   6.043  16.436  1.00  0.00           H
HETATM 5611  H2  SPC    46       3.504   5.239  15.146  1.00  0.00           H
HETATM 5612  O   SPC    52       2.274   2.119  22.483  1.00  0.00           O
HETATM 5613  H1  SPC    52       1.475   1.506  22.572  1.00  0.00           H
HETATM 5614  H2  SPC    52       1.954   3.074  22.542  1.00  0.00           H
HETATM 5615  O   SPC    53      -7.164   9.004  16.708  1.00  0.00           O
HETATM 5616  H1  SPC    53      -7.575   9.927  16.738  1.00  0.00           H
HETATM 5617  H2  SPC    53      -6.811   8.849  15.774  1.00  0.00           H
HETATM 5618  O   SPC    55      -2.457   7.835  17.408  1.00  0.00           O
HETATM 5619  H1  SPC    55      -1.942   8.709  17.419  1.00  0.00           H
HETATM 5620  H2  SPC    55      -3.385   8.012  17.777  1.00  0.00           H
HETATM 5621  O   SPC    57       5.276  -0.230  21.278  1.00  0.00           O
HETATM 5622  H1  SPC    57       6.076  -0.723  20.911  1.00  0.00           H
HETATM 5623  H2  SPC    57       4.619  -0.903  21.653  1.00  0.00           H
HETATM 5624  O   SPC    59       0.054   0.501  22.137  1.00  0.00           O
HETATM 5625  H1  SPC    59      -0.652   0.196  21.479  1.00  0.00           H
HETATM 5626  H2  SPC    59       0.315  -0.301  22.697  1.00  0.00           H
HETATM 5627  O   SPC    61      -0.720   3.184  22.183  1.00  0.00           O
HETATM 5628  H1  SPC    61      -0.579   2.197  22.342  1.00  0.00           H
HETATM 5629  H2  SPC    61      -1.266   3.297  21.340  1.00  0.00           H
HETATM 5630  O   SPC    62       0.818   3.271  19.168  1.00  0.00           O
HETATM 5631  H1  SPC    62       1.154   4.224  19.188  1.00  0.00           H
HETATM 5632  H2  SPC    62      -0.174   3.273  19.372  1.00  0.00           H
HETATM 5633  O   SPC    65      -3.535   1.200  19.401  1.00  0.00           O
HETATM 5634  H1  SPC    65      -3.450   0.769  18.486  1.00  0.00           H
HETATM 5635  H2  SPC    65      -3.088   0.586  20.068  1.00  0.00           H
HETATM 5636  O   SPC   384       1.185   1.581 -20.775  1.00  0.00           O
HETATM 5637  H1  SPC   384       0.396   0.936 -20.700  1.00  0.00           H
HETATM 5638  H2  SPC   384       0.836   2.441 -21.151  1.00  0.00           H
HETATM 5639  O   SPC   406       5.984   9.512 -15.885  1.00  0.00           O
HETATM 5640  H1  SPC   406       6.053  10.514 -15.841  1.00  0.00           H
HETATM 5641  H2  SPC   406       6.749   9.126 -15.343  1.00  0.00           H
HETATM 5642  O   SPC   447      -0.097   8.385 -16.253  1.00  0.00           O
HETATM 5643  H1  SPC   447      -0.617   7.971 -17.023  1.00  0.00           H
HETATM 5644  H2  SPC   447      -0.643   9.156 -15.887  1.00  0.00           H
HETATM 5645  O   SPC   454      -7.260  21.931   5.540  1.00  0.00           O
HETATM 5646  H1  SPC   454      -7.412  20.980   5.838  1.00  0.00           H
HETATM 5647  H2  SPC   454      -7.662  22.552   6.227  1.00  0.00           H
HETATM 5648  O   SPC   455       5.491  27.042  -7.134  1.00  0.00           O
HETATM 5649  H1  SPC   455       6.375  27.278  -7.563  1.00  0.00           H
HETATM 5650  H2  SPC   455       5.610  26.170  -6.633  1.00  0.00           H
HETATM 5651  O   SPC   457       4.473  21.782  -0.121  1.00  0.00           O
HETATM 5652  H1  SPC   457       4.091  21.076  -0.744  1.00  0.00           H
HETATM 5653  H2  SPC   457       3.724  22.382   0.196  1.00  0.00           H
HETATM 5654  O   SPC   458      -0.579  17.294   2.851  1.00  0.00           O
HETATM 5655  H1  SPC   458      -0.684  16.301   2.982  1.00  0.00           H
HETATM 5656  H2  SPC   458      -0.347  17.467   1.882  1.00  0.00           H
HETATM 5657  O   SPC   459       5.927  23.353  -8.396  1.00  0.00           O
HETATM 5658  H1  SPC   459       5.541  22.430  -8.541  1.00  0.00           H
HETATM 5659  H2  SPC   459       5.281  24.033  -8.781  1.00  0.00           H
HETATM 5660  O   SPC   460      -0.258  25.844  -5.144  1.00  0.00           O
HETATM 5661  H1  SPC   460       0.141  25.036  -4.684  1.00  0.00           H
HETATM 5662  H2  SPC   460      -1.250  25.869  -4.935  1.00  0.00           H
HETATM 5663  O   SPC   461      -3.213  18.156   6.881  1.00  0.00           O
HETATM 5664  H1  SPC   461      -3.139  18.164   5.874  1.00  0.00           H
HETATM 5665  H2  SPC   461      -3.880  18.862   7.166  1.00  0.00           H
HETATM 5666  O   SPC   462      -8.250  23.217   7.779  1.00  0.00           O
HETATM 5667  H1  SPC   462      -8.958  23.899   7.974  1.00  0.00           H
HETATM 5668  H2  SPC   462      -8.559  22.316   8.122  1.00  0.00           H
HETATM 5669  O   SPC   463       8.096  23.188   1.033  1.00  0.00           O
HETATM 5670  H1  SPC   463       8.737  22.592   1.549  1.00  0.00           H
HETATM 5671  H2  SPC   463       8.550  23.472   0.173  1.00  0.00           H
HETATM 5672  O   SPC   464       4.776  23.117  -4.190  1.00  0.00           O
HETATM 5673  H1  SPC   464       4.113  23.820  -3.888  1.00  0.00           H
HETATM 5674  H2  SPC   464       5.365  22.885  -3.402  1.00  0.00           H
HETATM 5675  O   SPC   466      -3.559  23.234   7.360  1.00  0.00           O
HETATM 5676  H1  SPC   466      -4.109  23.066   6.528  1.00  0.00           H
HETATM 5677  H2  SPC   466      -2.765  23.802   7.095  1.00  0.00           H
HETATM 5678  O   SPC   467      -0.886  19.595   7.114  1.00  0.00           O
HETATM 5679  H1  SPC   467      -1.015  20.321   7.806  1.00  0.00           H
HETATM 5680  H2  SPC   467      -1.718  19.021   7.099  1.00  0.00           H
HETATM 5681  O   SPC   468       7.749  28.427  -0.921  1.00  0.00           O
HETATM 5682  H1  SPC   468       8.448  27.756  -0.624  1.00  0.00           H
HETATM 5683  H2  SPC   468       7.681  28.396  -1.930  1.00  0.00           H
HETATM 5684  O   SPC   469       7.801  28.269  -3.636  1.00  0.00           O
HETATM 5685  H1  SPC   469       7.848  27.372  -4.104  1.00  0.00           H
HETATM 5686  H2  SPC   469       8.724  28.682  -3.649  1.00  0.00           H
HETATM 5687  O   SPC   470      -3.900  23.937   0.141  1.00  0.00           O
HETATM 5688  H1  SPC   470      -4.086  24.020  -0.843  1.00  0.00           H
HETATM 5689  H2  SPC   470      -4.768  24.069   0.649  1.00  0.00           H
HETATM 5690  O   SPC   471       3.349  26.309   0.788  1.00  0.00           O
HETATM 5691  H1  SPC   471       4.223  26.819   0.768  1.00  0.00           H
HETATM 5692  H2  SPC   471       2.804  26.561  -0.028  1.00  0.00           H
HETATM 5693  O   SPC   472      -5.372  19.314   4.578  1.00  0.00           O
HETATM 5694  H1  SPC   472      -4.446  18.947   4.426  1.00  0.00           H
HETATM 5695  H2  SPC   472      -5.474  20.162   4.048  1.00  0.00           H
HETATM 5696  O   SPC   473       5.879  27.357   0.730  1.00  0.00           O
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HETATM 5697  H1  SPC   473       6.435  27.925   0.102  1.00  0.00           H
HETATM 5698  H2  SPC   473       6.502  26.737   1.232  1.00  0.00           H
HETATM 5699  O   SPC   475       3.257  25.054  -3.180  1.00  0.00           O
HETATM 5700  H1  SPC   475       2.747  25.907  -3.366  1.00  0.00           H
HETATM 5701  H2  SPC   475       3.949  25.245  -2.470  1.00  0.00           H
HETATM 5702  O   SPC   476      -3.648  26.469  -7.207  1.00  0.00           O
HETATM 5703  H1  SPC   476      -3.305  25.910  -7.971  1.00  0.00           H
HETATM 5704  H2  SPC   476      -4.215  27.208  -7.573  1.00  0.00           H
HETATM 5705  O   SPC   477      -1.977  25.210   1.609  1.00  0.00           O
HETATM 5706  H1  SPC   477      -2.665  24.824   0.976  1.00  0.00           H
HETATM 5707  H2  SPC   477      -2.363  25.187   2.547  1.00  0.00           H
HETATM 5708  O   SPC   478       6.654  24.006   7.076  1.00  0.00           O
HETATM 5709  H1  SPC   478       7.496  24.380   7.494  1.00  0.00           H
HETATM 5710  H2  SPC   478       5.862  24.353   7.593  1.00  0.00           H
HETATM 5711  O   SPC   479       6.043  24.635  -6.018  1.00  0.00           O
HETATM 5712  H1  SPC   479       6.061  24.103  -6.879  1.00  0.00           H
HETATM 5713  H2  SPC   479       5.582  24.076  -5.311  1.00  0.00           H
HETATM 5714  O   SPC   480      -4.803  22.886   4.935  1.00  0.00           O
HETATM 5715  H1  SPC   480      -4.257  22.174   4.472  1.00  0.00           H
HETATM 5716  H2  SPC   480      -5.755  22.554   5.038  1.00  0.00           H
HETATM 5717  O   SPC   481       7.604  25.687   1.991  1.00  0.00           O
HETATM 5718  H1  SPC   481       7.087  25.709   2.857  1.00  0.00           H
HETATM 5719  H2  SPC   481       7.737  24.721   1.718  1.00  0.00           H
HETATM 5720  O   SPC   483       0.901  25.120   7.065  1.00  0.00           O
HETATM 5721  H1  SPC   483       1.471  24.573   7.694  1.00  0.00           H
HETATM 5722  H2  SPC   483       1.332  25.114   6.152  1.00  0.00           H
HETATM 5723  O   SPC   484       3.966  26.362   6.087  1.00  0.00           O
HETATM 5724  H1  SPC   484       3.882  27.348   6.253  1.00  0.00           H
HETATM 5725  H2  SPC   484       4.167  25.906   6.965  1.00  0.00           H
HETATM 5726  O   SPC   485       2.870  23.666   1.178  1.00  0.00           O
HETATM 5727  H1  SPC   485       3.073  24.635   0.969  1.00  0.00           H
HETATM 5728  H2  SPC   485       1.869  23.544   1.186  1.00  0.00           H
HETATM 5729  O   SPC   486       6.307  21.292   1.740  1.00  0.00           O
HETATM 5730  H1  SPC   486       7.021  21.939   1.424  1.00  0.00           H
HETATM 5731  H2  SPC   486       5.557  21.301   1.055  1.00  0.00           H
HETATM 5732  O   SPC   487       2.110  24.997   4.607  1.00  0.00           O
HETATM 5733  H1  SPC   487       2.860  25.496   5.067  1.00  0.00           H
HETATM 5734  H2  SPC   487       1.741  25.584   3.866  1.00  0.00           H
HETATM 5735  O   SPC   488       1.368  22.494   3.793  1.00  0.00           O
HETATM 5736  H1  SPC   488       1.722  23.382   4.129  1.00  0.00           H
HETATM 5737  H2  SPC   488       0.995  22.633   2.868  1.00  0.00           H
HETATM 5738  O   SPC   490      -2.383  21.934   1.293  1.00  0.00           O
HETATM 5739  H1  SPC   490      -2.976  22.634   0.865  1.00  0.00           H
HETATM 5740  H2  SPC   490      -1.431  22.268   1.270  1.00  0.00           H
HETATM 5741  O   SPC   491       5.045  23.489   2.848  1.00  0.00           O
HETATM 5742  H1  SPC   491       5.496  22.665   2.481  1.00  0.00           H
HETATM 5743  H2  SPC   491       4.158  23.596   2.374  1.00  0.00           H
HETATM 5744  O   SPC   492      -2.718  18.509   4.145  1.00  0.00           O
HETATM 5745  H1  SPC   492      -1.840  18.098   3.852  1.00  0.00           H
HETATM 5746  H2  SPC   492      -2.656  19.515   4.038  1.00  0.00           H
HETATM 5747  O   SPC   493      -0.340  24.721  -7.694  1.00  0.00           O
HETATM 5748  H1  SPC   493      -0.247  25.310  -6.877  1.00  0.00           H
HETATM 5749  H2  SPC   493       0.415  24.921  -8.334  1.00  0.00           H
HETATM 5750  O   SPC   494      -1.430  24.282   6.094  1.00  0.00           O
HETATM 5751  H1  SPC   494      -0.632  24.735   6.524  1.00  0.00           H
HETATM 5752  H2  SPC   494      -1.153  23.353   5.806  1.00  0.00           H
HETATM 5753  O   SPC   495      -2.909  25.556  -4.642  1.00  0.00           O
HETATM 5754  H1  SPC   495      -3.313  24.682  -4.335  1.00  0.00           H
HETATM 5755  H2  SPC   495      -3.349  25.839  -5.505  1.00  0.00           H
HETATM 5756  O   SPC   497       6.218  23.015  -1.867  1.00  0.00           O
HETATM 5757  H1  SPC   497       6.073  24.004  -1.717  1.00  0.00           H
HETATM 5758  H2  SPC   497       5.675  22.506  -1.183  1.00  0.00           H
HETATM 5759  O   SPC   498      -7.227  19.312   6.489  1.00  0.00           O
HETATM 5760  H1  SPC   498      -6.577  19.264   5.711  1.00  0.00           H
HETATM 5761  H2  SPC   498      -7.563  18.373   6.673  1.00  0.00           H
HETATM 5762  O   SPC   499      -3.119  24.869   4.029  1.00  0.00           O
HETATM 5763  H1  SPC   499      -3.877  24.261   4.302  1.00  0.00           H
HETATM 5764  H2  SPC   499      -2.436  24.872   4.774  1.00  0.00           H
HETATM 5765  O   SPC   500      -8.686  20.619   8.480  1.00  0.00           O
HETATM 5766  H1  SPC   500      -8.176  20.077   7.797  1.00  0.00           H
HETATM 5767  H2  SPC   500      -8.179  20.584   9.357  1.00  0.00           H
HETATM 5768  O   SPC   502      -2.699  24.485  -9.022  1.00  0.00           O
HETATM 5769  H1  SPC   502      -2.436  24.252  -9.975  1.00  0.00           H
HETATM 5770  H2  SPC   502      -1.848  24.552  -8.475  1.00  0.00           H
HETATM 5771  O   SPC   503       2.755  20.423   5.057  1.00  0.00           O
HETATM 5772  H1  SPC   503       2.506  19.587   4.551  1.00  0.00           H
HETATM 5773  H2  SPC   503       2.362  21.218   4.574  1.00  0.00           H
HETATM 5774  O   SPC   504      -8.876  24.106   1.332  1.00  0.00           O
HETATM 5775  H1  SPC   504      -9.229  23.595   0.539  1.00  0.00           H
HETATM 5776  H2  SPC   504      -7.877  24.186   1.256  1.00  0.00           H
HETATM 5777  O   SPC   505       0.655  24.082  -1.249  1.00  0.00           O
HETATM 5778  H1  SPC   505       1.020  25.022  -1.202  1.00  0.00           H
HETATM 5779  H2  SPC   505       0.651  23.792  -2.215  1.00  0.00           H
HETATM 5780  O   SPC   506       1.305  26.523   2.540  1.00  0.00           O
HETATM 5781  H1  SPC   506       0.557  26.914   1.991  1.00  0.00           H
HETATM 5782  H2  SPC   506       2.136  26.485   1.965  1.00  0.00           H
HETATM 5783  O   SPC   507       3.452  21.068   7.666  1.00  0.00           O
HETATM 5784  H1  SPC   507       2.841  20.488   8.228  1.00  0.00           H
HETATM 5785  H2  SPC   507       3.289  20.850   6.691  1.00  0.00           H
HETATM 5786  O   SPC   508      -5.154  23.595 -10.124  1.00  0.00           O
HETATM 5787  H1  SPC   508      -5.138  23.474 -11.125  1.00  0.00           H
HETATM 5788  H2  SPC   508      -4.269  23.980  -9.838  1.00  0.00           H
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HETATM 5789  O   SPC   509     -0.757  21.730   5.304  1.00  0.00           O
HETATM 5790  H1  SPC   509      0.106  21.923   4.811  1.00  0.00           H
HETATM 5791  H2  SPC   509     -0.607  20.953   5.932  1.00  0.00           H
HETATM 5792  O   SPC   510      2.583  23.546   8.516  1.00  0.00           O
HETATM 5793  H1  SPC   510      2.928  22.665   8.159  1.00  0.00           H
HETATM 5794  H2  SPC   510      3.359  24.185   8.600  1.00  0.00           H
HETATM 5795  O   SPC   511      1.016  23.728  -4.024  1.00  0.00           O
HETATM 5796  H1  SPC   511      1.968  24.002  -3.828  1.00  0.00           H
HETATM 5797  H2  SPC   511      1.013  23.036  -4.757  1.00  0.00           H
HETATM 5798  O   SPC   512     -2.933  21.175   3.811  1.00  0.00           O
HETATM 5799  H1  SPC   512     -2.164  21.489   4.393  1.00  0.00           H
HETATM 5800  H2  SPC   512     -2.766  21.489   2.862  1.00  0.00           H
HETATM 5801  O   SPC   513      8.151  25.892  -4.869  1.00  0.00           O
HETATM 5802  H1  SPC   513      8.681  25.172  -4.398  1.00  0.00           H
HETATM 5803  H2  SPC   513      7.364  25.453  -5.332  1.00  0.00           H
HETATM 5804  O   SPC   514      7.294  23.501   4.519  1.00  0.00           O
HETATM 5805  H1  SPC   514      7.025  23.701   5.476  1.00  0.00           H
HETATM 5806  H2  SPC   514      6.478  23.596   3.934  1.00  0.00           H
HETATM 5807  O   SPC   515     -6.078  24.139   1.744  1.00  0.00           O
HETATM 5808  H1  SPC   515     -6.151  23.198   2.107  1.00  0.00           H
HETATM 5809  H2  SPC   515     -6.074  24.781   2.515  1.00  0.00           H
HETATM 5810  O   SPC   516      0.063  23.350   1.261  1.00  0.00           O
HETATM 5811  H1  SPC   516      0.251  23.491   0.273  1.00  0.00           H
HETATM 5812  H2  SPC   516     -0.535  24.102   1.575  1.00  0.00           H
HETATM 5813  O   SPC   520     -4.910  19.993  12.300  1.00  0.00           O
HETATM 5814  H1  SPC   520     -4.281  20.574  12.841  1.00  0.00           H
HETATM 5815  H2  SPC   520     -4.861  19.049  12.664  1.00  0.00           H
HETATM 5816  O   SPC   522      4.760  25.358   8.619  1.00  0.00           O
HETATM 5817  H1  SPC   522      5.325  26.190   8.482  1.00  0.00           H
HETATM 5818  H2  SPC   522      4.815  25.093   9.595  1.00  0.00           H
HETATM 5819  O   SPC   523      5.043  20.731  12.149  1.00  0.00           O
HETATM 5820  H1  SPC   523      4.072  20.837  12.401  1.00  0.00           H
HETATM 5821  H2  SPC   523      5.173  21.158  11.242  1.00  0.00           H
HETATM 5822  O   SPC   525      0.173  12.194  18.525  1.00  0.00           O
HETATM 5823  H1  SPC   525     -0.130  12.371  19.463  1.00  0.00           H
HETATM 5824  H2  SPC   525      0.006  13.027  17.969  1.00  0.00           H
HETATM 5825  O   SPC   531      5.188  21.886   9.677  1.00  0.00           O
HETATM 5826  H1  SPC   531      6.156  21.616   9.589  1.00  0.00           H
HETATM 5827  H2  SPC   531      4.676  21.545   8.875  1.00  0.00           H
HETATM 5828  O   SPC   534     -6.526  16.330   9.601  1.00  0.00           O
HETATM 5829  H1  SPC   534     -7.468  16.542   9.899  1.00  0.00           H
HETATM 5830  H2  SPC   534     -6.033  15.949  10.399  1.00  0.00           H
HETATM 5831  O   SPC   542      3.515  23.660  13.487  1.00  0.00           O
HETATM 5832  H1  SPC   542      3.173  24.452  13.998  1.00  0.00           H
HETATM 5833  H2  SPC   542      3.918  23.001  14.145  1.00  0.00           H
HETATM 5834  O   SPC   543      0.878  18.610  15.562  1.00  0.00           O
HETATM 5835  H1  SPC   543      0.909  17.627  15.773  1.00  0.00           H
HETATM 5836  H2  SPC   543      1.822  18.961  15.525  1.00  0.00           H
HETATM 5837  O   SPC   546      3.972  18.105  10.049  1.00  0.00           O
HETATM 5838  H1  SPC   546      3.228  18.716   9.735  1.00  0.00           H
HETATM 5839  H2  SPC   546      4.240  17.517   9.271  1.00  0.00           H
HETATM 5840  O   SPC   547      6.736  20.142  14.256  1.00  0.00           O
HETATM 5841  H1  SPC   547      6.168  20.490  13.493  1.00  0.00           H
HETATM 5842  H2  SPC   547      6.464  19.186  14.431  1.00  0.00           H
HETATM 5843  O   SPC   551      6.858  18.753  11.526  1.00  0.00           O
HETATM 5844  H1  SPC   551      6.523  17.806  11.596  1.00  0.00           H
HETATM 5845  H2  SPC   551      6.097  19.378  11.746  1.00  0.00           H
HETATM 5846  O   SPC   557      4.102  15.727  15.905  1.00  0.00           O
HETATM 5847  H1  SPC   557      4.654  16.412  15.414  1.00  0.00           H
HETATM 5848  H2  SPC   557      4.715  15.021  16.275  1.00  0.00           H
HETATM 5849  O   SPC   559     -0.304  14.363  17.009  1.00  0.00           O
HETATM 5850  H1  SPC   559      0.340  15.000  16.563  1.00  0.00           H
HETATM 5851  H2  SPC   559     -1.169  14.374  16.490  1.00  0.00           H
HETATM 5852  O   SPC   560     -6.920  20.736  10.549  1.00  0.00           O
HETATM 5853  H1  SPC   560     -6.317  20.406  11.290  1.00  0.00           H
HETATM 5854  H2  SPC   560     -6.431  21.456  10.039  1.00  0.00           H
HETATM 5855  O   SPC   562     -0.026  19.854  11.118  1.00  0.00           O
HETATM 5856  H1  SPC   562     -0.400  19.665  12.036  1.00  0.00           H
HETATM 5857  H2  SPC   562     -0.029  20.849  10.964  1.00  0.00           H
HETATM 5858  O   SPC   565     -2.885  21.246  13.613  1.00  0.00           O
HETATM 5859  H1  SPC   565     -2.516  22.083  14.019  1.00  0.00           H
HETATM 5860  H2  SPC   565     -2.179  20.523  13.660  1.00  0.00           H
HETATM 5861  O   SPC   566     -6.316  11.671  14.038  1.00  0.00           O
HETATM 5862  H1  SPC   566     -6.423  12.625  13.729  1.00  0.00           H
HETATM 5863  H2  SPC   566     -6.858  11.552  14.882  1.00  0.00           H
HETATM 5864  O   SPC   568      4.611  13.795  12.170  1.00  0.00           O
HETATM 5865  H1  SPC   568      4.670  13.371  13.084  1.00  0.00           H
HETATM 5866  H2  SPC   568      3.832  13.381  11.678  1.00  0.00           H
HETATM 5867  O   SPC   572      5.692  17.517  14.447  1.00  0.00           O
HETATM 5868  H1  SPC   572      5.382  17.276  13.512  1.00  0.00           H
HETATM 5869  H2  SPC   572      6.423  16.867  14.707  1.00  0.00           H
HETATM 5870  O   SPC   575      4.803  12.531  14.620  1.00  0.00           O
HETATM 5871  H1  SPC   575      5.338  12.883  15.401  1.00  0.00           H
HETATM 5872  H2  SPC   575      3.821  12.719  14.795  1.00  0.00           H
HETATM 5873  O   SPC   577     -3.887  11.138  12.909  1.00  0.00           O
HETATM 5874  H1  SPC   577     -4.790  11.304  13.335  1.00  0.00           H
HETATM 5875  H2  SPC   577     -3.929  10.277  12.378  1.00  0.00           H
HETATM 5876  O   SPC   583     -3.325  19.808  10.078  1.00  0.00           O
HETATM 5877  H1  SPC   583     -3.955  19.729   9.292  1.00  0.00           H
HETATM 5878  H2  SPC   583     -3.878  19.909  10.920  1.00  0.00           H
HETATM 5879  O   SPC   587     -2.244  14.086   9.491  1.00  0.00           O
HETATM 5880  H1  SPC   587     -2.253  13.418   8.736  1.00  0.00           H
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HETATM 5881  H2  SPC   587     -2.773  14.899   9.207  1.00  0.00          H
HETATM 5882  O   SPC   591     -1.849  10.860  14.618  1.00  0.00          O
HETATM 5883  H1  SPC   591     -1.117  11.517  14.383  1.00  0.00          H
HETATM 5884  H2  SPC   591     -2.637  11.043  14.009  1.00  0.00          H
HETATM 5885  O   SPC   593     -4.247  13.102  11.071  1.00  0.00          O
HETATM 5886  H1  SPC   593     -3.448  13.400  10.528  1.00  0.00          H
HETATM 5887  H2  SPC   593     -3.939  12.431  11.762  1.00  0.00          H
HETATM 5888  O   SPC   596      2.595  18.804  12.430  1.00  0.00          O
HETATM 5889  H1  SPC   596      3.126  18.507  11.625  1.00  0.00          H
HETATM 5890  H2  SPC   596      2.207  19.718  12.237  1.00  0.00          H
HETATM 5891  O   SPC   597      4.487  21.787  15.177  1.00  0.00          O
HETATM 5892  H1  SPC   597      3.949  20.933  15.216  1.00  0.00          H
HETATM 5893  H2  SPC   597      5.462  21.547  15.203  1.00  0.00          H
HETATM 5894  O   SPC   598      4.868  24.172  11.110  1.00  0.00          O
HETATM 5895  H1  SPC   598      4.907  23.302  10.595  1.00  0.00          H
HETATM 5896  H2  SPC   598      4.322  24.027  11.948  1.00  0.00          H
HETATM 5897  O   SPC   599      7.425  15.498  14.865  1.00  0.00          O
HETATM 5898  H1  SPC   599      8.307  15.914  15.131  1.00  0.00          H
HETATM 5899  H2  SPC   599      7.523  15.055  13.958  1.00  0.00          H
HETATM 5900  O   SPC   600     -7.148  14.118  16.486  1.00  0.00          O
HETATM 5901  H1  SPC   600     -6.168  13.845  16.464  1.00  0.00          H
HETATM 5902  H2  SPC   600     -7.263  14.830  17.182  1.00  0.00          H
HETATM 5903  O   SPC   601     -6.340  11.410  10.399  1.00  0.00          O
HETATM 5904  H1  SPC   601     -5.657  12.134  10.568  1.00  0.00          H
HETATM 5905  H2  SPC   601     -5.890  10.653   9.904  1.00  0.00          H
HETATM 5906  O   SPC   607      7.288  14.296  12.442  1.00  0.00          O
HETATM 5907  H1  SPC   607      6.320  14.088  12.238  1.00  0.00          H
HETATM 5908  H2  SPC   607      7.639  14.928  11.737  1.00  0.00          H
HETATM 5909  O   SPC   612      2.213  13.072  15.108  1.00  0.00          O
HETATM 5910  H1  SPC   612      2.187  12.443  15.902  1.00  0.00          H
HETATM 5911  H2  SPC   612      1.906  13.985  15.404  1.00  0.00          H
HETATM 5912  O   SPC   614     -4.976  19.991   7.890  1.00  0.00          O
HETATM 5913  H1  SPC   614     -5.162  20.928   8.222  1.00  0.00          H
HETATM 5914  H2  SPC   614     -5.816  19.642   7.453  1.00  0.00          H
HETATM 5915  O   SPC   617      0.818  17.497   7.560  1.00  0.00          O
HETATM 5916  H1  SPC   617      0.190  18.227   7.247  1.00  0.00          H
HETATM 5917  H2  SPC   617      1.104  16.949   6.769  1.00  0.00          H
HETATM 5918  O   SPC   625      8.164  11.883  17.206  1.00  0.00          O
HETATM 5919  H1  SPC   625      7.341  12.433  17.017  1.00  0.00          H
HETATM 5920  H2  SPC   625      8.691  11.781  16.351  1.00  0.00          H
HETATM 5921  O   SPC   626      6.238  13.913  16.641  1.00  0.00          O
HETATM 5922  H1  SPC   626      6.698  14.437  15.905  1.00  0.00          H
HETATM 5923  H2  SPC   626      6.475  14.344  17.520  1.00  0.00          H
HETATM 5924  O   SPC   628     -1.751  16.599  13.249  1.00  0.00          O
HETATM 5925  H1  SPC   628     -0.753  16.449  13.300  1.00  0.00          H
HETATM 5926  H2  SPC   628     -1.992  16.772  12.280  1.00  0.00          H
HETATM 5927  O   SPC   630      1.460  15.794  15.437  1.00  0.00          O
HETATM 5928  H1  SPC   630      1.318  15.995  14.455  1.00  0.00          H
HETATM 5929  H2  SPC   630      2.452  15.850  15.640  1.00  0.00          H
HETATM 5930  O   SPC   631     -9.067  16.825  10.492  1.00  0.00          O
HETATM 5931  H1  SPC   631     -9.084  17.615  11.110  1.00  0.00          H
HETATM 5932  H2  SPC   631     -9.602  17.049   9.660  1.00  0.00          H
HETATM 5933  O   SPC   633     -3.798  16.261   8.801  1.00  0.00          O
HETATM 5934  H1  SPC   633     -4.797  16.269   8.949  1.00  0.00          H
HETATM 5935  H2  SPC   633     -3.579  16.887   8.037  1.00  0.00          H
HETATM 5936  O   SPC   634      1.499   9.361  15.297  1.00  0.00          O
HETATM 5937  H1  SPC   634      1.428   9.687  14.341  1.00  0.00          H
HETATM 5938  H2  SPC   634      1.740  10.146  15.884  1.00  0.00          H
HETATM 5939  O   SPC   639      7.703  15.926  18.111  1.00  0.00          O
HETATM 5940  H1  SPC   639      7.383  16.652  18.724  1.00  0.00          H
HETATM 5941  H2  SPC   639      8.249  16.344  17.369  1.00  0.00          H
HETATM 5942  O   SPC   641     -0.299  13.088  11.164  1.00  0.00          O
HETATM 5943  H1  SPC   641     -0.585  12.126  11.052  1.00  0.00          H
HETATM 5944  H2  SPC   641     -0.889  13.664  10.578  1.00  0.00          H
HETATM 5945  O   SPC   642     -7.219  14.305  13.736  1.00  0.00          O
HETATM 5946  H1  SPC   642     -7.222  14.391  14.742  1.00  0.00          H
HETATM 5947  H2  SPC   642     -8.100  13.902  13.444  1.00  0.00          H
HETATM 5948  O   SPC   643     -2.277  14.381  15.049  1.00  0.00          O
HETATM 5949  H1  SPC   643     -2.337  15.225  14.501  1.00  0.00          H
HETATM 5950  H2  SPC   643     -1.610  13.763  14.606  1.00  0.00          H
HETATM 5951  O   SPC   646     -4.575  13.409  16.414  1.00  0.00          O
HETATM 5952  H1  SPC   646     -3.753  13.730  15.924  1.00  0.00          H
HETATM 5953  H2  SPC   646     -4.368  12.520  16.851  1.00  0.00          H
HETATM 5954  O   SPC   647     -0.258  12.952  13.879  1.00  0.00          O
HETATM 5955  H1  SPC   647      0.698  12.908  14.202  1.00  0.00          H
HETATM 5956  H2  SPC   647     -0.254  13.083  12.875  1.00  0.00          H
HETATM 5957  O   SPC   648      2.736  15.072   9.705  1.00  0.00          O
HETATM 5958  H1  SPC   648      1.859  15.541   9.886  1.00  0.00          H
HETATM 5959  H2  SPC   648      2.688  14.143  10.090  1.00  0.00          H
HETATM 5960  O   SPC   649     -4.032  10.984  17.619  1.00  0.00          O
HETATM 5961  H1  SPC   649     -3.049  10.773  17.537  1.00  0.00          H
HETATM 5962  H2  SPC   649     -4.510  10.165  17.954  1.00  0.00          H
HETATM 5963  O   SPC   651      3.516  19.201  14.930  1.00  0.00          O
HETATM 5964  H1  SPC   651      3.116  19.086  14.006  1.00  0.00          H
HETATM 5965  H2  SPC   651      4.329  18.609  14.996  1.00  0.00          H
HETATM 5966  O   SPC   658      0.606  22.417  10.141  1.00  0.00          O
HETATM 5967  H1  SPC   658     -0.236  22.272   9.601  1.00  0.00          H
HETATM 5968  H2  SPC   658      1.268  22.926   9.573  1.00  0.00          H
HETATM 5969  O   SPC   666     -7.875  16.824   7.189  1.00  0.00          O
HETATM 5970  H1  SPC   666     -8.820  16.915   7.542  1.00  0.00          H
HETATM 5971  H2  SPC   666     -7.274  16.536   7.949  1.00  0.00          H
HETATM 5972  O   SPC   670     -1.714  21.626   8.818  1.00  0.00          O
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HETATM 5973  H1  SPC   670      -2.374  22.228   8.347  1.00  0.00          H
HETATM 5974  H2  SPC   670      -2.228  20.994   9.418  1.00  0.00          H
HETATM 5975  O   SPC   676      -6.184   8.972  14.170  1.00  0.00          O
HETATM 5976  H1  SPC   676      -5.218   8.730  14.356  1.00  0.00          H
HETATM 5977  H2  SPC   676      -6.229   9.960  13.959  1.00  0.00          H
HETATM 5978  O   SPC   679      -4.446  17.474  13.152  1.00  0.00          O
HETATM 5979  H1  SPC   679      -4.913  16.711  12.680  1.00  0.00          H
HETATM 5980  H2  SPC   679      -3.535  17.160  13.441  1.00  0.00          H
HETATM 5981  O   SPC   686       1.832  19.450   9.163  1.00  0.00          O
HETATM 5982  H1  SPC   686       1.487  18.718   8.557  1.00  0.00          H
HETATM 5983  H2  SPC   686       1.139  19.616   9.884  1.00  0.00          H
HETATM 5984  O   SPC   687       2.332  11.263  17.102  1.00  0.00          O
HETATM 5985  H1  SPC   687       3.020  10.648  17.513  1.00  0.00          H
HETATM 5986  H2  SPC   687       1.643  11.503  17.802  1.00  0.00          H
HETATM 5987  O   SPC   688      -5.745  22.478   8.777  1.00  0.00          O
HETATM 5988  H1  SPC   688      -6.560  22.949   8.410  1.00  0.00          H
HETATM 5989  H2  SPC   688      -4.917  22.931   8.411  1.00  0.00          H
HETATM 5990  O   SPC   691       0.389  16.443  10.078  1.00  0.00          O
HETATM 5991  H1  SPC   691      -0.541  16.740  10.344  1.00  0.00          H
HETATM 5992  H2  SPC   691       0.566  16.772   9.139  1.00  0.00          H
HETATM 5993  O   SPC   692      -1.387  10.295  17.237  1.00  0.00          O
HETATM 5994  H1  SPC   692      -1.434  10.513  16.248  1.00  0.00          H
HETATM 5995  H2  SPC   692      -0.749  10.941  17.681  1.00  0.00          H
HETATM 5996  O   SPC   693      -8.114  11.533  16.149  1.00  0.00          O
HETATM 5997  H1  SPC   693      -7.921  12.491  16.406  1.00  0.00          H
HETATM 5998  H2  SPC   693      -9.061  11.470  15.803  1.00  0.00          H
HETATM 5999  O   SPC   697       7.447  24.559  12.008  1.00  0.00          O
HETATM 6000  H1  SPC   697       7.706  23.664  12.398  1.00  0.00          H
HETATM 6001  H2  SPC   697       6.486  24.512  11.701  1.00  0.00          H
HETATM 6002  O   SPC   698      -5.525  15.309  11.902  1.00  0.00          O
HETATM 6003  H1  SPC   698      -6.192  15.010  12.604  1.00  0.00          H
HETATM 6004  H2  SPC   698      -5.017  14.493  11.581  1.00  0.00          H
HETATM 6005  O   SPC   703       5.093  16.555  11.980  1.00  0.00          O
HETATM 6006  H1  SPC   703       4.808  15.585  11.970  1.00  0.00          H
HETATM 6007  H2  SPC   703       4.611  17.039  11.234  1.00  0.00          H
HETATM 6008  O   SPC   706      -2.139  17.337  10.671  1.00  0.00          O
HETATM 6009  H1  SPC   706      -2.309  18.327  10.564  1.00  0.00          H
HETATM 6010  H2  SPC   706      -2.776  16.843  10.060  1.00  0.00          H
HETATM 6011  O   SPC   707      -0.986  19.280  13.686  1.00  0.00          O
HETATM 6012  H1  SPC   707      -0.291  19.188  14.418  1.00  0.00          H
HETATM 6013  H2  SPC   707      -1.433  18.385  13.565  1.00  0.00          H
HETATM 6014  O   SPC   709       2.356  21.575  12.122  1.00  0.00          O
HETATM 6015  H1  SPC   709       2.654  22.394  12.632  1.00  0.00          H
HETATM 6016  H2  SPC   709       1.723  21.867  11.390  1.00  0.00          H
HETATM 6017  O   SPC   712       1.016  16.570  12.817  1.00  0.00          O
HETATM 6018  H1  SPC   712       0.835  16.305  11.860  1.00  0.00          H
HETATM 6019  H2  SPC   712       1.546  17.432  12.805  1.00  0.00          H
HETATM 6020  O   SPC  1025       7.451  20.546 -14.015  1.00  0.00          O
HETATM 6021  H1  SPC  1025       8.168  19.837 -14.060  1.00  0.00          H
HETATM 6022  H2  SPC  1025       6.878  20.477 -14.839  1.00  0.00          H
HETATM 6023  O   SPC  1030       1.525  24.811  -9.755  1.00  0.00          O
HETATM 6024  H1  SPC  1030       1.032  25.049 -10.597  1.00  0.00          H
HETATM 6025  H2  SPC  1030       1.965  23.917  -9.882  1.00  0.00          H
HETATM 6026  O   SPC  1049       3.842  18.207 -16.014  1.00  0.00          O
HETATM 6027  H1  SPC  1049       4.622  18.841 -16.086  1.00  0.00          H
HETATM 6028  H2  SPC  1049       2.989  18.740 -16.143  1.00  0.00          H
HETATM 6029  O   SPC  1052       4.389  21.608 -12.238  1.00  0.00          O
HETATM 6030  H1  SPC  1052       3.586  20.999 -12.217  1.00  0.00          H
HETATM 6031  H2  SPC  1052       4.703  21.698 -13.185  1.00  0.00          H
HETATM 6032  O   SPC  1058       5.967  20.090 -16.434  1.00  0.00          O
HETATM 6033  H1  SPC  1058       5.597  20.716 -17.124  1.00  0.00          H
HETATM 6034  H2  SPC  1058       6.877  19.767 -16.738  1.00  0.00          H
HETATM 6035  O   SPC  1061       3.045  15.568 -15.567  1.00  0.00          O
HETATM 6036  H1  SPC  1061       3.347  16.535 -15.546  1.00  0.00          H
HETATM 6037  H2  SPC  1061       2.582  15.405 -16.441  1.00  0.00          H
HETATM 6038  O   SPC  1083       8.057   8.768 -14.273  1.00  0.00          O
HETATM 6039  H1  SPC  1083       8.476   8.036 -13.723  1.00  0.00          H
HETATM 6040  H2  SPC  1083       8.716   9.536 -14.325  1.00  0.00          H
HETATM 6041  O   SPC  1095       0.000  22.075 -12.540  1.00  0.00          O
HETATM 6042  H1  SPC  1095       0.818  21.498 -12.641  1.00  0.00          H
HETATM 6043  H2  SPC  1095      -0.320  22.339 -13.463  1.00  0.00          H
HETATM 6044  O   SPC  1096       9.157  15.090 -17.069  1.00  0.00          O
HETATM 6045  H1  SPC  1096       8.319  15.585 -17.341  1.00  0.00          H
HETATM 6046  H2  SPC  1096       9.867  15.766 -16.830  1.00  0.00          H
HETATM 6047  O   SPC  1097       7.010  16.776 -17.526  1.00  0.00          O
HETATM 6048  H1  SPC  1097       6.035  16.999 -17.478  1.00  0.00          H
HETATM 6049  H2  SPC  1097       7.546  17.622 -17.395  1.00  0.00          H
HETATM 6050  O   SPC  1101      -0.892   9.741 -19.132  1.00  0.00          O
HETATM 6051  H1  SPC  1101      -1.098   8.782 -18.872  1.00  0.00          H
HETATM 6052  H2  SPC  1101      -1.759  10.235 -19.215  1.00  0.00          H
HETATM 6053  O   SPC  1102       8.452  19.064 -16.919  1.00  0.00          O
HETATM 6054  H1  SPC  1102       8.650  18.770 -15.966  1.00  0.00          H
HETATM 6055  H2  SPC  1102       9.324  19.346 -17.340  1.00  0.00          H
HETATM 6056  O   SPC  1109       7.116  21.692 -11.546  1.00  0.00          O
HETATM 6057  H1  SPC  1109       7.388  21.290 -12.434  1.00  0.00          H
HETATM 6058  H2  SPC  1109       6.110  21.748 -11.523  1.00  0.00          H
HETATM 6059  O   SPC  1111       1.730  19.848 -16.350  1.00  0.00          O
HETATM 6060  H1  SPC  1111       1.556  20.727 -15.900  1.00  0.00          H
HETATM 6061  H2  SPC  1111       1.210  19.854 -17.225  1.00  0.00          H
HETATM 6062  O   SPC  1113      -2.062  23.732 -11.538  1.00  0.00          O
HETATM 6063  H1  SPC  1113      -1.293  23.183 -11.895  1.00  0.00          H
HETATM 6064  H2  SPC  1113      -2.829  23.675 -12.189  1.00  0.00          H
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HETATM 6065  O   SPC  1128      4.182  25.331  -8.977  1.00  0.00           O
HETATM 6066  H1  SPC  1128      3.204  25.415  -9.203  1.00  0.00           H
HETATM 6067  H2  SPC  1128      4.463  26.125  -8.426  1.00  0.00           H
HETATM 6068  O   SPC  1147     -0.614  27.338   0.629  1.00  0.00           O
HETATM 6069  H1  SPC  1147     -1.128  26.524   0.946  1.00  0.00           H
HETATM 6070  H2  SPC  1147     -1.243  28.116   0.582  1.00  0.00           H
HETATM 6071  O   SPC  1155      5.452  25.669  -1.570  1.00  0.00           O
HETATM 6072  H1  SPC  1155      5.572  26.085  -0.661  1.00  0.00           H
HETATM 6073  H2  SPC  1155      5.407  26.416  -2.256  1.00  0.00           H
HETATM 6074  O   SPC  1178      3.661  28.332  -5.559  1.00  0.00           O
HETATM 6075  H1  SPC  1178      4.304  27.834  -6.164  1.00  0.00           H
HETATM 6076  H2  SPC  1178      3.469  29.228  -5.966  1.00  0.00           H
HETATM 6077  O   SPC  1184      5.616  25.921   3.956  1.00  0.00           O
HETATM 6078  H1  SPC  1184      5.282  25.098   3.472  1.00  0.00           H
HETATM 6079  H2  SPC  1184      5.002  26.096   4.740  1.00  0.00           H
HETATM 6080  O   SPC  1190      6.301  27.478   7.956  1.00  0.00           O
HETATM 6081  H1  SPC  1190      6.480  27.726   6.993  1.00  0.00           H
HETATM 6082  H2  SPC  1190      7.072  27.805   8.519  1.00  0.00           H
HETATM 6083  O   SPC  1196      1.724  27.257  -3.854  1.00  0.00           O
HETATM 6084  H1  SPC  1196      2.364  27.711  -4.490  1.00  0.00           H
HETATM 6085  H2  SPC  1196      0.944  26.892  -4.386  1.00  0.00           H
HETATM 6086  O   SPC  1211      9.122  30.624  -0.075  1.00  0.00           O
HETATM 6087  H1  SPC  1211      8.556  29.868  -0.433  1.00  0.00           H
HETATM 6088  H2  SPC  1211      8.635  31.045   0.701  1.00  0.00           H
HETATM 6089  O   SPC  1220      7.702  31.444   2.163  1.00  0.00           O
HETATM 6090  H1  SPC  1220      7.122  32.261   2.165  1.00  0.00           H
HETATM 6091  H2  SPC  1220      7.130  30.642   2.412  1.00  0.00           H
HETATM 6092  O   SPC  1223      5.163  27.698  -3.299  1.00  0.00           O
HETATM 6093  H1  SPC  1223      4.561  27.970  -4.062  1.00  0.00           H
HETATM 6094  H2  SPC  1223      6.084  28.079  -3.463  1.00  0.00           H
HETATM 6095  O   SPC  1228      6.223  29.321   2.860  1.00  0.00           O
HETATM 6096  H1  SPC  1228      5.890  28.620   2.218  1.00  0.00           H
HETATM 6097  H2  SPC  1228      6.304  28.912   3.778  1.00  0.00           H
HETATM 6098  O   SPC  1230      1.475  26.746  -1.130  1.00  0.00           O
HETATM 6099  H1  SPC  1230      1.463  27.112  -2.072  1.00  0.00           H
HETATM 6100  H2  SPC  1230      0.669  27.095  -0.630  1.00  0.00           H
HETATM 6101  O   SPC  1254      6.888  27.977   5.286  1.00  0.00           O
HETATM 6102  H1  SPC  1254      6.627  27.136   4.791  1.00  0.00           H
HETATM 6103  H2  SPC  1254      7.882  28.132   5.168  1.00  0.00           H
HETATM 6104  O   SPC  1358      8.507  28.265   9.445  1.00  0.00           O
HETATM 6105  H1  SPC  1358      8.787  27.465  10.004  1.00  0.00           H
HETATM 6106  H2  SPC  1358      8.559  29.087  10.015  1.00  0.00           H
HETATM 6107  O   SPC  3122     23.171   9.319  -2.739  1.00  0.00           O
HETATM 6108  H1  SPC  3122     23.843   8.943  -3.378  1.00  0.00           H
HETATM 6109  H2  SPC  3122     23.053   8.663  -1.970  1.00  0.00           H
HETATM 6110  O   SPC  3135     23.407  11.313   0.836  1.00  0.00           O
HETATM 6111  H1  SPC  3135     23.019  11.523  -0.071  1.00  0.00           H
HETATM 6112  H2  SPC  3135     23.600  10.324   0.887  1.00  0.00           H
HETATM 6113  O   SPC  3137     20.466   8.937  -3.236  1.00  0.00           O
HETATM 6114  H1  SPC  3137     20.174   9.377  -4.097  1.00  0.00           H
HETATM 6115  H2  SPC  3137     21.452   9.101  -3.104  1.00  0.00           H
HETATM 6116  O   SPC  3144     24.191   8.665   1.432  1.00  0.00           O
HETATM 6117  H1  SPC  3144     24.007   8.731   2.428  1.00  0.00           H
HETATM 6118  H2  SPC  3144     25.124   8.321   1.305  1.00  0.00           H
HETATM 6119  O   SPC  3156     22.898   7.633  -0.720  1.00  0.00           O
HETATM 6120  H1  SPC  3156     23.298   7.972   0.144  1.00  0.00           H
HETATM 6121  H2  SPC  3156     22.390   6.780  -0.525  1.00  0.00           H
HETATM 6122  O   SPC  3162     23.954   9.024   4.078  1.00  0.00           O
HETATM 6123  H1  SPC  3162     24.086  10.025   4.021  1.00  0.00           H
HETATM 6124  H2  SPC  3162     23.841   8.764   5.046  1.00  0.00           H
HETATM 6125  O   SPC  3189     10.851   7.647  17.523  1.00  0.00           O
HETATM 6126  H1  SPC  3189     10.543   6.739  17.844  1.00  0.00           H
HETATM 6127  H2  SPC  3189     10.061   8.280  17.568  1.00  0.00           H
HETATM 6128  O   SPC  3194     13.272   8.853  17.446  1.00  0.00           O
HETATM 6129  H1  SPC  3194     12.416   8.312  17.367  1.00  0.00           H
HETATM 6130  H2  SPC  3194     13.382   9.124  18.405  1.00  0.00           H
HETATM 6131  O   SPC  3212      9.636   5.267  18.264  1.00  0.00           O
HETATM 6132  H1  SPC  3212      8.979   5.027  17.539  1.00  0.00           H
HETATM 6133  H2  SPC  3212      9.438   4.715  19.077  1.00  0.00           H
HETATM 6134  O   SPC  3266      8.603   9.178  17.696  1.00  0.00           O
HETATM 6135  H1  SPC  3266      7.794   8.738  18.110  1.00  0.00           H
HETATM 6136  H2  SPC  3266      8.427  10.169  17.623  1.00  0.00           H
HETATM 6137  O   SPC  3271     15.915   8.721  16.483  1.00  0.00           O
HETATM 6138  H1  SPC  3271     16.273   9.666  16.407  1.00  0.00           H
HETATM 6139  H2  SPC  3271     14.955   8.766  16.797  1.00  0.00           H
HETATM 6140  O   SPC  3671     16.118   8.360 -15.225  1.00  0.00           O
HETATM 6141  H1  SPC  3671     15.334   7.781 -14.951  1.00  0.00           H
HETATM 6142  H2  SPC  3671     16.423   8.899 -14.425  1.00  0.00           H
HETATM 6143  O   SPC  3690     12.428  10.267 -12.941  1.00  0.00           O
HETATM 6144  H1  SPC  3690     13.205  10.670 -13.441  1.00  0.00           H
HETATM 6145  H2  SPC  3690     12.780   9.897 -12.059  1.00  0.00           H
HETATM 6146  O   SPC  3693     18.909   8.232 -12.011  1.00  0.00           O
HETATM 6147  H1  SPC  3693     18.956   7.927 -11.051  1.00  0.00           H
HETATM 6148  H2  SPC  3693     19.032   7.425 -12.609  1.00  0.00           H
HETATM 6149  O   SPC  3704     18.959   6.032 -13.602  1.00  0.00           O
HETATM 6150  H1  SPC  3704     18.769   6.285 -14.560  1.00  0.00           H
HETATM 6151  H2  SPC  3704     18.375   5.254 -13.356  1.00  0.00           H
HETATM 6152  O   SPC  3725     16.405   4.849 -14.651  1.00  0.00           O
HETATM 6153  H1  SPC  3725     15.678   5.498 -14.387  1.00  0.00           H
HETATM 6154  H2  SPC  3725     17.036   5.317 -15.283  1.00  0.00           H
HETATM 6155  O   SPC  3734     14.176   6.499 -14.615  1.00  0.00           O
HETATM 6156  H1  SPC  3734     13.352   6.943 -14.222  1.00  0.00           H
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HETATM 6157  H2  SPC  3734      13.879   5.684 -15.133  1.00  0.00           H
HETATM 6158  O   SPC  3757      18.812   4.414  -9.086  1.00  0.00           O
HETATM 6159  H1  SPC  3757      19.062   3.631  -8.486  1.00  0.00           H
HETATM 6160  H2  SPC  3757      17.929   4.210  -9.522  1.00  0.00           H
HETATM 6161  O   SPC  3761      19.249   7.160  -9.410  1.00  0.00           O
HETATM 6162  H1  SPC  3761      18.973   6.192  -9.292  1.00  0.00           H
HETATM 6163  H2  SPC  3761      20.245   7.214  -9.327  1.00  0.00           H
HETATM 6164  O   SPC  3778      14.001   3.931 -15.682  1.00  0.00           O
HETATM 6165  H1  SPC  3778      13.578   3.097 -15.322  1.00  0.00           H
HETATM 6166  H2  SPC  3778      14.962   3.971 -15.376  1.00  0.00           H
HETATM 6167  O   SPC  3781      11.952   7.669 -13.684  1.00  0.00           O
HETATM 6168  H1  SPC  3781      12.111   8.631 -13.418  1.00  0.00           H
HETATM 6169  H2  SPC  3781      11.009   7.419 -13.435  1.00  0.00           H
HETATM 6170  O   SPC  3783      17.965   6.630 -16.120  1.00  0.00           O
HETATM 6171  H1  SPC  3783      18.299   6.850 -17.038  1.00  0.00           H
HETATM 6172  H2  SPC  3783      17.296   7.340 -15.841  1.00  0.00           H
HETATM 6173  O   SPC  3785      18.590   9.581  -7.876  1.00  0.00           O
HETATM 6174  H1  SPC  3785      17.610   9.787  -7.728  1.00  0.00           H
HETATM 6175  H2  SPC  3785      18.667   8.717  -8.392  1.00  0.00           H
HETATM 6176  O   SPC  3790      17.691  22.392   1.342  1.00  0.00           O
HETATM 6177  H1  SPC  3790      18.164  21.495   1.304  1.00  0.00           H
HETATM 6178  H2  SPC  3790      17.910  22.833   2.224  1.00  0.00           H
HETATM 6179  O   SPC  3794       9.199  22.220   8.353  1.00  0.00           O
HETATM 6180  H1  SPC  3794       9.043  23.211   8.234  1.00  0.00           H
HETATM 6181  H2  SPC  3794       8.523  21.856   9.009  1.00  0.00           H
HETATM 6182  O   SPC  3796      22.423  11.799  -1.817  1.00  0.00           O
HETATM 6183  H1  SPC  3796      22.782  10.890  -2.076  1.00  0.00           H
HETATM 6184  H2  SPC  3796      21.850  12.131  -2.578  1.00  0.00           H
HETATM 6185  O   SPC  3798      18.895  19.954   1.337  1.00  0.00           O
HETATM 6186  H1  SPC  3798      19.814  19.714   1.704  1.00  0.00           H
HETATM 6187  H2  SPC  3798      18.381  19.101   1.220  1.00  0.00           H
HETATM 6188  O   SPC  3799      15.362  28.626  -0.568  1.00  0.00           O
HETATM 6189  H1  SPC  3799      14.733  29.079   0.077  1.00  0.00           H
HETATM 6190  H2  SPC  3799      15.849  27.886  -0.086  1.00  0.00           H
HETATM 6191  O   SPC  3800      13.266  22.634   8.676  1.00  0.00           O
HETATM 6192  H1  SPC  3800      12.747  22.957   7.868  1.00  0.00           H
HETATM 6193  H2  SPC  3800      14.237  22.884   8.546  1.00  0.00           H
HETATM 6194  O   SPC  3803      16.099  20.281   8.467  1.00  0.00           O
HETATM 6195  H1  SPC  3803      15.240  20.207   8.991  1.00  0.00           H
HETATM 6196  H2  SPC  3803      16.486  19.348   8.380  1.00  0.00           H
HETATM 6197  O   SPC  3808      11.204  23.559   2.653  1.00  0.00           O
HETATM 6198  H1  SPC  3808      10.536  22.805   2.518  1.00  0.00           H
HETATM 6199  H2  SPC  3808      11.654  23.740   1.765  1.00  0.00           H
HETATM 6200  O   SPC  3810      14.939  22.515   1.183  1.00  0.00           O
HETATM 6201  H1  SPC  3810      14.646  22.772   0.255  1.00  0.00           H
HETATM 6202  H2  SPC  3810      15.937  22.358   1.179  1.00  0.00           H
HETATM 6203  O   SPC  3811       8.118  21.777  -3.435  1.00  0.00           O
HETATM 6204  H1  SPC  3811       7.474  22.185  -2.771  1.00  0.00           H
HETATM 6205  H2  SPC  3811       8.899  22.403  -3.546  1.00  0.00           H
HETATM 6206  O   SPC  3812      13.668  25.591   3.268  1.00  0.00           O
HETATM 6207  H1  SPC  3812      13.590  25.747   2.271  1.00  0.00           H
HETATM 6208  H2  SPC  3812      13.908  24.621   3.426  1.00  0.00           H
HETATM 6209  O   SPC  3813      13.836  24.287  -4.011  1.00  0.00           O
HETATM 6210  H1  SPC  3813      13.882  23.352  -4.401  1.00  0.00           H
HETATM 6211  H2  SPC  3813      13.437  24.898  -4.704  1.00  0.00           H
HETATM 6212  O   SPC  3814      14.399  23.607  -1.417  1.00  0.00           O
HETATM 6213  H1  SPC  3814      15.370  23.835  -1.260  1.00  0.00           H
HETATM 6214  H2  SPC  3814      14.162  23.870  -2.367  1.00  0.00           H
HETATM 6215  O   SPC  3815      16.086  10.619  -7.451  1.00  0.00           O
HETATM 6216  H1  SPC  3815      16.213  11.596  -7.239  1.00  0.00           H
HETATM 6217  H2  SPC  3815      15.588  10.542  -8.334  1.00  0.00           H
HETATM 6218  O   SPC  3818      19.582  10.372  -5.391  1.00  0.00           O
HETATM 6219  H1  SPC  3818      19.305  10.075  -6.318  1.00  0.00           H
HETATM 6220  H2  SPC  3818      18.782  10.773  -4.929  1.00  0.00           H
HETATM 6221  O   SPC  3822      21.513  14.356  -0.839  1.00  0.00           O
HETATM 6222  H1  SPC  3822      22.138  13.594  -1.049  1.00  0.00           H
HETATM 6223  H2  SPC  3822      20.606  14.130  -1.230  1.00  0.00           H
HETATM 6224  O   SPC  3823      13.409  26.008   0.610  1.00  0.00           O
HETATM 6225  H1  SPC  3823      13.197  26.659  -0.134  1.00  0.00           H
HETATM 6226  H2  SPC  3823      12.914  25.145   0.423  1.00  0.00           H
HETATM 6227  O   SPC  3825       9.921  27.588  -6.086  1.00  0.00           O
HETATM 6228  H1  SPC  3825      10.197  28.262  -5.390  1.00  0.00           H
HETATM 6229  H2  SPC  3825       9.304  26.913  -5.652  1.00  0.00           H
HETATM 6230  O   SPC  3826      12.068  25.683  -5.759  1.00  0.00           O
HETATM 6231  H1  SPC  3826      11.562  24.868  -6.079  1.00  0.00           H
HETATM 6232  H2  SPC  3826      11.623  26.500  -6.146  1.00  0.00           H
HETATM 6233  O   SPC  3827      11.290  20.795  -4.450  1.00  0.00           O
HETATM 6234  H1  SPC  3827      11.193  20.916  -5.447  1.00  0.00           H
HETATM 6235  H2  SPC  3827      10.630  20.101  -4.138  1.00  0.00           H
HETATM 6236  O   SPC  3829      11.399  26.205  -3.171  1.00  0.00           O
HETATM 6237  H1  SPC  3829      12.092  26.563  -2.524  1.00  0.00           H
HETATM 6238  H2  SPC  3829      11.849  26.028  -4.059  1.00  0.00           H
HETATM 6239  O   SPC  3831      16.597  13.295  -6.668  1.00  0.00           O
HETATM 6240  H1  SPC  3831      17.520  13.225  -6.254  1.00  0.00           H
HETATM 6241  H2  SPC  3831      16.690  13.713  -7.585  1.00  0.00           H
HETATM 6242  O   SPC  3832      15.081  27.287   4.765  1.00  0.00           O
HETATM 6243  H1  SPC  3832      14.530  26.686   4.162  1.00  0.00           H
HETATM 6244  H2  SPC  3832      14.913  27.006   5.716  1.00  0.00           H
HETATM 6245  O   SPC  3839      12.030  23.462   6.386  1.00  0.00           O
HETATM 6246  H1  SPC  3839      12.135  22.647   5.797  1.00  0.00           H
HETATM 6247  H2  SPC  3839      11.171  23.925   6.127  1.00  0.00           H
HETATM 6248  O   SPC  3843      11.283  26.597   4.082  1.00  0.00           O
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HETATM 6249  H1  SPC  3843      12.207  26.244   3.866  1.00  0.00          H
HETATM 6250  H2  SPC  3843      10.730  25.835   4.450  1.00  0.00          H
HETATM 6251  O   SPC  3845      19.101  13.652  -1.830  1.00  0.00          O
HETATM 6252  H1  SPC  3845      18.813  12.848  -2.366  1.00  0.00          H
HETATM 6253  H2  SPC  3845      18.433  14.396  -1.975  1.00  0.00          H
HETATM 6254  O   SPC  3847      11.697  21.480  -7.144  1.00  0.00          O
HETATM 6255  H1  SPC  3847      11.610  21.242  -8.124  1.00  0.00          H
HETATM 6256  H2  SPC  3847      12.671  21.616  -6.933  1.00  0.00          H
HETATM 6257  O   SPC  3848      12.075  23.731   0.062  1.00  0.00          O
HETATM 6258  H1  SPC  3848      12.813  23.517  -0.595  1.00  0.00          H
HETATM 6259  H2  SPC  3848      11.193  23.758  -0.433  1.00  0.00          H
HETATM 6260  O   SPC  3850      16.383  17.730  -6.254  1.00  0.00          O
HETATM 6261  H1  SPC  3850      15.934  18.632  -6.220  1.00  0.00          H
HETATM 6262  H2  SPC  3850      16.392  17.418  -7.218  1.00  0.00          H
HETATM 6263  O   SPC  3851      18.312  23.868   3.672  1.00  0.00          O
HETATM 6264  H1  SPC  3851      19.301  23.978   3.784  1.00  0.00          H
HETATM 6265  H2  SPC  3851      17.906  24.777   3.470  1.00  0.00          H
HETATM 6266  O   SPC  3853       9.847  24.040  -3.756  1.00  0.00          O
HETATM 6267  H1  SPC  3853      10.504  24.762  -3.485  1.00  0.00          H
HETATM 6268  H2  SPC  3853      10.073  23.743  -4.698  1.00  0.00          H
HETATM 6269  O   SPC  3855      16.203  23.730   5.553  1.00  0.00          O
HETATM 6270  H1  SPC  3855      17.075  23.785   5.049  1.00  0.00          H
HETATM 6271  H2  SPC  3855      15.492  23.403   4.909  1.00  0.00          H
HETATM 6272  O   SPC  3858      21.236  12.285  -4.336  1.00  0.00          O
HETATM 6273  H1  SPC  3858      20.675  11.520  -4.691  1.00  0.00          H
HETATM 6274  H2  SPC  3858      21.979  12.464  -4.984  1.00  0.00          H
HETATM 6275  O   SPC  3859      17.558  15.857  -2.222  1.00  0.00          O
HETATM 6276  H1  SPC  3859      17.182  15.689  -3.150  1.00  0.00          H
HETATM 6277  H2  SPC  3859      18.151  16.664  -2.263  1.00  0.00          H
HETATM 6278  O   SPC  3860      24.318  11.671   3.388  1.00  0.00          O
HETATM 6279  H1  SPC  3860      23.928  11.592   2.456  1.00  0.00          H
HETATM 6280  H2  SPC  3860      24.938  12.457   3.410  1.00  0.00          H
HETATM 6281  O   SPC  3862       9.591  24.170  -1.012  1.00  0.00          O
HETATM 6282  H1  SPC  3862       9.589  25.151  -0.765  1.00  0.00          H
HETATM 6283  H2  SPC  3862       9.555  24.087  -2.018  1.00  0.00          H
HETATM 6284  O   SPC  3863      14.368  22.954   3.743  1.00  0.00          O
HETATM 6285  H1  SPC  3863      13.683  22.282   4.056  1.00  0.00          H
HETATM 6286  H2  SPC  3863      14.595  22.750   2.774  1.00  0.00          H
HETATM 6287  O   SPC  3864      18.880  13.509  -5.236  1.00  0.00          O
HETATM 6288  H1  SPC  3864      19.738  13.227  -4.787  1.00  0.00          H
HETATM 6289  H2  SPC  3864      18.591  14.398  -4.866  1.00  0.00          H
HETATM 6290  O   SPC  3870      12.073  21.614   4.376  1.00  0.00          O
HETATM 6291  H1  SPC  3870      11.848  22.420   3.810  1.00  0.00          H
HETATM 6292  H2  SPC  3870      11.659  20.803   3.934  1.00  0.00          H
HETATM 6293  O   SPC  3872      15.953  22.927   8.167  1.00  0.00          O
HETATM 6294  H1  SPC  3872      16.148  23.271   7.236  1.00  0.00          H
HETATM 6295  H2  SPC  3872      16.123  21.927   8.181  1.00  0.00          H
HETATM 6296  O   SPC  3873      13.013  27.656  -1.557  1.00  0.00          O
HETATM 6297  H1  SPC  3873      13.973  27.963  -1.471  1.00  0.00          H
HETATM 6298  H2  SPC  3873      12.412  28.460  -1.442  1.00  0.00          H
HETATM 6299  O   SPC  3874      12.334  26.191   8.592  1.00  0.00          O
HETATM 6300  H1  SPC  3874      11.585  26.654   8.098  1.00  0.00          H
HETATM 6301  H2  SPC  3874      13.074  25.982   7.938  1.00  0.00          H
HETATM 6302  O   SPC  3876      14.106  25.294   6.636  1.00  0.00          O
HETATM 6303  H1  SPC  3876      13.335  24.664   6.464  1.00  0.00          H
HETATM 6304  H2  SPC  3876      14.958  24.839   6.345  1.00  0.00          H
HETATM 6305  O   SPC  3877       7.752  21.091  10.378  1.00  0.00          O
HETATM 6306  H1  SPC  3877       7.603  20.121  10.622  1.00  0.00          H
HETATM 6307  H2  SPC  3877       7.980  21.593  11.226  1.00  0.00          H
HETATM 6308  O   SPC  3879       8.904  24.948   8.286  1.00  0.00          O
HETATM 6309  H1  SPC  3879       8.955  25.283   9.238  1.00  0.00          H
HETATM 6310  H2  SPC  3879       9.386  25.613   7.698  1.00  0.00          H
HETATM 6311  O   SPC  3881       9.468  26.659   0.221  1.00  0.00          O
HETATM 6312  H1  SPC  3881       8.849  26.296   0.933  1.00  0.00          H
HETATM 6313  H2  SPC  3881      10.179  27.218   0.674  1.00  0.00          H
HETATM 6314  O   SPC  3883      16.120  26.240   0.691  1.00  0.00          O
HETATM 6315  H1  SPC  3883      16.532  25.498   0.142  1.00  0.00          H
HETATM 6316  H2  SPC  3883      15.116  26.114   0.693  1.00  0.00          H
HETATM 6317  O   SPC  3888      10.312  23.673  -6.422  1.00  0.00          O
HETATM 6318  H1  SPC  3888       9.616  23.913  -7.117  1.00  0.00          H
HETATM 6319  H2  SPC  3888      10.791  22.834  -6.726  1.00  0.00          H
HETATM 6320  O   SPC  3890      16.912  15.529  -4.805  1.00  0.00          O
HETATM 6321  H1  SPC  3890      16.579  14.771  -5.379  1.00  0.00          H
HETATM 6322  H2  SPC  3890      16.733  16.400  -5.296  1.00  0.00          H
HETATM 6323  O   SPC  3891      17.068  24.051  -0.728  1.00  0.00          O
HETATM 6324  H1  SPC  3891      17.772  24.032  -1.441  1.00  0.00          H
HETATM 6325  H2  SPC  3891      17.349  23.430   0.022  1.00  0.00          H
HETATM 6326  O   SPC  3895      13.769  21.831  -5.075  1.00  0.00          O
HETATM 6327  H1  SPC  3895      12.945  21.367  -4.719  1.00  0.00          H
HETATM 6328  H2  SPC  3895      14.374  21.146  -5.506  1.00  0.00          H
HETATM 6329  O   SPC  3898       9.872  24.393   4.832  1.00  0.00          O
HETATM 6330  H1  SPC  3898      10.356  24.102   3.991  1.00  0.00          H
HETATM 6331  H2  SPC  3898       8.904  24.111   4.756  1.00  0.00          H
HETATM 6332  O   SPC  3899      17.196  26.261   3.214  1.00  0.00          O
HETATM 6333  H1  SPC  3899      16.844  26.336   2.268  1.00  0.00          H
HETATM 6334  H2  SPC  3899      16.540  26.704   3.838  1.00  0.00          H
HETATM 6335  O   SPC  3903      13.911  20.585  12.715  1.00  0.00          O
HETATM 6336  H1  SPC  3903      13.885  21.594  12.748  1.00  0.00          H
HETATM 6337  H2  SPC  3903      13.141  20.223  13.262  1.00  0.00          H
HETATM 6338  O   SPC  3911       9.319  19.532  15.244  1.00  0.00          O
HETATM 6339  H1  SPC  3911       8.388  19.674  14.881  1.00  0.00          H
HETATM 6340  H2  SPC  3911       9.689  20.432  15.527  1.00  0.00          H
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HETATM 6341  O   SPC  3923       9.403  16.921  16.154  1.00  0.00          O
HETATM 6342  H1  SPC  3923       9.469  17.888  15.864  1.00  0.00          H
HETATM 6343  H2  SPC  3923      10.329  16.581  16.372  1.00  0.00          H
HETATM 6344  O   SPC  3942       8.305  22.104  12.866  1.00  0.00          O
HETATM 6345  H1  SPC  3942       7.907  21.441  13.513  1.00  0.00          H
HETATM 6346  H2  SPC  3942       9.283  22.227  13.085  1.00  0.00          H
HETATM 6347  O   SPC  3960       9.284  26.067  10.789  1.00  0.00          O
HETATM 6348  H1  SPC  3960      10.211  25.733  11.015  1.00  0.00          H
HETATM 6349  H2  SPC  3960       8.609  25.555  11.349  1.00  0.00          H
HETATM 6350  O   SPC  3961      11.788  24.843  10.861  1.00  0.00          O
HETATM 6351  H1  SPC  3961      11.505  23.936  10.528  1.00  0.00          H
HETATM 6352  H2  SPC  3961      12.086  25.399  10.065  1.00  0.00          H
HETATM 6353  O   SPC  3963      13.819  20.276   9.964  1.00  0.00          O
HETATM 6354  H1  SPC  3963      13.588  21.139   9.493  1.00  0.00          H
HETATM 6355  H2  SPC  3963      13.914  20.459  10.953  1.00  0.00          H
HETATM 6356  O   SPC  3965      13.639  23.368  12.371  1.00  0.00          O
HETATM 6357  H1  SPC  3965      14.526  23.275  11.890  1.00  0.00          H
HETATM 6358  H2  SPC  3965      13.110  24.100  11.919  1.00  0.00          H
HETATM 6359  O   SPC  3970      18.895   9.468  14.278  1.00  0.00          O
HETATM 6360  H1  SPC  3970      19.772   9.775  14.655  1.00  0.00          H
HETATM 6361  H2  SPC  3970      19.020   9.265  13.296  1.00  0.00          H
HETATM 6362  O   SPC  3978      11.757  15.546  16.880  1.00  0.00          O
HETATM 6363  H1  SPC  3978      12.434  14.884  16.519  1.00  0.00          H
HETATM 6364  H2  SPC  3978      11.084  15.032  17.435  1.00  0.00          H
HETATM 6365  O   SPC  3991      11.155  19.491  11.232  1.00  0.00          O
HETATM 6366  H1  SPC  3991      11.104  20.418  10.838  1.00  0.00          H
HETATM 6367  H2  SPC  3991      11.241  19.567  12.234  1.00  0.00          H
HETATM 6368  O   SPC  3992      10.326  22.008  15.534  1.00  0.00          O
HETATM 6369  H1  SPC  3992      10.704  22.164  14.609  1.00  0.00          H
HETATM 6370  H2  SPC  3992      10.523  22.809  16.102  1.00  0.00          H
HETATM 6371  O   SPC  3996      11.098  22.427  12.944  1.00  0.00          O
HETATM 6372  H1  SPC  3996      12.009  22.850  13.042  1.00  0.00          H
HETATM 6373  H2  SPC  3996      10.937  22.275  11.958  1.00  0.00          H
HETATM 6374  O   SPC  4004      15.884  16.607  14.918  1.00  0.00          O
HETATM 6375  H1  SPC  4004      16.570  17.079  15.475  1.00  0.00          H
HETATM 6376  H2  SPC  4004      15.747  17.141  14.065  1.00  0.00          H
HETATM 6377  O   SPC  4008      17.153  11.102  15.909  1.00  0.00          O
HETATM 6378  H1  SPC  4008      17.750  10.743  15.184  1.00  0.00          H
HETATM 6379  H2  SPC  4008      16.855  12.033  15.660  1.00  0.00          H
HETATM 6380  O   SPC  4015      16.242  13.846  15.619  1.00  0.00          O
HETATM 6381  H1  SPC  4015      16.553  14.034  16.553  1.00  0.00          H
HETATM 6382  H2  SPC  4015      16.108  14.726  15.141  1.00  0.00          H
HETATM 6383  O   SPC  4018      13.463  13.664  15.938  1.00  0.00          O
HETATM 6384  H1  SPC  4018      14.450  13.591  15.752  1.00  0.00          H
HETATM 6385  H2  SPC  4018      13.084  12.732  16.052  1.00  0.00          H
HETATM 6386  O   SPC  4019      12.367  11.190  16.186  1.00  0.00          O
HETATM 6387  H1  SPC  4019      12.673  10.321  16.595  1.00  0.00          H
HETATM 6388  H2  SPC  4019      11.375  11.147  16.030  1.00  0.00          H
HETATM 6389  O   SPC  4040      15.876  22.836  10.924  1.00  0.00          O
HETATM 6390  H1  SPC  4040      15.935  23.076   9.944  1.00  0.00          H
HETATM 6391  H2  SPC  4040      16.509  22.081  11.105  1.00  0.00          H
HETATM 6392  O   SPC  4047      11.817  19.308  14.021  1.00  0.00          O
HETATM 6393  H1  SPC  4047      12.386  18.713  14.611  1.00  0.00          H
HETATM 6394  H2  SPC  4047      10.903  19.391  14.442  1.00  0.00          H
HETATM 6395  O   SPC  4049      13.246  17.547  15.580  1.00  0.00          O
HETATM 6396  H1  SPC  4049      12.743  16.894  16.163  1.00  0.00          H
HETATM 6397  H2  SPC  4049      14.168  17.180  15.405  1.00  0.00          H
HETATM 6398  O   SPC  4057      11.126  22.122  10.210  1.00  0.00          O
HETATM 6399  H1  SPC  4057      10.379  22.088   9.525  1.00  0.00          H
HETATM 6400  H2  SPC  4057      11.998  22.259   9.711  1.00  0.00          H
HETATM 6401  O   SPC  4065       9.754  14.082  18.052  1.00  0.00          O
HETATM 6402  H1  SPC  4065       9.370  13.159  17.931  1.00  0.00          H
HETATM 6403  H2  SPC  4065       8.997  14.723  18.236  1.00  0.00          H
HETATM 6404  O   SPC  4072      15.535  18.297  12.841  1.00  0.00          O
HETATM 6405  H1  SPC  4072      15.084  19.200  12.842  1.00  0.00          H
HETATM 6406  H2  SPC  4072      15.659  18.002  11.877  1.00  0.00          H
HETATM 6407  O   SPC  4392       9.325  22.419 -10.079  1.00  0.00          O
HETATM 6408  H1  SPC  4392       8.529  22.149 -10.643  1.00  0.00          H
HETATM 6409  H2  SPC  4392       9.058  23.197  -9.497  1.00  0.00          H
HETATM 6410  O   SPC  4394      11.780  16.766 -12.208  1.00  0.00          O
HETATM 6411  H1  SPC  4394      11.906  16.021 -12.877  1.00  0.00          H
HETATM 6412  H2  SPC  4394      10.808  17.066 -12.255  1.00  0.00          H
HETATM 6413  O   SPC  4398      18.535  12.047  -9.320  1.00  0.00          O
HETATM 6414  H1  SPC  4398      18.742  11.200  -8.814  1.00  0.00          H
HETATM 6415  H2  SPC  4398      17.993  11.811 -10.138  1.00  0.00          H
HETATM 6416  O   SPC  4400      14.702  11.058 -14.346  1.00  0.00          O
HETATM 6417  H1  SPC  4400      14.677  10.558 -15.215  1.00  0.00          H
HETATM 6418  H2  SPC  4400      15.515  10.756 -13.830  1.00  0.00          H
HETATM 6419  O   SPC  4410      14.169  20.479  -8.979  1.00  0.00          O
HETATM 6420  H1  SPC  4410      14.614  19.981  -9.737  1.00  0.00          H
HETATM 6421  H2  SPC  4410      13.243  20.748  -9.281  1.00  0.00          H
HETATM 6422  O   SPC  4411       8.431  24.394  -8.293  1.00  0.00          O
HETATM 6423  H1  SPC  4411       8.288  25.392  -8.284  1.00  0.00          H
HETATM 6424  H2  SPC  4411       7.529  23.941  -8.385  1.00  0.00          H
HETATM 6425  O   SPC  4416      16.248  16.914  -8.848  1.00  0.00          O
HETATM 6426  H1  SPC  4416      15.393  16.905  -9.380  1.00  0.00          H
HETATM 6427  H2  SPC  4416      16.684  16.005  -8.930  1.00  0.00          H
HETATM 6428  O   SPC  4423      15.410  20.288  -6.608  1.00  0.00          O
HETATM 6429  H1  SPC  4423      16.300  20.725  -6.753  1.00  0.00          H
HETATM 6430  H2  SPC  4423      14.905  20.288  -7.488  1.00  0.00          H
HETATM 6431  O   SPC  4433      13.523  12.662  -9.543  1.00  0.00          O
HETATM 6432  H1  SPC  4433      13.128  12.658  -8.617  1.00  0.00          H
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HETATM 6433  H2  SPC  4433      13.942  11.751  -9.715  1.00  0.00          H
HETATM 6434  O   SPC  4458      12.477  19.451 -11.990  1.00  0.00          O
HETATM 6435  H1  SPC  4458      13.470  19.451 -11.809  1.00  0.00          H
HETATM 6436  H2  SPC  4458      12.168  18.492 -12.080  1.00  0.00          H
HETATM 6437  O   SPC  4466      11.235  19.625 -17.141  1.00  0.00          O
HETATM 6438  H1  SPC  4466      11.274  19.812 -16.144  1.00  0.00          H
HETATM 6439  H2  SPC  4466      11.926  20.186 -17.599  1.00  0.00          H
HETATM 6440  O   SPC  4479      11.619  14.885 -14.342  1.00  0.00          O
HETATM 6441  H1  SPC  4479      11.501  15.621 -15.023  1.00  0.00          H
HETATM 6442  H2  SPC  4479      10.872  14.216 -14.463  1.00  0.00          H
HETATM 6443  O   SPC  4481      17.038   9.907 -13.142  1.00  0.00          O
HETATM 6444  H1  SPC  4481      16.944  10.662 -12.475  1.00  0.00          H
HETATM 6445  H2  SPC  4481      17.760   9.282 -12.804  1.00  0.00          H
HETATM 6446  O   SPC  4484       9.997  10.674 -14.202  1.00  0.00          O
HETATM 6447  H1  SPC  4484      10.867  10.548 -13.703  1.00  0.00          H
HETATM 6448  H2  SPC  4484       9.958  11.620 -14.550  1.00  0.00          H
HETATM 6449  O   SPC  4485      11.631  21.026  -9.869  1.00  0.00          O
HETATM 6450  H1  SPC  4485      11.804  20.477 -10.701  1.00  0.00          H
HETATM 6451  H2  SPC  4485      10.782  21.563 -10.012  1.00  0.00          H
HETATM 6452  O   SPC  4491      14.049  13.707 -13.594  1.00  0.00          O
HETATM 6453  H1  SPC  4491      14.202  12.787 -13.978  1.00  0.00          H
HETATM 6454  H2  SPC  4491      13.171  14.067 -13.940  1.00  0.00          H
HETATM 6455  O   SPC  4519      15.039  14.114 -11.155  1.00  0.00          O
HETATM 6456  H1  SPC  4519      14.707  14.028 -12.112  1.00  0.00          H
HETATM 6457  H2  SPC  4519      14.402  13.597 -10.553  1.00  0.00          H
HETATM 6458  O   SPC  4533      14.106  16.625 -10.693  1.00  0.00          O
HETATM 6459  H1  SPC  4533      13.187  16.670 -11.113  1.00  0.00          H
HETATM 6460  H2  SPC  4533      14.484  15.702 -10.859  1.00  0.00          H
HETATM 6461  O   SPC  4538      15.109  19.073 -11.151  1.00  0.00          O
HETATM 6462  H1  SPC  4538      14.763  18.136 -10.974  1.00  0.00          H
HETATM 6463  H2  SPC  4538      16.080  19.014 -11.392  1.00  0.00          H
HETATM 6464  O   SPC  4549       8.123  27.209  -8.156  1.00  0.00          O
HETATM 6465  H1  SPC  4549       8.815  27.427  -7.450  1.00  0.00          H
HETATM 6466  H2  SPC  4549       8.415  27.609  -9.027  1.00  0.00          H
HETATM 6467  O   SPC  4562      17.003  14.305  -9.174  1.00  0.00          O
HETATM 6468  H1  SPC  4562      17.707  13.581  -9.263  1.00  0.00          H
HETATM 6469  H2  SPC  4562      16.348  14.211  -9.937  1.00  0.00          H
HETATM 6470  O   SPC  4578       9.423  13.279 -15.072  1.00  0.00          O
HETATM 6471  H1  SPC  4578       9.383  13.866 -15.897  1.00  0.00          H
HETATM 6472  H2  SPC  4578       8.502  12.901 -14.913  1.00  0.00          H
HETATM 6473  O   SPC  4583      10.889  16.992 -16.064  1.00  0.00          O
HETATM 6474  H1  SPC  4583      10.281  17.435 -15.387  1.00  0.00          H
HETATM 6475  H2  SPC  4583      11.276  17.711 -16.652  1.00  0.00          H
HETATM 6476  O   SPC  4591      11.264  19.919 -14.461  1.00  0.00          O
HETATM 6477  H1  SPC  4591      11.750  19.935 -13.577  1.00  0.00          H
HETATM 6478  H2  SPC  4591      10.428  19.356 -14.354  1.00  0.00          H
HETATM 6479  O   SPC  4593      16.604  11.812 -11.271  1.00  0.00          O
HETATM 6480  H1  SPC  4593      15.963  11.265 -10.702  1.00  0.00          H
HETATM 6481  H2  SPC  4593      16.168  12.698 -11.472  1.00  0.00          H
HETATM 6482  O   SPC  4595       9.563  28.463   4.953  1.00  0.00          O
HETATM 6483  H1  SPC  4595      10.231  27.772   4.630  1.00  0.00          H
HETATM 6484  H2  SPC  4595       9.694  29.305   4.409  1.00  0.00          H
HETATM 6485  O   SPC  4603      14.953  29.553   3.227  1.00  0.00          O
HETATM 6486  H1  SPC  4603      14.942  28.755   3.848  1.00  0.00          H
HETATM 6487  H2  SPC  4603      15.852  29.989   3.280  1.00  0.00          H
HETATM 6488  O   SPC  4655      10.088  27.314   7.397  1.00  0.00          O
HETATM 6489  H1  SPC  4655       9.937  27.794   6.521  1.00  0.00          H
HETATM 6490  H2  SPC  4655       9.541  27.773   8.112  1.00  0.00          H
HETATM 6491  O   SPC  4664      11.035  28.207   1.887  1.00  0.00          O
HETATM 6492  H1  SPC  4664      11.169  27.553   2.646  1.00  0.00          H
HETATM 6493  H2  SPC  4664      10.588  29.036   2.253  1.00  0.00          H
HETATM 6494  O   SPC  4699      13.290  29.551   1.081  1.00  0.00          O
HETATM 6495  H1  SPC  4699      13.886  29.641   1.895  1.00  0.00          H
HETATM 6496  H2  SPC  4699      12.507  28.960   1.324  1.00  0.00          H
HETATM 6497  O   SPC  4716      10.474  28.779  -3.530  1.00  0.00          O
HETATM 6498  H1  SPC  4716      10.783  27.836  -3.340  1.00  0.00          H
HETATM 6499  H2  SPC  4716      10.871  29.390  -2.832  1.00  0.00          H
HETATM 6500  O   SPC  4729      11.535  29.921  -1.123  1.00  0.00          O
HETATM 6501  H1  SPC  4729      12.235  30.066  -0.412  1.00  0.00          H
HETATM 6502  H2  SPC  4729      10.646  30.254  -0.767  1.00  0.00          H
HETATM 6503  O   SPC  4733      10.058  30.479   3.151  1.00  0.00          O
HETATM 6504  H1  SPC  4733       9.190  30.864   2.801  1.00  0.00          H
HETATM 6505  H2  SPC  4733      10.779  31.169   3.052  1.00  0.00          H
HETATM 6506  O   SPC  A25J    -18.122   6.744   8.084  1.00  0.00          O
HETATM 6507  H1  SPC  A25J    -17.865   6.408   7.164  1.00  0.00          H
HETATM 6508  H2  SPC  A25J    -19.065   7.080   8.041  1.00  0.00          H
HETATM 6509  O   SPC  A25P    -18.401  -2.754   8.120  1.00  0.00          O
HETATM 6510  H1  SPC  A25P    -17.923  -3.584   7.810  1.00  0.00          H
HETATM 6511  H2  SPC  A25P    -17.944  -2.429   8.959  1.00  0.00          H
HETATM 6512  O   SPC  A25R    -17.559   2.489   7.466  1.00  0.00          O
HETATM 6513  H1  SPC  A25R    -16.716   2.798   7.914  1.00  0.00          H
HETATM 6514  H2  SPC  A25R    -17.585   2.877   6.535  1.00  0.00          H
HETATM 6515  O   SPC  A25S    -18.884  -3.039   3.414  1.00  0.00          O
HETATM 6516  H1  SPC  A25S    -19.857  -3.127   3.194  1.00  0.00          H
HETATM 6517  H2  SPC  A25S    -18.460  -2.395   2.761  1.00  0.00          H
HETATM 6518  O   SPC  A26K    -17.039  -4.240   5.011  1.00  0.00          O
HETATM 6519  H1  SPC  A26K    -16.173  -4.121   4.515  1.00  0.00          H
HETATM 6520  H2  SPC  A26K    -17.784  -3.839   4.455  1.00  0.00          H
HETATM 6521  O   SPC  A26V    -17.911   6.036   5.415  1.00  0.00          O
HETATM 6522  H1  SPC  A26V    -18.400   6.288   4.556  1.00  0.00          H
HETATM 6523  H2  SPC  A26V    -17.616   5.074   5.332  1.00  0.00          H
HETATM 6524  O   SPC  A278    -16.622  -4.804   7.588  1.00  0.00          O
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HETATM 6525  H1  SPC  A278     -15.654  -4.586   7.779  1.00  0.00          H
HETATM 6526  H2  SPC  A278     -16.786  -4.665   6.595  1.00  0.00          H
HETATM 6527  O   SPC  A27A     -17.057   3.425   4.884  1.00  0.00          O
HETATM 6528  H1  SPC  A27A     -16.434   3.829   4.199  1.00  0.00          H
HETATM 6529  H2  SPC  A27A     -17.072   2.426   4.743  1.00  0.00          H
HETATM 6530  O   SPC  A281    -14.601   4.641  12.689  1.00  0.00          O
HETATM 6531  H1  SPC  A281    -14.444   5.630  12.556  1.00  0.00          H
HETATM 6532  H2  SPC  A281    -14.340   4.397  13.636  1.00  0.00          H
HETATM 6533  O   SPC  A287     -8.883   8.922  13.515  1.00  0.00          O
HETATM 6534  H1  SPC  A287     -7.941   8.700  13.803  1.00  0.00          H
HETATM 6535  H2  SPC  A287     -8.830   9.508  12.690  1.00  0.00          H
HETATM 6536  O   SPC  A28N    -10.701   0.825  17.187  1.00  0.00          O
HETATM 6537  H1  SPC  A28N    -11.050   0.812  18.127  1.00  0.00          H
HETATM 6538  H2  SPC  A28N     -9.699   0.683  17.215  1.00  0.00          H
HETATM 6539  O   SPC  A291     -9.334   4.804  16.169  1.00  0.00          O
HETATM 6540  H1  SPC  A291     -9.619   4.419  15.284  1.00  0.00          H
HETATM 6541  H2  SPC  A291     -8.688   4.164  16.607  1.00  0.00          H
HETATM 6542  O   SPC  A298    -13.841   3.927  15.189  1.00  0.00          O
HETATM 6543  H1  SPC  A298    -13.321   3.062  15.227  1.00  0.00          H
HETATM 6544  H2  SPC  A298    -13.215   4.689  15.423  1.00  0.00          H
HETATM 6545  O   SPC  A29N    -18.247   0.487   9.180  1.00  0.00          O
HETATM 6546  H1  SPC  A29N    -18.082   1.247   8.532  1.00  0.00          H
HETATM 6547  H2  SPC  A29N    -18.495  -0.331   8.658  1.00  0.00          H
HETATM 6548  O   SPC  A2AC    -12.196   1.680  15.001  1.00  0.00          O
HETATM 6549  H1  SPC  A2AC    -11.623   2.309  14.458  1.00  0.00          H
HETATM 6550  H2  SPC  A2AC    -11.685   1.415  15.833  1.00  0.00          H
HETATM 6551  O   SPC  A2AJ    -17.810   5.789  10.706  1.00  0.00          O
HETATM 6552  H1  SPC  A2AJ    -17.372   6.596  11.108  1.00  0.00          H
HETATM 6553  H2  SPC  A2AJ    -17.953   5.959   9.721  1.00  0.00          H
HETATM 6554  O   SPC  A2AP    -11.954   5.892  15.534  1.00  0.00          O
HETATM 6555  H1  SPC  A2AP    -11.829   6.671  14.905  1.00  0.00          H
HETATM 6556  H2  SPC  A2AP    -11.064   5.661  15.945  1.00  0.00          H
HETATM 6557  O   SPC  A2BE    -17.669   0.894  11.851  1.00  0.00          O
HETATM 6558  H1  SPC  A2BE    -17.615   1.891  11.998  1.00  0.00          H
HETATM 6559  H2  SPC  A2BE    -17.934   0.721  10.890  1.00  0.00          H
HETATM 6560  O   SPC  A2BQ    -16.289   2.577  14.891  1.00  0.00          O
HETATM 6561  H1  SPC  A2BQ    -16.761   2.998  14.106  1.00  0.00          H
HETATM 6562  H2  SPC  A2BQ    -15.492   3.146  15.134  1.00  0.00          H
HETATM 6563  O   SPC  A2BS    -17.134   3.659  12.393  1.00  0.00          O
HETATM 6564  H1  SPC  A2BS    -16.160   3.932  12.420  1.00  0.00          H
HETATM 6565  H2  SPC  A2BS    -17.625   4.322  11.810  1.00  0.00          H
HETATM 6566  O   SPC  A2BV    -16.265  -0.001  13.997  1.00  0.00          O
HETATM 6567  H1  SPC  A2BV    -16.829   0.152  13.170  1.00  0.00          H
HETATM 6568  H2  SPC  A2BV    -16.290   0.848  14.546  1.00  0.00          H
HETATM 6569  O   SPC  A2OW    -17.819   8.861   5.019  1.00  0.00          O
HETATM 6570  H1  SPC  A2OW    -18.280   8.955   4.118  1.00  0.00          H
HETATM 6571  H2  SPC  A2OW    -17.803   7.881   5.254  1.00  0.00          H
HETATM 6572  O   SPC  A2QF    -17.180  10.546   7.030  1.00  0.00          O
HETATM 6573  H1  SPC  A2QF    -17.363   9.897   6.272  1.00  0.00          H
HETATM 6574  H2  SPC  A2QF    -17.663  11.401   6.839  1.00  0.00          H
HETATM 6575  O   SPC  A2QT    -10.858  19.638   7.068  1.00  0.00          O
HETATM 6576  H1  SPC  A2QT    -10.251  20.174   7.671  1.00  0.00          H
HETATM 6577  H2  SPC  A2QT    -11.615  20.228   6.753  1.00  0.00          H
HETATM 6578  O   SPC  A2R4    -11.491   7.972  13.653  1.00  0.00          O
HETATM 6579  H1  SPC  A2R4    -10.484   8.054  13.639  1.00  0.00          H
HETATM 6580  H2  SPC  A2R4    -11.881   8.840  13.312  1.00  0.00          H
HETATM 6581  O   SPC  A2RI     -8.674  10.664  11.471  1.00  0.00          O
HETATM 6582  H1  SPC  A2RI     -9.448  10.961  10.891  1.00  0.00          H
HETATM 6583  H2  SPC  A2RI     -7.804  10.937  11.024  1.00  0.00          H
HETATM 6584  O   SPC  A2RJ    -10.948  11.703  10.424  1.00  0.00          O
HETATM 6585  H1  SPC  A2RJ    -10.801  12.703  10.449  1.00  0.00          H
HETATM 6586  H2  SPC  A2RJ    -11.772  11.509   9.871  1.00  0.00          H
HETATM 6587  O   SPC  A2RY    -16.615   8.873   9.138  1.00  0.00          O
HETATM 6588  H1  SPC  A2RY    -16.761   9.587   8.436  1.00  0.00          H
HETATM 6589  H2  SPC  A2RY    -17.047   8.022   8.812  1.00  0.00          H
HETATM 6590  O   SPC  A2S2    -14.665   9.499  10.971  1.00  0.00          O
HETATM 6591  H1  SPC  A2S2    -14.464   8.651  11.484  1.00  0.00          H
HETATM 6592  H2  SPC  A2S2    -15.457   9.322  10.364  1.00  0.00          H
HETATM 6593  O   SPC  A2S9    -10.352  14.373  10.872  1.00  0.00          O
HETATM 6594  H1  SPC  A2S9    -10.051  13.929  11.729  1.00  0.00          H
HETATM 6595  H2  SPC  A2S9     -9.818  15.222  10.751  1.00  0.00          H
HETATM 6596  O   SPC  A2T8    -12.101  15.251   8.874  1.00  0.00          O
HETATM 6597  H1  SPC  A2T8    -12.696  14.528   8.496  1.00  0.00          H
HETATM 6598  H2  SPC  A2T8    -11.604  14.880   9.670  1.00  0.00          H
HETATM 6599  O   SPC  A2TA    -10.432  10.959  14.658  1.00  0.00          O
HETATM 6600  H1  SPC  A2TA     -9.872  10.156  14.409  1.00  0.00          H
HETATM 6601  H2  SPC  A2TA    -11.344  10.847  14.246  1.00  0.00          H
HETATM 6602  O   SPC  A2TV    -12.335  10.350  12.531  1.00  0.00          O
HETATM 6603  H1  SPC  A2TV    -13.250  10.205  12.133  1.00  0.00          H
HETATM 6604  H2  SPC  A2TV    -11.763  10.829  11.852  1.00  0.00          H
HETATM 6605  O   SPC  A2UG    -13.572  13.186   7.765  1.00  0.00          O
HETATM 6606  H1  SPC  A2UG    -14.551  13.271   7.563  1.00  0.00          H
HETATM 6607  H2  SPC  A2UG    -13.423  12.316   8.261  1.00  0.00          H
HETATM 6608  O   SPC  A2UN     -9.389  12.871  12.983  1.00  0.00          O
HETATM 6609  H1  SPC  A2UN     -8.974  12.148  12.412  1.00  0.00          H
HETATM 6610  H2  SPC  A2UN     -9.903  12.420  13.726  1.00  0.00          H
HETATM 6611  O   SPC  A2V9    -10.375  17.204   8.179  1.00  0.00          O
HETATM 6612  H1  SPC  A2V9    -11.140  16.553   8.325  1.00  0.00          H
HETATM 6613  H2  SPC  A2V9    -10.741  18.050   7.760  1.00  0.00          H
HETATM 6614  O   SPC  A2W8    -13.182  10.895   9.155  1.00  0.00          O
HETATM 6615  H1  SPC  A2W8    -13.838  10.515   9.826  1.00  0.00          H
HETATM 6616  H2  SPC  A2W8    -12.765  10.125   8.654  1.00  0.00          H
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HETATM 6617  O   SPC  A4YB     2.369  12.613  10.967  1.00  0.00          O
HETATM 6618  H1  SPC  A4YB     1.407  12.893  11.120  1.00  0.00          H
HETATM 6619  H2  SPC  A4YB     2.387  11.960  10.198  1.00  0.00          H
HETATM 6620  O   SPC  A4YC    -9.833  18.350   4.868  1.00  0.00          O
HETATM 6621  H1  SPC  A4YC   -10.548  17.643   4.770  1.00  0.00          H
HETATM 6622  H2  SPC  A4YC   -10.054  18.910   5.679  1.00  0.00          H
HETATM 6623  O   SPC  A4YD   -10.043   7.990  -0.968  1.00  0.00          O
HETATM 6624  H1  SPC  A4YD    -9.911   7.131  -0.443  1.00  0.00          H
HETATM 6625  H2  SPC  A4YD   -10.982   8.321  -0.805  1.00  0.00          H
HETATM 6626  O   SPC  A4YE    -1.027   8.652   8.778  1.00  0.00          O
HETATM 6627  H1  SPC  A4YE    -1.859   8.931   8.276  1.00  0.00          H
HETATM 6628  H2  SPC  A4YE    -1.233   7.820   9.226  1.00  0.00          H
HETATM 6629  O   SPC  A4YF    -7.991   0.472  17.433  1.00  0.00          O
HETATM 6630  H1  SPC  A4YF    -7.166  -0.059  17.180  1.00  0.00          H
HETATM 6631  H2  SPC  A4YF    -7.754   1.455  17.409  1.00  0.00          H
HETATM 6632  O   SPC  A4YG     2.056  18.912  -3.809  1.00  0.00          O
HETATM 6633  H1  SPC  A4YG     2.706  18.232  -4.170  1.00  0.00          H
HETATM 6634  H2  SPC  A4YG     1.204  18.854  -4.345  1.00  0.00          H
HETATM 6635  O   SPC  A4YH     2.100  10.837   8.570  1.00  0.00          O
HETATM 6636  H1  SPC  A4YH     2.820  11.296   8.064  1.00  0.00          H
HETATM 6637  H2  SPC  A4YH     1.363  10.803   7.932  1.00  0.00          H
HETATM 6638  O   SPC  A4YJ     2.872   3.315  -3.035  1.00  0.00          O
HETATM 6639  H1  SPC  A4YJ     3.188   2.760  -3.810  1.00  0.00          H
HETATM 6640  H2  SPC  A4YJ     3.347   4.205  -3.064  1.00  0.00          H
HETATM 6641  O   SPC  A4YK   -13.615  -0.491  13.935  1.00  0.00          O
HETATM 6642  H1  SPC  A4YK   -13.121   0.326  14.268  1.00  0.00          H
HETATM 6643  H2  SPC  A4YK   -14.609  -0.317  14.023  1.00  0.00          H
HETATM 6644  O   SPC  A4YL     8.998  18.055   3.350  1.00  0.00          O
HETATM 6645  H1  SPC  A4YL     9.791  18.633   3.083  1.00  0.00          H
HETATM 6646  H2  SPC  A4YL     8.365  17.997   2.560  1.00  0.00          H
HETATM 6647  O   SPC  A4YM     4.275  16.377   7.959  1.00  0.00          O
HETATM 6648  H1  SPC  A4YM     4.155  15.985   7.042  1.00  0.00          H
HETATM 6649  H2  SPC  A4YM     3.724  15.831   8.614  1.00  0.00          H
HETATM 6650  O   SPC  A4YN   -12.166   5.412   5.734  1.00  0.00          O
HETATM 6651  H1  SPC  A4YN   -12.032   4.455   5.443  1.00  0.00          H
HETATM 6652  H2  SPC  A4YN   -12.096   6.014   4.933  1.00  0.00          H
HETATM 6653  O   SPC  A4YO     5.990   6.026   2.405  1.00  0.00          O
HETATM 6654  H1  SPC  A4YO     6.410   5.463   3.123  1.00  0.00          H
HETATM 6655  H2  SPC  A4YO     5.887   6.970   2.742  1.00  0.00          H
HETATM 6656  O   SPC  A4YP    -3.650   8.943  11.315  1.00  0.00          O
HETATM 6657  H1  SPC  A4YP    -3.444   7.962  11.417  1.00  0.00          H
HETATM 6658  H2  SPC  A4YP    -4.290   9.056  10.539  1.00  0.00          H
HETATM 6659  O   SPC  A4YQ     3.788  19.840  -1.835  1.00  0.00          O
HETATM 6660  H1  SPC  A4YQ     3.134  19.605  -2.569  1.00  0.00          H
HETATM 6661  H2  SPC  A4YQ     4.643  19.314  -1.978  1.00  0.00          H
HETATM 6662  O   SPC  A4YS     1.451  10.390  12.793  1.00  0.00          O
HETATM 6663  H1  SPC  A4YS     0.619  10.233  12.245  1.00  0.00          H
HETATM 6664  H2  SPC  A4YS     2.033  11.053  12.312  1.00  0.00          H
HETATM 6665  O   SPC  A4YT     4.579  20.972  -8.481  1.00  0.00          O
HETATM 6666  H1  SPC  A4YT     4.787  20.258  -9.163  1.00  0.00          H
HETATM 6667  H2  SPC  A4YT     3.581  20.974  -8.308  1.00  0.00          H
HETATM 6668  O   SPC  A4YU    -5.656  -0.815  16.841  1.00  0.00          O
HETATM 6669  H1  SPC  A4YU    -5.752  -1.722  17.275  1.00  0.00          H
HETATM 6670  H2  SPC  A4YU    -4.723  -0.470  17.025  1.00  0.00          H
HETATM 6671  O   SPC  A4YV    -1.091  22.505 -15.051  1.00  0.00          O
HETATM 6672  H1  SPC  A4YV    -1.271  21.526 -14.875  1.00  0.00          H
HETATM 6673  H2  SPC  A4YV    -0.635  22.574 -15.959  1.00  0.00          H
HETATM 6674  O   SPC  A4YY   -12.023   4.609  11.542  1.00  0.00          O
HETATM 6675  H1  SPC  A4YY   -12.068   5.279  10.791  1.00  0.00          H
HETATM 6676  H2  SPC  A4YY   -12.966   4.352  11.794  1.00  0.00          H
HETATM 6677  O   SPC  A4YZ     1.847   8.212   8.720  1.00  0.00          O
HETATM 6678  H1  SPC  A4YZ     2.675   7.722   8.839  1.00  0.00          H
HETATM 6679  H2  SPC  A4YZ     2.077   9.175   8.775  1.00  0.00          H
HETATM 6680  O   SPC  A4Z0     1.967  18.185   3.508  1.00  0.00          O
HETATM 6681  H1  SPC  A4Z0     0.989  18.086   3.273  1.00  0.00          H
HETATM 6682  H2  SPC  A4Z0     2.509  18.105   2.662  1.00  0.00          H
HETATM 6683  O   SPC  A4Z2    -5.266   9.215   9.146  1.00  0.00          O
HETATM 6684  H1  SPC  A4Z2    -4.566   9.232   8.418  1.00  0.00          H
HETATM 6685  H2  SPC  A4Z2    -6.113   8.826   8.771  1.00  0.00          H
HETATM 6686  O   SPC  A4Z3     7.084  18.590   1.536  1.00  0.00          O
HETATM 6687  H1  SPC  A4Z3     6.717  19.518   1.404  1.00  0.00          H
HETATM 6688  H2  SPC  A4Z3     7.012  18.089   0.652  1.00  0.00          H
HETATM 6689  O   SPC  A4Z5    -0.932  10.241  11.018  1.00  0.00          O
HETATM 6690  H1  SPC  A4Z5    -1.814   9.942  11.284  1.00  0.00          H
HETATM 6691  H2  SPC  A4Z5    -0.792   9.796  10.164  1.00  0.00          H
HETATM 6692  O   SPC  A4Z6   -13.720   7.205  12.165  1.00  0.00          O
HETATM 6693  H1  SPC  A4Z6   -13.346   6.960  11.257  1.00  0.00          H
HETATM 6694  H2  SPC  A4Z6   -12.948   7.329  12.805  1.00  0.00          H
HETATM 6695  O   SPC  A4Z7    -9.159  -1.263  19.203  1.00  0.00          O
HETATM 6696  H1  SPC  A4Z7    -9.643  -1.927  18.614  1.00  0.00          H
HETATM 6697  H2  SPC  A4Z7    -8.646  -0.627  18.610  1.00  0.00          H
HETATM 6698  O   SPC  A4Z8     4.959  20.927  -5.763  1.00  0.00          O
HETATM 6699  H1  SPC  A4Z8     4.705  21.777  -5.276  1.00  0.00          H
HETATM 6700  H2  SPC  A4Z8     4.763  21.041  -6.748  1.00  0.00          H
HETATM 6701  O   SPC  A4Z9     1.972  20.868  -7.724  1.00  0.00          O
HETATM 6702  H1  SPC  A4Z9     1.987  19.892  -7.470  1.00  0.00          H
HETATM 6703  H2  SPC  A4Z9     1.291  21.347  -7.151  1.00  0.00          H
HETATM 6704  O   SPC  A4ZA    -1.064  14.525   4.301  1.00  0.00          O
HETATM 6705  H1  SPC  A4ZA    -0.807  13.657   4.681  1.00  0.00          H
HETATM 6706  H2  SPC  A4ZA    -2.001  14.573   4.533  1.00  0.00          H
HETATM 6707  O   SPC  A4ZB     0.072  22.354  -6.369  1.00  0.00          O
HETATM 6708  H1  SPC  A4ZB    -0.835  22.197  -5.940  1.00  0.00          H
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HETATM 6709  H2  SPC  A4ZB       0.004  23.184  -6.940  1.00  0.00          H
HETATM 6710  O   SPC  A4ZC     -12.704   6.615   9.725  1.00  0.00          O
HETATM 6711  H1  SPC  A4ZC     -12.281   7.394   9.243  1.00  0.00          H
HETATM 6712  H2  SPC  A4ZC     -13.313   6.137   9.077  1.00  0.00          H
HETATM 6713  C1  MMA A 901      -6.970   6.909   7.043  1.00 38.63          C
HETATM 6714  C2  MMA A 901      -6.404   7.878   6.018  1.00 39.79          C
HETATM 6715  O1  MMA A 901      -7.818   7.627   7.909  1.00 38.68          O
HETATM 6716  C3  MMA A 901      -7.548   8.415   5.172  1.00 38.55          C
HETATM 6717  C7  MMA A 901      -8.380   6.808   8.921  1.00 39.29          C
HETATM 6718  O2  MMA A 901      -5.478   7.163   5.236  1.00 42.66          O
HETATM 6719  C4  MMA A 901      -8.189   7.243   4.445  1.00 38.26          C
HETATM 6720  O3  MMA A 901      -7.136   9.451   4.314  1.00 36.39          O
HETATM 6721  C5  MMA A 901      -8.630   6.176   5.468  1.00 38.04          C
HETATM 6722  O4  MMA A 901      -9.284   7.764   3.732  1.00 36.12          O
HETATM 6723  C6  MMA A 901      -8.956   4.865   4.787  1.00 39.02          C
HETATM 6724  O5  MMA A 901      -7.611   5.841   6.421  1.00 38.49          O
HETATM 6725  O6  MMA A 901      -7.809   4.483   4.062  1.00 37.72          O
HETATM 6726  H1  MMA A 901      -6.146   6.463   7.613  1.00  0.00          H
HETATM 6727  H2  MMA A 901      -5.912   8.720   6.525  1.00  0.00          H
HETATM 6728  H3  MMA A 901      -8.284   8.867   5.846  1.00  0.00          H
HETATM 6729  H71 MMA A 901      -8.920   7.462   9.607  1.00  0.00          H
HETATM 6730  H72 MMA A 901      -9.060   6.063   8.497  1.00  0.00          H
HETATM 6731  H73 MMA A 901      -7.594   6.285   9.482  1.00  0.00          H
HETATM 6732  HO2 MMA A 901      -4.684   7.752   5.120  1.00  0.00          H
HETATM 6733  H4  MMA A 901      -7.457   6.795   3.768  1.00  0.00          H
HETATM 6734  HO3 MMA A 901      -6.455   9.148   3.688  1.00  0.00          H
HETATM 6735  H5  MMA A 901      -9.518   6.545   6.000  1.00  0.00          H
HETATM 6736  HO4 MMA A 901      -9.820   7.085   3.257  1.00  0.00          H
HETATM 6737  H61 MMA A 901      -9.222   4.125   5.553  1.00  0.00          H
HETATM 6738  H62 MMA A 901      -9.822   5.004   4.131  1.00  0.00          H
HETATM 6739  HO6 MMA A 901      -7.987   3.641   3.607  1.00  0.00          H
HETATM 6740  PB  GDP A 904      -2.448   8.958   5.863  1.00 26.19          P
HETATM 6741  O1B GDP A 904      -3.536   8.711   4.824  1.00 27.84          O
HETATM 6742  O2B GDP A 904      -1.417   7.831   5.912  1.00 26.32          O1-
HETATM 6743  O3B GDP A 904      -2.975   9.354   7.258  1.00 26.19          O1-
HETATM 6744  O3A GDP A 904      -1.717  10.318   5.293  1.00 25.44          O
HETATM 6745  PA  GDP A 904      -0.212  10.858   5.459  1.00 25.23          P
HETATM 6746  O1A GDP A 904       0.528   9.990   6.468  1.00 25.43          O
HETATM 6747  O2A GDP A 904      -0.230  12.341   5.669  1.00 26.02          O1-
HETATM 6748  O5' GDP A 904       0.381  10.664   3.974  1.00 25.21          O
HETATM 6749  C5' GDP A 904       0.641   9.384   3.425  1.00 23.27          C
HETATM 6750  C4' GDP A 904       2.112   9.329   2.970  1.00 23.57          C
HETATM 6751  O4' GDP A 904       2.333  10.397   2.053  1.00 24.01          O
HETATM 6752  C3' GDP A 904       3.137   9.511   4.094  1.00 23.80          C
HETATM 6753  O3' GDP A 904       4.247   8.664   3.856  1.00 22.36          O
HETATM 6754  C2' GDP A 904       3.588  10.959   3.967  1.00 23.31          C
HETATM 6755  O2' GDP A 904       4.940  11.032   4.384  1.00 21.65          O
HETATM 6756  C1' GDP A 904       3.391  11.209   2.468  1.00 24.11          C
HETATM 6757  N9  GDP A 904       3.011  12.629   2.189  1.00 24.67          N
HETATM 6758  C8  GDP A 904       1.805  13.258   2.402  1.00 24.89          C
HETATM 6759  N7  GDP A 904       1.787  14.519   2.067  1.00 24.52          N
HETATM 6760  C5  GDP A 904       3.069  14.754   1.586  1.00 24.90          C
HETATM 6761  C6  GDP A 904       3.664  15.969   1.109  1.00 26.54          C
HETATM 6762  O6  GDP A 904       3.170  17.102   1.108  1.00 27.33          O
HETATM 6763  N1  GDP A 904       4.970  15.773   0.663  1.00 26.79          N
HETATM 6764  C2  GDP A 904       5.656  14.572   0.760  1.00 25.66          C
HETATM 6765  N2  GDP A 904       6.930  14.589   0.377  1.00 26.54          N
HETATM 6766  N3  GDP A 904       5.128  13.461   1.239  1.00 26.00          N
HETATM 6767  C4  GDP A 904       3.824  13.598   1.637  1.00 24.67          C
HETATM 6768 H5'1 GDP A 904       0.443   8.581   4.137  1.00  0.00          H
HETATM 6769 H5'2 GDP A 904      -0.028   9.202   2.581  1.00  0.00          H
HETATM 6770  H4' GDP A 904       2.272   8.380   2.453  1.00  0.00          H
HETATM 6771  H3' GDP A 904       2.745   9.304   5.089  1.00  0.00          H
HETATM 6772  HO3 GDP A 904       4.995   9.262   3.941  1.00  0.00          H
HETATM 6773  H2' GDP A 904       2.939  11.613   4.550  1.00  0.00          H
HETATM 6774  HO2 GDP A 904       5.041  11.840   4.910  1.00  0.00          H
HETATM 6775  H1' GDP A 904       4.281  10.999   1.877  1.00  0.00          H
HETATM 6776  H8  GDP A 904       0.937  12.759   2.807  1.00  0.00          H
HETATM 6777  HN1 GDP A 904       5.463  16.574   0.247  1.00  0.00          H
HETATM 6778  HN2 GDP A 904       7.579  13.887   0.724  1.00  0.00          H
HETATM 6779  H1  GDP A 904       7.290  15.440  -0.053  1.00  0.00          H
HETATM 6780 MN1   MN A 909       0.360   7.923   7.122  1.00 24.77         Mn2+
HETATM 6781  C1  0MA   2      -3.690   5.111   3.719  0.00  0.00          C1+
HETATM 6782  C2  0MA   2      -2.576   6.040   3.423  0.00  0.00          C
HETATM 6783  O2  0MA   2      -1.413   5.312   3.611  0.00  0.00          O
HETATM 6784  C3  0MA   2      -2.719   6.790   2.052  0.00  0.00          C
HETATM 6785  O3  0MA   2      -1.530   6.624   1.325  0.00  0.00          O
HETATM 6786  C4  0MA   2      -3.928   6.264   1.290  0.00  0.00          C
HETATM 6787  O4  0MA   2      -4.293   7.101   0.233  0.00  0.00          O
HETATM 6788  C5  0MA   2      -5.156   6.162   2.181  0.00  0.00          C
HETATM 6789  O5  0MA   2      -4.842   5.163   3.230  0.00  0.00          O
HETATM 6790  C6  0MA   2      -6.418   5.683   1.468  0.00  0.00          C
HETATM 6791  O6  0MA   2      -7.345   6.728   1.471  0.00  0.00          O
HETATM 6792  H1  0MA   2      -3.519   4.314   4.449  0.00  0.00          H
HETATM 6793  H2  0MA   2      -2.716   6.803   4.220  0.00  0.00          H
HETATM 6794  H2O 0MA   2      -0.684   5.861   3.972  0.00  0.00          H
HETATM 6795  H3  0MA   2      -2.906   7.852   2.261  0.00  0.00          H
HETATM 6796  H3O 0MA   2      -1.705   6.699   0.356  0.00  0.00          H
HETATM 6797  H4  0MA   2      -3.659   5.254   0.936  0.00  0.00          H
HETATM 6798  H4O 0MA   2      -3.553   7.068  -0.419  0.00  0.00          H
HETATM 6799  H5  0MA   2      -5.356   7.101   2.706  0.00  0.00          H
HETATM 6800  H61 0MA   2      -6.796   4.805   2.002  0.00  0.00          H
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HETATM 6801  H62 0MA     2      -6.142   5.398   0.442  0.00  0.00           H
HETATM 6802  H6O 0MA     2      -8.230   6.380   1.191  0.00  0.00           H
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(g) The Cartesian coordinates (in the PDB format) of the M06-2X:OPLS2005 optimized transition state **TS23** (**WT_Mn**).

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REMARK 888
REMARK 888 WRITTEN BY MAESTRO (A PRODUCT OF SCHRODINGER, LLC)
TITLE     TS23 (WT_Mn)
MODEL        1
ATOM      1  CH3 ACE A 103      -7.060 -19.300 -19.433  1.00  0.00          C
ATOM      2  C   ACE A 103      -5.977 -18.258 -19.666  1.00  0.00          C
ATOM      3  O   ACE A 103      -5.276 -18.311 -20.678  1.00  0.00          O
ATOM      4 1H   ACE A 103      -8.041 -18.824 -19.423  1.00  0.00          H
ATOM      5 2H   ACE A 103      -7.046 -20.060 -20.212  1.00  0.00          H
ATOM      6 3H   ACE A 103      -6.916 -19.784 -18.466  1.00  0.00          H
ATOM      7  N   LYS A 104      -5.841 -17.313 -18.734  1.00 36.95          N
ATOM      8  CA  LYS A 104      -4.834 -16.263 -18.712  1.00 37.33          C
ATOM      9  C   LYS A 104      -4.816 -15.661 -17.308  1.00 36.73          C
ATOM     10  O   LYS A 104      -5.649 -14.792 -17.019  1.00 37.03          O
ATOM     11  CB  LYS A 104      -5.122 -15.177 -19.785  1.00 38.20          C
ATOM     12  CG  LYS A 104      -4.016 -14.099 -19.911  1.00 40.08          C
ATOM     13  CD  LYS A 104      -4.508 -12.634 -19.881  1.00 40.86          C
ATOM     14  CE  LYS A 104      -4.400 -11.932 -18.510  1.00 41.37          C
ATOM     15  NZ  LYS A 104      -5.554 -12.177 -17.625  1.00 44.72          N1+
ATOM     16  HA  LYS A 104      -3.863 -16.719 -18.915  1.00  0.00          H
ATOM     17  HB2 LYS A 104      -5.245 -15.653 -20.758  1.00  0.00          H
ATOM     18  HB3 LYS A 104      -6.089 -14.715 -19.579  1.00  0.00          H
ATOM     19  HG2 LYS A 104      -3.230 -14.246 -19.169  1.00  0.00          H
ATOM     20  HG3 LYS A 104      -3.514 -14.270 -20.865  1.00  0.00          H
ATOM     21  HD2 LYS A 104      -3.859 -12.073 -20.557  1.00  0.00          H
ATOM     22  HD3 LYS A 104      -5.507 -12.534 -20.309  1.00  0.00          H
ATOM     23  HE2 LYS A 104      -3.477 -12.211 -18.007  1.00  0.00          H
ATOM     24  HE3 LYS A 104      -4.336 -10.853 -18.662  1.00  0.00          H
ATOM     25  HZ1 LYS A 104      -5.389 -11.702 -16.737  1.00  0.00          H
ATOM     26  HZ2 LYS A 104      -6.397 -11.776 -18.026  1.00  0.00          H
ATOM     27  HZ3 LYS A 104      -5.687 -13.172 -17.437  1.00  0.00          H
ATOM     28  H2  LYS A 104      -6.419 -17.422 -17.879  1.00  0.00          H
ATOM     29  N   THR A 105      -3.823 -16.000 -16.476  1.00 34.30          N
ATOM     30  CA  THR A 105      -3.616 -15.282 -15.223  1.00 33.23          C
ATOM     31  C   THR A 105      -2.981 -13.922 -15.572  1.00 32.56          C
ATOM     32  O   THR A 105      -2.179 -13.808 -16.503  1.00 32.13          O
ATOM     33  CB  THR A 105      -2.761 -16.092 -14.203  1.00 32.21          C
ATOM     34  OG1 THR A 105      -1.364 -15.831 -14.183  1.00 35.33          O
ATOM     35  CG2 THR A 105      -2.995 -17.610 -14.229  1.00 33.79          C
ATOM     36  H   THR A 105      -3.099 -16.641 -16.767  1.00  0.00          H
ATOM     37  HA  THR A 105      -4.599 -15.132 -14.774  1.00  0.00          H
ATOM     38  HB  THR A 105      -3.110 -15.745 -13.230  1.00  0.00          H
ATOM     39  HG1 THR A 105      -0.934 -16.213 -14.976  1.00  0.00          H
ATOM     40 HG21 THR A 105      -2.528 -18.093 -13.371  1.00  0.00          H
ATOM     41 HG22 THR A 105      -4.061 -17.840 -14.202  1.00  0.00          H
ATOM     42 HG23 THR A 105      -2.577 -18.062 -15.130  1.00  0.00          H
ATOM     43  N   THR A 106      -3.335 -12.870 -14.839  1.00 30.71          N
ATOM     44  CA  THR A 106      -2.710 -11.555 -14.970  1.00 29.71          C
ATOM     45  C   THR A 106      -1.390 -11.511 -14.153  1.00 28.38          C
ATOM     46  O   THR A 106      -0.638 -10.540 -14.243  1.00 26.84          O
ATOM     47  CB  THR A 106      -3.756 -10.486 -14.562  1.00 29.60          C
ATOM     48  OG1 THR A 106      -4.849 -10.562 -15.474  1.00 29.62          O
ATOM     49  CG2 THR A 106      -3.265  -9.034 -14.664  1.00 29.22          C
ATOM     50  H   THR A 106      -3.968 -13.050 -14.043  1.00  0.00          H
ATOM     51  HA  THR A 106      -2.428 -11.370 -16.008  1.00  0.00          H
ATOM     52  HB  THR A 106      -4.121 -10.690 -13.555  1.00  0.00          H
ATOM     53  HG1 THR A 106      -5.380  -9.774 -15.350  1.00  0.00          H
ATOM     54 HG21 THR A 106      -4.061  -8.321 -14.460  1.00  0.00          H
ATOM     55 HG22 THR A 106      -2.464  -8.819 -13.957  1.00  0.00          H
ATOM     56 HG23 THR A 106      -2.883  -8.812 -15.654  1.00  0.00          H
ATOM     57  N   MET A 107      -1.020 -12.611 -13.469  1.00 27.33          N
ATOM     58  CA  MET A 107       0.314 -12.815 -12.904  1.00 27.87          C
ATOM     59  C   MET A 107       1.346 -13.039 -14.020  1.00 27.83          C
ATOM     60  O   MET A 107       2.522 -12.759 -13.816  1.00 28.87          O
ATOM     61  CB  MET A 107       0.335 -14.053 -11.974  1.00 25.92          C
ATOM     62  CG  MET A 107       1.130 -13.847 -10.672  1.00 26.21          C
ATOM     63  SD  MET A 107       2.943 -13.746 -10.774  1.00 27.25          S
ATOM     64  CE  MET A 107       3.446 -15.191  -9.794  1.00 24.40          C
ATOM     65  H   MET A 107      -1.629 -13.418 -13.534  1.00  0.00          H
ATOM     66  HA  MET A 107       0.588 -11.923 -12.340  1.00  0.00          H
ATOM     67  HB2 MET A 107      -0.686 -14.306 -11.699  1.00  0.00          H
ATOM     68  HB3 MET A 107       0.700 -14.942 -12.494  1.00  0.00          H
ATOM     69  HG2 MET A 107       0.763 -12.959 -10.158  1.00  0.00          H
ATOM     70  HG3 MET A 107       0.910 -14.688 -10.024  1.00  0.00          H
ATOM     71  HE1 MET A 107       4.524 -15.329  -9.855  1.00  0.00          H
ATOM     72  HE2 MET A 107       3.186 -15.064  -8.744  1.00  0.00          H
ATOM     73  HE3 MET A 107       2.972 -16.101 -10.162  1.00  0.00          H
ATOM     74  N   ASP A 108       0.950 -13.511 -15.209  1.00 28.14          N
ATOM     75  CA  ASP A 108       1.879 -13.877 -16.290  1.00 28.57          C
ATOM     76  C   ASP A 108       2.483 -12.685 -17.051  1.00 28.39          C
ATOM     77  O   ASP A 108       3.251 -12.862 -17.994  1.00 28.31          O
ATOM     78  CB  ASP A 108       1.249 -14.922 -17.231  1.00 29.94          C
ATOM     79  CG  ASP A 108       1.159 -16.269 -16.525  1.00 31.66          C
ATOM     80  OD1 ASP A 108       2.247 -16.802 -16.204  1.00 31.67          O
ATOM     81  OD2 ASP A 108       0.017 -16.686 -16.223  1.00 33.98          O1-
ATOM     82  H   ASP A 108      -0.016 -13.796 -15.323  1.00  0.00          H
ATOM     83  HA  ASP A 108       2.741 -14.333 -15.819  1.00  0.00          H
ATOM     84  HB2 ASP A 108       0.263 -14.607 -17.573  1.00  0.00          H
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ATOM     85  HB3 ASP A 108       1.860 -15.070 -18.122  1.00  0.00           H
ATOM     86  N   TYR A 109       2.242 -11.461 -16.569  1.00 29.03           N
ATOM     87  CA  TYR A 109       3.049 -10.281 -16.879  1.00 29.95           C
ATOM     88  C   TYR A 109       4.189 -10.098 -15.845  1.00 29.37           C
ATOM     89  O   TYR A 109       4.972  -9.157 -15.969  1.00 30.93           O
ATOM     90  CB  TYR A 109       2.137  -9.036 -16.821  1.00 32.34           C
ATOM     91  CG  TYR A 109       0.949  -9.056 -17.775  1.00 34.77           C
ATOM     92  CD1 TYR A 109      -0.366  -8.950 -17.272  1.00 34.89           C
ATOM     93  CD2 TYR A 109       1.149  -9.201 -19.165  1.00 35.80           C
ATOM     94  CE1 TYR A 109      -1.467  -9.020 -18.149  1.00 34.99           C
ATOM     95  CE2 TYR A 109       0.047  -9.269 -20.040  1.00 35.75           C
ATOM     96  CZ  TYR A 109      -1.263  -9.192 -19.529  1.00 36.34           C
ATOM     97  OH  TYR A 109      -2.344  -9.293 -20.353  1.00 36.60           O
ATOM     98  H   TYR A 109       1.565 -11.398 -15.822  1.00  0.00           H
ATOM     99  HA  TYR A 109       3.498 -10.363 -17.870  1.00  0.00           H
ATOM    100  HB2 TYR A 109       1.772  -8.894 -15.803  1.00  0.00           H
ATOM    101  HB3 TYR A 109       2.727  -8.149 -17.054  1.00  0.00           H
ATOM    102  HD1 TYR A 109      -0.538  -8.836 -16.211  1.00  0.00           H
ATOM    103  HD2 TYR A 109       2.148  -9.287 -19.566  1.00  0.00           H
ATOM    104  HE1 TYR A 109      -2.475  -8.955 -17.772  1.00  0.00           H
ATOM    105  HE2 TYR A 109       0.219  -9.402 -21.098  1.00  0.00           H
ATOM    106  HH  TYR A 109      -2.124  -9.288 -21.273  1.00  0.00           H
ATOM    107  N   ILE A 110       4.277 -10.962 -14.820  1.00 28.23           N
ATOM    108  CA  ILE A 110       5.170 -10.892 -13.663  1.00 27.12           C
ATOM    109  C   ILE A 110       5.952 -12.210 -13.469  1.00 28.39           C
ATOM    110  O   ILE A 110       7.110 -12.140 -13.041  1.00 27.18           O
ATOM    111  CB  ILE A 110       4.386 -10.461 -12.382  1.00 26.29           C
ATOM    112  CG1 ILE A 110       3.596  -9.145 -12.562  1.00 26.10           C
ATOM    113  CG2 ILE A 110       5.281 -10.359 -11.130  1.00 24.77           C
ATOM    114  CD1 ILE A 110       2.112  -9.360 -12.892  1.00 26.96           C
ATOM    115  H   ILE A 110       3.565 -11.686 -14.764  1.00  0.00           H
ATOM    116  HA  ILE A 110       5.924 -10.127 -13.857  1.00  0.00           H
ATOM    117  HB  ILE A 110       3.666 -11.244 -12.147  1.00  0.00           H
ATOM    118 HG12 ILE A 110       3.639  -8.573 -11.638  1.00  0.00           H
ATOM    119 HG13 ILE A 110       4.067  -8.514 -13.317  1.00  0.00           H
ATOM    120 HG21 ILE A 110       4.712 -10.027 -10.261  1.00  0.00           H
ATOM    121 HG22 ILE A 110       5.713 -11.321 -10.857  1.00  0.00           H
ATOM    122 HG23 ILE A 110       6.097  -9.654 -11.285  1.00  0.00           H
ATOM    123 HD11 ILE A 110       1.608  -8.420 -13.115  1.00  0.00           H
ATOM    124 HD12 ILE A 110       1.976 -10.009 -13.754  1.00  0.00           H
ATOM    125 HD13 ILE A 110       1.589  -9.821 -12.055  1.00  0.00           H
ATOM    126  N   THR A 111       5.361 -13.384 -13.773  1.00 28.11           N
ATOM    127  CA  THR A 111       5.932 -14.738 -13.636  1.00 29.58           C
ATOM    128  C   THR A 111       7.449 -14.928 -13.898  1.00 30.49           C
ATOM    129  O   THR A 111       8.095 -15.544 -13.044  1.00 30.80           O
ATOM    130  CB  THR A 111       5.022 -15.863 -14.209  1.00 29.32           C
ATOM    131  OG1 THR A 111       4.718 -15.664 -15.571  1.00 32.94           O
ATOM    132  CG2 THR A 111       3.729 -16.079 -13.415  1.00 28.93           C
ATOM    133  H   THR A 111       4.390 -13.358 -14.070  1.00  0.00           H
ATOM    134  HA  THR A 111       5.869 -14.882 -12.557  1.00  0.00           H
ATOM    135  HB  THR A 111       5.570 -16.806 -14.158  1.00  0.00           H
ATOM    136  HG1 THR A 111       3.908 -16.153 -15.796  1.00  0.00           H
ATOM    137 HG21 THR A 111       3.163 -16.927 -13.802  1.00  0.00           H
ATOM    138 HG22 THR A 111       3.944 -16.293 -12.369  1.00  0.00           H
ATOM    139 HG23 THR A 111       3.077 -15.213 -13.453  1.00  0.00           H
ATOM    140  N   PRO A 112       8.074 -14.368 -14.966  1.00 32.29           N
ATOM    141  CA  PRO A 112       9.541 -14.305 -15.124  1.00 33.46           C
ATOM    142  C   PRO A 112      10.351 -13.841 -13.893  1.00 35.96           C
ATOM    143  O   PRO A 112      11.380 -14.438 -13.585  1.00 35.45           O
ATOM    144  CB  PRO A 112       9.776 -13.363 -16.313  1.00 33.51           C
ATOM    145  CG  PRO A 112       8.527 -13.509 -17.162  1.00 31.85           C
ATOM    146  CD  PRO A 112       7.414 -13.827 -16.162  1.00 31.36           C
ATOM    147  HA  PRO A 112       9.871 -15.311 -15.390  1.00  0.00           H
ATOM    148  HB2 PRO A 112       9.859 -12.326 -15.979  1.00  0.00           H
ATOM    149  HB3 PRO A 112      10.687 -13.605 -16.862  1.00  0.00           H
ATOM    150  HG2 PRO A 112       8.311 -12.627 -17.765  1.00  0.00           H
ATOM    151  HG3 PRO A 112       8.648 -14.352 -17.844  1.00  0.00           H
ATOM    152  HD2 PRO A 112       6.869 -12.913 -15.934  1.00  0.00           H
ATOM    153  HD3 PRO A 112       6.707 -14.533 -16.596  1.00  0.00           H
ATOM    154  N   SER A 113       9.885 -12.827 -13.147  1.00 36.66           N
ATOM    155  CA  SER A 113      10.564 -12.332 -11.941  1.00 35.89           C
ATOM    156  C   SER A 113      10.381 -13.281 -10.731  1.00 36.89           C
ATOM    157  O   SER A 113      11.131 -13.199  -9.759  1.00 37.22           O
ATOM    158  CB  SER A 113      10.086 -10.887 -11.642  1.00 35.80           C
ATOM    159  OG  SER A 113       8.729 -10.761 -11.235  1.00 33.01           O
ATOM    160  H   SER A 113       8.978 -12.432 -13.378  1.00  0.00           H
ATOM    161  HA  SER A 113      11.635 -12.283 -12.147  1.00  0.00           H
ATOM    162  HB2 SER A 113      10.711 -10.461 -10.855  1.00  0.00           H
ATOM    163  HB3 SER A 113      10.251 -10.258 -12.519  1.00  0.00           H
ATOM    164  HG  SER A 113       8.161 -11.176 -11.886  1.00  0.00           H
ATOM    165  N   PHE A 114       9.445 -14.235 -10.824  1.00 37.03           N
ATOM    166  CA  PHE A 114       9.184 -15.290  -9.847  1.00 38.15           C
ATOM    167  C   PHE A 114       9.877 -16.609 -10.234  1.00 40.29           C
ATOM    168  O   PHE A 114       9.704 -17.606  -9.531  1.00 41.86           O
ATOM    169  CB  PHE A 114       7.655 -15.508  -9.733  1.00 37.24           C
ATOM    170  CG  PHE A 114       7.027 -14.633  -8.670  1.00 37.59           C
ATOM    171  CD1 PHE A 114       6.944 -13.239  -8.862  1.00 37.08           C
ATOM    172  CD2 PHE A 114       6.551 -15.210  -7.474  1.00 36.59           C
ATOM    173  CE1 PHE A 114       6.415 -12.423  -7.849  1.00 37.47           C
ATOM    174  CE2 PHE A 114       6.025 -14.393  -6.460  1.00 35.73           C
ATOM    175  CZ  PHE A 114       5.970 -13.004  -6.648  1.00 36.89           C
ATOM    176  H   PHE A 114       8.919 -14.293 -11.689  1.00  0.00           H
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ATOM    177  HA  PHE A 114       9.578 -15.013  -8.867  1.00  0.00           H
ATOM    178  HB2 PHE A 114       7.153 -15.314 -10.678  1.00  0.00           H
ATOM    179  HB3 PHE A 114       7.404 -16.543  -9.497  1.00  0.00           H
ATOM    180  HD1 PHE A 114       7.297 -12.788  -9.779  1.00  0.00           H
ATOM    181  HD2 PHE A 114       6.585 -16.277  -7.322  1.00  0.00           H
ATOM    182  HE1 PHE A 114       6.351 -11.355  -7.993  1.00  0.00           H
ATOM    183  HE2 PHE A 114       5.675 -14.826  -5.534  1.00  0.00           H
ATOM    184  HZ  PHE A 114       5.581 -12.383  -5.862  1.00  0.00           H
ATOM    185  N   ALA A 115      10.698 -16.629 -11.295  1.00 -1.00           N
ATOM    186  CA  ALA A 115      11.532 -17.774 -11.671  1.00 -1.00           C
ATOM    187  C   ALA A 115      12.836 -17.817 -10.848  1.00 -1.00           C
ATOM    188  O   ALA A 115      13.509 -18.842 -10.804  1.00 -1.00           O
ATOM    189  CB  ALA A 115      11.915 -17.636 -13.152  1.00 -1.00           C
ATOM    190  H   ALA A 115      10.758 -15.797 -11.872  1.00 -1.00           H
ATOM    191  HA  ALA A 115      10.984 -18.707 -11.523  1.00 -1.00           H
ATOM    192  HB1 ALA A 115      12.467 -18.512 -13.495  1.00 -1.00           H
ATOM    193  HB2 ALA A 115      11.030 -17.542 -13.782  1.00 -1.00           H
ATOM    194  HB3 ALA A 115      12.546 -16.764 -13.331  1.00 -1.00           H
ATOM    195  N   ASN A 116      13.172 -16.721 -10.155  1.00 -1.00           N
ATOM    196  CA  ASN A 116      14.379 -16.465  -9.351  1.00 -1.00           C
ATOM    197  C   ASN A 116      14.385 -17.241  -8.001  1.00 -1.00           C
ATOM    198  O   ASN A 116      15.016 -16.828  -7.023  1.00 -1.00           O
ATOM    199  CB  ASN A 116      14.405 -14.929  -9.137  1.00 -1.00           C
ATOM    200  CG  ASN A 116      15.686 -14.365  -8.518  1.00 -1.00           C
ATOM    201  OD1 ASN A 116      16.780 -14.548  -9.040  1.00 -1.00           O
ATOM    202  ND2 ASN A 116      15.561 -13.689  -7.383  1.00 -1.00           N
ATOM    203  H   ASN A 116      12.521 -15.954 -10.234  1.00 -1.00           H
ATOM    204  HA  ASN A 116      15.257 -16.771  -9.924  1.00 -1.00           H
ATOM    205  HB2 ASN A 116      14.303 -14.432 -10.103  1.00 -1.00           H
ATOM    206  HB3 ASN A 116      13.536 -14.618  -8.559  1.00 -1.00           H
ATOM    207 HD21 ASN A 116      16.369 -13.252  -6.959  1.00 -1.00           H
ATOM    208 HD22 ASN A 116      14.639 -13.623  -6.946  1.00 -1.00           H
ATOM    209  N   LYS A 117      13.694 -18.388  -7.942  1.00 -1.00           N
ATOM    210  CA  LYS A 117      13.467 -19.275  -6.794  1.00 -1.00           C
ATOM    211  C   LYS A 117      14.746 -20.014  -6.339  1.00 -1.00           C
ATOM    212  O   LYS A 117      14.828 -21.241  -6.330  1.00 -1.00           O
ATOM    213  CB  LYS A 117      12.329 -20.257  -7.159  1.00 -1.00           C
ATOM    214  CG  LYS A 117      10.933 -19.618  -7.062  1.00 -1.00           C
ATOM    215  CD  LYS A 117       9.840 -20.498  -7.698  1.00 -1.00           C
ATOM    216  CE  LYS A 117       8.389 -20.113  -7.348  1.00 -1.00           C
ATOM    217  NZ  LYS A 117       8.085 -18.710  -7.646  1.00 -1.00          N1+
ATOM    218  H   LYS A 117      13.345 -18.713  -8.836  1.00 -1.00           H
ATOM    219  HA  LYS A 117      13.151 -18.666  -5.949  1.00 -1.00           H
ATOM    220  HB2 LYS A 117      12.503 -20.667  -8.155  1.00 -1.00           H
ATOM    221  HB3 LYS A 117      12.337 -21.111  -6.479  1.00 -1.00           H
ATOM    222  HG2 LYS A 117      10.719 -19.436  -6.010  1.00 -1.00           H
ATOM    223  HG3 LYS A 117      10.944 -18.636  -7.535  1.00 -1.00           H
ATOM    224  HD2 LYS A 117       9.968 -20.491  -8.782  1.00 -1.00           H
ATOM    225  HD3 LYS A 117       9.993 -21.534  -7.390  1.00 -1.00           H
ATOM    226  HE2 LYS A 117       7.703 -20.732  -7.927  1.00 -1.00           H
ATOM    227  HE3 LYS A 117       8.165 -20.310  -6.300  1.00 -1.00           H
ATOM    228  HZ1 LYS A 117       7.058 -18.620  -7.823  1.00 -1.00           H
ATOM    229  HZ2 LYS A 117       8.293 -18.113  -6.846  1.00 -1.00           H
ATOM    230  HZ3 LYS A 117       8.590 -18.375  -8.463  1.00 -1.00           H
ATOM    231  N   ALA A 118      15.759 -19.227  -5.980  1.00 -1.00           N
ATOM    232  CA  ALA A 118      17.026 -19.616  -5.381  1.00 -1.00           C
ATOM    233  C   ALA A 118      17.661 -18.440  -4.627  1.00 -1.00           C
ATOM    234  O   ALA A 118      18.348 -18.649  -3.629  1.00 -1.00           O
ATOM    235  CB  ALA A 118      17.971 -20.215  -6.435  1.00 -1.00           C
ATOM    236  H   ALA A 118      15.564 -18.239  -6.103  1.00 -1.00           H
ATOM    237  HA  ALA A 118      16.813 -20.387  -4.636  1.00 -1.00           H
ATOM    238  HB1 ALA A 118      18.923 -20.501  -5.987  1.00 -1.00           H
ATOM    239  HB2 ALA A 118      17.542 -21.110  -6.886  1.00 -1.00           H
ATOM    240  HB3 ALA A 118      18.178 -19.504  -7.235  1.00 -1.00           H
ATOM    241  N   GLY A 119      17.429 -17.198  -5.075  1.00 49.69           N
ATOM    242  CA  GLY A 119      18.062 -15.995  -4.542  1.00 48.49           C
ATOM    243  C   GLY A 119      17.046 -15.035  -3.922  1.00 47.46           C
ATOM    244  O   GLY A 119      15.853 -15.339  -3.838  1.00 48.38           O
ATOM    245  H   GLY A 119      16.825 -17.070  -5.880  1.00 -1.00           H
ATOM    246  HA2 GLY A 119      18.836 -16.223  -3.808  1.00  0.00           H
ATOM    247  HA3 GLY A 119      18.556 -15.486  -5.371  1.00  0.00           H
ATOM    248  N   LYS A 120      17.524 -13.862  -3.489  1.00 45.71           N
ATOM    249  CA  LYS A 120      16.686 -12.694  -3.204  1.00 42.69           C
ATOM    250  C   LYS A 120      16.311 -12.067  -4.565  1.00 40.13           C
ATOM    251  O   LYS A 120      17.150 -12.101  -5.473  1.00 39.70           O
ATOM    252  CB  LYS A 120      17.522 -11.614  -2.463  1.00 44.31           C
ATOM    253  CG  LYS A 120      17.866 -11.858  -0.979  1.00 45.11           C
ATOM    254  CD  LYS A 120      18.782 -10.726  -0.448  1.00 45.84           C
ATOM    255  CE  LYS A 120      18.930 -10.634   1.085  1.00 46.18           C
ATOM    256  NZ  LYS A 120      17.844  -9.859   1.702  1.00 44.91          N1+
ATOM    257  H   LYS A 120      18.493 -13.663  -3.686  1.00  0.00           H
ATOM    258  HA  LYS A 120      15.806 -12.979  -2.625  1.00  0.00           H
ATOM    259  HB2 LYS A 120      18.442 -11.425  -3.022  1.00  0.00           H
ATOM    260  HB3 LYS A 120      16.971 -10.671  -2.503  1.00  0.00           H
ATOM    261  HG2 LYS A 120      16.945 -11.912  -0.400  1.00  0.00           H
ATOM    262  HG3 LYS A 120      18.359 -12.823  -0.857  1.00  0.00           H
ATOM    263  HD2 LYS A 120      19.772 -10.874  -0.881  1.00  0.00           H
ATOM    264  HD3 LYS A 120      18.447  -9.760  -0.832  1.00  0.00           H
ATOM    265  HE2 LYS A 120      18.975 -11.625   1.539  1.00  0.00           H
ATOM    266  HE3 LYS A 120      19.865 -10.130   1.333  1.00  0.00           H
ATOM    267  HZ1 LYS A 120      17.277 -10.486   2.315  1.00  0.00           H
ATOM    268  HZ2 LYS A 120      18.148  -9.047   2.237  1.00  0.00           H
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ATOM    269  HZ3 LYS A 120      17.170  -9.558   1.011  1.00  0.00           H
ATOM    270  N   PRO A 121      15.125 -11.450  -4.720  1.00 37.16           N
ATOM    271  CA  PRO A 121      14.862 -10.547  -5.847  1.00 35.52           C
ATOM    272  C   PRO A 121      15.540  -9.186  -5.585  1.00 33.34           C
ATOM    273  O   PRO A 121      16.062  -8.943  -4.491  1.00 31.34           O
ATOM    274  CB  PRO A 121      13.336 -10.416  -5.861  1.00 35.26           C
ATOM    275  CG  PRO A 121      12.921 -10.586  -4.406  1.00 37.08           C
ATOM    276  CD  PRO A 121      13.973 -11.531  -3.817  1.00 36.33           C
ATOM    277  HA  PRO A 121      15.221 -10.956  -6.793  1.00  0.00           H
ATOM    278  HB2 PRO A 121      12.992  -9.474  -6.288  1.00  0.00           H
ATOM    279  HB3 PRO A 121      12.905 -11.218  -6.462  1.00  0.00           H
ATOM    280  HG2 PRO A 121      12.974  -9.617  -3.908  1.00  0.00           H
ATOM    281  HG3 PRO A 121      11.903 -10.963  -4.294  1.00  0.00           H
ATOM    282  HD2 PRO A 121      14.229 -11.238  -2.798  1.00  0.00           H
ATOM    283  HD3 PRO A 121      13.597 -12.556  -3.796  1.00  0.00           H
ATOM    284  N   LYS A 122      15.495  -8.264  -6.556  1.00 31.90           N
ATOM    285  CA  LYS A 122      15.867  -6.874  -6.311  1.00 31.10           C
ATOM    286  C   LYS A 122      14.673  -6.241  -5.570  1.00 29.95           C
ATOM    287  O   LYS A 122      13.640  -5.961  -6.177  1.00 31.41           O
ATOM    288  CB  LYS A 122      16.123  -6.128  -7.645  1.00 33.97           C
ATOM    289  CG  LYS A 122      17.137  -6.810  -8.586  1.00 35.41           C
ATOM    290  CD  LYS A 122      17.770  -5.871  -9.638  1.00 40.19           C
ATOM    291  CE  LYS A 122      16.952  -5.609 -10.922  1.00 42.24           C
ATOM    292  NZ  LYS A 122      15.732  -4.826 -10.685  1.00 43.94           N1+
ATOM    293  H   LYS A 122      15.016  -8.475  -7.420  1.00  0.00           H
ATOM    294  HA  LYS A 122      16.769  -6.819  -5.697  1.00  0.00           H
ATOM    295  HB2 LYS A 122      15.189  -5.974  -8.179  1.00  0.00           H
ATOM    296  HB3 LYS A 122      16.494  -5.133  -7.394  1.00  0.00           H
ATOM    297  HG2 LYS A 122      17.947  -7.207  -7.971  1.00  0.00           H
ATOM    298  HG3 LYS A 122      16.682  -7.675  -9.072  1.00  0.00           H
ATOM    299  HD2 LYS A 122      18.071  -4.930  -9.173  1.00  0.00           H
ATOM    300  HD3 LYS A 122      18.707  -6.332  -9.954  1.00  0.00           H
ATOM    301  HE2 LYS A 122      17.571  -5.052 -11.627  1.00  0.00           H
ATOM    302  HE3 LYS A 122      16.680  -6.546 -11.410  1.00  0.00           H
ATOM    303  HZ1 LYS A 122      15.377  -4.423 -11.537  1.00  0.00           H
ATOM    304  HZ2 LYS A 122      15.000  -5.503 -10.373  1.00  0.00           H
ATOM    305  HZ3 LYS A 122      15.899  -4.093 -10.001  1.00  0.00           H
ATOM    306  N   ALA A 123      14.806  -6.043  -4.259  1.00 25.55           N
ATOM    307  CA  ALA A 123      13.801  -5.455  -3.385  1.00 25.13           C
ATOM    308  C   ALA A 123      14.455  -4.375  -2.526  1.00 23.88           C
ATOM    309  O   ALA A 123      15.654  -4.448  -2.258  1.00 23.84           O
ATOM    310  CB  ALA A 123      13.149  -6.550  -2.532  1.00 23.35           C
ATOM    311  H   ALA A 123      15.689  -6.261  -3.819  1.00  0.00           H
ATOM    312  HA  ALA A 123      13.031  -4.975  -3.985  1.00  0.00           H
ATOM    313  HB1 ALA A 123      12.285  -6.158  -1.995  1.00  0.00           H
ATOM    314  HB2 ALA A 123      12.812  -7.387  -3.141  1.00  0.00           H
ATOM    315  HB3 ALA A 123      13.840  -6.948  -1.792  1.00  0.00           H
ATOM    316  N   CYS A 124      13.662  -3.403  -2.080  1.00 25.75           N
ATOM    317  CA  CYS A 124      14.062  -2.302  -1.215  1.00 23.52           C
ATOM    318  C   CYS A 124      12.946  -2.030  -0.205  1.00 23.67           C
ATOM    319  O   CYS A 124      11.797  -2.425  -0.426  1.00 24.40           O
ATOM    320  CB  CYS A 124      14.439  -1.067  -2.068  1.00 22.25           C
ATOM    321  SG  CYS A 124      13.002  -0.361  -2.949  1.00 23.91           S
ATOM    322  H   CYS A 124      12.686  -3.400  -2.345  1.00  0.00           H
ATOM    323  HA  CYS A 124      14.941  -2.603  -0.643  1.00  0.00           H
ATOM    324  HB2 CYS A 124      14.874  -0.289  -1.441  1.00  0.00           H
ATOM    325  HB3 CYS A 124      15.203  -1.337  -2.793  1.00  0.00           H
ATOM    326  HG  CYS A 124      12.478   0.238  -1.875  1.00  0.00           H
ATOM    327  N   TYR A 125      13.244  -1.267   0.847  1.00 21.36           N
ATOM    328  CA  TYR A 125      12.222  -0.491   1.543  1.00 22.40           C
ATOM    329  C   TYR A 125      12.035   0.797   0.727  1.00 21.88           C
ATOM    330  O   TYR A 125      13.018   1.353   0.232  1.00 20.40           O
ATOM    331  CB  TYR A 125      12.682  -0.095   2.958  1.00 21.32           C
ATOM    332  CG  TYR A 125      13.214  -1.213   3.833  1.00 22.30           C
ATOM    333  CD1 TYR A 125      12.346  -2.087   4.520  1.00 20.05           C
ATOM    334  CD2 TYR A 125      14.607  -1.358   3.980  1.00 18.10           C
ATOM    335  CE1 TYR A 125      12.877  -3.113   5.329  1.00 20.76           C
ATOM    336  CE2 TYR A 125      15.133  -2.379   4.785  1.00 18.47           C
ATOM    337  CZ  TYR A 125      14.270  -3.267   5.452  1.00 18.41           C
ATOM    338  OH  TYR A 125      14.786  -4.274   6.212  1.00 19.18           O
ATOM    339  H   TYR A 125      14.212  -0.970   0.960  1.00  0.00           H
ATOM    340  HA  TYR A 125      11.296  -1.044   1.595  1.00  0.00           H
ATOM    341  HB2 TYR A 125      13.458   0.658   2.885  1.00  0.00           H
ATOM    342  HB3 TYR A 125      11.860   0.393   3.485  1.00  0.00           H
ATOM    343  HD1 TYR A 125      11.275  -1.975   4.436  1.00  0.00           H
ATOM    344  HD2 TYR A 125      15.285  -0.682   3.481  1.00  0.00           H
ATOM    345  HE1 TYR A 125      12.215  -3.780   5.860  1.00  0.00           H
ATOM    346  HE2 TYR A 125      16.204  -2.461   4.876  1.00  0.00           H
ATOM    347  HH  TYR A 125      15.742  -4.272   6.183  1.00  0.00           H
ATOM    348  N   VAL A 126      10.795   1.262   0.576  1.00 22.88           N
ATOM    349  CA  VAL A 126      10.463   2.533  -0.044  1.00 20.05           C
ATOM    350  C   VAL A 126       9.685   3.368   0.975  1.00 20.90           C
ATOM    351  O   VAL A 126       8.790   2.874   1.668  1.00 19.39           O
ATOM    352  CB  VAL A 126       9.758   2.348  -1.413  1.00 21.97           C
ATOM    353  CG1 VAL A 126       8.357   1.726  -1.331  1.00 21.20           C
ATOM    354  CG2 VAL A 126       9.697   3.671  -2.197  1.00 17.14           C
ATOM    355  H   VAL A 126      10.029   0.762   1.029  1.00  0.00           H
ATOM    356  HA  VAL A 126      11.388   3.062  -0.256  1.00  0.00           H
ATOM    357  HB  VAL A 126      10.377   1.662  -1.992  1.00  0.00           H
ATOM    358 HG11 VAL A 126       7.956   1.550  -2.330  1.00  0.00           H
ATOM    359 HG12 VAL A 126       8.388   0.773  -0.808  1.00  0.00           H
ATOM    360 HG13 VAL A 126       7.652   2.376  -0.814  1.00  0.00           H
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ATOM    361 HG21 VAL A 126       9.287   3.523  -3.196  1.00  0.00          H
ATOM    362 HG22 VAL A 126       9.072   4.412  -1.698  1.00  0.00          H
ATOM    363 HG23 VAL A 126      10.692   4.104  -2.316  1.00  0.00          H
ATOM    364  N   THR A 127      10.041   4.645   1.053  1.00 20.50          N
ATOM    365  CA  THR A 127       9.479   5.612   1.963  1.00 20.93          C
ATOM    366  C   THR A 127       9.315   6.924   1.195  1.00 21.13          C
ATOM    367  O   THR A 127      10.306   7.600   0.938  1.00 23.81          O
ATOM    368  CB  THR A 127      10.406   5.690   3.202  1.00 22.06          C
ATOM    369  OG1 THR A 127      10.245   4.531   4.004  1.00 22.71          O
ATOM    370  CG2 THR A 127      10.149   6.889   4.112  1.00 19.49          C
ATOM    371  H   THR A 127      10.851   4.945   0.513  1.00  0.00          H
ATOM    372  HA  THR A 127       8.483   5.303   2.280  1.00  0.00          H
ATOM    373  HB  THR A 127      11.446   5.739   2.873  1.00  0.00          H
ATOM    374  HG1 THR A 127       9.304   4.384   4.119  1.00  0.00          H
ATOM    375 HG21 THR A 127      10.849   6.876   4.940  1.00  0.00          H
ATOM    376 HG22 THR A 127      10.331   7.822   3.584  1.00  0.00          H
ATOM    377 HG23 THR A 127       9.131   6.904   4.501  1.00  0.00          H
ATOM    378  N   LEU A 128       8.078   7.318   0.881  1.00 20.38          N
ATOM    379  CA  LEU A 128       7.757   8.698   0.536  1.00 18.73          C
ATOM    380  C   LEU A 128       7.519   9.418   1.866  1.00 18.52          C
ATOM    381  O   LEU A 128       6.790   8.905   2.719  1.00 17.90          O
ATOM    382  CB  LEU A 128       6.485   8.725  -0.329  1.00 18.41          C
ATOM    383  CG  LEU A 128       5.994  10.122  -0.775  1.00 18.76          C
ATOM    384  CD1 LEU A 128       7.108  11.038  -1.311  1.00 18.77          C
ATOM    385  CD2 LEU A 128       4.867   9.962  -1.800  1.00 14.06          C
ATOM    386  H   LEU A 128       7.299   6.749   1.204  1.00  0.00          H
ATOM    387  HA  LEU A 128       8.576   9.160  -0.002  1.00  0.00          H
ATOM    388  HB2 LEU A 128       6.673   8.120  -1.218  1.00  0.00          H
ATOM    389  HB3 LEU A 128       5.676   8.227   0.206  1.00  0.00          H
ATOM    390  HG  LEU A 128       5.571  10.633   0.089  1.00  0.00          H
ATOM    391 HD11 LEU A 128       6.696  11.943  -1.759  1.00  0.00          H
ATOM    392 HD12 LEU A 128       7.767  11.376  -0.514  1.00  0.00          H
ATOM    393 HD13 LEU A 128       7.726  10.537  -2.054  1.00  0.00          H
ATOM    394 HD21 LEU A 128       4.495  10.926  -2.133  1.00  0.00          H
ATOM    395 HD22 LEU A 128       5.197   9.413  -2.683  1.00  0.00          H
ATOM    396 HD23 LEU A 128       4.027   9.424  -1.365  1.00  0.00          H
ATOM    397  N   VAL A 129       8.201  10.542   2.074  1.00 18.42          N
ATOM    398  CA  VAL A 129       8.265  11.246   3.341  1.00 18.44          C
ATOM    399  C   VAL A 129       8.471  12.748   3.098  1.00 18.85          C
ATOM    400  O   VAL A 129       9.033  13.143   2.076  1.00 19.12          O
ATOM    401  CB  VAL A 129       9.292  10.525   4.255  1.00 19.71          C
ATOM    402  CG1 VAL A 129      10.733  10.593   3.711  1.00 19.20          C
ATOM    403  CG2 VAL A 129       9.203  10.949   5.724  1.00 16.64          C
ATOM    404  H   VAL A 129       8.839  10.879   1.353  1.00  0.00          H
ATOM    405  HA  VAL A 129       7.294  11.159   3.813  1.00  0.00          H
ATOM    406  HB  VAL A 129       9.001   9.476   4.266  1.00  0.00          H
ATOM    407 HG11 VAL A 129      11.404   9.943   4.267  1.00  0.00          H
ATOM    408 HG12 VAL A 129      10.786  10.267   2.673  1.00  0.00          H
ATOM    409 HG13 VAL A 129      11.126  11.609   3.753  1.00  0.00          H
ATOM    410 HG21 VAL A 129       9.732  10.263   6.378  1.00  0.00          H
ATOM    411 HG22 VAL A 129       9.629  11.933   5.882  1.00  0.00          H
ATOM    412 HG23 VAL A 129       8.164  10.959   6.050  1.00  0.00          H
ATOM    413  N   ARG A 130       8.019  13.586   4.035  1.00 21.17          N
ATOM    414  CA  ARG A 130       8.380  14.998   4.127  1.00 21.51          C
ATOM    415  C   ARG A 130       9.592  15.131   5.065  1.00 21.74          C
ATOM    416  O   ARG A 130       9.748  14.339   5.994  1.00 18.71          O
ATOM    417  CB  ARG A 130       7.212  15.752   4.799  1.00 24.72          C
ATOM    418  CG  ARG A 130       5.978  15.850   3.895  1.00 26.46          C
ATOM    419  CD  ARG A 130       4.722  16.385   4.594  1.00 30.21          C
ATOM    420  NE  ARG A 130       4.021  15.289   5.276  1.00 33.85          N
ATOM    421  CZ  ARG A 130       2.707  15.075   5.425  1.00 35.23          C
ATOM    422  NH1 ARG A 130       1.784  15.931   4.985  1.00 35.12          N
ATOM    423  NH2 ARG A 130       2.324  13.974   6.055  1.00 31.29          N1+
ATOM    424  H   ARG A 130       7.472  13.203   4.798  1.00  0.00          H
ATOM    425  HA  ARG A 130       8.611  15.419   3.145  1.00  0.00          H
ATOM    426  HB2 ARG A 130       6.952  15.280   5.746  1.00  0.00          H
ATOM    427  HB3 ARG A 130       7.519  16.762   5.050  1.00  0.00          H
ATOM    428  HG2 ARG A 130       6.218  16.480   3.037  1.00  0.00          H
ATOM    429  HG3 ARG A 130       5.758  14.863   3.492  1.00  0.00          H
ATOM    430  HD2 ARG A 130       4.951  17.197   5.284  1.00  0.00          H
ATOM    431  HD3 ARG A 130       4.065  16.792   3.834  1.00  0.00          H
ATOM    432  HE  ARG A 130       4.646  14.470   5.487  1.00  0.00          H
ATOM    433 HH11 ARG A 130       2.036  16.762   4.435  1.00  0.00          H
ATOM    434 HH12 ARG A 130       0.817  15.609   4.891  1.00  0.00          H
ATOM    435 HH21 ARG A 130       3.017  13.321   6.492  1.00  0.00          H
ATOM    436 HH22 ARG A 130       1.361  13.615   6.085  1.00  0.00          H
ATOM    437  N   ASN A 131      10.391  16.198   4.931  1.00 21.83          N
ATOM    438  CA  ASN A 131      11.515  16.520   5.837  1.00 20.92          C
ATOM    439  C   ASN A 131      11.053  16.748   7.294  1.00 21.34          C
ATOM    440  O   ASN A 131      11.775  16.478   8.258  1.00 20.83          O
ATOM    441  CB  ASN A 131      12.326  17.739   5.334  1.00 24.29          C
ATOM    442  CG  ASN A 131      13.167  17.443   4.090  1.00 24.72          C
ATOM    443  OD1 ASN A 131      13.995  16.539   4.090  1.00 26.89          O
ATOM    444  ND2 ASN A 131      12.944  18.154   2.992  1.00 26.08          N
ATOM    445  H   ASN A 131      10.137  16.863   4.198  1.00  0.00          H
ATOM    446  HA  ASN A 131      12.169  15.652   5.850  1.00  0.00          H
ATOM    447  HB2 ASN A 131      11.672  18.594   5.161  1.00  0.00          H
ATOM    448  HB3 ASN A 131      13.034  18.054   6.104  1.00  0.00          H
ATOM    449 HD21 ASN A 131      12.212  18.879   2.952  1.00  0.00          H
ATOM    450 HD22 ASN A 131      13.580  18.069   2.196  1.00  0.00          H
ATOM    451  N   LYS A 132       9.784  17.147   7.438  1.00 21.47          N
ATOM    452  CA  LYS A 132       9.005  17.291   8.664  1.00 21.50          C
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ATOM    453  C   LYS A 132      8.756  15.940   9.359  1.00 20.13           C
ATOM    454  O   LYS A 132      8.615  15.883  10.579  1.00 20.64           O
ATOM    455  CB  LYS A 132      7.630  17.886   8.279  1.00 18.17           C
ATOM    456  CG  LYS A 132      7.693  19.295   7.663  1.00 -1.00          C
ATOM    457  CD  LYS A 132      7.679  19.291   6.130  1.00 -1.00          C
ATOM    458  CE  LYS A 132      7.914  20.668   5.503  1.00 -1.00          C
ATOM    459  NZ  LYS A 132      7.909  20.563   4.037  1.00 -1.00          N1+
ATOM    460  H   LYS A 132      9.293  17.306   6.573  1.00  0.00           H
ATOM    461  HA  LYS A 132      9.527  17.954   9.358  1.00  0.00           H
ATOM    462  HB2 LYS A 132      7.083  17.209   7.619  1.00  0.00           H
ATOM    463  HB3 LYS A 132      7.012  17.938   9.173  1.00  0.00           H
ATOM    464  HG2 LYS A 132      6.837  19.876   8.012  1.00 -1.00          H
ATOM    465  HG3 LYS A 132      8.581  19.806   8.031  1.00 -1.00          H
ATOM    466  HD2 LYS A 132      8.466  18.633   5.773  1.00 -1.00          H
ATOM    467  HD3 LYS A 132      6.730  18.883   5.780  1.00 -1.00          H
ATOM    468  HE2 LYS A 132      7.152  21.372   5.836  1.00 -1.00          H
ATOM    469  HE3 LYS A 132      8.881  21.064   5.817  1.00 -1.00          H
ATOM    470  HZ1 LYS A 132      7.009  20.731   3.604  1.00 -1.00          H
ATOM    471  HZ2 LYS A 132      8.560  21.228   3.604  1.00 -1.00          H
ATOM    472  HZ3 LYS A 132      8.253  19.652   3.743  1.00 -1.00          H
ATOM    473  N   GLU A 133      8.704  14.845   8.592  1.00 20.07           N
ATOM    474  CA  GLU A 133      8.333  13.517   9.058  1.00 17.67           C
ATOM    475  C   GLU A 133      9.557  12.636   9.317  1.00 18.46           C
ATOM    476  O   GLU A 133      9.363  11.487   9.703  1.00 15.28           O
ATOM    477  CB  GLU A 133      7.423  12.855   8.016  1.00 17.59           C
ATOM    478  CG  GLU A 133      5.969  13.296   8.195  1.00 20.24           C
ATOM    479  CD  GLU A 133      5.117  12.893   7.016  1.00 23.42           C
ATOM    480  OE1 GLU A 133      4.005  12.370   7.218  1.00 24.54           O
ATOM    481  OE2 GLU A 133      5.491  13.206   5.867  1.00 22.56           O1-
ATOM    482  H   GLU A 133      8.927  14.924   7.604  1.00  0.00           H
ATOM    483  HA  GLU A 133      7.790  13.567  10.002  1.00  0.00           H
ATOM    484  HB2 GLU A 133      7.776  13.076   7.010  1.00  0.00           H
ATOM    485  HB3 GLU A 133      7.439  11.769   8.107  1.00  0.00           H
ATOM    486  HG2 GLU A 133      5.549  12.878   9.112  1.00  0.00           H
ATOM    487  HG3 GLU A 133      5.913  14.379   8.290  1.00  0.00           H
ATOM    488  N   LEU A 134     10.795  13.161   9.253  1.00 18.65           N
ATOM    489  CA  LEU A 134     12.006  12.513   9.793  1.00 19.98           C
ATOM    490  C   LEU A 134     11.769  12.074  11.245  1.00 18.99           C
ATOM    491  O   LEU A 134     11.962  10.922  11.622  1.00 19.26           O
ATOM    492  CB  LEU A 134     13.205  13.490   9.735  1.00 19.11           C
ATOM    493  CG  LEU A 134     14.528  12.989  10.368  1.00 23.22           C
ATOM    494  CD1 LEU A 134     15.107  11.777   9.621  1.00 21.36           C
ATOM    495  CD2 LEU A 134     15.539  14.139  10.478  1.00 21.65           C
ATOM    496  H   LEU A 134     10.877  14.093   8.871  1.00  0.00           H
ATOM    497  HA  LEU A 134     12.219  11.632   9.186  1.00  0.00           H
ATOM    498  HB2 LEU A 134     13.390  13.783   8.709  1.00  0.00           H
ATOM    499  HB3 LEU A 134     12.931  14.417  10.231  1.00  0.00           H
ATOM    500  HG  LEU A 134     14.348  12.670  11.393  1.00  0.00           H
ATOM    501 HD11 LEU A 134     16.025  11.422  10.087  1.00  0.00           H
ATOM    502 HD12 LEU A 134     14.414  10.936   9.614  1.00  0.00           H
ATOM    503 HD13 LEU A 134     15.338  12.019   8.586  1.00  0.00           H
ATOM    504 HD21 LEU A 134     16.551  13.784  10.660  1.00  0.00           H
ATOM    505 HD22 LEU A 134     15.554  14.754   9.578  1.00  0.00           H
ATOM    506 HD23 LEU A 134     15.306  14.798  11.310  1.00  0.00           H
ATOM    507  N   LYS A 135     11.253  13.033  12.013  1.00 17.87           N
ATOM    508  CA  LYS A 135     10.950  13.013  13.428  1.00 18.77           C
ATOM    509  C   LYS A 135      9.871  11.977  13.815  1.00 18.88           C
ATOM    510  O   LYS A 135      9.734  11.655  14.996  1.00 18.40           O
ATOM    511  CB  LYS A 135     10.535  14.453  13.800  1.00 18.36           C
ATOM    512  CG  LYS A 135     11.610  15.527  13.508  1.00 19.77           C
ATOM    513  CD  LYS A 135     11.576  16.211  12.118  1.00 16.28           C
ATOM    514  CE  LYS A 135     12.938  16.865  11.803  1.00 18.85           C
ATOM    515  NZ  LYS A 135     13.028  17.531  10.491  1.00 18.17           N1+
ATOM    516  H   LYS A 135     11.061  13.905  11.548  1.00  0.00           H
ATOM    517  HA  LYS A 135     11.862  12.751  13.964  1.00  0.00           H
ATOM    518  HB2 LYS A 135      9.614  14.736  13.303  1.00  0.00           H
ATOM    519  HB3 LYS A 135     10.312  14.466  14.868  1.00  0.00           H
ATOM    520  HG2 LYS A 135     11.489  16.319  14.244  1.00  0.00           H
ATOM    521  HG3 LYS A 135     12.595  15.100  13.704  1.00  0.00           H
ATOM    522  HD2 LYS A 135     11.317  15.513  11.328  1.00  0.00           H
ATOM    523  HD3 LYS A 135     10.784  16.961  12.109  1.00  0.00           H
ATOM    524  HE2 LYS A 135     13.171  17.600  12.569  1.00  0.00           H
ATOM    525  HE3 LYS A 135     13.723  16.118  11.855  1.00  0.00           H
ATOM    526  HZ1 LYS A 135     14.030  17.705  10.300  1.00  0.00           H
ATOM    527  HZ2 LYS A 135     12.655  16.998   9.714  1.00  0.00           H
ATOM    528  HZ3 LYS A 135     12.551  18.432  10.533  1.00  0.00           H
ATOM    529  N   GLY A 136      9.162  11.408  12.833  1.00 19.43           N
ATOM    530  CA  GLY A 136      8.216  10.308  12.978  1.00 17.22           C
ATOM    531  C   GLY A 136      8.723   9.046  12.271  1.00 19.59           C
ATOM    532  O   GLY A 136      8.530   7.939  12.769  1.00 18.34           O
ATOM    533  H   GLY A 136      9.353  11.730  11.895  1.00  0.00           H
ATOM    534  HA2 GLY A 136      7.999  10.083  14.024  1.00  0.00           H
ATOM    535  HA3 GLY A 136      7.276  10.607  12.517  1.00  0.00           H
ATOM    536  N   LEU A 137      9.410   9.177  11.129  1.00 18.36           N
ATOM    537  CA  LEU A 137     10.017   8.092  10.358  1.00 21.19           C
ATOM    538  C   LEU A 137     11.103   7.348  11.139  1.00 22.14           C
ATOM    539  O   LEU A 137     11.271   6.142  10.960  1.00 24.02           O
ATOM    540  CB  LEU A 137     10.611   8.660   9.052  1.00 21.04           C
ATOM    541  CG  LEU A 137     11.218   7.616   8.092  1.00 21.35           C
ATOM    542  CD1 LEU A 137     10.156   6.658   7.528  1.00 23.22           C
ATOM    543  CD2 LEU A 137     12.014   8.312   6.987  1.00 20.28           C
ATOM    544  H   LEU A 137      9.499  10.109  10.725  1.00  0.00           H
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ATOM    545  HA  LEU A 137       9.236   7.371  10.136  1.00  0.00           H
ATOM    546  HB2 LEU A 137       9.854   9.225   8.514  1.00  0.00           H
ATOM    547  HB3 LEU A 137      11.383   9.385   9.314  1.00  0.00           H
ATOM    548  HG  LEU A 137      11.947   7.013   8.628  1.00  0.00           H
ATOM    549 HD11 LEU A 137      10.614   5.885   6.910  1.00  0.00           H
ATOM    550 HD12 LEU A 137       9.618   6.134   8.314  1.00  0.00           H
ATOM    551 HD13 LEU A 137       9.418   7.188   6.926  1.00  0.00           H
ATOM    552 HD21 LEU A 137      12.549   7.589   6.383  1.00  0.00           H
ATOM    553 HD22 LEU A 137      11.370   8.870   6.315  1.00  0.00           H
ATOM    554 HD23 LEU A 137      12.759   8.994   7.397  1.00  0.00           H
ATOM    555  N   LEU A 138     11.813   8.039  12.034  1.00 21.78           N
ATOM    556  CA  LEU A 138     12.796   7.445  12.931  1.00 22.46           C
ATOM    557  C   LEU A 138     12.200   6.353  13.845  1.00 21.43           C
ATOM    558  O   LEU A 138     12.926   5.417  14.170  1.00 22.46           O
ATOM    559  CB  LEU A 138     13.505   8.553  13.728  1.00 19.96           C
ATOM    560  CG  LEU A 138     14.462   9.421  12.874  1.00 22.18           C
ATOM    561 CD1 LEU A 138     14.694  10.783  13.542  1.00 21.53           C
ATOM    562 CD2 LEU A 138     15.800   8.730  12.584  1.00 21.97           C
ATOM    563  H   LEU A 138     11.688   9.049  12.060  1.00  0.00           H
ATOM    564  HA  LEU A 138     13.534   6.940  12.307  1.00  0.00           H
ATOM    565  HB2 LEU A 138     12.743   9.186  14.187  1.00  0.00           H
ATOM    566  HB3 LEU A 138     14.057   8.119  14.561  1.00  0.00           H
ATOM    567  HG  LEU A 138     14.007   9.611  11.904  1.00  0.00           H
ATOM    568 HD11 LEU A 138     15.456  11.366  13.024  1.00  0.00           H
ATOM    569 HD12 LEU A 138     13.780  11.375  13.554  1.00  0.00           H
ATOM    570 HD13 LEU A 138     15.003  10.665  14.577  1.00  0.00           H
ATOM    571 HD21 LEU A 138     16.407   9.331  11.906  1.00  0.00           H
ATOM    572 HD22 LEU A 138     16.368   8.598  13.499  1.00  0.00           H
ATOM    573 HD23 LEU A 138     15.660   7.759  12.110  1.00  0.00           H
ATOM    574  N   SER A 139     10.888   6.396  14.148  1.00 20.82           N
ATOM    575  CA  SER A 139     10.149   5.316  14.813  1.00 20.60           C
ATOM    576  C   SER A 139     10.064   4.091  13.891  1.00 21.37           C
ATOM    577  O   SER A 139     10.380   2.979  14.318  1.00 21.68           O
ATOM    578  CB  SER A 139      8.716   5.785  15.189  1.00 19.65           C
ATOM    579  OG  SER A 139      7.956   4.793  15.876  1.00 22.99           O
ATOM    580  H   SER A 139     10.347   7.177  13.801  1.00  0.00           H
ATOM    581  HA  SER A 139     10.693   5.035  15.716  1.00  0.00           H
ATOM    582  HB2 SER A 139      8.765   6.683  15.808  1.00  0.00           H
ATOM    583  HB3 SER A 139      8.150   6.051  14.299  1.00  0.00           H
ATOM    584  HG  SER A 139      7.740   4.099  15.247  1.00  0.00           H
ATOM    585  N   SER A 140      9.685   4.304  12.621  1.00 20.33           N
ATOM    586  CA  SER A 140      9.542   3.266  11.609  1.00 20.38           C
ATOM    587  C   SER A 140     10.897   2.580  11.378  1.00 20.79           C
ATOM    588  O   SER A 140     10.977   1.356  11.448  1.00 19.68           O
ATOM    589  CB  SER A 140      9.036   3.881  10.285  1.00 18.81           C
ATOM    590  OG  SER A 140      7.981   4.818  10.459  1.00 20.17           O
ATOM    591  H   SER A 140      9.468   5.242  12.315  1.00  0.00           H
ATOM    592  HA  SER A 140      8.824   2.531  11.975  1.00  0.00           H
ATOM    593  HB2 SER A 140      9.841   4.360   9.727  1.00  0.00           H
ATOM    594  HB3 SER A 140      8.673   3.072   9.651  1.00  0.00           H
ATOM    595  HG  SER A 140      7.505   4.842   9.625  1.00  0.00           H
ATOM    596  N   ILE A 141     11.962   3.377  11.186  1.00 20.52           N
ATOM    597  CA  ILE A 141     13.334   2.911  11.018  1.00 22.74           C
ATOM    598  C   ILE A 141     13.805   2.122  12.248  1.00 22.91           C
ATOM    599  O   ILE A 141     14.143   0.954  12.083  1.00 25.89           O
ATOM    600  CB  ILE A 141     14.301   4.070  10.643  1.00 21.78           C
ATOM    601 CG1 ILE A 141     13.915   4.734   9.297  1.00 21.69           C
ATOM    602 CG2 ILE A 141     15.760   3.569  10.568  1.00 19.44           C
ATOM    603 CD1 ILE A 141     14.583   6.098   9.057  1.00 20.88           C
ATOM    604  H   ILE A 141     11.796   4.381  11.168  1.00  0.00           H
ATOM    605  HA  ILE A 141     13.334   2.206  10.187  1.00  0.00           H
ATOM    606  HB  ILE A 141     14.240   4.827  11.426  1.00  0.00           H
ATOM    607 HG12 ILE A 141     14.158   4.063   8.471  1.00  0.00           H
ATOM    608 HG13 ILE A 141     12.837   4.877   9.238  1.00  0.00           H
ATOM    609 HG21 ILE A 141     16.435   4.332  10.194  1.00  0.00           H
ATOM    610 HG22 ILE A 141     16.148   3.260  11.538  1.00  0.00           H
ATOM    611 HG23 ILE A 141     15.841   2.709   9.903  1.00  0.00           H
ATOM    612 HD11 ILE A 141     14.258   6.518   8.105  1.00  0.00           H
ATOM    613 HD12 ILE A 141     14.321   6.813   9.837  1.00  0.00           H
ATOM    614 HD13 ILE A 141     15.668   6.027   9.009  1.00  0.00           H
ATOM    615  N   LYS A 142     13.814   2.715  13.458  1.00 22.93           N
ATOM    616  CA  LYS A 142     14.330   2.069  14.673  1.00 24.30           C
ATOM    617  C   LYS A 142     13.627   0.743  15.022  1.00 23.46           C
ATOM    618  O   LYS A 142     14.271  -0.145  15.583  1.00 20.35           O
ATOM    619  CB  LYS A 142     14.325   3.026  15.897  1.00 26.67           C
ATOM    620  CG  LYS A 142     15.675   3.718  16.201  1.00 31.03           C
ATOM    621  CD  LYS A 142     15.944   5.031  15.442  1.00 35.34           C
ATOM    622  CE  LYS A 142     17.310   5.642  15.825  1.00 39.87           C
ATOM    623  NZ  LYS A 142     17.527   6.970  15.227  1.00 41.29          N1+
ATOM    624  H   LYS A 142     13.433   3.653  13.550  1.00  0.00           H
ATOM    625  HA  LYS A 142     15.363   1.790  14.456  1.00  0.00           H
ATOM    626  HB2 LYS A 142     13.502   3.737  15.857  1.00  0.00           H
ATOM    627  HB3 LYS A 142     14.100   2.437  16.789  1.00  0.00           H
ATOM    628  HG2 LYS A 142     15.691   3.946  17.268  1.00  0.00           H
ATOM    629  HG3 LYS A 142     16.493   3.014  16.044  1.00  0.00           H
ATOM    630  HD2 LYS A 142     15.894   4.847  14.368  1.00  0.00           H
ATOM    631  HD3 LYS A 142     15.146   5.740  15.673  1.00  0.00           H
ATOM    632  HE2 LYS A 142     17.386   5.748  16.908  1.00  0.00           H
ATOM    633  HE3 LYS A 142     18.118   4.976  15.520  1.00  0.00           H
ATOM    634  HZ1 LYS A 142     18.486   7.285  15.324  1.00  0.00           H
ATOM    635  HZ2 LYS A 142     17.311   6.984  14.246  1.00  0.00           H
ATOM    636  HZ3 LYS A 142     16.917   7.661  15.695  1.00  0.00           H
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ATOM    637  N   TYR A 143      12.345   0.587  14.666  1.00 22.06           N
ATOM    638  CA  TYR A 143      11.650  -0.690  14.773  1.00 22.59           C
ATOM    639  C   TYR A 143      12.076  -1.651  13.644  1.00 21.72           C
ATOM    640  O   TYR A 143      12.650  -2.695  13.952  1.00 22.10           O
ATOM    641  CB  TYR A 143      10.116  -0.483  14.806  1.00 20.02           C
ATOM    642  CG  TYR A 143       9.501  -0.611  16.195  1.00 21.94           C
ATOM    643  CD1 TYR A 143       9.733  -1.783  16.944  1.00 23.77           C
ATOM    644  CD2 TYR A 143       8.670   0.394  16.741  1.00 22.49           C
ATOM    645  CE1 TYR A 143       9.100  -1.984  18.180  1.00 22.37           C
ATOM    646  CE2 TYR A 143       8.014   0.179  17.975  1.00 23.21           C
ATOM    647  CZ  TYR A 143       8.208  -1.025  18.684  1.00 22.87           C
ATOM    648  OH  TYR A 143       7.534  -1.282  19.844  1.00 21.97           O
ATOM    649  H   TYR A 143      11.854   1.372  14.253  1.00  0.00           H
ATOM    650  HA  TYR A 143      11.962  -1.164  15.705  1.00  0.00           H
ATOM    651  HB2 TYR A 143       9.833   0.466  14.352  1.00  0.00           H
ATOM    652  HB3 TYR A 143       9.622  -1.242  14.199  1.00  0.00           H
ATOM    653  HD1 TYR A 143      10.368  -2.567  16.563  1.00  0.00           H
ATOM    654  HD2 TYR A 143       8.511   1.319  16.206  1.00  0.00           H
ATOM    655  HE1 TYR A 143       9.278  -2.899  18.725  1.00  0.00           H
ATOM    656  HE2 TYR A 143       7.351   0.932  18.376  1.00  0.00           H
ATOM    657  HH  TYR A 143       7.753  -2.181  20.180  1.00  0.00           H
ATOM    658  N   VAL A 144      11.865  -1.305  12.358  1.00 22.79           N
ATOM    659  CA  VAL A 144      12.187  -2.124  11.169  1.00 22.01           C
ATOM    660  C   VAL A 144      13.643  -2.635  11.160  1.00 23.35           C
ATOM    661  O   VAL A 144      13.906  -3.780  10.788  1.00 21.03           O
ATOM    662  CB  VAL A 144      11.824  -1.338   9.871  1.00 21.23           C
ATOM    663  CG1 VAL A 144      12.323  -1.982   8.559  1.00 23.80           C
ATOM    664  CG2 VAL A 144      10.311  -1.076   9.731  1.00 17.15           C
ATOM    665  H   VAL A 144      11.495  -0.377  12.167  1.00  0.00           H
ATOM    666  HA  VAL A 144      11.568  -3.019  11.215  1.00  0.00           H
ATOM    667  HB  VAL A 144      12.322  -0.371   9.949  1.00  0.00           H
ATOM    668 HG11 VAL A 144      11.988  -1.415   7.689  1.00  0.00           H
ATOM    669 HG12 VAL A 144      13.412  -2.019   8.496  1.00  0.00           H
ATOM    670 HG13 VAL A 144      11.952  -3.001   8.445  1.00  0.00           H
ATOM    671 HG21 VAL A 144      10.128  -0.261   9.031  1.00  0.00           H
ATOM    672 HG22 VAL A 144       9.792  -1.948   9.335  1.00  0.00           H
ATOM    673 HG23 VAL A 144       9.836  -0.809  10.674  1.00  0.00           H
ATOM    674  N   GLU A 145      14.577  -1.801  11.626  1.00 23.20           N
ATOM    675  CA  GLU A 145      16.003  -2.074  11.695  1.00 23.64           C
ATOM    676  C   GLU A 145      16.339  -3.324  12.509  1.00 24.71           C
ATOM    677  O   GLU A 145      17.172  -4.138  12.116  1.00 23.64           O
ATOM    678  CB  GLU A 145      16.700  -0.855  12.322  1.00 25.26           C
ATOM    679  CG  GLU A 145      17.390  -0.016  11.244  1.00 25.70           C
ATOM    680  CD  GLU A 145      18.683  -0.673  10.787  1.00 24.54           C
ATOM    681  OE1 GLU A 145      19.439  -1.144  11.661  1.00 27.65           O
ATOM    682  OE2 GLU A 145      18.938  -0.714   9.570  1.00 28.24           O1-
ATOM    683  H   GLU A 145      14.280  -0.857  11.867  1.00  0.00           H
ATOM    684  HA  GLU A 145      16.341  -2.223  10.677  1.00  0.00           H
ATOM    685  HB2 GLU A 145      16.017  -0.251  12.911  1.00  0.00           H
ATOM    686  HB3 GLU A 145      17.436  -1.159  13.066  1.00  0.00           H
ATOM    687  HG2 GLU A 145      16.730   0.146  10.390  1.00  0.00           H
ATOM    688  HG3 GLU A 145      17.610   0.966  11.641  1.00  0.00           H
ATOM    689  N   ASN A 146      15.701  -3.445  13.670  1.00 25.05           N
ATOM    690  CA  ASN A 146      16.021  -4.475  14.650  1.00 28.02           C
ATOM    691  C   ASN A 146      15.009  -5.619  14.524  1.00 26.91           C
ATOM    692  O   ASN A 146      15.384  -6.774  14.701  1.00 26.71           O
ATOM    693  CB  ASN A 146      15.991  -3.856  16.064  1.00 31.59           C
ATOM    694  CG  ASN A 146      16.992  -2.700  16.219  1.00 35.43           C
ATOM    695  OD1 ASN A 146      18.184  -2.828  15.937  1.00 38.91           O
ATOM    696  ND2 ASN A 146      16.526  -1.510  16.573  1.00 38.29           N
ATOM    697  H   ASN A 146      14.957  -2.788  13.866  1.00  0.00           H
ATOM    698  HA  ASN A 146      17.016  -4.891  14.478  1.00  0.00           H
ATOM    699  HB2 ASN A 146      14.983  -3.515  16.308  1.00  0.00           H
ATOM    700  HB3 ASN A 146      16.241  -4.621  16.801  1.00  0.00           H
ATOM    701 HD21 ASN A 146      15.524  -1.329  16.602  1.00  0.00           H
ATOM    702 HD22 ASN A 146      17.160  -0.742  16.705  1.00  0.00           H
ATOM    703  N   LYS A 147      13.759  -5.319  14.133  1.00 25.17           N
ATOM    704  CA  LYS A 147      12.704  -6.306  13.914  1.00 25.56           C
ATOM    705  C   LYS A 147      12.918  -7.122  12.627  1.00 23.80           C
ATOM    706  O   LYS A 147      12.398  -8.237  12.550  1.00 24.25           O
ATOM    707  CB  LYS A 147      11.331  -5.596  13.847  1.00 26.51           C
ATOM    708  CG  LYS A 147      10.881  -5.016  15.205  1.00 27.65           C
ATOM    709  CD  LYS A 147      10.312  -6.090  16.143  1.00 29.92           C
ATOM    710  CE  LYS A 147      10.185  -5.676  17.614  1.00 29.66           C
ATOM    711  NZ  LYS A 147       9.876  -6.822  18.483  1.00 34.14           N1+
ATOM    712  H   LYS A 147      13.504  -4.344  14.005  1.00  0.00           H
ATOM    713  HA  LYS A 147      12.716  -7.012  14.744  1.00  0.00           H
ATOM    714  HB2 LYS A 147      11.367  -4.804  13.098  1.00  0.00           H
ATOM    715  HB3 LYS A 147      10.563  -6.287  13.494  1.00  0.00           H
ATOM    716  HG2 LYS A 147      11.712  -4.501  15.687  1.00  0.00           H
ATOM    717  HG3 LYS A 147      10.120  -4.259  15.027  1.00  0.00           H
ATOM    718  HD2 LYS A 147       9.336  -6.394  15.774  1.00  0.00           H
ATOM    719  HD3 LYS A 147      10.954  -6.960  16.097  1.00  0.00           H
ATOM    720  HE2 LYS A 147      11.113  -5.229  17.971  1.00  0.00           H
ATOM    721  HE3 LYS A 147       9.399  -4.931  17.736  1.00  0.00           H
ATOM    722  HZ1 LYS A 147       9.818  -6.421  19.439  1.00  0.00           H
ATOM    723  HZ2 LYS A 147       8.944  -7.174  18.304  1.00  0.00           H
ATOM    724  HZ3 LYS A 147      10.582  -7.562  18.408  1.00  0.00           H
ATOM    725  N   ILE A 148      13.710  -6.624  11.662  1.00 24.02           N
ATOM    726  CA  ILE A 148      14.147  -7.367  10.481  1.00 21.98           C
ATOM    727  C   ILE A 148      15.575  -7.038  10.006  1.00 23.64           C
ATOM    728  O   ILE A 148      16.373  -7.963   9.876  1.00 24.28           O
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ATOM    729  CB  ILE A 148      13.068  -7.428   9.367  1.00 21.36           C
ATOM    730  CG1 ILE A 148      13.519  -8.313   8.179  1.00 23.00           C
ATOM    731  CG2 ILE A 148      12.618  -6.033   8.898  1.00 19.78           C
ATOM    732  CD1 ILE A 148      12.390  -9.099   7.507  1.00 19.41           C
ATOM    733  H   ILE A 148      14.063  -5.681  11.772  1.00  0.00           H
ATOM    734  HA  ILE A 148      14.241  -8.401  10.814  1.00  0.00           H
ATOM    735  HB  ILE A 148      12.199  -7.908   9.813  1.00  0.00           H
ATOM    736 HG12 ILE A 148      14.058  -7.716   7.441  1.00  0.00           H
ATOM    737 HG13 ILE A 148      14.230  -9.057   8.535  1.00  0.00           H
ATOM    738 HG21 ILE A 148      11.874  -6.106   8.113  1.00  0.00           H
ATOM    739 HG22 ILE A 148      12.168  -5.462   9.709  1.00  0.00           H
ATOM    740 HG23 ILE A 148      13.443  -5.449   8.490  1.00  0.00           H
ATOM    741 HD11 ILE A 148      12.765  -9.657   6.650  1.00  0.00           H
ATOM    742 HD12 ILE A 148      11.961  -9.823   8.198  1.00  0.00           H
ATOM    743 HD13 ILE A 148      11.589  -8.455   7.161  1.00  0.00           H
ATOM    744  N   ASN A 149      15.889  -5.770   9.698  1.00 22.03           N
ATOM    745  CA  ASN A 149      17.005  -5.373   8.809  1.00 24.97           C
ATOM    746  C   ASN A 149      18.390  -5.923   9.201  1.00 27.08           C
ATOM    747  O   ASN A 149      19.130  -6.390   8.342  1.00 26.94           O
ATOM    748  CB  ASN A 149      17.068  -3.834   8.674  1.00 24.58           C
ATOM    749  CG  ASN A 149      17.748  -3.340   7.394  1.00 26.06           C
ATOM    750  OD1 ASN A 149      17.545  -3.904   6.320  1.00 24.50           O
ATOM    751  ND2 ASN A 149      18.540  -2.281   7.478  1.00 25.60           N
ATOM    752  H   ASN A 149      15.175  -5.070   9.874  1.00  0.00           H
ATOM    753  HA  ASN A 149      16.754  -5.804   7.838  1.00  0.00           H
ATOM    754  HB2 ASN A 149      16.065  -3.407   8.687  1.00  0.00           H
ATOM    755  HB3 ASN A 149      17.618  -3.425   9.521  1.00  0.00           H
ATOM    756 HD21 ASN A 149      18.684  -1.755   8.363  1.00  0.00           H
ATOM    757 HD22 ASN A 149      18.973  -1.889   6.640  1.00  0.00           H
ATOM    758  N   LYS A 150      18.722  -5.932  10.496  1.00 30.35           N
ATOM    759  CA  LYS A 150      19.993  -6.460  11.002  1.00 31.86           C
ATOM    760  C   LYS A 150      20.077  -8.000  10.979  1.00 30.69           C
ATOM    761  O   LYS A 150      21.163  -8.547  11.159  1.00 31.66           O
ATOM    762  CB  LYS A 150      20.185  -5.995  12.459  1.00 34.31           C
ATOM    763  CG  LYS A 150      20.554  -4.511  12.577  1.00 37.03           C
ATOM    764  CD  LYS A 150      20.876  -4.134  14.029  1.00 39.82           C
ATOM    765  CE  LYS A 150      21.195  -2.647  14.212  1.00 41.88           C
ATOM    766  NZ  LYS A 150      19.997  -1.819  14.032  1.00 43.28           N1+
ATOM    767  H   LYS A 150      18.091  -5.470  11.145  1.00  0.00           H
ATOM    768  HA  LYS A 150      20.813  -6.084  10.387  1.00  0.00           H
ATOM    769  HB2 LYS A 150      19.288  -6.213  13.043  1.00  0.00           H
ATOM    770  HB3 LYS A 150      20.988  -6.574  12.919  1.00  0.00           H
ATOM    771  HG2 LYS A 150      21.419  -4.296  11.945  1.00  0.00           H
ATOM    772  HG3 LYS A 150      19.744  -3.896  12.186  1.00  0.00           H
ATOM    773  HD2 LYS A 150      20.051  -4.424  14.682  1.00  0.00           H
ATOM    774  HD3 LYS A 150      21.737  -4.718  14.357  1.00  0.00           H
ATOM    775  HE2 LYS A 150      21.570  -2.484  15.223  1.00  0.00           H
ATOM    776  HE3 LYS A 150      21.980  -2.324  13.527  1.00  0.00           H
ATOM    777  HZ1 LYS A 150      20.166  -0.872  14.320  1.00  0.00           H
ATOM    778  HZ2 LYS A 150      19.761  -1.734  13.019  1.00  0.00           H
ATOM    779  HZ3 LYS A 150      19.212  -2.214  14.541  1.00  0.00           H
ATOM    780  N   LYS A 151      18.951  -8.696  10.789  1.00 29.61           N
ATOM    781  CA  LYS A 151      18.887 -10.147  10.637  1.00 28.95           C
ATOM    782  C   LYS A 151      18.806 -10.488   9.135  1.00 28.12           C
ATOM    783  O   LYS A 151      19.470 -11.418   8.684  1.00 26.36           O
ATOM    784  CB  LYS A 151      17.615 -10.675  11.351  1.00 30.41           C
ATOM    785  CG  LYS A 151      17.562 -10.347  12.863  1.00 32.64           C
ATOM    786  CD  LYS A 151      16.274 -10.796  13.586  1.00 35.44           C
ATOM    787  CE  LYS A 151      15.031 -10.012  13.134  1.00 35.31           C
ATOM    788  NZ  LYS A 151      13.825 -10.317  13.916  1.00 36.53           N1+
ATOM    789  H   LYS A 151      18.108  -8.170  10.584  1.00  0.00           H
ATOM    790  HA  LYS A 151      19.769 -10.631  11.060  1.00  0.00           H
ATOM    791  HB2 LYS A 151      16.728 -10.286  10.854  1.00  0.00           H
ATOM    792  HB3 LYS A 151      17.569 -11.758  11.222  1.00  0.00           H
ATOM    793  HG2 LYS A 151      18.420 -10.815  13.347  1.00  0.00           H
ATOM    794  HG3 LYS A 151      17.688  -9.274  13.020  1.00  0.00           H
ATOM    795  HD2 LYS A 151      16.118 -11.866  13.443  1.00  0.00           H
ATOM    796  HD3 LYS A 151      16.413 -10.648  14.658  1.00  0.00           H
ATOM    797  HE2 LYS A 151      15.215  -8.939  13.185  1.00  0.00           H
ATOM    798  HE3 LYS A 151      14.811 -10.249  12.094  1.00  0.00           H
ATOM    799  HZ1 LYS A 151      13.038  -9.958  13.389  1.00  0.00           H
ATOM    800  HZ2 LYS A 151      13.694 -11.316  14.067  1.00  0.00           H
ATOM    801  HZ3 LYS A 151      13.785  -9.835  14.832  1.00  0.00           H
ATOM    802  N   PHE A 152      18.012  -9.732   8.361  1.00 26.10           N
ATOM    803  CA  PHE A 152      17.736  -9.957   6.940  1.00 27.49           C
ATOM    804  C   PHE A 152      17.747  -8.601   6.208  1.00 27.68           C
ATOM    805  O   PHE A 152      16.704  -7.945   6.165  1.00 27.95           O
ATOM    806  CB  PHE A 152      16.410 -10.734   6.774  1.00 28.65           C
ATOM    807  CG  PHE A 152      16.345 -12.046   7.540  1.00 30.27           C
ATOM    808  CD1 PHE A 152      17.052 -13.177   7.080  1.00 29.39           C
ATOM    809  CD2 PHE A 152      15.633 -12.116   8.755  1.00 29.26           C
ATOM    810  CE1 PHE A 152      17.042 -14.371   7.826  1.00 29.40           C
ATOM    811  CE2 PHE A 152      15.655 -13.299   9.516  1.00 30.84           C
ATOM    812  CZ  PHE A 152      16.347 -14.431   9.048  1.00 29.38           C
ATOM    813  H   PHE A 152      17.507  -8.969   8.803  1.00  0.00           H
ATOM    814  HA  PHE A 152      18.511 -10.593   6.515  1.00  0.00           H
ATOM    815  HB2 PHE A 152      15.568 -10.112   7.074  1.00  0.00           H
ATOM    816  HB3 PHE A 152      16.251 -10.936   5.716  1.00  0.00           H
ATOM    817  HD1 PHE A 152      17.623 -13.125   6.164  1.00  0.00           H
ATOM    818  HD2 PHE A 152      15.095 -11.254   9.124  1.00  0.00           H
ATOM    819  HE1 PHE A 152      17.591 -15.232   7.474  1.00  0.00           H
ATOM    820  HE2 PHE A 152      15.144 -13.337  10.464  1.00  0.00           H
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ATOM    821  HZ  PHE A 152      16.351 -15.339   9.634  1.00  0.00           H
ATOM    822  N   PRO A 153      18.902  -8.137   5.678  1.00 27.92           N
ATOM    823  CA  PRO A 153      19.055  -6.761   5.186  1.00 26.86           C
ATOM    824  C   PRO A 153      18.481  -6.508   3.782  1.00 25.61           C
ATOM    825  O   PRO A 153      18.484  -7.402   2.922  1.00 23.81           O
ATOM    826  CB  PRO A 153      20.572  -6.516   5.202  1.00 28.24           C
ATOM    827  CG  PRO A 153      21.185  -7.893   5.004  1.00 29.29           C
ATOM    828  CD  PRO A 153      20.188  -8.841   5.674  1.00 28.25           C
ATOM    829  HA  PRO A 153      18.573  -6.082   5.885  1.00  0.00           H
ATOM    830  HB2 PRO A 153      20.911  -5.791   4.460  1.00  0.00           H
ATOM    831  HB3 PRO A 153      20.857  -6.128   6.182  1.00  0.00           H
ATOM    832  HG2 PRO A 153      21.247  -8.114   3.938  1.00  0.00           H
ATOM    833  HG3 PRO A 153      22.190  -7.974   5.422  1.00  0.00           H
ATOM    834  HD2 PRO A 153      20.136  -9.794   5.147  1.00  0.00           H
ATOM    835  HD3 PRO A 153      20.489  -9.035   6.706  1.00  0.00           H
ATOM    836  N   TYR A 154      18.060  -5.253   3.565  1.00 23.90           N
ATOM    837  CA  TYR A 154      17.629  -4.632   2.308  1.00 25.51           C
ATOM    838  C   TYR A 154      18.050  -3.146   2.273  1.00 24.53           C
ATOM    839  O   TYR A 154      18.256  -2.567   3.343  1.00 23.72           O
ATOM    840  CB  TYR A 154      16.111  -4.831   2.082  1.00 24.29           C
ATOM    841  CG  TYR A 154      15.752  -6.215   1.581  1.00 25.02           C
ATOM    842  CD1 TYR A 154      16.065  -6.580   0.255  1.00 24.50           C
ATOM    843  CD2 TYR A 154      15.162  -7.156   2.448  1.00 23.16           C
ATOM    844  CE1 TYR A 154      15.831  -7.889  -0.194  1.00 26.82           C
ATOM    845  CE2 TYR A 154      14.931  -8.469   2.000  1.00 25.35           C
ATOM    846  CZ  TYR A 154      15.285  -8.836   0.686  1.00 26.98           C
ATOM    847  OH  TYR A 154      15.224 -10.136   0.291  1.00 26.94           O
ATOM    848  H   TYR A 154      18.088  -4.615   4.357  1.00  0.00           H
ATOM    849  HA  TYR A 154      18.174  -5.130   1.506  1.00  0.00           H
ATOM    850  HB2 TYR A 154      15.563  -4.615   3.000  1.00  0.00           H
ATOM    851  HB3 TYR A 154      15.734  -4.113   1.352  1.00  0.00           H
ATOM    852  HD1 TYR A 154      16.517  -5.867  -0.417  1.00  0.00           H
ATOM    853  HD2 TYR A 154      14.928  -6.889   3.470  1.00  0.00           H
ATOM    854  HE1 TYR A 154      16.097  -8.168  -1.205  1.00  0.00           H
ATOM    855  HE2 TYR A 154      14.520  -9.193   2.688  1.00  0.00           H
ATOM    856  HH  TYR A 154      14.872 -10.734   0.985  1.00  0.00           H
ATOM    857  N   PRO A 155      18.184  -2.513   1.085  1.00 24.68           N
ATOM    858  CA  PRO A 155      18.423  -1.065   0.954  1.00 23.85           C
ATOM    859  C   PRO A 155      17.126  -0.261   1.179  1.00 24.27           C
ATOM    860  O   PRO A 155      16.028  -0.803   1.012  1.00 23.44           O
ATOM    861  CB  PRO A 155      18.924  -0.891  -0.487  1.00 23.62           C
ATOM    862  CG  PRO A 155      18.284  -2.035  -1.257  1.00 23.92           C
ATOM    863  CD  PRO A 155      18.142  -3.156  -0.230  1.00 24.00           C
ATOM    864  HA  PRO A 155      19.184  -0.742   1.663  1.00  0.00           H
ATOM    865  HB2 PRO A 155      18.697   0.086  -0.921  1.00  0.00           H
ATOM    866  HB3 PRO A 155      20.007  -0.999  -0.521  1.00  0.00           H
ATOM    867  HG2 PRO A 155      17.300  -1.728  -1.613  1.00  0.00           H
ATOM    868  HG3 PRO A 155      18.868  -2.331  -2.129  1.00  0.00           H
ATOM    869  HD2 PRO A 155      17.215  -3.700  -0.389  1.00  0.00           H
ATOM    870  HD3 PRO A 155      18.974  -3.855  -0.325  1.00  0.00           H
ATOM    871  N   TRP A 156      17.240   1.021   1.550  1.00 23.62           N
ATOM    872  CA  TRP A 156      16.110   1.905   1.844  1.00 24.34           C
ATOM    873  C   TRP A 156      16.124   3.116   0.900  1.00 24.58           C
ATOM    874  O   TRP A 156      17.022   3.955   0.962  1.00 24.78           O
ATOM    875  CB  TRP A 156      16.140   2.314   3.335  1.00 22.47           C
ATOM    876  CG  TRP A 156      14.811   2.615   3.972  1.00 23.60           C
ATOM    877  CD1 TRP A 156      13.796   3.321   3.416  1.00 23.21           C
ATOM    878  CD2 TRP A 156      14.311   2.166   5.272  1.00 24.20           C
ATOM    879  NE1 TRP A 156      12.714   3.330   4.272  1.00 23.02           N
ATOM    880  CE3 TRP A 156      14.840   1.390   6.333  1.00 22.06           C
ATOM    881  CE2 TRP A 156      12.973   2.636   5.427  1.00 24.32           C
ATOM    882  CZ3 TRP A 156      14.068   1.089   7.475  1.00 23.14           C
ATOM    883  CZ2 TRP A 156      12.201   2.361   6.564  1.00 23.17           C
ATOM    884  CH2 TRP A 156      12.747   1.569   7.588  1.00 23.12           C
ATOM    885  H   TRP A 156      18.176   1.408   1.651  1.00  0.00           H
ATOM    886  HA  TRP A 156      15.181   1.366   1.672  1.00  0.00           H
ATOM    887  HB2 TRP A 156      16.571   1.496   3.912  1.00  0.00           H
ATOM    888  HB3 TRP A 156      16.805   3.161   3.496  1.00  0.00           H
ATOM    889  HD1 TRP A 156      13.827   3.797   2.446  1.00  0.00           H
ATOM    890  HE1 TRP A 156      11.819   3.798   4.061  1.00  0.00           H
ATOM    891  HE3 TRP A 156      15.845   1.002   6.253  1.00  0.00           H
ATOM    892  HZ3 TRP A 156      14.490   0.475   8.258  1.00  0.00           H
ATOM    893  HZ2 TRP A 156      11.196   2.744   6.632  1.00  0.00           H
ATOM    894  HH2 TRP A 156      12.147   1.330   8.452  1.00  0.00           H
ATOM    895  N   VAL A 157      15.108   3.213   0.038  1.00 24.62           N
ATOM    896  CA  VAL A 157      14.891   4.316  -0.886  1.00 22.16           C
ATOM    897  C   VAL A 157      13.936   5.310  -0.200  1.00 21.82           C
ATOM    898  O   VAL A 157      12.757   5.021   0.025  1.00 22.52           O
ATOM    899  CB  VAL A 157      14.263   3.744  -2.186  1.00 20.88           C
ATOM    900  CG1 VAL A 157      13.835   4.848  -3.169  1.00 19.19           C
ATOM    901  CG2 VAL A 157      15.226   2.767  -2.889  1.00 20.83           C
ATOM    902  H   VAL A 157      14.375   2.507   0.072  1.00  0.00           H
ATOM    903  HA  VAL A 157      15.833   4.812  -1.129  1.00  0.00           H
ATOM    904  HB  VAL A 157      13.366   3.178  -1.928  1.00  0.00           H
ATOM    905 HG11 VAL A 157      13.603   4.443  -4.152  1.00  0.00           H
ATOM    906 HG12 VAL A 157      12.945   5.368  -2.821  1.00  0.00           H
ATOM    907 HG13 VAL A 157      14.622   5.591  -3.295  1.00  0.00           H
ATOM    908 HG21 VAL A 157      14.756   2.310  -3.759  1.00  0.00           H
ATOM    909 HG22 VAL A 157      16.130   3.271  -3.231  1.00  0.00           H
ATOM    910 HG23 VAL A 157      15.533   1.949  -2.238  1.00  0.00           H
ATOM    911  N   PHE A 158      14.449   6.493   0.129  1.00 22.60           N
ATOM    912  CA  PHE A 158      13.697   7.605   0.682  1.00 21.72           C
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ATOM    913  C   PHE A 158      13.368   8.554  -0.481  1.00 21.85           C
ATOM    914  O   PHE A 158      14.252   8.948  -1.246  1.00 21.79           O
ATOM    915  CB  PHE A 158      14.579   8.319   1.725  1.00 22.82           C
ATOM    916  CG  PHE A 158      14.969   7.434   2.896  1.00 22.97           C
ATOM    917  CD1 PHE A 158      14.017   7.101   3.882  1.00 20.44           C
ATOM    918  CD2 PHE A 158      16.268   6.892   2.969  1.00 23.38           C
ATOM    919  CE1 PHE A 158      14.361   6.219   4.925  1.00 23.63           C
ATOM    920  CE2 PHE A 158      16.607   6.018   4.016  1.00 22.41           C
ATOM    921  CZ  PHE A 158      15.659   5.687   5.000  1.00 21.10           C
ATOM    922  H   PHE A 158      15.430   6.677  -0.085  1.00  0.00           H
ATOM    923  HA  PHE A 158      12.787   7.256   1.168  1.00  0.00           H
ATOM    924  HB2 PHE A 158      15.477   8.725   1.257  1.00  0.00           H
ATOM    925  HB3 PHE A 158      14.041   9.168   2.139  1.00  0.00           H
ATOM    926  HD1 PHE A 158      13.012   7.490   3.817  1.00  0.00           H
ATOM    927  HD2 PHE A 158      17.002   7.122   2.210  1.00  0.00           H
ATOM    928  HE1 PHE A 158      13.625   5.898   5.645  1.00  0.00           H
ATOM    929  HE2 PHE A 158      17.593   5.586   4.052  1.00  0.00           H
ATOM    930  HZ  PHE A 158      15.907   4.988   5.784  1.00  0.00           H
ATOM    931  N   LEU A 159      12.087   8.901  -0.619  1.00 22.19           N
ATOM    932  CA  LEU A 159      11.505   9.751  -1.651  1.00 20.94           C
ATOM    933  C   LEU A 159      10.866  10.977  -0.975  1.00 21.28           C
ATOM    934  O   LEU A 159      10.334  10.868   0.131  1.00 22.09           O
ATOM    935  CB  LEU A 159      10.457   8.944  -2.453  1.00 22.79           C
ATOM    936  CG  LEU A 159      10.983   7.647  -3.112  1.00 22.80           C
ATOM    937  CD1 LEU A 159       9.841   6.823  -3.728  1.00 23.75           C
ATOM    938  CD2 LEU A 159      12.064   7.931  -4.163  1.00 19.61           C
ATOM    939  H   LEU A 159      11.420   8.515   0.050  1.00  0.00           H
ATOM    940  HA  LEU A 159      12.279  10.084  -2.333  1.00  0.00           H
ATOM    941  HB2 LEU A 159       9.630   8.676  -1.801  1.00  0.00           H
ATOM    942  HB3 LEU A 159      10.030   9.594  -3.215  1.00  0.00           H
ATOM    943  HG  LEU A 159      11.424   7.024  -2.334  1.00  0.00           H
ATOM    944 HD11 LEU A 159      10.214   5.872  -4.111  1.00  0.00           H
ATOM    945 HD12 LEU A 159       9.068   6.602  -2.992  1.00  0.00           H
ATOM    946 HD13 LEU A 159       9.373   7.340  -4.564  1.00  0.00           H
ATOM    947 HD21 LEU A 159      12.381   7.017  -4.668  1.00  0.00           H
ATOM    948 HD22 LEU A 159      11.697   8.615  -4.927  1.00  0.00           H
ATOM    949 HD23 LEU A 159      12.954   8.374  -3.718  1.00  0.00           H
ATOM    950  N   ASN A 160      10.915  12.146  -1.620  1.00 21.67           N
ATOM    951  CA  ASN A 160      10.468  13.441  -1.088  1.00 21.59           C
ATOM    952  C   ASN A 160       9.965  14.318  -2.245  1.00 22.22           C
ATOM    953  O   ASN A 160      10.105  13.950  -3.409  1.00 22.40           O
ATOM    954  CB  ASN A 160      11.630  14.063  -0.281  1.00 21.73           C
ATOM    955  CG  ASN A 160      11.296  15.172   0.722  1.00 20.70           C
ATOM    956  OD1 ASN A 160      10.304  15.892   0.609  1.00 17.56           O
ATOM    957  ND2 ASN A 160      12.150  15.325   1.726  1.00 20.24           N
ATOM    958  H   ASN A 160      11.388  12.179  -2.516  1.00  0.00           H
ATOM    959  HA  ASN A 160       9.617  13.270  -0.428  1.00  0.00           H
ATOM    960  HB2 ASN A 160      12.055  13.270   0.320  1.00  0.00           H
ATOM    961  HB3 ASN A 160      12.425  14.397  -0.949  1.00  0.00           H
ATOM    962 HD21 ASN A 160      12.957  14.718   1.794  1.00  0.00           H
ATOM    963 HD22 ASN A 160      12.055  16.097   2.367  1.00  0.00           H
ATOM    964  N   ASP A 161       9.393  15.484  -1.941  1.00 22.62           N
ATOM    965  CA  ASP A 161       8.924  16.487  -2.906  1.00 21.64           C
ATOM    966  C   ASP A 161       9.631  17.840  -2.676  1.00 24.09           C
ATOM    967  O   ASP A 161       9.634  18.702  -3.555  1.00 24.64           O
ATOM    968  CB  ASP A 161       7.376  16.540  -2.908  1.00 22.24           C
ATOM    969  CG  ASP A 161       6.711  17.534  -1.960  1.00 22.54           C
ATOM    970  OD1 ASP A 161       6.831  17.360  -0.727  1.00 19.79           O
ATOM    971  OD2 ASP A 161       6.015  18.438  -2.484  1.00 25.86           O1-
ATOM    972  H   ASP A 161       9.400  15.738  -0.957  1.00  0.00           H
ATOM    973  HA  ASP A 161       9.227  16.180  -3.908  1.00  0.00           H
ATOM    974  HB2 ASP A 161       7.049  16.769  -3.921  1.00  0.00           H
ATOM    975  HB3 ASP A 161       6.966  15.550  -2.706  1.00  0.00           H
ATOM    976  N   GLU A 162      10.303  17.998  -1.536  1.00 25.03           N
ATOM    977  CA  GLU A 162      11.428  18.902  -1.345  1.00 25.78           C
ATOM    978  C   GLU A 162      12.712  18.088  -1.611  1.00 26.36           C
ATOM    979  O   GLU A 162      12.653  16.855  -1.646  1.00 26.47           O
ATOM    980  CB  GLU A 162      11.439  19.285   0.146  1.00 28.39           C
ATOM    981  CG  GLU A 162      10.354  20.311   0.499  1.00 34.38           C
ATOM    982  CD  GLU A 162      10.323  20.631   1.978  1.00 38.51           C
ATOM    983  OE1 GLU A 162      10.883  19.881   2.808  1.00 40.07           O
ATOM    984  OE2 GLU A 162       9.657  21.617   2.358  1.00 39.26           O1-
ATOM    985  H   GLU A 162      10.289  17.219  -0.889  1.00  0.00           H
ATOM    986  HA  GLU A 162      11.378  19.780  -1.989  1.00  0.00           H
ATOM    987  HB2 GLU A 162      11.321  18.386   0.753  1.00  0.00           H
ATOM    988  HB3 GLU A 162      12.403  19.704   0.438  1.00  0.00           H
ATOM    989  HG2 GLU A 162      10.518  21.233  -0.060  1.00  0.00           H
ATOM    990  HG3 GLU A 162       9.372  19.937   0.208  1.00  0.00           H
ATOM    991  N   PRO A 163      13.892  18.731  -1.708  1.00 25.77           N
ATOM    992  CA  PRO A 163      15.163  18.022  -1.553  1.00 25.31           C
ATOM    993  C   PRO A 163      15.335  17.595  -0.080  1.00 24.48           C
ATOM    994  O   PRO A 163      14.776  18.217   0.829  1.00 23.95           O
ATOM    995  CB  PRO A 163      16.227  19.028  -2.013  1.00 25.46           C
ATOM    996  CG  PRO A 163      15.606  20.395  -1.756  1.00 26.93           C
ATOM    997  CD  PRO A 163      14.096  20.170  -1.881  1.00 25.47           C
ATOM    998  HA  PRO A 163      15.182  17.136  -2.192  1.00  0.00           H
ATOM    999  HB2 PRO A 163      17.186  18.906  -1.508  1.00  0.00           H
ATOM   1000  HB3 PRO A 163      16.400  18.902  -3.083  1.00  0.00           H
ATOM   1001  HG2 PRO A 163      15.843  20.707  -0.737  1.00  0.00           H
ATOM   1002  HG3 PRO A 163      15.974  21.168  -2.432  1.00  0.00           H
ATOM   1003  HD2 PRO A 163      13.554  20.775  -1.155  1.00  0.00           H
ATOM   1004  HD3 PRO A 163      13.747  20.450  -2.873  1.00  0.00           H
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ATOM   1005  N   PHE A 164      16.094  16.526   0.168  1.00 23.91           N
ATOM   1006  CA  PHE A 164      16.332  16.020   1.517  1.00 22.65           C
ATOM   1007  C   PHE A 164      17.345  16.916   2.232  1.00 22.61           C
ATOM   1008  O   PHE A 164      18.456  17.111   1.727  1.00 20.34           O
ATOM   1009  CB  PHE A 164      16.887  14.587   1.450  1.00 21.23           C
ATOM   1010  CG  PHE A 164      15.788  13.553   1.373  1.00 21.71           C
ATOM   1011  CD1 PHE A 164      15.040  13.260   2.532  1.00 21.29           C
ATOM   1012  CD2 PHE A 164      15.487  12.906   0.159  1.00 20.13           C
ATOM   1013  CE1 PHE A 164      14.003  12.314   2.482  1.00 22.86           C
ATOM   1014  CE2 PHE A 164      14.461  11.947   0.119  1.00 22.82           C
ATOM   1015  CZ  PHE A 164      13.720  11.651   1.278  1.00 20.54           C
ATOM   1016  H   PHE A 164      16.565  16.078  -0.615  1.00  0.00           H
ATOM   1017  HA  PHE A 164      15.398  16.019   2.077  1.00  0.00           H
ATOM   1018  HB2 PHE A 164      17.583  14.469   0.618  1.00  0.00           H
ATOM   1019  HB3 PHE A 164      17.461  14.360   2.350  1.00  0.00           H
ATOM   1020  HD1 PHE A 164      15.248  13.772   3.461  1.00  0.00           H
ATOM   1021  HD2 PHE A 164      16.033  13.141  -0.744  1.00  0.00           H
ATOM   1022  HE1 PHE A 164      13.420  12.105   3.364  1.00  0.00           H
ATOM   1023  HE2 PHE A 164      14.223  11.453  -0.809  1.00  0.00           H
ATOM   1024  HZ  PHE A 164      12.906  10.943   1.234  1.00  0.00           H
ATOM   1025  N   THR A 165      16.955  17.449   3.395  1.00 23.48           N
ATOM   1026  CA  THR A 165      17.774  18.267   4.280  1.00 23.94           C
ATOM   1027  C   THR A 165      18.908  17.420   4.883  1.00 26.62           C
ATOM   1028  O   THR A 165      18.743  16.225   5.142  1.00 21.92           O
ATOM   1029  CB  THR A 165      16.845  18.879   5.364  1.00 25.32           C
ATOM   1030  OG1 THR A 165      16.061  17.895   6.019  1.00 27.19           O
ATOM   1031  CG2 THR A 165      15.898  19.947   4.797  1.00 25.62           C
ATOM   1032  H   THR A 165      16.041  17.214   3.774  1.00  0.00           H
ATOM   1033  HA  THR A 165      18.222  19.074   3.701  1.00  0.00           H
ATOM   1034  HB  THR A 165      17.464  19.359   6.125  1.00  0.00           H
ATOM   1035  HG1 THR A 165      16.370  17.802   6.935  1.00  0.00           H
ATOM   1036 HG21 THR A 165      15.266  20.369   5.579  1.00  0.00           H
ATOM   1037 HG22 THR A 165      16.458  20.769   4.349  1.00  0.00           H
ATOM   1038 HG23 THR A 165      15.245  19.541   4.025  1.00  0.00           H
ATOM   1039  N   GLU A 166      20.091  18.019   5.059  1.00 27.49           N
ATOM   1040  CA  GLU A 166      21.323  17.344   5.474  1.00 30.60           C
ATOM   1041  C   GLU A 166      21.185  16.609   6.817  1.00 29.25           C
ATOM   1042  O   GLU A 166      21.658  15.482   6.947  1.00 31.53           O
ATOM   1043  CB  GLU A 166      22.524  18.320   5.443  1.00 34.11           C
ATOM   1044  CG  GLU A 166      22.591  19.287   4.230  1.00 40.02           C
ATOM   1045  CD  GLU A 166      22.199  18.648   2.901  1.00 44.19           C
ATOM   1046  OE1 GLU A 166      21.110  18.997   2.403  1.00 48.52           O
ATOM   1047  OE2 GLU A 166      22.855  17.677   2.474  1.00 46.29           O1-
ATOM   1048  H   GLU A 166      20.218  18.911   4.595  1.00  0.00           H
ATOM   1049  HA  GLU A 166      21.532  16.570   4.741  1.00  0.00           H
ATOM   1050  HB2 GLU A 166      22.536  18.917   6.355  1.00  0.00           H
ATOM   1051  HB3 GLU A 166      23.442  17.730   5.466  1.00  0.00           H
ATOM   1052  HG2 GLU A 166      21.938  20.143   4.401  1.00  0.00           H
ATOM   1053  HG3 GLU A 166      23.598  19.692   4.130  1.00  0.00           H
ATOM   1054  N   GLU A 167      20.444  17.207   7.760  1.00 29.61           N
ATOM   1055  CA  GLU A 167      20.028  16.624   9.035  1.00 30.74           C
ATOM   1056  C   GLU A 167      19.244  15.305   8.878  1.00 29.24           C
ATOM   1057  O   GLU A 167      19.468  14.381   9.658  1.00 26.20           O
ATOM   1058  CB  GLU A 167      19.342  17.723   9.900  1.00 33.76           C
ATOM   1059  CG  GLU A 167      18.007  17.403  10.617  1.00 39.85           C
ATOM   1060  CD  GLU A 167      16.765  17.544   9.741  1.00 43.67           C
ATOM   1061  OE1 GLU A 167      16.909  17.761   8.516  1.00 45.84           O
ATOM   1062  OE2 GLU A 167      15.654  17.523  10.322  1.00 45.11           O1-
ATOM   1063  H   GLU A 167      20.018  18.084   7.504  1.00  0.00           H
ATOM   1064  HA  GLU A 167      20.951  16.345   9.549  1.00  0.00           H
ATOM   1065  HB2 GLU A 167      20.056  18.020  10.668  1.00  0.00           H
ATOM   1066  HB3 GLU A 167      19.197  18.632   9.313  1.00  0.00           H
ATOM   1067  HG2 GLU A 167      18.019  16.419  11.084  1.00  0.00           H
ATOM   1068  HG3 GLU A 167      17.891  18.115  11.433  1.00  0.00           H
ATOM   1069  N   PHE A 168      18.384  15.188   7.854  1.00 26.92           N
ATOM   1070  CA  PHE A 168      17.623  13.986   7.507  1.00 25.65           C
ATOM   1071  C   PHE A 168      18.576  12.836   7.194  1.00 24.16           C
ATOM   1072  O   PHE A 168      18.495  11.764   7.791  1.00 21.85           O
ATOM   1073  CB  PHE A 168      16.685  14.260   6.302  1.00 25.88           C
ATOM   1074  CG  PHE A 168      15.509  13.308   6.143  1.00 25.83           C
ATOM   1075  CD1 PHE A 168      15.692  11.941   5.836  1.00 27.41           C
ATOM   1076  CD2 PHE A 168      14.203  13.811   6.293  1.00 26.00           C
ATOM   1077  CE1 PHE A 168      14.583  11.076   5.766  1.00 27.73           C
ATOM   1078  CE2 PHE A 168      13.092  12.951   6.210  1.00 24.69           C
ATOM   1079  CZ  PHE A 168      13.286  11.579   5.978  1.00 24.72           C
ATOM   1080  H   PHE A 168      18.235  16.009   7.281  1.00  0.00           H
ATOM   1081  HA  PHE A 168      17.031  13.696   8.367  1.00  0.00           H
ATOM   1082  HB2 PHE A 168      16.290  15.273   6.387  1.00  0.00           H
ATOM   1083  HB3 PHE A 168      17.232  14.248   5.360  1.00  0.00           H
ATOM   1084  HD1 PHE A 168      16.681  11.539   5.667  1.00  0.00           H
ATOM   1085  HD2 PHE A 168      14.065  14.863   6.499  1.00  0.00           H
ATOM   1086  HE1 PHE A 168      14.725  10.027   5.544  1.00  0.00           H
ATOM   1087  HE2 PHE A 168      12.092  13.335   6.343  1.00  0.00           H
ATOM   1088  HZ  PHE A 168      12.433  10.924   5.939  1.00  0.00           H
ATOM   1089  N   LYS A 169      19.510  13.093   6.278  1.00 24.01           N
ATOM   1090  CA  LYS A 169      20.462  12.121   5.766  1.00 26.45           C
ATOM   1091  C   LYS A 169      21.464  11.717   6.865  1.00 26.84           C
ATOM   1092  O   LYS A 169      21.730  10.526   7.031  1.00 27.09           O
ATOM   1093  CB  LYS A 169      21.136  12.729   4.521  1.00 29.03           C
ATOM   1094  CG  LYS A 169      20.108  13.009   3.396  1.00 31.88           C
ATOM   1095  CD  LYS A 169      20.646  13.735   2.155  1.00 35.09           C
ATOM   1096  CE  LYS A 169      21.086  15.170   2.472  1.00 37.28           C
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ATOM   1097  NZ  LYS A 169      21.202  16.043   1.300  1.00 38.69          N1+
ATOM   1098  H   LYS A 169      19.541  14.034   5.908  1.00  0.00           H
ATOM   1099  HA  LYS A 169      19.915  11.225   5.469  1.00  0.00           H
ATOM   1100  HB2 LYS A 169      21.672  13.638   4.797  1.00  0.00           H
ATOM   1101  HB3 LYS A 169      21.885  12.031   4.145  1.00  0.00           H
ATOM   1102  HG2 LYS A 169      19.688  12.058   3.077  1.00  0.00           H
ATOM   1103  HG3 LYS A 169      19.263  13.582   3.778  1.00  0.00           H
ATOM   1104  HD2 LYS A 169      21.469  13.169   1.716  1.00  0.00           H
ATOM   1105  HD3 LYS A 169      19.855  13.749   1.403  1.00  0.00           H
ATOM   1106  HE2 LYS A 169      20.366  15.639   3.137  1.00  0.00           H
ATOM   1107  HE3 LYS A 169      22.049  15.152   2.983  1.00  0.00           H
ATOM   1108  HZ1 LYS A 169      21.884  16.775   1.573  1.00  0.00           H
ATOM   1109  HZ2 LYS A 169      21.516  15.529   0.474  1.00  0.00           H
ATOM   1110  HZ3 LYS A 169      20.324  16.516   1.132  1.00  0.00           H
ATOM   1111  N   GLU A 170      21.915  12.672   7.697  1.00 26.50           N
ATOM   1112  CA  GLU A 170      22.761  12.444   8.874  1.00 27.91           C
ATOM   1113  C   GLU A 170      22.021  11.580   9.923  1.00 26.70           C
ATOM   1114  O   GLU A 170      22.575  10.600  10.426  1.00 25.68           O
ATOM   1115  CB  GLU A 170      23.178  13.815   9.482  1.00 30.74           C
ATOM   1116  CG  GLU A 170      24.663  13.932   9.886  1.00 38.58           C
ATOM   1117  CD  GLU A 170      25.087  12.877  10.888  1.00 44.74           C
ATOM   1118  OE1 GLU A 170      24.382  12.689  11.904  1.00 47.54           O
ATOM   1119  OE2 GLU A 170      26.019  12.099  10.589  1.00 48.23          O1-
ATOM   1120  H   GLU A 170      21.661  13.633   7.486  1.00  0.00           H
ATOM   1121  HA  GLU A 170      23.648  11.905   8.536  1.00  0.00           H
ATOM   1122  HB2 GLU A 170      23.005  14.615   8.769  1.00  0.00           H
ATOM   1123  HB3 GLU A 170      22.553  14.068  10.340  1.00  0.00           H
ATOM   1124  HG2 GLU A 170      25.296  13.853   9.002  1.00  0.00           H
ATOM   1125  HG3 GLU A 170      24.857  14.912  10.322  1.00  0.00           H
ATOM   1126  N   ALA A 171      20.751  11.900  10.218  1.00 23.76           N
ATOM   1127  CA  ALA A 171      19.935  11.219  11.220  1.00 23.64           C
ATOM   1128  C   ALA A 171      19.496   9.818  10.771  1.00 23.90           C
ATOM   1129  O   ALA A 171      19.383   8.930  11.620  1.00 22.94           O
ATOM   1130  CB  ALA A 171      18.675  12.046  11.497  1.00 23.80           C
ATOM   1131  H   ALA A 171      20.360  12.735   9.786  1.00  0.00           H
ATOM   1132  HA  ALA A 171      20.516  11.128  12.139  1.00  0.00           H
ATOM   1133  HB1 ALA A 171      18.013  11.554  12.211  1.00  0.00           H
ATOM   1134  HB2 ALA A 171      18.927  13.025  11.905  1.00  0.00           H
ATOM   1135  HB3 ALA A 171      18.116  12.205  10.576  1.00  0.00           H
ATOM   1136  N   VAL A 172      19.272   9.606   9.467  1.00 24.62           N
ATOM   1137  CA  VAL A 172      19.076   8.298   8.841  1.00 25.76           C
ATOM   1138  C   VAL A 172      20.370   7.464   8.937  1.00 26.15           C
ATOM   1139  O   VAL A 172      20.306   6.298   9.326  1.00 25.46           O
ATOM   1140  CB  VAL A 172      18.567   8.488   7.386  1.00 25.40           C
ATOM   1141  CG1 VAL A 172      18.716   7.250   6.486  1.00 25.21           C
ATOM   1142  CG2 VAL A 172      17.087   8.915   7.385  1.00 22.74           C
ATOM   1143  H   VAL A 172      19.273  10.419   8.852  1.00  0.00           H
ATOM   1144  HA  VAL A 172      18.309   7.762   9.402  1.00  0.00           H
ATOM   1145  HB  VAL A 172      19.151   9.282   6.918  1.00  0.00           H
ATOM   1146 HG11 VAL A 172      18.297   7.443   5.500  1.00  0.00           H
ATOM   1147 HG12 VAL A 172      19.758   6.970   6.328  1.00  0.00           H
ATOM   1148 HG13 VAL A 172      18.189   6.394   6.897  1.00  0.00           H
ATOM   1149 HG21 VAL A 172      16.750   9.136   6.373  1.00  0.00           H
ATOM   1150 HG22 VAL A 172      16.445   8.125   7.773  1.00  0.00           H
ATOM   1151 HG23 VAL A 172      16.910   9.804   7.989  1.00  0.00           H
ATOM   1152  N   THR A 173      21.544   8.083   8.741  1.00 26.81           N
ATOM   1153  CA  THR A 173      22.881   7.498   8.946  1.00 28.03           C
ATOM   1154  C   THR A 173      23.243   7.510  10.466  1.00 27.32           C
ATOM   1155  O   THR A 173      24.397   7.645  10.876  1.00 26.39           O
ATOM   1156  CB  THR A 173      23.913   8.299   8.093  1.00 27.81           C
ATOM   1157  OG1 THR A 173      23.419   8.492   6.776  1.00 30.64           O
ATOM   1158  CG2 THR A 173      25.261   7.587   7.890  1.00 27.52           C
ATOM   1159  H   THR A 173      21.519   9.052   8.445  1.00  0.00           H
ATOM   1160  HA  THR A 173      22.867   6.460   8.606  1.00  0.00           H
ATOM   1161  HB  THR A 173      24.088   9.283   8.534  1.00  0.00           H
ATOM   1162  HG1 THR A 173      22.729   9.161   6.819  1.00  0.00           H
ATOM   1163 HG21 THR A 173      25.915   8.170   7.240  1.00  0.00           H
ATOM   1164 HG22 THR A 173      25.800   7.436   8.824  1.00  0.00           H
ATOM   1165 HG23 THR A 173      25.126   6.609   7.426  1.00  0.00           H
ATOM   1166  N   LYS A 174      22.228   7.413  11.329  1.00 27.78           N
ATOM   1167  CA  LYS A 174      22.247   7.193  12.769  1.00 31.22           C
ATOM   1168  C   LYS A 174      20.923   6.524  13.185  1.00 30.61           C
ATOM   1169  O   LYS A 174      20.369   6.762  14.264  1.00 30.04           O
ATOM   1170  CB  LYS A 174      22.664   8.475  13.532  1.00 32.27           C
ATOM   1171  CG  LYS A 174      24.047   8.347  14.206  1.00 36.69           C
ATOM   1172  CD  LYS A 174      24.771   9.692  14.389  1.00 39.08           C
ATOM   1173  CE  LYS A 174      25.754  10.022  13.249  1.00 41.57           C
ATOM   1174  NZ  LYS A 174      25.087  10.111  11.948  1.00 43.16          N1+
ATOM   1175  H   LYS A 174      21.311   7.393  10.897  1.00  0.00           H
ATOM   1176  HA  LYS A 174      22.992   6.416  12.952  1.00  0.00           H
ATOM   1177  HB2 LYS A 174      22.648   9.323  12.846  1.00  0.00           H
ATOM   1178  HB3 LYS A 174      21.932   8.738  14.296  1.00  0.00           H
ATOM   1179  HG2 LYS A 174      23.910   7.870  15.178  1.00  0.00           H
ATOM   1180  HG3 LYS A 174      24.696   7.674  13.644  1.00  0.00           H
ATOM   1181  HD2 LYS A 174      24.055  10.505  14.521  1.00  0.00           H
ATOM   1182  HD3 LYS A 174      25.345   9.656  15.316  1.00  0.00           H
ATOM   1183  HE2 LYS A 174      26.224  10.989  13.441  1.00  0.00           H
ATOM   1184  HE3 LYS A 174      26.555   9.286  13.188  1.00  0.00           H
ATOM   1185  HZ1 LYS A 174      25.679  10.657  11.301  1.00  0.00           H
ATOM   1186  HZ2 LYS A 174      24.789   9.236  11.530  1.00  0.00           H
ATOM   1187  HZ3 LYS A 174      24.329  10.793  11.994  1.00  0.00           H
ATOM   1188  N   ALA A 175      20.381   5.712  12.273  1.00 28.23           N
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ATOM   1189  CA  ALA A 175      19.134   4.991  12.394  1.00 26.89           C
ATOM   1190  C   ALA A 175      19.248   3.676  11.634  1.00 26.79           C
ATOM   1191  O   ALA A 175      19.189   2.628  12.268  1.00 27.40           O
ATOM   1192  CB  ALA A 175      17.947   5.877  11.984  1.00 24.63           C
ATOM   1193  H   ALA A 175      20.911   5.529  11.427  1.00  0.00           H
ATOM   1194  HA  ALA A 175      19.007   4.719  13.441  1.00  0.00           H
ATOM   1195  HB1 ALA A 175      16.998   5.415  12.254  1.00  0.00           H
ATOM   1196  HB2 ALA A 175      17.993   6.852  12.462  1.00  0.00           H
ATOM   1197  HB3 ALA A 175      17.935   6.051  10.908  1.00  0.00           H
ATOM   1198  N   VAL A 176      19.440   3.751  10.311  1.00 27.12           N
ATOM   1199  CA  VAL A 176      19.591   2.612   9.405  1.00 25.91           C
ATOM   1200  C   VAL A 176      21.032   2.063   9.517  1.00 26.78           C
ATOM   1201  O   VAL A 176      21.963   2.815   9.823  1.00 26.76           O
ATOM   1202  CB  VAL A 176      19.298   3.081   7.944  1.00 24.16           C
ATOM   1203  CG1 VAL A 176      19.362   1.935   6.915  1.00 25.45           C
ATOM   1204  CG2 VAL A 176      17.929   3.769   7.800  1.00 19.93           C
ATOM   1205  H   VAL A 176      19.615   4.659   9.892  1.00  0.00           H
ATOM   1206  HA  VAL A 176      18.870   1.847   9.682  1.00  0.00           H
ATOM   1207  HB  VAL A 176      20.055   3.815   7.659  1.00  0.00           H
ATOM   1208 HG11 VAL A 176      18.916   2.211   5.960  1.00  0.00           H
ATOM   1209 HG12 VAL A 176      20.392   1.669   6.695  1.00  0.00           H
ATOM   1210 HG13 VAL A 176      18.842   1.042   7.264  1.00  0.00           H
ATOM   1211 HG21 VAL A 176      17.772   4.091   6.771  1.00  0.00           H
ATOM   1212 HG22 VAL A 176      17.117   3.087   8.047  1.00  0.00           H
ATOM   1213 HG23 VAL A 176      17.845   4.656   8.427  1.00  0.00           H
ATOM   1214  N   SER A 177      21.210   0.766   9.246  1.00 24.88           N
ATOM   1215  CA  SER A 177      22.486   0.055   9.206  1.00 26.57           C
ATOM   1216  C   SER A 177      22.646  -0.820   7.946  1.00 27.23           C
ATOM   1217  O   SER A 177      23.410  -1.783   7.929  1.00 28.95           O
ATOM   1218  CB  SER A 177      22.821  -0.555  10.586  1.00 24.99           C
ATOM   1219  OG  SER A 177      21.972  -1.615  10.997  1.00 23.21           O
ATOM   1220  H   SER A 177      20.367   0.183   9.158  1.00  0.00           H
ATOM   1221  HA  SER A 177      23.259   0.808   9.043  1.00  0.00           H
ATOM   1222  HB2 SER A 177      23.842  -0.940  10.566  1.00  0.00           H
ATOM   1223  HB3 SER A 177      22.802   0.225  11.346  1.00  0.00           H
ATOM   1224  HG  SER A 177      21.049  -1.330  10.964  1.00  0.00           H
ATOM   1225  N   SER A 178      21.978  -0.417   6.861  1.00 26.97           N
ATOM   1226  CA  SER A 178      22.119  -0.907   5.495  1.00 26.31           C
ATOM   1227  C   SER A 178      22.314   0.296   4.546  1.00 26.98           C
ATOM   1228  O   SER A 178      22.587   1.407   5.005  1.00 27.69           O
ATOM   1229  CB  SER A 178      20.948  -1.863   5.174  1.00 26.87           C
ATOM   1230  OG  SER A 178      19.696  -1.198   5.190  1.00 26.69           O
ATOM   1231  H   SER A 178      21.412   0.413   6.946  1.00  0.00           H
ATOM   1232  HA  SER A 178      23.044  -1.482   5.424  1.00  0.00           H
ATOM   1233  HB2 SER A 178      21.089  -2.305   4.187  1.00  0.00           H
ATOM   1234  HB3 SER A 178      20.928  -2.697   5.879  1.00  0.00           H
ATOM   1235  HG  SER A 178      19.125  -1.602   4.529  1.00  0.00           H
ATOM   1236  N   GLU A 179      22.232   0.075   3.226  1.00 28.23           N
ATOM   1237  CA  GLU A 179      22.407   1.097   2.193  1.00 30.32           C
ATOM   1238  C   GLU A 179      21.133   1.961   2.090  1.00 29.86           C
ATOM   1239  O   GLU A 179      20.029   1.493   2.385  1.00 29.62           O
ATOM   1240  CB  GLU A 179      22.714   0.370   0.865  1.00 30.92           C
ATOM   1241  CG  GLU A 179      23.304   1.262  -0.252  1.00 36.26           C
ATOM   1242  CD  GLU A 179      22.429   1.349  -1.495  1.00 40.60           C
ATOM   1243  OE1 GLU A 179      21.217   1.620  -1.368  1.00 42.26           O
ATOM   1244  OE2 GLU A 179      22.960   1.161  -2.611  1.00 41.15           O1-
ATOM   1245  H   GLU A 179      21.891  -0.816   2.912  1.00  0.00           H
ATOM   1246  HA  GLU A 179      23.253   1.729   2.469  1.00  0.00           H
ATOM   1247  HB2 GLU A 179      23.438  -0.423   1.052  1.00  0.00           H
ATOM   1248  HB3 GLU A 179      21.818  -0.141   0.514  1.00  0.00           H
ATOM   1249  HG2 GLU A 179      23.483   2.278   0.098  1.00  0.00           H
ATOM   1250  HG3 GLU A 179      24.277   0.874  -0.554  1.00  0.00           H
ATOM   1251  N   VAL A 180      21.301   3.236   1.730  1.00 28.50           N
ATOM   1252  CA  VAL A 180      20.273   4.267   1.731  1.00 27.87           C
ATOM   1253  C   VAL A 180      20.387   5.109   0.454  1.00 27.26           C
ATOM   1254  O   VAL A 180      21.504   5.427   0.036  1.00 25.36           O
ATOM   1255  CB  VAL A 180      20.325   5.094   3.049  1.00 28.46           C
ATOM   1256  CG1 VAL A 180      19.938   4.253   4.278  1.00 25.72           C
ATOM   1257  CG2 VAL A 180      21.681   5.785   3.305  1.00 29.12           C
ATOM   1258  H   VAL A 180      22.189   3.522   1.348  1.00  0.00           H
ATOM   1259  HA  VAL A 180      19.306   3.772   1.686  1.00  0.00           H
ATOM   1260  HB  VAL A 180      19.581   5.886   2.949  1.00  0.00           H
ATOM   1261 HG11 VAL A 180      19.808   4.873   5.163  1.00  0.00           H
ATOM   1262 HG12 VAL A 180      19.006   3.715   4.107  1.00  0.00           H
ATOM   1263 HG13 VAL A 180      20.701   3.510   4.512  1.00  0.00           H
ATOM   1264 HG21 VAL A 180      21.641   6.408   4.199  1.00  0.00           H
ATOM   1265 HG22 VAL A 180      22.480   5.058   3.448  1.00  0.00           H
ATOM   1266 HG23 VAL A 180      21.969   6.433   2.478  1.00  0.00           H
ATOM   1267  N   LYS A 181      19.252   5.511  -0.131  1.00 26.75           N
ATOM   1268  CA  LYS A 181      19.154   6.416  -1.276  1.00 27.00           C
ATOM   1269  C   LYS A 181      18.085   7.479  -1.002  1.00 26.79           C
ATOM   1270  O   LYS A 181      17.075   7.188  -0.363  1.00 26.53           O
ATOM   1271  CB  LYS A 181      18.924   5.646  -2.594  1.00 28.69           C
ATOM   1272  CG  LYS A 181      20.046   4.644  -2.914  1.00 31.19           C
ATOM   1273  CD  LYS A 181      20.055   4.163  -4.373  1.00 35.82           C
ATOM   1274  CE  LYS A 181      21.201   3.183  -4.651  1.00 35.27           C
ATOM   1275  NZ  LYS A 181      20.918   1.854  -4.107  1.00 36.42           N1+
ATOM   1276  H   LYS A 181      18.370   5.197   0.270  1.00  0.00           H
ATOM   1277  HA  LYS A 181      20.098   6.957  -1.371  1.00  0.00           H
ATOM   1278  HB2 LYS A 181      17.962   5.132  -2.572  1.00  0.00           H
ATOM   1279  HB3 LYS A 181      18.859   6.377  -3.401  1.00  0.00           H
ATOM   1280  HG2 LYS A 181      21.010   5.107  -2.696  1.00  0.00           H
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ATOM   1281  HG3 LYS A 181      19.965   3.791  -2.239  1.00  0.00           H
ATOM   1282  HD2 LYS A 181      19.099   3.713  -4.648  1.00  0.00           H
ATOM   1283  HD3 LYS A 181      20.187   5.027  -5.026  1.00  0.00           H
ATOM   1284  HE2 LYS A 181      21.359   3.076  -5.725  1.00  0.00           H
ATOM   1285  HE3 LYS A 181      22.134   3.549  -4.222  1.00  0.00           H
ATOM   1286  HZ1 LYS A 181      21.796   1.401  -3.830  1.00  0.00           H
ATOM   1287  HZ2 LYS A 181      20.447   1.889  -3.210  1.00  0.00           H
ATOM   1288  HZ3 LYS A 181      20.406   1.305  -4.815  1.00  0.00           H
ATOM   1289  N   PHE A 182      18.321   8.707  -1.470  1.00 25.47           N
ATOM   1290  CA  PHE A 182      17.576   9.918  -1.147  1.00 24.54           C
ATOM   1291  C   PHE A 182      17.230  10.640  -2.457  1.00 23.94           C
ATOM   1292  O   PHE A 182      18.093  11.308  -3.033  1.00 25.57           O
ATOM   1293  CB  PHE A 182      18.448  10.805  -0.230  1.00 24.23           C
ATOM   1294  CG  PHE A 182      18.848  10.198   1.102  1.00 25.85           C
ATOM   1295  CD1 PHE A 182      17.927  10.141   2.169  1.00 25.40           C
ATOM   1296  CD2 PHE A 182      20.159   9.708   1.277  1.00 27.19           C
ATOM   1297  CE1 PHE A 182      18.323   9.601   3.408  1.00 27.01           C
ATOM   1298  CE2 PHE A 182      20.554   9.177   2.517  1.00 25.63           C
ATOM   1299  CZ  PHE A 182      19.638   9.125   3.582  1.00 26.56           C
ATOM   1300  H   PHE A 182      19.144   8.825  -2.072  1.00  0.00           H
ATOM   1301  HA  PHE A 182      16.651   9.679  -0.623  1.00  0.00           H
ATOM   1302  HB2 PHE A 182      19.360  11.092  -0.755  1.00  0.00           H
ATOM   1303  HB3 PHE A 182      17.932  11.741  -0.023  1.00  0.00           H
ATOM   1304  HD1 PHE A 182      16.921  10.517   2.042  1.00  0.00           H
ATOM   1305  HD2 PHE A 182      20.869   9.742   0.462  1.00  0.00           H
ATOM   1306  HE1 PHE A 182      17.615   9.553   4.221  1.00  0.00           H
ATOM   1307  HE2 PHE A 182      21.563   8.813   2.650  1.00  0.00           H
ATOM   1308  HZ  PHE A 182      19.958   8.720   4.530  1.00  0.00           H
ATOM   1309  N   GLY A 183      15.991  10.519  -2.940  1.00 24.28           N
ATOM   1310  CA  GLY A 183      15.543  11.088  -4.211  1.00 21.73           C
ATOM   1311  C   GLY A 183      14.381  12.062  -4.044  1.00 22.11           C
ATOM   1312  O   GLY A 183      13.572  11.916  -3.130  1.00 22.30           O
ATOM   1313  H   GLY A 183      15.310   9.976  -2.408  1.00  0.00           H
ATOM   1314  HA2 GLY A 183      16.357  11.573  -4.748  1.00  0.00           H
ATOM   1315  HA3 GLY A 183      15.193  10.282  -4.853  1.00  0.00           H
ATOM   1316  N   ILE A 184      14.250  13.030  -4.955  1.00 24.31           N
ATOM   1317  CA  ILE A 184      13.036  13.831  -5.093  1.00 25.05           C
ATOM   1318  C   ILE A 184      12.126  13.110  -6.107  1.00 27.69           C
ATOM   1319  O   ILE A 184      12.603  12.425  -7.017  1.00 27.87           O
ATOM   1320  CB  ILE A 184      13.402  15.268  -5.574  1.00 25.38           C
ATOM   1321  CG1 ILE A 184      12.290  16.275  -5.209  1.00 25.06           C
ATOM   1322  CG2 ILE A 184      13.775  15.384  -7.069  1.00 20.90           C
ATOM   1323  CD1 ILE A 184      12.710  17.742  -5.356  1.00 26.79           C
ATOM   1324  H   ILE A 184      14.933  13.081  -5.709  1.00  0.00           H
ATOM   1325  HA  ILE A 184      12.537  13.900  -4.127  1.00  0.00           H
ATOM   1326  HB  ILE A 184      14.276  15.570  -4.997  1.00  0.00           H
ATOM   1327 HG12 ILE A 184      11.400  16.094  -5.812  1.00  0.00           H
ATOM   1328 HG13 ILE A 184      11.985  16.118  -4.174  1.00  0.00           H
ATOM   1329 HG21 ILE A 184      14.210  16.356  -7.290  1.00  0.00           H
ATOM   1330 HG22 ILE A 184      14.503  14.633  -7.370  1.00  0.00           H
ATOM   1331 HG23 ILE A 184      12.906  15.274  -7.719  1.00  0.00           H
ATOM   1332 HD11 ILE A 184      11.910  18.388  -5.006  1.00  0.00           H
ATOM   1333 HD12 ILE A 184      13.601  17.964  -4.769  1.00  0.00           H
ATOM   1334 HD13 ILE A 184      12.910  18.009  -6.393  1.00  0.00           H
ATOM   1335  N   LEU A 185      10.813  13.279  -5.970  1.00 28.44           N
ATOM   1336  CA  LEU A 185       9.822  12.901  -6.967  1.00 29.84           C
ATOM   1337  C   LEU A 185       9.637  14.075  -7.952  1.00 29.59           C
ATOM   1338  O   LEU A 185       9.551  15.215  -7.482  1.00 31.09           O
ATOM   1339  CB  LEU A 185       8.468  12.683  -6.262  1.00 30.35           C
ATOM   1340  CG  LEU A 185       8.441  11.550  -5.216  1.00 31.80           C
ATOM   1341  CD1 LEU A 185       7.004  11.350  -4.725  1.00 29.02           C
ATOM   1342  CD2 LEU A 185       9.053  10.244  -5.740  1.00 32.61           C
ATOM   1343  H   LEU A 185      10.481  13.789  -5.155  1.00  0.00           H
ATOM   1344  HA  LEU A 185      10.131  11.984  -7.464  1.00  0.00           H
ATOM   1345  HB2 LEU A 185       8.139  13.610  -5.785  1.00  0.00           H
ATOM   1346  HB3 LEU A 185       7.721  12.468  -7.028  1.00  0.00           H
ATOM   1347  HG  LEU A 185       9.033  11.844  -4.350  1.00  0.00           H
ATOM   1348 HD11 LEU A 185       6.896  10.446  -4.130  1.00  0.00           H
ATOM   1349 HD12 LEU A 185       6.693  12.198  -4.116  1.00  0.00           H
ATOM   1350 HD13 LEU A 185       6.307  11.278  -5.556  1.00  0.00           H
ATOM   1351 HD21 LEU A 185       8.749   9.390  -5.140  1.00  0.00           H
ATOM   1352 HD22 LEU A 185       8.769  10.045  -6.768  1.00  0.00           H
ATOM   1353 HD23 LEU A 185      10.142  10.289  -5.717  1.00  0.00           H
ATOM   1354  N   PRO A 186       9.551  13.824  -9.282  1.00 28.92           N
ATOM   1355  CA  PRO A 186       9.240  14.825 -10.317  1.00 29.13           C
ATOM   1356  C   PRO A 186       8.047  15.736  -9.969  1.00 28.44           C
ATOM   1357  O   PRO A 186       6.916  15.271  -9.791  1.00 28.12           O
ATOM   1358  CB  PRO A 186       8.982  14.016 -11.598  1.00 30.26           C
ATOM   1359  CG  PRO A 186       9.744  12.719 -11.405  1.00 28.14           C
ATOM   1360  CD  PRO A 186       9.799  12.517  -9.895  1.00 28.20           C
ATOM   1361  HA  PRO A 186      10.139  15.429 -10.450  1.00  0.00           H
ATOM   1362  HB2 PRO A 186       7.922  13.792 -11.722  1.00  0.00           H
ATOM   1363  HB3 PRO A 186       9.318  14.546 -12.489  1.00  0.00           H
ATOM   1364  HG2 PRO A 186       9.284  11.876 -11.920  1.00  0.00           H
ATOM   1365  HG3 PRO A 186      10.758  12.830 -11.794  1.00  0.00           H
ATOM   1366  HD2 PRO A 186       9.019  11.827  -9.580  1.00  0.00           H
ATOM   1367  HD3 PRO A 186      10.767  12.102  -9.608  1.00  0.00           H
ATOM   1368  N   LYS A 187       8.310  17.044  -9.887  1.00 28.27           N
ATOM   1369  CA  LYS A 187       7.376  18.090  -9.480  1.00 28.97           C
ATOM   1370  C   LYS A 187       6.268  18.328 -10.522  1.00 26.32           C
ATOM   1371  O   LYS A 187       5.198  18.830 -10.177  1.00 25.20           O
ATOM   1372  CB  LYS A 187       8.158  19.392  -9.242  1.00 32.18           C
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ATOM   1373  CG  LYS A 187       9.034  19.375  -7.971  1.00 34.77           C
ATOM   1374  CD  LYS A 187       8.377  19.981  -6.715  1.00 38.08           C
ATOM   1375  CE  LYS A 187       7.605  18.979  -5.840  1.00 37.86           C
ATOM   1376  NZ  LYS A 187       7.027  19.649  -4.660  1.00 39.41           N1+
ATOM   1377  H   LYS A 187       9.204  17.346 -10.256  1.00  0.00           H
ATOM   1378  HA  LYS A 187       6.919  17.785  -8.546  1.00  0.00           H
ATOM   1379  HB2 LYS A 187       8.791  19.579 -10.112  1.00  0.00           H
ATOM   1380  HB3 LYS A 187       7.481  20.247  -9.204  1.00  0.00           H
ATOM   1381  HG2 LYS A 187       9.440  18.382  -7.770  1.00  0.00           H
ATOM   1382  HG3 LYS A 187       9.903  19.988  -8.199  1.00  0.00           H
ATOM   1383  HD2 LYS A 187       9.168  20.414  -6.103  1.00  0.00           H
ATOM   1384  HD3 LYS A 187       7.738  20.821  -6.994  1.00  0.00           H
ATOM   1385  HE2 LYS A 187       6.795  18.526  -6.407  1.00  0.00           H
ATOM   1386  HE3 LYS A 187       8.258  18.162  -5.537  1.00  0.00           H
ATOM   1387  HZ1 LYS A 187       6.684  19.025  -3.924  1.00  0.00           H
ATOM   1388  HZ2 LYS A 187       7.674  20.306  -4.218  1.00  0.00           H
ATOM   1389  HZ3 LYS A 187       6.225  20.199  -4.989  1.00  0.00           H
ATOM   1390  N   GLU A 188       6.517  17.906 -11.766  1.00 26.19           N
ATOM   1391  CA  GLU A 188       5.618  17.872 -12.917  1.00 25.89           C
ATOM   1392  C   GLU A 188       4.416  16.966 -12.627  1.00 25.60           C
ATOM   1393  O   GLU A 188       3.264  17.402 -12.632  1.00 25.35           O
ATOM   1394  CB  GLU A 188       6.352  17.342 -14.186  1.00 28.34           C
ATOM   1395  CG  GLU A 188       7.685  16.594 -13.980  1.00 32.78           C
ATOM   1396  CD  GLU A 188       8.836  17.527 -13.661  1.00 33.60           C
ATOM   1397  OE1 GLU A 188       9.339  17.471 -12.524  1.00 31.32           O
ATOM   1398  OE2 GLU A 188       9.182  18.354 -14.533  1.00 35.45           O1-
ATOM   1399  H   GLU A 188       7.475  17.597 -11.924  1.00  0.00           H
ATOM   1400  HA  GLU A 188       5.245  18.881 -13.105  1.00  0.00           H
ATOM   1401  HB2 GLU A 188       5.697  16.699 -14.776  1.00  0.00           H
ATOM   1402  HB3 GLU A 188       6.539  18.185 -14.844  1.00  0.00           H
ATOM   1403  HG2 GLU A 188       7.580  15.831 -13.211  1.00  0.00           H
ATOM   1404  HG3 GLU A 188       7.944  16.058 -14.892  1.00  0.00           H
ATOM   1405  N   HIS A 189       4.709  15.692 -12.341  1.00 23.36           N
ATOM   1406  CA  HIS A 189       3.723  14.638 -12.111  1.00 23.70           C
ATOM   1407  C   HIS A 189       3.074  14.790 -10.725  1.00 22.66           C
ATOM   1408  O   HIS A 189       1.925  14.395 -10.524  1.00 23.19           O
ATOM   1409  CB  HIS A 189       4.402  13.260 -12.236  1.00 22.55           C
ATOM   1410  CG  HIS A 189       5.209  13.046 -13.501  1.00 24.25           C
ATOM   1411  ND1 HIS A 189       4.930  13.662 -14.716  1.00 24.12           N
ATOM   1412  CD2 HIS A 189       6.300  12.241 -13.748  1.00 22.85           C
ATOM   1413  CE1 HIS A 189       5.843  13.253 -15.598  1.00 22.58           C
ATOM   1414  NE2 HIS A 189       6.691  12.370 -15.083  1.00 24.93           N
ATOM   1415  H   HIS A 189       5.685  15.429 -12.362  1.00  0.00           H
ATOM   1416  HA  HIS A 189       2.950  14.721 -12.874  1.00  0.00           H
ATOM   1417  HB2 HIS A 189       5.064  13.083 -11.386  1.00  0.00           H
ATOM   1418  HB3 HIS A 189       3.639  12.481 -12.188  1.00  0.00           H
ATOM   1419  HD1 HIS A 189       4.207  14.366 -14.931  1.00  0.00           H
ATOM   1420  HD2 HIS A 189       6.829  11.578 -13.075  1.00  0.00           H
ATOM   1421  HE1 HIS A 189       5.890  13.601 -16.622  1.00  0.00           H
ATOM   1422  N   TRP A 190       3.766  15.485  -9.816  1.00 21.90           N
ATOM   1423  CA  TRP A 190       3.284  16.001  -8.540  1.00 22.07           C
ATOM   1424  C   TRP A 190       2.553  17.360  -8.726  1.00 22.09           C
ATOM   1425  O   TRP A 190       2.448  18.152  -7.789  1.00 23.25           O
ATOM   1426  CB  TRP A 190       4.526  16.192  -7.654  1.00 20.63           C
ATOM   1427  CG  TRP A 190       4.333  16.288  -6.177  1.00 20.86           C
ATOM   1428  CD1 TRP A 190       4.371  17.433  -5.463  1.00 20.30           C
ATOM   1429  CD2 TRP A 190       4.189  15.212  -5.204  1.00 20.57           C
ATOM   1430  NE1 TRP A 190       4.298  17.138  -4.120  1.00 22.97           N
ATOM   1431  CE3 TRP A 190       4.138  13.802  -5.278  1.00 20.34           C
ATOM   1432  CE2 TRP A 190       4.134  15.792  -3.902  1.00 21.62           C
ATOM   1433  CZ3 TRP A 190       4.045  13.017  -4.111  1.00 20.80           C
ATOM   1434  CZ2 TRP A 190       4.018  15.023  -2.736  1.00 20.94           C
ATOM   1435  CH2 TRP A 190       3.976  13.625  -2.841  1.00 23.55           C
ATOM   1436  H   TRP A 190       4.707  15.755 -10.082  1.00  0.00           H
ATOM   1437  HA  TRP A 190       2.608  15.272  -8.093  1.00  0.00           H
ATOM   1438  HB2 TRP A 190       5.230  15.373  -7.805  1.00  0.00           H
ATOM   1439  HB3 TRP A 190       5.038  17.095  -7.971  1.00  0.00           H
ATOM   1440  HD1 TRP A 190       4.510  18.411  -5.901  1.00  0.00           H
ATOM   1441  HE1 TRP A 190       4.674  17.770  -3.393  1.00  0.00           H
ATOM   1442  HE3 TRP A 190       4.201  13.322  -6.243  1.00  0.00           H
ATOM   1443  HZ3 TRP A 190       4.037  11.941  -4.198  1.00  0.00           H
ATOM   1444  HZ2 TRP A 190       3.993  15.501  -1.771  1.00  0.00           H
ATOM   1445  HH2 TRP A 190       3.909  13.033  -1.941  1.00  0.00           H
ATOM   1446  N   SER A 191       2.019  17.632  -9.920  1.00 23.12           N
ATOM   1447  CA  SER A 191       1.147  18.748 -10.259  1.00 23.81           C
ATOM   1448  C   SER A 191      -0.033  18.219 -11.092  1.00 24.41           C
ATOM   1449  O   SER A 191      -0.240  17.005 -11.165  1.00 24.90           O
ATOM   1450  CB  SER A 191       1.966  19.940 -10.811  1.00 25.10           C
ATOM   1451  OG  SER A 191       2.208  19.902 -12.209  1.00 24.23           O
ATOM   1452  H   SER A 191       2.131  16.944 -10.652  1.00  0.00           H
ATOM   1453  HA  SER A 191       0.690  19.100  -9.335  1.00  0.00           H
ATOM   1454  HB2 SER A 191       1.441  20.868 -10.584  1.00  0.00           H
ATOM   1455  HB3 SER A 191       2.919  20.012 -10.291  1.00  0.00           H
ATOM   1456  HG  SER A 191       2.577  19.035 -12.418  1.00  0.00           H
ATOM   1457  N   TYR A 192      -0.840  19.117 -11.663  1.00 24.18           N
ATOM   1458  CA  TYR A 192      -2.056  18.804 -12.407  1.00 22.22           C
ATOM   1459  C   TYR A 192      -1.711  18.915 -13.901  1.00 21.91           C
ATOM   1460  O   TYR A 192      -1.443  20.031 -14.344  1.00 20.67           O
ATOM   1461  CB  TYR A 192      -3.114  19.895 -12.085  1.00 22.43           C
ATOM   1462  CG  TYR A 192      -3.403  20.082 -10.607  1.00 24.33           C
ATOM   1463  CD1 TYR A 192      -4.491  19.429  -9.995  1.00 24.83           C
ATOM   1464  CD2 TYR A 192      -2.560  20.905  -9.833  1.00 24.09           C
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ATOM   1465  CE1 TYR A 192      -4.689  19.548  -8.605  1.00 24.93           C
ATOM   1466  CE2 TYR A 192      -2.754  21.015  -8.448  1.00 24.35           C
ATOM   1467  CZ  TYR A 192      -3.799  20.306  -7.828  1.00 24.98           C
ATOM   1468  OH  TYR A 192      -3.929  20.318  -6.474  1.00 28.04           O
ATOM   1469  H   TYR A 192      -0.551  20.088 -11.688  1.00  0.00           H
ATOM   1470  HA  TYR A 192      -2.456  17.826 -12.140  1.00  0.00           H
ATOM   1471  HB2 TYR A 192      -2.808  20.871 -12.466  1.00  0.00           H
ATOM   1472  HB3 TYR A 192      -4.046  19.661 -12.604  1.00  0.00           H
ATOM   1473  HD1 TYR A 192      -5.154  18.810 -10.580  1.00  0.00           H
ATOM   1474  HD2 TYR A 192      -1.738  21.434 -10.293  1.00  0.00           H
ATOM   1475  HE1 TYR A 192      -5.501  19.033  -8.121  1.00  0.00           H
ATOM   1476  HE2 TYR A 192      -2.075  21.625  -7.872  1.00  0.00           H
ATOM   1477  HH  TYR A 192      -3.360  20.984  -6.063  1.00  0.00           H
ATOM   1478  N   PRO A 193      -1.694  17.824 -14.696  1.00 22.36           N
ATOM   1479  CA  PRO A 193      -1.578  17.895 -16.160  1.00 24.02           C
ATOM   1480  C   PRO A 193      -2.631  18.799 -16.827  1.00 24.39           C
ATOM   1481  O   PRO A 193      -3.724  19.018 -16.302  1.00 24.70           O
ATOM   1482  CB  PRO A 193      -1.763  16.452 -16.644  1.00 24.46           C
ATOM   1483  CG  PRO A 193      -1.401  15.577 -15.459  1.00 25.42           C
ATOM   1484  CD  PRO A 193      -1.660  16.440 -14.227  1.00 24.13           C
ATOM   1485  HA  PRO A 193      -0.575  18.254 -16.403  1.00  0.00           H
ATOM   1486  HB2 PRO A 193      -2.803  16.260 -16.911  1.00  0.00           H
ATOM   1487  HB3 PRO A 193      -1.160  16.230 -17.525  1.00  0.00           H
ATOM   1488  HG2 PRO A 193      -1.975  14.649 -15.443  1.00  0.00           H
ATOM   1489  HG3 PRO A 193      -0.343  15.323 -15.517  1.00  0.00           H
ATOM   1490  HD2 PRO A 193      -2.606  16.162 -13.771  1.00  0.00           H
ATOM   1491  HD3 PRO A 193      -0.876  16.300 -13.487  1.00  0.00           H
ATOM   1492  N   GLU A 194      -2.320  19.288 -18.023  1.00 22.73           N
ATOM   1493  CA  GLU A 194      -3.133  20.217 -18.800  1.00 23.46           C
ATOM   1494  C   GLU A 194      -4.368  19.533 -19.432  1.00 23.36           C
ATOM   1495  O   GLU A 194      -5.210  20.223 -20.002  1.00 21.68           O
ATOM   1496  CB  GLU A 194      -2.225  20.830 -19.897  1.00 25.61           C
ATOM   1497  CG  GLU A 194      -1.210  21.890 -19.387  1.00 28.09           C
ATOM   1498  CD  GLU A 194      -0.202  21.390 -18.353  1.00 32.73           C
ATOM   1499  OE1 GLU A 194       0.075  22.138 -17.391  1.00 31.59           O
ATOM   1500  OE2 GLU A 194       0.220  20.215 -18.456  1.00 33.69           O1-
ATOM   1501  H   GLU A 194      -1.331  19.265 -18.290  1.00  0.00           H
ATOM   1502  HA  GLU A 194      -3.500  21.013 -18.150  1.00  0.00           H
ATOM   1503  HB2 GLU A 194      -1.693  20.040 -20.429  1.00  0.00           H
ATOM   1504  HB3 GLU A 194      -2.847  21.318 -20.648  1.00  0.00           H
ATOM   1505  HG2 GLU A 194      -0.641  22.284 -20.228  1.00  0.00           H
ATOM   1506  HG3 GLU A 194      -1.749  22.735 -18.958  1.00  0.00           H
ATOM   1507  N   TRP A 195      -4.513  18.203 -19.299  1.00 22.03           N
ATOM   1508  CA  TRP A 195      -5.724  17.463 -19.665  1.00 22.35           C
ATOM   1509  C   TRP A 195      -6.759  17.438 -18.521  1.00 22.75           C
ATOM   1510  O   TRP A 195      -7.908  17.062 -18.750  1.00 21.13           O
ATOM   1511  CB  TRP A 195      -5.367  16.000 -20.037  1.00 22.81           C
ATOM   1512  CG  TRP A 195      -4.753  15.083 -19.010  1.00 23.84           C
ATOM   1513  CD1 TRP A 195      -5.401  14.529 -17.959  1.00 25.41           C
ATOM   1514  CD2 TRP A 195      -3.407  14.510 -18.984  1.00 23.39           C
ATOM   1515  NE1 TRP A 195      -4.551  13.686 -17.274  1.00 26.41           N
ATOM   1516  CE3 TRP A 195      -2.256  14.635 -19.798  1.00 23.41           C
ATOM   1517  CE2 TRP A 195      -3.330  13.582 -17.900  1.00 24.13           C
ATOM   1518  CZ3 TRP A 195      -1.101  13.863 -19.556  1.00 26.61           C
ATOM   1519  CZ2 TRP A 195      -2.194  12.793 -17.660  1.00 24.83           C
ATOM   1520  CH2 TRP A 195      -1.072  12.937 -18.494  1.00 23.38           C
ATOM   1521  H   TRP A 195      -3.780  17.706 -18.817  1.00  0.00           H
ATOM   1522  HA  TRP A 195      -6.197  17.931 -20.530  1.00  0.00           H
ATOM   1523  HB2 TRP A 195      -6.276  15.504 -20.380  1.00  0.00           H
ATOM   1524  HB3 TRP A 195      -4.712  16.004 -20.908  1.00  0.00           H
ATOM   1525  HD1 TRP A 195      -6.444  14.699 -17.726  1.00  0.00           H
ATOM   1526  HE1 TRP A 195      -4.866  13.077 -16.510  1.00  0.00           H
ATOM   1527  HE3 TRP A 195      -2.279  15.306 -20.643  1.00  0.00           H
ATOM   1528  HZ3 TRP A 195      -0.249  13.952 -20.213  1.00  0.00           H
ATOM   1529  HZ2 TRP A 195      -2.193  12.066 -16.861  1.00  0.00           H
ATOM   1530  HH2 TRP A 195      -0.205  12.309 -18.342  1.00  0.00           H
ATOM   1531  N   ILE A 196      -6.370  17.805 -17.291  1.00 22.64           N
ATOM   1532  CA  ILE A 196      -7.230  17.777 -16.111  1.00 24.40           C
ATOM   1533  C   ILE A 196      -8.186  18.979 -16.187  1.00 23.38           C
ATOM   1534  O   ILE A 196      -7.763  20.101 -16.478  1.00 23.92           O
ATOM   1535  CB  ILE A 196      -6.343  17.885 -14.828  1.00 23.65           C
ATOM   1536  CG1 ILE A 196      -5.263  16.783 -14.735  1.00 23.75           C
ATOM   1537  CG2 ILE A 196      -7.122  17.958 -13.498  1.00 25.15           C
ATOM   1538  CD1 ILE A 196      -5.786  15.360 -14.518  1.00 22.43           C
ATOM   1539  H   ILE A 196      -5.439  18.184 -17.177  1.00  0.00           H
ATOM   1540  HA  ILE A 196      -7.801  16.847 -16.099  1.00  0.00           H
ATOM   1541  HB  ILE A 196      -5.809  18.834 -14.897  1.00  0.00           H
ATOM   1542 HG12 ILE A 196      -4.647  16.772 -15.630  1.00  0.00           H
ATOM   1543 HG13 ILE A 196      -4.594  17.040 -13.916  1.00  0.00           H
ATOM   1544 HG21 ILE A 196      -6.441  18.014 -12.649  1.00  0.00           H
ATOM   1545 HG22 ILE A 196      -7.759  18.839 -13.444  1.00  0.00           H
ATOM   1546 HG23 ILE A 196      -7.748  17.077 -13.361  1.00  0.00           H
ATOM   1547 HD11 ILE A 196      -4.963  14.644 -14.507  1.00  0.00           H
ATOM   1548 HD12 ILE A 196      -6.306  15.274 -13.570  1.00  0.00           H
ATOM   1549 HD13 ILE A 196      -6.470  15.054 -15.309  1.00  0.00           H
ATOM   1550  N   ASN A 197      -9.466  18.772 -15.853  1.00 22.81           N
ATOM   1551  CA  ASN A 197     -10.434  19.841 -15.611  1.00 22.80           C
ATOM   1552  C   ASN A 197     -10.038  20.566 -14.307  1.00 21.04           C
ATOM   1553  O   ASN A 197     -10.490  20.244 -13.206  1.00 21.74           O
ATOM   1554  CB  ASN A 197     -11.869  19.250 -15.560  1.00  0.00           C
ATOM   1555  CG  ASN A 197     -12.938  20.237 -15.076  1.00  0.00           C
ATOM   1556  OD1 ASN A 197     -13.488  20.053 -14.001  1.00  0.00           O
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ATOM   1557  ND2 ASN A 197     -13.237  21.305 -15.804  1.00  0.00           N
ATOM   1558  H   ASN A 197      -9.749  17.815 -15.643  1.00  0.00           H
ATOM   1559  HA  ASN A 197     -10.390  20.554 -16.436  1.00  0.00           H
ATOM   1560  HB2 ASN A 197     -12.154  18.871 -16.541  1.00  0.00           H
ATOM   1561  HB3 ASN A 197     -11.896  18.392 -14.889  1.00  0.00           H
ATOM   1562 HD22 ASN A 197     -13.861  21.980 -15.356  1.00  0.00           H
ATOM   1563 HD21 ASN A 197     -12.843  21.480 -16.712  1.00  0.00           H
ATOM   1564  N   GLN A 198      -9.190  21.590 -14.443  1.00 20.33           N
ATOM   1565  CA  GLN A 198      -8.773  22.511 -13.388  1.00 20.78           C
ATOM   1566  C   GLN A 198      -9.882  23.545 -13.072  1.00 22.61           C
ATOM   1567  O   GLN A 198      -9.594  24.703 -12.784  1.00 19.79           O
ATOM   1568  CB  GLN A 198      -7.414  23.149 -13.770  1.00 22.47           C
ATOM   1569  CG  GLN A 198      -6.302  22.083 -13.960  1.00 22.31           C
ATOM   1570  CD  GLN A 198      -4.873  22.621 -13.858  1.00 23.01           C
ATOM   1571  OE1 GLN A 198      -4.532  23.327 -12.910  1.00 21.95           O
ATOM   1572  NE2 GLN A 198      -4.010  22.257 -14.800  1.00 23.94           N
ATOM   1573  H   GLN A 198      -8.765  21.698 -15.357  1.00  0.00           H
ATOM   1574  HA  GLN A 198      -8.619  21.966 -12.462  1.00  0.00           H
ATOM   1575  HB2 GLN A 198      -7.511  23.751 -14.675  1.00  0.00           H
ATOM   1576  HB3 GLN A 198      -7.121  23.844 -12.981  1.00  0.00           H
ATOM   1577  HG2 GLN A 198      -6.397  21.313 -13.193  1.00  0.00           H
ATOM   1578  HG3 GLN A 198      -6.433  21.575 -14.914  1.00  0.00           H
ATOM   1579 HE21 GLN A 198      -4.292  21.628 -15.541  1.00  0.00           H
ATOM   1580 HE22 GLN A 198      -3.049  22.598 -14.803  1.00  0.00           H
ATOM   1581  N   THR A 199     -11.146  23.093 -13.072  1.00 22.32           N
ATOM   1582  CA  THR A 199     -12.281  23.735 -12.426  1.00 22.52           C
ATOM   1583  C   THR A 199     -12.679  22.778 -11.291  1.00 21.34           C
ATOM   1584  O   THR A 199     -12.454  23.140 -10.143  1.00 21.66           O
ATOM   1585  CB  THR A 199     -13.404  24.152 -13.422  1.00 21.15           C
ATOM   1586  OG1 THR A 199     -14.328  23.133 -13.745  1.00 24.02           O
ATOM   1587  CG2 THR A 199     -12.879  24.778 -14.724  1.00 20.12           C
ATOM   1588  H   THR A 199     -11.276  22.111 -13.277  1.00  0.00           H
ATOM   1589  HA  THR A 199     -11.943  24.658 -11.951  1.00  0.00           H
ATOM   1590  HB  THR A 199     -13.996  24.918 -12.916  1.00  0.00           H
ATOM   1591  HG1 THR A 199     -14.925  23.099 -12.982  1.00  0.00           H
ATOM   1592 HG21 THR A 199     -13.699  25.171 -15.325  1.00  0.00           H
ATOM   1593 HG22 THR A 199     -12.200  25.604 -14.508  1.00  0.00           H
ATOM   1594 HG23 THR A 199     -12.337  24.054 -15.331  1.00  0.00           H
ATOM   1595  N   LYS A 200     -13.100  21.523 -11.541  1.00 21.45           N
ATOM   1596  CA  LYS A 200     -13.473  20.562 -10.487  1.00 22.36           C
ATOM   1597  C   LYS A 200     -12.266  20.221  -9.590  1.00 21.80           C
ATOM   1598  O   LYS A 200     -12.403  20.095  -8.374  1.00 21.82           O
ATOM   1599  CB  LYS A 200     -14.076  19.283 -11.113  1.00 23.43           C
ATOM   1600  CG  LYS A 200     -14.737  18.314 -10.108  1.00 27.52           C
ATOM   1601  CD  LYS A 200     -15.249  17.026 -10.779  1.00 27.63           C
ATOM   1602  CE  LYS A 200     -15.749  15.970  -9.769  1.00 27.92           C
ATOM   1603  NZ  LYS A 200     -15.767  14.618 -10.359  1.00 31.29           N1+
ATOM   1604  H   LYS A 200     -13.325  21.266 -12.500  1.00  0.00           H
ATOM   1605  HA  LYS A 200     -14.236  21.027  -9.863  1.00  0.00           H
ATOM   1606  HB2 LYS A 200     -14.839  19.583 -11.833  1.00  0.00           H
ATOM   1607  HB3 LYS A 200     -13.306  18.760 -11.683  1.00  0.00           H
ATOM   1608  HG2 LYS A 200     -14.020  18.051  -9.330  1.00  0.00           H
ATOM   1609  HG3 LYS A 200     -15.557  18.826  -9.600  1.00  0.00           H
ATOM   1610  HD2 LYS A 200     -16.039  17.273 -11.489  1.00  0.00           H
ATOM   1611  HD3 LYS A 200     -14.432  16.615 -11.375  1.00  0.00           H
ATOM   1612  HE2 LYS A 200     -15.100  15.940  -8.895  1.00  0.00           H
ATOM   1613  HE3 LYS A 200     -16.739  16.229  -9.393  1.00  0.00           H
ATOM   1614  HZ1 LYS A 200     -15.713  13.894  -9.605  1.00  0.00           H
ATOM   1615  HZ2 LYS A 200     -16.596  14.448 -10.900  1.00  0.00           H
ATOM   1616  HZ3 LYS A 200     -14.948  14.458 -10.921  1.00  0.00           H
ATOM   1617  N   ALA A 201     -11.058  20.169 -10.173  1.00 21.18           N
ATOM   1618  CA  ALA A 201      -9.802  20.053  -9.435  1.00 21.35           C
ATOM   1619  C   ALA A 201      -9.389  21.353  -8.711  1.00 21.94           C
ATOM   1620  O   ALA A 201      -8.383  21.336  -8.006  1.00 19.69           O
ATOM   1621  CB  ALA A 201      -8.676  19.634 -10.399  1.00 16.72           C
ATOM   1622  H   ALA A 201     -11.025  20.295 -11.180  1.00  0.00           H
ATOM   1623  HA  ALA A 201      -9.912  19.288  -8.668  1.00  0.00           H
ATOM   1624  HB1 ALA A 201      -7.692  19.719  -9.938  1.00  0.00           H
ATOM   1625  HB2 ALA A 201      -8.790  18.603 -10.724  1.00  0.00           H
ATOM   1626  HB3 ALA A 201      -8.656  20.245 -11.292  1.00  0.00           H
ATOM   1627  N   ALA A 202     -10.127  22.462  -8.859  1.00 20.87           N
ATOM   1628  CA  ALA A 202      -9.961  23.722  -8.133  1.00 22.47           C
ATOM   1629  C   ALA A 202     -11.106  23.906  -7.115  1.00 22.33           C
ATOM   1630  O   ALA A 202     -10.839  24.201  -5.953  1.00 22.37           O
ATOM   1631  CB  ALA A 202      -9.947  24.899  -9.123  1.00 19.99           C
ATOM   1632  H   ALA A 202     -10.967  22.398  -9.428  1.00  0.00           H
ATOM   1633  HA  ALA A 202      -9.011  23.735  -7.604  1.00  0.00           H
ATOM   1634  HB1 ALA A 202      -9.729  25.834  -8.605  1.00  0.00           H
ATOM   1635  HB2 ALA A 202      -9.177  24.765  -9.884  1.00  0.00           H
ATOM   1636  HB3 ALA A 202     -10.897  25.035  -9.637  1.00  0.00           H
ATOM   1637  N   GLU A 203     -12.365  23.675  -7.521  1.00 22.02           N
ATOM   1638  CA  GLU A 203     -13.601  23.783  -6.736  1.00 23.59           C
ATOM   1639  C   GLU A 203     -13.530  22.927  -5.457  1.00 23.77           C
ATOM   1640  O   GLU A 203     -13.729  23.407  -4.337  1.00 22.97           O
ATOM   1641  CB  GLU A 203     -14.800  23.324  -7.606  1.00 24.19           C
ATOM   1642  CG  GLU A 203     -15.146  24.202  -8.838  1.00 28.14           C
ATOM   1643  CD  GLU A 203     -15.791  23.404  -9.981  1.00 30.24           C
ATOM   1644  OE1 GLU A 203     -16.460  22.395  -9.675  1.00 31.20           O
ATOM   1645  OE2 GLU A 203     -15.553  23.768 -11.157  1.00 32.85           O1-
ATOM   1646  H   GLU A 203     -12.496  23.462  -8.512  1.00  0.00           H
ATOM   1647  HA  GLU A 203     -13.741  24.825  -6.443  1.00  0.00           H
ATOM   1648  HB2 GLU A 203     -14.608  22.302  -7.935  1.00  0.00           H
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ATOM   1649  HB3 GLU A 203     -15.698  23.251  -6.990  1.00  0.00          H
ATOM   1650  HG2 GLU A 203     -15.828  25.001  -8.551  1.00  0.00          H
ATOM   1651  HG3 GLU A 203     -14.258  24.692  -9.232  1.00  0.00          H
ATOM   1652  N   ILE A 204     -13.166  21.652  -5.629  1.00 23.93           N
ATOM   1653  CA  ILE A 204     -13.153  20.638  -4.580  1.00 24.60           C
ATOM   1654  C   ILE A 204     -11.814  20.682  -3.794  1.00 24.13           C
ATOM   1655  O   ILE A 204     -11.604  19.869  -2.894  1.00 26.89           O
ATOM   1656  CB  ILE A 204     -13.476  19.256  -5.239  1.00 24.83           C
ATOM   1657  CG1 ILE A 204     -14.730  19.312  -6.160  1.00 27.64           C
ATOM   1658  CG2 ILE A 204     -13.655  18.100  -4.231  1.00 22.97           C
ATOM   1659  CD1 ILE A 204     -16.037  19.733  -5.469  1.00 28.38           C
ATOM   1660  H   ILE A 204     -12.998  21.334  -6.578  1.00  0.00          H
ATOM   1661  HA  ILE A 204     -13.940  20.858  -3.857  1.00  0.00          H
ATOM   1662  HB  ILE A 204     -12.634  18.986  -5.879  1.00  0.00          H
ATOM   1663 HG12 ILE A 204     -14.562  19.980  -7.004  1.00  0.00          H
ATOM   1664 HG13 ILE A 204     -14.888  18.338  -6.620  1.00  0.00          H
ATOM   1665 HG21 ILE A 204     -14.060  17.214  -4.718  1.00  0.00          H
ATOM   1666 HG22 ILE A 204     -12.716  17.797  -3.775  1.00  0.00          H
ATOM   1667 HG23 ILE A 204     -14.342  18.377  -3.432  1.00  0.00          H
ATOM   1668 HD11 ILE A 204     -16.861  19.740  -6.183  1.00  0.00          H
ATOM   1669 HD12 ILE A 204     -16.305  19.052  -4.663  1.00  0.00          H
ATOM   1670 HD13 ILE A 204     -15.969  20.737  -5.053  1.00  0.00          H
ATOM   1671  N   ARG A 205     -10.935  21.676  -4.034  1.00 23.13           N
ATOM   1672  CA  ARG A 205      -9.826  22.017  -3.127  1.00 25.14           C
ATOM   1673  C   ARG A 205     -10.377  22.768  -1.900  1.00 25.07           C
ATOM   1674  O   ARG A 205      -9.791  22.688  -0.821  1.00 22.75           O
ATOM   1675  CB  ARG A 205      -8.810  22.988  -3.783  1.00 25.21           C
ATOM   1676  CG  ARG A 205      -8.214  22.564  -5.133  1.00 29.73           C
ATOM   1677  CD  ARG A 205      -6.922  21.730  -5.081  1.00 29.20           C
ATOM   1678  NE  ARG A 205      -5.735  22.510  -5.474  1.00 29.90           N
ATOM   1679  CZ  ARG A 205      -5.376  22.920  -6.701  1.00 28.96           C
ATOM   1680  NH1 ARG A 205      -6.167  22.793  -7.764  1.00 29.65           N
ATOM   1681  NH2 ARG A 205      -4.178  23.466  -6.857  1.00 28.01           N1+
ATOM   1682  H   ARG A 205     -11.168  22.339  -4.765  1.00  0.00          H
ATOM   1683  HA  ARG A 205      -9.314  21.112  -2.800  1.00  0.00          H
ATOM   1684  HB2 ARG A 205      -9.296  23.954  -3.934  1.00  0.00          H
ATOM   1685  HB3 ARG A 205      -7.996  23.199  -3.087  1.00  0.00          H
ATOM   1686  HG2 ARG A 205      -8.972  22.039  -5.711  1.00  0.00          H
ATOM   1687  HG3 ARG A 205      -8.004  23.480  -5.684  1.00  0.00          H
ATOM   1688  HD2 ARG A 205      -6.763  21.314  -4.085  1.00  0.00          H
ATOM   1689  HD3 ARG A 205      -6.996  20.876  -5.756  1.00  0.00          H
ATOM   1690  HE  ARG A 205      -5.021  22.671  -4.729  1.00  0.00          H
ATOM   1691 HH11 ARG A 205      -7.034  22.245  -7.735  1.00  0.00          H
ATOM   1692 HH12 ARG A 205      -5.846  23.081  -8.706  1.00  0.00          H
ATOM   1693 HH21 ARG A 205      -3.457  23.216  -6.156  1.00  0.00          H
ATOM   1694 HH22 ARG A 205      -3.817  23.818  -7.744  1.00  0.00          H
ATOM   1695  N   ALA A 206     -11.470  23.526  -2.084  1.00 24.01           N
ATOM   1696  CA  ALA A 206     -12.096  24.351  -1.059  1.00 24.47           C
ATOM   1697  C   ALA A 206     -13.223  23.566  -0.377  1.00 24.30           C
ATOM   1698  O   ALA A 206     -13.178  23.393   0.837  1.00 25.49           O
ATOM   1699  CB  ALA A 206     -12.694  25.601  -1.728  1.00 23.88           C
ATOM   1700  H   ALA A 206     -11.902  23.519  -2.999  1.00  0.00          H
ATOM   1701  HA  ALA A 206     -11.367  24.659  -0.306  1.00  0.00          H
ATOM   1702  HB1 ALA A 206     -13.192  26.235  -0.993  1.00  0.00          H
ATOM   1703  HB2 ALA A 206     -11.913  26.202  -2.195  1.00  0.00          H
ATOM   1704  HB3 ALA A 206     -13.424  25.357  -2.501  1.00  0.00          H
ATOM   1705  N   ASP A 207     -14.211  23.075  -1.148  1.00 23.97           N
ATOM   1706  CA  ASP A 207     -15.427  22.389  -0.661  1.00 24.82           C
ATOM   1707  C   ASP A 207     -15.109  21.236   0.315  1.00 24.07           C
ATOM   1708  O   ASP A 207     -15.710  21.103   1.383  1.00 24.77           O
ATOM   1709  CB  ASP A 207     -16.338  21.983  -1.867  1.00 25.95           C
ATOM   1710  CG  ASP A 207     -16.920  20.566  -1.865  1.00 28.75           C
ATOM   1711  OD1 ASP A 207     -18.142  20.389  -1.667  1.00 30.03           O
ATOM   1712  OD2 ASP A 207     -16.161  19.580  -2.017  1.00 31.14           O1-
ATOM   1713  H   ASP A 207     -14.154  23.259  -2.142  1.00  0.00          H
ATOM   1714  HA  ASP A 207     -15.982  23.121  -0.070  1.00  0.00          H
ATOM   1715  HB2 ASP A 207     -17.168  22.686  -1.943  1.00  0.00          H
ATOM   1716  HB3 ASP A 207     -15.793  22.080  -2.805  1.00  0.00          H
ATOM   1717  N   ALA A 208     -14.119  20.420  -0.061  1.00 23.20           N
ATOM   1718  CA  ALA A 208     -13.758  19.187   0.615  1.00 22.76           C
ATOM   1719  C   ALA A 208     -13.048  19.423   1.957  1.00 22.38           C
ATOM   1720  O   ALA A 208     -13.017  18.513   2.788  1.00 24.01           O
ATOM   1721  CB  ALA A 208     -12.858  18.381  -0.318  1.00 19.96           C
ATOM   1722  H   ALA A 208     -13.731  20.586  -0.977  1.00  0.00          H
ATOM   1723  HA  ALA A 208     -14.667  18.621   0.800  1.00  0.00          H
ATOM   1724  HB1 ALA A 208     -12.532  17.461   0.155  1.00  0.00          H
ATOM   1725  HB2 ALA A 208     -13.384  18.110  -1.232  1.00  0.00          H
ATOM   1726  HB3 ALA A 208     -11.974  18.948  -0.595  1.00  0.00          H
ATOM   1727  N   ALA A 209     -12.563  20.650   2.214  1.00 22.75           N
ATOM   1728  CA  ALA A 209     -12.020  21.095   3.500  1.00 22.99           C
ATOM   1729  C   ALA A 209     -13.100  21.133   4.595  1.00 24.29           C
ATOM   1730  O   ALA A 209     -12.784  21.067   5.783  1.00 25.18           O
ATOM   1731  CB  ALA A 209     -11.430  22.504   3.343  1.00 23.91           C
ATOM   1732  H   ALA A 209     -12.708  21.366   1.508  1.00  0.00          H
ATOM   1733  HA  ALA A 209     -11.236  20.404   3.807  1.00  0.00          H
ATOM   1734  HB1 ALA A 209     -10.836  22.779   4.215  1.00  0.00          H
ATOM   1735  HB2 ALA A 209     -10.783  22.575   2.469  1.00  0.00          H
ATOM   1736  HB3 ALA A 209     -12.208  23.260   3.230  1.00  0.00          H
ATOM   1737  N   THR A 210     -14.367  21.190   4.181  1.00 22.25           N
ATOM   1738  CA  THR A 210     -15.566  21.140   4.999  1.00 22.42           C
ATOM   1739  C   THR A 210     -16.398  19.879   4.681  1.00 21.18           C
ATOM   1740  O   THR A 210     -17.591  19.854   4.978  1.00 19.00           O
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ATOM   1741  CB  THR A 210     -16.328  22.486   4.840  1.00 24.82           C
ATOM   1742  OG1 THR A 210     -16.442  22.889   3.483  1.00 24.17           O
ATOM   1743  CG2 THR A 210     -15.641  23.641   5.582  1.00 24.26           C
ATOM   1744  H   THR A 210     -14.530  21.334   3.190  1.00  0.00           H
ATOM   1745  HA  THR A 210     -15.299  21.031   6.051  1.00  0.00           H
ATOM   1746  HB  THR A 210     -17.337  22.381   5.244  1.00  0.00           H
ATOM   1747  HG1 THR A 210     -16.669  22.144   2.935  1.00  0.00           H
ATOM   1748 HG21 THR A 210     -16.216  24.563   5.487  1.00  0.00           H
ATOM   1749 HG22 THR A 210     -15.540  23.422   6.645  1.00  0.00           H
ATOM   1750 HG23 THR A 210     -14.644  23.833   5.186  1.00  0.00           H
ATOM   1751  N   LYS A 211     -15.783  18.820   4.118  1.00 20.79           N
ATOM   1752  CA  LYS A 211     -16.425  17.519   3.909  1.00 22.47           C
ATOM   1753  C   LYS A 211     -15.638  16.359   4.534  1.00 22.13           C
ATOM   1754  O   LYS A 211     -16.263  15.464   5.101  1.00 22.26           O
ATOM   1755  CB  LYS A 211     -16.728  17.230   2.418  1.00 24.94           C
ATOM   1756  CG  LYS A 211     -17.630  18.266   1.709  1.00 30.95           C
ATOM   1757  CD  LYS A 211     -18.750  17.650   0.851  1.00 35.72           C
ATOM   1758  CE  LYS A 211     -18.287  16.894  -0.408  1.00 40.53           C
ATOM   1759  NZ  LYS A 211     -17.977  17.793  -1.530  1.00 39.99           N1+
ATOM   1760  H   LYS A 211     -14.797  18.906   3.907  1.00  0.00           H
ATOM   1761  HA  LYS A 211     -17.387  17.504   4.427  1.00  0.00           H
ATOM   1762  HB2 LYS A 211     -15.799  17.098   1.866  1.00  0.00           H
ATOM   1763  HB3 LYS A 211     -17.215  16.254   2.379  1.00  0.00           H
ATOM   1764  HG2 LYS A 211     -18.109  18.897   2.458  1.00  0.00           H
ATOM   1765  HG3 LYS A 211     -17.027  18.943   1.106  1.00  0.00           H
ATOM   1766  HD2 LYS A 211     -19.324  16.969   1.482  1.00  0.00           H
ATOM   1767  HD3 LYS A 211     -19.452  18.436   0.567  1.00  0.00           H
ATOM   1768  HE2 LYS A 211     -17.435  16.247  -0.200  1.00  0.00           H
ATOM   1769  HE3 LYS A 211     -19.099  16.243  -0.735  1.00  0.00           H
ATOM   1770  HZ1 LYS A 211     -18.040  17.379  -2.441  1.00  0.00           H
ATOM   1771  HZ2 LYS A 211     -18.515  18.668  -1.526  1.00  0.00           H
ATOM   1772  HZ3 LYS A 211     -17.058  18.258  -1.483  1.00  0.00           H
ATOM   1773  N   TYR A 212     -14.303  16.307   4.400  1.00 21.51           N
ATOM   1774  CA  TYR A 212     -13.535  15.118   4.782  1.00 22.30           C
ATOM   1775  C   TYR A 212     -12.048  15.376   5.044  1.00 19.69           C
ATOM   1776  O   TYR A 212     -11.474  16.340   4.537  1.00 19.22           O
ATOM   1777  CB  TYR A 212     -13.772  13.967   3.775  1.00 22.78           C
ATOM   1778  CG  TYR A 212     -13.598  14.324   2.305  1.00 23.36           C
ATOM   1779  CD1 TYR A 212     -12.320  14.581   1.769  1.00 23.83           C
ATOM   1780  CD2 TYR A 212     -14.726  14.380   1.462  1.00 26.25           C
ATOM   1781  CE1 TYR A 212     -12.177  14.846   0.396  1.00 23.80           C
ATOM   1782  CE2 TYR A 212     -14.578  14.639   0.087  1.00 24.56           C
ATOM   1783  CZ  TYR A 212     -13.298  14.854  -0.451  1.00 23.94           C
ATOM   1784  OH  TYR A 212     -13.140  15.072  -1.787  1.00 25.44           O
ATOM   1785  H   TYR A 212     -13.794  17.041   3.915  1.00  0.00           H
ATOM   1786  HA  TYR A 212     -13.925  14.793   5.746  1.00  0.00           H
ATOM   1787  HB2 TYR A 212     -13.105  13.132   3.997  1.00  0.00           H
ATOM   1788  HB3 TYR A 212     -14.773  13.561   3.923  1.00  0.00           H
ATOM   1789  HD1 TYR A 212     -11.442  14.552   2.398  1.00  0.00           H
ATOM   1790  HD2 TYR A 212     -15.710  14.205   1.873  1.00  0.00           H
ATOM   1791  HE1 TYR A 212     -11.198  15.042  -0.006  1.00  0.00           H
ATOM   1792  HE2 TYR A 212     -15.449  14.649  -0.550  1.00  0.00           H
ATOM   1793  HH  TYR A 212     -13.937  14.925  -2.274  1.00  0.00           H
ATOM   1794  N   ILE A 213     -11.432  14.463   5.806  1.00 19.76           N
ATOM   1795  CA  ILE A 213     -10.004  14.269   6.071  1.00 18.38           C
ATOM   1796  C   ILE A 213      -9.135  14.324   4.791  1.00 19.12           C
ATOM   1797  O   ILE A 213      -9.352  13.552   3.852  1.00 20.73           O
ATOM   1798  CB  ILE A 213      -9.843  12.980   6.938  1.00 18.18           C
ATOM   1799  CG1 ILE A 213      -8.397  12.568   7.291  1.00 16.52           C
ATOM   1800  CG2 ILE A 213     -10.562  11.752   6.349  1.00 15.90           C
ATOM   1801  CD1 ILE A 213      -7.565  13.641   7.998  1.00 15.33           C
ATOM   1802  H   ILE A 213     -12.037  13.780   6.246  1.00  0.00           H
ATOM   1803  HA  ILE A 213      -9.709  15.108   6.697  1.00  0.00           H
ATOM   1804  HB  ILE A 213     -10.334  13.194   7.889  1.00  0.00           H
ATOM   1805 HG12 ILE A 213      -8.432  11.700   7.952  1.00  0.00           H
ATOM   1806 HG13 ILE A 213      -7.878  12.226   6.398  1.00  0.00           H
ATOM   1807 HG21 ILE A 213     -10.466  10.913   7.034  1.00  0.00           H
ATOM   1808 HG22 ILE A 213     -11.629  11.907   6.196  1.00  0.00           H
ATOM   1809 HG23 ILE A 213     -10.131  11.449   5.395  1.00  0.00           H
ATOM   1810 HD11 ILE A 213      -6.635  13.218   8.378  1.00  0.00           H
ATOM   1811 HD12 ILE A 213      -7.280  14.432   7.311  1.00  0.00           H
ATOM   1812 HD13 ILE A 213      -8.098  14.079   8.843  1.00  0.00           H
ATOM   1813  N   TYR A 214      -8.186  15.270   4.743  1.00 17.70           N
ATOM   1814  CA  TYR A 214      -7.222  15.528   3.666  1.00 17.21           C
ATOM   1815  C   TYR A 214      -7.904  16.028   2.373  1.00 16.96           C
ATOM   1816  O   TYR A 214      -7.409  15.838   1.263  1.00 18.78           O
ATOM   1817  CB  TYR A 214      -6.210  14.369   3.451  1.00 16.51           C
ATOM   1818  CG  TYR A 214      -5.380  13.949   4.643  1.00 22.99           C
ATOM   1819  CD1 TYR A 214      -4.439  14.792   5.243  1.00 22.50           C
ATOM   1820  CD2 TYR A 214      -5.447  12.629   5.091  1.00 22.11           C
ATOM   1821  CE1 TYR A 214      -3.586  14.329   6.242  1.00 25.16           C
ATOM   1822  CE2 TYR A 214      -4.616  12.154   6.097  1.00 24.75           C
ATOM   1823  CZ  TYR A 214      -3.658  12.996   6.662  1.00 24.22           C
ATOM   1824  OH  TYR A 214      -2.802  12.578   7.621  1.00 26.19           O
ATOM   1825  H   TYR A 214      -8.086  15.858   5.571  1.00  0.00           H
ATOM   1826  HA  TYR A 214      -6.646  16.389   4.012  1.00  0.00           H
ATOM   1827  HB2 TYR A 214      -6.756  13.501   3.082  1.00  0.00           H
ATOM   1828  HB3 TYR A 214      -5.527  14.648   2.642  1.00  0.00           H
ATOM   1829  HD1 TYR A 214      -4.357  15.829   4.922  1.00  0.00           H
ATOM   1830  HD2 TYR A 214      -6.150  11.935   4.633  1.00  0.00           H
ATOM   1831  HE1 TYR A 214      -2.861  14.987   6.711  1.00  0.00           H
ATOM   1832  HE2 TYR A 214      -4.690  11.121   6.414  1.00  0.00           H
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ATOM   1833  HH  TYR A 214      -2.789  11.595   7.677  1.00  0.00           H
ATOM   1834  N   GLY A 215      -9.038  16.716   2.518  1.00 19.32           N
ATOM   1835  CA  GLY A 215      -9.863  17.232   1.433  1.00 20.66           C
ATOM   1836  C   GLY A 215      -9.572  18.712   1.195  1.00 20.07           C
ATOM   1837  O   GLY A 215      -9.591  19.163   0.051  1.00 23.01           O
ATOM   1838  H   GLY A 215      -9.360  16.890   3.465  1.00  0.00           H
ATOM   1839  HA2 GLY A 215      -9.716  16.674   0.508  1.00  0.00           H
ATOM   1840  HA3 GLY A 215     -10.907  17.124   1.723  1.00  0.00           H
ATOM   1841  N   GLY A 216      -9.122  19.422   2.231  1.00 20.86           N
ATOM   1842  CA  GLY A 216      -8.554  20.762   2.142  1.00 19.87           C
ATOM   1843  C   GLY A 216      -7.029  20.673   2.042  1.00 20.78           C
ATOM   1844  O   GLY A 216      -6.313  21.592   2.435  1.00 20.29           O
ATOM   1845  H   GLY A 216      -9.180  19.001   3.161  1.00  0.00           H
ATOM   1846  HA2 GLY A 216      -8.952  21.320   1.295  1.00  0.00           H
ATOM   1847  HA3 GLY A 216      -8.811  21.318   3.044  1.00  0.00           H
ATOM   1848  N   SER A 217      -6.515  19.542   1.546  1.00 19.48           N
ATOM   1849  CA  SER A 217      -5.118  19.330   1.234  1.00 20.05           C
ATOM   1850  C   SER A 217      -4.931  19.547  -0.269  1.00 20.74           C
ATOM   1851  O   SER A 217      -5.754  19.128  -1.093  1.00 20.42           O
ATOM   1852  CB  SER A 217      -4.738  17.871   1.543  1.00 20.42           C
ATOM   1853  OG  SER A 217      -3.330  17.724   1.510  1.00 20.14           O
ATOM   1854  H   SER A 217      -7.170  18.849   1.214  1.00  0.00           H
ATOM   1855  HA  SER A 217      -4.485  20.010   1.807  1.00  0.00           H
ATOM   1856  HB2 SER A 217      -5.092  17.567   2.528  1.00  0.00           H
ATOM   1857  HB3 SER A 217      -5.195  17.189   0.825  1.00  0.00           H
ATOM   1858  HG  SER A 217      -2.999  18.004   2.363  1.00  0.00           H
ATOM   1859  N   GLU A 218      -3.799  20.160  -0.601  1.00 21.33           N
ATOM   1860  CA  GLU A 218      -3.246  20.242  -1.934  1.00 22.53           C
ATOM   1861  C   GLU A 218      -2.495  18.925  -2.219  1.00 21.12           C
ATOM   1862  O   GLU A 218      -2.911  18.127  -3.060  1.00 21.10           O
ATOM   1863  CB  GLU A 218      -2.284  21.452  -1.903  1.00 25.65           C
ATOM   1864  CG  GLU A 218      -1.626  21.837  -3.225  1.00 26.70           C
ATOM   1865  CD  GLU A 218      -2.607  22.362  -4.252  1.00 27.03           C
ATOM   1866  OE1 GLU A 218      -3.639  22.978  -3.911  1.00 26.49           O
ATOM   1867  OE2 GLU A 218      -2.349  22.160  -5.453  1.00 26.09           O1-
ATOM   1868  H   GLU A 218      -3.222  20.525   0.150  1.00  0.00           H
ATOM   1869  HA  GLU A 218      -4.036  20.391  -2.673  1.00  0.00           H
ATOM   1870  HB2 GLU A 218      -2.830  22.323  -1.549  1.00  0.00           H
ATOM   1871  HB3 GLU A 218      -1.489  21.300  -1.173  1.00  0.00           H
ATOM   1872  HG2 GLU A 218      -0.923  22.639  -3.025  1.00  0.00           H
ATOM   1873  HG3 GLU A 218      -1.049  21.008  -3.635  1.00  0.00           H
ATOM   1874  N   SER A 219      -1.412  18.675  -1.470  1.00 19.74           N
ATOM   1875  CA  SER A 219      -0.394  17.685  -1.793  1.00 18.94           C
ATOM   1876  C   SER A 219      -0.819  16.224  -1.580  1.00 18.73           C
ATOM   1877  O   SER A 219      -0.229  15.343  -2.204  1.00 18.43           O
ATOM   1878  CB  SER A 219       0.873  18.019  -0.988  1.00 17.41           C
ATOM   1879  OG  SER A 219       0.706  17.897   0.416  1.00 21.92           O
ATOM   1880  H   SER A 219      -1.171  19.322  -0.735  1.00  0.00           H
ATOM   1881  HA  SER A 219      -0.152  17.787  -2.848  1.00  0.00           H
ATOM   1882  HB2 SER A 219       1.679  17.349  -1.298  1.00  0.00           H
ATOM   1883  HB3 SER A 219       1.222  19.027  -1.219  1.00  0.00           H
ATOM   1884  HG  SER A 219       1.593  17.693   0.727  1.00  0.00           H
ATOM   1885  N   TYR A 220      -1.869  15.941  -0.787  1.00 20.35           N
ATOM   1886  CA  TYR A 220      -2.383  14.582  -0.584  1.00 20.31           C
ATOM   1887  C   TYR A 220      -2.911  13.965  -1.899  1.00 21.43           C
ATOM   1888  O   TYR A 220      -2.820  12.758  -2.113  1.00 21.25           O
ATOM   1889  CB  TYR A 220      -3.491  14.579   0.499  1.00 18.66           C
ATOM   1890  CG  TYR A 220      -3.848  13.241   1.108  1.00 19.79           C
ATOM   1891  CD1 TYR A 220      -3.132  12.822   2.236  1.00 20.92           C
ATOM   1892  CD2 TYR A 220      -4.903  12.445   0.660  1.00 19.71           C
ATOM   1893  CE1 TYR A 220      -3.417  11.619   2.861  1.00 21.76           C
ATOM   1894  CE2 TYR A 220      -5.214  11.239   1.284  1.00 20.40           C
ATOM   1895  CZ  TYR A 220      -4.450  10.820   2.370  1.00 22.36           C
ATOM   1896  OH  TYR A 220      -4.719   9.614   2.949  1.00 20.26           O
ATOM   1897  H   TYR A 220      -2.310  16.701  -0.280  1.00  0.00           H
ATOM   1898  HA  TYR A 220      -1.554  13.971  -0.220  1.00  0.00           H
ATOM   1899  HB2 TYR A 220      -3.103  15.204   1.303  1.00  0.00           H
ATOM   1900  HB3 TYR A 220      -4.378  15.071   0.090  1.00  0.00           H
ATOM   1901  HD1 TYR A 220      -2.335  13.446   2.635  1.00  0.00           H
ATOM   1902  HD2 TYR A 220      -5.485  12.763  -0.202  1.00  0.00           H
ATOM   1903  HE1 TYR A 220      -2.855  11.303   3.735  1.00  0.00           H
ATOM   1904  HE2 TYR A 220      -6.017  10.608   0.921  1.00  0.00           H
ATOM   1905  HH  TYR A 220      -4.206   9.559   3.793  1.00  0.00           H
ATOM   1906  N   ARG A 221      -3.388  14.811  -2.819  1.00 19.98           N
ATOM   1907  CA  ARG A 221      -3.922  14.421  -4.119  1.00 19.09           C
ATOM   1908  C   ARG A 221      -2.786  14.076  -5.097  1.00 20.19           C
ATOM   1909  O   ARG A 221      -2.902  13.126  -5.871  1.00 18.27           O
ATOM   1910  CB  ARG A 221      -4.707  15.620  -4.677  1.00 19.12           C
ATOM   1911  CG  ARG A 221      -5.864  16.064  -3.767  1.00 16.39           C
ATOM   1912  CD  ARG A 221      -6.534  17.357  -4.243  1.00 17.18           C
ATOM   1913  NE  ARG A 221      -7.989  17.260  -4.085  1.00 19.14           N
ATOM   1914  CZ  ARG A 221      -8.754  17.870  -3.177  1.00 18.73           C
ATOM   1915  NH1 ARG A 221      -8.246  18.662  -2.232  1.00 18.23           N
ATOM   1916  NH2 ARG A 221     -10.060  17.657  -3.222  1.00 17.55           N1+
ATOM   1917  H   ARG A 221      -3.343  15.799  -2.603  1.00  0.00           H
ATOM   1918  HA  ARG A 221      -4.582  13.556  -4.012  1.00  0.00           H
ATOM   1919  HB2 ARG A 221      -4.037  16.464  -4.859  1.00  0.00           H
ATOM   1920  HB3 ARG A 221      -5.117  15.338  -5.646  1.00  0.00           H
ATOM   1921  HG2 ARG A 221      -6.586  15.249  -3.690  1.00  0.00           H
ATOM   1922  HG3 ARG A 221      -5.509  16.241  -2.751  1.00  0.00           H
ATOM   1923  HD2 ARG A 221      -6.121  18.224  -3.725  1.00  0.00           H
ATOM   1924  HD3 ARG A 221      -6.331  17.530  -5.299  1.00  0.00           H
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ATOM   1925  HE  ARG A 221      -8.456  16.688  -4.789  1.00  0.00           H
ATOM   1926 HH11 ARG A 221      -7.241  18.787  -2.082  1.00  0.00           H
ATOM   1927 HH12 ARG A 221      -8.841  19.006  -1.467  1.00  0.00           H
ATOM   1928 HH21 ARG A 221     -10.437  16.900  -3.803  1.00  0.00           H
ATOM   1929 HH22 ARG A 221     -10.725  18.342  -2.844  1.00  0.00           H
ATOM   1930  N   HIS A 222      -1.670  14.816  -5.025  1.00 19.92           N
ATOM   1931  CA  HIS A 222      -0.453  14.579  -5.806  1.00 20.24           C
ATOM   1932  C   HIS A 222       0.253  13.323  -5.293  1.00 19.44           C
ATOM   1933  O   HIS A 222       0.658  12.476  -6.086  1.00 21.15           O
ATOM   1934  CB  HIS A 222       0.504  15.777  -5.662  1.00 18.79           C
ATOM   1935  CG  HIS A 222      -0.065  17.063  -6.177  1.00 19.64           C
ATOM   1936  ND1 HIS A 222      -0.203  18.188  -5.364  1.00 22.12           N
ATOM   1937  CD2 HIS A 222      -0.569  17.348  -7.426  1.00 20.71           C
ATOM   1938  CE1 HIS A 222      -0.836  19.074  -6.118  1.00 20.00           C
ATOM   1939  NE2 HIS A 222      -1.085  18.627  -7.346  1.00 22.40           N
ATOM   1940  H   HIS A 222      -1.639  15.539  -4.320  1.00  0.00           H
ATOM   1941  HA  HIS A 222      -0.713  14.434  -6.856  1.00  0.00           H
ATOM   1942  HB2 HIS A 222       0.805  15.919  -4.623  1.00  0.00           H
ATOM   1943  HB3 HIS A 222       1.426  15.584  -6.206  1.00  0.00           H
ATOM   1944  HD2 HIS A 222      -0.632  16.749  -8.323  1.00  0.00           H
ATOM   1945  HE1 HIS A 222      -1.136  20.047  -5.767  1.00  0.00           H
ATOM   1946  HE2 HIS A 222      -1.622  19.122  -8.050  1.00  0.00           H
ATOM   1947  N   MET A 223       0.317  13.180  -3.964  1.00 20.38           N
ATOM   1948  CA  MET A 223       0.767  12.003  -3.233  1.00 21.04           C
ATOM   1949  C   MET A 223      -0.004  10.750  -3.662  1.00 21.36           C
ATOM   1950  O   MET A 223       0.624   9.797  -4.116  1.00 20.45           O
ATOM   1951  CB  MET A 223       0.674  12.298  -1.725  1.00 20.16           C
ATOM   1952  CG  MET A 223       1.273  11.238  -0.794  1.00 21.68           C
ATOM   1953  SD  MET A 223       0.235   9.799  -0.403  1.00 24.24           S
ATOM   1954  CE  MET A 223      -1.127  10.603   0.475  1.00 23.61           C
ATOM   1955  H   MET A 223       0.008  13.972  -3.405  1.00  0.00           H
ATOM   1956  HA  MET A 223       1.809  11.830  -3.488  1.00  0.00           H
ATOM   1957  HB2 MET A 223       1.223  13.222  -1.538  1.00  0.00           H
ATOM   1958  HB3 MET A 223      -0.350  12.509  -1.440  1.00  0.00           H
ATOM   1959  HG2 MET A 223       2.225  10.890  -1.189  1.00  0.00           H
ATOM   1960  HG3 MET A 223       1.503  11.728   0.148  1.00  0.00           H
ATOM   1961  HE1 MET A 223      -1.796   9.853   0.895  1.00  0.00           H
ATOM   1962  HE2 MET A 223      -0.747  11.227   1.285  1.00  0.00           H
ATOM   1963  HE3 MET A 223      -1.711  11.232  -0.192  1.00  0.00           H
ATOM   1964  N   CYS A 224      -1.342  10.767  -3.599  1.00 20.63           N
ATOM   1965  CA  CYS A 224      -2.172   9.617  -3.958  1.00 20.63           C
ATOM   1966  C   CYS A 224      -2.116   9.277  -5.455  1.00 19.25           C
ATOM   1967  O   CYS A 224      -2.163   8.097  -5.796  1.00 18.72           O
ATOM   1968  CB  CYS A 224      -3.632   9.841  -3.542  1.00 18.88           C
ATOM   1969  SG  CYS A 224      -3.750   9.751  -1.736  1.00 21.25           S
ATOM   1970  H   CYS A 224      -1.803  11.568  -3.177  1.00  0.00           H
ATOM   1971  HA  CYS A 224      -1.791   8.745  -3.422  1.00  0.00           H
ATOM   1972  HB2 CYS A 224      -4.027  10.792  -3.905  1.00  0.00           H
ATOM   1973  HB3 CYS A 224      -4.261   9.050  -3.954  1.00  0.00           H
ATOM   1974  HG  CYS A 224      -3.220  10.965  -1.522  1.00  0.00           H
ATOM   1975  N   ARG A 225      -1.938  10.270  -6.344  1.00 20.13           N
ATOM   1976  CA  ARG A 225      -1.663  10.042  -7.765  1.00 18.90           C
ATOM   1977  C   ARG A 225      -0.292   9.361  -7.930  1.00 18.94           C
ATOM   1978  O   ARG A 225      -0.182   8.340  -8.608  1.00 18.24           O
ATOM   1979  CB  ARG A 225      -1.700  11.378  -8.548  1.00 19.79           C
ATOM   1980  CG  ARG A 225      -1.420  11.224 -10.060  1.00 22.48           C
ATOM   1981  CD  ARG A 225      -1.361  12.555 -10.818  1.00 21.79           C
ATOM   1982  NE  ARG A 225      -1.170  12.322 -12.252  1.00 21.49           N
ATOM   1983  CZ  ARG A 225      -0.440  12.977 -13.157  1.00 23.17           C
ATOM   1984 NH1 ARG A 225       0.323  14.015 -12.816  1.00 23.34           N
ATOM   1985 NH2 ARG A 225      -0.485  12.576 -14.424  1.00 25.08           N1+
ATOM   1986  H   ARG A 225      -1.950  11.226  -6.009  1.00  0.00           H
ATOM   1987  HA  ARG A 225      -2.432   9.377  -8.167  1.00  0.00           H
ATOM   1988  HB2 ARG A 225      -2.680  11.840  -8.418  1.00  0.00           H
ATOM   1989  HB3 ARG A 225      -0.980  12.077  -8.123  1.00  0.00           H
ATOM   1990  HG2 ARG A 225      -0.474  10.711 -10.229  1.00  0.00           H
ATOM   1991  HG3 ARG A 225      -2.192  10.590 -10.499  1.00  0.00           H
ATOM   1992  HD2 ARG A 225      -2.309  13.075 -10.697  1.00  0.00           H
ATOM   1993  HD3 ARG A 225      -0.570  13.189 -10.418  1.00  0.00           H
ATOM   1994  HE  ARG A 225      -1.816  11.566 -12.637  1.00  0.00           H
ATOM   1995 HH11 ARG A 225       0.492  14.241 -11.837  1.00  0.00           H
ATOM   1996 HH12 ARG A 225       0.821  14.563 -13.500  1.00  0.00           H
ATOM   1997 HH21 ARG A 225      -0.985  11.670 -14.660  1.00  0.00           H
ATOM   1998 HH22 ARG A 225      -0.023  13.009 -15.203  1.00  0.00           H
ATOM   1999  N   TYR A 226       0.753   9.905  -7.290  1.00 16.90           N
ATOM   2000  CA  TYR A 226       2.123   9.419  -7.416  1.00 18.14           C
ATOM   2001  C   TYR A 226       2.283   8.011  -6.812  1.00 17.98           C
ATOM   2002  O   TYR A 226       2.857   7.127  -7.452  1.00 18.92           O
ATOM   2003  CB  TYR A 226       3.118  10.417  -6.781  1.00 15.96           C
ATOM   2004  CG  TYR A 226       4.513  10.287  -7.364  1.00 20.33           C
ATOM   2005  CD1 TYR A 226       4.959  11.197  -8.349  1.00 18.06           C
ATOM   2006  CD2 TYR A 226       5.334   9.200  -6.997  1.00 19.81           C
ATOM   2007  CE1 TYR A 226       6.174  10.968  -9.024  1.00 20.94           C
ATOM   2008  CE2 TYR A 226       6.536   8.966  -7.682  1.00 22.35           C
ATOM   2009  CZ  TYR A 226       6.933   9.820  -8.725  1.00 20.61           C
ATOM   2010  OH  TYR A 226       8.023   9.504  -9.476  1.00 24.39           O
ATOM   2011  H   TYR A 226       0.600  10.750  -6.742  1.00  0.00           H
ATOM   2012  HA  TYR A 226       2.326   9.364  -8.484  1.00  0.00           H
ATOM   2013  HB2 TYR A 226       2.786  11.438  -6.964  1.00  0.00           H
ATOM   2014  HB3 TYR A 226       3.154  10.303  -5.697  1.00  0.00           H
ATOM   2015  HD1 TYR A 226       4.350  12.043  -8.636  1.00  0.00           H
ATOM   2016  HD2 TYR A 226       5.026   8.507  -6.227  1.00  0.00           H
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ATOM   2017  HE1 TYR A 226       6.493  11.635  -9.812  1.00  0.00           H
ATOM   2018  HE2 TYR A 226       7.143   8.113  -7.424  1.00  0.00           H
ATOM   2019  HH  TYR A 226       8.032   8.587  -9.739  1.00  0.00           H
ATOM   2020  N   GLN A 227       1.704   7.782  -5.626  1.00 19.29           N
ATOM   2021  CA  GLN A 227       1.682   6.500  -4.926  1.00 19.24           C
ATOM   2022  C   GLN A 227       0.718   5.499  -5.580  1.00 21.01           C
ATOM   2023  O   GLN A 227       0.754   4.323  -5.234  1.00 21.37           O
ATOM   2024  CB  GLN A 227       1.226   6.710  -3.465  1.00 19.57           C
ATOM   2025  CG  GLN A 227       2.233   7.453  -2.568  1.00 16.42           C
ATOM   2026  CD  GLN A 227       3.363   6.568  -2.042  1.00 20.53           C
ATOM   2027  OE1 GLN A 227       3.945   5.770  -2.769  1.00 21.69           O
ATOM   2028  NE2 GLN A 227       3.679   6.684  -0.759  1.00 19.47           N
ATOM   2029  H   GLN A 227       1.242   8.564  -5.158  1.00  0.00           H
ATOM   2030  HA  GLN A 227       2.678   6.056  -4.956  1.00  0.00           H
ATOM   2031  HB2 GLN A 227       0.275   7.245  -3.452  1.00  0.00           H
ATOM   2032  HB3 GLN A 227       1.009   5.747  -3.000  1.00  0.00           H
ATOM   2033  HG2 GLN A 227       2.657   8.312  -3.087  1.00  0.00           H
ATOM   2034  HG3 GLN A 227       1.687   7.848  -1.714  1.00  0.00           H
ATOM   2035 HE21 GLN A 227       3.174   7.329  -0.169  1.00  0.00           H
ATOM   2036 HE22 GLN A 227       4.420   6.116  -0.374  1.00  0.00           H
ATOM   2037  N   SER A 228      -0.122   5.911  -6.534  1.00 19.57           N
ATOM   2038  CA  SER A 228      -0.831   4.980  -7.401  1.00 20.36           C
ATOM   2039  C   SER A 228       0.046   4.670  -8.625  1.00 20.27           C
ATOM   2040  O   SER A 228       0.243   3.499  -8.945  1.00 23.07           O
ATOM   2041  CB  SER A 228      -2.145   5.609  -7.891  1.00 16.62           C
ATOM   2042  OG  SER A 228      -3.040   5.759  -6.813  1.00 18.44           O
ATOM   2043  H   SER A 228      -0.162   6.896  -6.754  1.00  0.00           H
ATOM   2044  HA  SER A 228      -1.067   4.044  -6.890  1.00  0.00           H
ATOM   2045  HB2 SER A 228      -1.987   6.580  -8.354  1.00  0.00           H
ATOM   2046  HB3 SER A 228      -2.613   4.964  -8.635  1.00  0.00           H
ATOM   2047  HG  SER A 228      -2.760   6.536  -6.323  1.00  0.00           H
ATOM   2048  N   GLY A 229       0.564   5.694  -9.312  1.00 19.50           N
ATOM   2049  CA  GLY A 229       0.921   5.581 -10.720  1.00 20.20           C
ATOM   2050  C   GLY A 229       2.354   5.885 -11.128  1.00 19.94           C
ATOM   2051  O   GLY A 229       2.667   5.713 -12.307  1.00 17.43           O
ATOM   2052  H   GLY A 229       0.367   6.639  -8.985  1.00  0.00           H
ATOM   2053  HA2 GLY A 229       0.596   4.641 -11.161  1.00  0.00           H
ATOM   2054  HA3 GLY A 229       0.346   6.348 -11.215  1.00  0.00           H
ATOM   2055  N   PHE A 230       3.201   6.395 -10.227  1.00 19.02           N
ATOM   2056  CA  PHE A 230       4.483   6.997 -10.608  1.00 20.56           C
ATOM   2057  C   PHE A 230       5.680   6.495  -9.793  1.00 21.40           C
ATOM   2058  O   PHE A 230       6.819   6.799 -10.146  1.00 24.25           O
ATOM   2059  CB  PHE A 230       4.388   8.533 -10.649  1.00 21.77           C
ATOM   2060  CG  PHE A 230       3.487   9.134 -11.715  1.00 22.64           C
ATOM   2061  CD1 PHE A 230       4.056   9.606 -12.915  1.00 24.17           C
ATOM   2062  CD2 PHE A 230       2.092   9.240 -11.517  1.00 24.47           C
ATOM   2063  CE1 PHE A 230       3.240  10.171 -13.911  1.00 25.11           C
ATOM   2064  CE2 PHE A 230       1.274   9.782 -12.527  1.00 23.94           C
ATOM   2065  CZ  PHE A 230       1.848  10.239 -13.726  1.00 26.08           C
ATOM   2066  H   PHE A 230       2.874   6.543  -9.277  1.00  0.00           H
ATOM   2067  HA  PHE A 230       4.736   6.701 -11.621  1.00  0.00           H
ATOM   2068  HB2 PHE A 230       4.084   8.902  -9.677  1.00  0.00           H
ATOM   2069  HB3 PHE A 230       5.385   8.941 -10.818  1.00  0.00           H
ATOM   2070  HD1 PHE A 230       5.122   9.534 -13.086  1.00  0.00           H
ATOM   2071  HD2 PHE A 230       1.635   8.881 -10.608  1.00  0.00           H
ATOM   2072  HE1 PHE A 230       3.682  10.531 -14.829  1.00  0.00           H
ATOM   2073  HE2 PHE A 230       0.203   9.838 -12.401  1.00  0.00           H
ATOM   2074  HZ  PHE A 230       1.217  10.623 -14.513  1.00  0.00           H
ATOM   2075  N   PHE A 231       5.462   5.732  -8.713  1.00 19.26           N
ATOM   2076  CA  PHE A 231       6.551   5.184  -7.897  1.00 21.27           C
ATOM   2077  C   PHE A 231       7.213   3.969  -8.574  1.00 20.88           C
ATOM   2078  O   PHE A 231       8.411   3.775  -8.420  1.00 21.71           O
ATOM   2079  CB  PHE A 231       6.045   4.856  -6.472  1.00 18.61           C
ATOM   2080  CG  PHE A 231       5.109   3.670  -6.290  1.00 18.09           C
ATOM   2081  CD1 PHE A 231       5.590   2.492  -5.681  1.00 16.51           C
ATOM   2082  CD2 PHE A 231       3.759   3.742  -6.691  1.00 15.34           C
ATOM   2083  CE1 PHE A 231       4.731   1.401  -5.466  1.00 15.19           C
ATOM   2084  CE2 PHE A 231       2.904   2.642  -6.486  1.00 15.58           C
ATOM   2085  CZ  PHE A 231       3.383   1.481  -5.857  1.00 17.00           C
ATOM   2086  H   PHE A 231       4.510   5.531  -8.448  1.00  0.00           H
ATOM   2087  HA  PHE A 231       7.331   5.940  -7.795  1.00  0.00           H
ATOM   2088  HB2 PHE A 231       6.918   4.695  -5.838  1.00  0.00           H
ATOM   2089  HB3 PHE A 231       5.557   5.736  -6.052  1.00  0.00           H
ATOM   2090  HD1 PHE A 231       6.621   2.417  -5.368  1.00  0.00           H
ATOM   2091  HD2 PHE A 231       3.364   4.632  -7.155  1.00  0.00           H
ATOM   2092  HE1 PHE A 231       5.110   0.500  -5.005  1.00  0.00           H
ATOM   2093  HE2 PHE A 231       1.877   2.683  -6.816  1.00  0.00           H
ATOM   2094  HZ  PHE A 231       2.717   0.649  -5.687  1.00  0.00           H
ATOM   2095  N   TRP A 232       6.472   3.235  -9.414  1.00 20.84           N
ATOM   2096  CA  TRP A 232       6.952   2.168 -10.305  1.00 21.29           C
ATOM   2097  C   TRP A 232       7.379   2.743 -11.674  1.00 22.43           C
ATOM   2098  O   TRP A 232       7.314   2.062 -12.696  1.00 24.91           O
ATOM   2099  CB  TRP A 232       5.809   1.146 -10.506  1.00 20.84           C
ATOM   2100  CG  TRP A 232       4.455   1.704 -10.837  1.00 22.17           C
ATOM   2101  CD1 TRP A 232       3.540   2.057  -9.910  1.00 22.45           C
ATOM   2102  CD2 TRP A 232       3.828   1.959 -12.134  1.00 25.05           C
ATOM   2103  NE1 TRP A 232       2.401   2.518 -10.530  1.00 24.51           N
ATOM   2104  CE3 TRP A 232       4.226   1.814 -13.484  1.00 25.82           C
ATOM   2105  CE2 TRP A 232       2.503   2.444 -11.906  1.00 26.33           C
ATOM   2106  CZ3 TRP A 232       3.363   2.141 -14.549  1.00 27.28           C
ATOM   2107  CZ2 TRP A 232       1.620   2.742 -12.961  1.00 26.19           C
ATOM   2108  CH2 TRP A 232       2.058   2.600 -14.289  1.00 25.91           C
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ATOM   2109  H   TRP A 232       5.501   3.488  -9.519  1.00  0.00           H
ATOM   2110  HA  TRP A 232       7.822   1.665  -9.878  1.00  0.00           H
ATOM   2111  HB2 TRP A 232       6.073   0.399 -11.254  1.00  0.00           H
ATOM   2112  HB3 TRP A 232       5.705   0.579  -9.581  1.00  0.00           H
ATOM   2113  HD1 TRP A 232       3.699   1.955  -8.849  1.00  0.00           H
ATOM   2114  HE1 TRP A 232       1.578   2.809  -9.998  1.00  0.00           H
ATOM   2115  HE3 TRP A 232       5.211   1.436 -13.707  1.00  0.00           H
ATOM   2116  HZ3 TRP A 232       3.701   2.024 -15.567  1.00  0.00           H
ATOM   2117  HZ2 TRP A 232       0.614   3.082 -12.767  1.00  0.00           H
ATOM   2118  HH2 TRP A 232       1.393   2.840 -15.106  1.00  0.00           H
ATOM   2119  N   ARG A 233       7.787   4.014 -11.697  1.00 22.95           N
ATOM   2120  CA  ARG A 233       8.487   4.673 -12.788  1.00 23.34           C
ATOM   2121  C   ARG A 233       9.369   5.798 -12.228  1.00 23.57           C
ATOM   2122  O   ARG A 233       9.439   6.878 -12.818  1.00 24.36           O
ATOM   2123  CB  ARG A 233       7.563   5.025 -13.979  1.00 23.72           C
ATOM   2124  CG  ARG A 233       6.270   5.768 -13.613  1.00 23.64           C
ATOM   2125  CD  ARG A 233       5.472   6.187 -14.856  1.00 22.56           C
ATOM   2126  NE  ARG A 233       4.056   6.449 -14.553  1.00 23.96           N
ATOM   2127  CZ  ARG A 233       3.199   7.196 -15.262  1.00 23.37           C
ATOM   2128  NH1 ARG A 233       3.614   8.007 -16.237  1.00 24.58           N
ATOM   2129  NH2 ARG A 233       1.901   7.099 -14.987  1.00 27.02           N1+
ATOM   2130  H   ARG A 233       7.843   4.479 -10.802  1.00  0.00           H
ATOM   2131  HA  ARG A 233       9.208   3.960 -13.185  1.00  0.00           H
ATOM   2132  HB2 ARG A 233       8.127   5.610 -14.707  1.00  0.00           H
ATOM   2133  HB3 ARG A 233       7.301   4.101 -14.494  1.00  0.00           H
ATOM   2134  HG2 ARG A 233       5.661   5.125 -12.976  1.00  0.00           H
ATOM   2135  HG3 ARG A 233       6.522   6.657 -13.033  1.00  0.00           H
ATOM   2136  HD2 ARG A 233       5.947   7.047 -15.321  1.00  0.00           H
ATOM   2137  HD3 ARG A 233       5.491   5.388 -15.598  1.00  0.00           H
ATOM   2138  HE  ARG A 233       3.674   5.947 -13.744  1.00  0.00           H
ATOM   2139 HH11 ARG A 233       4.572   8.387 -16.218  1.00  0.00           H
ATOM   2140 HH12 ARG A 233       2.938   8.497 -16.807  1.00  0.00           H
ATOM   2141 HH21 ARG A 233       1.580   6.555 -14.201  1.00  0.00           H
ATOM   2142 HH22 ARG A 233       1.158   7.622 -15.509  1.00  0.00           H
ATOM   2143  N   HIS A 234      10.010   5.560 -11.074  1.00 23.15           N
ATOM   2144  CA  HIS A 234      10.989   6.449 -10.448  1.00 24.03           C
ATOM   2145  C   HIS A 234      12.347   5.740 -10.487  1.00 25.68           C
ATOM   2146  O   HIS A 234      12.429   4.541 -10.219  1.00 24.39           O
ATOM   2147  CB  HIS A 234      10.591   6.732  -8.986  1.00 21.56           C
ATOM   2148  CG  HIS A 234      11.469   7.766  -8.327  1.00 23.59           C
ATOM   2149  ND1 HIS A 234      12.664   7.445  -7.670  1.00 24.32           N
ATOM   2150  CD2 HIS A 234      11.290   9.131  -8.284  1.00 21.93           C
ATOM   2151  CE1 HIS A 234      13.164   8.617  -7.290  1.00 24.17           C
ATOM   2152  NE2 HIS A 234      12.383   9.646  -7.609  1.00 23.23           N
ATOM   2153  H   HIS A 234      10.016   4.600 -10.741  1.00  0.00           H
ATOM   2154  HA  HIS A 234      11.062   7.397 -10.986  1.00  0.00           H
ATOM   2155  HB2 HIS A 234       9.566   7.101  -8.957  1.00  0.00           H
ATOM   2156  HB3 HIS A 234      10.604   5.820  -8.388  1.00  0.00           H
ATOM   2157  HD2 HIS A 234      10.514   9.754  -8.702  1.00  0.00           H
ATOM   2158  HE1 HIS A 234      14.106   8.732  -6.774  1.00  0.00           H
ATOM   2159  HE2 HIS A 234      12.594  10.630  -7.446  1.00  0.00           H
ATOM   2160  N   GLU A 235      13.413   6.478 -10.793  1.00 26.94           N
ATOM   2161  CA  GLU A 235      14.775   6.015 -11.031  1.00 29.85           C
ATOM   2162  C   GLU A 235      15.398   5.207  -9.876  1.00 27.43           C
ATOM   2163  O   GLU A 235      16.196   4.302 -10.127  1.00 27.58           O
ATOM   2164  CB  GLU A 235      15.648   7.232 -11.404  1.00 32.61           C
ATOM   2165  CG  GLU A 235      15.781   8.349 -10.338  1.00 40.85           C
ATOM   2166  CD  GLU A 235      14.670   9.393 -10.338  1.00 45.22           C
ATOM   2167  OE1 GLU A 235      13.581   9.155 -10.898  1.00 46.95           O
ATOM   2168  OE2 GLU A 235      14.935  10.483  -9.784  1.00 48.79           O1-
ATOM   2169  H   GLU A 235      13.289   7.494 -10.901  1.00  0.00           H
ATOM   2170  HA  GLU A 235      14.736   5.348 -11.895  1.00  0.00           H
ATOM   2171  HB2 GLU A 235      16.645   6.863 -11.640  1.00  0.00           H
ATOM   2172  HB3 GLU A 235      15.284   7.666 -12.336  1.00  0.00           H
ATOM   2173  HG2 GLU A 235      15.880   7.943  -9.334  1.00  0.00           H
ATOM   2174  HG3 GLU A 235      16.710   8.887 -10.522  1.00  0.00           H
ATOM   2175  N   LEU A 236      15.018   5.492  -8.623  1.00 26.47           N
ATOM   2176  CA  LEU A 236      15.488   4.748  -7.453  1.00 26.49           C
ATOM   2177  C   LEU A 236      14.645   3.484  -7.211  1.00 26.64           C
ATOM   2178  O   LEU A 236      15.009   2.686  -6.353  1.00 25.30           O
ATOM   2179  CB  LEU A 236      15.394   5.626  -6.183  1.00 24.84           C
ATOM   2180  CG  LEU A 236      16.321   6.859  -6.135  1.00 24.56           C
ATOM   2181  CD1 LEU A 236      16.130   7.620  -4.817  1.00 23.65           C
ATOM   2182  CD2 LEU A 236      17.798   6.480  -6.283  1.00 22.45           C
ATOM   2183  H   LEU A 236      14.321   6.217  -8.485  1.00  0.00           H
ATOM   2184  HA  LEU A 236      16.517   4.415  -7.591  1.00  0.00           H
ATOM   2185  HB2 LEU A 236      14.360   5.939  -6.033  1.00  0.00           H
ATOM   2186  HB3 LEU A 236      15.647   5.003  -5.324  1.00  0.00           H
ATOM   2187  HG  LEU A 236      16.063   7.529  -6.955  1.00  0.00           H
ATOM   2188 HD11 LEU A 236      16.754   8.513  -4.798  1.00  0.00           H
ATOM   2189 HD12 LEU A 236      15.095   7.927  -4.680  1.00  0.00           H
ATOM   2190 HD13 LEU A 236      16.411   7.012  -3.957  1.00  0.00           H
ATOM   2191 HD21 LEU A 236      18.456   7.332  -6.111  1.00  0.00           H
ATOM   2192 HD22 LEU A 236      18.065   5.698  -5.577  1.00  0.00           H
ATOM   2193 HD23 LEU A 236      18.010   6.108  -7.281  1.00  0.00           H
ATOM   2194  N   LEU A 237      13.547   3.276  -7.951  1.00 25.05           N
ATOM   2195  CA  LEU A 237      12.666   2.119  -7.825  1.00 27.46           C
ATOM   2196  C   LEU A 237      12.696   1.229  -9.070  1.00 27.75           C
ATOM   2197  O   LEU A 237      12.462   0.030  -8.927  1.00 28.17           O
ATOM   2198  CB  LEU A 237      11.234   2.550  -7.435  1.00 25.77           C
ATOM   2199  CG  LEU A 237      10.808   2.008  -6.053  1.00 26.56           C
ATOM   2200  CD1 LEU A 237      11.621   2.630  -4.911  1.00 26.59           C
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ATOM   2201  CD2 LEU A 237       9.310   2.206  -5.807  1.00 27.15           C
ATOM   2202  H   LEU A 237      13.306   3.962  -8.661  1.00  0.00           H
ATOM   2203  HA  LEU A 237      13.042   1.462  -7.042  1.00  0.00           H
ATOM   2204  HB2 LEU A 237      11.132   3.636  -7.457  1.00  0.00           H
ATOM   2205  HB3 LEU A 237      10.527   2.189  -8.186  1.00  0.00           H
ATOM   2206  HG  LEU A 237      10.997   0.935  -6.045  1.00  0.00           H
ATOM   2207 HD11 LEU A 237      11.351   2.190  -3.955  1.00  0.00           H
ATOM   2208 HD12 LEU A 237      12.689   2.455  -5.032  1.00  0.00           H
ATOM   2209 HD13 LEU A 237      11.462   3.706  -4.851  1.00  0.00           H
ATOM   2210 HD21 LEU A 237       8.995   1.729  -4.878  1.00  0.00           H
ATOM   2211 HD22 LEU A 237       9.058   3.265  -5.749  1.00  0.00           H
ATOM   2212 HD23 LEU A 237       8.723   1.774  -6.617  1.00  0.00           H
ATOM   2213  N   GLU A 238      13.078   1.734 -10.254  1.00 28.09           N
ATOM   2214  CA  GLU A 238      13.351   0.915 -11.451  1.00 29.19           C
ATOM   2215  C   GLU A 238      14.651   0.098 -11.302  1.00 29.11           C
ATOM   2216  O   GLU A 238      14.871  -0.887 -12.008  1.00 28.86           O
ATOM   2217  CB  GLU A 238      13.384   1.794 -12.725  1.00 32.53           C
ATOM   2218  CG  GLU A 238      12.088   2.594 -13.025  1.00 39.05           C
ATOM   2219  CD  GLU A 238      10.810   1.825 -12.723  1.00 42.35           C
ATOM   2220  OE1 GLU A 238      10.338   1.063 -13.588  1.00 44.53           O
ATOM   2221  OE2 GLU A 238      10.347   1.892 -11.564  1.00 42.36           O1-
ATOM   2222  H   GLU A 238      13.067   2.745 -10.357  1.00  0.00           H
ATOM   2223  HA  GLU A 238      12.578   0.161 -11.570  1.00  0.00           H
ATOM   2224  HB2 GLU A 238      14.224   2.488 -12.672  1.00  0.00           H
ATOM   2225  HB3 GLU A 238      13.582   1.146 -13.580  1.00  0.00           H
ATOM   2226  HG2 GLU A 238      12.068   3.513 -12.446  1.00  0.00           H
ATOM   2227  HG3 GLU A 238      12.060   2.904 -14.068  1.00  0.00           H
ATOM   2228  N   GLU A 239      15.454   0.443 -10.290  1.00 30.17           N
ATOM   2229  CA  GLU A 239      16.517  -0.356  -9.699  1.00 30.22           C
ATOM   2230  C   GLU A 239      15.972  -1.689  -9.109  1.00 30.36           C
ATOM   2231  O   GLU A 239      16.668  -2.708  -9.119  1.00 29.89           O
ATOM   2232  CB  GLU A 239      17.203   0.562  -8.656  1.00 31.52           C
ATOM   2233  CG  GLU A 239      18.520   0.049  -8.040  1.00 34.59           C
ATOM   2234  CD  GLU A 239      19.202   1.097  -7.156  1.00 35.31           C
ATOM   2235  OE1 GLU A 239      19.260   2.282  -7.549  1.00 38.54           O
ATOM   2236  OE2 GLU A 239      19.677   0.712  -6.062  1.00 36.01           O1-
ATOM   2237  H   GLU A 239      15.200   1.291  -9.804  1.00  0.00           H
ATOM   2238  HA  GLU A 239      17.233  -0.598 -10.486  1.00  0.00           H
ATOM   2239  HB2 GLU A 239      17.412   1.521  -9.133  1.00  0.00           H
ATOM   2240  HB3 GLU A 239      16.506   0.790  -7.848  1.00  0.00           H
ATOM   2241  HG2 GLU A 239      18.340  -0.852  -7.454  1.00  0.00           H
ATOM   2242  HG3 GLU A 239      19.222  -0.220  -8.828  1.00  0.00           H
ATOM   2243  N   TYR A 240      14.695  -1.742  -8.694  1.00 29.40           N
ATOM   2244  CA  TYR A 240      14.076  -2.818  -7.918  1.00 26.76           C
ATOM   2245  C   TYR A 240      12.849  -3.419  -8.621  1.00 26.94           C
ATOM   2246  O   TYR A 240      12.186  -2.785  -9.440  1.00 26.38           O
ATOM   2247  CB  TYR A 240      13.757  -2.308  -6.498  1.00 25.17           C
ATOM   2248  CG  TYR A 240      15.000  -1.850  -5.757  1.00 22.76           C
ATOM   2249  CD1 TYR A 240      15.942  -2.791  -5.298  1.00 23.97           C
ATOM   2250  CD2 TYR A 240      15.263  -0.476  -5.599  1.00 23.51           C
ATOM   2251  CE1 TYR A 240      17.146  -2.368  -4.713  1.00 21.82           C
ATOM   2252  CE2 TYR A 240      16.476  -0.047  -5.032  1.00 21.33           C
ATOM   2253  CZ  TYR A 240      17.422  -0.996  -4.607  1.00 21.91           C
ATOM   2254  OH  TYR A 240      18.637  -0.590  -4.160  1.00 23.59           O
ATOM   2255  H   TYR A 240      14.104  -0.931  -8.850  1.00  0.00           H
ATOM   2256  HA  TYR A 240      14.789  -3.632  -7.809  1.00  0.00           H
ATOM   2257  HB2 TYR A 240      13.030  -1.494  -6.539  1.00  0.00           H
ATOM   2258  HB3 TYR A 240      13.285  -3.096  -5.910  1.00  0.00           H
ATOM   2259  HD1 TYR A 240      15.766  -3.840  -5.419  1.00  0.00           H
ATOM   2260  HD2 TYR A 240      14.553   0.260  -5.941  1.00  0.00           H
ATOM   2261  HE1 TYR A 240      17.877  -3.092  -4.385  1.00  0.00           H
ATOM   2262  HE2 TYR A 240      16.688   1.011  -4.962  1.00  0.00           H
ATOM   2263  HH  TYR A 240      19.052  -0.087  -4.885  1.00  0.00           H
ATOM   2264  N   ASP A 241      12.558  -4.682  -8.311  1.00 27.29           N
ATOM   2265  CA  ASP A 241      11.440  -5.480  -8.822  1.00 26.93           C
ATOM   2266  C   ASP A 241      10.342  -5.604  -7.762  1.00 26.42           C
ATOM   2267  O   ASP A 241       9.203  -5.917  -8.098  1.00 27.05           O
ATOM   2268  CB  ASP A 241      11.923  -6.914  -9.137  1.00 27.77           C
ATOM   2269  CG  ASP A 241      12.815  -6.969 -10.361  1.00 27.65           C
ATOM   2270  OD1 ASP A 241      12.287  -7.324 -11.432  1.00 25.77           O
ATOM   2271  OD2 ASP A 241      14.009  -6.621 -10.221  1.00 26.65           O1-
ATOM   2272  H   ASP A 241      13.124  -5.147  -7.603  1.00  0.00           H
ATOM   2273  HA  ASP A 241      11.005  -5.040  -9.721  1.00  0.00           H
ATOM   2274  HB2 ASP A 241      12.481  -7.333  -8.300  1.00  0.00           H
ATOM   2275  HB3 ASP A 241      11.075  -7.579  -9.310  1.00  0.00           H
ATOM   2276  N   TRP A 242      10.666  -5.369  -6.486  1.00 24.04           N
ATOM   2277  CA  TRP A 242       9.768  -5.410  -5.338  1.00 24.23           C
ATOM   2278  C   TRP A 242      10.014  -4.191  -4.447  1.00 23.82           C
ATOM   2279  O   TRP A 242      11.063  -3.552  -4.533  1.00 22.71           O
ATOM   2280  CB  TRP A 242       9.923  -6.716  -4.532  1.00 23.96           C
ATOM   2281  CG  TRP A 242       9.686  -8.060  -5.159  1.00 23.75           C
ATOM   2282  CD1 TRP A 242      10.389  -8.596  -6.181  1.00 26.08           C
ATOM   2283  CD2 TRP A 242       8.770  -9.111  -4.725  1.00 25.48           C
ATOM   2284  NE1 TRP A 242       9.992  -9.900  -6.396  1.00 23.93           N
ATOM   2285  CE3 TRP A 242       7.758  -9.204  -3.741  1.00 25.82           C
ATOM   2286  CE2 TRP A 242       9.067 -10.298  -5.460  1.00 25.93           C
ATOM   2287  CZ3 TRP A 242       7.133 -10.432  -3.450  1.00 26.34           C
ATOM   2288  CZ2 TRP A 242       8.469 -11.531  -5.168  1.00 26.43           C
ATOM   2289  CH2 TRP A 242       7.514 -11.598  -4.140  1.00 24.99           C
ATOM   2290  H   TRP A 242      11.616  -5.086  -6.285  1.00  0.00           H
ATOM   2291  HA  TRP A 242       8.743  -5.311  -5.686  1.00  0.00           H
ATOM   2292  HB2 TRP A 242      10.931  -6.747  -4.127  1.00  0.00           H
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ATOM   2293  HB3 TRP A 242      9.272  -6.666  -3.661  1.00  0.00           H
ATOM   2294  HD1 TRP A 242     11.188  -8.085  -6.691  1.00  0.00           H
ATOM   2295  HE1 TRP A 242     10.442 -10.509  -7.071  1.00  0.00           H
ATOM   2296  HE3 TRP A 242      7.485  -8.326  -3.176  1.00  0.00           H
ATOM   2297  HZ3 TRP A 242      6.369 -10.483  -2.687  1.00  0.00           H
ATOM   2298  HZ2 TRP A 242      8.727 -12.416  -5.731  1.00  0.00           H
ATOM   2299  HH2 TRP A 242      7.045 -12.543  -3.911  1.00  0.00           H
ATOM   2300  N   TYR A 243      9.057  -3.897  -3.568  1.00 22.84           N
ATOM   2301  CA  TYR A 243      9.073  -2.793  -2.624  1.00 21.90           C
ATOM   2302  C   TYR A 243      8.459  -3.236  -1.296  1.00 22.39           C
ATOM   2303  O   TYR A 243      7.467  -3.969  -1.284  1.00 22.11           O
ATOM   2304  CB  TYR A 243      8.381  -1.555  -3.229  1.00 22.85           C
ATOM   2305  CG  TYR A 243      6.857  -1.604  -3.337  1.00 20.92           C
ATOM   2306  CD1 TYR A 243      6.230  -2.434  -4.289  1.00 18.97           C
ATOM   2307  CD2 TYR A 243      6.053  -0.829  -2.473  1.00 20.38           C
ATOM   2308  CE1 TYR A 243      4.833  -2.448  -4.421  1.00 18.11           C
ATOM   2309  CE2 TYR A 243      4.650  -0.856  -2.589  1.00 20.28           C
ATOM   2310  CZ  TYR A 243      4.041  -1.653  -3.573  1.00 19.55           C
ATOM   2311  OH  TYR A 243      2.688  -1.654  -3.715  1.00 19.44           O
ATOM   2312  H   TYR A 243      8.221  -4.485  -3.535  1.00  0.00           H
ATOM   2313  HA  TYR A 243     10.114  -2.526  -2.431  1.00  0.00           H
ATOM   2314  HB2 TYR A 243      8.659  -0.691  -2.630  1.00  0.00           H
ATOM   2315  HB3 TYR A 243      8.796  -1.351  -4.216  1.00  0.00           H
ATOM   2316  HD1 TYR A 243      6.808  -3.082  -4.925  1.00  0.00           H
ATOM   2317  HD2 TYR A 243      6.503  -0.216  -1.711  1.00  0.00           H
ATOM   2318  HE1 TYR A 243      4.377  -3.088  -5.165  1.00  0.00           H
ATOM   2319  HE2 TYR A 243      4.036  -0.256  -1.932  1.00  0.00           H
ATOM   2320  HH  TYR A 243      2.232  -1.258  -2.942  1.00  0.00           H
ATOM   2321  N   TRP A 244      9.030  -2.777  -0.179  1.00 20.85           N
ATOM   2322  CA  TRP A 244      8.372  -2.734   1.118  1.00 20.48           C
ATOM   2323  C   TRP A 244      8.020  -1.261   1.338  1.00 21.37           C
ATOM   2324  O   TRP A 244      8.911  -0.453   1.601  1.00 18.99           O
ATOM   2325  CB  TRP A 244      9.326  -3.214   2.228  1.00 20.36           C
ATOM   2326  CG  TRP A 244      8.704  -3.609   3.531  1.00 22.78           C
ATOM   2327  CD1 TRP A 244      7.512  -3.210   4.036  1.00 24.36           C
ATOM   2328  CD2 TRP A 244      9.244  -4.559   4.490  1.00 23.95           C
ATOM   2329  NE1 TRP A 244      7.287  -3.845   5.239  1.00 23.22           N
ATOM   2330  CE3 TRP A 244     10.416  -5.344   4.535  1.00 24.80           C
ATOM   2331  CE2 TRP A 244      8.322  -4.693   5.570  1.00 24.71           C
ATOM   2332  CZ3 TRP A 244     10.654  -6.234   5.597  1.00 26.03           C
ATOM   2333  CZ2 TRP A 244      8.550  -5.571   6.641  1.00 26.18           C
ATOM   2334  CH2 TRP A 244      9.714  -6.358   6.638  1.00 24.87           C
ATOM   2335  H   TRP A 244      9.931  -2.311  -0.258  1.00  0.00           H
ATOM   2336  HA  TRP A 244      7.503  -3.379   1.132  1.00  0.00           H
ATOM   2337  HB2 TRP A 244      9.859  -4.091   1.875  1.00  0.00           H
ATOM   2338  HB3 TRP A 244     10.104  -2.497   2.460  1.00  0.00           H
ATOM   2339  HD1 TRP A 244      6.828  -2.524   3.557  1.00  0.00           H
ATOM   2340  HE1 TRP A 244      6.405  -3.768   5.733  1.00  0.00           H
ATOM   2341  HE3 TRP A 244     11.141  -5.261   3.740  1.00  0.00           H
ATOM   2342  HZ3 TRP A 244     11.560  -6.821   5.602  1.00  0.00           H
ATOM   2343  HZ2 TRP A 244      7.832  -5.670   7.440  1.00  0.00           H
ATOM   2344  HH2 TRP A 244      9.893  -7.057   7.436  1.00  0.00           H
ATOM   2345  N   ARG A 245      6.746  -0.882   1.214  1.00 21.39           N
ATOM   2346  CA  ARG A 245      6.314   0.471   1.549  1.00 21.27           C
ATOM   2347  C   ARG A 245      6.260   0.609   3.074  1.00 18.90           C
ATOM   2348  O   ARG A 245      5.504  -0.101   3.738  1.00 20.72           O
ATOM   2349  CB  ARG A 245      4.943   0.791   0.929  1.00 22.80           C
ATOM   2350  CG  ARG A 245      4.415   2.192   1.308  1.00 24.05           C
ATOM   2351  CD  ARG A 245      3.465   2.750   0.259  1.00 22.81           C
ATOM   2352  NE  ARG A 245      2.660   3.805   0.857  1.00 24.70           N
ATOM   2353  CZ  ARG A 245      1.454   4.118   0.357  1.00 24.50           C
ATOM   2354  NH1 ARG A 245      1.160   3.724  -0.872  1.00 21.87           N
ATOM   2355  NH2 ARG A 245      0.593   4.829   1.083  1.00 25.57           N1+
ATOM   2356  H   ARG A 245      6.054  -1.605   1.019  1.00  0.00           H
ATOM   2357  HA  ARG A 245      7.029   1.185   1.143  1.00  0.00           H
ATOM   2358  HB2 ARG A 245      5.052   0.734  -0.152  1.00  0.00           H
ATOM   2359  HB3 ARG A 245      4.203   0.036   1.200  1.00  0.00           H
ATOM   2360  HG2 ARG A 245      3.930   2.141   2.287  1.00  0.00           H
ATOM   2361  HG3 ARG A 245      5.253   2.888   1.411  1.00  0.00           H
ATOM   2362  HD2 ARG A 245      4.056   3.119  -0.584  1.00  0.00           H
ATOM   2363  HD3 ARG A 245      2.816   1.939  -0.076  1.00  0.00           H
ATOM   2364  HE  ARG A 245      2.895   4.164   1.769  1.00  0.00           H
ATOM   2365 HH11 ARG A 245      1.879   3.412  -1.525  1.00  0.00           H
ATOM   2366 HH12 ARG A 245      0.188   3.827  -1.232  1.00  0.00           H
ATOM   2367 HH21 ARG A 245      0.709   4.960   2.088  1.00  0.00           H
ATOM   2368 HH22 ARG A 245     -0.307   5.079   0.688  1.00  0.00           H
ATOM   2369  N   VAL A 246      7.057   1.541   3.600  1.00 18.37           N
ATOM   2370  CA  VAL A 246      7.093   1.923   4.998  1.00 17.88           C
ATOM   2371  C   VAL A 246      6.770   3.425   5.036  1.00 17.66           C
ATOM   2372  O   VAL A 246      7.508   4.251   4.491  1.00 16.95           O
ATOM   2373  CB  VAL A 246      8.473   1.565   5.620  1.00 20.27           C
ATOM   2374  CG1 VAL A 246      8.522   1.900   7.122  1.00 18.44           C
ATOM   2375  CG2 VAL A 246      8.860   0.087   5.406  1.00 22.05           C
ATOM   2376  H   VAL A 246      7.675   2.049   2.968  1.00  0.00           H
ATOM   2377  HA  VAL A 246      6.320   1.387   5.553  1.00  0.00           H
ATOM   2378  HB  VAL A 246      9.239   2.163   5.123  1.00  0.00           H
ATOM   2379 HG11 VAL A 246      9.463   1.583   7.569  1.00  0.00           H
ATOM   2380 HG12 VAL A 246      8.427   2.973   7.290  1.00  0.00           H
ATOM   2381 HG13 VAL A 246      7.719   1.401   7.665  1.00  0.00           H
ATOM   2382 HG21 VAL A 246      9.813  -0.148   5.883  1.00  0.00           H
ATOM   2383 HG22 VAL A 246      8.107  -0.589   5.811  1.00  0.00           H
ATOM   2384 HG23 VAL A 246      8.977  -0.151   4.348  1.00  0.00           H
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ATOM   2385  N   GLU A 247      5.652   3.781   5.672  1.00 18.37           N
ATOM   2386  CA  GLU A 247      5.255   5.162   5.948  1.00 17.71           C
ATOM   2387  C   GLU A 247      5.936   5.644   7.257  1.00 18.77           C
ATOM   2388  O   GLU A 247      6.456   4.826   8.030  1.00 19.80           O
ATOM   2389  CB  GLU A 247      3.706   5.189   6.088  1.00 17.17           C
ATOM   2390  CG  GLU A 247      3.010   5.423   4.739  1.00 16.44           C
ATOM   2391  CD  GLU A 247      1.598   6.006   4.804  1.00 20.59           C
ATOM   2392  OE1 GLU A 247      1.447   6.978   5.598  1.00 21.32           O
ATOM   2393  OE2 GLU A 247      0.742   5.556   4.011  1.00 23.91           O1-
ATOM   2394  H   GLU A 247      5.084   3.046   6.066  1.00  0.00           H
ATOM   2395  HA  GLU A 247      5.590   5.817   5.143  1.00  0.00           H
ATOM   2396  HB2 GLU A 247      3.339   4.262   6.533  1.00  0.00           H
ATOM   2397  HB3 GLU A 247      3.420   5.962   6.805  1.00  0.00           H
ATOM   2398  HG2 GLU A 247      3.584   6.169   4.183  1.00  0.00           H
ATOM   2399  HG3 GLU A 247      3.036   4.489   4.179  1.00  0.00           H
ATOM   2400  N   PRO A 248      5.959   6.966   7.535  1.00 19.92           N
ATOM   2401  CA  PRO A 248      6.482   7.509   8.794  1.00 20.59           C
ATOM   2402  C   PRO A 248      5.516   7.257   9.966  1.00 20.76           C
ATOM   2403  O   PRO A 248      4.310   7.114   9.760  1.00 20.31           O
ATOM   2404  CB  PRO A 248      6.673   9.007   8.523  1.00 22.82           C
ATOM   2405  CG  PRO A 248      5.663   9.336   7.437  1.00 21.16           C
ATOM   2406  CD  PRO A 248      5.503   8.039   6.649  1.00 20.35           C
ATOM   2407  HA  PRO A 248      7.441   7.047   9.011  1.00  0.00           H
ATOM   2408  HB2 PRO A 248      6.555   9.636   9.408  1.00  0.00           H
ATOM   2409  HB3 PRO A 248      7.673   9.182   8.132  1.00  0.00           H
ATOM   2410  HG2 PRO A 248      4.711   9.610   7.891  1.00  0.00           H
ATOM   2411  HG3 PRO A 248      5.972  10.166   6.803  1.00  0.00           H
ATOM   2412  HD2 PRO A 248      4.466   7.911   6.338  1.00  0.00           H
ATOM   2413  HD3 PRO A 248      6.127   8.065   5.753  1.00  0.00           H
ATOM   2414  N   ASP A 249      6.053   7.186  11.193  1.00 20.20           N
ATOM   2415  CA  ASP A 249      5.329   7.030  12.465  1.00 19.81           C
ATOM   2416  C   ASP A 249      4.861   5.585  12.718  1.00 20.04           C
ATOM   2417  O   ASP A 249      3.950   5.353  13.511  1.00 20.11           O
ATOM   2418  CB  ASP A 249      4.250   8.130  12.709  1.00  0.00           C
ATOM   2419  CG  ASP A 249      4.696   9.215  13.688  1.00  0.00           C
ATOM   2420  OD1 ASP A 249      5.011   9.005  14.858  1.00  0.00           O
ATOM   2421  OD2 ASP A 249      4.714  10.448  13.118  1.00  0.00           O
ATOM   2422  H   ASP A 249      7.059   7.247  11.278  1.00  0.00           H
ATOM   2423  HA  ASP A 249      6.097   7.151  13.229  1.00  0.00           H
ATOM   2424  HB2 ASP A 249      3.909   8.597  11.786  1.00  0.00           H
ATOM   2425  HB3 ASP A 249      3.349   7.707  13.147  1.00  0.00           H
ATOM   2426  HD2 ASP A 249      4.865  11.144  13.769  1.00  0.00           H
ATOM   2427  N   ILE A 250      5.472   4.604  12.042  1.00 19.14           N
ATOM   2428  CA  ILE A 250      5.110   3.190  12.102  1.00 20.37           C
ATOM   2429  C   ILE A 250      5.807   2.508  13.295  1.00 19.83           C
ATOM   2430  O   ILE A 250      6.836   2.965  13.806  1.00 20.11           O
ATOM   2431  CB  ILE A 250      5.441   2.532  10.714  1.00 21.38           C
ATOM   2432  CG1 ILE A 250      4.180   2.453   9.832  1.00 23.63           C
ATOM   2433  CG2 ILE A 250      6.114   1.139  10.725  1.00 22.17           C
ATOM   2434  CD1 ILE A 250      3.501   3.792   9.540  1.00 20.80           C
ATOM   2435  H   ILE A 250      6.284   4.844  11.484  1.00  0.00           H
ATOM   2436  HA  ILE A 250      4.038   3.119  12.285  1.00  0.00           H
ATOM   2437  HB  ILE A 250      6.139   3.170  10.182  1.00  0.00           H
ATOM   2438 HG12 ILE A 250      4.442   2.000   8.875  1.00  0.00           H
ATOM   2439 HG13 ILE A 250      3.451   1.791  10.300  1.00  0.00           H
ATOM   2440 HG21 ILE A 250      6.339   0.807   9.711  1.00  0.00           H
ATOM   2441 HG22 ILE A 250      7.062   1.141  11.262  1.00  0.00           H
ATOM   2442 HG23 ILE A 250      5.472   0.382  11.177  1.00  0.00           H
ATOM   2443 HD11 ILE A 250      2.705   3.655   8.810  1.00  0.00           H
ATOM   2444 HD12 ILE A 250      3.066   4.235  10.435  1.00  0.00           H
ATOM   2445 HD13 ILE A 250      4.197   4.516   9.132  1.00  0.00           H
ATOM   2446  N   LYS A 251      5.209   1.391  13.719  1.00 20.52           N
ATOM   2447  CA  LYS A 251      5.706   0.434  14.695  1.00 20.36           C
ATOM   2448  C   LYS A 251      5.611  -0.950  14.030  1.00 21.67           C
ATOM   2449  O   LYS A 251      4.603  -1.232  13.377  1.00 19.23           O
ATOM   2450  CB  LYS A 251      4.839   0.498  15.978  1.00 20.47           C
ATOM   2451  CG  LYS A 251      4.624   1.915  16.568  1.00 20.09           C
ATOM   2452  CD  LYS A 251      3.460   1.989  17.570  1.00 22.23           C
ATOM   2453  CE  LYS A 251      3.822   1.622  19.011  1.00 20.07           C
ATOM   2454  NZ  LYS A 251      2.606   1.357  19.801  1.00 21.10           N1+
ATOM   2455  H   LYS A 251      4.356   1.114  13.242  1.00  0.00           H
ATOM   2456  HA  LYS A 251      6.746   0.652  14.926  1.00  0.00           H
ATOM   2457  HB2 LYS A 251      3.869   0.058  15.752  1.00  0.00           H
ATOM   2458  HB3 LYS A 251      5.275  -0.151  16.740  1.00  0.00           H
ATOM   2459  HG2 LYS A 251      5.547   2.298  17.006  1.00  0.00           H
ATOM   2460  HG3 LYS A 251      4.371   2.612  15.770  1.00  0.00           H
ATOM   2461  HD2 LYS A 251      3.068   3.007  17.578  1.00  0.00           H
ATOM   2462  HD3 LYS A 251      2.640   1.365  17.223  1.00  0.00           H
ATOM   2463  HE2 LYS A 251      4.477   0.754  19.026  1.00  0.00           H
ATOM   2464  HE3 LYS A 251      4.380   2.441  19.463  1.00  0.00           H
ATOM   2465  HZ1 LYS A 251      1.931   2.116  19.654  1.00  0.00           H
ATOM   2466  HZ2 LYS A 251      2.143   0.501  19.500  1.00  0.00           H
ATOM   2467  HZ3 LYS A 251      2.798   1.314  20.799  1.00  0.00           H
ATOM   2468  N   LEU A 252      6.625  -1.807  14.202  1.00 19.01           N
ATOM   2469  CA  LEU A 252      6.556  -3.245  13.938  1.00 20.86           C
ATOM   2470  C   LEU A 252      6.732  -3.901  15.302  1.00 19.45           C
ATOM   2471  O   LEU A 252      7.783  -3.749  15.914  1.00 21.96           O
ATOM   2472  CB  LEU A 252      7.707  -3.717  13.013  1.00 21.87           C
ATOM   2473  CG  LEU A 252      7.351  -3.817  11.517  1.00 22.64           C
ATOM   2474  CD1 LEU A 252      8.609  -4.167  10.712  1.00 23.58           C
ATOM   2475  CD2 LEU A 252      6.274  -4.881  11.251  1.00 23.00           C
ATOM   2476  H   LEU A 252      7.366  -1.542  14.839  1.00  0.00           H
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ATOM   2477  HA  LEU A 252       5.586  -3.536  13.541  1.00  0.00           H
ATOM   2478  HB2 LEU A 252       8.573  -3.069  13.149  1.00  0.00           H
ATOM   2479  HB3 LEU A 252       8.051  -4.707  13.323  1.00  0.00           H
ATOM   2480  HG  LEU A 252       6.984  -2.847  11.179  1.00  0.00           H
ATOM   2481 HD11 LEU A 252       8.419  -4.151   9.638  1.00  0.00           H
ATOM   2482 HD12 LEU A 252       9.407  -3.461  10.922  1.00  0.00           H
ATOM   2483 HD13 LEU A 252       8.984  -5.158  10.971  1.00  0.00           H
ATOM   2484 HD21 LEU A 252       6.105  -5.022  10.184  1.00  0.00           H
ATOM   2485 HD22 LEU A 252       6.569  -5.846  11.666  1.00  0.00           H
ATOM   2486 HD23 LEU A 252       5.315  -4.620  11.690  1.00  0.00           H
ATOM   2487  N   TYR A 253      5.711  -4.599  15.787  1.00 20.60           N
ATOM   2488  CA  TYR A 253      5.695  -5.154  17.132  1.00 20.37           C
ATOM   2489  C   TYR A 253      6.321  -6.549  17.143  1.00 19.45           C
ATOM   2490  O   TYR A 253      7.098  -6.865  18.039  1.00 22.46           O
ATOM   2491  CB  TYR A 253      4.229  -5.305  17.562  1.00 19.57           C
ATOM   2492  CG  TYR A 253      3.468  -3.998  17.680  1.00 20.14           C
ATOM   2493  CD1 TYR A 253      3.945  -2.987  18.535  1.00 20.07           C
ATOM   2494  CD2 TYR A 253      2.235  -3.824  17.018  1.00 19.83           C
ATOM   2495  CE1 TYR A 253      3.169  -1.843  18.768  1.00 20.33           C
ATOM   2496  CE2 TYR A 253      1.459  -2.678  17.256  1.00 19.82           C
ATOM   2497  CZ  TYR A 253      1.920  -1.686  18.141  1.00 18.82           C
ATOM   2498  OH  TYR A 253      1.149  -0.595  18.414  1.00 18.72           O
ATOM   2499  H   TYR A 253      4.912  -4.774  15.187  1.00  0.00           H
ATOM   2500  HA  TYR A 253      6.239  -4.517  17.834  1.00  0.00           H
ATOM   2501  HB2 TYR A 253      3.694  -5.979  16.893  1.00  0.00           H
ATOM   2502  HB3 TYR A 253      4.195  -5.783  18.540  1.00  0.00           H
ATOM   2503  HD1 TYR A 253      4.875  -3.107  19.076  1.00  0.00           H
ATOM   2504  HD2 TYR A 253      1.829  -4.600  16.389  1.00  0.00           H
ATOM   2505  HE1 TYR A 253      3.525  -1.132  19.491  1.00  0.00           H
ATOM   2506  HE2 TYR A 253      0.492  -2.594  16.783  1.00  0.00           H
ATOM   2507  HH  TYR A 253      0.207  -0.801  18.241  1.00  0.00           H
ATOM   2508  N   CYS A 254      6.006  -7.385  16.149  1.00 22.80           N
ATOM   2509  CA  CYS A 254      6.552  -8.734  16.048  1.00 23.68           C
ATOM   2510  C   CYS A 254      7.865  -8.661  15.270  1.00 22.63           C
ATOM   2511  O   CYS A 254      7.965  -7.964  14.258  1.00 23.04           O
ATOM   2512  CB  CYS A 254      5.583  -9.637  15.273  1.00 23.53           C
ATOM   2513  SG  CYS A 254      3.942  -9.798  16.031  1.00 25.59           S
ATOM   2514  H   CYS A 254      5.472  -7.029  15.371  1.00  0.00           H
ATOM   2515  HA  CYS A 254      6.727  -9.160  17.035  1.00  0.00           H
ATOM   2516  HB2 CYS A 254      5.453  -9.262  14.258  1.00  0.00           H
ATOM   2517  HB3 CYS A 254      6.002 -10.640  15.166  1.00  0.00           H
ATOM   2518  N   ASP A 255      8.866  -9.388  15.765  1.00 22.72           N
ATOM   2519  CA  ASP A 255     10.135  -9.655  15.112  1.00 23.70           C
ATOM   2520  C   ASP A 255      9.866 -10.608  13.957  1.00 24.37           C
ATOM   2521  O   ASP A 255      9.414 -11.730  14.164  1.00 24.71           O
ATOM   2522  CB  ASP A 255     11.104 -10.340  16.102  1.00 25.02           C
ATOM   2523  CG  ASP A 255     12.041  -9.347  16.750  1.00 25.86           C
ATOM   2524  OD1 ASP A 255     11.669  -8.786  17.808  1.00 25.31           O
ATOM   2525  OD2 ASP A 255     13.118  -9.161  16.144  1.00 30.23           O1-
ATOM   2526  H   ASP A 255      8.623 -10.023  16.528  1.00  0.00           H
ATOM   2527  HA  ASP A 255     10.562  -8.731  14.719  1.00  0.00           H
ATOM   2528  HB2 ASP A 255     10.570 -10.893  16.873  1.00  0.00           H
ATOM   2529  HB3 ASP A 255     11.725 -11.082  15.601  1.00  0.00           H
ATOM   2530  N   ILE A 256     10.149 -10.153  12.741  1.00 23.24           N
ATOM   2531  CA  ILE A 256      9.976 -10.925  11.526  1.00 25.08           C
ATOM   2532  C   ILE A 256     11.309 -11.676  11.393  1.00 24.17           C
ATOM   2533  O   ILE A 256     12.376 -11.067  11.271  1.00 23.01           O
ATOM   2534  CB  ILE A 256      9.722  -9.956  10.341  1.00 24.13           C
ATOM   2535  CG1 ILE A 256      8.597  -8.933  10.655  1.00 24.74           C
ATOM   2536  CG2 ILE A 256      9.382 -10.748   9.062  1.00 23.47           C
ATOM   2537  CD1 ILE A 256      8.471  -7.797   9.637  1.00 24.32           C
ATOM   2538  H   ILE A 256     10.582  -9.244  12.642  1.00  0.00           H
ATOM   2539  HA  ILE A 256      9.136 -11.618  11.622  1.00  0.00           H
ATOM   2540  HB  ILE A 256     10.636  -9.395  10.159  1.00  0.00           H
ATOM   2541 HG12 ILE A 256      7.649  -9.458  10.749  1.00  0.00           H
ATOM   2542 HG13 ILE A 256      8.754  -8.451  11.619  1.00  0.00           H
ATOM   2543 HG21 ILE A 256      9.277 -10.089   8.205  1.00  0.00           H
ATOM   2544 HG22 ILE A 256     10.156 -11.472   8.806  1.00  0.00           H
ATOM   2545 HG23 ILE A 256      8.445 -11.298   9.167  1.00  0.00           H
ATOM   2546 HD11 ILE A 256      7.661  -7.123   9.913  1.00  0.00           H
ATOM   2547 HD12 ILE A 256      9.390  -7.212   9.601  1.00  0.00           H
ATOM   2548 HD13 ILE A 256      8.253  -8.167   8.637  1.00  0.00           H
ATOM   2549  N   ASN A 257     11.255 -12.999  11.548  1.00 25.64           N
ATOM   2550  CA  ASN A 257     12.422 -13.866  11.735  1.00 27.73           C
ATOM   2551  C   ASN A 257     12.659 -14.737  10.497  1.00 27.85           C
ATOM   2552  O   ASN A 257     13.146 -15.861  10.584  1.00 27.48           O
ATOM   2553  CB  ASN A 257     12.298 -14.677  13.046  1.00 29.60           C
ATOM   2554  CG  ASN A 257     12.403 -13.788  14.288  1.00 31.61           C
ATOM   2555  OD1 ASN A 257     13.326 -12.978  14.405  1.00 33.94           O
ATOM   2556  ND2 ASN A 257     11.439 -13.865  15.194  1.00 33.79           N
ATOM   2557  H   ASN A 257     10.343 -13.412  11.692  1.00  0.00           H
ATOM   2558  HA  ASN A 257     13.328 -13.265  11.817  1.00  0.00           H
ATOM   2559  HB2 ASN A 257     11.365 -15.243  13.057  1.00  0.00           H
ATOM   2560  HB3 ASN A 257     13.101 -15.411  13.116  1.00  0.00           H
ATOM   2561 HD21 ASN A 257     10.589 -14.406  15.007  1.00  0.00           H
ATOM   2562 HD22 ASN A 257     11.473 -13.294  16.021  1.00  0.00           H
ATOM   2563  N   TYR A 258     12.354 -14.173   9.329  1.00 29.16           N
ATOM   2564  CA  TYR A 258     12.655 -14.675   8.002  1.00 29.16           C
ATOM   2565  C   TYR A 258     12.800 -13.468   7.070  1.00 28.34           C
ATOM   2566  O   TYR A 258     12.280 -12.388   7.360  1.00 28.39           O
ATOM   2567  CB  TYR A 258     11.617 -15.725   7.552  1.00 29.46           C
ATOM   2568  CG  TYR A 258     10.197 -15.205   7.410  1.00 30.02           C
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ATOM   2569  CD1 TYR A 258       9.346 -15.156   8.534  1.00 31.04          C
ATOM   2570  CD2 TYR A 258       9.728 -14.753   6.158  1.00 30.30          C
ATOM   2571  CE1 TYR A 258       8.040 -14.647   8.410  1.00 29.83          C
ATOM   2572  CE2 TYR A 258       8.417 -14.258   6.033  1.00 30.49          C
ATOM   2573  CZ  TYR A 258       7.577 -14.198   7.159  1.00 31.23          C
ATOM   2574  OH  TYR A 258       6.319 -13.702   7.027  1.00 30.56          O
ATOM   2575  H   TYR A 258      11.986 -13.229   9.332  1.00  0.00          H
ATOM   2576  HA  TYR A 258      13.632 -15.160   8.046  1.00  0.00          H
ATOM   2577  HB2 TYR A 258      11.924 -16.150   6.596  1.00  0.00          H
ATOM   2578  HB3 TYR A 258      11.613 -16.562   8.252  1.00  0.00          H
ATOM   2579  HD1 TYR A 258       9.691 -15.501   9.497  1.00  0.00          H
ATOM   2580  HD2 TYR A 258      10.369 -14.777   5.291  1.00  0.00          H
ATOM   2581  HE1 TYR A 258       7.392 -14.602   9.274  1.00  0.00          H
ATOM   2582  HE2 TYR A 258       8.047 -13.921   5.077  1.00  0.00          H
ATOM   2583  HH  TYR A 258       5.831 -13.647   7.878  1.00  0.00          H
ATOM   2584  N   ASP A 259      13.499 -13.643   5.946  1.00 26.74          N
ATOM   2585  CA  ASP A 259      13.631 -12.631   4.902  1.00 25.98          C
ATOM   2586  C   ASP A 259      12.366 -12.707   4.034  1.00 26.85          C
ATOM   2587  O   ASP A 259      12.141 -13.714   3.357  1.00 26.32          O
ATOM   2588  CB  ASP A 259      14.893 -12.955   4.076  1.00 24.33          C
ATOM   2589  CG  ASP A 259      15.201 -11.956   2.965  1.00 23.76          C
ATOM   2590  OD1 ASP A 259      14.351 -11.703   2.081  1.00 24.79          O
ATOM   2591  OD2 ASP A 259      16.332 -11.428   2.968  1.00 24.27          O1-
ATOM   2592  H   ASP A 259      13.881 -14.554   5.755  1.00  0.00          H
ATOM   2593  HA  ASP A 259      13.736 -11.637   5.342  1.00  0.00          H
ATOM   2594  HB2 ASP A 259      15.756 -12.986   4.735  1.00  0.00          H
ATOM   2595  HB3 ASP A 259      14.833 -13.955   3.655  1.00  0.00          H
ATOM   2596  N   VAL A 260      11.517 -11.676   4.107  1.00 27.13          N
ATOM   2597  CA  VAL A 260      10.189 -11.646   3.500  1.00 26.80          C
ATOM   2598  C   VAL A 260      10.215 -11.801   1.968  1.00 26.31          C
ATOM   2599  O   VAL A 260       9.444 -12.591   1.431  1.00 25.15          O
ATOM   2600  CB  VAL A 260       9.413 -10.380   3.955  1.00 27.92          C
ATOM   2601  CG1 VAL A 260       9.153 -10.403   5.470  1.00 27.39          C
ATOM   2602  CG2 VAL A 260      10.060  -9.040   3.548  1.00 30.01          C
ATOM   2603  H   VAL A 260      11.737 -10.937   4.757  1.00  0.00          H
ATOM   2604  HA  VAL A 260       9.650 -12.516   3.882  1.00  0.00          H
ATOM   2605  HB  VAL A 260       8.433 -10.417   3.476  1.00  0.00          H
ATOM   2606 HG11 VAL A 260       8.549  -9.551   5.783  1.00  0.00          H
ATOM   2607 HG12 VAL A 260       8.612 -11.303   5.767  1.00  0.00          H
ATOM   2608 HG13 VAL A 260      10.082 -10.377   6.039  1.00  0.00          H
ATOM   2609 HG21 VAL A 260       9.463  -8.201   3.906  1.00  0.00          H
ATOM   2610 HG22 VAL A 260      11.065  -8.926   3.954  1.00  0.00          H
ATOM   2611 HG23 VAL A 260      10.115  -8.929   2.466  1.00  0.00          H
ATOM   2612  N   PHE A 261      11.119 -11.119   1.255  1.00 25.12          N
ATOM   2613  CA  PHE A 261      11.151 -11.147  -0.210  1.00 24.42          C
ATOM   2614  C   PHE A 261      11.838 -12.415  -0.730  1.00 26.37          C
ATOM   2615  O   PHE A 261      11.455 -12.919  -1.784  1.00 26.96          O
ATOM   2616  CB  PHE A 261      11.895  -9.917  -0.749  1.00 24.90          C
ATOM   2617  CG  PHE A 261      11.166  -8.616  -0.493  1.00 24.87          C
ATOM   2618  CD1 PHE A 261       9.969  -8.348  -1.183  1.00 23.69          C
ATOM   2619  CD2 PHE A 261      11.665  -7.685   0.440  1.00 24.07          C
ATOM   2620  CE1 PHE A 261       9.255  -7.165  -0.926  1.00 23.05          C
ATOM   2621  CE2 PHE A 261      10.953  -6.501   0.698  1.00 26.09          C
ATOM   2622  CZ  PHE A 261       9.742  -6.254   0.026  1.00 24.79          C
ATOM   2623  H   PHE A 261      11.801 -10.560   1.746  1.00  0.00          H
ATOM   2624  HA  PHE A 261      10.132 -11.140  -0.603  1.00  0.00          H
ATOM   2625  HB2 PHE A 261      12.894  -9.862  -0.335  1.00  0.00          H
ATOM   2626  HB3 PHE A 261      12.021 -10.006  -1.827  1.00  0.00          H
ATOM   2627  HD1 PHE A 261       9.594  -9.061  -1.901  1.00  0.00          H
ATOM   2628  HD2 PHE A 261      12.586  -7.871   0.967  1.00  0.00          H
ATOM   2629  HE1 PHE A 261       8.326  -6.957  -1.438  1.00  0.00          H
ATOM   2630  HE2 PHE A 261      11.334  -5.791   1.416  1.00  0.00          H
ATOM   2631  HZ  PHE A 261       9.168  -5.372   0.244  1.00  0.00          H
ATOM   2632  N   LYS A 262      12.777 -12.995   0.033  1.00 25.29          N
ATOM   2633  CA  LYS A 262      13.319 -14.324  -0.230  1.00 27.76          C
ATOM   2634  C   LYS A 262      12.250 -15.413  -0.016  1.00 27.08          C
ATOM   2635  O   LYS A 262      12.370 -16.459  -0.644  1.00 27.65          O
ATOM   2636  CB  LYS A 262      14.515 -14.565   0.717  1.00 27.98          C
ATOM   2637  CG  LYS A 262      15.219 -15.941   0.695  1.00 31.68          C
ATOM   2638  CD  LYS A 262      16.085 -16.225  -0.548  1.00 35.77          C
ATOM   2639  CE  LYS A 262      15.614 -17.431  -1.385  1.00 38.98          C
ATOM   2640  NZ  LYS A 262      14.480 -17.089  -2.248  1.00 38.71          N1+
ATOM   2641  H   LYS A 262      13.098 -12.515   0.877  1.00  0.00          H
ATOM   2642  HA  LYS A 262      13.659 -14.363  -1.267  1.00  0.00          H
ATOM   2643  HB2 LYS A 262      15.258 -13.780   0.571  1.00  0.00          H
ATOM   2644  HB3 LYS A 262      14.131 -14.432   1.723  1.00  0.00          H
ATOM   2645  HG2 LYS A 262      15.880 -15.965   1.563  1.00  0.00          H
ATOM   2646  HG3 LYS A 262      14.513 -16.751   0.881  1.00  0.00          H
ATOM   2647  HD2 LYS A 262      16.185 -15.330  -1.161  1.00  0.00          H
ATOM   2648  HD3 LYS A 262      17.097 -16.445  -0.205  1.00  0.00          H
ATOM   2649  HE2 LYS A 262      16.424 -17.776  -2.026  1.00  0.00          H
ATOM   2650  HE3 LYS A 262      15.343 -18.275  -0.750  1.00  0.00          H
ATOM   2651  HZ1 LYS A 262      14.121 -17.947  -2.717  1.00  0.00          H
ATOM   2652  HZ2 LYS A 262      13.677 -16.769  -1.711  1.00  0.00          H
ATOM   2653  HZ3 LYS A 262      14.736 -16.414  -2.962  1.00  0.00          H
ATOM   2654  N   TRP A 263      11.253 -15.192   0.851  1.00 26.32          N
ATOM   2655  CA  TRP A 263      10.205 -16.150   1.207  1.00 26.06          C
ATOM   2656  C   TRP A 263       8.974 -16.008   0.288  1.00 28.00          C
ATOM   2657  O   TRP A 263       8.484 -17.016  -0.226  1.00 26.85          O
ATOM   2658  CB  TRP A 263       9.796 -15.871   2.670  1.00 25.69          C
ATOM   2659  CG  TRP A 263       8.750 -16.755   3.283  1.00 24.08          C
ATOM   2660  CD1 TRP A 263       8.985 -17.924   3.921  1.00 24.32          C
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ATOM   2661  CD2 TRP A 263       7.309 -16.533   3.369  1.00 24.24           C
ATOM   2662  NE1 TRP A 263       7.791 -18.447   4.377  1.00 24.75           N
ATOM   2663  CE3 TRP A 263       6.432 -15.514   2.931  1.00 25.60           C
ATOM   2664  CE2 TRP A 263       6.723 -17.627   4.074  1.00 24.89           C
ATOM   2665  CZ3 TRP A 263       5.045 -15.582   3.168  1.00 24.08           C
ATOM   2666  CZ2 TRP A 263       5.340 -17.710   4.318  1.00 24.80           C
ATOM   2667  CH2 TRP A 263       4.498 -16.680   3.858  1.00 25.33           C
ATOM   2668  H   TRP A 263      11.285 -14.323   1.373  1.00  0.00           H
ATOM   2669  HA  TRP A 263      10.587 -17.170   1.130  1.00  0.00           H
ATOM   2670  HB2 TRP A 263      10.686 -15.968   3.292  1.00  0.00           H
ATOM   2671  HB3 TRP A 263       9.465 -14.840   2.796  1.00  0.00           H
ATOM   2672  HD1 TRP A 263       9.966 -18.358   4.056  1.00  0.00           H
ATOM   2673  HE1 TRP A 263       7.724 -19.287   4.935  1.00  0.00           H
ATOM   2674  HE3 TRP A 263       6.838 -14.663   2.414  1.00  0.00           H
ATOM   2675  HZ3 TRP A 263       4.399 -14.783   2.830  1.00  0.00           H
ATOM   2676  HZ2 TRP A 263       4.925 -18.552   4.850  1.00  0.00           H
ATOM   2677  HH2 TRP A 263       3.435 -16.726   4.043  1.00  0.00           H
ATOM   2678  N   MET A 264       8.480 -14.780   0.059  1.00 26.69           N
ATOM   2679  CA  MET A 264       7.262 -14.457  -0.706  1.00 27.66           C
ATOM   2680  C   MET A 264       7.338 -14.954  -2.161  1.00 28.61           C
ATOM   2681  O   MET A 264       6.354 -15.431  -2.727  1.00 28.17           O
ATOM   2682  CB  MET A 264       7.050 -12.923  -0.717  1.00 26.75           C
ATOM   2683  CG  MET A 264       6.485 -12.315   0.579  1.00 27.80           C
ATOM   2684  SD  MET A 264       4.697 -12.487   0.805  1.00 32.27           S
ATOM   2685  CE  MET A 264       4.119 -11.171  -0.299  1.00 29.89           C
ATOM   2686  H   MET A 264       8.932 -14.002   0.540  1.00  0.00           H
ATOM   2687  HA  MET A 264       6.405 -14.941  -0.234  1.00  0.00           H
ATOM   2688  HB2 MET A 264       7.996 -12.435  -0.956  1.00  0.00           H
ATOM   2689  HB3 MET A 264       6.380 -12.650  -1.531  1.00  0.00           H
ATOM   2690  HG2 MET A 264       6.972 -12.742   1.451  1.00  0.00           H
ATOM   2691  HG3 MET A 264       6.720 -11.251   0.608  1.00  0.00           H
ATOM   2692  HE1 MET A 264       3.032 -11.186  -0.360  1.00  0.00           H
ATOM   2693  HE2 MET A 264       4.437 -10.199   0.074  1.00  0.00           H
ATOM   2694  HE3 MET A 264       4.513 -11.291  -1.305  1.00  0.00           H
ATOM   2695  N   GLN A 265       8.542 -14.869  -2.736  1.00 28.33           N
ATOM   2696  CA  GLN A 265       8.896 -15.251  -4.095  1.00 30.41           C
ATOM   2697  C   GLN A 265       8.744 -16.769  -4.342  1.00 30.83           C
ATOM   2698  O   GLN A 265       8.372 -17.175  -5.446  1.00 30.37           O
ATOM   2699  CB  GLN A 265      10.349 -14.780  -4.297  1.00 27.86           C
ATOM   2700  CG  GLN A 265      10.923 -14.921  -5.718  1.00 30.57           C
ATOM   2701  CD  GLN A 265      12.442 -14.808  -5.689  1.00 32.16           C
ATOM   2702  OE1 GLN A 265      13.025 -13.850  -6.186  1.00 31.72           O
ATOM   2703  NE2 GLN A 265      13.107 -15.792  -5.107  1.00 32.89           N
ATOM   2704  H   GLN A 265       9.280 -14.468  -2.174  1.00  0.00           H
ATOM   2705  HA  GLN A 265       8.242 -14.720  -4.788  1.00  0.00           H
ATOM   2706  HB2 GLN A 265      10.422 -13.725  -4.030  1.00  0.00           H
ATOM   2707  HB3 GLN A 265      10.981 -15.308  -3.580  1.00  0.00           H
ATOM   2708  HG2 GLN A 265      10.679 -15.891  -6.153  1.00  0.00           H
ATOM   2709  HG3 GLN A 265      10.504 -14.165  -6.383  1.00  0.00           H
ATOM   2710 HE21 GLN A 265      12.579 -16.608  -4.726  1.00  0.00           H
ATOM   2711 HE22 GLN A 265      14.109 -15.833  -5.224  1.00  0.00           H
ATOM   2712  N   GLU A 266       8.995 -17.608  -3.326  1.00 31.44           N
ATOM   2713  CA  GLU A 266       8.933 -19.068  -3.443  1.00 33.01           C
ATOM   2714  C   GLU A 266       7.516 -19.548  -3.121  1.00 32.66           C
ATOM   2715  O   GLU A 266       7.001 -20.446  -3.781  1.00 32.48           O
ATOM   2716  CB  GLU A 266       9.895 -19.783  -2.458  1.00 34.36           C
ATOM   2717  CG  GLU A 266      11.186 -19.049  -2.071  1.00 44.11           C
ATOM   2718  CD  GLU A 266      12.139 -18.721  -3.212  1.00 48.33           C
ATOM   2719  OE1 GLU A 266      13.306 -19.161  -3.158  1.00 49.69           O
ATOM   2720  OE2 GLU A 266      11.831 -17.820  -4.015  1.00 50.67           O1-
ATOM   2721  H   GLU A 266       9.346 -17.217  -2.465  1.00  0.00           H
ATOM   2722  HA  GLU A 266       9.192 -19.369  -4.455  1.00  0.00           H
ATOM   2723  HB2 GLU A 266       9.385 -20.008  -1.519  1.00  0.00           H
ATOM   2724  HB3 GLU A 266      10.155 -20.757  -2.875  1.00  0.00           H
ATOM   2725  HG2 GLU A 266      10.914 -18.129  -1.564  1.00  0.00           H
ATOM   2726  HG3 GLU A 266      11.728 -19.645  -1.337  1.00  0.00           H
ATOM   2727  N   ASN A 267       6.886 -18.915  -2.121  1.00 29.70           N
ATOM   2728  CA  ASN A 267       5.540 -19.225  -1.625  1.00 28.37           C
ATOM   2729  C   ASN A 267       4.439 -18.700  -2.555  1.00 26.52           C
ATOM   2730  O   ASN A 267       3.258 -18.940  -2.294  1.00 27.70           O
ATOM   2731  CB  ASN A 267       5.336 -18.593  -0.228  1.00 29.57           C
ATOM   2732  CG  ASN A 267       6.015 -19.392   0.880  1.00 30.12           C
ATOM   2733  OD1 ASN A 267       5.425 -20.298   1.456  1.00 32.14           O
ATOM   2734  ND2 ASN A 267       7.254 -19.060   1.210  1.00 27.84           N
ATOM   2735  H   ASN A 267       7.399 -18.175  -1.659  1.00  0.00           H
ATOM   2736  HA  ASN A 267       5.415 -20.309  -1.561  1.00  0.00           H
ATOM   2737  HB2 ASN A 267       5.670 -17.555  -0.210  1.00  0.00           H
ATOM   2738  HB3 ASN A 267       4.277 -18.564   0.035  1.00  0.00           H
ATOM   2739 HD21 ASN A 267       7.720 -18.288   0.738  1.00  0.00           H
ATOM   2740 HD22 ASN A 267       7.649 -19.460   2.047  1.00  0.00           H
ATOM   2741  N   GLU A 268       4.811 -17.986  -3.628  1.00 28.56           N
ATOM   2742  CA  GLU A 268       3.968 -17.533  -4.730  1.00 29.03           C
ATOM   2743  C   GLU A 268       3.036 -16.409  -4.262  1.00 27.53           C
ATOM   2744  O   GLU A 268       1.820 -16.518  -4.389  1.00 29.81           O
ATOM   2745  CB  GLU A 268       3.244 -18.732  -5.406  1.00 31.12           C
ATOM   2746  CG  GLU A 268       4.134 -19.496  -6.403  1.00 34.99           C
ATOM   2747  CD  GLU A 268       4.402 -18.672  -7.652  1.00 36.24           C
ATOM   2748  OE1 GLU A 268       3.407 -18.147  -8.196  1.00 38.70           O
ATOM   2749  OE2 GLU A 268       5.594 -18.531  -8.001  1.00 37.35           O1-
ATOM   2750  H   GLU A 268       5.800 -17.803  -3.711  1.00  0.00           H
ATOM   2751  HA  GLU A 268       4.628 -17.060  -5.458  1.00  0.00           H
ATOM   2752  HB2 GLU A 268       2.838 -19.436  -4.683  1.00  0.00           H
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ATOM   2753  HB3 GLU A 268       2.362 -18.373  -5.928  1.00  0.00           H
ATOM   2754  HG2 GLU A 268       5.073 -19.790  -5.933  1.00  0.00           H
ATOM   2755  HG3 GLU A 268       3.638 -20.416  -6.713  1.00  0.00           H
ATOM   2756  N   LYS A 269       3.579 -15.367  -3.630  1.00 25.71           N
ATOM   2757  CA  LYS A 269       2.823 -14.257  -3.063  1.00 25.50           C
ATOM   2758  C   LYS A 269       3.429 -12.966  -3.627  1.00 24.82           C
ATOM   2759  O   LYS A 269       4.616 -12.717  -3.439  1.00 25.11           O
ATOM   2760  CB  LYS A 269       2.845 -14.365  -1.521  1.00 23.34           C
ATOM   2761  CG  LYS A 269       2.318 -15.701  -0.933  1.00 24.75           C
ATOM   2762  CD  LYS A 269       0.810 -15.960  -1.138  1.00 23.23           C
ATOM   2763  CE  LYS A 269       0.396 -17.447  -1.177  1.00 22.16           C
ATOM   2764  NZ  LYS A 269       0.694 -18.069  -2.477  1.00 22.20           N1+
ATOM   2765  H   LYS A 269       4.588 -15.337  -3.495  1.00  0.00           H
ATOM   2766  HA  LYS A 269       1.787 -14.286  -3.389  1.00  0.00           H
ATOM   2767  HB2 LYS A 269       3.878 -14.246  -1.196  1.00  0.00           H
ATOM   2768  HB3 LYS A 269       2.296 -13.527  -1.093  1.00  0.00           H
ATOM   2769  HG2 LYS A 269       2.900 -16.523  -1.344  1.00  0.00           H
ATOM   2770  HG3 LYS A 269       2.529 -15.721   0.138  1.00  0.00           H
ATOM   2771  HD2 LYS A 269       0.255 -15.488  -0.328  1.00  0.00           H
ATOM   2772  HD3 LYS A 269       0.457 -15.462  -2.038  1.00  0.00           H
ATOM   2773  HE2 LYS A 269       0.872 -18.015  -0.377  1.00  0.00           H
ATOM   2774  HE3 LYS A 269      -0.679 -17.528  -1.012  1.00  0.00           H
ATOM   2775  HZ1 LYS A 269      -0.085 -18.645  -2.856  1.00  0.00           H
ATOM   2776  HZ2 LYS A 269       0.819 -17.357  -3.190  1.00  0.00           H
ATOM   2777  HZ3 LYS A 269       1.551 -18.612  -2.451  1.00  0.00           H
ATOM   2778  N   VAL A 270       2.636 -12.190  -4.374  1.00 24.36           N
ATOM   2779  CA  VAL A 270       3.061 -11.044  -5.185  1.00 23.54           C
ATOM   2780  C   VAL A 270       2.642  -9.722  -4.510  1.00 22.50           C
ATOM   2781  O   VAL A 270       3.258  -8.685  -4.760  1.00 23.72           O
ATOM   2782  CB  VAL A 270       2.422 -11.172  -6.605  1.00 23.18           C
ATOM   2783  CG1 VAL A 270       2.906 -10.095  -7.595  1.00 22.05           C
ATOM   2784  CG2 VAL A 270       2.651 -12.543  -7.278  1.00 23.42           C
ATOM   2785  H   VAL A 270       1.645 -12.416  -4.396  1.00  0.00           H
ATOM   2786  HA  VAL A 270       4.145 -11.008  -5.273  1.00  0.00           H
ATOM   2787  HB  VAL A 270       1.344 -11.051  -6.486  1.00  0.00           H
ATOM   2788 HG11 VAL A 270       2.475 -10.238  -8.586  1.00  0.00           H
ATOM   2789 HG12 VAL A 270       2.644  -9.087  -7.276  1.00  0.00           H
ATOM   2790 HG13 VAL A 270       3.987 -10.142  -7.716  1.00  0.00           H
ATOM   2791 HG21 VAL A 270       1.931 -12.692  -8.081  1.00  0.00           H
ATOM   2792 HG22 VAL A 270       3.633 -12.605  -7.742  1.00  0.00           H
ATOM   2793 HG23 VAL A 270       2.562 -13.395  -6.606  1.00  0.00           H
ATOM   2794  N   TYR A 271       1.629  -9.756  -3.636  1.00 21.55           N
ATOM   2795  CA  TYR A 271       1.153  -8.623  -2.857  1.00 22.01           C
ATOM   2796  C   TYR A 271       0.911  -9.121  -1.433  1.00 20.85           C
ATOM   2797  O   TYR A 271       0.030  -9.952  -1.218  1.00 21.84           O
ATOM   2798  CB  TYR A 271      -0.087  -8.003  -3.537  1.00 19.56           C
ATOM   2799  CG  TYR A 271      -0.631  -6.759  -2.856  1.00 18.54           C
ATOM   2800  CD1 TYR A 271      -0.180  -5.481  -3.246  1.00 18.88           C
ATOM   2801  CD2 TYR A 271      -1.582  -6.876  -1.819  1.00 19.17           C
ATOM   2802  CE1 TYR A 271      -0.674  -4.332  -2.600  1.00 16.85           C
ATOM   2803  CE2 TYR A 271      -2.071  -5.725  -1.175  1.00 18.66           C
ATOM   2804  CZ  TYR A 271      -1.624  -4.450  -1.568  1.00 18.55           C
ATOM   2805  OH  TYR A 271      -2.108  -3.337  -0.946  1.00 19.00           O
ATOM   2806  H   TYR A 271       1.165 -10.640  -3.462  1.00  0.00           H
ATOM   2807  HA  TYR A 271       1.927  -7.857  -2.812  1.00  0.00           H
ATOM   2808  HB2 TYR A 271       0.158  -7.741  -4.567  1.00  0.00           H
ATOM   2809  HB3 TYR A 271      -0.886  -8.743  -3.600  1.00  0.00           H
ATOM   2810  HD1 TYR A 271       0.547  -5.372  -4.038  1.00  0.00           H
ATOM   2811  HD2 TYR A 271      -1.934  -7.847  -1.503  1.00  0.00           H
ATOM   2812  HE1 TYR A 271      -0.318  -3.359  -2.896  1.00  0.00           H
ATOM   2813  HE2 TYR A 271      -2.788  -5.824  -0.374  1.00  0.00           H
ATOM   2814  HH  TYR A 271      -1.572  -2.544  -1.118  1.00  0.00           H
ATOM   2815  N   GLY A 272       1.702  -8.647  -0.471  1.00 20.02           N
ATOM   2816  CA  GLY A 272       1.605  -8.989   0.936  1.00 19.98           C
ATOM   2817  C   GLY A 272       1.333  -7.732   1.751  1.00 19.55           C
ATOM   2818  O   GLY A 272       2.068  -6.753   1.621  1.00 20.95           O
ATOM   2819  H   GLY A 272       2.451  -7.999  -0.700  1.00  0.00           H
ATOM   2820  HA2 GLY A 272       0.860  -9.751   1.118  1.00  0.00           H
ATOM   2821  HA3 GLY A 272       2.555  -9.411   1.248  1.00  0.00           H
ATOM   2822  N   PHE A 273       0.302  -7.759   2.597  1.00 19.12           N
ATOM   2823  CA  PHE A 273      -0.176  -6.625   3.385  1.00 19.96           C
ATOM   2824  C   PHE A 273      -0.474  -7.063   4.834  1.00 20.73           C
ATOM   2825  O   PHE A 273      -0.266  -8.221   5.207  1.00 21.45           O
ATOM   2826  CB  PHE A 273      -1.356  -5.935   2.649  1.00 20.09           C
ATOM   2827  CG  PHE A 273      -2.661  -6.714   2.706  1.00 21.22           C
ATOM   2828  CD1 PHE A 273      -2.873  -7.816   1.851  1.00 20.84           C
ATOM   2829  CD2 PHE A 273      -3.627  -6.397   3.682  1.00 20.08           C
ATOM   2830  CE1 PHE A 273      -4.003  -8.636   2.026  1.00 20.71           C
ATOM   2831  CE2 PHE A 273      -4.743  -7.232   3.870  1.00 20.46           C
ATOM   2832  CZ  PHE A 273      -4.926  -8.355   3.048  1.00 22.49           C
ATOM   2833  H   PHE A 273      -0.250  -8.611   2.661  1.00  0.00           H
ATOM   2834  HA  PHE A 273       0.628  -5.892   3.461  1.00  0.00           H
ATOM   2835  HB2 PHE A 273      -1.520  -4.944   3.075  1.00  0.00           H
ATOM   2836  HB3 PHE A 273      -1.091  -5.751   1.607  1.00  0.00           H
ATOM   2837  HD1 PHE A 273      -2.146  -8.067   1.092  1.00  0.00           H
ATOM   2838  HD2 PHE A 273      -3.490  -5.547   4.333  1.00  0.00           H
ATOM   2839  HE1 PHE A 273      -4.150  -9.497   1.394  1.00  0.00           H
ATOM   2840  HE2 PHE A 273      -5.447  -7.024   4.660  1.00  0.00           H
ATOM   2841  HZ  PHE A 273      -5.783  -8.990   3.193  1.00  0.00           H
ATOM   2842  N   THR A 274      -0.968  -6.131   5.653  1.00 20.67           N
ATOM   2843  CA  THR A 274      -1.451  -6.363   7.011  1.00 19.86           C
ATOM   2844  C   THR A 274      -2.858  -5.760   7.148  1.00 23.58           C
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ATOM   2845  O   THR A 274      -3.856  -6.404   6.827  1.00 27.01           O
ATOM   2846  CB  THR A 274      -0.404  -5.889   8.055  1.00 23.05           C
ATOM   2847  OG1 THR A 274       0.052  -4.572   7.782  1.00 20.98           O
ATOM   2848  CG2 THR A 274       0.796  -6.831   8.215  1.00 20.44           C
ATOM   2849  H   THR A 274      -1.157  -5.217   5.271  1.00  0.00           H
ATOM   2850  HA  THR A 274      -1.604  -7.433   7.174  1.00  0.00           H
ATOM   2851  HB  THR A 274      -0.896  -5.833   9.020  1.00  0.00           H
ATOM   2852  HG1 THR A 274       0.729  -4.635   7.120  1.00  0.00           H
ATOM   2853 HG21 THR A 274       1.509  -6.450   8.947  1.00  0.00           H
ATOM   2854 HG22 THR A 274       0.466  -7.810   8.567  1.00  0.00           H
ATOM   2855 HG23 THR A 274       1.323  -6.985   7.276  1.00  0.00           H
ATOM   2856  N   VAL A 275      -2.953  -4.508   7.595  1.00 21.17           N
ATOM   2857  CA  VAL A 275      -4.214  -3.845   7.911  1.00 19.25           C
ATOM   2858  C   VAL A 275      -5.043  -3.607   6.623  1.00 18.02           C
ATOM   2859  O   VAL A 275      -4.500  -3.320   5.554  1.00 19.67           O
ATOM   2860  CB  VAL A 275      -3.910  -2.516   8.653  1.00 17.62           C
ATOM   2861  CG1 VAL A 275      -5.177  -1.902   9.274  1.00 17.33           C
ATOM   2862  CG2 VAL A 275      -2.852  -2.667   9.768  1.00 17.17           C
ATOM   2863  H   VAL A 275      -2.085  -4.031   7.798  1.00  0.00           H
ATOM   2864  HA  VAL A 275      -4.770  -4.510   8.578  1.00  0.00           H
ATOM   2865  HB  VAL A 275      -3.510  -1.829   7.911  1.00  0.00           H
ATOM   2866 HG11 VAL A 275      -4.959  -0.996   9.839  1.00  0.00           H
ATOM   2867 HG12 VAL A 275      -5.926  -1.638   8.527  1.00  0.00           H
ATOM   2868 HG13 VAL A 275      -5.622  -2.607   9.974  1.00  0.00           H
ATOM   2869 HG21 VAL A 275      -2.694  -1.727  10.298  1.00  0.00           H
ATOM   2870 HG22 VAL A 275      -3.170  -3.408  10.504  1.00  0.00           H
ATOM   2871 HG23 VAL A 275      -1.882  -2.977   9.381  1.00  0.00           H
ATOM   2872  N   SER A 276      -6.367  -3.728   6.728  1.00 18.71           N
ATOM   2873  CA  SER A 276      -7.343  -3.558   5.657  1.00 19.95           C
ATOM   2874  C   SER A 276      -8.609  -2.934   6.256  1.00 18.73           C
ATOM   2875  O   SER A 276      -8.957  -3.231   7.400  1.00 22.68           O
ATOM   2876  CB  SER A 276      -7.510  -4.885   4.891  1.00 18.49           C
ATOM   2877  OG  SER A 276      -7.649  -5.977   5.778  1.00 20.03           O
ATOM   2878  H   SER A 276      -6.781  -3.921   7.630  1.00  0.00           H
ATOM   2879  HA  SER A 276      -6.952  -2.818   4.956  1.00  0.00           H
ATOM   2880  HB2 SER A 276      -8.374  -4.844   4.227  1.00  0.00           H
ATOM   2881  HB3 SER A 276      -6.638  -5.069   4.267  1.00  0.00           H
ATOM   2882  HG  SER A 276      -6.836  -6.055   6.262  1.00  0.00           H
ATOM   2883  N   ILE A 277      -9.251  -2.009   5.539  1.00 19.56           N
ATOM   2884  CA  ILE A 277     -10.153  -1.009   6.102  1.00 18.81           C
ATOM   2885  C   ILE A 277     -11.254  -0.628   5.100  1.00 17.40           C
ATOM   2886  O   ILE A 277     -11.147  -0.918   3.906  1.00 17.52           O
ATOM   2887  CB  ILE A 277      -9.293   0.169   6.656  1.00 16.88           C
ATOM   2888  CG1 ILE A 277     -10.057   1.112   7.607  1.00 21.77           C
ATOM   2889  CG2 ILE A 277      -8.632   0.974   5.530  1.00 21.13           C
ATOM   2890  CD1 ILE A 277      -9.147   1.998   8.474  1.00 19.17           C
ATOM   2891  H   ILE A 277      -9.011  -1.889   4.556  1.00  0.00           H
ATOM   2892  HA  ILE A 277     -10.682  -1.467   6.934  1.00  0.00           H
ATOM   2893  HB  ILE A 277      -8.488  -0.268   7.249  1.00  0.00           H
ATOM   2894 HG12 ILE A 277     -10.743   1.748   7.050  1.00  0.00           H
ATOM   2895 HG13 ILE A 277     -10.677   0.509   8.264  1.00  0.00           H
ATOM   2896 HG21 ILE A 277      -7.970   1.732   5.933  1.00  0.00           H
ATOM   2897 HG22 ILE A 277      -8.044   0.346   4.860  1.00  0.00           H
ATOM   2898 HG23 ILE A 277      -9.382   1.493   4.937  1.00  0.00           H
ATOM   2899 HD11 ILE A 277      -9.738   2.583   9.178  1.00  0.00           H
ATOM   2900 HD12 ILE A 277      -8.445   1.398   9.054  1.00  0.00           H
ATOM   2901 HD13 ILE A 277      -8.569   2.702   7.876  1.00  0.00           H
ATOM   2902  N   HIS A 278     -12.291   0.048   5.606  1.00 17.40           N
ATOM   2903  CA  HIS A 278     -13.312   0.771   4.856  1.00 18.62           C
ATOM   2904  C   HIS A 278     -12.734   2.098   4.345  1.00 20.19           C
ATOM   2905  O   HIS A 278     -11.994   2.773   5.066  1.00 22.16           O
ATOM   2906  CB  HIS A 278     -14.457   1.147   5.825  1.00 19.60           C
ATOM   2907  CG  HIS A 278     -15.675   0.284   5.730  1.00 19.20           C
ATOM   2908  ND1 HIS A 278     -16.719   0.580   4.846  1.00 19.72           N
ATOM   2909  CD2 HIS A 278     -15.999  -0.845   6.446  1.00 19.63           C
ATOM   2910  CE1 HIS A 278     -17.630  -0.359   5.071  1.00 18.30           C
ATOM   2911  NE2 HIS A 278     -17.262  -1.216   6.022  1.00 20.42           N
ATOM   2912  H   HIS A 278     -12.307   0.186   6.610  1.00  0.00           H
ATOM   2913  HA  HIS A 278     -13.680   0.168   4.023  1.00  0.00           H
ATOM   2914  HB2 HIS A 278     -14.115   1.147   6.858  1.00  0.00           H
ATOM   2915  HB3 HIS A 278     -14.804   2.169   5.667  1.00  0.00           H
ATOM   2916  HD2 HIS A 278     -15.459  -1.380   7.212  1.00  0.00           H
ATOM   2917  HE1 HIS A 278     -18.578  -0.410   4.553  1.00  0.00           H
ATOM   2918  HE2 HIS A 278     -17.824  -1.975   6.405  1.00  0.00           H
ATOM   2919  N   GLU A 279     -13.112   2.516   3.135  1.00 18.56           N
ATOM   2920  CA  GLU A 279     -12.866   3.859   2.622  1.00 20.35           C
ATOM   2921  C   GLU A 279     -14.082   4.755   2.902  1.00 20.15           C
ATOM   2922  O   GLU A 279     -15.200   4.269   3.086  1.00 21.21           O
ATOM   2923  CB  GLU A 279     -12.611   3.796   1.093  1.00 18.12           C
ATOM   2924  CG  GLU A 279     -12.105   5.097   0.424  1.00 19.55           C
ATOM   2925  CD  GLU A 279     -10.895   5.731   1.104  1.00 21.45           C
ATOM   2926  OE1 GLU A 279     -11.032   6.237   2.239  1.00 21.73           O
ATOM   2927  OE2 GLU A 279      -9.815   5.764   0.479  1.00 20.95           O1-
ATOM   2928  H   GLU A 279     -13.683   1.891   2.576  1.00  0.00           H
ATOM   2929  HA  GLU A 279     -12.006   4.269   3.142  1.00  0.00           H
ATOM   2930  HB2 GLU A 279     -11.886   3.019   0.872  1.00  0.00           H
ATOM   2931  HB3 GLU A 279     -13.524   3.478   0.586  1.00  0.00           H
ATOM   2932  HG2 GLU A 279     -11.840   4.884  -0.611  1.00  0.00           H
ATOM   2933  HG3 GLU A 279     -12.897   5.842   0.372  1.00  0.00           H
ATOM   2934  N   TYR A 280     -13.857   6.071   2.898  1.00 20.93           N
ATOM   2935  CA  TYR A 280     -14.912   7.077   2.952  1.00 21.95           C
ATOM   2936  C   TYR A 280     -15.440   7.245   1.518  1.00 20.59           C
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ATOM   2937  O   TYR A 280     -14.742   7.786   0.655  1.00 20.61           O
ATOM   2938  CB  TYR A 280     -14.312   8.432   3.379  1.00 23.30           C
ATOM   2939  CG  TYR A 280     -13.582   8.460   4.703  1.00 26.62           C
ATOM   2940  CD1 TYR A 280     -14.285   8.390   5.922  1.00 30.13           C
ATOM   2941  CD2 TYR A 280     -12.181   8.588   4.711  1.00 30.20           C
ATOM   2942  CE1 TYR A 280     -13.589   8.464   7.142  1.00 31.13           C
ATOM   2943  CE2 TYR A 280     -11.487   8.644   5.930  1.00 32.21           C
ATOM   2944  CZ  TYR A 280     -12.187   8.590   7.146  1.00 32.49           C
ATOM   2945  OH  TYR A 280     -11.509   8.683   8.327  1.00 34.99           O
ATOM   2946  H   TYR A 280     -12.908   6.372   2.670  1.00  0.00           H
ATOM   2947  HA  TYR A 280     -15.709   6.783   3.638  1.00  0.00           H
ATOM   2948  HB2 TYR A 280     -13.611   8.784   2.625  1.00  0.00           H
ATOM   2949  HB3 TYR A 280     -15.106   9.178   3.427  1.00  0.00           H
ATOM   2950  HD1 TYR A 280     -15.358   8.281   5.932  1.00  0.00           H
ATOM   2951  HD2 TYR A 280     -11.633   8.645   3.781  1.00  0.00           H
ATOM   2952  HE1 TYR A 280     -14.145   8.407   8.066  1.00  0.00           H
ATOM   2953  HE2 TYR A 280     -10.416   8.746   5.913  1.00  0.00           H
ATOM   2954  HH  TYR A 280     -10.569   8.720   8.192  1.00  0.00           H
ATOM   2955  N   GLU A 281     -16.670   6.793   1.264  1.00 22.29           N
ATOM   2956  CA  GLU A 281     -17.454   6.940   0.034  1.00 20.70           C
ATOM   2957  C   GLU A 281     -17.378   8.349  -0.595  1.00 20.87           C
ATOM   2958  O   GLU A 281     -17.130   8.477  -1.794  1.00 18.87           O
ATOM   2959  CB  GLU A 281     -18.895   6.424   0.298  1.00 21.60           C
ATOM   2960  CG  GLU A 281     -19.830   7.319   1.150  1.00 27.54           C
ATOM   2961  CD  GLU A 281     -19.210   7.677   2.492  1.00 30.84           C
ATOM   2962  OE1 GLU A 281     -18.864   6.742   3.242  1.00 32.62           O
ATOM   2963  OE2 GLU A 281     -18.839   8.854   2.671  1.00 35.66           O1-
ATOM   2964  H   GLU A 281     -17.205   6.465   2.068  1.00  0.00           H
ATOM   2965  HA  GLU A 281     -16.998   6.257  -0.683  1.00  0.00           H
ATOM   2966  HB2 GLU A 281     -19.379   6.261  -0.665  1.00  0.00           H
ATOM   2967  HB3 GLU A 281     -18.841   5.439   0.762  1.00  0.00           H
ATOM   2968  HG2 GLU A 281     -20.085   8.235   0.618  1.00  0.00           H
ATOM   2969  HG3 GLU A 281     -20.770   6.801   1.341  1.00  0.00           H
ATOM   2970  N   VAL A 282     -17.507   9.398   0.229  1.00 20.46           N
ATOM   2971  CA  VAL A 282     -17.457  10.810  -0.139  1.00 20.98           C
ATOM   2972  C   VAL A 282     -16.102  11.266  -0.741  1.00 20.93           C
ATOM   2973  O   VAL A 282     -16.069  12.286  -1.432  1.00 18.59           O
ATOM   2974  CB  VAL A 282     -17.879  11.645   1.106  1.00 21.34           C
ATOM   2975  CG1 VAL A 282     -16.890  11.551   2.287  1.00 22.74           C
ATOM   2976  CG2 VAL A 282     -18.232  13.108   0.774  1.00 22.47           C
ATOM   2977  H   VAL A 282     -17.815   9.191   1.186  1.00  0.00           H
ATOM   2978  HA  VAL A 282     -18.208  10.952  -0.918  1.00  0.00           H
ATOM   2979  HB  VAL A 282     -18.814  11.210   1.466  1.00  0.00           H
ATOM   2980 HG11 VAL A 282     -17.234  12.139   3.138  1.00  0.00           H
ATOM   2981 HG12 VAL A 282     -16.799  10.524   2.636  1.00  0.00           H
ATOM   2982 HG13 VAL A 282     -15.891  11.894   2.025  1.00  0.00           H
ATOM   2983 HG21 VAL A 282     -18.603  13.629   1.658  1.00  0.00           H
ATOM   2984 HG22 VAL A 282     -17.375  13.660   0.398  1.00  0.00           H
ATOM   2985 HG23 VAL A 282     -19.013  13.153   0.015  1.00  0.00           H
ATOM   2986  N   THR A 283     -15.000  10.525  -0.532  1.00 19.91           N
ATOM   2987  CA  THR A 283     -13.691  10.846  -1.115  1.00 18.39           C
ATOM   2988  C   THR A 283     -13.517  10.221  -2.517  1.00 19.45           C
ATOM   2989  O   THR A 283     -12.637  10.655  -3.261  1.00 20.36           O
ATOM   2990  CB  THR A 283     -12.552  10.367  -0.170  1.00 20.55           C
ATOM   2991  OG1 THR A 283     -12.440   8.962  -0.031  1.00 18.62           O
ATOM   2992  CG2 THR A 283     -12.596  10.996   1.224  1.00 17.56           C
ATOM   2993  H   THR A 283     -15.095   9.661  -0.010  1.00  0.00           H
ATOM   2994  HA  THR A 283     -13.591  11.928  -1.229  1.00  0.00           H
ATOM   2995  HB  THR A 283     -11.611  10.684  -0.621  1.00  0.00           H
ATOM   2996  HG1 THR A 283     -13.269   8.589   0.278  1.00  0.00           H
ATOM   2997 HG21 THR A 283     -11.798  10.614   1.862  1.00  0.00           H
ATOM   2998 HG22 THR A 283     -12.453  12.067   1.141  1.00  0.00           H
ATOM   2999 HG23 THR A 283     -13.547  10.834   1.730  1.00  0.00           H
ATOM   3000  N   ILE A 284     -14.363   9.247  -2.893  1.00 16.54           N
ATOM   3001  CA  ILE A 284     -14.243   8.408  -4.086  1.00 16.06           C
ATOM   3002  C   ILE A 284     -15.452   8.374  -5.077  1.00 16.32           C
ATOM   3003  O   ILE A 284     -15.529   7.371  -5.796  1.00 18.94           O
ATOM   3004  CB  ILE A 284     -13.777   6.986  -3.633  1.00 14.12           C
ATOM   3005  CG1 ILE A 284     -14.832   6.237  -2.785  1.00 16.19           C
ATOM   3006  CG2 ILE A 284     -12.426   7.008  -2.901  1.00 14.01           C
ATOM   3007  CD1 ILE A 284     -14.550   4.736  -2.649  1.00 12.12           C
ATOM   3008  H   ILE A 284     -15.118   9.007  -2.260  1.00  0.00           H
ATOM   3009  HA  ILE A 284     -13.444   8.810  -4.709  1.00  0.00           H
ATOM   3010  HB  ILE A 284     -13.615   6.402  -4.534  1.00  0.00           H
ATOM   3011 HG12 ILE A 284     -14.891   6.684  -1.793  1.00  0.00           H
ATOM   3012 HG13 ILE A 284     -15.824   6.351  -3.222  1.00  0.00           H
ATOM   3013 HG21 ILE A 284     -11.956   6.026  -2.883  1.00  0.00           H
ATOM   3014 HG22 ILE A 284     -11.728   7.700  -3.367  1.00  0.00           H
ATOM   3015 HG23 ILE A 284     -12.548   7.311  -1.867  1.00  0.00           H
ATOM   3016 HD11 ILE A 284     -15.337   4.255  -2.072  1.00  0.00           H
ATOM   3017 HD12 ILE A 284     -14.504   4.250  -3.623  1.00  0.00           H
ATOM   3018 HD13 ILE A 284     -13.610   4.546  -2.133  1.00  0.00           H
ATOM   3019  N   PRO A 285     -16.379   9.372  -5.183  1.00 17.10           N
ATOM   3020  CA  PRO A 285     -17.569   9.349  -6.067  1.00 18.10           C
ATOM   3021  C   PRO A 285     -17.443   8.782  -7.491  1.00 18.61           C
ATOM   3022  O   PRO A 285     -18.385   8.144  -7.966  1.00 21.16           O
ATOM   3023  CB  PRO A 285     -18.080  10.793  -6.128  1.00 19.30           C
ATOM   3024  CG  PRO A 285     -17.678  11.380  -4.795  1.00 19.72           C
ATOM   3025  CD  PRO A 285     -16.406  10.623  -4.417  1.00 17.67           C
ATOM   3026  HA  PRO A 285     -18.308   8.740  -5.544  1.00  0.00           H
ATOM   3027  HB2 PRO A 285     -17.584  11.345  -6.929  1.00  0.00           H
ATOM   3028  HB3 PRO A 285     -19.155  10.848  -6.305  1.00  0.00           H
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ATOM   3029  HG2 PRO A 285     -17.537  12.461  -4.825  1.00  0.00           H
ATOM   3030  HG3 PRO A 285     -18.455  11.170  -4.058  1.00  0.00           H
ATOM   3031  HD2 PRO A 285     -15.507  11.200  -4.626  1.00  0.00           H
ATOM   3032  HD3 PRO A 285     -16.460  10.430  -3.352  1.00  0.00           H
ATOM   3033  N   THR A 286     -16.310   8.986  -8.175  1.00 19.69           N
ATOM   3034  CA  THR A 286     -16.101   8.494  -9.530  1.00 19.30           C
ATOM   3035  C   THR A 286     -14.941   7.484  -9.646  1.00 20.60           C
ATOM   3036  O   THR A 286     -14.709   6.990 -10.749  1.00 18.78           O
ATOM   3037  CB  THR A 286     -16.152   9.662 -10.561  1.00 21.39           C
ATOM   3038  OG1 THR A 286     -15.102  10.605 -10.439  1.00 21.34           O
ATOM   3039  CG2 THR A 286     -17.471  10.448 -10.544  1.00 19.97           C
ATOM   3040  H   THR A 286     -15.618   9.651  -7.808  1.00  0.00           H
ATOM   3041  HA  THR A 286     -16.944   7.865  -9.811  1.00  0.00           H
ATOM   3042  HB  THR A 286     -16.050   9.223 -11.555  1.00  0.00           H
ATOM   3043  HG1 THR A 286     -15.149  11.030  -9.572  1.00  0.00           H
ATOM   3044 HG21 THR A 286     -17.511  11.163 -11.365  1.00  0.00           H
ATOM   3045 HG22 THR A 286     -18.327   9.782 -10.647  1.00  0.00           H
ATOM   3046 HG23 THR A 286     -17.595  11.003  -9.613  1.00  0.00           H
ATOM   3047  N   LEU A 287     -14.276   7.084  -8.544  1.00 19.85           N
ATOM   3048  CA  LEU A 287     -13.118   6.165  -8.532  1.00 20.60           C
ATOM   3049  C   LEU A 287     -13.540   4.774  -9.019  1.00 20.95           C
ATOM   3050  O   LEU A 287     -13.026   4.269 -10.020  1.00 18.74           O
ATOM   3051  CB  LEU A 287     -12.527   6.068  -7.101  1.00 19.84           C
ATOM   3052  CG  LEU A 287     -11.088   5.496  -6.959  1.00 24.19           C
ATOM   3053  CD1 LEU A 287     -10.590   5.678  -5.519  1.00 17.69           C
ATOM   3054  CD2 LEU A 287     -10.930   4.014  -7.347  1.00 20.76           C
ATOM   3055  H   LEU A 287     -14.566   7.487  -7.659  1.00  0.00           H
ATOM   3056  HA  LEU A 287     -12.354   6.545  -9.209  1.00  0.00           H
ATOM   3057  HB2 LEU A 287     -12.516   7.076  -6.684  1.00  0.00           H
ATOM   3058  HB3 LEU A 287     -13.197   5.498  -6.459  1.00  0.00           H
ATOM   3059  HG  LEU A 287     -10.427   6.076  -7.603  1.00  0.00           H
ATOM   3060 HD11 LEU A 287      -9.534   5.422  -5.427  1.00  0.00           H
ATOM   3061 HD12 LEU A 287     -10.699   6.710  -5.190  1.00  0.00           H
ATOM   3062 HD13 LEU A 287     -11.142   5.044  -4.826  1.00  0.00           H
ATOM   3063 HD21 LEU A 287      -9.960   3.624  -7.034  1.00  0.00           H
ATOM   3064 HD22 LEU A 287     -11.693   3.389  -6.884  1.00  0.00           H
ATOM   3065 HD23 LEU A 287     -10.972   3.871  -8.425  1.00  0.00           H
ATOM   3066  N   TRP A 288     -14.528   4.177  -8.337  1.00 18.96           N
ATOM   3067  CA  TRP A 288     -15.059   2.858  -8.668  1.00 20.78           C
ATOM   3068  C   TRP A 288     -15.760   2.879 -10.035  1.00 21.73           C
ATOM   3069  O   TRP A 288     -15.660   1.917 -10.786  1.00 21.01           O
ATOM   3070  CB  TRP A 288     -16.047   2.395  -7.583  1.00 16.55           C
ATOM   3071  CG  TRP A 288     -16.724   1.092  -7.887  1.00 19.20           C
ATOM   3072  CD1 TRP A 288     -18.011   0.956  -8.277  1.00 17.19           C
ATOM   3073  CD2 TRP A 288     -16.164  -0.258  -7.865  1.00 18.61           C
ATOM   3074  NE1 TRP A 288     -18.278  -0.373  -8.517  1.00 18.83           N
ATOM   3075  CE3 TRP A 288     -14.900  -0.807  -7.541  1.00 16.92           C
ATOM   3076  CE2 TRP A 288     -17.185  -1.174  -8.259  1.00 18.36           C
ATOM   3077  CZ3 TRP A 288     -14.670  -2.197  -7.598  1.00 21.22           C
ATOM   3078  CZ2 TRP A 288     -16.968  -2.561  -8.318  1.00 20.24           C
ATOM   3079  CH2 TRP A 288     -15.702  -3.075  -7.982  1.00 22.41           C
ATOM   3080  H   TRP A 288     -14.889   4.661  -7.528  1.00  0.00           H
ATOM   3081  HA  TRP A 288     -14.231   2.148  -8.713  1.00  0.00           H
ATOM   3082  HB2 TRP A 288     -15.530   2.286  -6.629  1.00  0.00           H
ATOM   3083  HB3 TRP A 288     -16.817   3.153  -7.431  1.00  0.00           H
ATOM   3084  HD1 TRP A 288     -18.701   1.777  -8.415  1.00  0.00           H
ATOM   3085  HE1 TRP A 288     -19.178  -0.690  -8.900  1.00  0.00           H
ATOM   3086  HE3 TRP A 288     -14.100  -0.152  -7.231  1.00  0.00           H
ATOM   3087  HZ3 TRP A 288     -13.697  -2.592  -7.344  1.00  0.00           H
ATOM   3088  HZ2 TRP A 288     -17.766  -3.225  -8.609  1.00  0.00           H
ATOM   3089  HH2 TRP A 288     -15.519  -4.139  -8.021  1.00  0.00           H
ATOM   3090  N   GLN A 289     -16.419   3.993 -10.378  1.00 23.21           N
ATOM   3091  CA  GLN A 289     -17.086   4.196 -11.659  1.00 24.00           C
ATOM   3092  C   GLN A 289     -16.066   4.168 -12.813  1.00 23.78           C
ATOM   3093  O   GLN A 289     -16.239   3.409 -13.759  1.00 21.70           O
ATOM   3094  CB  GLN A 289     -17.880   5.516 -11.586  1.00 26.05           C
ATOM   3095  CG  GLN A 289     -18.812   5.768 -12.789  1.00 30.79           C
ATOM   3096  CD  GLN A 289     -19.820   6.905 -12.592  1.00 32.56           C
ATOM   3097  OE1 GLN A 289     -20.593   7.200 -13.493  1.00 33.91           O
ATOM   3098  NE2 GLN A 289     -19.864   7.562 -11.436  1.00 33.71           N
ATOM   3099  H   GLN A 289     -16.389   4.757  -9.722  1.00  0.00           H
ATOM   3100  HA  GLN A 289     -17.787   3.371 -11.807  1.00  0.00           H
ATOM   3101  HB2 GLN A 289     -18.473   5.492 -10.671  1.00  0.00           H
ATOM   3102  HB3 GLN A 289     -17.194   6.357 -11.500  1.00  0.00           H
ATOM   3103  HG2 GLN A 289     -18.227   5.977 -13.687  1.00  0.00           H
ATOM   3104  HG3 GLN A 289     -19.384   4.865 -13.007  1.00  0.00           H
ATOM   3105 HE21 GLN A 289     -19.277   7.318 -10.653  1.00  0.00           H
ATOM   3106 HE22 GLN A 289     -20.556   8.290 -11.348  1.00  0.00           H
ATOM   3107  N   THR A 290     -14.946   4.887 -12.674  1.00 23.31           N
ATOM   3108  CA  THR A 290     -13.865   4.924 -13.662  1.00 22.84           C
ATOM   3109  C   THR A 290     -13.086   3.584 -13.688  1.00 22.38           C
ATOM   3110  O   THR A 290     -12.565   3.201 -14.733  1.00 22.84           O
ATOM   3111  CB  THR A 290     -12.936   6.117 -13.317  1.00 24.30           C
ATOM   3112  OG1 THR A 290     -13.714   7.299 -13.203  1.00 25.09           O
ATOM   3113  CG2 THR A 290     -11.871   6.413 -14.376  1.00 22.40           C
ATOM   3114  H   THR A 290     -14.835   5.467 -11.851  1.00  0.00           H
ATOM   3115  HA  THR A 290     -14.301   5.084 -14.651  1.00  0.00           H
ATOM   3116  HB  THR A 290     -12.439   5.939 -12.360  1.00  0.00           H
ATOM   3117  HG1 THR A 290     -14.155   7.247 -12.354  1.00  0.00           H
ATOM   3118 HG21 THR A 290     -11.285   7.293 -14.117  1.00  0.00           H
ATOM   3119 HG22 THR A 290     -11.170   5.587 -14.470  1.00  0.00           H
ATOM   3120 HG23 THR A 290     -12.312   6.584 -15.359  1.00  0.00           H
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ATOM   3121  N   SER A 291     -13.074   2.825 -12.579  1.00 19.88           N
ATOM   3122  CA  SER A 291     -12.540   1.462 -12.530  1.00 20.14           C
ATOM   3123  C   SER A 291     -13.494   0.471 -13.232  1.00 20.06           C
ATOM   3124  O   SER A 291     -13.044  -0.475 -13.877  1.00 19.13           O
ATOM   3125  CB  SER A 291     -12.364   1.030 -11.058  1.00 19.42           C
ATOM   3126  OG  SER A 291     -11.447   1.880 -10.382  1.00 19.96           O
ATOM   3127  H   SER A 291     -13.492   3.206 -11.740  1.00  0.00           H
ATOM   3128  HA  SER A 291     -11.579   1.437 -13.048  1.00  0.00           H
ATOM   3129  HB2 SER A 291     -13.312   1.013 -10.525  1.00  0.00           H
ATOM   3130  HB3 SER A 291     -11.981   0.009 -11.019  1.00  0.00           H
ATOM   3131  HG  SER A 291     -11.819   2.760 -10.355  1.00  0.00           H
ATOM   3132  N   MET A 292     -14.811   0.715 -13.182  1.00 22.05           N
ATOM   3133  CA  MET A 292     -15.830  -0.001 -13.949  1.00 23.75           C
ATOM   3134  C   MET A 292     -15.604   0.252 -15.451  1.00 23.08           C
ATOM   3135  O   MET A 292     -15.575  -0.697 -16.221  1.00 23.18           O
ATOM   3136  CB  MET A 292     -17.249   0.428 -13.497  1.00 23.46           C
ATOM   3137  CG  MET A 292     -18.183  -0.731 -13.100  1.00 23.79           C
ATOM   3138  SD  MET A 292     -19.021  -1.596 -14.462  1.00 24.01           S
ATOM   3139  CE  MET A 292     -17.883  -2.981 -14.746  1.00 23.71           C
ATOM   3140  H   MET A 292     -15.129   1.477 -12.593  1.00  0.00           H
ATOM   3141  HA  MET A 292     -15.691  -1.066 -13.753  1.00  0.00           H
ATOM   3142  HB2 MET A 292     -17.166   1.062 -12.616  1.00  0.00           H
ATOM   3143  HB3 MET A 292     -17.732   1.065 -14.239  1.00  0.00           H
ATOM   3144  HG2 MET A 292     -17.672  -1.448 -12.455  1.00  0.00           H
ATOM   3145  HG3 MET A 292     -18.979  -0.314 -12.481  1.00  0.00           H
ATOM   3146  HE1 MET A 292     -18.283  -3.649 -15.508  1.00  0.00           H
ATOM   3147  HE2 MET A 292     -16.915  -2.626 -15.093  1.00  0.00           H
ATOM   3148  HE3 MET A 292     -17.734  -3.555 -13.830  1.00  0.00           H
ATOM   3149  N   ASP A 293     -15.298   1.488 -15.865  1.00 25.20           N
ATOM   3150  CA  ASP A 293     -14.886   1.863 -17.233  1.00 24.42           C
ATOM   3151  C   ASP A 293     -13.411   1.519 -17.557  1.00 24.19           C
ATOM   3152  O   ASP A 293     -12.837   1.989 -18.548  1.00 22.66           O
ATOM   3153  CB  ASP A 293     -15.220   3.348 -17.515  1.00 25.99           C
ATOM   3154  CG  ASP A 293     -16.729   3.550 -17.586  1.00 25.87           C
ATOM   3155  OD1 ASP A 293     -17.405   3.582 -16.535  1.00 25.88           O
ATOM   3156  OD2 ASP A 293     -17.312   3.438 -18.684  1.00 26.97           O1-
ATOM   3157  H   ASP A 293     -15.430   2.247 -15.201  1.00  0.00           H
ATOM   3158  HA  ASP A 293     -15.455   1.262 -17.941  1.00  0.00           H
ATOM   3159  HB2 ASP A 293     -14.801   3.997 -16.747  1.00  0.00           H
ATOM   3160  HB3 ASP A 293     -14.801   3.673 -18.467  1.00  0.00           H
ATOM   3161  N   PHE A 294     -12.816   0.615 -16.772  1.00 22.53           N
ATOM   3162  CA  PHE A 294     -11.733  -0.269 -17.181  1.00 21.67           C
ATOM   3163  C   PHE A 294     -12.315  -1.685 -17.348  1.00 22.37           C
ATOM   3164  O   PHE A 294     -12.201  -2.252 -18.427  1.00 23.42           O
ATOM   3165  CB  PHE A 294     -10.593  -0.244 -16.146  1.00 21.57           C
ATOM   3166  CG  PHE A 294      -9.429  -1.151 -16.491  1.00 21.32           C
ATOM   3167  CD1 PHE A 294      -8.477  -0.753 -17.452  1.00 23.19           C
ATOM   3168  CD2 PHE A 294      -9.311  -2.409 -15.864  1.00 21.72           C
ATOM   3169  CE1 PHE A 294      -7.388  -1.594 -17.749  1.00 21.37           C
ATOM   3170  CE2 PHE A 294      -8.232  -3.252 -16.179  1.00 24.26           C
ATOM   3171  CZ  PHE A 294      -7.255  -2.830 -17.094  1.00 21.92           C
ATOM   3172  H   PHE A 294     -13.344   0.327 -15.961  1.00  0.00           H
ATOM   3173  HA  PHE A 294     -11.323   0.035 -18.143  1.00  0.00           H
ATOM   3174  HB2 PHE A 294     -10.212   0.772 -16.044  1.00  0.00           H
ATOM   3175  HB3 PHE A 294     -10.952  -0.520 -15.157  1.00  0.00           H
ATOM   3176  HD1 PHE A 294      -8.557   0.199 -17.955  1.00  0.00           H
ATOM   3177  HD2 PHE A 294     -10.046  -2.739 -15.144  1.00  0.00           H
ATOM   3178  HE1 PHE A 294      -6.647  -1.291 -18.474  1.00  0.00           H
ATOM   3179  HE2 PHE A 294      -8.138  -4.222 -15.718  1.00  0.00           H
ATOM   3180  HZ  PHE A 294      -6.401  -3.461 -17.287  1.00  0.00           H
ATOM   3181  N   ILE A 295     -12.997  -2.246 -16.340  1.00 24.85           N
ATOM   3182  CA  ILE A 295     -13.558  -3.610 -16.356  1.00 26.88           C
ATOM   3183  C   ILE A 295     -14.656  -3.845 -17.438  1.00 27.94           C
ATOM   3184  O   ILE A 295     -14.879  -4.984 -17.839  1.00 27.36           O
ATOM   3185  CB  ILE A 295     -14.010  -3.966 -14.903  1.00 28.74           C
ATOM   3186  CG1 ILE A 295     -12.834  -3.939 -13.888  1.00 30.86           C
ATOM   3187  CG2 ILE A 295     -14.789  -5.292 -14.764  1.00 29.65           C
ATOM   3188  CD1 ILE A 295     -11.757  -5.018 -14.100  1.00 31.32           C
ATOM   3189  H   ILE A 295     -13.063  -1.735 -15.468  1.00  0.00           H
ATOM   3190  HA  ILE A 295     -12.750  -4.286 -16.641  1.00  0.00           H
ATOM   3191  HB  ILE A 295     -14.698  -3.182 -14.589  1.00  0.00           H
ATOM   3192 HG12 ILE A 295     -12.347  -2.965 -13.895  1.00  0.00           H
ATOM   3193 HG13 ILE A 295     -13.234  -4.044 -12.879  1.00  0.00           H
ATOM   3194 HG21 ILE A 295     -14.992  -5.527 -13.719  1.00  0.00           H
ATOM   3195 HG22 ILE A 295     -15.753  -5.251 -15.273  1.00  0.00           H
ATOM   3196 HG23 ILE A 295     -14.232  -6.127 -15.192  1.00  0.00           H
ATOM   3197 HD11 ILE A 295     -10.972  -4.931 -13.348  1.00  0.00           H
ATOM   3198 HD12 ILE A 295     -12.169  -6.024 -14.023  1.00  0.00           H
ATOM   3199 HD13 ILE A 295     -11.272  -4.932 -15.073  1.00  0.00           H
ATOM   3200  N   LYS A 296     -15.301  -2.792 -17.962  1.00 27.30           N
ATOM   3201  CA  LYS A 296     -16.206  -2.843 -19.122  1.00 29.16           C
ATOM   3202  C   LYS A 296     -15.434  -2.928 -20.457  1.00 29.60           C
ATOM   3203  O   LYS A 296     -16.025  -3.260 -21.482  1.00 30.49           O
ATOM   3204  CB  LYS A 296     -16.967  -1.496 -19.233  1.00 30.80           C
ATOM   3205  CG  LYS A 296     -18.066  -1.181 -18.201  1.00 35.46           C
ATOM   3206  CD  LYS A 296     -18.479   0.296 -18.352  1.00 37.53           C
ATOM   3207  CE  LYS A 296     -19.361   0.873 -17.236  1.00 39.57           C
ATOM   3208  NZ  LYS A 296     -19.475   2.336 -17.368  1.00 42.84           N1+
ATOM   3209  H   LYS A 296     -15.171  -1.899 -17.495  1.00  0.00           H
ATOM   3210  HA  LYS A 296     -16.897  -3.685 -19.048  1.00  0.00           H
ATOM   3211  HB2 LYS A 296     -16.224  -0.695 -19.224  1.00  0.00           H
ATOM   3212  HB3 LYS A 296     -17.443  -1.425 -20.214  1.00  0.00           H
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ATOM   3213  HG2 LYS A 296     -18.922  -1.841 -18.347  1.00  0.00           H
ATOM   3214  HG3 LYS A 296     -17.706  -1.373 -17.194  1.00  0.00           H
ATOM   3215  HD2 LYS A 296     -17.572   0.893 -18.392  1.00  0.00           H
ATOM   3216  HD3 LYS A 296     -18.962   0.440 -19.319  1.00  0.00           H
ATOM   3217  HE2 LYS A 296     -20.351   0.416 -17.266  1.00  0.00           H
ATOM   3218  HE3 LYS A 296     -18.929   0.658 -16.260  1.00  0.00           H
ATOM   3219  HZ1 LYS A 296     -20.237   2.755 -16.869  1.00  0.00           H
ATOM   3220  HZ2 LYS A 296     -18.604   2.786 -17.002  1.00  0.00           H
ATOM   3221  HZ3 LYS A 296     -19.420   2.644 -18.330  1.00  0.00           H
ATOM   3222  N   LYS A 297     -14.169  -2.499 -20.457  1.00 28.79           N
ATOM   3223  CA  LYS A 297     -13.381  -2.119 -21.625  1.00 30.07           C
ATOM   3224  C   LYS A 297     -12.213  -3.090 -21.841  1.00 29.13           C
ATOM   3225  O   LYS A 297     -11.854  -3.349 -22.985  1.00 30.10           O
ATOM   3226  CB  LYS A 297     -12.867  -0.689 -21.335  1.00 31.69           C
ATOM   3227  CG  LYS A 297     -11.953  -0.034 -22.389  1.00 36.08           C
ATOM   3228  CD  LYS A 297     -11.497   1.365 -21.939  1.00 40.63           C
ATOM   3229  CE  LYS A 297     -10.386   1.339 -20.866  1.00 42.81           C
ATOM   3230  NZ  LYS A 297     -10.468   2.522 -19.993  1.00 42.47           N1+
ATOM   3231  H   LYS A 297     -13.724  -2.373 -19.556  1.00  0.00           H
ATOM   3232  HA  LYS A 297     -13.994  -2.115 -22.529  1.00  0.00           H
ATOM   3233  HB2 LYS A 297     -13.733  -0.043 -21.181  1.00  0.00           H
ATOM   3234  HB3 LYS A 297     -12.340  -0.698 -20.384  1.00  0.00           H
ATOM   3235  HG2 LYS A 297     -11.079  -0.655 -22.596  1.00  0.00           H
ATOM   3236  HG3 LYS A 297     -12.499   0.041 -23.330  1.00  0.00           H
ATOM   3237  HD2 LYS A 297     -11.135   1.918 -22.806  1.00  0.00           H
ATOM   3238  HD3 LYS A 297     -12.371   1.910 -21.580  1.00  0.00           H
ATOM   3239  HE2 LYS A 297     -10.460   0.459 -20.230  1.00  0.00           H
ATOM   3240  HE3 LYS A 297      -9.403   1.288 -21.338  1.00  0.00           H
ATOM   3241  HZ1 LYS A 297      -9.649   2.592 -19.378  1.00  0.00           H
ATOM   3242  HZ2 LYS A 297     -10.499   3.366 -20.537  1.00  0.00           H
ATOM   3243  HZ3 LYS A 297     -11.305   2.451 -19.416  1.00  0.00           H
ATOM   3244  N   ASN A 298     -11.639  -3.608 -20.750  1.00 28.47           N
ATOM   3245  CA  ASN A 298     -10.448  -4.454 -20.711  1.00 26.71           C
ATOM   3246  C   ASN A 298     -10.724  -5.744 -19.915  1.00 25.72           C
ATOM   3247  O   ASN A 298     -10.224  -5.882 -18.792  1.00 23.38           O
ATOM   3248  CB  ASN A 298      -9.255  -3.652 -20.129  1.00 27.91           C
ATOM   3249  CG  ASN A 298      -8.658  -2.640 -21.101  1.00 28.07           C
ATOM   3250  OD1 ASN A 298      -8.927  -1.439 -21.022  1.00 30.60           O
ATOM   3251  ND2 ASN A 298      -7.807  -3.118 -21.997  1.00 28.22           N
ATOM   3252  H   ASN A 298     -11.971  -3.289 -19.846  1.00  0.00           H
ATOM   3253  HA  ASN A 298     -10.175  -4.766 -21.720  1.00  0.00           H
ATOM   3254  HB2 ASN A 298      -9.544  -3.147 -19.207  1.00  0.00           H
ATOM   3255  HB3 ASN A 298      -8.454  -4.337 -19.852  1.00  0.00           H
ATOM   3256 HD21 ASN A 298      -7.652  -4.153 -22.013  1.00  0.00           H
ATOM   3257 HD22 ASN A 298      -7.348  -2.537 -22.671  1.00  0.00           H
ATOM   3258  N   PRO A 299     -11.540  -6.692 -20.434  1.00 25.00           N
ATOM   3259  CA  PRO A 299     -11.804  -7.969 -19.757  1.00 25.78           C
ATOM   3260  C   PRO A 299     -10.640  -8.977 -19.836  1.00 25.64           C
ATOM   3261  O   PRO A 299     -10.599  -9.899 -19.026  1.00 25.28           O
ATOM   3262  CB  PRO A 299     -13.058  -8.520 -20.452  1.00 26.77           C
ATOM   3263  CG  PRO A 299     -12.987  -7.952 -21.862  1.00 25.54           C
ATOM   3264  CD  PRO A 299     -12.308  -6.594 -21.680  1.00 25.40           C
ATOM   3265  HA  PRO A 299     -12.021  -7.796 -18.701  1.00  0.00           H
ATOM   3266  HB2 PRO A 299     -13.118  -9.610 -20.440  1.00  0.00           H
ATOM   3267  HB3 PRO A 299     -13.946  -8.138 -19.947  1.00  0.00           H
ATOM   3268  HG2 PRO A 299     -12.352  -8.589 -22.481  1.00  0.00           H
ATOM   3269  HG3 PRO A 299     -13.960  -7.878 -22.347  1.00  0.00           H
ATOM   3270  HD2 PRO A 299     -11.694  -6.333 -22.543  1.00  0.00           H
ATOM   3271  HD3 PRO A 299     -13.069  -5.823 -21.567  1.00  0.00           H
ATOM   3272  N   GLU A 300      -9.693  -8.825 -20.770  1.00 27.36           N
ATOM   3273  CA  GLU A 300      -8.495  -9.650 -20.917  1.00 30.62           C
ATOM   3274  C   GLU A 300      -7.489  -9.392 -19.779  1.00 31.01           C
ATOM   3275  O   GLU A 300      -6.850 -10.329 -19.300  1.00 30.85           O
ATOM   3276  CB  GLU A 300      -7.863  -9.374 -22.312  1.00 33.91           C
ATOM   3277  CG  GLU A 300      -7.148  -8.014 -22.552  1.00 38.15           C
ATOM   3278  CD  GLU A 300      -8.063  -6.803 -22.409  1.00 41.20           C
ATOM   3279  OE1 GLU A 300      -9.274  -6.965 -22.659  1.00 42.55           O
ATOM   3280  OE2 GLU A 300      -7.591  -5.757 -21.929  1.00 42.55           O1-
ATOM   3281  H   GLU A 300      -9.759  -8.049 -21.446  1.00  0.00           H
ATOM   3282  HA  GLU A 300      -8.799 -10.698 -20.871  1.00  0.00           H
ATOM   3283  HB2 GLU A 300      -7.133 -10.160 -22.504  1.00  0.00           H
ATOM   3284  HB3 GLU A 300      -8.628  -9.508 -23.078  1.00  0.00           H
ATOM   3285  HG2 GLU A 300      -6.292  -7.892 -21.888  1.00  0.00           H
ATOM   3286  HG3 GLU A 300      -6.746  -7.989 -23.564  1.00  0.00           H
ATOM   3287  N   TYR A 301      -7.366  -8.140 -19.321  1.00 29.28           N
ATOM   3288  CA  TYR A 301      -6.453  -7.723 -18.256  1.00 27.29           C
ATOM   3289  C   TYR A 301      -6.975  -8.080 -16.848  1.00 26.08           C
ATOM   3290  O   TYR A 301      -6.201  -8.076 -15.889  1.00 25.20           O
ATOM   3291  CB  TYR A 301      -6.247  -6.195 -18.351  1.00 25.45           C
ATOM   3292  CG  TYR A 301      -5.334  -5.658 -19.456  1.00 24.93           C
ATOM   3293  CD1 TYR A 301      -4.345  -6.453 -20.082  1.00 25.31           C
ATOM   3294  CD2 TYR A 301      -5.445  -4.302 -19.835  1.00 23.92           C
ATOM   3295  CE1 TYR A 301      -3.484  -5.893 -21.047  1.00 25.27           C
ATOM   3296  CE2 TYR A 301      -4.563  -3.735 -20.771  1.00 26.82           C
ATOM   3297  CZ  TYR A 301      -3.574  -4.527 -21.373  1.00 25.82           C
ATOM   3298  OH  TYR A 301      -2.690  -3.968 -22.247  1.00 26.18           O
ATOM   3299  H   TYR A 301      -7.865  -7.414 -19.825  1.00  0.00           H
ATOM   3300  HA  TYR A 301      -5.503  -8.247 -18.350  1.00  0.00           H
ATOM   3301  HB2 TYR A 301      -7.220  -5.708 -18.436  1.00  0.00           H
ATOM   3302  HB3 TYR A 301      -5.832  -5.830 -17.413  1.00  0.00           H
ATOM   3303  HD1 TYR A 301      -4.220  -7.496 -19.845  1.00  0.00           H
ATOM   3304  HD2 TYR A 301      -6.211  -3.674 -19.416  1.00  0.00           H
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ATOM   3305  HE1 TYR A 301      -2.730  -6.505 -21.517  1.00  0.00           H
ATOM   3306  HE2 TYR A 301      -4.649  -2.692 -21.034  1.00  0.00           H
ATOM   3307  HH  TYR A 301      -2.405  -3.078 -21.952  1.00  0.00           H
ATOM   3308  N   LEU A 302      -8.248  -8.467 -16.716  1.00 26.08           N
ATOM   3309  CA  LEU A 302      -8.817  -9.078 -15.516  1.00 25.64           C
ATOM   3310  C   LEU A 302      -8.309 -10.532 -15.419  1.00 26.50           C
ATOM   3311  O   LEU A 302      -8.135 -11.207 -16.437  1.00 26.41           O
ATOM   3312  CB  LEU A 302     -10.360  -9.023 -15.658  1.00 26.41           C
ATOM   3313  CG  LEU A 302     -11.218  -9.699 -14.564  1.00 28.11           C
ATOM   3314  CD1 LEU A 302     -10.964  -9.136 -13.160  1.00 26.19           C
ATOM   3315  CD2 LEU A 302     -12.709  -9.594 -14.916  1.00 28.85           C
ATOM   3316  H   LEU A 302      -8.780  -8.560 -17.571  1.00  0.00           H
ATOM   3317  HA  LEU A 302      -8.501  -8.515 -14.636  1.00  0.00           H
ATOM   3318  HB2 LEU A 302     -10.662  -7.979 -15.752  1.00  0.00           H
ATOM   3319  HB3 LEU A 302     -10.629  -9.490 -16.604  1.00  0.00           H
ATOM   3320  HG  LEU A 302     -10.976 -10.762 -14.549  1.00  0.00           H
ATOM   3321 HD11 LEU A 302     -11.599  -9.629 -12.425  1.00  0.00           H
ATOM   3322 HD12 LEU A 302      -9.936  -9.304 -12.849  1.00  0.00           H
ATOM   3323 HD13 LEU A 302     -11.162  -8.065 -13.114  1.00  0.00           H
ATOM   3324 HD21 LEU A 302     -13.325 -10.117 -14.184  1.00  0.00           H
ATOM   3325 HD22 LEU A 302     -13.038  -8.555 -14.953  1.00  0.00           H
ATOM   3326 HD23 LEU A 302     -12.912 -10.040 -15.891  1.00  0.00           H
ATOM   3327  N   ASP A 303      -8.035 -11.006 -14.200  1.00 26.14           N
ATOM   3328  CA  ASP A 303      -7.723 -12.407 -13.918  1.00 26.40           C
ATOM   3329  C   ASP A 303      -9.037 -13.158 -13.672  1.00 26.12           C
ATOM   3330  O   ASP A 303      -9.952 -12.631 -13.033  1.00 26.00           O
ATOM   3331  CB  ASP A 303      -6.874 -12.499 -12.633  1.00 24.91           C
ATOM   3332  CG  ASP A 303      -6.076 -13.792 -12.591  1.00 24.80           C
ATOM   3333  OD1 ASP A 303      -6.681 -14.873 -12.407  1.00 24.92           O
ATOM   3334  OD2 ASP A 303      -4.847 -13.682 -12.777  1.00 22.64           O1-
ATOM   3335  H   ASP A 303      -8.135 -10.399 -13.393  1.00  0.00           H
ATOM   3336  HA  ASP A 303      -7.178 -12.846 -14.757  1.00  0.00           H
ATOM   3337  HB2 ASP A 303      -6.163 -11.673 -12.594  1.00  0.00           H
ATOM   3338  HB3 ASP A 303      -7.477 -12.419 -11.727  1.00  0.00           H
ATOM   3339  N   GLU A 304      -9.133 -14.397 -14.151  1.00 27.08           N
ATOM   3340  CA  GLU A 304     -10.278 -15.283 -13.967  1.00 27.05           C
ATOM   3341  C   GLU A 304     -10.350 -15.841 -12.527  1.00 26.35           C
ATOM   3342  O   GLU A 304     -11.438 -16.166 -12.052  1.00 25.01           O
ATOM   3343  CB  GLU A 304     -10.152 -16.422 -15.003  1.00 29.55           C
ATOM   3344  CG  GLU A 304      -8.872 -17.282 -14.894  1.00 34.94           C
ATOM   3345  CD  GLU A 304      -8.410 -17.846 -16.231  1.00 38.80           C
ATOM   3346  OE1 GLU A 304      -9.280 -18.259 -17.024  1.00 40.86           O
ATOM   3347  OE2 GLU A 304      -7.180 -17.836 -16.449  1.00 37.70           O1-
ATOM   3348  H   GLU A 304      -8.321 -14.799 -14.603  1.00  0.00           H
ATOM   3349  HA  GLU A 304     -11.197 -14.728 -14.164  1.00  0.00           H
ATOM   3350  HB2 GLU A 304     -11.018 -17.081 -14.937  1.00  0.00           H
ATOM   3351  HB3 GLU A 304     -10.209 -15.981 -16.000  1.00  0.00           H
ATOM   3352  HG2 GLU A 304      -8.042 -16.690 -14.516  1.00  0.00           H
ATOM   3353  HG3 GLU A 304      -9.018 -18.106 -14.196  1.00  0.00           H
ATOM   3354  N   ASN A 305      -9.224 -15.894 -11.800  1.00 25.29           N
ATOM   3355  CA  ASN A 305      -9.088 -16.502 -10.468  1.00 24.94           C
ATOM   3356  C   ASN A 305      -9.116 -15.402  -9.381  1.00 25.14           C
ATOM   3357  O   ASN A 305      -8.524 -15.557  -8.309  1.00 24.32           O
ATOM   3358  CB  ASN A 305      -7.719 -17.222 -10.348  1.00 26.38           C
ATOM   3359  CG  ASN A 305      -7.349 -18.165 -11.488  1.00 26.41           C
ATOM   3360  OD1 ASN A 305      -7.647 -19.353 -11.435  1.00 28.64           O
ATOM   3361  ND2 ASN A 305      -6.665 -17.640 -12.500  1.00 27.76           N
ATOM   3362  H   ASN A 305      -8.362 -15.525 -12.216  1.00  0.00           H
ATOM   3363  HA  ASN A 305      -9.892 -17.217 -10.285  1.00  0.00           H
ATOM   3364  HB2 ASN A 305      -6.934 -16.484 -10.282  1.00  0.00           H
ATOM   3365  HB3 ASN A 305      -7.678 -17.791  -9.419  1.00  0.00           H
ATOM   3366 HD21 ASN A 305      -6.518 -16.618 -12.529  1.00  0.00           H
ATOM   3367 HD22 ASN A 305      -6.491 -18.187 -13.332  1.00  0.00           H
ATOM   3368  N   ASN A 306      -9.744 -14.261  -9.684  1.00 24.92           N
ATOM   3369  CA  ASN A 306      -9.760 -13.015  -8.911  1.00 24.17           C
ATOM   3370  C   ASN A 306     -10.447 -13.103  -7.527  1.00 23.07           C
ATOM   3371  O   ASN A 306     -11.075 -14.097  -7.157  1.00 22.07           O
ATOM   3372  CB  ASN A 306     -10.405 -11.883  -9.755  1.00 24.78           C
ATOM   3373  CG  ASN A 306     -11.868 -12.110 -10.142  1.00 23.30           C
ATOM   3374  OD1 ASN A 306     -12.762 -11.972  -9.311  1.00 23.64           O
ATOM   3375  ND2 ASN A 306     -12.129 -12.449 -11.396  1.00 30.14           N
ATOM   3376  H   ASN A 306     -10.193 -14.260 -10.589  1.00  0.00           H
ATOM   3377  HA  ASN A 306      -8.717 -12.746  -8.729  1.00  0.00           H
ATOM   3378  HB2 ASN A 306     -10.372 -10.948  -9.205  1.00  0.00           H
ATOM   3379  HB3 ASN A 306      -9.802 -11.703 -10.645  1.00  0.00           H
ATOM   3380 HD21 ASN A 306     -11.358 -12.527 -12.072  1.00  0.00           H
ATOM   3381 HD22 ASN A 306     -13.069 -12.669 -11.676  1.00  0.00           H
ATOM   3382  N   LEU A 307     -10.345 -12.006  -6.771  1.00 22.52           N
ATOM   3383  CA  LEU A 307     -10.921 -11.770  -5.457  1.00 20.85           C
ATOM   3384  C   LEU A 307     -11.910 -10.585  -5.541  1.00 21.65           C
ATOM   3385  O   LEU A 307     -11.948  -9.733  -4.651  1.00 22.08           O
ATOM   3386  CB  LEU A 307      -9.754 -11.524  -4.465  1.00 21.68           C
ATOM   3387  CG  LEU A 307     -10.120 -11.559  -2.964  1.00 24.57           C
ATOM   3388  CD1 LEU A 307     -10.272 -12.983  -2.428  1.00 25.54           C
ATOM   3389  CD2 LEU A 307      -9.087 -10.789  -2.134  1.00 24.54           C
ATOM   3390  H   LEU A 307      -9.811 -11.223  -7.155  1.00  0.00           H
ATOM   3391  HA  LEU A 307     -11.487 -12.645  -5.134  1.00  0.00           H
ATOM   3392  HB2 LEU A 307      -8.956 -12.243  -4.646  1.00  0.00           H
ATOM   3393  HB3 LEU A 307      -9.312 -10.556  -4.703  1.00  0.00           H
ATOM   3394  HG  LEU A 307     -11.079 -11.072  -2.815  1.00  0.00           H
ATOM   3395 HD11 LEU A 307     -10.496 -12.968  -1.362  1.00  0.00           H
ATOM   3396 HD12 LEU A 307     -11.082 -13.511  -2.928  1.00  0.00           H
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ATOM   3397 HD13 LEU A 307      -9.350 -13.547  -2.558  1.00  0.00           H
ATOM   3398 HD21 LEU A 307      -9.363 -10.787  -1.081  1.00  0.00           H
ATOM   3399 HD22 LEU A 307      -8.099 -11.239  -2.219  1.00  0.00           H
ATOM   3400 HD23 LEU A 307      -9.010  -9.749  -2.455  1.00  0.00           H
ATOM   3401  N   MET A 308     -12.752 -10.514  -6.588  1.00 20.81           N
ATOM   3402  CA  MET A 308     -13.806  -9.493  -6.749  1.00 22.78           C
ATOM   3403  C   MET A 308     -14.788  -9.448  -5.555  1.00 22.78           C
ATOM   3404  O   MET A 308     -15.316  -8.388  -5.217  1.00 22.72           O
ATOM   3405  CB  MET A 308     -14.548  -9.728  -8.086  1.00 21.26           C
ATOM   3406  CG  MET A 308     -15.677  -8.733  -8.413  1.00 20.59           C
ATOM   3407  SD  MET A 308     -15.165  -7.010  -8.654  1.00 23.31           S
ATOM   3408  CE  MET A 308     -14.744  -7.038 -10.421  1.00 20.96           C
ATOM   3409  H   MET A 308     -12.654 -11.207  -7.325  1.00  0.00           H
ATOM   3410  HA  MET A 308     -13.311  -8.521  -6.790  1.00  0.00           H
ATOM   3411  HB2 MET A 308     -13.830  -9.702  -8.905  1.00  0.00           H
ATOM   3412  HB3 MET A 308     -14.967 -10.736  -8.087  1.00  0.00           H
ATOM   3413  HG2 MET A 308     -16.201  -9.063  -9.310  1.00  0.00           H
ATOM   3414  HG3 MET A 308     -16.422  -8.752  -7.622  1.00  0.00           H
ATOM   3415  HE1 MET A 308     -14.333  -6.076 -10.727  1.00  0.00           H
ATOM   3416  HE2 MET A 308     -14.007  -7.810 -10.637  1.00  0.00           H
ATOM   3417  HE3 MET A 308     -15.629  -7.239 -11.024  1.00  0.00           H
ATOM   3418  N   SER A 309     -14.969 -10.579  -4.868  1.00 22.41           N
ATOM   3419  CA  SER A 309     -15.769 -10.755  -3.663  1.00 23.60           C
ATOM   3420  C   SER A 309     -15.223 -10.008  -2.427  1.00 22.97           C
ATOM   3421  O   SER A 309     -15.951  -9.850  -1.450  1.00 22.64           O
ATOM   3422  CB  SER A 309     -15.845 -12.274  -3.404  1.00 24.95           C
ATOM   3423  OG  SER A 309     -14.551 -12.872  -3.378  1.00 30.97           O
ATOM   3424  H   SER A 309     -14.458 -11.400  -5.160  1.00  0.00           H
ATOM   3425  HA  SER A 309     -16.775 -10.373  -3.851  1.00  0.00           H
ATOM   3426  HB2 SER A 309     -16.352 -12.466  -2.457  1.00  0.00           H
ATOM   3427  HB3 SER A 309     -16.444 -12.754  -4.179  1.00  0.00           H
ATOM   3428  HG  SER A 309     -14.632 -13.750  -3.033  1.00  0.00           H
ATOM   3429  N   PHE A 310     -13.971  -9.524  -2.457  1.00 22.04           N
ATOM   3430  CA  PHE A 310     -13.430  -8.637  -1.427  1.00 21.22           C
ATOM   3431  C   PHE A 310     -13.851  -7.186  -1.702  1.00 21.27           C
ATOM   3432  O   PHE A 310     -14.056  -6.435  -0.752  1.00 20.91           O
ATOM   3433  CB  PHE A 310     -11.886  -8.720  -1.435  1.00 20.01           C
ATOM   3434  CG  PHE A 310     -11.156  -7.741  -0.529  1.00 20.57           C
ATOM   3435  CD1 PHE A 310     -11.362  -7.780   0.865  1.00 21.24           C
ATOM   3436  CD2 PHE A 310     -10.298  -6.767  -1.082  1.00 21.25           C
ATOM   3437  CE1 PHE A 310     -10.711  -6.853   1.699  1.00 21.69           C
ATOM   3438  CE2 PHE A 310      -9.657  -5.835  -0.245  1.00 21.89           C
ATOM   3439  CZ  PHE A 310      -9.859  -5.880   1.147  1.00 21.34           C
ATOM   3440  H   PHE A 310     -13.405  -9.699  -3.282  1.00  0.00           H
ATOM   3441  HA  PHE A 310     -13.798  -8.926  -0.441  1.00  0.00           H
ATOM   3442  HB2 PHE A 310     -11.593  -9.719  -1.118  1.00  0.00           H
ATOM   3443  HB3 PHE A 310     -11.506  -8.590  -2.448  1.00  0.00           H
ATOM   3444  HD1 PHE A 310     -12.031  -8.510   1.297  1.00  0.00           H
ATOM   3445  HD2 PHE A 310     -10.129  -6.724  -2.149  1.00  0.00           H
ATOM   3446  HE1 PHE A 310     -10.864  -6.891   2.763  1.00  0.00           H
ATOM   3447  HE2 PHE A 310      -8.983  -5.105  -0.670  1.00  0.00           H
ATOM   3448  HZ  PHE A 310      -9.350  -5.179   1.792  1.00  0.00           H
ATOM   3449  N   LEU A 311     -13.999  -6.789  -2.973  1.00 20.63           N
ATOM   3450  CA  LEU A 311     -14.240  -5.403  -3.373  1.00 22.79           C
ATOM   3451  C   LEU A 311     -15.734  -5.082  -3.486  1.00 24.02           C
ATOM   3452  O   LEU A 311     -16.111  -3.915  -3.430  1.00 26.14           O
ATOM   3453  CB  LEU A 311     -13.700  -5.195  -4.807  1.00 23.27           C
ATOM   3454  CG  LEU A 311     -12.213  -5.513  -5.030  1.00 24.44           C
ATOM   3455  CD1 LEU A 311     -11.904  -5.381  -6.526  1.00 21.83           C
ATOM   3456  CD2 LEU A 311     -11.289  -4.619  -4.187  1.00 24.33           C
ATOM   3457  H   LEU A 311     -13.902  -7.478  -3.706  1.00  0.00           H
ATOM   3458  HA  LEU A 311     -13.776  -4.702  -2.675  1.00  0.00           H
ATOM   3459  HB2 LEU A 311     -14.283  -5.804  -5.503  1.00  0.00           H
ATOM   3460  HB3 LEU A 311     -13.880  -4.160  -5.107  1.00  0.00           H
ATOM   3461  HG  LEU A 311     -12.022  -6.551  -4.751  1.00  0.00           H
ATOM   3462 HD11 LEU A 311     -10.863  -5.606  -6.738  1.00  0.00           H
ATOM   3463 HD12 LEU A 311     -12.507  -6.069  -7.118  1.00  0.00           H
ATOM   3464 HD13 LEU A 311     -12.099  -4.373  -6.892  1.00  0.00           H
ATOM   3465 HD21 LEU A 311     -10.245  -4.886  -4.346  1.00  0.00           H
ATOM   3466 HD22 LEU A 311     -11.404  -3.565  -4.442  1.00  0.00           H
ATOM   3467 HD23 LEU A 311     -11.482  -4.727  -3.120  1.00  0.00           H
ATOM   3468  N   SER A 312     -16.586  -6.082  -3.716  1.00 24.95           N
ATOM   3469  CA  SER A 312     -17.915  -5.882  -4.263  1.00 24.03           C
ATOM   3470  C   SER A 312     -18.971  -6.662  -3.481  1.00 25.46           C
ATOM   3471  O   SER A 312     -18.702  -7.737  -2.950  1.00 23.59           O
ATOM   3472  CB  SER A 312     -17.860  -6.191  -5.771  1.00 22.48           C
ATOM   3473  OG  SER A 312     -19.100  -5.956  -6.412  1.00 23.27           O
ATOM   3474  H   SER A 312     -16.228  -7.029  -3.724  1.00  0.00           H
ATOM   3475  HA  SER A 312     -18.195  -4.834  -4.155  1.00  0.00           H
ATOM   3476  HB2 SER A 312     -17.100  -5.573  -6.255  1.00  0.00           H
ATOM   3477  HB3 SER A 312     -17.564  -7.228  -5.923  1.00  0.00           H
ATOM   3478  HG  SER A 312     -19.281  -5.010  -6.329  1.00  0.00           H
ATOM   3479  N   ASN A 313     -20.184  -6.098  -3.430  1.00 27.59           N
ATOM   3480  CA  ASN A 313     -21.346  -6.663  -2.740  1.00 30.50           C
ATOM   3481  C   ASN A 313     -22.059  -7.644  -3.686  1.00 30.83           C
ATOM   3482  O   ASN A 313     -22.569  -8.671  -3.248  1.00 32.14           O
ATOM   3483  CB  ASN A 313     -22.384  -5.552  -2.413  1.00 29.50           C
ATOM   3484  CG  ASN A 313     -21.798  -4.292  -1.775  1.00 31.80           C
ATOM   3485  OD1 ASN A 313     -21.465  -4.272  -0.596  1.00 30.49           O
ATOM   3486  ND2 ASN A 313     -21.639  -3.235  -2.565  1.00 31.11           N
ATOM   3487  H   ASN A 313     -20.304  -5.211  -3.898  1.00  0.00           H
ATOM   3488  HA  ASN A 313     -21.036  -7.173  -1.825  1.00  0.00           H
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ATOM   3489  HB2 ASN A 313     -22.946  -5.258  -3.300  1.00  0.00           H
ATOM   3490  HB3 ASN A 313     -23.127  -5.956  -1.724  1.00  0.00           H
ATOM   3491 HD21 ASN A 313     -21.941  -3.286  -3.542  1.00  0.00           H
ATOM   3492 HD22 ASN A 313     -21.212  -2.389  -2.206  1.00  0.00           H
ATOM   3493  N   ASP A 314     -22.122  -7.304  -4.982  1.00 32.03           N
ATOM   3494  CA  ASP A 314     -22.836  -8.045  -6.025  1.00 31.57           C
ATOM   3495  C   ASP A 314     -21.859  -8.886  -6.871  1.00 32.42           C
ATOM   3496  O   ASP A 314     -22.283  -9.863  -7.486  1.00 29.58           O
ATOM   3497  CB  ASP A 314     -23.541  -7.024  -6.961  1.00 33.24           C
ATOM   3498  CG  ASP A 314     -22.599  -6.161  -7.792  1.00 33.93           C
ATOM   3499  OD1 ASP A 314     -22.026  -5.205  -7.235  1.00 33.28           O
ATOM   3500  OD2 ASP A 314     -22.373  -6.490  -8.973  1.00 35.28           O1-
ATOM   3501  H   ASP A 314     -21.681  -6.440  -5.269  1.00  0.00           H
ATOM   3502  HA  ASP A 314     -23.583  -8.707  -5.585  1.00  0.00           H
ATOM   3503  HB2 ASP A 314     -24.200  -7.560  -7.645  1.00  0.00           H
ATOM   3504  HB3 ASP A 314     -24.188  -6.369  -6.378  1.00  0.00           H
ATOM   3505  N   ASN A 315     -20.578  -8.496  -6.925  1.00 31.75           N
ATOM   3506  CA  ASN A 315     -19.497  -9.020  -7.763  1.00 32.79           C
ATOM   3507  C   ASN A 315     -19.362  -8.228  -9.070  1.00 31.79           C
ATOM   3508  O   ASN A 315     -19.568  -8.757 -10.165  1.00 30.01           O
ATOM   3509  CB  ASN A 315     -19.398 -10.560  -7.908  1.00 34.98           C
ATOM   3510  CG  ASN A 315     -19.150 -11.271  -6.579  1.00 39.86           C
ATOM   3511  OD1 ASN A 315     -18.014 -11.411  -6.140  1.00 41.48           O
ATOM   3512  ND2 ASN A 315     -20.210 -11.720  -5.920  1.00 39.98           N
ATOM   3513  H   ASN A 315     -20.354  -7.641  -6.426  1.00  0.00           H
ATOM   3514  HA  ASN A 315     -18.605  -8.749  -7.202  1.00  0.00           H
ATOM   3515  HB2 ASN A 315     -20.267 -10.979  -8.413  1.00  0.00           H
ATOM   3516  HB3 ASN A 315     -18.553 -10.801  -8.556  1.00  0.00           H
ATOM   3517 HD21 ASN A 315     -21.135 -11.518  -6.281  1.00  0.00           H
ATOM   3518 HD22 ASN A 315     -20.082 -12.149  -5.019  1.00  0.00           H
ATOM   3519  N   GLY A 316     -19.043  -6.937  -8.962  1.00 29.91           N
ATOM   3520  CA  GLY A 316     -18.426  -6.133 -10.010  1.00 28.90           C
ATOM   3521  C   GLY A 316     -19.176  -4.879 -10.449  1.00 29.49           C
ATOM   3522  O   GLY A 316     -18.619  -4.145 -11.260  1.00 31.30           O
ATOM   3523  H   GLY A 316     -19.032  -6.542  -8.016  1.00  0.00           H
ATOM   3524  HA2 GLY A 316     -17.466  -5.789  -9.631  1.00  0.00           H
ATOM   3525  HA3 GLY A 316     -18.201  -6.729 -10.896  1.00  0.00           H
ATOM   3526  N   LYS A 317     -20.402  -4.608  -9.975  1.00 28.46           N
ATOM   3527  CA  LYS A 317     -21.107  -3.369 -10.317  1.00 29.26           C
ATOM   3528  C   LYS A 317     -21.007  -2.355  -9.163  1.00 28.45           C
ATOM   3529  O   LYS A 317     -20.756  -1.178  -9.419  1.00 29.61           O
ATOM   3530  CB  LYS A 317     -22.592  -3.648 -10.654  1.00 30.65           C
ATOM   3531  CG  LYS A 317     -22.840  -4.268 -12.054  1.00 32.56           C
ATOM   3532  CD  LYS A 317     -23.148  -5.782 -12.078  1.00 33.46           C
ATOM   3533  CE  LYS A 317     -21.910  -6.700 -12.172  1.00 35.75           C
ATOM   3534  NZ  LYS A 317     -21.908  -7.717 -11.109  1.00 33.98           N1+
ATOM   3535  H   LYS A 317     -20.851  -5.232  -9.301  1.00  0.00           H
ATOM   3536  HA  LYS A 317     -20.664  -2.880 -11.188  1.00  0.00           H
ATOM   3537  HB2 LYS A 317     -23.084  -4.216  -9.866  1.00  0.00           H
ATOM   3538  HB3 LYS A 317     -23.106  -2.685 -10.650  1.00  0.00           H
ATOM   3539  HG2 LYS A 317     -23.719  -3.767 -12.463  1.00  0.00           H
ATOM   3540  HG3 LYS A 317     -22.033  -4.018 -12.745  1.00  0.00           H
ATOM   3541  HD2 LYS A 317     -23.775  -6.035 -11.221  1.00  0.00           H
ATOM   3542  HD3 LYS A 317     -23.773  -5.984 -12.949  1.00  0.00           H
ATOM   3543  HE2 LYS A 317     -21.876  -7.199 -13.141  1.00  0.00           H
ATOM   3544  HE3 LYS A 317     -20.993  -6.121 -12.107  1.00  0.00           H
ATOM   3545  HZ1 LYS A 317     -21.001  -8.166 -10.991  1.00  0.00           H
ATOM   3546  HZ2 LYS A 317     -22.088  -7.219 -10.206  1.00  0.00           H
ATOM   3547  HZ3 LYS A 317     -22.629  -8.408 -11.213  1.00  0.00           H
ATOM   3548  N   THR A 318     -21.162  -2.778  -7.905  1.00 28.25           N
ATOM   3549  CA  THR A 318     -21.092  -1.932  -6.713  1.00 25.97           C
ATOM   3550  C   THR A 318     -19.786  -2.218  -5.948  1.00 24.96           C
ATOM   3551  O   THR A 318     -19.318  -3.357  -5.924  1.00 24.07           O
ATOM   3552  CB  THR A 318     -22.334  -2.221  -5.824  1.00 27.38           C
ATOM   3553  OG1 THR A 318     -22.340  -3.533  -5.282  1.00 30.36           O
ATOM   3554  CG2 THR A 318     -23.672  -1.992  -6.543  1.00 28.55           C
ATOM   3555  H   THR A 318     -21.386  -3.769  -7.738  1.00  0.00           H
ATOM   3556  HA  THR A 318     -21.104  -0.876  -6.990  1.00  0.00           H
ATOM   3557  HB  THR A 318     -22.298  -1.535  -4.976  1.00  0.00           H
ATOM   3558  HG1 THR A 318     -22.274  -4.158  -6.028  1.00  0.00           H
ATOM   3559 HG21 THR A 318     -24.510  -2.102  -5.853  1.00  0.00           H
ATOM   3560 HG22 THR A 318     -23.722  -0.989  -6.966  1.00  0.00           H
ATOM   3561 HG23 THR A 318     -23.821  -2.703  -7.357  1.00  0.00           H
ATOM   3562  N   TYR A 319     -19.215  -1.198  -5.298  1.00 22.19           N
ATOM   3563  CA  TYR A 319     -18.081  -1.319  -4.382  1.00 21.55           C
ATOM   3564  C   TYR A 319     -18.657  -1.474  -2.964  1.00 20.73           C
ATOM   3565  O   TYR A 319     -19.692  -0.874  -2.662  1.00 22.78           O
ATOM   3566  CB  TYR A 319     -17.270   0.002  -4.449  1.00 17.02           C
ATOM   3567  CG  TYR A 319     -15.856   0.003  -3.879  1.00 18.70           C
ATOM   3568  CD1 TYR A 319     -15.007  -1.114  -4.028  1.00 15.33           C
ATOM   3569  CD2 TYR A 319     -15.362   1.152  -3.228  1.00 16.65           C
ATOM   3570  CE1 TYR A 319     -13.738  -1.136  -3.423  1.00 16.26           C
ATOM   3571  CE2 TYR A 319     -14.070   1.152  -2.663  1.00 16.78           C
ATOM   3572  CZ  TYR A 319     -13.278  -0.008  -2.722  1.00 15.64           C
ATOM   3573  OH  TYR A 319     -12.080  -0.046  -2.081  1.00 14.07           O
ATOM   3574  H   TYR A 319     -19.671  -0.301  -5.316  1.00  0.00           H
ATOM   3575  HA  TYR A 319     -17.475  -2.177  -4.667  1.00  0.00           H
ATOM   3576  HB2 TYR A 319     -17.172   0.299  -5.484  1.00  0.00           H
ATOM   3577  HB3 TYR A 319     -17.838   0.807  -3.979  1.00  0.00           H
ATOM   3578  HD1 TYR A 319     -15.316  -1.973  -4.601  1.00  0.00           H
ATOM   3579  HD2 TYR A 319     -15.973   2.039  -3.151  1.00  0.00           H
ATOM   3580  HE1 TYR A 319     -13.122  -2.021  -3.501  1.00  0.00           H
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ATOM   3581  HE2 TYR A 319     -13.702   2.023  -2.141  1.00  0.00           H
ATOM   3582  HH  TYR A 319     -11.925  -0.911  -1.693  1.00  0.00           H
ATOM   3583  N   ASN A 320     -18.023  -2.273  -2.098  1.00 18.73           N
ATOM   3584  CA  ASN A 320     -18.424  -2.440  -0.690  1.00 19.06           C
ATOM   3585  C   ASN A 320     -17.653  -1.495   0.258  1.00 16.51           C
ATOM   3586  O   ASN A 320     -17.973  -1.448   1.445  1.00 16.08           O
ATOM   3587  CB  ASN A 320     -18.236  -3.909  -0.217  1.00 19.10           C
ATOM   3588  CG  ASN A 320     -16.812  -4.464  -0.253  1.00 19.82           C
ATOM   3589  OD1 ASN A 320     -15.844  -3.727  -0.404  1.00 21.01           O
ATOM   3590  ND2 ASN A 320     -16.656  -5.776  -0.170  1.00 17.92           N
ATOM   3591  H   ASN A 320     -17.199  -2.785  -2.418  1.00  0.00           H
ATOM   3592  HA  ASN A 320     -19.483  -2.203  -0.571  1.00  0.00           H
ATOM   3593  HB2 ASN A 320     -18.613  -4.020   0.800  1.00  0.00           H
ATOM   3594  HB3 ASN A 320     -18.858  -4.555  -0.836  1.00  0.00           H
ATOM   3595 HD21 ASN A 320     -17.431  -6.416  -0.099  1.00  0.00           H
ATOM   3596 HD22 ASN A 320     -15.698  -6.123  -0.250  1.00  0.00           H
ATOM   3597  N   LEU A 321     -16.643  -0.780  -0.263  1.00 16.54           N
ATOM   3598  CA  LEU A 321     -15.750   0.186   0.389  1.00 16.81           C
ATOM   3599  C   LEU A 321     -14.431  -0.407   0.919  1.00 19.47           C
ATOM   3600  O   LEU A 321     -13.574   0.354   1.373  1.00 17.04           O
ATOM   3601  CB  LEU A 321     -16.447   1.175   1.363  1.00 17.52           C
ATOM   3602  CG  LEU A 321     -17.622   1.994   0.777  1.00 19.03           C
ATOM   3603  CD1 LEU A 321     -18.431   2.669   1.893  1.00 18.92           C
ATOM   3604  CD2 LEU A 321     -17.149   3.049  -0.232  1.00 19.85           C
ATOM   3605  H   LEU A 321     -16.435  -0.978  -1.231  1.00  0.00           H
ATOM   3606  HA  LEU A 321     -15.404   0.804  -0.431  1.00  0.00           H
ATOM   3607  HB2 LEU A 321     -16.797   0.612   2.225  1.00  0.00           H
ATOM   3608  HB3 LEU A 321     -15.712   1.869   1.770  1.00  0.00           H
ATOM   3609  HG  LEU A 321     -18.302   1.313   0.264  1.00  0.00           H
ATOM   3610 HD11 LEU A 321     -19.330   3.144   1.501  1.00  0.00           H
ATOM   3611 HD12 LEU A 321     -18.748   1.948   2.648  1.00  0.00           H
ATOM   3612 HD13 LEU A 321     -17.847   3.441   2.395  1.00  0.00           H
ATOM   3613 HD21 LEU A 321     -17.990   3.614  -0.634  1.00  0.00           H
ATOM   3614 HD22 LEU A 321     -16.460   3.759   0.230  1.00  0.00           H
ATOM   3615 HD23 LEU A 321     -16.642   2.588  -1.074  1.00  0.00           H
ATOM   3616  N   CYS A 322     -14.232  -1.730   0.860  1.00 19.78           N
ATOM   3617  CA  CYS A 322     -13.077  -2.405   1.454  1.00 21.80           C
ATOM   3618  C   CYS A 322     -11.809  -2.265   0.600  1.00 21.81           C
ATOM   3619  O   CYS A 322     -11.861  -2.315  -0.632  1.00 21.18           O
ATOM   3620  CB  CYS A 322     -13.355  -3.912   1.595  1.00 20.40           C
ATOM   3621  SG  CYS A 322     -14.507  -4.372   2.921  1.00 21.81           S
ATOM   3622  H   CYS A 322     -14.933  -2.322   0.420  1.00  0.00           H
ATOM   3623  HA  CYS A 322     -12.889  -1.975   2.437  1.00  0.00           H
ATOM   3624  HB2 CYS A 322     -13.695  -4.330   0.651  1.00  0.00           H
ATOM   3625  HB3 CYS A 322     -12.426  -4.440   1.810  1.00  0.00           H
ATOM   3626  N   HIS A 323     -10.659  -2.113   1.262  1.00 21.47           N
ATOM   3627  CA  HIS A 323      -9.338  -2.055   0.650  1.00 21.03           C
ATOM   3628  C   HIS A 323      -8.248  -2.497   1.640  1.00 21.77           C
ATOM   3629  O   HIS A 323      -8.482  -2.568   2.849  1.00 21.97           O
ATOM   3630  CB  HIS A 323      -9.091  -0.665   0.039  1.00 19.56           C
ATOM   3631  CG  HIS A 323      -9.046   0.467   1.020  1.00 20.31           C
ATOM   3632  ND1 HIS A 323     -10.168   1.134   1.473  1.00 18.55           N
ATOM   3633  CD2 HIS A 323      -7.983   1.028   1.682  1.00 19.48           C
ATOM   3634  CE1 HIS A 323      -9.741   2.084   2.302  1.00 19.82           C
ATOM   3635  NE2 HIS A 323      -8.425   2.082   2.469  1.00 17.55           N
ATOM   3636  H   HIS A 323     -10.685  -1.953   2.267  1.00  0.00           H
ATOM   3637  HA  HIS A 323      -9.318  -2.783  -0.162  1.00  0.00           H
ATOM   3638  HB2 HIS A 323      -8.130  -0.645  -0.464  1.00  0.00           H
ATOM   3639  HB3 HIS A 323      -9.830  -0.442  -0.728  1.00  0.00           H
ATOM   3640  HD1 HIS A 323     -11.139   0.923   1.261  1.00  0.00           H
ATOM   3641  HD2 HIS A 323      -6.943   0.751   1.644  1.00  0.00           H
ATOM   3642  HE1 HIS A 323     -10.389   2.776   2.814  1.00  0.00           H
ATOM   3643  N   PHE A 324      -7.055  -2.787   1.120  1.00 20.35           N
ATOM   3644  CA  PHE A 324      -5.812  -3.071   1.831  1.00 21.54           C
ATOM   3645  C   PHE A 324      -5.156  -1.713   2.129  1.00 21.67           C
ATOM   3646  O   PHE A 324      -5.077  -0.870   1.235  1.00 19.86           O
ATOM   3647  CB  PHE A 324      -4.888  -3.862   0.873  1.00 21.99           C
ATOM   3648  CG  PHE A 324      -5.504  -5.098   0.224  1.00 23.32           C
ATOM   3649  CD1 PHE A 324      -6.220  -6.035   0.994  1.00 23.40           C
ATOM   3650  CD2 PHE A 324      -5.357  -5.317  -1.162  1.00 21.47           C
ATOM   3651  CE1 PHE A 324      -6.772  -7.178   0.389  1.00 23.76           C
ATOM   3652  CE2 PHE A 324      -5.918  -6.456  -1.772  1.00 21.69           C
ATOM   3653  CZ  PHE A 324      -6.626  -7.391  -0.994  1.00 21.06           C
ATOM   3654  H   PHE A 324      -6.929  -2.659   0.112  1.00  0.00           H
ATOM   3655  HA  PHE A 324      -5.995  -3.625   2.747  1.00  0.00           H
ATOM   3656  HB2 PHE A 324      -4.535  -3.207   0.075  1.00  0.00           H
ATOM   3657  HB3 PHE A 324      -3.989  -4.177   1.407  1.00  0.00           H
ATOM   3658  HD1 PHE A 324      -6.341  -5.892   2.056  1.00  0.00           H
ATOM   3659  HD2 PHE A 324      -4.792  -4.613  -1.758  1.00  0.00           H
ATOM   3660  HE1 PHE A 324      -7.316  -7.882   0.996  1.00  0.00           H
ATOM   3661  HE2 PHE A 324      -5.802  -6.621  -2.833  1.00  0.00           H
ATOM   3662  HZ  PHE A 324      -7.055  -8.267  -1.457  1.00  0.00           H
ATOM   3663  N   TRP A 325      -4.735  -1.462   3.376  1.00 22.91           N
ATOM   3664  CA  TRP A 325      -4.224  -0.166   3.829  1.00 25.28           C
ATOM   3665  C   TRP A 325      -2.733  -0.100   3.429  1.00 26.42           C
ATOM   3666  O   TRP A 325      -1.880  -0.745   4.041  1.00 30.29           O
ATOM   3667  CB  TRP A 325      -4.424  -0.088   5.372  1.00 24.63           C
ATOM   3668  CG  TRP A 325      -4.809   1.226   6.001  1.00 24.92           C
ATOM   3669  CD1 TRP A 325      -5.483   2.236   5.406  1.00 22.73           C
ATOM   3670  CD2 TRP A 325      -4.568   1.678   7.373  1.00 22.74           C
ATOM   3671  NE1 TRP A 325      -5.733   3.234   6.326  1.00 25.68           N
ATOM   3672  CE3 TRP A 325      -3.875   1.151   8.487  1.00 22.84           C
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ATOM   3673  CE2 TRP A 325      -5.179   2.955   7.552  1.00 24.25           C
ATOM   3674  CZ3 TRP A 325      -3.812   1.837   9.714  1.00 20.89           C
ATOM   3675  CZ2 TRP A 325      -5.130   3.648   8.774  1.00 22.79           C
ATOM   3676  CH2 TRP A 325      -4.435   3.088   9.859  1.00 24.61           C
ATOM   3677  H   TRP A 325      -4.696  -2.223   4.050  1.00  0.00           H
ATOM   3678  HA  TRP A 325      -4.782   0.625   3.329  1.00  0.00           H
ATOM   3679  HB2 TRP A 325      -5.233  -0.755   5.667  1.00  0.00           H
ATOM   3680  HB3 TRP A 325      -3.546  -0.464   5.895  1.00  0.00           H
ATOM   3681  HD1 TRP A 325      -5.842   2.233   4.386  1.00  0.00           H
ATOM   3682  HE1 TRP A 325      -6.322   4.040   6.098  1.00  0.00           H
ATOM   3683  HE3 TRP A 325      -3.371   0.208   8.393  1.00  0.00           H
ATOM   3684  HZ3 TRP A 325      -3.281   1.402  10.550  1.00  0.00           H
ATOM   3685  HZ2 TRP A 325      -5.612   4.603   8.886  1.00  0.00           H
ATOM   3686  HH2 TRP A 325      -4.377   3.615  10.799  1.00  0.00           H
ATOM   3687  N   SER A 326      -2.435   0.632   2.348  1.00 24.03           N
ATOM   3688  CA  SER A 326      -1.202   0.565   1.557  1.00 22.71           C
ATOM   3689  C   SER A 326       0.078   1.084   2.250  1.00 21.08           C
ATOM   3690  O   SER A 326       1.180   0.941   1.730  1.00 19.92           O
ATOM   3691  CB  SER A 326      -1.462   1.306   0.232  1.00 22.45           C
ATOM   3692  OG  SER A 326      -1.964   2.618   0.438  1.00 23.98           O
ATOM   3693  H   SER A 326      -3.170   1.164   1.906  1.00  0.00           H
ATOM   3694  HA  SER A 326      -1.036  -0.486   1.327  1.00  0.00           H
ATOM   3695  HB2 SER A 326      -0.543   1.367  -0.353  1.00  0.00           H
ATOM   3696  HB3 SER A 326      -2.165   0.741  -0.379  1.00  0.00           H
ATOM   3697  HG  SER A 326      -1.850   3.092  -0.401  1.00  0.00           H
ATOM   3698  N   ASN A 327      -0.038   1.622   3.465  1.00 18.51           N
ATOM   3699  CA  ASN A 327       1.035   1.996   4.388  1.00 18.42           C
ATOM   3700  C   ASN A 327       1.940   0.819   4.848  1.00 19.32           C
ATOM   3701  O   ASN A 327       2.962   1.049   5.502  1.00 18.72           O
ATOM   3702  CB  ASN A 327       0.400   2.714   5.609  1.00 18.64           C
ATOM   3703  CG  ASN A 327      -0.822   2.037   6.200  1.00 18.91           C
ATOM   3704  OD1 ASN A 327      -1.945   2.343   5.842  1.00 17.18           O
ATOM   3705  ND2 ASN A 327      -0.612   1.122   7.185  1.00 16.88           N
ATOM   3706  H   ASN A 327      -0.993   1.707   3.791  1.00  0.00           H
ATOM   3707  HA  ASN A 327       1.686   2.689   3.856  1.00  0.00           H
ATOM   3708  HB2 ASN A 327       1.152   2.897   6.385  1.00  0.00           H
ATOM   3709  HB3 ASN A 327       0.058   3.681   5.233  1.00  0.00           H
ATOM   3710 HD21 ASN A 327       0.325   0.805   7.421  1.00  0.00           H
ATOM   3711 HD22 ASN A 327      -1.393   0.520   7.401  1.00  0.00           H
ATOM   3712  N   PHE A 328       1.561  -0.426   4.529  1.00 18.00           N
ATOM   3713  CA  PHE A 328       2.359  -1.638   4.651  1.00 19.94           C
ATOM   3714  C   PHE A 328       2.031  -2.530   3.458  1.00 20.27           C
ATOM   3715  O   PHE A 328       1.002  -3.208   3.464  1.00 20.85           O
ATOM   3716  CB  PHE A 328       2.118  -2.335   6.000  1.00 20.17           C
ATOM   3717  CG  PHE A 328       3.051  -3.497   6.310  1.00 21.71           C
ATOM   3718  CD1 PHE A 328       2.761  -4.797   5.842  1.00 20.89           C
ATOM   3719  CD2 PHE A 328       4.216  -3.280   7.074  1.00 21.40           C
ATOM   3720  CE1 PHE A 328       3.619  -5.869   6.151  1.00 23.81           C
ATOM   3721  CE2 PHE A 328       5.059  -4.355   7.407  1.00 23.59           C
ATOM   3722  CZ  PHE A 328       4.762  -5.650   6.942  1.00 20.62           C
ATOM   3723  H   PHE A 328       0.700  -0.531   4.003  1.00  0.00           H
ATOM   3724  HA  PHE A 328       3.416  -1.370   4.597  1.00  0.00           H
ATOM   3725  HB2 PHE A 328       2.234  -1.604   6.788  1.00  0.00           H
ATOM   3726  HB3 PHE A 328       1.084  -2.673   6.068  1.00  0.00           H
ATOM   3727  HD1 PHE A 328       1.887  -4.978   5.234  1.00  0.00           H
ATOM   3728  HD2 PHE A 328       4.463  -2.287   7.415  1.00  0.00           H
ATOM   3729  HE1 PHE A 328       3.400  -6.862   5.784  1.00  0.00           H
ATOM   3730  HE2 PHE A 328       5.941  -4.184   8.006  1.00  0.00           H
ATOM   3731  HZ  PHE A 328       5.414  -6.477   7.179  1.00  0.00           H
ATOM   3732  N   GLU A 329       2.907  -2.529   2.455  1.00 21.96           N
ATOM   3733  CA  GLU A 329       2.867  -3.415   1.303  1.00 21.09           C
ATOM   3734  C   GLU A 329       4.273  -3.975   1.152  1.00 20.76           C
ATOM   3735  O   GLU A 329       5.192  -3.193   0.926  1.00 20.35           O
ATOM   3736  CB  GLU A 329       2.449  -2.634   0.047  1.00 20.27           C
ATOM   3737  CG  GLU A 329       0.998  -2.150   0.119  1.00 21.97           C
ATOM   3738  CD  GLU A 329       0.592  -1.303  -1.070  1.00 23.07           C
ATOM   3739  OE1 GLU A 329       1.448  -0.675  -1.722  1.00 20.27           O
ATOM   3740  OE2 GLU A 329      -0.619  -1.262  -1.379  1.00 25.60           O1-
ATOM   3741  H   GLU A 329       3.730  -1.949   2.533  1.00  0.00           H
ATOM   3742  HA  GLU A 329       2.164  -4.233   1.463  1.00  0.00           H
ATOM   3743  HB2 GLU A 329       3.118  -1.786  -0.104  1.00  0.00           H
ATOM   3744  HB3 GLU A 329       2.564  -3.267  -0.836  1.00  0.00           H
ATOM   3745  HG2 GLU A 329       0.325  -3.002   0.209  1.00  0.00           H
ATOM   3746  HG3 GLU A 329       0.860  -1.550   1.012  1.00  0.00           H
ATOM   3747  N   ILE A 330       4.432  -5.293   1.278  1.00 20.01           N
ATOM   3748  CA  ILE A 330       5.587  -6.062   0.831  1.00 21.19           C
ATOM   3749  C   ILE A 330       5.078  -6.650  -0.492  1.00 21.93           C
ATOM   3750  O   ILE A 330       4.330  -7.630  -0.491  1.00 20.27           O
ATOM   3751  CB  ILE A 330       5.892  -7.177   1.879  1.00 20.93           C
ATOM   3752  CG1 ILE A 330       6.372  -6.566   3.215  1.00 21.73           C
ATOM   3753  CG2 ILE A 330       6.916  -8.232   1.399  1.00 18.92           C
ATOM   3754  CD1 ILE A 330       6.388  -7.546   4.397  1.00 23.49           C
ATOM   3755  H   ILE A 330       3.584  -5.837   1.441  1.00  0.00           H
ATOM   3756  HA  ILE A 330       6.468  -5.441   0.664  1.00  0.00           H
ATOM   3757  HB  ILE A 330       4.956  -7.698   2.063  1.00  0.00           H
ATOM   3758 HG12 ILE A 330       7.370  -6.153   3.077  1.00  0.00           H
ATOM   3759 HG13 ILE A 330       5.741  -5.722   3.498  1.00  0.00           H
ATOM   3760 HG21 ILE A 330       6.947  -9.088   2.069  1.00  0.00           H
ATOM   3761 HG22 ILE A 330       6.688  -8.631   0.411  1.00  0.00           H
ATOM   3762 HG23 ILE A 330       7.922  -7.817   1.367  1.00  0.00           H
ATOM   3763 HD11 ILE A 330       6.810  -7.078   5.281  1.00  0.00           H
ATOM   3764 HD12 ILE A 330       5.381  -7.857   4.662  1.00  0.00           H
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ATOM   3765 HD13 ILE A 330      6.979  -8.438   4.199  1.00  0.00           H
ATOM   3766  N   ALA A 331      5.388  -6.002  -1.614  1.00 21.39           N
ATOM   3767  CA  ALA A 331      4.778  -6.291  -2.904  1.00 22.41           C
ATOM   3768  C   ALA A 331      5.784  -6.166  -4.043  1.00 21.44           C
ATOM   3769  O   ALA A 331      6.853  -5.575  -3.893  1.00 20.66           O
ATOM   3770  CB  ALA A 331      3.499  -5.458  -3.084  1.00 21.06           C
ATOM   3771  H   ALA A 331      6.033  -5.212  -1.574  1.00  0.00           H
ATOM   3772  HA  ALA A 331      4.485  -7.342  -2.918  1.00  0.00           H
ATOM   3773  HB1 ALA A 331      3.055  -5.611  -4.068  1.00  0.00           H
ATOM   3774  HB2 ALA A 331      2.749  -5.716  -2.336  1.00  0.00           H
ATOM   3775  HB3 ALA A 331      3.702  -4.395  -2.972  1.00  0.00           H
ATOM   3776  N   ASN A 332      5.447  -6.770  -5.180  1.00 22.89           N
ATOM   3777  CA  ASN A 332      6.212  -6.740  -6.419  1.00 20.34           C
ATOM   3778  C   ASN A 332      5.815  -5.463  -7.190  1.00 21.01           C
ATOM   3779  O   ASN A 332      4.630  -5.163  -7.322  1.00 20.20           O
ATOM   3780  CB  ASN A 332      5.809  -7.998  -7.210  1.00 21.25           C
ATOM   3781  CG  ASN A 332      6.630  -8.209  -8.476  1.00 19.39           C
ATOM   3782  OD1 ASN A 332      6.280  -7.666  -9.513  1.00 19.86           O
ATOM   3783  ND2 ASN A 332      7.698  -8.998  -8.433  1.00 20.38           N
ATOM   3784  H   ASN A 332      4.544  -7.235  -5.206  1.00  0.00           H
ATOM   3785  HA  ASN A 332      7.279  -6.776  -6.213  1.00  0.00           H
ATOM   3786  HB2 ASN A 332      5.902  -8.885  -6.580  1.00  0.00           H
ATOM   3787  HB3 ASN A 332      4.758  -7.932  -7.496  1.00  0.00           H
ATOM   3788 HD21 ASN A 332      8.058  -9.358  -7.557  1.00  0.00           H
ATOM   3789 HD22 ASN A 332      8.185  -9.204  -9.295  1.00  0.00           H
ATOM   3790  N   LEU A 333      6.800  -4.718  -7.708  1.00 20.23           N
ATOM   3791  CA  LEU A 333      6.611  -3.486  -8.479  1.00 22.19           C
ATOM   3792  C   LEU A 333      6.268  -3.800  -9.940  1.00 22.56           C
ATOM   3793  O   LEU A 333      5.598  -3.002 -10.592  1.00 23.16           O
ATOM   3794  CB  LEU A 333      7.931  -2.674  -8.519  1.00 20.41           C
ATOM   3795  CG  LEU A 333      8.309  -1.976  -7.202  1.00 19.24           C
ATOM   3796  CD1 LEU A 333      9.778  -1.538  -7.194  1.00 21.42           C
ATOM   3797  CD2 LEU A 333      7.390  -0.774  -6.921  1.00 20.07           C
ATOM   3798  H   LEU A 333      7.743  -5.103  -7.682  1.00  0.00           H
ATOM   3799  HA  LEU A 333      5.797  -2.894  -8.057  1.00  0.00           H
ATOM   3800  HB2 LEU A 333      8.741  -3.335  -8.827  1.00  0.00           H
ATOM   3801  HB3 LEU A 333      7.880  -1.909  -9.299  1.00  0.00           H
ATOM   3802  HG  LEU A 333      8.214  -2.705  -6.404  1.00  0.00           H
ATOM   3803 HD11 LEU A 333     10.064  -1.146  -6.219  1.00  0.00           H
ATOM   3804 HD12 LEU A 333     10.440  -2.378  -7.399  1.00  0.00           H
ATOM   3805 HD13 LEU A 333      9.972  -0.762  -7.934  1.00  0.00           H
ATOM   3806 HD21 LEU A 333      7.651  -0.286  -5.983  1.00  0.00           H
ATOM   3807 HD22 LEU A 333      7.463  -0.025  -7.711  1.00  0.00           H
ATOM   3808 HD23 LEU A 333      6.345  -1.067  -6.842  1.00  0.00           H
ATOM   3809  N   ASN A 334      6.697  -4.957 -10.466  1.00 22.33           N
ATOM   3810  CA  ASN A 334      6.465  -5.350 -11.861  1.00 23.39           C
ATOM   3811  C   ASN A 334      4.982  -5.675 -12.116  1.00 23.98           C
ATOM   3812  O   ASN A 334      4.530  -5.585 -13.255  1.00 23.96           O
ATOM   3813  CB  ASN A 334      7.357  -6.534 -12.315  1.00 25.18           C
ATOM   3814  CG  ASN A 334      8.861  -6.284 -12.157  1.00 27.49           C
ATOM   3815  OD1 ASN A 334      9.327  -5.151 -12.284  1.00 28.65           O
ATOM   3816  ND2 ASN A 334      9.625  -7.324 -11.842  1.00 26.16           N
ATOM   3817  H   ASN A 334      7.165  -5.620  -9.861  1.00  0.00           H
ATOM   3818  HA  ASN A 334      6.723  -4.493 -12.478  1.00  0.00           H
ATOM   3819  HB2 ASN A 334      7.078  -7.453 -11.805  1.00  0.00           H
ATOM   3820  HB3 ASN A 334      7.175  -6.727 -13.373  1.00  0.00           H
ATOM   3821 HD21 ASN A 334      9.225  -8.240 -11.720  1.00  0.00           H
ATOM   3822 HD22 ASN A 334     10.656  -7.219 -11.755  1.00  0.00           H
ATOM   3823  N   LEU A 335      4.202  -5.938 -11.054  1.00 23.74           N
ATOM   3824  CA  LEU A 335      2.738  -5.977 -11.050  1.00 22.83           C
ATOM   3825  C   LEU A 335      2.139  -4.614 -11.427  1.00 23.38           C
ATOM   3826  O   LEU A 335      1.165  -4.552 -12.174  1.00 20.24           O
ATOM   3827  CB  LEU A 335      2.246  -6.429  -9.652  1.00 22.39           C
ATOM   3828  CG  LEU A 335      0.711  -6.512  -9.457  1.00 22.32           C
ATOM   3829  CD1 LEU A 335      0.051  -7.531 -10.401  1.00 21.69           C
ATOM   3830  CD2 LEU A 335      0.367  -6.812  -7.991  1.00 20.81           C
ATOM   3831  H   LEU A 335      4.679  -6.052 -10.169  1.00  0.00           H
ATOM   3832  HA  LEU A 335      2.409  -6.689 -11.804  1.00  0.00           H
ATOM   3833  HB2 LEU A 335      2.686  -7.400  -9.419  1.00  0.00           H
ATOM   3834  HB3 LEU A 335      2.643  -5.738  -8.907  1.00  0.00           H
ATOM   3835  HG  LEU A 335      0.270  -5.539  -9.673  1.00  0.00           H
ATOM   3836 HD11 LEU A 335     -1.012  -7.644 -10.186  1.00  0.00           H
ATOM   3837 HD12 LEU A 335      0.127  -7.221 -11.444  1.00  0.00           H
ATOM   3838 HD13 LEU A 335      0.512  -8.513 -10.317  1.00  0.00           H
ATOM   3839 HD21 LEU A 335     -0.712  -6.841  -7.836  1.00  0.00           H
ATOM   3840 HD22 LEU A 335      0.776  -7.770  -7.674  1.00  0.00           H
ATOM   3841 HD23 LEU A 335      0.769  -6.044  -7.329  1.00  0.00           H
ATOM   3842  N   TRP A 336      2.735  -3.515 -10.960  1.00 20.71           N
ATOM   3843  CA  TRP A 336      2.276  -2.167 -11.269  1.00 21.14           C
ATOM   3844  C   TRP A 336      2.851  -1.682 -12.612  1.00 20.82           C
ATOM   3845  O   TRP A 336      2.205  -0.909 -13.312  1.00 21.72           O
ATOM   3846  CB  TRP A 336      2.686  -1.215 -10.139  1.00 19.56           C
ATOM   3847  CG  TRP A 336      2.300  -1.593  -8.734  1.00 21.10           C
ATOM   3848  CD1 TRP A 336      3.069  -1.360  -7.645  1.00 20.91           C
ATOM   3849  CD2 TRP A 336      1.086  -2.246  -8.225  1.00 20.60           C
ATOM   3850  NE1 TRP A 336      2.399  -1.768  -6.510  1.00 21.76           N
ATOM   3851  CE3 TRP A 336     -0.081  -2.805  -8.799  1.00 21.74           C
ATOM   3852  CE2 TRP A 336      1.170  -2.297  -6.803  1.00 18.03           C
ATOM   3853  CZ3 TRP A 336     -1.111  -3.346  -8.002  1.00 18.29           C
ATOM   3854  CZ2 TRP A 336      0.143  -2.807  -5.995  1.00 20.48           C
ATOM   3855  CH2 TRP A 336     -1.012  -3.328  -6.599  1.00 21.36           C
ATOM   3856  H   TRP A 336      3.563  -3.610 -10.386  1.00  0.00           H
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ATOM   3857  HA  TRP A 336       1.194  -2.155 -11.354  1.00  0.00           H
ATOM   3858  HB2 TRP A 336       3.761  -1.038 -10.165  1.00  0.00           H
ATOM   3859  HB3 TRP A 336       2.211  -0.255 -10.337  1.00  0.00           H
ATOM   3860  HD1 TRP A 336       4.040  -0.886  -7.675  1.00  0.00           H
ATOM   3861  HE1 TRP A 336       2.750  -1.685  -5.548  1.00  0.00           H
ATOM   3862  HE3 TRP A 336      -0.194  -2.828  -9.870  1.00  0.00           H
ATOM   3863  HZ3 TRP A 336      -1.981  -3.777  -8.472  1.00  0.00           H
ATOM   3864  HZ2 TRP A 336       0.255  -2.801  -4.922  1.00  0.00           H
ATOM   3865  HH2 TRP A 336      -1.809  -3.724  -5.990  1.00  0.00           H
ATOM   3866  N   ARG A 337       4.006  -2.207 -13.041  1.00 21.65           N
ATOM   3867  CA  ARG A 337       4.548  -1.964 -14.380  1.00 20.04           C
ATOM   3868  C   ARG A 337       3.846  -2.816 -15.460  1.00 18.23           C
ATOM   3869  O   ARG A 337       4.144  -2.624 -16.643  1.00 17.77           O
ATOM   3870  CB  ARG A 337       6.053  -2.310 -14.424  1.00 21.14           C
ATOM   3871  CG  ARG A 337       6.920  -1.472 -13.472  1.00 20.85           C
ATOM   3872  CD  ARG A 337       8.400  -1.876 -13.500  1.00 23.87           C
ATOM   3873  NE  ARG A 337       9.157  -1.065 -12.549  1.00 23.95           N
ATOM   3874  CZ  ARG A 337       9.849  -1.450 -11.476  1.00 25.49           C
ATOM   3875  NH1 ARG A 337      10.075  -2.729 -11.177  1.00 26.97           N
ATOM   3876  NH2 ARG A 337      10.326  -0.512 -10.672  1.00 26.66           N1+
ATOM   3877  H   ARG A 337       4.511  -2.805 -12.399  1.00  0.00           H
ATOM   3878  HA  ARG A 337       4.415  -0.913 -14.643  1.00  0.00           H
ATOM   3879  HB2 ARG A 337       6.189  -3.372 -14.231  1.00  0.00           H
ATOM   3880  HB3 ARG A 337       6.430  -2.154 -15.436  1.00  0.00           H
ATOM   3881  HG2 ARG A 337       6.828  -0.415 -13.728  1.00  0.00           H
ATOM   3882  HG3 ARG A 337       6.553  -1.564 -12.452  1.00  0.00           H
ATOM   3883  HD2 ARG A 337       8.509  -2.934 -13.276  1.00  0.00           H
ATOM   3884  HD3 ARG A 337       8.821  -1.715 -14.493  1.00  0.00           H
ATOM   3885  HE  ARG A 337       9.411  -0.111 -12.915  1.00  0.00           H
ATOM   3886 HH11 ARG A 337       9.753  -3.518 -11.748  1.00  0.00           H
ATOM   3887 HH12 ARG A 337      10.793  -2.922 -10.475  1.00  0.00           H
ATOM   3888 HH21 ARG A 337      10.259   0.496 -10.989  1.00  0.00           H
ATOM   3889 HH22 ARG A 337      10.994  -0.672  -9.920  1.00  0.00           H
ATOM   3890  N   SER A 338       2.948  -3.744 -15.087  1.00 17.15           N
ATOM   3891  CA  SER A 338       2.230  -4.629 -16.005  1.00 19.46           C
ATOM   3892  C   SER A 338       1.176  -3.841 -16.815  1.00 20.12           C
ATOM   3893  O   SER A 338       0.605  -2.890 -16.270  1.00 21.09           O
ATOM   3894  CB  SER A 338       1.548  -5.781 -15.223  1.00 20.32           C
ATOM   3895  OG  SER A 338       0.360  -5.423 -14.535  1.00 21.76           O
ATOM   3896  H   SER A 338       2.741  -3.829 -14.103  1.00  0.00           H
ATOM   3897  HA  SER A 338       2.990  -5.065 -16.652  1.00  0.00           H
ATOM   3898  HB2 SER A 338       1.256  -6.551 -15.935  1.00  0.00           H
ATOM   3899  HB3 SER A 338       2.245  -6.259 -14.533  1.00  0.00           H
ATOM   3900  HG  SER A 338       0.602  -5.043 -13.685  1.00  0.00           H
ATOM   3901  N   PRO A 339       0.896  -4.217 -18.087  1.00 22.35           N
ATOM   3902  CA  PRO A 339      -0.154  -3.613 -18.934  1.00 21.08           C
ATOM   3903  C   PRO A 339      -1.513  -3.428 -18.229  1.00 19.47           C
ATOM   3904  O   PRO A 339      -2.075  -2.334 -18.225  1.00 20.76           O
ATOM   3905  CB  PRO A 339      -0.261  -4.545 -20.147  1.00 20.47           C
ATOM   3906  CG  PRO A 339       1.078  -5.249 -20.244  1.00 21.32           C
ATOM   3907  CD  PRO A 339       1.613  -5.268 -18.817  1.00 19.67           C
ATOM   3908  HA  PRO A 339       0.188  -2.637 -19.278  1.00  0.00           H
ATOM   3909  HB2 PRO A 339      -1.046  -5.287 -20.009  1.00  0.00           H
ATOM   3910  HB3 PRO A 339      -0.483  -3.989 -21.057  1.00  0.00           H
ATOM   3911  HG2 PRO A 339       0.999  -6.245 -20.684  1.00  0.00           H
ATOM   3912  HG3 PRO A 339       1.742  -4.660 -20.878  1.00  0.00           H
ATOM   3913  HD2 PRO A 339       1.409  -6.235 -18.355  1.00  0.00           H
ATOM   3914  HD3 PRO A 339       2.692  -5.107 -18.824  1.00  0.00           H
ATOM   3915  N   ALA A 340      -1.965  -4.473 -17.519  1.00 19.58           N
ATOM   3916  CA  ALA A 340      -3.189  -4.494 -16.724  1.00 19.57           C
ATOM   3917  C   ALA A 340      -3.295  -3.357 -15.700  1.00 19.42           C
ATOM   3918  O   ALA A 340      -4.349  -2.736 -15.597  1.00 17.04           O
ATOM   3919  CB  ALA A 340      -3.330  -5.861 -16.041  1.00 20.76           C
ATOM   3920  H   ALA A 340      -1.444  -5.331 -17.582  1.00  0.00           H
ATOM   3921  HA  ALA A 340      -4.015  -4.359 -17.419  1.00  0.00           H
ATOM   3922  HB1 ALA A 340      -4.237  -5.902 -15.435  1.00  0.00           H
ATOM   3923  HB2 ALA A 340      -3.396  -6.661 -16.778  1.00  0.00           H
ATOM   3924  HB3 ALA A 340      -2.486  -6.072 -15.383  1.00  0.00           H
ATOM   3925  N   TYR A 341      -2.210  -3.041 -14.978  1.00 18.41           N
ATOM   3926  CA  TYR A 341      -2.218  -1.928 -14.032  1.00 20.02           C
ATOM   3927  C   TYR A 341      -1.918  -0.590 -14.728  1.00 20.29           C
ATOM   3928  O   TYR A 341      -2.454   0.432 -14.302  1.00 20.54           O
ATOM   3929  CB  TYR A 341      -1.182  -2.139 -12.921  1.00 19.15           C
ATOM   3930  CG  TYR A 341      -1.333  -1.129 -11.789  1.00 19.29           C
ATOM   3931  CD1 TYR A 341      -2.338  -1.299 -10.817  1.00 18.41           C
ATOM   3932  CD2 TYR A 341      -0.518   0.016 -11.737  1.00 17.75           C
ATOM   3933  CE1 TYR A 341      -2.486  -0.373  -9.762  1.00 19.60           C
ATOM   3934  CE2 TYR A 341      -0.674   0.946 -10.699  1.00 19.82           C
ATOM   3935  CZ  TYR A 341      -1.634   0.743  -9.693  1.00 19.34           C
ATOM   3936  OH  TYR A 341      -1.725   1.632  -8.663  1.00 19.62           O
ATOM   3937  H   TYR A 341      -1.345  -3.536 -15.158  1.00  0.00           H
ATOM   3938  HA  TYR A 341      -3.196  -1.867 -13.557  1.00  0.00           H
ATOM   3939  HB2 TYR A 341      -1.290  -3.138 -12.499  1.00  0.00           H
ATOM   3940  HB3 TYR A 341      -0.172  -2.097 -13.332  1.00  0.00           H
ATOM   3941  HD1 TYR A 341      -2.992  -2.148 -10.896  1.00  0.00           H
ATOM   3942  HD2 TYR A 341       0.217   0.203 -12.505  1.00  0.00           H
ATOM   3943  HE1 TYR A 341      -3.244  -0.517  -9.007  1.00  0.00           H
ATOM   3944  HE2 TYR A 341      -0.046   1.816 -10.698  1.00  0.00           H
ATOM   3945  HH  TYR A 341      -1.008   2.259  -8.737  1.00  0.00           H
ATOM   3946  N   ARG A 342      -1.105  -0.571 -15.793  1.00 20.95           N
ATOM   3947  CA  ARG A 342      -0.752   0.635 -16.545  1.00 21.79           C
ATOM   3948  C   ARG A 342      -1.991   1.297 -17.152  1.00 22.81           C
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ATOM   3949  O   ARG A 342      -2.297   2.449 -16.840  1.00 22.78           O
ATOM   3950  CB  ARG A 342       0.204   0.286 -17.691  1.00 23.26           C
ATOM   3951  CG  ARG A 342       1.645  -0.024 -17.302  1.00 23.00           C
ATOM   3952  CD  ARG A 342       2.345  -0.730 -18.471  1.00 25.52           C
ATOM   3953  NE  ARG A 342       3.787  -0.489 -18.441  1.00 27.12           N
ATOM   3954  CZ  ARG A 342       4.438   0.457 -19.128  1.00 24.20           C
ATOM   3955  NH1 ARG A 342       3.793   1.288 -19.954  1.00 21.44           N
ATOM   3956  NH2 ARG A 342       5.757   0.573 -18.966  1.00 25.12           N1+
ATOM   3957  H   ARG A 342      -0.717  -1.455 -16.107  1.00  0.00           H
ATOM   3958  HA  ARG A 342      -0.279   1.349 -15.870  1.00  0.00           H
ATOM   3959  HB2 ARG A 342      -0.206  -0.556 -18.247  1.00  0.00           H
ATOM   3960  HB3 ARG A 342       0.228   1.114 -18.400  1.00  0.00           H
ATOM   3961  HG2 ARG A 342       2.150   0.906 -17.044  1.00  0.00           H
ATOM   3962  HG3 ARG A 342       1.680  -0.644 -16.408  1.00  0.00           H
ATOM   3963  HD2 ARG A 342       2.183  -1.802 -18.409  1.00  0.00           H
ATOM   3964  HD3 ARG A 342       1.931  -0.442 -19.435  1.00  0.00           H
ATOM   3965  HE  ARG A 342       4.241  -1.176 -17.831  1.00  0.00           H
ATOM   3966 HH11 ARG A 342       2.768   1.221 -20.132  1.00  0.00           H
ATOM   3967 HH12 ARG A 342       4.235   2.016 -20.488  1.00  0.00           H
ATOM   3968 HH21 ARG A 342       6.253  -0.038 -18.332  1.00  0.00           H
ATOM   3969 HH22 ARG A 342       6.298   1.278 -19.442  1.00  0.00           H
ATOM   3970  N   GLU A 343      -2.721   0.541 -17.977  1.00 24.14           N
ATOM   3971  CA  GLU A 343      -3.892   1.010 -18.697  1.00 24.75           C
ATOM   3972  C   GLU A 343      -5.085   1.188 -17.731  1.00 24.10           C
ATOM   3973  O   GLU A 343      -5.964   2.012 -17.998  1.00 24.31           O
ATOM   3974  CB  GLU A 343      -4.222  -0.002 -19.817  1.00 25.68           C
ATOM   3975  CG  GLU A 343      -3.335   0.141 -21.082  1.00 30.62           C
ATOM   3976  CD  GLU A 343      -1.951  -0.502 -20.993  1.00 30.71           C
ATOM   3977  OE1 GLU A 343      -1.856  -1.694 -21.354  1.00 32.63           O
ATOM   3978  OE2 GLU A 343      -0.990   0.202 -20.604  1.00 29.45           O1-
ATOM   3979  H   GLU A 343      -2.375  -0.388 -18.214  1.00  0.00           H
ATOM   3980  HA  GLU A 343      -3.678   1.986 -19.139  1.00  0.00           H
ATOM   3981  HB2 GLU A 343      -4.172  -1.024 -19.436  1.00  0.00           H
ATOM   3982  HB3 GLU A 343      -5.256   0.139 -20.134  1.00  0.00           H
ATOM   3983  HG2 GLU A 343      -3.844  -0.332 -21.922  1.00  0.00           H
ATOM   3984  HG3 GLU A 343      -3.220   1.189 -21.355  1.00  0.00           H
ATOM   3985  N   TYR A 344      -5.090   0.497 -16.577  1.00 22.33           N
ATOM   3986  CA  TYR A 344      -6.000   0.760 -15.458  1.00 19.95           C
ATOM   3987  C   TYR A 344      -5.669   2.112 -14.817  1.00 21.16           C
ATOM   3988  O   TYR A 344      -6.558   2.954 -14.703  1.00 19.78           O
ATOM   3989  CB  TYR A 344      -5.926  -0.356 -14.392  1.00 17.99           C
ATOM   3990  CG  TYR A 344      -6.705  -0.088 -13.110  1.00 21.67           C
ATOM   3991  CD1 TYR A 344      -8.109  -0.002 -13.153  1.00 21.18           C
ATOM   3992  CD2 TYR A 344      -6.034   0.116 -11.883  1.00 21.43           C
ATOM   3993  CE1 TYR A 344      -8.834   0.326 -11.995  1.00 20.99           C
ATOM   3994  CE2 TYR A 344      -6.766   0.427 -10.719  1.00 21.57           C
ATOM   3995  CZ  TYR A 344      -8.166   0.565 -10.780  1.00 21.53           C
ATOM   3996  OH  TYR A 344      -8.874   0.955  -9.679  1.00 19.87           O
ATOM   3997  H   TYR A 344      -4.352  -0.182 -16.445  1.00  0.00           H
ATOM   3998  HA  TYR A 344      -7.020   0.816 -15.834  1.00  0.00           H
ATOM   3999  HB2 TYR A 344      -6.305  -1.282 -14.823  1.00  0.00           H
ATOM   4000  HB3 TYR A 344      -4.889  -0.546 -14.130  1.00  0.00           H
ATOM   4001  HD1 TYR A 344      -8.629  -0.164 -14.083  1.00  0.00           H
ATOM   4002  HD2 TYR A 344      -4.956   0.053 -11.830  1.00  0.00           H
ATOM   4003  HE1 TYR A 344      -9.903   0.401 -12.052  1.00  0.00           H
ATOM   4004  HE2 TYR A 344      -6.248   0.583  -9.785  1.00  0.00           H
ATOM   4005  HH  TYR A 344      -9.768   1.224  -9.891  1.00  0.00           H
ATOM   4006  N   PHE A 345      -4.405   2.349 -14.438  1.00 20.71           N
ATOM   4007  CA  PHE A 345      -3.970   3.601 -13.832  1.00 20.36           C
ATOM   4008  C   PHE A 345      -4.199   4.786 -14.779  1.00 21.44           C
ATOM   4009  O   PHE A 345      -4.757   5.792 -14.353  1.00 22.30           O
ATOM   4010  CB  PHE A 345      -2.497   3.551 -13.359  1.00 18.78           C
ATOM   4011  CG  PHE A 345      -2.068   4.891 -12.777  1.00 18.84           C
ATOM   4012  CD1 PHE A 345      -2.638   5.335 -11.565  1.00 19.24           C
ATOM   4013  CD2 PHE A 345      -1.289   5.778 -13.553  1.00 17.98           C
ATOM   4014  CE1 PHE A 345      -2.491   6.678 -11.170  1.00 17.82           C
ATOM   4015  CE2 PHE A 345      -1.141   7.118 -13.148  1.00 18.95           C
ATOM   4016  CZ  PHE A 345      -1.757   7.572 -11.967  1.00 18.47           C
ATOM   4017  H   PHE A 345      -3.704   1.619 -14.558  1.00  0.00           H
ATOM   4018  HA  PHE A 345      -4.600   3.763 -12.957  1.00  0.00           H
ATOM   4019  HB2 PHE A 345      -2.371   2.775 -12.603  1.00  0.00           H
ATOM   4020  HB3 PHE A 345      -1.841   3.281 -14.188  1.00  0.00           H
ATOM   4021  HD1 PHE A 345      -3.265   4.672 -10.986  1.00  0.00           H
ATOM   4022  HD2 PHE A 345      -0.890   5.467 -14.510  1.00  0.00           H
ATOM   4023  HE1 PHE A 345      -2.980   7.045 -10.283  1.00  0.00           H
ATOM   4024  HE2 PHE A 345      -0.602   7.819 -13.767  1.00  0.00           H
ATOM   4025  HZ  PHE A 345      -1.680   8.612 -11.687  1.00  0.00           H
ATOM   4026  N   ASP A 346      -3.835   4.676 -16.062  1.00 21.25           N
ATOM   4027  CA  ASP A 346      -4.011   5.786 -17.001  1.00 20.54           C
ATOM   4028  C   ASP A 346      -5.497   6.063 -17.306  1.00 20.57           C
ATOM   4029  O   ASP A 346      -5.871   7.218 -17.491  1.00 18.80           O
ATOM   4030  CB  ASP A 346      -3.181   5.578 -18.283  1.00 21.13           C
ATOM   4031  CG  ASP A 346      -2.598   6.909 -18.744  1.00 21.90           C
ATOM   4032  OD1 ASP A 346      -1.567   7.336 -18.174  1.00 20.23           O
ATOM   4033  OD2 ASP A 346      -3.216   7.546 -19.617  1.00 24.56           O1-
ATOM   4034  H   ASP A 346      -3.340   3.840 -16.373  1.00  0.00           H
ATOM   4035  HA  ASP A 346      -3.623   6.669 -16.488  1.00  0.00           H
ATOM   4036  HB2 ASP A 346      -2.341   4.908 -18.101  1.00  0.00           H
ATOM   4037  HB3 ASP A 346      -3.770   5.131 -19.084  1.00  0.00           H
ATOM   4038  N   THR A 347      -6.384   5.054 -17.193  1.00 20.11           N
ATOM   4039  CA  THR A 347      -7.844   5.241 -17.170  1.00 20.50           C
ATOM   4040  C   THR A 347      -8.302   6.112 -15.967  1.00 19.74           C
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ATOM   4041  O   THR A 347      -9.310   6.806 -16.081  1.00 19.02           O
ATOM   4042  CB  THR A 347      -8.575   3.859 -17.207  1.00 17.98           C
ATOM   4043  OG1 THR A 347      -8.339   3.191 -18.441  1.00 21.15           O
ATOM   4044  CG2 THR A 347     -10.106   3.917 -17.074  1.00 18.73           C
ATOM   4045  H   THR A 347      -6.015   4.137 -16.982  1.00  0.00           H
ATOM   4046  HA  THR A 347      -8.116   5.799 -18.069  1.00  0.00           H
ATOM   4047  HB  THR A 347      -8.210   3.218 -16.410  1.00  0.00           H
ATOM   4048  HG1 THR A 347      -7.416   2.899 -18.410  1.00  0.00           H
ATOM   4049 HG21 THR A 347     -10.558   2.931 -17.173  1.00  0.00           H
ATOM   4050 HG22 THR A 347     -10.398   4.274 -16.089  1.00  0.00           H
ATOM   4051 HG23 THR A 347     -10.555   4.586 -17.809  1.00  0.00           H
ATOM   4052  N   LEU A 348      -7.572   6.120 -14.840  1.00 20.95           N
ATOM   4053  CA  LEU A 348      -7.823   6.993 -13.691  1.00 20.70           C
ATOM   4054  C   LEU A 348      -7.131   8.360 -13.888  1.00 20.77           C
ATOM   4055  O   LEU A 348      -7.689   9.394 -13.511  1.00 22.33           O
ATOM   4056  CB  LEU A 348      -7.240   6.346 -12.401  1.00 19.16           C
ATOM   4057  CG  LEU A 348      -7.766   4.934 -12.045  1.00 19.34           C
ATOM   4058  CD1 LEU A 348      -6.981   4.358 -10.862  1.00 18.78           C
ATOM   4059  CD2 LEU A 348      -9.273   4.865 -11.752  1.00 16.55           C
ATOM   4060  H   LEU A 348      -6.722   5.566 -14.818  1.00  0.00           H
ATOM   4061  HA  LEU A 348      -8.894   7.162 -13.572  1.00  0.00           H
ATOM   4062  HB2 LEU A 348      -6.157   6.289 -12.480  1.00  0.00           H
ATOM   4063  HB3 LEU A 348      -7.377   7.010 -11.551  1.00  0.00           H
ATOM   4064  HG  LEU A 348      -7.579   4.282 -12.896  1.00  0.00           H
ATOM   4065 HD11 LEU A 348      -7.320   3.349 -10.625  1.00  0.00           H
ATOM   4066 HD12 LEU A 348      -5.915   4.299 -11.080  1.00  0.00           H
ATOM   4067 HD13 LEU A 348      -7.103   4.969  -9.968  1.00  0.00           H
ATOM   4068 HD21 LEU A 348      -9.593   3.827 -11.653  1.00  0.00           H
ATOM   4069 HD22 LEU A 348      -9.529   5.367 -10.820  1.00  0.00           H
ATOM   4070 HD23 LEU A 348      -9.862   5.304 -12.555  1.00  0.00           H
ATOM   4071  N   ASP A 349      -5.925   8.372 -14.470  1.00 21.51           N
ATOM   4072  CA  ASP A 349      -5.044   9.542 -14.569  1.00 21.24           C
ATOM   4073  C   ASP A 349      -5.467  10.512 -15.683  1.00 21.96           C
ATOM   4074  O   ASP A 349      -5.500  11.725 -15.462  1.00 19.94           O
ATOM   4075  CB  ASP A 349      -3.598   9.074 -14.845  1.00 18.89           C
ATOM   4076  CG  ASP A 349      -2.559  10.061 -14.336  1.00 19.84           C
ATOM   4077  OD1 ASP A 349      -2.699  10.552 -13.197  1.00 20.50           O
ATOM   4078  OD2 ASP A 349      -1.560  10.330 -15.038  1.00 19.99           O1-
ATOM   4079  H   ASP A 349      -5.516   7.469 -14.698  1.00  0.00           H
ATOM   4080  HA  ASP A 349      -5.097  10.067 -13.613  1.00  0.00           H
ATOM   4081  HB2 ASP A 349      -3.406   8.132 -14.336  1.00  0.00           H
ATOM   4082  HB3 ASP A 349      -3.425   8.888 -15.907  1.00  0.00           H
ATOM   4083  N   HIS A 350      -5.866   9.986 -16.851  1.00 22.62           N
ATOM   4084  CA  HIS A 350      -6.450  10.760 -17.955  1.00 23.51           C
ATOM   4085  C   HIS A 350      -7.934  11.093 -17.703  1.00 22.85           C
ATOM   4086  O   HIS A 350      -8.533  11.832 -18.482  1.00 22.01           O
ATOM   4087  CB  HIS A 350      -6.289  10.027 -19.311  1.00  0.00           C
ATOM   4088  CG  HIS A 350      -5.162  10.560 -20.164  1.00  0.00           C
ATOM   4089  ND1 HIS A 350      -3.986   9.870 -20.402  1.00  0.00           N
ATOM   4090  CD2 HIS A 350      -5.030  11.748 -20.850  1.00  0.00           C
ATOM   4091  CE1 HIS A 350      -3.235  10.619 -21.209  1.00  0.00           C
ATOM   4092  NE2 HIS A 350      -3.806  11.777 -21.523  1.00  0.00           N
ATOM   4093  H   HIS A 350      -5.775   8.980 -16.993  1.00  0.00           H
ATOM   4094  HA  HIS A 350      -5.944  11.718 -18.037  1.00  0.00           H
ATOM   4095  HB2 HIS A 350      -6.170   8.954 -19.190  1.00  0.00           H
ATOM   4096  HB3 HIS A 350      -7.185  10.141 -19.923  1.00  0.00           H
ATOM   4097  HD1 HIS A 350      -3.712   8.905 -20.065  1.00  0.00           H
ATOM   4098  HD2 HIS A 350      -5.722  12.576 -20.913  1.00  0.00           H
ATOM   4099  HE1 HIS A 350      -2.263  10.309 -21.568  1.00  0.00           H
ATOM   4100  N   GLN A 351      -8.527  10.600 -16.603  1.00 22.30           N
ATOM   4101  CA  GLN A 351      -9.792  11.101 -16.074  1.00 23.00           C
ATOM   4102  C   GLN A 351      -9.449  12.325 -15.205  1.00 22.67           C
ATOM   4103  O   GLN A 351      -9.825  13.440 -15.562  1.00 19.82           O
ATOM   4104  CB  GLN A 351     -10.506   9.977 -15.276  1.00 23.52           C
ATOM   4105  CG  GLN A 351     -12.026  10.162 -15.061  1.00 26.12           C
ATOM   4106  CD  GLN A 351     -12.418  10.708 -13.688  1.00 28.38           C
ATOM   4107  OE1 GLN A 351     -11.805  11.632 -13.172  1.00 27.29           O
ATOM   4108  NE2 GLN A 351     -13.439  10.135 -13.065  1.00 27.43           N
ATOM   4109  H   GLN A 351      -7.951  10.022 -16.009  1.00  0.00           H
ATOM   4110  HA  GLN A 351     -10.434  11.416 -16.899  1.00  0.00           H
ATOM   4111  HB2 GLN A 351     -10.394   9.059 -15.850  1.00  0.00           H
ATOM   4112  HB3 GLN A 351     -10.017   9.775 -14.326  1.00  0.00           H
ATOM   4113  HG2 GLN A 351     -12.445  10.812 -15.830  1.00  0.00           H
ATOM   4114  HG3 GLN A 351     -12.514   9.196 -15.198  1.00  0.00           H
ATOM   4115 HE21 GLN A 351     -13.781   9.243 -13.417  1.00  0.00           H
ATOM   4116 HE22 GLN A 351     -13.752  10.475 -12.162  1.00  0.00           H
ATOM   4117  N   GLY A 352      -8.671  12.137 -14.128  1.00 21.90           N
ATOM   4118  CA  GLY A 352      -8.116  13.205 -13.289  1.00 22.88           C
ATOM   4119  C   GLY A 352      -8.559  13.147 -11.821  1.00 23.50           C
ATOM   4120  O   GLY A 352      -8.005  13.851 -10.973  1.00 20.98           O
ATOM   4121  H   GLY A 352      -8.343  11.193 -13.942  1.00  0.00           H
ATOM   4122  HA2 GLY A 352      -7.031  13.104 -13.319  1.00  0.00           H
ATOM   4123  HA3 GLY A 352      -8.359  14.194 -13.680  1.00  0.00           H
ATOM   4124  N   GLY A 353      -9.545  12.293 -11.535  1.00 21.49           N
ATOM   4125  CA  GLY A 353     -10.115  11.813 -10.277  1.00 20.56           C
ATOM   4126  C   GLY A 353      -9.485  12.223  -8.945  1.00 21.34           C
ATOM   4127  O   GLY A 353     -10.153  12.838  -8.112  1.00 20.96           O
ATOM   4128  H   GLY A 353      -9.998  11.906 -12.359  1.00  0.00           H
ATOM   4129  HA2 GLY A 353     -11.185  12.023 -10.263  1.00  0.00           H
ATOM   4130  HA3 GLY A 353     -10.009  10.741 -10.335  1.00  0.00           H
ATOM   4131  N   PHE A 354      -8.195  11.904  -8.760  1.00 21.51           N
ATOM   4132  CA  PHE A 354      -7.348  12.213  -7.599  1.00 21.68           C
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ATOM   4133 C   PHE A 354      -7.443  13.677  -7.148  1.00 22.65           C
ATOM   4134 O   PHE A 354      -7.414  13.977  -5.954  1.00 23.57           O
ATOM   4135 CB  PHE A 354      -5.881  11.846  -7.915  1.00 20.06           C
ATOM   4136 CG  PHE A 354      -5.656  10.397  -8.310  1.00 22.30           C
ATOM   4137 CD1 PHE A 354      -5.553   9.407  -7.312  1.00 22.41           C
ATOM   4138 CD2 PHE A 354      -5.553  10.033  -9.670  1.00 19.69           C
ATOM   4139 CE1 PHE A 354      -5.384   8.057  -7.669  1.00 22.82           C
ATOM   4140 CE2 PHE A 354      -5.377   8.682 -10.027  1.00 19.35           C
ATOM   4141 CZ  PHE A 354      -5.306   7.692  -9.026  1.00 19.73           C
ATOM   4142 H   PHE A 354      -7.747  11.398  -9.510  1.00  0.00           H
ATOM   4143 HA  PHE A 354      -7.690  11.603  -6.764  1.00  0.00           H
ATOM   4144 HB2 PHE A 354      -5.497  12.491  -8.709  1.00  0.00           H
ATOM   4145 HB3 PHE A 354      -5.257  12.058  -7.045  1.00  0.00           H
ATOM   4146 HD1 PHE A 354      -5.611   9.676  -6.268  1.00  0.00           H
ATOM   4147 HD2 PHE A 354      -5.603  10.779 -10.451  1.00  0.00           H
ATOM   4148 HE1 PHE A 354      -5.310   7.301  -6.899  1.00  0.00           H
ATOM   4149 HE2 PHE A 354      -5.290   8.408 -11.070  1.00  0.00           H
ATOM   4150 HZ  PHE A 354      -5.175   6.654  -9.298  1.00  0.00           H
ATOM   4151 N   PHE A 355      -7.583  14.580  -8.121  1.00 22.12           N
ATOM   4152 CA  PHE A 355      -7.687  16.013  -7.921  1.00 21.19           C
ATOM   4153 C   PHE A 355      -9.150  16.459  -7.819  1.00 20.42           C
ATOM   4154 O   PHE A 355      -9.449  17.369  -7.051  1.00 20.48           O
ATOM   4155 CB  PHE A 355      -7.067  16.686  -9.156  1.00 22.36           C
ATOM   4156 CG  PHE A 355      -5.628  16.281  -9.422  1.00 24.02           C
ATOM   4157 CD1 PHE A 355      -4.680  16.307  -8.379  1.00 22.48           C
ATOM   4158 CD2 PHE A 355      -5.233  15.862 -10.708  1.00 24.49           C
ATOM   4159 CE1 PHE A 355      -3.356  15.910  -8.615  1.00 22.98           C
ATOM   4160 CE2 PHE A 355      -3.896  15.499 -10.955  1.00 25.14           C
ATOM   4161 CZ  PHE A 355      -2.954  15.538  -9.910  1.00 26.02           C
ATOM   4162 H   PHE A 355      -7.598  14.239  -9.080  1.00  0.00           H
ATOM   4163 HA  PHE A 355      -7.164  16.316  -7.016  1.00  0.00           H
ATOM   4164 HB2 PHE A 355      -7.665  16.479 -10.046  1.00  0.00           H
ATOM   4165 HB3 PHE A 355      -7.092  17.764  -9.021  1.00  0.00           H
ATOM   4166 HD1 PHE A 355      -4.956  16.645  -7.394  1.00  0.00           H
ATOM   4167 HD2 PHE A 355      -5.957  15.820 -11.507  1.00  0.00           H
ATOM   4168 HE1 PHE A 355      -2.658  15.903  -7.795  1.00  0.00           H
ATOM   4169 HE2 PHE A 355      -3.598  15.180 -11.943  1.00  0.00           H
ATOM   4170 HZ  PHE A 355      -1.924  15.274 -10.099  1.00  0.00           H
ATOM   4171 N   TYR A 356     -10.049  15.814  -8.572  1.00 19.12           N
ATOM   4172 CA  TYR A 356     -11.463  16.170  -8.711  1.00 18.71           C
ATOM   4173 C   TYR A 356     -12.288  15.816  -7.476  1.00 20.13           C
ATOM   4174 O   TYR A 356     -13.278  16.479  -7.184  1.00 17.47           O
ATOM   4175 CB  TYR A 356     -12.068  15.321  -9.842  1.00 17.74           C
ATOM   4176 CG  TYR A 356     -11.642  15.601 -11.263  1.00 21.18           C
ATOM   4177 CD1 TYR A 356     -10.929  16.762 -11.621  1.00 20.84           C
ATOM   4178 CD2 TYR A 356     -11.987  14.664 -12.254  1.00 21.61           C
ATOM   4179 CE1 TYR A 356     -10.498  16.941 -12.945  1.00 22.87           C
ATOM   4180 CE2 TYR A 356     -11.576  14.857 -13.581  1.00 22.71           C
ATOM   4181 CZ  TYR A 356     -10.793  15.975 -13.921  1.00 24.04           C
ATOM   4182 OH  TYR A 356     -10.292  16.104 -15.181  1.00 25.85           O
ATOM   4183 H   TYR A 356      -9.718  15.025  -9.112  1.00  0.00           H
ATOM   4184 HA  TYR A 356     -11.579  17.239  -8.896  1.00  0.00           H
ATOM   4185 HB2 TYR A 356     -11.890  14.263  -9.641  1.00  0.00           H
ATOM   4186 HB3 TYR A 356     -13.145  15.429  -9.833  1.00  0.00           H
ATOM   4187 HD1 TYR A 356     -10.687  17.516 -10.892  1.00  0.00           H
ATOM   4188 HD2 TYR A 356     -12.537  13.769 -12.002  1.00  0.00           H
ATOM   4189 HE1 TYR A 356      -9.923  17.813 -13.203  1.00  0.00           H
ATOM   4190 HE2 TYR A 356     -11.835  14.115 -14.322  1.00  0.00           H
ATOM   4191 HH  TYR A 356     -10.178  15.233 -15.576  1.00  0.00           H
ATOM   4192 N   GLU A 357     -11.914  14.738  -6.796  1.00 19.72           N
ATOM   4193 CA  GLU A 357     -12.458  14.308  -5.527  1.00 19.69           C
ATOM   4194 C   GLU A 357     -11.232  14.264  -4.611  1.00 21.19           C
ATOM   4195 O   GLU A 357     -10.526  15.273  -4.501  1.00 22.16           O
ATOM   4196 CB  GLU A 357     -13.255  12.996  -5.729  1.00 19.32           C
ATOM   4197 CG  GLU A 357     -14.605  13.220  -6.459  1.00 20.09           C
ATOM   4198 CD  GLU A 357     -14.875  12.286  -7.633  1.00 23.06           C
ATOM   4199 OE1 GLU A 357     -14.600  11.069  -7.547  1.00 20.05           O
ATOM   4200 OE2 GLU A 357     -15.411  12.785  -8.648  1.00 23.66           O1-
ATOM   4201 H   GLU A 357     -11.108  14.223  -7.142  1.00  0.00           H
ATOM   4202 HA  GLU A 357     -13.121  15.062  -5.101  1.00  0.00           H
ATOM   4203 HB2 GLU A 357     -12.635  12.277  -6.263  1.00  0.00           H
ATOM   4204 HB3 GLU A 357     -13.477  12.546  -4.764  1.00  0.00           H
ATOM   4205 HG2 GLU A 357     -15.430  13.141  -5.755  1.00  0.00           H
ATOM   4206 HG3 GLU A 357     -14.664  14.239  -6.838  1.00  0.00           H
ATOM   4207 N   ARG A 358     -10.950  13.133  -3.967  1.00 19.68           N
ATOM   4208 CA  ARG A 358      -9.739  12.920  -3.193  1.00 19.97           C
ATOM   4209 C   ARG A 358      -9.474  11.419  -3.170  1.00 20.10           C
ATOM   4210 O   ARG A 358      -9.475  10.817  -2.098  1.00 19.00           O
ATOM   4211 CB  ARG A 358      -9.853  13.592  -1.807  1.00 19.86           C
ATOM   4212 CG  ARG A 358      -8.574  13.539  -0.946  1.00 19.86           C
ATOM   4213 CD  ARG A 358      -8.818  12.989   0.468  1.00 19.26           C
ATOM   4214 NE  ARG A 358      -9.033  11.537   0.436  1.00 20.24           N
ATOM   4215 CZ  ARG A 358      -8.944  10.696   1.469  1.00 19.04           C
ATOM   4216 NH1 ARG A 358      -8.769  11.145   2.708  1.00 17.28           N
ATOM   4217 NH2 ARG A 358      -9.021   9.387   1.260  1.00 18.85           N1+
ATOM   4218 H   ARG A 358     -11.570  12.333  -4.059  1.00  0.00           H
ATOM   4219 HA  ARG A 358      -8.897  13.372  -3.724  1.00  0.00           H
ATOM   4220 HB2 ARG A 358     -10.131  14.639  -1.935  1.00  0.00           H
ATOM   4221 HB3 ARG A 358     -10.684  13.128  -1.275  1.00  0.00           H
ATOM   4222 HG2 ARG A 358      -7.797  12.948  -1.434  1.00  0.00           H
ATOM   4223 HG3 ARG A 358      -8.153  14.543  -0.876  1.00  0.00           H
ATOM   4224 HD2 ARG A 358      -7.930  13.178   1.068  1.00  0.00           H
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ATOM   4225  HD3 ARG A 358      -9.648  13.489   0.965  1.00  0.00           H
ATOM   4226  HE  ARG A 358      -9.194  11.146  -0.507  1.00  0.00           H
ATOM   4227 HH11 ARG A 358      -8.908  12.124   2.981  1.00  0.00           H
ATOM   4228 HH12 ARG A 358      -8.433  10.509   3.434  1.00  0.00           H
ATOM   4229 HH21 ARG A 358      -9.237   8.967   0.340  1.00  0.00           H
ATOM   4230 HH22 ARG A 358      -8.950   8.719   2.028  1.00  0.00           H
ATOM   4231  N   TRP A 359      -9.311  10.808  -4.348  1.00 19.26           N
ATOM   4232  CA  TRP A 359      -9.090   9.370  -4.487  1.00 19.61           C
ATOM   4233  C   TRP A 359      -7.764   8.974  -3.829  1.00 18.49           C
ATOM   4234  O   TRP A 359      -6.753   9.650  -4.027  1.00 21.29           O
ATOM   4235  CB  TRP A 359      -9.041   8.959  -5.972  1.00 19.93           C
ATOM   4236  CG  TRP A 359     -10.241   9.193  -6.840  1.00 23.18           C
ATOM   4237  CD1 TRP A 359     -11.413   9.768  -6.484  1.00 23.43           C
ATOM   4238  CD2 TRP A 359     -10.380   8.855  -8.250  1.00 22.00           C
ATOM   4239  NE1 TRP A 359     -12.252   9.835  -7.577  1.00 26.12           N
ATOM   4240  CE3 TRP A 359      -9.539   8.242  -9.210  1.00 22.65           C
ATOM   4241  CE2 TRP A 359     -11.665   9.287  -8.695  1.00 24.16           C
ATOM   4242  CZ3 TRP A 359      -9.967   8.070 -10.541  1.00 21.38           C
ATOM   4243  CZ2 TRP A 359     -12.083   9.128 -10.025  1.00 24.29           C
ATOM   4244  CH2 TRP A 359     -11.236   8.503 -10.951  1.00 23.99           C
ATOM   4245  H   TRP A 359      -9.329  11.366  -5.187  1.00  0.00           H
ATOM   4246  HA  TRP A 359      -9.908   8.848  -3.990  1.00  0.00           H
ATOM   4247  HB2 TRP A 359      -8.200   9.448  -6.461  1.00  0.00           H
ATOM   4248  HB3 TRP A 359      -8.813   7.894  -6.037  1.00  0.00           H
ATOM   4249  HD1 TRP A 359     -11.641  10.141  -5.498  1.00  0.00           H
ATOM   4250  HE1 TRP A 359     -13.182  10.316  -7.556  1.00  0.00           H
ATOM   4251  HE3 TRP A 359      -8.552   7.912  -8.919  1.00  0.00           H
ATOM   4252  HZ3 TRP A 359      -9.323   7.622 -11.273  1.00  0.00           H
ATOM   4253  HZ2 TRP A 359     -13.043   9.479 -10.342  1.00  0.00           H
ATOM   4254  HH2 TRP A 359     -11.545   8.381 -11.978  1.00  0.00           H
ATOM   4255  N   GLY A 360      -7.778   7.873  -3.082  1.00 20.56           N
ATOM   4256  CA  GLY A 360      -6.639   7.371  -2.340  1.00 19.56           C
ATOM   4257  C   GLY A 360      -5.980   6.232  -3.112  1.00 19.97           C
ATOM   4258  O   GLY A 360      -6.643   5.507  -3.855  1.00 19.92           O
ATOM   4259  H   GLY A 360      -8.666   7.427  -2.899  1.00  0.00           H
ATOM   4260  HA2 GLY A 360      -5.930   8.161  -2.109  1.00  0.00           H
ATOM   4261  HA3 GLY A 360      -6.997   6.988  -1.385  1.00  0.00           H
ATOM   4262  N   ASP A 361      -4.668   6.060  -2.926  1.00 18.87           N
ATOM   4263  CA  ASP A 361      -3.867   5.033  -3.598  1.00 20.81           C
ATOM   4264  C   ASP A 361      -4.216   3.614  -3.098  1.00 20.03           C
ATOM   4265  O   ASP A 361      -4.117   2.654  -3.861  1.00 22.19           O
ATOM   4266  CB  ASP A 361      -2.357   5.336  -3.399  1.00 21.93           C
ATOM   4267  CG  ASP A 361      -1.790   5.053  -2.012  1.00 21.87           C
ATOM   4268  OD1 ASP A 361      -1.806   5.951  -1.144  1.00 25.70           O
ATOM   4269  OD2 ASP A 361      -1.355   3.912  -1.769  1.00 23.34           O1-
ATOM   4270  H   ASP A 361      -4.191   6.696  -2.303  1.00  0.00           H
ATOM   4271  HA  ASP A 361      -4.103   5.071  -4.659  1.00  0.00           H
ATOM   4272  HB2 ASP A 361      -1.794   4.726  -4.105  1.00  0.00           H
ATOM   4273  HB3 ASP A 361      -2.139   6.368  -3.667  1.00  0.00           H
ATOM   4274  N   ALA A 362      -4.647   3.476  -1.838  1.00 20.12           N
ATOM   4275  CA  ALA A 362      -4.978   2.203  -1.200  1.00 19.36           C
ATOM   4276  C   ALA A 362      -6.153   1.451  -1.867  1.00 19.28           C
ATOM   4277  O   ALA A 362      -5.942   0.295  -2.245  1.00 17.72           O
ATOM   4278  CB  ALA A 362      -5.211   2.418   0.295  1.00 20.36           C
ATOM   4279  H   ALA A 362      -4.682   4.316  -1.281  1.00  0.00           H
ATOM   4280  HA  ALA A 362      -4.093   1.574  -1.306  1.00  0.00           H
ATOM   4281  HB1 ALA A 362      -5.068   1.491   0.836  1.00  0.00           H
ATOM   4282  HB2 ALA A 362      -4.495   3.114   0.715  1.00  0.00           H
ATOM   4283  HB3 ALA A 362      -6.207   2.782   0.519  1.00  0.00           H
ATOM   4284  N   PRO A 363      -7.343   2.059  -2.118  1.00 17.22           N
ATOM   4285  CA  PRO A 363      -8.375   1.435  -2.958  1.00 17.69           C
ATOM   4286  C   PRO A 363      -7.933   1.157  -4.404  1.00 17.56           C
ATOM   4287  O   PRO A 363      -8.200   0.060  -4.884  1.00 18.84           O
ATOM   4288  CB  PRO A 363      -9.623   2.320  -2.845  1.00 18.18           C
ATOM   4289  CG  PRO A 363      -9.107   3.670  -2.382  1.00 20.02           C
ATOM   4290  CD  PRO A 363      -7.814   3.358  -1.626  1.00 17.04           C
ATOM   4291  HA  PRO A 363      -8.623   0.467  -2.525  1.00  0.00           H
ATOM   4292  HB2 PRO A 363     -10.200   2.383  -3.769  1.00  0.00           H
ATOM   4293  HB3 PRO A 363     -10.285   1.914  -2.079  1.00  0.00           H
ATOM   4294  HG2 PRO A 363      -8.882   4.286  -3.253  1.00  0.00           H
ATOM   4295  HG3 PRO A 363      -9.827   4.218  -1.774  1.00  0.00           H
ATOM   4296  HD2 PRO A 363      -7.094   4.162  -1.713  1.00  0.00           H
ATOM   4297  HD3 PRO A 363      -8.059   3.257  -0.568  1.00  0.00           H
ATOM   4298  N   VAL A 364      -7.188   2.061  -5.061  1.00 15.81           N
ATOM   4299  CA  VAL A 364      -6.609   1.853  -6.399  1.00 13.67           C
ATOM   4300  C   VAL A 364      -5.672   0.620  -6.437  1.00 15.13           C
ATOM   4301  O   VAL A 364      -5.784  -0.219  -7.330  1.00 12.77           O
ATOM   4302  CB  VAL A 364      -5.920   3.167  -6.868  1.00 16.16           C
ATOM   4303  CG1 VAL A 364      -5.129   3.029  -8.182  1.00 13.85           C
ATOM   4304  CG2 VAL A 364      -6.944   4.308  -7.013  1.00 15.04           C
ATOM   4305  H   VAL A 364      -6.995   2.946  -4.613  1.00  0.00           H
ATOM   4306  HA  VAL A 364      -7.431   1.634  -7.085  1.00  0.00           H
ATOM   4307  HB  VAL A 364      -5.202   3.471  -6.107  1.00  0.00           H
ATOM   4308 HG11 VAL A 364      -4.745   3.994  -8.512  1.00  0.00           H
ATOM   4309 HG12 VAL A 364      -4.272   2.364  -8.079  1.00  0.00           H
ATOM   4310 HG13 VAL A 364      -5.757   2.637  -8.979  1.00  0.00           H
ATOM   4311 HG21 VAL A 364      -6.455   5.241  -7.294  1.00  0.00           H
ATOM   4312 HG22 VAL A 364      -7.684   4.077  -7.780  1.00  0.00           H
ATOM   4313 HG23 VAL A 364      -7.480   4.497  -6.086  1.00  0.00           H
ATOM   4314  N   HIS A 365      -4.808   0.454  -5.423  1.00 14.05           N
ATOM   4315  CA  HIS A 365      -3.947  -0.724  -5.272  1.00 17.18           C
ATOM   4316  C   HIS A 365      -4.764  -1.992  -4.993  1.00 16.98           C
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ATOM   4317  O   HIS A 365     -4.388  -3.063  -5.456  1.00 19.79          O
ATOM   4318  CB  HIS A 365     -2.971  -0.573  -4.088  1.00 16.11          C
ATOM   4319  CG  HIS A 365     -1.839   0.408  -4.227  1.00 19.71          C
ATOM   4320  ND1 HIS A 365     -0.790   0.377  -3.333  1.00 19.57          N1+
ATOM   4321  CD2 HIS A 365     -1.588   1.452  -5.100  1.00 18.63          C
ATOM   4322  CE1 HIS A 365      0.044   1.353  -3.641  1.00 21.02          C
ATOM   4323  NE2 HIS A 365     -0.394   2.032  -4.693  1.00 20.54          N
ATOM   4324  H   HIS A 365     -4.740   1.204  -4.736  1.00  0.00          H
ATOM   4325  HA  HIS A 365     -3.381  -0.878  -6.193  1.00  0.00          H
ATOM   4326  HB2 HIS A 365     -3.514  -0.328  -3.174  1.00  0.00          H
ATOM   4327  HB3 HIS A 365     -2.498  -1.539  -3.894  1.00  0.00          H
ATOM   4328  HD1 HIS A 365     -0.643  -0.298  -2.531  1.00  0.00          H
ATOM   4329  HD2 HIS A 365     -2.156   1.843  -5.933  1.00  0.00          H
ATOM   4330  HE1 HIS A 365      0.947   1.571  -3.086  1.00  0.00          H
ATOM   4331  HE2 HIS A 365      0.048   2.904  -5.022  1.00  0.00          H
ATOM   4332  N   SER A 366     -5.867  -1.888  -4.243  1.00 18.87          N
ATOM   4333  CA  SER A 366     -6.653  -3.039  -3.807  1.00 18.88          C
ATOM   4334  C   SER A 366     -7.595  -3.528  -4.908  1.00 19.48          C
ATOM   4335  O   SER A 366     -7.707  -4.736  -5.102  1.00 17.62          O
ATOM   4336  CB  SER A 366     -7.510  -2.632  -2.607  1.00 18.94          C
ATOM   4337  OG  SER A 366     -6.661  -2.261  -1.542  1.00 19.20          O
ATOM   4338  H   SER A 366     -6.137  -0.970  -3.915  1.00  0.00          H
ATOM   4339  HA  SER A 366     -5.992  -3.862  -3.531  1.00  0.00          H
ATOM   4340  HB2 SER A 366     -8.189  -1.815  -2.850  1.00  0.00          H
ATOM   4341  HB3 SER A 366     -8.125  -3.474  -2.284  1.00  0.00          H
ATOM   4342  HG  SER A 366     -6.168  -1.480  -1.801  1.00  0.00          H
ATOM   4343  N   ILE A 367     -8.233  -2.610  -5.654  1.00 19.28          N
ATOM   4344  CA  ILE A 367     -9.040  -2.916  -6.836  1.00 18.73          C
ATOM   4345  C   ILE A 367     -8.166  -3.602  -7.902  1.00 19.02          C
ATOM   4346  O   ILE A 367     -8.614  -4.548  -8.540  1.00 20.14          O
ATOM   4347  CB  ILE A 367     -9.770  -1.635  -7.344  1.00 16.72          C
ATOM   4348  CG1 ILE A 367    -10.803  -1.126  -6.305  1.00 15.35          C
ATOM   4349  CG2 ILE A 367    -10.470  -1.836  -8.708  1.00 14.85          C
ATOM   4350  CD1 ILE A 367    -11.220   0.340  -6.505  1.00 15.61          C
ATOM   4351  H   ILE A 367     -8.100  -1.623  -5.438  1.00  0.00          H
ATOM   4352  HA  ILE A 367     -9.794  -3.639  -6.537  1.00  0.00          H
ATOM   4353  HB  ILE A 367     -9.011  -0.861  -7.482  1.00  0.00          H
ATOM   4354 HG12 ILE A 367    -11.685  -1.766  -6.313  1.00  0.00          H
ATOM   4355 HG13 ILE A 367    -10.403  -1.213  -5.295  1.00  0.00          H
ATOM   4356 HG21 ILE A 367    -11.008  -0.944  -9.019  1.00  0.00          H
ATOM   4357 HG22 ILE A 367     -9.754  -2.047  -9.503  1.00  0.00          H
ATOM   4358 HG23 ILE A 367    -11.181  -2.662  -8.674  1.00  0.00          H
ATOM   4359 HD11 ILE A 367    -11.892   0.661  -5.708  1.00  0.00          H
ATOM   4360 HD12 ILE A 367    -10.350   0.997  -6.487  1.00  0.00          H
ATOM   4361 HD13 ILE A 367    -11.733   0.498  -7.453  1.00  0.00          H
ATOM   4362  N   ALA A 368     -6.897  -3.194  -8.021  1.00 17.53          N
ATOM   4363  CA  ALA A 368     -5.913  -3.862  -8.854  1.00 16.44          C
ATOM   4364  C   ALA A 368     -5.468  -5.212  -8.265  1.00 18.86          C
ATOM   4365  O   ALA A 368     -5.616  -6.234  -8.925  1.00 20.08          O
ATOM   4366  CB  ALA A 368     -4.700  -2.948  -8.993  1.00 16.29          C
ATOM   4367  H   ALA A 368     -6.608  -2.373  -7.506  1.00  0.00          H
ATOM   4368  HA  ALA A 368     -6.344  -4.042  -9.841  1.00  0.00          H
ATOM   4369  HB1 ALA A 368     -3.911  -3.470  -9.529  1.00  0.00          H
ATOM   4370  HB2 ALA A 368     -4.966  -2.053  -9.557  1.00  0.00          H
ATOM   4371  HB3 ALA A 368     -4.295  -2.633  -8.033  1.00  0.00          H
ATOM   4372  N   ALA A 369     -4.945  -5.255  -7.030  1.00 18.52          N
ATOM   4373  CA  ALA A 369     -4.374  -6.458  -6.407  1.00 20.68          C
ATOM   4374  C   ALA A 369     -5.384  -7.598  -6.200  1.00 20.05          C
ATOM   4375  O   ALA A 369     -4.984  -8.754  -6.126  1.00 18.61          O
ATOM   4376  CB  ALA A 369     -3.744  -6.101  -5.052  1.00 20.85          C
ATOM   4377  H   ALA A 369     -4.848  -4.381  -6.516  1.00  0.00          H
ATOM   4378  HA  ALA A 369     -3.590  -6.840  -7.065  1.00  0.00          H
ATOM   4379  HB1 ALA A 369     -3.380  -6.991  -4.535  1.00  0.00          H
ATOM   4380  HB2 ALA A 369     -2.890  -5.438  -5.171  1.00  0.00          H
ATOM   4381  HB3 ALA A 369     -4.457  -5.606  -4.393  1.00  0.00          H
ATOM   4382  N   ALA A 370     -6.683  -7.288  -6.125  1.00 20.81          N
ATOM   4383  CA  ALA A 370     -7.747  -8.278  -6.028  1.00 23.03          C
ATOM   4384  C   ALA A 370     -8.237  -8.763  -7.406  1.00 24.19          C
ATOM   4385  O   ALA A 370     -8.952  -9.762  -7.446  1.00 25.96          O
ATOM   4386  CB  ALA A 370     -8.935  -7.624  -5.308  1.00 24.55          C
ATOM   4387  H   ALA A 370     -6.942  -6.307  -6.126  1.00  0.00          H
ATOM   4388  HA  ALA A 370     -7.416  -9.144  -5.455  1.00  0.00          H
ATOM   4389  HB1 ALA A 370     -9.792  -8.294  -5.243  1.00  0.00          H
ATOM   4390  HB2 ALA A 370     -8.667  -7.335  -4.292  1.00  0.00          H
ATOM   4391  HB3 ALA A 370     -9.259  -6.728  -5.832  1.00  0.00          H
ATOM   4392  N   LEU A 371     -7.895  -8.088  -8.515  1.00 24.56          N
ATOM   4393  CA  LEU A 371     -8.402  -8.392  -9.861  1.00 24.21          C
ATOM   4394  C   LEU A 371     -7.300  -8.736 -10.868  1.00 24.41          C
ATOM   4395  O   LEU A 371     -7.566  -9.460 -11.825  1.00 21.31          O
ATOM   4396  CB  LEU A 371     -9.249  -7.220 -10.403  1.00 24.83          C
ATOM   4397  CG  LEU A 371    -10.510  -6.871  -9.586  1.00 27.38          C
ATOM   4398  CD1 LEU A 371    -11.263  -5.693 -10.223  1.00 25.79          C
ATOM   4399  CD2 LEU A 371    -11.455  -8.061  -9.378  1.00 27.66          C
ATOM   4400  H   LEU A 371     -7.283  -7.286  -8.416  1.00  0.00          H
ATOM   4401  HA  LEU A 371     -9.030  -9.279  -9.841  1.00  0.00          H
ATOM   4402  HB2 LEU A 371     -8.615  -6.334 -10.477  1.00  0.00          H
ATOM   4403  HB3 LEU A 371     -9.546  -7.436 -11.429  1.00  0.00          H
ATOM   4404  HG  LEU A 371    -10.177  -6.554  -8.600  1.00  0.00          H
ATOM   4405 HD11 LEU A 371    -12.094  -5.369  -9.597  1.00  0.00          H
ATOM   4406 HD12 LEU A 371    -10.605  -4.833 -10.358  1.00  0.00          H
ATOM   4407 HD13 LEU A 371    -11.664  -5.962 -11.201  1.00  0.00          H
ATOM   4408 HD21 LEU A 371    -12.363  -7.741  -8.873  1.00  0.00          H
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ATOM   4409 HD22 LEU A 371     -11.735  -8.528 -10.321  1.00  0.00           H
ATOM   4410 HD23 LEU A 371     -11.011  -8.822  -8.741  1.00  0.00           H
ATOM   4411  N   PHE A 372      -6.087  -8.207 -10.689  1.00 22.29           N
ATOM   4412  CA  PHE A 372      -4.944  -8.372 -11.591  1.00 20.76           C
ATOM   4413  C   PHE A 372      -3.931  -9.362 -10.996  1.00 22.10           C
ATOM   4414  O   PHE A 372      -2.817  -9.490 -11.498  1.00 20.77           O
ATOM   4415  CB  PHE A 372      -4.246  -7.007 -11.808  1.00 20.58           C
ATOM   4416  CG  PHE A 372      -5.111  -5.864 -12.324  1.00 20.46           C
ATOM   4417  CD1 PHE A 372      -6.358  -6.092 -12.951  1.00 19.24           C
ATOM   4418  CD2 PHE A 372      -4.664  -4.541 -12.140  1.00 17.33           C
ATOM   4419  CE1 PHE A 372      -7.187  -5.011 -13.293  1.00 21.85           C
ATOM   4420  CE2 PHE A 372      -5.485  -3.459 -12.506  1.00 20.11           C
ATOM   4421  CZ  PHE A 372      -6.755  -3.693 -13.064  1.00 20.51           C
ATOM   4422  H   PHE A 372      -5.958  -7.536  -9.932  1.00  0.00           H
ATOM   4423  HA  PHE A 372      -5.268  -8.773 -12.551  1.00  0.00           H
ATOM   4424  HB2 PHE A 372      -3.791  -6.686 -10.869  1.00  0.00           H
ATOM   4425  HB3 PHE A 372      -3.415  -7.119 -12.504  1.00  0.00           H
ATOM   4426  HD1 PHE A 372      -6.711  -7.092 -13.153  1.00  0.00           H
ATOM   4427  HD2 PHE A 372      -3.696  -4.355 -11.699  1.00  0.00           H
ATOM   4428  HE1 PHE A 372      -8.156  -5.200 -13.731  1.00  0.00           H
ATOM   4429  HE2 PHE A 372      -5.146  -2.448 -12.349  1.00  0.00           H
ATOM   4430  HZ  PHE A 372      -7.390  -2.862 -13.332  1.00  0.00           H
ATOM   4431  N   LEU A 373      -4.319 -10.077  -9.940  1.00 21.49           N
ATOM   4432  CA  LEU A 373      -3.643 -11.260  -9.444  1.00 22.37           C
ATOM   4433  C   LEU A 373      -4.672 -12.392  -9.381  1.00 22.61           C
ATOM   4434  O   LEU A 373      -5.823 -12.125  -9.016  1.00 21.20           O
ATOM   4435  CB  LEU A 373      -3.089 -11.011  -8.025  1.00 21.57           C
ATOM   4436  CG  LEU A 373      -1.873 -10.070  -7.931  1.00 21.65           C
ATOM   4437  CD1 LEU A 373      -1.524  -9.790  -6.460  1.00 25.02           C
ATOM   4438  CD2 LEU A 373      -0.651 -10.632  -8.672  1.00 24.25           C
ATOM   4439  H   LEU A 373      -5.273  -9.962  -9.627  1.00  0.00           H
ATOM   4440  HA  LEU A 373      -2.843 -11.538 -10.127  1.00  0.00           H
ATOM   4441  HB2 LEU A 373      -3.895 -10.630  -7.399  1.00  0.00           H
ATOM   4442  HB3 LEU A 373      -2.827 -11.969  -7.580  1.00  0.00           H
ATOM   4443  HG  LEU A 373      -2.139  -9.117  -8.393  1.00  0.00           H
ATOM   4444 HD11 LEU A 373      -0.665  -9.126  -6.377  1.00  0.00           H
ATOM   4445 HD12 LEU A 373      -2.356  -9.309  -5.944  1.00  0.00           H
ATOM   4446 HD13 LEU A 373      -1.287 -10.706  -5.920  1.00  0.00           H
ATOM   4447 HD21 LEU A 373       0.211  -9.985  -8.527  1.00  0.00           H
ATOM   4448 HD22 LEU A 373      -0.384 -11.627  -8.319  1.00  0.00           H
ATOM   4449 HD23 LEU A 373      -0.817 -10.687  -9.749  1.00  0.00           H
ATOM   4450  N   PRO A 374      -4.255 -13.655  -9.607  1.00 23.37           N
ATOM   4451  CA  PRO A 374      -5.047 -14.815  -9.212  1.00 23.61           C
ATOM   4452  C   PRO A 374      -4.955 -14.925  -7.679  1.00 24.19           C
ATOM   4453  O   PRO A 374      -3.871 -14.747  -7.120  1.00 25.28           O
ATOM   4454  CB  PRO A 374      -4.390 -15.994  -9.950  1.00 21.86           C
ATOM   4455  CG  PRO A 374      -2.944 -15.587 -10.169  1.00 25.99           C
ATOM   4456  CD  PRO A 374      -2.976 -14.057 -10.201  1.00 23.76           C
ATOM   4457  HA  PRO A 374      -6.083 -14.673  -9.521  1.00  0.00           H
ATOM   4458  HB2 PRO A 374      -4.494 -16.949  -9.434  1.00  0.00           H
ATOM   4459  HB3 PRO A 374      -4.848 -16.103 -10.933  1.00  0.00           H
ATOM   4460  HG2 PRO A 374      -2.352 -15.945  -9.339  1.00  0.00           H
ATOM   4461  HG3 PRO A 374      -2.518 -16.019 -11.075  1.00  0.00           H
ATOM   4462  HD2 PRO A 374      -2.131 -13.638  -9.656  1.00  0.00           H
ATOM   4463  HD3 PRO A 374      -2.923 -13.694 -11.227  1.00  0.00           H
ATOM   4464  N   LYS A 375      -6.076 -15.136  -6.975  1.00 23.78           N
ATOM   4465  CA  LYS A 375      -6.203 -14.827  -5.544  1.00 23.97           C
ATOM   4466  C   LYS A 375      -5.273 -15.599  -4.579  1.00 22.75           C
ATOM   4467  O   LYS A 375      -5.170 -15.218  -3.414  1.00 21.14           O
ATOM   4468  CB  LYS A 375      -7.682 -14.893  -5.111  1.00 23.67           C
ATOM   4469  CG  LYS A 375      -8.310 -16.291  -4.949  1.00 25.99           C
ATOM   4470  CD  LYS A 375      -9.781 -16.189  -4.502  1.00 27.02           C
ATOM   4471  CE  LYS A 375     -10.233 -17.346  -3.598  1.00 27.83           C
ATOM   4472  NZ  LYS A 375     -11.534 -17.068  -2.962  1.00 29.10           N1+
ATOM   4473  H   LYS A 375      -6.944 -15.272  -7.495  1.00  0.00           H
ATOM   4474  HA  LYS A 375      -5.902 -13.782  -5.452  1.00  0.00           H
ATOM   4475  HB2 LYS A 375      -7.758 -14.374  -4.154  1.00  0.00           H
ATOM   4476  HB3 LYS A 375      -8.281 -14.306  -5.808  1.00  0.00           H
ATOM   4477  HG2 LYS A 375      -8.237 -16.855  -5.880  1.00  0.00           H
ATOM   4478  HG3 LYS A 375      -7.738 -16.847  -4.205  1.00  0.00           H
ATOM   4479  HD2 LYS A 375      -9.907 -15.262  -3.949  1.00  0.00           H
ATOM   4480  HD3 LYS A 375     -10.423 -16.097  -5.381  1.00  0.00           H
ATOM   4481  HE2 LYS A 375     -10.287 -18.277  -4.165  1.00  0.00           H
ATOM   4482  HE3 LYS A 375      -9.506 -17.513  -2.804  1.00  0.00           H
ATOM   4483  HZ1 LYS A 375     -11.667 -17.705  -2.180  1.00  0.00           H
ATOM   4484  HZ2 LYS A 375     -11.559 -16.135  -2.565  1.00  0.00           H
ATOM   4485  HZ3 LYS A 375     -12.288 -17.155  -3.624  1.00  0.00           H
ATOM   4486  N   ASP A 376      -4.554 -16.624  -5.062  1.00 22.97           N
ATOM   4487  CA  ASP A 376      -3.410 -17.267  -4.393  1.00 23.49           C
ATOM   4488  C   ASP A 376      -2.300 -16.250  -4.059  1.00 24.05           C
ATOM   4489  O   ASP A 376      -1.672 -16.338  -3.011  1.00 23.37           O
ATOM   4490  CB  ASP A 376      -2.880 -18.456  -5.258  1.00 26.21           C
ATOM   4491  CG  ASP A 376      -1.438 -18.920  -4.984  1.00 25.03           C
ATOM   4492  OD1 ASP A 376      -0.617 -18.901  -5.929  1.00 24.00           O
ATOM   4493  OD2 ASP A 376      -1.136 -19.257  -3.818  1.00 25.73           O1-
ATOM   4494  H   ASP A 376      -4.671 -16.799  -6.049  1.00  0.00           H
ATOM   4495  HA  ASP A 376      -3.754 -17.672  -3.440  1.00  0.00           H
ATOM   4496  HB2 ASP A 376      -3.535 -19.318  -5.140  1.00  0.00           H
ATOM   4497  HB3 ASP A 376      -2.925 -18.183  -6.313  1.00  0.00           H
ATOM   4498  N   LYS A 377      -2.056 -15.271  -4.938  1.00 23.50           N
ATOM   4499  CA  LYS A 377      -0.872 -14.416  -4.889  1.00 22.56           C
ATOM   4500  C   LYS A 377      -1.010 -13.218  -3.933  1.00 21.29           C
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ATOM   4501  O   LYS A 377      -0.091 -12.398  -3.850  1.00 20.97          O
ATOM   4502  CB  LYS A 377      -0.587 -13.866  -6.298  1.00 21.84          C
ATOM   4503  CG  LYS A 377      -0.574 -14.905  -7.431  1.00 23.25          C
ATOM   4504  CD  LYS A 377       0.415 -16.070  -7.289  1.00 21.18          C
ATOM   4505  CE  LYS A 377       0.211 -17.145  -8.375  1.00 22.85          C
ATOM   4506  NZ  LYS A 377       0.855 -18.408  -8.013  1.00 23.32          N1+
ATOM   4507  H   LYS A 377      -2.673 -15.184  -5.742  1.00  0.00          H
ATOM   4508  HA  LYS A 377      -0.025 -15.002  -4.553  1.00  0.00          H
ATOM   4509  HB2 LYS A 377      -1.339 -13.119  -6.540  1.00  0.00          H
ATOM   4510  HB3 LYS A 377       0.356 -13.330  -6.286  1.00  0.00          H
ATOM   4511  HG2 LYS A 377      -1.566 -15.333  -7.495  1.00  0.00          H
ATOM   4512  HG3 LYS A 377      -0.413 -14.383  -8.368  1.00  0.00          H
ATOM   4513  HD2 LYS A 377       1.445 -15.712  -7.283  1.00  0.00          H
ATOM   4514  HD3 LYS A 377       0.243 -16.533  -6.320  1.00  0.00          H
ATOM   4515  HE2 LYS A 377      -0.850 -17.368  -8.486  1.00  0.00          H
ATOM   4516  HE3 LYS A 377       0.580 -16.814  -9.345  1.00  0.00          H
ATOM   4517  HZ1 LYS A 377       0.455 -18.692  -7.100  1.00  0.00          H
ATOM   4518  HZ2 LYS A 377       0.658 -19.126  -8.685  1.00  0.00          H
ATOM   4519  HZ3 LYS A 377       1.886 -18.287  -7.972  1.00  0.00          H
ATOM   4520  N   ILE A 378      -2.136 -13.110  -3.229  1.00 20.46          N
ATOM   4521  CA  ILE A 378      -2.433 -12.065  -2.263  1.00 19.71          C
ATOM   4522  C   ILE A 378      -2.184 -12.707  -0.882  1.00 21.20          C
ATOM   4523  O   ILE A 378      -2.708 -13.787  -0.601  1.00 23.96          O
ATOM   4524  CB  ILE A 378      -3.923 -11.629  -2.421  1.00 19.96          C
ATOM   4525  CG1 ILE A 378      -4.340 -11.380  -3.897  1.00 16.92          C
ATOM   4526  CG2 ILE A 378      -4.196 -10.366  -1.581  1.00 15.66          C
ATOM   4527  CD1 ILE A 378      -5.853 -11.215  -4.098  1.00 19.39          C
ATOM   4528  H   ILE A 378      -2.779 -13.890  -3.259  1.00  0.00          H
ATOM   4529  HA  ILE A 378      -1.785 -11.203  -2.420  1.00  0.00          H
ATOM   4530  HB  ILE A 378      -4.555 -12.434  -2.041  1.00  0.00          H
ATOM   4531 HG12 ILE A 378      -3.818 -10.508  -4.292  1.00  0.00          H
ATOM   4532 HG13 ILE A 378      -4.044 -12.212  -4.534  1.00  0.00          H
ATOM   4533 HG21 ILE A 378      -5.240 -10.061  -1.622  1.00  0.00          H
ATOM   4534 HG22 ILE A 378      -3.956 -10.531  -0.533  1.00  0.00          H
ATOM   4535 HG23 ILE A 378      -3.600  -9.522  -1.928  1.00  0.00          H
ATOM   4536 HD11 ILE A 378      -6.088 -11.161  -5.162  1.00  0.00          H
ATOM   4537 HD12 ILE A 378      -6.402 -12.059  -3.682  1.00  0.00          H
ATOM   4538 HD13 ILE A 378      -6.226 -10.299  -3.641  1.00  0.00          H
ATOM   4539  N   HIS A 379      -1.386 -12.065  -0.022  1.00 20.04          N
ATOM   4540  CA  HIS A 379      -1.021 -12.549   1.309  1.00 20.47          C
ATOM   4541  C   HIS A 379      -1.403 -11.515   2.373  1.00 21.04          C
ATOM   4542  O   HIS A 379      -1.159 -10.325   2.201  1.00 19.94          O
ATOM   4543  CB  HIS A 379       0.484 -12.877   1.350  1.00 21.51          C
ATOM   4544  CG  HIS A 379       0.962 -13.451   2.657  1.00 21.45          C
ATOM   4545  ND1 HIS A 379       0.396 -14.597   3.222  1.00 20.38          N
ATOM   4546  CD2 HIS A 379       1.969 -13.005   3.479  1.00 22.37          C
ATOM   4547  CE1 HIS A 379       1.056 -14.777   4.363  1.00 22.41          C
ATOM   4548  NE2 HIS A 379       2.007 -13.865   4.562  1.00 22.62          N
ATOM   4549  H   HIS A 379      -0.977 -11.180  -0.320  1.00  0.00          H
ATOM   4550  HA  HIS A 379      -1.562 -13.470   1.533  1.00  0.00          H
ATOM   4551  HB2 HIS A 379       0.725 -13.593   0.573  1.00  0.00          H
ATOM   4552  HB3 HIS A 379       1.076 -11.991   1.130  1.00  0.00          H
ATOM   4553  HD2 HIS A 379       2.637 -12.163   3.385  1.00  0.00          H
ATOM   4554  HE1 HIS A 379       0.840 -15.572   5.062  1.00  0.00          H
ATOM   4555  HE2 HIS A 379       2.618 -13.793   5.371  1.00  0.00          H
ATOM   4556  N   TYR A 380      -1.959 -11.978   3.492  1.00 21.37          N
ATOM   4557  CA  TYR A 380      -2.094 -11.210   4.724  1.00 21.69          C
ATOM   4558  C   TYR A 380      -1.073 -11.840   5.673  1.00 20.30          C
ATOM   4559  O   TYR A 380      -1.146 -13.045   5.929  1.00 21.92          O
ATOM   4560  CB  TYR A 380      -3.524 -11.383   5.286  1.00 19.97          C
ATOM   4561  CG  TYR A 380      -3.715 -10.929   6.725  1.00 21.86          C
ATOM   4562  CD1 TYR A 380      -3.838  -9.562   7.039  1.00 18.74          C
ATOM   4563  CD2 TYR A 380      -3.718 -11.880   7.765  1.00 19.94          C
ATOM   4564  CE1 TYR A 380      -3.928  -9.151   8.386  1.00 21.73          C
ATOM   4565  CE2 TYR A 380      -3.811 -11.466   9.106  1.00 22.01          C
ATOM   4566  CZ  TYR A 380      -3.886 -10.101   9.421  1.00 22.98          C
ATOM   4567  OH  TYR A 380      -3.929  -9.724  10.730  1.00 22.49          O
ATOM   4568  H   TYR A 380      -1.934 -12.981   3.628  1.00  0.00          H
ATOM   4569  HA  TYR A 380      -1.884 -10.149   4.584  1.00  0.00          H
ATOM   4570  HB2 TYR A 380      -4.220 -10.826   4.660  1.00  0.00          H
ATOM   4571  HB3 TYR A 380      -3.826 -12.429   5.222  1.00  0.00          H
ATOM   4572  HD1 TYR A 380      -3.840  -8.825   6.249  1.00  0.00          H
ATOM   4573  HD2 TYR A 380      -3.625 -12.931   7.536  1.00  0.00          H
ATOM   4574  HE1 TYR A 380      -4.016  -8.103   8.626  1.00  0.00          H
ATOM   4575  HE2 TYR A 380      -3.824 -12.194   9.900  1.00  0.00          H
ATOM   4576  HH  TYR A 380      -4.355  -8.874  10.889  1.00  0.00          H
ATOM   4577  N   PHE A 381      -0.136 -11.044   6.190  1.00 21.02          N
ATOM   4578  CA  PHE A 381       0.855 -11.492   7.162  1.00 22.01          C
ATOM   4579  C   PHE A 381       0.205 -11.536   8.556  1.00 21.75          C
ATOM   4580  O   PHE A 381       0.196 -10.549   9.293  1.00 21.88          O
ATOM   4581  CB  PHE A 381       2.030 -10.502   7.180  1.00 21.96          C
ATOM   4582  CG  PHE A 381       2.975 -10.585   5.997  1.00 23.44          C
ATOM   4583  CD1 PHE A 381       4.030 -11.522   6.010  1.00 24.95          C
ATOM   4584  CD2 PHE A 381       2.843  -9.700   4.911  1.00 24.30          C
ATOM   4585  CE1 PHE A 381       4.953 -11.567   4.948  1.00 24.65          C
ATOM   4586  CE2 PHE A 381       3.763  -9.750   3.851  1.00 24.16          C
ATOM   4587  CZ  PHE A 381       4.823 -10.676   3.868  1.00 22.13          C
ATOM   4588  H   PHE A 381      -0.142 -10.059   5.941  1.00  0.00          H
ATOM   4589  HA  PHE A 381       1.232 -12.485   6.913  1.00  0.00          H
ATOM   4590  HB2 PHE A 381       1.678  -9.477   7.296  1.00  0.00          H
ATOM   4591  HB3 PHE A 381       2.627 -10.714   8.064  1.00  0.00          H
ATOM   4592  HD1 PHE A 381       4.149 -12.195   6.851  1.00  0.00          H
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ATOM   4593  HD2 PHE A 381       2.051  -8.969   4.894  1.00  0.00           H
ATOM   4594  HE1 PHE A 381       5.762 -12.283   4.973  1.00  0.00           H
ATOM   4595  HE2 PHE A 381       3.669  -9.053   3.039  1.00  0.00           H
ATOM   4596  HZ  PHE A 381       5.534 -10.705   3.057  1.00  0.00           H
ATOM   4597  N   SER A 382      -0.344 -12.701   8.914  1.00 22.55           N
ATOM   4598  CA  SER A 382      -0.963 -12.996  10.204  1.00 23.85           C
ATOM   4599  C   SER A 382       0.057 -13.234  11.329  1.00 23.18           C
ATOM   4600  O   SER A 382      -0.331 -13.378  12.484  1.00 24.66           O
ATOM   4601  CB  SER A 382      -1.818 -14.267  10.008  1.00 23.74           C
ATOM   4602  OG  SER A 382      -1.086 -15.361   9.469  1.00 23.95           O
ATOM   4603  H   SER A 382      -0.318 -13.458   8.242  1.00  0.00           H
ATOM   4604  HA  SER A 382      -1.589 -12.159  10.514  1.00  0.00           H
ATOM   4605  HB2 SER A 382      -2.279 -14.565  10.951  1.00  0.00           H
ATOM   4606  HB3 SER A 382      -2.630 -14.053   9.320  1.00  0.00           H
ATOM   4607  HG  SER A 382      -0.303 -15.488   9.991  1.00  0.00           H
ATOM   4608  N   ASP A 383       1.337 -13.318  10.972  1.00 25.17           N
ATOM   4609  CA  ASP A 383       2.527 -13.485  11.794  1.00 23.87           C
ATOM   4610  C   ASP A 383       3.141 -12.114  12.142  1.00 23.92           C
ATOM   4611  O   ASP A 383       3.924 -12.027  13.088  1.00 24.24           O
ATOM   4612  CB  ASP A 383       3.574 -14.266  10.947  1.00 23.64           C
ATOM   4613  CG  ASP A 383       3.894 -13.682   9.562  1.00 23.19           C
ATOM   4614  OD1 ASP A 383       2.932 -13.368   8.822  1.00 22.50           O
ATOM   4615  OD2 ASP A 383       5.092 -13.561   9.241  1.00 22.18           O1-
ATOM   4616  H   ASP A 383       1.572 -13.227   9.978  1.00  0.00           H
ATOM   4617  HA  ASP A 383       2.295 -14.022  12.715  1.00  0.00           H
ATOM   4618  HB2 ASP A 383       4.507 -14.353  11.506  1.00  0.00           H
ATOM   4619  HB3 ASP A 383       3.227 -15.286  10.791  1.00  0.00           H
ATOM   4620  N   ILE A 384       2.791 -11.043  11.413  1.00 22.55           N
ATOM   4621  CA  ILE A 384       3.320  -9.704  11.628  1.00 22.33           C
ATOM   4622  C   ILE A 384       2.285  -8.893  12.422  1.00 23.48           C
ATOM   4623  O   ILE A 384       1.111  -8.786  12.065  1.00 25.39           O
ATOM   4624  CB  ILE A 384       3.668  -9.028  10.267  1.00 22.93           C
ATOM   4625  CG1 ILE A 384       4.777  -9.842   9.550  1.00 21.02           C
ATOM   4626  CG2 ILE A 384       4.101  -7.552  10.427  1.00 18.69           C
ATOM   4627  CD1 ILE A 384       5.321  -9.227   8.252  1.00 22.41           C
ATOM   4628  H   ILE A 384       2.101 -11.170  10.685  1.00  0.00           H
ATOM   4629  HA  ILE A 384       4.243  -9.758  12.208  1.00  0.00           H
ATOM   4630  HB  ILE A 384       2.772  -9.032   9.645  1.00  0.00           H
ATOM   4631 HG12 ILE A 384       5.606 -10.014  10.234  1.00  0.00           H
ATOM   4632 HG13 ILE A 384       4.413 -10.842   9.320  1.00  0.00           H
ATOM   4633 HG21 ILE A 384       4.299  -7.082   9.465  1.00  0.00           H
ATOM   4634 HG22 ILE A 384       3.331  -6.940  10.895  1.00  0.00           H
ATOM   4635 HG23 ILE A 384       5.004  -7.478  11.032  1.00  0.00           H
ATOM   4636 HD11 ILE A 384       5.954  -9.944   7.728  1.00  0.00           H
ATOM   4637 HD12 ILE A 384       4.517  -8.940   7.576  1.00  0.00           H
ATOM   4638 HD13 ILE A 384       5.926  -8.346   8.449  1.00  0.00           H
ATOM   4639  N   GLY A 385       2.773  -8.243  13.476  1.00 22.88           N
ATOM   4640  CA  GLY A 385       2.067  -7.280  14.296  1.00 21.82           C
ATOM   4641  C   GLY A 385       2.718  -5.931  14.024  1.00 20.82           C
ATOM   4642  O   GLY A 385       3.947  -5.824  13.990  1.00 19.73           O
ATOM   4643  H   GLY A 385       3.749  -8.379  13.685  1.00  0.00           H
ATOM   4644  HA2 GLY A 385       1.007  -7.270  14.053  1.00  0.00           H
ATOM   4645  HA3 GLY A 385       2.161  -7.533  15.352  1.00  0.00           H
ATOM   4646  N   TYR A 386       1.898  -4.916  13.779  1.00 21.09           N
ATOM   4647  CA  TYR A 386       2.256  -3.657  13.139  1.00 20.61           C
ATOM   4648  C   TYR A 386       1.283  -2.571  13.615  1.00 20.86           C
ATOM   4649  O   TYR A 386       0.190  -2.902  14.062  1.00 21.94           O
ATOM   4650  CB  TYR A 386       2.256  -3.898  11.609  1.00 21.65           C
ATOM   4651  CG  TYR A 386       2.251  -2.669  10.726  1.00 21.23           C
ATOM   4652  CD1 TYR A 386       3.456  -2.058  10.324  1.00 20.92           C
ATOM   4653  CD2 TYR A 386       1.017  -2.138  10.302  1.00 17.77           C
ATOM   4654  CE1 TYR A 386       3.421  -0.940   9.469  1.00 20.13           C
ATOM   4655  CE2 TYR A 386       0.984  -1.008   9.473  1.00 19.71           C
ATOM   4656  CZ  TYR A 386       2.186  -0.423   9.034  1.00 19.65           C
ATOM   4657  OH  TYR A 386       2.137   0.610   8.146  1.00 20.30           O
ATOM   4658  H   TYR A 386       0.909  -5.034  13.995  1.00  0.00           H
ATOM   4659  HA  TYR A 386       3.252  -3.362  13.461  1.00  0.00           H
ATOM   4660  HB2 TYR A 386       3.106  -4.519  11.331  1.00  0.00           H
ATOM   4661  HB3 TYR A 386       1.380  -4.489  11.335  1.00  0.00           H
ATOM   4662  HD1 TYR A 386       4.406  -2.456  10.650  1.00  0.00           H
ATOM   4663  HD2 TYR A 386       0.091  -2.601  10.610  1.00  0.00           H
ATOM   4664  HE1 TYR A 386       4.347  -0.499   9.136  1.00  0.00           H
ATOM   4665  HE2 TYR A 386       0.027  -0.626   9.156  1.00  0.00           H
ATOM   4666  HH  TYR A 386       2.846   0.633   7.505  1.00  0.00           H
ATOM   4667  N   HIS A 387       1.634  -1.286  13.491  1.00 19.49           N
ATOM   4668  CA  HIS A 387       0.732  -0.154  13.709  1.00 20.54           C
ATOM   4669  C   HIS A 387       1.132   1.022  12.817  1.00 18.80           C
ATOM   4670  O   HIS A 387       2.262   1.496  12.920  1.00 18.62           O
ATOM   4671  CB  HIS A 387       0.634   0.187  15.216  1.00 20.00           C
ATOM   4672  CG  HIS A 387      -0.004   1.504  15.622  1.00 25.81           C
ATOM   4673  ND1 HIS A 387      -1.293   1.602  16.131  1.00 22.90           N1+
ATOM   4674  CD2 HIS A 387       0.527   2.784  15.658  1.00 23.86           C
ATOM   4675  CE1 HIS A 387      -1.490   2.863  16.486  1.00 24.18           C
ATOM   4676  NE2 HIS A 387      -0.444   3.621  16.180  1.00 25.10           N
ATOM   4677  H   HIS A 387       2.562  -1.080  13.129  1.00  0.00           H
ATOM   4678  HA  HIS A 387      -0.255  -0.460  13.372  1.00  0.00           H
ATOM   4679  HB2 HIS A 387       0.109  -0.616  15.726  1.00  0.00           H
ATOM   4680  HB3 HIS A 387       1.637   0.184  15.633  1.00  0.00           H
ATOM   4681  HD1 HIS A 387      -1.944   0.845  16.451  1.00  0.00           H
ATOM   4682  HD2 HIS A 387       1.506   3.162  15.395  1.00  0.00           H
ATOM   4683  HE1 HIS A 387      -2.374   3.206  17.004  1.00  0.00           H
ATOM   4684  HE2 HIS A 387      -0.334   4.619  16.469  1.00  0.00           H
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ATOM   4685  N   HIS A 388       0.190   1.528  12.012  1.00 18.98           N
ATOM   4686  CA  HIS A 388       0.211   2.859  11.410  1.00 18.64           C
ATOM   4687  C   HIS A 388      -0.895   3.643  12.143  1.00 20.19           C
ATOM   4688  O   HIS A 388      -2.009   3.121  12.220  1.00 20.72           O
ATOM   4689  CB  HIS A 388      -0.183   2.773   9.914  1.00  0.00           C
ATOM   4690  CG  HIS A 388      -0.384   4.021   9.099  1.00  0.00           C
ATOM   4691  ND1 HIS A 388      -1.375   4.076   8.141  1.00  0.00           N
ATOM   4692  CD2 HIS A 388       0.296   5.204   8.952  1.00  0.00           C
ATOM   4693  CE1 HIS A 388      -1.257   5.230   7.455  1.00  0.00           C
ATOM   4694  NE2 HIS A 388      -0.257   5.945   7.936  1.00  0.00           N
ATOM   4695  H   HIS A 388      -0.740   1.120  12.080  1.00  0.00           H
ATOM   4696  HA  HIS A 388       1.195   3.320  11.501  1.00  0.00           H
ATOM   4697  HB2 HIS A 388       0.615   2.183   9.465  1.00  0.00           H
ATOM   4698  HB3 HIS A 388      -1.078   2.157   9.843  1.00  0.00           H
ATOM   4699  HD1 HIS A 388      -2.051   3.351   7.919  1.00  0.00           H
ATOM   4700  HD2 HIS A 388       1.154   5.577   9.489  1.00  0.00           H
ATOM   4701  HE1 HIS A 388      -1.866   5.497   6.600  1.00  0.00           H
ATOM   4702  N   PRO A 389      -0.636   4.839  12.714  1.00 19.60           N
ATOM   4703  CA  PRO A 389      -1.641   5.632  13.443  1.00 19.62           C
ATOM   4704  C   PRO A 389      -2.981   5.817  12.685  1.00 19.23           C
ATOM   4705  O   PRO A 389      -2.939   6.274  11.537  1.00 20.06           O
ATOM   4706  CB  PRO A 389      -0.957   6.988  13.693  1.00 19.61           C
ATOM   4707  CG  PRO A 389       0.536   6.724  13.610  1.00 19.36           C
ATOM   4708  CD  PRO A 389       0.681   5.475  12.753  1.00 19.21           C
ATOM   4709  HA  PRO A 389      -1.788   5.124  14.391  1.00  0.00           H
ATOM   4710  HB2 PRO A 389      -1.226   7.719  12.928  1.00  0.00           H
ATOM   4711  HB3 PRO A 389      -1.228   7.419  14.655  1.00  0.00           H
ATOM   4712  HG2 PRO A 389       1.073   7.577  13.196  1.00  0.00           H
ATOM   4713  HG3 PRO A 389       0.941   6.536  14.604  1.00  0.00           H
ATOM   4714  HD2 PRO A 389       0.997   5.755  11.751  1.00  0.00           H
ATOM   4715  HD3 PRO A 389       1.434   4.810  13.176  1.00  0.00           H
ATOM   4716  N   PRO A 390      -4.163   5.532  13.281  1.00 19.23           N
ATOM   4717  CA  PRO A 390      -4.397   5.051  14.655  1.00 19.78           C
ATOM   4718  C   PRO A 390      -4.495   3.513  14.841  1.00 19.82           C
ATOM   4719  O   PRO A 390      -4.847   3.102  15.947  1.00 20.50           O
ATOM   4720  CB  PRO A 390      -5.773   5.655  14.991  1.00 16.45           C
ATOM   4721  CG  PRO A 390      -6.526   5.614  13.672  1.00 19.09           C
ATOM   4722  CD  PRO A 390      -5.433   5.913  12.647  1.00 19.54           C
ATOM   4723  HA  PRO A 390      -3.671   5.447  15.365  1.00  0.00           H
ATOM   4724  HB2 PRO A 390      -6.314   5.151  15.791  1.00  0.00           H
ATOM   4725  HB3 PRO A 390      -5.643   6.685  15.320  1.00  0.00           H
ATOM   4726  HG2 PRO A 390      -6.931   4.616  13.515  1.00  0.00           H
ATOM   4727  HG3 PRO A 390      -7.355   6.320  13.631  1.00  0.00           H
ATOM   4728  HD2 PRO A 390      -5.602   5.373  11.716  1.00  0.00           H
ATOM   4729  HD3 PRO A 390      -5.420   6.980  12.414  1.00  0.00           H
ATOM   4730  N   TYR A 391      -4.255   2.652  13.837  1.00 21.44           N
ATOM   4731  CA  TYR A 391      -4.697   1.246  13.853  1.00 22.01           C
ATOM   4732  C   TYR A 391      -3.561   0.222  13.778  1.00 21.91           C
ATOM   4733  O   TYR A 391      -2.553   0.422  13.096  1.00 21.23           O
ATOM   4734  CB  TYR A 391      -5.740   0.992  12.744  1.00 25.04           C
ATOM   4735  CG  TYR A 391      -7.066   1.695  12.953  1.00 26.98           C
ATOM   4736  CD1 TYR A 391      -7.721   1.572  14.193  1.00 27.76           C
ATOM   4737  CD2 TYR A 391      -7.661   2.453  11.920  1.00 28.12           C
ATOM   4738  CE1 TYR A 391      -8.939   2.223  14.417  1.00 29.80           C
ATOM   4739  CE2 TYR A 391      -8.895   3.099  12.143  1.00 28.51           C
ATOM   4740  CZ  TYR A 391      -9.525   2.988  13.398  1.00 30.11           C
ATOM   4741  OH  TYR A 391     -10.706   3.611  13.657  1.00 29.73           O
ATOM   4742  H   TYR A 391      -3.759   2.962  13.009  1.00  0.00           H
ATOM   4743  HA  TYR A 391      -5.174   1.033  14.809  1.00  0.00           H
ATOM   4744  HB2 TYR A 391      -5.334   1.263  11.775  1.00  0.00           H
ATOM   4745  HB3 TYR A 391      -5.957  -0.075  12.675  1.00  0.00           H
ATOM   4746  HD1 TYR A 391      -7.306   0.966  14.983  1.00  0.00           H
ATOM   4747  HD2 TYR A 391      -7.181   2.539  10.956  1.00  0.00           H
ATOM   4748  HE1 TYR A 391      -9.418   2.124  15.378  1.00  0.00           H
ATOM   4749  HE2 TYR A 391      -9.349   3.679  11.352  1.00  0.00           H
ATOM   4750  HH  TYR A 391     -11.100   4.032  12.873  1.00  0.00           H
ATOM   4751  N   ASP A 392      -3.752  -0.882  14.510  1.00 20.65           N
ATOM   4752  CA  ASP A 392      -2.790  -1.950  14.767  1.00 21.18           C
ATOM   4753  C   ASP A 392      -3.236  -3.223  14.048  1.00 20.89           C
ATOM   4754  O   ASP A 392      -4.425  -3.527  14.001  1.00 20.18           O
ATOM   4755  CB  ASP A 392      -2.677  -2.293  16.282  1.00 22.25           C
ATOM   4756  CG  ASP A 392      -2.334  -1.122  17.191  1.00 21.58           C
ATOM   4757  OD1 ASP A 392      -3.040  -0.088  17.141  1.00 20.66           O
ATOM   4758  OD2 ASP A 392      -1.300  -1.153  17.885  1.00 21.72           O1-
ATOM   4759  H   ASP A 392      -4.621  -0.960  15.030  1.00  0.00           H
ATOM   4760  HA  ASP A 392      -1.819  -1.635  14.404  1.00  0.00           H
ATOM   4761  HB2 ASP A 392      -3.608  -2.729  16.645  1.00  0.00           H
ATOM   4762  HB3 ASP A 392      -1.919  -3.065  16.424  1.00  0.00           H
ATOM   4763  N   ASN A 393      -2.269  -3.994  13.557  1.00 20.94           N
ATOM   4764  CA  ASN A 393      -2.405  -5.409  13.214  1.00 20.94           C
ATOM   4765  C   ASN A 393      -1.788  -6.157  14.401  1.00 23.33           C
ATOM   4766  O   ASN A 393      -0.720  -5.743  14.868  1.00 20.26           O
ATOM   4767  CB  ASN A 393      -1.509  -5.715  11.984  1.00 21.01           C
ATOM   4768  CG  ASN A 393      -2.062  -6.874  11.161  1.00 21.80           C
ATOM   4769  OD1 ASN A 393      -3.015  -6.671  10.421  1.00 21.19           O
ATOM   4770  ND2 ASN A 393      -1.472  -8.062  11.208  1.00 18.99           N
ATOM   4771  H   ASN A 393      -1.318  -3.684  13.757  1.00  0.00           H
ATOM   4772  HA  ASN A 393      -3.449  -5.688  13.048  1.00  0.00           H
ATOM   4773  HB2 ASN A 393      -1.485  -4.852  11.320  1.00  0.00           H
ATOM   4774  HB3 ASN A 393      -0.468  -5.909  12.245  1.00  0.00           H
ATOM   4775 HD21 ASN A 393      -0.589  -8.253  11.682  1.00  0.00           H
ATOM   4776 HD22 ASN A 393      -1.914  -8.827  10.708  1.00  0.00           H
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ATOM   4777  N   CYS A 394     -2.389  -7.249  14.878  1.00 21.34           N
ATOM   4778  CA  CYS A 394     -1.767  -8.113  15.885  1.00 23.77           C
ATOM   4779  C   CYS A 394     -2.163  -9.585  15.684  1.00 23.91           C
ATOM   4780  O   CYS A 394     -3.364  -9.854  15.664  1.00 23.61           O
ATOM   4781  CB  CYS A 394     -2.036  -7.587  17.308  1.00 24.76           C
ATOM   4782  SG  CYS A 394     -1.112  -8.420  18.627  1.00 21.89           S
ATOM   4783  H   CYS A 394     -3.317  -7.508  14.529  1.00  0.00           H
ATOM   4784  HA  CYS A 394     -0.692  -8.029  15.754  1.00  0.00           H
ATOM   4785  HB2 CYS A 394     -1.817  -6.521  17.368  1.00  0.00           H
ATOM   4786  HB3 CYS A 394     -3.090  -7.690  17.550  1.00  0.00           H
ATOM   4787  N   PRO A 395     -1.205 -10.543  15.570  1.00 24.08           N
ATOM   4788  CA  PRO A 395     -1.473 -11.993  15.566  1.00 23.62           C
ATOM   4789  C   PRO A 395     -2.316 -12.428  16.777  1.00 23.97           C
ATOM   4790  O   PRO A 395     -1.961 -12.124  17.916  1.00 22.43           O
ATOM   4791  CB  PRO A 395     -0.088 -12.659  15.624  1.00 22.83           C
ATOM   4792  CG  PRO A 395      0.871 -11.632  15.065  1.00 22.60           C
ATOM   4793  CD  PRO A 395      0.224 -10.287  15.369  1.00 24.08           C
ATOM   4794  HA  PRO A 395     -1.970 -12.244  14.628  1.00  0.00           H
ATOM   4795  HB2 PRO A 395      0.207 -12.886  16.648  1.00  0.00           H
ATOM   4796  HB3 PRO A 395     -0.054 -13.598  15.072  1.00  0.00           H
ATOM   4797  HG2 PRO A 395      1.879 -11.737  15.465  1.00  0.00           H
ATOM   4798  HG3 PRO A 395      0.941 -11.750  13.985  1.00  0.00           H
ATOM   4799  HD2 PRO A 395      0.654  -9.871  16.280  1.00  0.00           H
ATOM   4800  HD3 PRO A 395      0.393  -9.593  14.549  1.00  0.00           H
ATOM   4801  N   LEU A 396     -3.442 -13.112  16.538  1.00 23.38           N
ATOM   4802  CA  LEU A 396     -4.414 -13.491  17.569  1.00 25.21           C
ATOM   4803  C   LEU A 396     -4.328 -14.981  17.934  1.00 27.18           C
ATOM   4804  O   LEU A 396     -5.190 -15.496  18.652  1.00 29.80           O
ATOM   4805  CB  LEU A 396     -5.845 -13.169  17.090  1.00 24.81           C
ATOM   4806  CG  LEU A 396     -6.096 -11.688  16.757  1.00 23.79           C
ATOM   4807  CD1 LEU A 396     -7.541 -11.503  16.295  1.00 23.36           C
ATOM   4808  CD2 LEU A 396     -5.770 -10.760  17.939  1.00 21.88           C
ATOM   4809  H   LEU A 396     -3.671 -13.282  15.572  1.00  0.00           H
ATOM   4810  HA  LEU A 396     -4.228 -12.945  18.495  1.00  0.00           H
ATOM   4811  HB2 LEU A 396     -6.090 -13.777  16.222  1.00  0.00           H
ATOM   4812  HB3 LEU A 396     -6.554 -13.464  17.863  1.00  0.00           H
ATOM   4813  HG  LEU A 396     -5.459 -11.392  15.921  1.00  0.00           H
ATOM   4814 HD11 LEU A 396     -7.742 -10.454  16.070  1.00  0.00           H
ATOM   4815 HD12 LEU A 396     -7.735 -12.077  15.389  1.00  0.00           H
ATOM   4816 HD13 LEU A 396     -8.248 -11.826  17.056  1.00  0.00           H
ATOM   4817 HD21 LEU A 396     -6.107  -9.744  17.744  1.00  0.00           H
ATOM   4818 HD22 LEU A 396     -6.243 -11.094  18.859  1.00  0.00           H
ATOM   4819 HD23 LEU A 396     -4.695 -10.701  18.113  1.00  0.00           H
ATOM   4820  N   ASP A 397     -3.275 -15.678  17.499  1.00 26.31           N
ATOM   4821  CA  ASP A 397     -2.889 -17.033  17.907  1.00 26.97           C
ATOM   4822  C   ASP A 397     -2.342 -16.987  19.357  1.00 27.26           C
ATOM   4823  O   ASP A 397     -2.508 -15.991  20.066  1.00 24.89           O
ATOM   4824  CB  ASP A 397     -1.802 -17.529  16.923  1.00 27.87           C
ATOM   4825  CG  ASP A 397     -0.493 -16.775  17.083  1.00 31.48           C
ATOM   4826  OD1 ASP A 397     -0.468 -15.602  16.680  1.00 33.62           O
ATOM   4827  OD2 ASP A 397      0.413 -17.324  17.741  1.00 32.96           O1-
ATOM   4828  H   ASP A 397     -2.529 -15.161  17.031  1.00  0.00           H
ATOM   4829  HA  ASP A 397     -3.753 -17.693  17.862  1.00  0.00           H
ATOM   4830  HB2 ASP A 397     -1.610 -18.591  17.067  1.00  0.00           H
ATOM   4831  HB3 ASP A 397     -2.136 -17.421  15.891  1.00  0.00           H
ATOM   4832  N   LYS A 398     -1.738 -18.074  19.842  1.00 27.55           N
ATOM   4833  CA  LYS A 398     -1.100 -18.159  21.150  1.00 28.98           C
ATOM   4834  C   LYS A 398      0.247 -18.906  21.051  1.00 28.03           C
ATOM   4835  O   LYS A 398      0.674 -19.506  22.038  1.00 27.56           O
ATOM   4836  CB  LYS A 398     -2.083 -18.745  22.206  1.00 32.65           C
ATOM   4837  CG  LYS A 398     -3.484 -18.088  22.305  1.00 38.44           C
ATOM   4838  CD  LYS A 398     -3.507 -16.694  22.968  1.00 40.86           C
ATOM   4839  CE  LYS A 398     -4.800 -15.898  22.678  1.00 42.41           C
ATOM   4840  NZ  LYS A 398     -4.670 -15.039  21.491  1.00 44.87           N1+
ATOM   4841  H   LYS A 398     -1.592 -18.893  19.238  1.00  0.00           H
ATOM   4842  HA  LYS A 398     -0.816 -17.156  21.475  1.00  0.00           H
ATOM   4843  HB2 LYS A 398     -2.219 -19.802  21.973  1.00  0.00           H
ATOM   4844  HB3 LYS A 398     -1.607 -18.727  23.188  1.00  0.00           H
ATOM   4845  HG2 LYS A 398     -3.951 -18.052  21.322  1.00  0.00           H
ATOM   4846  HG3 LYS A 398     -4.128 -18.746  22.890  1.00  0.00           H
ATOM   4847  HD2 LYS A 398     -3.408 -16.833  24.046  1.00  0.00           H
ATOM   4848  HD3 LYS A 398     -2.634 -16.104  22.682  1.00  0.00           H
ATOM   4849  HE2 LYS A 398     -5.654 -16.566  22.560  1.00  0.00           H
ATOM   4850  HE3 LYS A 398     -5.025 -15.243  23.521  1.00  0.00           H
ATOM   4851  HZ1 LYS A 398     -5.555 -14.623  21.190  1.00  0.00           H
ATOM   4852  HZ2 LYS A 398     -4.034 -14.273  21.733  1.00  0.00           H
ATOM   4853  HZ3 LYS A 398     -4.244 -15.520  20.705  1.00  0.00           H
ATOM   4854  N   GLU A 399      0.921 -18.887  19.892  1.00 29.00           N
ATOM   4855  CA  GLU A 399      2.094 -19.707  19.585  1.00 29.56           C
ATOM   4856  C   GLU A 399      3.143 -18.946  18.759  1.00 27.81           C
ATOM   4857  O   GLU A 399      4.266 -18.742  19.220  1.00 26.43           O
ATOM   4858  CB  GLU A 399      1.693 -21.070  18.970  1.00 34.33           C
ATOM   4859  CG  GLU A 399      0.615 -21.028  17.857  1.00 42.27           C
ATOM   4860  CD  GLU A 399     -0.761 -21.439  18.349  1.00 46.74           C
ATOM   4861  OE1 GLU A 399     -1.561 -20.586  18.803  1.00 49.38           O
ATOM   4862  OE2 GLU A 399     -1.090 -22.644  18.314  1.00 48.28           O1-
ATOM   4863  H   GLU A 399      0.573 -18.300  19.120  1.00  0.00           H
ATOM   4864  HA  GLU A 399      2.610 -19.934  20.520  1.00  0.00           H
ATOM   4865  HB2 GLU A 399      2.586 -21.555  18.572  1.00  0.00           H
ATOM   4866  HB3 GLU A 399      1.359 -21.729  19.774  1.00  0.00           H
ATOM   4867  HG2 GLU A 399      0.546 -20.047  17.390  1.00  0.00           H
ATOM   4868  HG3 GLU A 399      0.893 -21.719  17.062  1.00  0.00           H
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ATOM   4869  N   VAL A 400      2.769 -18.492  17.559  1.00 26.01           N
ATOM   4870  CA  VAL A 400      3.569 -17.715  16.615  1.00 24.53           C
ATOM   4871  C   VAL A 400      3.805 -16.313  17.202  1.00 24.42           C
ATOM   4872  O   VAL A 400      4.929 -15.818  17.139  1.00 22.04           O
ATOM   4873  CB  VAL A 400      2.829 -17.629  15.246  1.00 24.87           C
ATOM   4874  CG1 VAL A 400      3.624 -16.861  14.169  1.00 22.22           C
ATOM   4875  CG2 VAL A 400      2.447 -19.020  14.702  1.00 22.82           C
ATOM   4876  H   VAL A 400      1.758 -18.407  17.425  1.00  0.00           H
ATOM   4877  HA  VAL A 400      4.532 -18.212  16.481  1.00  0.00           H
ATOM   4878  HB  VAL A 400      1.899 -17.077  15.396  1.00  0.00           H
ATOM   4879 HG11 VAL A 400      3.073 -16.822  13.229  1.00  0.00           H
ATOM   4880 HG12 VAL A 400      3.811 -15.825  14.456  1.00  0.00           H
ATOM   4881 HG13 VAL A 400      4.585 -17.333  13.968  1.00  0.00           H
ATOM   4882 HG21 VAL A 400      1.952 -18.939  13.734  1.00  0.00           H
ATOM   4883 HG22 VAL A 400      3.327 -19.650  14.575  1.00  0.00           H
ATOM   4884 HG23 VAL A 400      1.756 -19.540  15.364  1.00  0.00           H
ATOM   4885  N   TYR A 401      2.782 -15.747  17.858  1.00 25.28           N
ATOM   4886  CA  TYR A 401      2.812 -14.520  18.655  1.00 27.50           C
ATOM   4887  C   TYR A 401      3.936 -14.549  19.711  1.00 27.74           C
ATOM   4888  O   TYR A 401      4.756 -13.634  19.808  1.00 28.01           O
ATOM   4889  CB  TYR A 401      1.412 -14.332  19.286  1.00 26.68           C
ATOM   4890  CG  TYR A 401      1.248 -13.190  20.276  1.00 28.89           C
ATOM   4891  CD1 TYR A 401      1.396 -13.426  21.660  1.00 27.82           C
ATOM   4892  CD2 TYR A 401      0.920 -11.895  19.823  1.00 27.03           C
ATOM   4893  CE1 TYR A 401      1.207 -12.381  22.584  1.00 26.44           C
ATOM   4894  CE2 TYR A 401      0.743 -10.849  20.751  1.00 26.20           C
ATOM   4895  CZ  TYR A 401      0.871 -11.093  22.131  1.00 27.15           C
ATOM   4896  OH  TYR A 401      0.641 -10.097  23.033  1.00 23.75           O
ATOM   4897  H   TYR A 401      1.872 -16.214  17.769  1.00  0.00           H
ATOM   4898  HA  TYR A 401      3.000 -13.695  17.973  1.00  0.00           H
ATOM   4899  HB2 TYR A 401      0.681 -14.186  18.492  1.00  0.00           H
ATOM   4900  HB3 TYR A 401      1.106 -15.254  19.783  1.00  0.00           H
ATOM   4901  HD1 TYR A 401      1.658 -14.408  22.027  1.00  0.00           H
ATOM   4902  HD2 TYR A 401      0.799 -11.695  18.767  1.00  0.00           H
ATOM   4903  HE1 TYR A 401      1.321 -12.568  23.642  1.00  0.00           H
ATOM   4904  HE2 TYR A 401      0.494  -9.861  20.401  1.00  0.00           H
ATOM   4905  HH  TYR A 401      0.492  -9.240  22.630  1.00  0.00           H
ATOM   4906  N   ASN A 402      4.006 -15.656  20.464  1.00 27.33           N
ATOM   4907  CA  ASN A 402      4.961 -15.856  21.558  1.00 29.34           C
ATOM   4908  C   ASN A 402      6.364 -16.215  21.045  1.00 27.72           C
ATOM   4909  O   ASN A 402      7.338 -16.037  21.771  1.00 27.54           O
ATOM   4910  CB  ASN A 402      4.489 -17.008  22.481  1.00 30.12           C
ATOM   4911  CG  ASN A 402      3.293 -16.633  23.356  1.00 33.27           C
ATOM   4912  OD1 ASN A 402      3.313 -15.631  24.057  1.00 33.60           O
ATOM   4913  ND2 ASN A 402      2.211 -17.402  23.336  1.00 34.63           N
ATOM   4914  H   ASN A 402      3.356 -16.395  20.250  1.00  0.00           H
ATOM   4915  HA  ASN A 402      5.051 -14.933  22.137  1.00  0.00           H
ATOM   4916  HB2 ASN A 402      4.276 -17.904  21.898  1.00  0.00           H
ATOM   4917  HB3 ASN A 402      5.292 -17.280  23.169  1.00  0.00           H
ATOM   4918 HD21 ASN A 402      2.143 -18.256  22.793  1.00  0.00           H
ATOM   4919 HD22 ASN A 402      1.457 -17.133  23.945  1.00  0.00           H
ATOM   4920  N   SER A 403      6.483 -16.703  19.805  1.00 27.84           N
ATOM   4921  CA  SER A 403      7.755 -17.096  19.197  1.00 28.74           C
ATOM   4922  C   SER A 403      8.431 -15.918  18.466  1.00 28.13           C
ATOM   4923  O   SER A 403      9.556 -16.066  17.996  1.00 27.53           O
ATOM   4924  CB  SER A 403      7.466 -18.179  18.136  1.00 28.94           C
ATOM   4925  OG  SER A 403      6.896 -19.336  18.728  1.00 35.87           O
ATOM   4926  H   SER A 403      5.645 -16.808  19.251  1.00  0.00           H
ATOM   4927  HA  SER A 403      8.446 -17.487  19.946  1.00  0.00           H
ATOM   4928  HB2 SER A 403      6.805 -17.805  17.354  1.00  0.00           H
ATOM   4929  HB3 SER A 403      8.393 -18.478  17.643  1.00  0.00           H
ATOM   4930  HG  SER A 403      6.016 -19.116  19.034  1.00  0.00           H
ATOM   4931  N   ASN A 404      7.753 -14.767  18.335  1.00 25.90           N
ATOM   4932  CA  ASN A 404      8.153 -13.658  17.461  1.00 25.37           C
ATOM   4933  C   ASN A 404      8.123 -12.305  18.173  1.00 25.69           C
ATOM   4934  O   ASN A 404      8.043 -11.272  17.516  1.00 25.02           O
ATOM   4935  CB  ASN A 404      7.389 -13.677  16.112  1.00 26.10           C
ATOM   4936  CG  ASN A 404      7.778 -14.843  15.203  1.00 26.26           C
ATOM   4937  OD1 ASN A 404      8.875 -14.893  14.651  1.00 29.36           O
ATOM   4938  ND2 ASN A 404      6.895 -15.822  15.063  1.00 28.99           N
ATOM   4939  H   ASN A 404      6.831 -14.714  18.750  1.00  0.00           H
ATOM   4940  HA  ASN A 404      9.211 -13.764  17.214  1.00  0.00           H
ATOM   4941  HB2 ASN A 404      6.313 -13.670  16.291  1.00  0.00           H
ATOM   4942  HB3 ASN A 404      7.586 -12.768  15.546  1.00  0.00           H
ATOM   4943 HD21 ASN A 404      6.032 -15.777  15.600  1.00  0.00           H
ATOM   4944 HD22 ASN A 404      7.106 -16.588  14.447  1.00  0.00           H
ATOM   4945  N   ASN A 405      8.213 -12.286  19.511  1.00 25.25           N
ATOM   4946  CA  ASN A 405      8.409 -11.095  20.362  1.00 26.77           C
ATOM   4947  C   ASN A 405      7.300 -10.041  20.167  1.00 26.11           C
ATOM   4948  O   ASN A 405      7.590  -8.848  20.099  1.00 25.19           O
ATOM   4949  CB  ASN A 405      9.787 -10.409  20.129  1.00 28.88           C
ATOM   4950  CG  ASN A 405     11.028 -11.276  20.294  1.00 29.98           C
ATOM   4951  OD1 ASN A 405     11.039 -12.251  21.037  1.00 31.34           O
ATOM   4952  ND2 ASN A 405     12.092 -10.930  19.580  1.00 32.27           N
ATOM   4953  H   ASN A 405      8.306 -13.183  19.966  1.00  0.00           H
ATOM   4954  HA  ASN A 405      8.360 -11.428  21.399  1.00  0.00           H
ATOM   4955  HB2 ASN A 405      9.802  -9.969  19.132  1.00  0.00           H
ATOM   4956  HB3 ASN A 405      9.906  -9.578  20.826  1.00  0.00           H
ATOM   4957 HD21 ASN A 405     12.045 -10.098  18.974  1.00  0.00           H
ATOM   4958 HD22 ASN A 405     12.939 -11.465  19.660  1.00  0.00           H
ATOM   4959  N   CYS A 406      6.048 -10.462  19.968  1.00 25.69           N
ATOM   4960  CA  CYS A 406      4.965  -9.587  19.526  1.00 25.23           C
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ATOM   4961  C   CYS A 406      4.476  -8.644  20.637  1.00 26.10           C
ATOM   4962  O   CYS A 406      3.566  -8.972  21.397  1.00 26.16           O
ATOM   4963  CB  CYS A 406      3.816 -10.464  19.019  1.00 27.05           C
ATOM   4964  SG  CYS A 406      4.130 -11.268  17.422  1.00 25.91           S
ATOM   4965  H   CYS A 406      5.860 -11.456  19.996  1.00  0.00           H
ATOM   4966  HA  CYS A 406      5.303  -8.965  18.700  1.00  0.00           H
ATOM   4967  HB2 CYS A 406      3.585 -11.230  19.759  1.00  0.00           H
ATOM   4968  HB3 CYS A 406      2.908  -9.873  18.902  1.00  0.00           H
ATOM   4969  N   GLU A 407      5.054  -7.437  20.687  1.00 25.27           N
ATOM   4970  CA  GLU A 407      4.752  -6.326  21.596  1.00 25.75           C
ATOM   4971  C   GLU A 407      3.370  -5.683  21.305  1.00 24.42           C
ATOM   4972  O   GLU A 407      3.270  -4.460  21.193  1.00 22.09           O
ATOM   4973  CB  GLU A 407      5.853  -5.251  21.404  1.00 29.18           C
ATOM   4974  CG  GLU A 407      7.305  -5.687  21.698  1.00 35.84           C
ATOM   4975  CD  GLU A 407      8.323  -4.847  20.931  1.00 38.75           C
ATOM   4976  OE1 GLU A 407      9.378  -5.412  20.567  1.00 41.17           O
ATOM   4977  OE2 GLU A 407      8.023  -3.665  20.650  1.00 43.63           O1-
ATOM   4978  H   GLU A 407      5.889  -7.327  20.120  1.00  0.00           H
ATOM   4979  HA  GLU A 407      4.759  -6.686  22.626  1.00  0.00           H
ATOM   4980  HB2 GLU A 407      5.792  -4.884  20.378  1.00  0.00           H
ATOM   4981  HB3 GLU A 407      5.648  -4.383  22.033  1.00  0.00           H
ATOM   4982  HG2 GLU A 407      7.517  -5.611  22.763  1.00  0.00           H
ATOM   4983  HG3 GLU A 407      7.469  -6.727  21.429  1.00  0.00           H
ATOM   4984  N   CYS A 408      2.307  -6.476  21.125  1.00 23.64           N
ATOM   4985  CA  CYS A 408      1.004  -6.013  20.652  1.00 21.06           C
ATOM   4986  C   CYS A 408     -0.170  -6.587  21.432  1.00 21.00           C
ATOM   4987  O   CYS A 408     -0.119  -7.692  21.980  1.00 19.91           O
ATOM   4988  CB  CYS A 408      0.878  -6.150  19.126  1.00 20.88           C
ATOM   4989  SG  CYS A 408      0.823  -7.808  18.385  1.00 22.25           S
ATOM   4990  H   CYS A 408      2.427  -7.473  21.292  1.00  0.00           H
ATOM   4991  HA  CYS A 408      0.947  -4.939  20.849  1.00  0.00           H
ATOM   4992  HB2 CYS A 408      0.015  -5.586  18.772  1.00  0.00           H
ATOM   4993  HB3 CYS A 408      1.743  -5.666  18.699  1.00  0.00           H
ATOM   4994  N   ASP A 409     -1.238  -5.792  21.459  1.00 17.35           N
ATOM   4995  CA  ASP A 409     -2.441  -5.953  22.251  1.00 19.95           C
ATOM   4996  C   ASP A 409     -3.414  -6.846  21.467  1.00 21.68           C
ATOM   4997  O   ASP A 409     -4.120  -6.387  20.567  1.00 21.54           O
ATOM   4998  CB  ASP A 409     -3.087  -4.551  22.464  1.00 20.43           C
ATOM   4999  CG  ASP A 409     -2.091  -3.463  22.852  1.00 23.66           C
ATOM   5000  OD1 ASP A 409     -1.825  -3.294  24.055  1.00 21.49           O
ATOM   5001  OD2 ASP A 409     -1.499  -2.859  21.923  1.00 21.32           O1-
ATOM   5002  H   ASP A 409     -1.140  -4.863  21.061  1.00  0.00           H
ATOM   5003  HA  ASP A 409     -2.191  -6.389  23.220  1.00  0.00           H
ATOM   5004  HB2 ASP A 409     -3.562  -4.196  21.551  1.00  0.00           H
ATOM   5005  HB3 ASP A 409     -3.870  -4.599  23.221  1.00  0.00           H
ATOM   5006  N   GLN A 410     -3.513  -8.132  21.832  1.00 19.59           N
ATOM   5007  CA  GLN A 410     -4.408  -9.125  21.210  1.00 20.13           C
ATOM   5008  C   GLN A 410     -5.915  -8.877  21.475  1.00 21.87           C
ATOM   5009  O   GLN A 410     -6.755  -9.705  21.111  1.00 20.41           O
ATOM   5010  CB  GLN A 410     -4.050 -10.536  21.717  1.00 20.31           C
ATOM   5011  CG  GLN A 410     -2.666 -11.029  21.265  1.00 21.69           C
ATOM   5012  CD  GLN A 410     -2.552 -12.546  21.400  1.00 20.78           C
ATOM   5013  OE1 GLN A 410     -3.031 -13.139  22.365  1.00 24.03           O
ATOM   5014  NE2 GLN A 410     -2.035 -13.222  20.389  1.00 20.56           N
ATOM   5015  H   GLN A 410     -2.842  -8.459  22.513  1.00  0.00           H
ATOM   5016  HA  GLN A 410     -4.267  -9.086  20.127  1.00  0.00           H
ATOM   5017  HB2 GLN A 410     -4.121 -10.580  22.805  1.00  0.00           H
ATOM   5018  HB3 GLN A 410     -4.791 -11.245  21.342  1.00  0.00           H
ATOM   5019  HG2 GLN A 410     -2.486 -10.744  20.227  1.00  0.00           H
ATOM   5020  HG3 GLN A 410     -1.886 -10.554  21.858  1.00  0.00           H
ATOM   5021 HE21 GLN A 410     -1.727 -12.711  19.553  1.00  0.00           H
ATOM   5022 HE22 GLN A 410     -1.882 -14.225  20.409  1.00  0.00           H
ATOM   5023  N   GLY A 411     -6.255  -7.747  22.100  1.00 24.50           N
ATOM   5024  CA  GLY A 411     -7.599  -7.240  22.331  1.00 26.96           C
ATOM   5025  C   GLY A 411     -7.849  -5.910  21.611  1.00 27.55           C
ATOM   5026  O   GLY A 411     -8.960  -5.398  21.707  1.00 30.46           O
ATOM   5027  H   GLY A 411     -5.494  -7.124  22.331  1.00  0.00           H
ATOM   5028  HA2 GLY A 411     -8.363  -7.953  22.019  1.00  0.00           H
ATOM   5029  HA3 GLY A 411     -7.734  -7.078  23.401  1.00  0.00           H
ATOM   5030  N   ASN A 412     -6.864  -5.378  20.865  1.00 27.68           N
ATOM   5031  CA  ASN A 412     -6.937  -4.115  20.113  1.00 25.90           C
ATOM   5032  C   ASN A 412     -6.306  -4.244  18.718  1.00 24.16           C
ATOM   5033  O   ASN A 412     -5.817  -3.264  18.150  1.00 24.85           O
ATOM   5034  CB  ASN A 412     -6.460  -2.881  20.924  1.00 26.56           C
ATOM   5035  CG  ASN A 412     -7.368  -2.515  22.096  1.00 27.79           C
ATOM   5036  OD1 ASN A 412     -7.106  -2.884  23.237  1.00 32.66           O
ATOM   5037  ND2 ASN A 412     -8.441  -1.776  21.844  1.00 25.88           N
ATOM   5038  H   ASN A 412     -5.973  -5.860  20.795  1.00  0.00           H
ATOM   5039  HA  ASN A 412     -7.988  -3.931  19.875  1.00  0.00           H
ATOM   5040  HB2 ASN A 412     -5.452  -3.043  21.301  1.00  0.00           H
ATOM   5041  HB3 ASN A 412     -6.393  -2.004  20.279  1.00  0.00           H
ATOM   5042 HD21 ASN A 412     -8.692  -1.542  20.873  1.00  0.00           H
ATOM   5043 HD22 ASN A 412     -9.058  -1.553  22.603  1.00  0.00           H
ATOM   5044  N   ASP A 413     -6.350  -5.457  18.145  1.00 22.31           N
ATOM   5045  CA  ASP A 413     -6.085  -5.722  16.728  1.00 22.05           C
ATOM   5046  C   ASP A 413     -7.232  -5.107  15.913  1.00 21.82           C
ATOM   5047  O   ASP A 413     -8.395  -5.237  16.295  1.00 21.38           O
ATOM   5048  CB  ASP A 413     -6.022  -7.251  16.466  1.00 20.91           C
ATOM   5049  CG  ASP A 413     -6.157  -7.645  14.994  1.00 19.89           C
ATOM   5050  OD1 ASP A 413     -5.282  -7.236  14.196  1.00 19.55           O
ATOM   5051  OD2 ASP A 413     -7.206  -8.222  14.640  1.00 19.62           O1-
ATOM   5052  H   ASP A 413     -6.860  -6.167  18.643  1.00  0.00           H
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ATOM   5053  HA  ASP A 413      -5.140  -5.264  16.430  1.00  0.00           H
ATOM   5054  HB2 ASP A 413      -5.109  -7.684  16.857  1.00  0.00           H
ATOM   5055  HB3 ASP A 413      -6.846  -7.734  16.991  1.00  0.00           H
ATOM   5056  N   PHE A 414      -6.915  -4.460  14.794  1.00 21.02           N
ATOM   5057  CA  PHE A 414      -7.917  -3.890  13.918  1.00 18.26           C
ATOM   5058  C   PHE A 414      -8.436  -4.920  12.903  1.00 19.44           C
ATOM   5059  O   PHE A 414      -9.552  -4.730  12.426  1.00 21.11           O
ATOM   5060  CB  PHE A 414      -7.304  -2.702  13.153  1.00 18.35           C
ATOM   5061  CG  PHE A 414      -8.328  -1.872  12.399  1.00 17.60           C
ATOM   5062  CD1 PHE A 414      -9.260  -1.093  13.113  1.00 19.23           C
ATOM   5063  CD2 PHE A 414      -8.387  -1.916  10.992  1.00 17.55           C
ATOM   5064  CE1 PHE A 414     -10.240  -0.355  12.424  1.00 20.54           C
ATOM   5065  CE2 PHE A 414      -9.351  -1.162  10.304  1.00 16.66           C
ATOM   5066  CZ  PHE A 414     -10.278  -0.383  11.019  1.00 18.35           C
ATOM   5067  H   PHE A 414      -5.936  -4.379  14.523  1.00  0.00           H
ATOM   5068  HA  PHE A 414      -8.756  -3.521  14.509  1.00  0.00           H
ATOM   5069  HB2 PHE A 414      -6.804  -2.039  13.860  1.00  0.00           H
ATOM   5070  HB3 PHE A 414      -6.531  -3.046  12.464  1.00  0.00           H
ATOM   5071  HD1 PHE A 414      -9.224  -1.057  14.192  1.00  0.00           H
ATOM   5072  HD2 PHE A 414      -7.721  -2.549  10.430  1.00  0.00           H
ATOM   5073  HE1 PHE A 414     -10.951   0.246  12.972  1.00  0.00           H
ATOM   5074  HE2 PHE A 414      -9.387  -1.209   9.227  1.00  0.00           H
ATOM   5075  HZ  PHE A 414     -11.023   0.188  10.492  1.00  0.00           H
ATOM   5076  N   THR A 415      -7.695  -5.992  12.561  1.00 20.19           N
ATOM   5077  CA  THR A 415      -7.960  -6.918  11.442  1.00 20.23           C
ATOM   5078  C   THR A 415      -9.416  -7.423  11.374  1.00 22.22           C
ATOM   5079  O   THR A 415      -9.986  -7.560  10.291  1.00 22.79           O
ATOM   5080  CB  THR A 415      -6.973  -8.117  11.456  1.00 21.37           C
ATOM   5081  OG1 THR A 415      -5.635  -7.682  11.612  1.00 17.64           O
ATOM   5082  CG2 THR A 415      -7.032  -8.975  10.178  1.00 20.76           C
ATOM   5083  H   THR A 415      -6.865  -6.203  13.110  1.00  0.00           H
ATOM   5084  HA  THR A 415      -7.779  -6.347  10.529  1.00  0.00           H
ATOM   5085  HB  THR A 415      -7.202  -8.771  12.293  1.00  0.00           H
ATOM   5086  HG1 THR A 415      -5.493  -7.528  12.564  1.00  0.00           H
ATOM   5087 HG21 THR A 415      -6.431  -9.874  10.288  1.00  0.00           H
ATOM   5088 HG22 THR A 415      -8.039  -9.330   9.965  1.00  0.00           H
ATOM   5089 HG23 THR A 415      -6.675  -8.425   9.308  1.00  0.00           H
ATOM   5090  N   PHE A 416     -10.042  -7.654  12.529  1.00 22.70           N
ATOM   5091  CA  PHE A 416     -11.366  -8.253  12.609  1.00 23.45           C
ATOM   5092  C   PHE A 416     -12.414  -7.299  13.194  1.00 22.80           C
ATOM   5093  O   PHE A 416     -13.506  -7.759  13.524  1.00 25.25           O
ATOM   5094  CB  PHE A 416     -11.257  -9.597  13.353  1.00 20.24           C
ATOM   5095  CG  PHE A 416     -10.300 -10.567  12.681  1.00 20.62           C
ATOM   5096  CD1 PHE A 416     -10.681 -11.252  11.511  1.00 20.38           C
ATOM   5097  CD2 PHE A 416      -8.986 -10.704  13.169  1.00 18.91           C
ATOM   5098  CE1 PHE A 416      -9.741 -12.027  10.807  1.00 19.44           C
ATOM   5099  CE2 PHE A 416      -8.050 -11.495  12.479  1.00 18.21           C
ATOM   5100  CZ  PHE A 416      -8.425 -12.144  11.290  1.00 20.50           C
ATOM   5101  H   PHE A 416      -9.486  -7.552  13.374  1.00  0.00           H
ATOM   5102  HA  PHE A 416     -11.749  -8.483  11.614  1.00  0.00           H
ATOM   5103  HB2 PHE A 416     -10.927  -9.432  14.380  1.00  0.00           H
ATOM   5104  HB3 PHE A 416     -12.239 -10.066  13.411  1.00  0.00           H
ATOM   5105  HD1 PHE A 416     -11.679 -11.148  11.128  1.00  0.00           H
ATOM   5106  HD2 PHE A 416      -8.667 -10.146  14.038  1.00  0.00           H
ATOM   5107  HE1 PHE A 416     -10.017 -12.496   9.876  1.00  0.00           H
ATOM   5108  HE2 PHE A 416      -7.030 -11.549  12.837  1.00  0.00           H
ATOM   5109  HZ  PHE A 416      -7.689 -12.707  10.737  1.00  0.00           H
ATOM   5110  N   GLN A 417     -12.128  -5.992  13.320  1.00 23.60           N
ATOM   5111  CA  GLN A 417     -13.068  -4.974  13.811  1.00 22.99           C
ATOM   5112  C   GLN A 417     -14.135  -4.595  12.758  1.00 22.57           C
ATOM   5113  O   GLN A 417     -14.236  -5.226  11.704  1.00 22.49           O
ATOM   5114  CB  GLN A 417     -12.286  -3.726  14.269  1.00 22.97           C
ATOM   5115  CG  GLN A 417     -11.521  -3.967  15.584  1.00 23.29           C
ATOM   5116  CD  GLN A 417     -11.060  -2.700  16.309  1.00 26.35           C
ATOM   5117  OE1 GLN A 417     -10.432  -2.782  17.358  1.00 25.95           O
ATOM   5118  NE2 GLN A 417     -11.384  -1.513  15.810  1.00 24.11           N
ATOM   5119  H   GLN A 417     -11.211  -5.680  13.008  1.00  0.00           H
ATOM   5120  HA  GLN A 417     -13.618  -5.373  14.661  1.00  0.00           H
ATOM   5121  HB2 GLN A 417     -11.612  -3.367  13.491  1.00  0.00           H
ATOM   5122  HB3 GLN A 417     -12.995  -2.924  14.453  1.00  0.00           H
ATOM   5123  HG2 GLN A 417     -12.169  -4.492  16.284  1.00  0.00           H
ATOM   5124  HG3 GLN A 417     -10.668  -4.621  15.409  1.00  0.00           H
ATOM   5125 HE21 GLN A 417     -11.966  -1.416  14.985  1.00  0.00           H
ATOM   5126 HE22 GLN A 417     -11.099  -0.675  16.320  1.00  0.00           H
ATOM   5127  N   GLY A 418     -14.964  -3.582  13.042  1.00 22.92           N
ATOM   5128  CA  GLY A 418     -16.211  -3.315  12.328  1.00 21.05           C
ATOM   5129  C   GLY A 418     -16.058  -2.264  11.231  1.00 21.18           C
ATOM   5130  O   GLY A 418     -16.759  -2.352  10.229  1.00 21.14           O
ATOM   5131  H   GLY A 418     -14.799  -3.040  13.880  1.00  0.00           H
ATOM   5132  HA2 GLY A 418     -16.626  -4.229  11.899  1.00  0.00           H
ATOM   5133  HA3 GLY A 418     -16.946  -2.944  13.042  1.00  0.00           H
ATOM   5134  N   TYR A 419     -15.089  -1.349  11.354  1.00 20.25           N
ATOM   5135  CA  TYR A 419     -14.676  -0.444  10.276  1.00 21.27           C
ATOM   5136  C   TYR A 419     -13.552  -1.103   9.440  1.00 20.92           C
ATOM   5137  O   TYR A 419     -13.058  -0.538   8.467  1.00 19.73           O
ATOM   5138  CB  TYR A 419     -14.150   0.857  10.924  1.00 21.11           C
ATOM   5139  CG  TYR A 419     -14.111   2.062  10.002  1.00 22.25           C
ATOM   5140  CD1 TYR A 419     -15.269   2.843   9.825  1.00 23.37           C
ATOM   5141  CD2 TYR A 419     -12.926   2.417   9.330  1.00 21.83           C
ATOM   5142  CE1 TYR A 419     -15.232   3.990   9.013  1.00 23.61           C
ATOM   5143  CE2 TYR A 419     -12.898   3.534   8.478  1.00 24.89           C
ATOM   5144  CZ  TYR A 419     -14.051   4.326   8.334  1.00 22.99           C
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ATOM   5145  OH  TYR A 419     -14.019   5.457   7.582  1.00 26.03           O
ATOM   5146  H   TYR A 419     -14.579  -1.282  12.229  1.00  0.00           H
ATOM   5147  HA  TYR A 419     -15.522  -0.210   9.626  1.00  0.00           H
ATOM   5148  HB2 TYR A 419     -14.794   1.131  11.761  1.00  0.00           H
ATOM   5149  HB3 TYR A 419     -13.164   0.704  11.364  1.00  0.00           H
ATOM   5150  HD1 TYR A 419     -16.186   2.577  10.327  1.00  0.00           H
ATOM   5151  HD2 TYR A 419     -12.031   1.834   9.465  1.00  0.00           H
ATOM   5152  HE1 TYR A 419     -16.110   4.613   8.911  1.00  0.00           H
ATOM   5153  HE2 TYR A 419     -11.981   3.792   7.968  1.00  0.00           H
ATOM   5154  HH  TYR A 419     -13.315   5.457   6.915  1.00  0.00           H
ATOM   5155  N   SER A 420     -13.134  -2.313   9.823  1.00 19.72           N
ATOM   5156  CA  SER A 420     -12.085  -3.080   9.180  1.00 19.12           C
ATOM   5157  C   SER A 420     -12.678  -3.993   8.102  1.00 19.14           C
ATOM   5158  O   SER A 420     -13.887  -4.251   8.065  1.00 18.72           O
ATOM   5159  CB  SER A 420     -11.416  -3.940  10.258  1.00 20.59           C
ATOM   5160  OG  SER A 420     -10.248  -4.584   9.797  1.00 18.07           O
ATOM   5161  H   SER A 420     -13.664  -2.767  10.549  1.00  0.00           H
ATOM   5162  HA  SER A 420     -11.346  -2.413   8.746  1.00  0.00           H
ATOM   5163  HB2 SER A 420     -11.144  -3.303  11.099  1.00  0.00           H
ATOM   5164  HB3 SER A 420     -12.084  -4.708  10.637  1.00  0.00           H
ATOM   5165  HG  SER A 420      -9.728  -4.744  10.582  1.00  0.00           H
ATOM   5166  N   CYS A 421     -11.782  -4.505   7.257  1.00 20.98           N
ATOM   5167  CA  CYS A 421     -12.059  -5.415   6.158  1.00 19.83           C
ATOM   5168  C   CYS A 421     -11.107  -6.620   6.148  1.00 21.04           C
ATOM   5169  O   CYS A 421     -11.008  -7.319   5.139  1.00 23.25           O
ATOM   5170  CB  CYS A 421     -12.145  -4.654   4.824  1.00 20.05           C
ATOM   5171  SG  CYS A 421     -13.631  -3.632   4.607  1.00 22.53           S
ATOM   5172  H   CYS A 421     -10.808  -4.272   7.441  1.00  0.00           H
ATOM   5173  HA  CYS A 421     -13.039  -5.865   6.317  1.00  0.00           H
ATOM   5174  HB2 CYS A 421     -11.264  -4.026   4.686  1.00  0.00           H
ATOM   5175  HB3 CYS A 421     -12.134  -5.363   3.998  1.00  0.00           H
ATOM   5176  N   GLY A 422     -10.447  -6.938   7.268  1.00 20.19           N
ATOM   5177  CA  GLY A 422      -9.479  -8.035   7.304  1.00 22.14           C
ATOM   5178  C   GLY A 422     -10.180  -9.376   7.511  1.00 22.26           C
ATOM   5179  O   GLY A 422      -9.777 -10.372   6.910  1.00 19.11           O
ATOM   5180  H   GLY A 422     -10.519  -6.342   8.086  1.00  0.00           H
ATOM   5181  HA2 GLY A 422      -8.903  -8.087   6.379  1.00  0.00           H
ATOM   5182  HA3 GLY A 422      -8.756  -7.862   8.098  1.00  0.00           H
ATOM   5183  N   LYS A 423     -11.320  -9.394   8.223  1.00 24.00           N
ATOM   5184  CA  LYS A 423     -12.245 -10.527   8.217  1.00 25.44           C
ATOM   5185  C   LYS A 423     -12.786 -10.752   6.793  1.00 25.53           C
ATOM   5186  O   LYS A 423     -12.776 -11.879   6.311  1.00 26.66           O
ATOM   5187  CB  LYS A 423     -13.424 -10.319   9.197  1.00 26.73           C
ATOM   5188  CG  LYS A 423     -14.161 -11.650   9.479  1.00 31.23           C
ATOM   5189  CD  LYS A 423     -15.571 -11.547  10.087  1.00 34.49           C
ATOM   5190  CE  LYS A 423     -16.566 -10.633   9.350  1.00 36.84           C
ATOM   5191  NZ  LYS A 423     -16.747 -10.957   7.925  1.00 39.84           N1+
ATOM   5192  H   LYS A 423     -11.579  -8.527   8.672  1.00  0.00           H
ATOM   5193  HA  LYS A 423     -11.682 -11.412   8.516  1.00  0.00           H
ATOM   5194  HB2 LYS A 423     -13.087  -9.873  10.131  1.00  0.00           H
ATOM   5195  HB3 LYS A 423     -14.105  -9.587   8.772  1.00  0.00           H
ATOM   5196  HG2 LYS A 423     -14.241 -12.226   8.560  1.00  0.00           H
ATOM   5197  HG3 LYS A 423     -13.540 -12.268  10.128  1.00  0.00           H
ATOM   5198  HD2 LYS A 423     -15.995 -12.551  10.122  1.00  0.00           H
ATOM   5199  HD3 LYS A 423     -15.483 -11.214  11.122  1.00  0.00           H
ATOM   5200  HE2 LYS A 423     -17.541 -10.686   9.835  1.00  0.00           H
ATOM   5201  HE3 LYS A 423     -16.253  -9.594   9.438  1.00  0.00           H
ATOM   5202  HZ1 LYS A 423     -16.486 -10.109   7.397  1.00  0.00           H
ATOM   5203  HZ2 LYS A 423     -16.228 -11.792   7.583  1.00  0.00           H
ATOM   5204  HZ3 LYS A 423     -17.709 -11.123   7.698  1.00  0.00           H
ATOM   5205  N   GLU A 424     -13.216  -9.674   6.127  1.00 23.69           N
ATOM   5206  CA  GLU A 424     -13.795  -9.647   4.787  1.00 23.47           C
ATOM   5207  C   GLU A 424     -12.805 -10.194   3.746  1.00 23.14           C
ATOM   5208  O   GLU A 424     -13.211 -10.984   2.898  1.00 18.61           O
ATOM   5209  CB  GLU A 424     -14.230  -8.203   4.438  1.00 24.63           C
ATOM   5210  CG  GLU A 424     -15.503  -7.680   5.144  1.00 25.57           C
ATOM   5211  CD  GLU A 424     -15.572  -7.907   6.647  1.00 28.25           C
ATOM   5212  OE1 GLU A 424     -14.633  -7.558   7.395  1.00 27.71           O
ATOM   5213  OE2 GLU A 424     -16.562  -8.519   7.107  1.00 33.30           O1-
ATOM   5214  H   GLU A 424     -13.277  -8.799   6.643  1.00  0.00           H
ATOM   5215  HA  GLU A 424     -14.672 -10.296   4.775  1.00  0.00           H
ATOM   5216  HB2 GLU A 424     -13.418  -7.506   4.615  1.00  0.00           H
ATOM   5217  HB3 GLU A 424     -14.415  -8.140   3.364  1.00  0.00           H
ATOM   5218  HG2 GLU A 424     -15.604  -6.611   4.960  1.00  0.00           H
ATOM   5219  HG3 GLU A 424     -16.378  -8.145   4.689  1.00  0.00           H
ATOM   5220  N   TYR A 425     -11.508  -9.867   3.861  1.00 21.56           N
ATOM   5221  CA  TYR A 425     -10.425 -10.485   3.092  1.00 21.96           C
ATOM   5222  C   TYR A 425     -10.371 -12.007   3.321  1.00 23.23           C
ATOM   5223  O   TYR A 425     -10.475 -12.783   2.369  1.00 21.80           O
ATOM   5224  CB  TYR A 425      -9.064  -9.830   3.428  1.00 21.92           C
ATOM   5225  CG  TYR A 425      -7.901 -10.540   2.757  1.00 20.41           C
ATOM   5226  CD1 TYR A 425      -7.780 -10.482   1.356  1.00 20.32           C
ATOM   5227  CD2 TYR A 425      -7.017 -11.350   3.506  1.00 20.40           C
ATOM   5228  CE1 TYR A 425      -6.810 -11.257   0.701  1.00 17.64           C
ATOM   5229  CE2 TYR A 425      -6.039 -12.120   2.846  1.00 18.10           C
ATOM   5230  CZ  TYR A 425      -5.949 -12.081   1.442  1.00 19.87           C
ATOM   5231  OH  TYR A 425      -5.072 -12.873   0.771  1.00 16.52           O
ATOM   5232  H   TYR A 425     -11.265  -9.148   4.538  1.00  0.00           H
ATOM   5233  HA  TYR A 425     -10.632 -10.327   2.033  1.00  0.00           H
ATOM   5234  HB2 TYR A 425      -9.062  -8.786   3.113  1.00  0.00           H
ATOM   5235  HB3 TYR A 425      -8.898  -9.816   4.505  1.00  0.00           H
ATOM   5236  HD1 TYR A 425      -8.456  -9.870   0.776  1.00  0.00           H
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ATOM   5237  HD2 TYR A 425      -7.107 -11.411   4.581  1.00  0.00           H
ATOM   5238  HE1 TYR A 425      -6.740 -11.237  -0.375  1.00  0.00           H
ATOM   5239  HE2 TYR A 425      -5.388 -12.762   3.420  1.00  0.00           H
ATOM   5240  HH  TYR A 425      -4.267 -13.105   1.218  1.00  0.00           H
ATOM   5241  N   TYR A 426     -10.254 -12.431   4.588  1.00 21.99           N
ATOM   5242  CA  TYR A 426     -10.211 -13.834   5.000  1.00 23.50           C
ATOM   5243  C   TYR A 426     -11.432 -14.638   4.514  1.00 23.34           C
ATOM   5244  O   TYR A 426     -11.284 -15.782   4.086  1.00 24.05           O
ATOM   5245  CB  TYR A 426     -10.084 -13.930   6.536  1.00 22.73           C
ATOM   5246  CG  TYR A 426      -8.685 -14.138   7.089  1.00 23.27           C
ATOM   5247  CD1 TYR A 426      -7.979 -13.080   7.696  1.00 22.47           C
ATOM   5248  CD2 TYR A 426      -8.116 -15.427   7.085  1.00 22.87           C
ATOM   5249  CE1 TYR A 426      -6.740 -13.317   8.314  1.00 21.19           C
ATOM   5250  CE2 TYR A 426      -6.856 -15.657   7.667  1.00 22.99           C
ATOM   5251  CZ  TYR A 426      -6.180 -14.607   8.309  1.00 22.86           C
ATOM   5252  OH  TYR A 426      -5.003 -14.841   8.952  1.00 23.29           O
ATOM   5253  H   TYR A 426     -10.189 -11.723   5.312  1.00  0.00           H
ATOM   5254  HA  TYR A 426      -9.331 -14.288   4.539  1.00  0.00           H
ATOM   5255  HB2 TYR A 426     -10.531 -13.059   7.014  1.00  0.00           H
ATOM   5256  HB3 TYR A 426     -10.671 -14.775   6.897  1.00  0.00           H
ATOM   5257  HD1 TYR A 426      -8.386 -12.085   7.737  1.00  0.00           H
ATOM   5258  HD2 TYR A 426      -8.663 -16.258   6.677  1.00  0.00           H
ATOM   5259  HE1 TYR A 426      -6.231 -12.501   8.804  1.00  0.00           H
ATOM   5260  HE2 TYR A 426      -6.436 -16.651   7.656  1.00  0.00           H
ATOM   5261  HH  TYR A 426      -4.524 -15.589   8.623  1.00  0.00           H
ATOM   5262  N   ASP A 427     -12.627 -14.041   4.572  1.00 22.93           N
ATOM   5263  CA  ASP A 427     -13.904 -14.646   4.186  1.00 24.60           C
ATOM   5264  C   ASP A 427     -14.086 -14.654   2.658  1.00 23.59           C
ATOM   5265  O   ASP A 427     -14.612 -15.632   2.132  1.00 22.45           O
ATOM   5266  CB  ASP A 427     -15.092 -13.888   4.835  1.00 25.71           C
ATOM   5267  CG  ASP A 427     -15.162 -13.967   6.362  1.00 25.52           C
ATOM   5268  OD1 ASP A 427     -14.481 -14.832   6.960  1.00 30.54           O
ATOM   5269  OD2 ASP A 427     -15.902 -13.154   6.960  1.00 26.99          O1-
ATOM   5270  H   ASP A 427     -12.662 -13.114   4.994  1.00  0.00           H
ATOM   5271  HA  ASP A 427     -13.923 -15.684   4.523  1.00  0.00           H
ATOM   5272  HB2 ASP A 427     -15.065 -12.837   4.547  1.00  0.00           H
ATOM   5273  HB3 ASP A 427     -16.034 -14.285   4.454  1.00  0.00           H
ATOM   5274  N   ALA A 428     -13.606 -13.628   1.935  1.00 23.60           N
ATOM   5275  CA  ALA A 428     -13.612 -13.566   0.466  1.00 22.71           C
ATOM   5276  C   ALA A 428     -12.600 -14.550  -0.147  1.00 22.99           C
ATOM   5277  O   ALA A 428     -12.823 -15.097  -1.235  1.00 21.89           O
ATOM   5278  CB  ALA A 428     -13.240 -12.145   0.012  1.00 22.18           C
ATOM   5279  H   ALA A 428     -13.240 -12.817   2.427  1.00  0.00           H
ATOM   5280  HA  ALA A 428     -14.609 -13.813   0.099  1.00  0.00           H
ATOM   5281  HB1 ALA A 428     -13.193 -12.076  -1.076  1.00  0.00           H
ATOM   5282  HB2 ALA A 428     -13.982 -11.420   0.346  1.00  0.00           H
ATOM   5283  HB3 ALA A 428     -12.269 -11.833   0.401  1.00  0.00           H
ATOM   5284  N   GLN A 429     -11.492 -14.809   0.561  1.00 21.48           N
ATOM   5285  CA  GLN A 429     -10.572 -15.896   0.254  1.00 23.47           C
ATOM   5286  C   GLN A 429     -11.242 -17.247   0.565  1.00 23.16           C
ATOM   5287  O   GLN A 429     -11.352 -18.086  -0.334  1.00 24.44           O
ATOM   5288  CB  GLN A 429      -9.256 -15.739   1.050  1.00 24.04           C
ATOM   5289  CG  GLN A 429      -8.298 -14.653   0.509  1.00 23.93           C
ATOM   5290  CD  GLN A 429      -7.596 -15.048  -0.796  1.00 27.30           C
ATOM   5291  OE1 GLN A 429      -8.118 -15.834  -1.581  1.00 28.29           O
ATOM   5292  NE2 GLN A 429      -6.405 -14.527  -1.044  1.00 21.69           N
ATOM   5293  H   GLN A 429     -11.306 -14.226   1.373  1.00  0.00           H
ATOM   5294  HA  GLN A 429     -10.371 -15.869  -0.812  1.00  0.00           H
ATOM   5295  HB2 GLN A 429      -9.472 -15.533   2.097  1.00  0.00           H
ATOM   5296  HB3 GLN A 429      -8.716 -16.688   1.042  1.00  0.00           H
ATOM   5297  HG2 GLN A 429      -8.825 -13.710   0.361  1.00  0.00           H
ATOM   5298  HG3 GLN A 429      -7.535 -14.460   1.262  1.00  0.00           H
ATOM   5299 HE21 GLN A 429      -5.943 -13.890  -0.391  1.00  0.00           H
ATOM   5300 HE22 GLN A 429      -5.906 -14.804  -1.894  1.00  0.00           H
ATOM   5301  N   GLY A 430     -11.742 -17.407   1.796  1.00 24.56           N
ATOM   5302  CA  GLY A 430     -12.431 -18.592   2.309  1.00 25.89           C
ATOM   5303  C   GLY A 430     -11.667 -19.250   3.468  1.00 27.73           C
ATOM   5304  O   GLY A 430     -11.907 -20.411   3.791  1.00 27.40           O
ATOM   5305  H   GLY A 430     -11.658 -16.623   2.436  1.00  0.00           H
ATOM   5306  HA2 GLY A 430     -13.418 -18.294   2.664  1.00  0.00           H
ATOM   5307  HA3 GLY A 430     -12.590 -19.335   1.525  1.00  0.00           H
ATOM   5308  N   LEU A 431     -10.712 -18.532   4.067  1.00 26.14           N
ATOM   5309  CA  LEU A 431      -9.694 -19.050   4.970  1.00 27.26           C
ATOM   5310  C   LEU A 431     -10.117 -18.939   6.449  1.00 25.34           C
ATOM   5311  O   LEU A 431     -10.888 -18.056   6.852  1.00 25.57           O
ATOM   5312  CB  LEU A 431      -8.418 -18.202   4.755  1.00 26.32           C
ATOM   5313  CG  LEU A 431      -7.690 -18.448   3.416  1.00 26.85           C
ATOM   5314  CD1 LEU A 431      -6.678 -17.324   3.139  1.00 28.01           C
ATOM   5315  CD2 LEU A 431      -6.990 -19.816   3.372  1.00 26.82           C
ATOM   5316  H   LEU A 431     -10.684 -17.540   3.860  1.00  0.00           H
ATOM   5317  HA  LEU A 431      -9.495 -20.098   4.743  1.00  0.00           H
ATOM   5318  HB2 LEU A 431      -8.701 -17.150   4.783  1.00  0.00           H
ATOM   5319  HB3 LEU A 431      -7.710 -18.348   5.575  1.00  0.00           H
ATOM   5320  HG  LEU A 431      -8.425 -18.426   2.611  1.00  0.00           H
ATOM   5321 HD11 LEU A 431      -6.201 -17.452   2.166  1.00  0.00           H
ATOM   5322 HD12 LEU A 431      -7.157 -16.344   3.134  1.00  0.00           H
ATOM   5323 HD13 LEU A 431      -5.889 -17.300   3.891  1.00  0.00           H
ATOM   5324 HD21 LEU A 431      -6.462 -19.951   2.427  1.00  0.00           H
ATOM   5325 HD22 LEU A 431      -6.256 -19.916   4.172  1.00  0.00           H
ATOM   5326 HD23 LEU A 431      -7.697 -20.640   3.457  1.00  0.00           H
ATOM   5327  N   VAL A 432      -9.560 -19.843   7.265  1.00 24.67           N
ATOM   5328  CA  VAL A 432      -9.666 -19.912   8.722  1.00 24.91           C
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ATOM   5329  C   VAL A 432      -8.813 -18.779   9.330  1.00 24.65          C
ATOM   5330  O   VAL A 432      -7.781 -18.416   8.775  1.00 23.35          O
ATOM   5331  CB  VAL A 432      -9.159 -21.306   9.198  1.00 26.40          C
ATOM   5332  CG1 VAL A 432      -9.288 -21.513  10.721  1.00 27.65          C
ATOM   5333  CG2 VAL A 432      -9.872 -22.465   8.470  1.00 27.01          C
ATOM   5334  H   VAL A 432      -8.888 -20.469   6.847  1.00  0.00          H
ATOM   5335  HA  VAL A 432     -10.712 -19.779   9.003  1.00  0.00          H
ATOM   5336  HB  VAL A 432      -8.096 -21.380   8.956  1.00  0.00          H
ATOM   5337 HG11 VAL A 432      -8.951 -22.510  11.009  1.00  0.00          H
ATOM   5338 HG12 VAL A 432      -8.677 -20.808  11.286  1.00  0.00          H
ATOM   5339 HG13 VAL A 432     -10.321 -21.407  11.054  1.00  0.00          H
ATOM   5340 HG21 VAL A 432      -9.522 -23.432   8.831  1.00  0.00          H
ATOM   5341 HG22 VAL A 432     -10.951 -22.428   8.623  1.00  0.00          H
ATOM   5342 HG23 VAL A 432      -9.692 -22.453   7.395  1.00  0.00          H
ATOM   5343  N   LYS A 433      -9.274 -18.207  10.446  1.00 25.23          N
ATOM   5344  CA  LYS A 433      -8.772 -16.972  11.052  1.00 27.01          C
ATOM   5345  C   LYS A 433      -8.180 -17.265  12.453  1.00 28.68          C
ATOM   5346  O   LYS A 433      -8.593 -18.252  13.072  1.00 29.12          O
ATOM   5347  CB  LYS A 433      -9.980 -16.013  11.119  1.00 26.07          C
ATOM   5348  CG  LYS A 433     -10.390 -15.475   9.733  1.00 25.95          C
ATOM   5349  CD  LYS A 433     -11.844 -14.980   9.649  1.00 27.29          C
ATOM   5350  CE  LYS A 433     -12.854 -16.115   9.393  1.00 27.92          C
ATOM   5351  NZ  LYS A 433     -12.917 -16.510   7.974  1.00 27.82          N1+
ATOM   5352  H   LYS A 433     -10.001 -18.679  10.958  1.00  0.00          H
ATOM   5353  HA  LYS A 433      -7.996 -16.534  10.422  1.00  0.00          H
ATOM   5354  HB2 LYS A 433     -10.818 -16.527  11.588  1.00  0.00          H
ATOM   5355  HB3 LYS A 433      -9.757 -15.163  11.764  1.00  0.00          H
ATOM   5356  HG2 LYS A 433      -9.711 -14.658   9.500  1.00  0.00          H
ATOM   5357  HG3 LYS A 433     -10.216 -16.216   8.953  1.00  0.00          H
ATOM   5358  HD2 LYS A 433     -12.091 -14.465  10.578  1.00  0.00          H
ATOM   5359  HD3 LYS A 433     -11.945 -14.221   8.870  1.00  0.00          H
ATOM   5360  HE2 LYS A 433     -12.624 -16.983  10.011  1.00  0.00          H
ATOM   5361  HE3 LYS A 433     -13.853 -15.780   9.676  1.00  0.00          H
ATOM   5362  HZ1 LYS A 433     -13.494 -17.322   7.844  1.00  0.00          H
ATOM   5363  HZ2 LYS A 433     -13.434 -15.753   7.466  1.00  0.00          H
ATOM   5364  HZ3 LYS A 433     -12.018 -16.694   7.541  1.00  0.00          H
ATOM   5365  N   PRO A 434      -7.226 -16.448  12.963  1.00 29.99          N
ATOM   5366  CA  PRO A 434      -6.474 -16.726  14.199  1.00 31.36          C
ATOM   5367  C   PRO A 434      -7.300 -16.573  15.495  1.00 32.47          C
ATOM   5368  O   PRO A 434      -8.221 -15.763  15.575  1.00 33.32          O
ATOM   5369  CB  PRO A 434      -5.275 -15.766  14.150  1.00 31.69          C
ATOM   5370  CG  PRO A 434      -5.750 -14.590  13.310  1.00 29.64          C
ATOM   5371  CD  PRO A 434      -6.757 -15.207  12.340  1.00 30.38          C
ATOM   5372  HA  PRO A 434      -6.104 -17.752  14.148  1.00  0.00          H
ATOM   5373  HB2 PRO A 434      -4.908 -15.464  15.129  1.00  0.00          H
ATOM   5374  HB3 PRO A 434      -4.442 -16.253  13.640  1.00  0.00          H
ATOM   5375  HG2 PRO A 434      -6.258 -13.859  13.939  1.00  0.00          H
ATOM   5376  HG3 PRO A 434      -4.936 -14.072  12.800  1.00  0.00          H
ATOM   5377  HD2 PRO A 434      -7.580 -14.524  12.148  1.00  0.00          H
ATOM   5378  HD3 PRO A 434      -6.264 -15.428  11.392  1.00  0.00          H
ATOM   5379  N   LYS A 435      -6.941 -17.391  16.495  1.00 34.56          N
ATOM   5380  CA  LYS A 435      -7.633 -17.831  17.719  1.00 36.88          C
ATOM   5381  C   LYS A 435      -8.625 -16.938  18.501  1.00 37.85          C
ATOM   5382  O   LYS A 435      -9.351 -17.484  19.331  1.00 39.08          O
ATOM   5383  CB  LYS A 435      -6.645 -18.558  18.661  1.00 38.28          C
ATOM   5384  CG  LYS A 435      -6.073 -19.871  18.099  1.00 40.34          C
ATOM   5385  CD  LYS A 435      -5.072 -20.512  19.070  1.00 42.32          C
ATOM   5386  CE  LYS A 435      -4.507 -21.848  18.562  1.00 43.22          C
ATOM   5387  NZ  LYS A 435      -3.405 -22.301  19.415  1.00 42.23          N1+
ATOM   5388  H   LYS A 435      -6.090 -17.897  16.310  1.00  0.00          H
ATOM   5389  HA  LYS A 435      -8.301 -18.607  17.342  1.00  0.00          H
ATOM   5390  HB2 LYS A 435      -5.834 -17.884  18.929  1.00  0.00          H
ATOM   5391  HB3 LYS A 435      -7.143 -18.790  19.604  1.00  0.00          H
ATOM   5392  HG2 LYS A 435      -6.889 -20.566  17.894  1.00  0.00          H
ATOM   5393  HG3 LYS A 435      -5.576 -19.686  17.145  1.00  0.00          H
ATOM   5394  HD2 LYS A 435      -4.248 -19.813  19.231  1.00  0.00          H
ATOM   5395  HD3 LYS A 435      -5.543 -20.659  20.043  1.00  0.00          H
ATOM   5396  HE2 LYS A 435      -5.280 -22.615  18.511  1.00  0.00          H
ATOM   5397  HE3 LYS A 435      -4.105 -21.723  17.555  1.00  0.00          H
ATOM   5398  HZ1 LYS A 435      -2.830 -23.016  18.967  1.00  0.00          H
ATOM   5399  HZ2 LYS A 435      -2.677 -21.561  19.352  1.00  0.00          H
ATOM   5400  HZ3 LYS A 435      -3.605 -22.514  20.373  1.00  0.00          H
ATOM   5401  N   ASN A 436      -8.709 -15.623  18.277  1.00 38.38          N
ATOM   5402  CA  ASN A 436      -9.698 -14.746  18.923  1.00 38.54          C
ATOM   5403  C   ASN A 436     -10.361 -13.717  18.000  1.00 36.60          C
ATOM   5404  O   ASN A 436     -10.997 -12.783  18.492  1.00 35.38          O
ATOM   5405  CB  ASN A 436      -9.318 -14.261  20.347  1.00 41.89          C
ATOM   5406  CG  ASN A 436      -8.090 -13.355  20.454  1.00 46.16          C
ATOM   5407  OD1 ASN A 436      -6.987 -13.829  20.730  1.00 46.58          O
ATOM   5408  ND2 ASN A 436      -8.284 -12.047  20.330  1.00 48.00          N
ATOM   5409  H   ASN A 436      -8.111 -15.240  17.552  1.00  0.00          H
ATOM   5410  HA  ASN A 436     -10.567 -15.379  19.109  1.00  0.00          H
ATOM   5411  HB2 ASN A 436     -10.166 -13.745  20.800  1.00  0.00          H
ATOM   5412  HB3 ASN A 436      -9.146 -15.130  20.981  1.00  0.00          H
ATOM   5413 HD21 ASN A 436      -9.189 -11.676  20.082  1.00  0.00          H
ATOM   5414 HD22 ASN A 436      -7.528 -11.381  20.502  1.00  0.00          H
ATOM   5415  N   TRP A 437     -10.271 -13.928  16.677  1.00 33.69          N
ATOM   5416  CA  TRP A 437     -10.808 -13.100  15.587  1.00 32.40          C
ATOM   5417  C   TRP A 437     -12.253 -12.603  15.782  1.00 31.88          C
ATOM   5418  O   TRP A 437     -12.567 -11.442  15.532  1.00 31.51          O
ATOM   5419  CB  TRP A 437     -10.659 -13.859  14.247  1.00 31.53          C
ATOM   5420  CG  TRP A 437     -11.534 -15.067  14.033  1.00 29.81          C
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ATOM   5421  CD1 TRP A 437     -11.240 -16.340  14.383  1.00 30.15           C
ATOM   5422  CD2 TRP A 437     -12.857 -15.129  13.413  1.00 29.74           C
ATOM   5423  NE1 TRP A 437     -12.278 -17.176  14.027  1.00 29.97           N
ATOM   5424  CE3 TRP A 437     -13.734 -14.172  12.850  1.00 28.47           C
ATOM   5425  CE2 TRP A 437     -13.306 -16.485  13.427  1.00 28.86           C
ATOM   5426  CZ3 TRP A 437     -14.991 -14.546  12.336  1.00 29.95           C
ATOM   5427  CZ2 TRP A 437     -14.552 -16.872  12.905  1.00 30.78           C
ATOM   5428  CH2 TRP A 437     -15.400 -15.893  12.357  1.00 28.37           C
ATOM   5429  H   TRP A 437      -9.684 -14.702  16.379  1.00  0.00           H
ATOM   5430  HA  TRP A 437     -10.183 -12.208  15.534  1.00  0.00           H
ATOM   5431  HB2 TRP A 437     -10.871 -13.175  13.429  1.00  0.00           H
ATOM   5432  HB3 TRP A 437      -9.617 -14.145  14.103  1.00  0.00           H
ATOM   5433  HD1 TRP A 437     -10.326 -16.656  14.860  1.00  0.00           H
ATOM   5434  HE1 TRP A 437     -12.243 -18.173  14.200  1.00  0.00           H
ATOM   5435  HE3 TRP A 437     -13.432 -13.133  12.828  1.00  0.00           H
ATOM   5436  HZ3 TRP A 437     -15.648 -13.795  11.927  1.00  0.00           H
ATOM   5437  HZ2 TRP A 437     -14.862 -17.907  12.931  1.00  0.00           H
ATOM   5438  HH2 TRP A 437     -16.363 -16.174  11.956  1.00  0.00           H
ATOM   5439  N   LYS A 438     -13.149 -13.495  16.225  1.00 30.82           N
ATOM   5440  CA  LYS A 438     -14.593 -13.265  16.254  1.00 31.39           C
ATOM   5441  C   LYS A 438     -14.975 -12.176  17.279  1.00 29.84           C
ATOM   5442  O   LYS A 438     -15.946 -11.457  17.060  1.00 28.51           O
ATOM   5443  CB  LYS A 438     -15.301 -14.611  16.568  1.00 33.89           C
ATOM   5444  CG  LYS A 438     -16.739 -14.783  16.017  1.00 35.72           C
ATOM   5445  CD  LYS A 438     -17.772 -13.814  16.615  1.00 37.55           C
ATOM   5446  CE  LYS A 438     -19.240 -14.236  16.478  1.00 37.38           C
ATOM   5447  NZ  LYS A 438     -20.106 -13.281  17.190  1.00 33.68           N1+
ATOM   5448  H   LYS A 438     -12.804 -14.428  16.387  1.00  0.00           H
ATOM   5449  HA  LYS A 438     -14.894 -12.921  15.262  1.00  0.00           H
ATOM   5450  HB2 LYS A 438     -14.712 -15.421  16.135  1.00  0.00           H
ATOM   5451  HB3 LYS A 438     -15.293 -14.797  17.644  1.00  0.00           H
ATOM   5452  HG2 LYS A 438     -16.733 -14.696  14.929  1.00  0.00           H
ATOM   5453  HG3 LYS A 438     -17.050 -15.807  16.232  1.00  0.00           H
ATOM   5454  HD2 LYS A 438     -17.544 -13.675  17.673  1.00  0.00           H
ATOM   5455  HD3 LYS A 438     -17.666 -12.843  16.132  1.00  0.00           H
ATOM   5456  HE2 LYS A 438     -19.530 -14.286  15.428  1.00  0.00           H
ATOM   5457  HE3 LYS A 438     -19.391 -15.226  16.910  1.00  0.00           H
ATOM   5458  HZ1 LYS A 438     -21.080 -13.523  17.140  1.00  0.00           H
ATOM   5459  HZ2 LYS A 438     -19.828 -13.323  18.199  1.00  0.00           H
ATOM   5460  HZ3 LYS A 438     -19.950 -12.328  16.890  1.00  0.00           H
ATOM   5461  N   LYS A 439     -14.199 -12.004  18.360  1.00 29.46           N
ATOM   5462  CA  LYS A 439     -14.491 -11.065  19.449  1.00 32.01           C
ATOM   5463  C   LYS A 439     -14.544  -9.590  19.016  1.00 31.47           C
ATOM   5464  O   LYS A 439     -15.205  -8.783  19.667  1.00 31.96           O
ATOM   5465  CB  LYS A 439     -13.448 -11.234  20.576  1.00 33.79           C
ATOM   5466  CG  LYS A 439     -13.543 -12.559  21.363  1.00 37.29           C
ATOM   5467  CD  LYS A 439     -14.928 -12.873  21.966  1.00 37.29           C
ATOM   5468  CE  LYS A 439     -15.505 -11.761  22.866  1.00 40.03           C
ATOM   5469  NZ  LYS A 439     -16.875 -12.078  23.298  1.00 40.12           N1+
ATOM   5470  H   LYS A 439     -13.322 -12.508  18.394  1.00  0.00           H
ATOM   5471  HA  LYS A 439     -15.491 -11.289  19.821  1.00  0.00           H
ATOM   5472  HB2 LYS A 439     -12.444 -11.133  20.158  1.00  0.00           H
ATOM   5473  HB3 LYS A 439     -13.532 -10.403  21.279  1.00  0.00           H
ATOM   5474  HG2 LYS A 439     -13.249 -13.381  20.708  1.00  0.00           H
ATOM   5475  HG3 LYS A 439     -12.797 -12.541  22.159  1.00  0.00           H
ATOM   5476  HD2 LYS A 439     -15.626 -13.093  21.157  1.00  0.00           H
ATOM   5477  HD3 LYS A 439     -14.853 -13.800  22.537  1.00  0.00           H
ATOM   5478  HE2 LYS A 439     -14.869 -11.602  23.738  1.00  0.00           H
ATOM   5479  HE3 LYS A 439     -15.553 -10.815  22.326  1.00  0.00           H
ATOM   5480  HZ1 LYS A 439     -17.290 -11.324  23.819  1.00  0.00           H
ATOM   5481  HZ2 LYS A 439     -17.455 -12.189  22.426  1.00  0.00           H
ATOM   5482  HZ3 LYS A 439     -16.936 -12.947  23.799  1.00  0.00           H
ATOM   5483  N   PHE A 440     -13.897  -9.257  17.900  1.00 29.67           N
ATOM   5484  CA  PHE A 440     -13.843  -7.916  17.335  1.00 30.46           C
ATOM   5485  C   PHE A 440     -15.069  -7.620  16.444  1.00 32.12           C
ATOM   5486  O   PHE A 440     -15.347  -6.457  16.164  1.00 32.41           O
ATOM   5487  CB  PHE A 440     -12.554  -7.837  16.513  1.00 27.41           C
ATOM   5488  CG  PHE A 440     -11.291  -7.937  17.345  1.00 25.90           C
ATOM   5489  CD1 PHE A 440     -10.796  -6.784  17.985  1.00 25.42           C
ATOM   5490  CD2 PHE A 440     -10.602  -9.162  17.482  1.00 24.33           C
ATOM   5491  CE1 PHE A 440      -9.617  -6.848  18.742  1.00 23.50           C
ATOM   5492  CE2 PHE A 440      -9.428  -9.225  18.257  1.00 24.72           C
ATOM   5493  CZ  PHE A 440      -8.931  -8.068  18.883  1.00 23.12           C
ATOM   5494  H   PHE A 440     -13.363  -9.971  17.423  1.00  0.00           H
ATOM   5495  HA  PHE A 440     -13.808  -7.166  18.129  1.00  0.00           H
ATOM   5496  HB2 PHE A 440     -12.547  -8.620  15.758  1.00  0.00           H
ATOM   5497  HB3 PHE A 440     -12.513  -6.886  15.987  1.00  0.00           H
ATOM   5498  HD1 PHE A 440     -11.293  -5.831  17.884  1.00  0.00           H
ATOM   5499  HD2 PHE A 440     -10.955 -10.052  16.985  1.00  0.00           H
ATOM   5500  HE1 PHE A 440      -9.239  -5.940  19.185  1.00  0.00           H
ATOM   5501  HE2 PHE A 440      -8.884 -10.149  18.352  1.00  0.00           H
ATOM   5502  HZ  PHE A 440      -8.012  -8.112  19.445  1.00  0.00           H
ATOM   5503  N   ARG A 441     -15.879  -8.633  16.090  1.00 33.77           N
ATOM   5504  CA  ARG A 441     -17.252  -8.471  15.600  1.00 36.52           C
ATOM   5505  C   ARG A 441     -18.207  -8.936  16.723  1.00 38.32           C
ATOM   5506  O   ARG A 441     -19.140  -9.712  16.493  1.00 39.68           O
ATOM   5507  CB  ARG A 441     -17.490  -9.255  14.281  1.00 36.16           C
ATOM   5508  CG  ARG A 441     -16.587  -8.886  13.081  1.00 36.35           C
ATOM   5509  CD  ARG A 441     -16.647  -7.418  12.593  1.00 37.85           C
ATOM   5510  NE  ARG A 441     -17.259  -7.272  11.255  1.00 37.46           N
ATOM   5511  CZ  ARG A 441     -16.654  -7.086  10.069  1.00 38.15           C
ATOM   5512  NH1 ARG A 441     -15.333  -7.022   9.919  1.00 39.40           N
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ATOM   5513  NH2 ARG A 441     -17.436  -6.996   9.005  1.00 37.27          N1+
ATOM   5514  H   ARG A 441     -15.630  -9.557  16.428  1.00  0.00           H
ATOM   5515  HA  ARG A 441     -17.485  -7.419  15.429  1.00  0.00           H
ATOM   5516  HB2 ARG A 441     -17.374 -10.322  14.481  1.00  0.00           H
ATOM   5517  HB3 ARG A 441     -18.529  -9.122  13.976  1.00  0.00           H
ATOM   5518  HG2 ARG A 441     -15.559  -9.135  13.340  1.00  0.00           H
ATOM   5519  HG3 ARG A 441     -16.832  -9.550  12.253  1.00  0.00           H
ATOM   5520  HD2 ARG A 441     -17.186  -6.781  13.292  1.00  0.00           H
ATOM   5521  HD3 ARG A 441     -15.642  -7.019  12.562  1.00  0.00           H
ATOM   5522  HE  ARG A 441     -18.268  -7.198  11.236  1.00  0.00           H
ATOM   5523 HH11 ARG A 441     -14.756  -6.564  10.632  1.00  0.00           H
ATOM   5524 HH12 ARG A 441     -14.934  -7.070   8.952  1.00  0.00           H
ATOM   5525 HH21 ARG A 441     -17.342  -6.077   8.530  1.00  0.00           H
ATOM   5526 HH22 ARG A 441     -17.153  -7.629   8.216  1.00  0.00           H
ATOM   5527  N   GLU A 442     -17.928  -8.463  17.946  1.00 40.76           N
ATOM   5528  CA  GLU A 442     -18.743  -8.524  19.159  1.00 41.35           C
ATOM   5529  C   GLU A 442     -18.519  -7.247  19.975  1.00 40.88           C
ATOM   5530  O   GLU A 442     -19.478  -6.627  20.422  1.00 41.44           O
ATOM   5531  CB  GLU A 442     -18.495  -9.799  19.995  1.00 43.85           C
ATOM   5532  CG  GLU A 442     -18.829 -11.096  19.249  1.00 47.68           C
ATOM   5533  CD  GLU A 442     -18.794 -12.346  20.106  1.00 49.70           C
ATOM   5534  OE1 GLU A 442     -18.201 -12.318  21.204  1.00 49.65           O
ATOM   5535  OE2 GLU A 442     -19.333 -13.352  19.598  1.00 50.39          O1-
ATOM   5536  H   GLU A 442     -17.140  -7.832  17.996  1.00  0.00           H
ATOM   5537  HA  GLU A 442     -19.792  -8.512  18.857  1.00  0.00           H
ATOM   5538  HB2 GLU A 442     -17.463  -9.831  20.340  1.00  0.00           H
ATOM   5539  HB3 GLU A 442     -19.108  -9.744  20.897  1.00  0.00           H
ATOM   5540  HG2 GLU A 442     -19.827 -11.004  18.822  1.00  0.00           H
ATOM   5541  HG3 GLU A 442     -18.130 -11.243  18.429  1.00  0.00           H
ATOM   5542  N   NMA A 442A    -17.252  -6.848  20.151  1.00  0.00           N
ATOM   5543  CA  NMA A 442A    -16.875  -5.614  20.824  1.00  0.00           C
ATOM   5544  H   NMA A 442A    -16.500  -7.470  19.860  1.00  0.00           H
ATOM   5545 1HA  NMA A 442A    -15.790  -5.511  20.846  1.00  0.00           H
ATOM   5546 2HA  NMA A 442A    -17.288  -4.748  20.303  1.00  0.00           H
ATOM   5547 3HA  NMA A 442A    -17.243  -5.601  21.851  1.00  0.00           H
TER    5548      NMA A 442A
HETATM 5549  O   SPC     5     -1.764  -0.677  20.484  1.00  0.00           O
HETATM 5550  H1  SPC     5     -1.730  -1.524  21.048  1.00  0.00           H
HETATM 5551  H2  SPC     5     -1.595  -0.931  19.518  1.00  0.00           H
HETATM 5552  O   SPC     9     -3.522   8.612  14.931  1.00  0.00           O
HETATM 5553  H1  SPC     9     -2.891   9.373  14.734  1.00  0.00           H
HETATM 5554  H2  SPC     9     -3.232   8.174  15.789  1.00  0.00           H
HETATM 5555  O   SPC    12     -7.844   6.551  17.748  1.00  0.00           O
HETATM 5556  H1  SPC    12     -8.498   6.039  17.175  1.00  0.00           H
HETATM 5557  H2  SPC    12     -7.742   7.483  17.373  1.00  0.00           H
HETATM 5558  O   SPC    13     -3.053   5.279  18.266  1.00  0.00           O
HETATM 5559  H1  SPC    13     -2.723   6.191  17.990  1.00  0.00           H
HETATM 5560  H2  SPC    13     -4.033   5.353  18.510  1.00  0.00           H
HETATM 5561  O   SPC    14      4.985   2.373  22.022  1.00  0.00           O
HETATM 5562  H1  SPC    14      4.088   2.274  22.474  1.00  0.00           H
HETATM 5563  H2  SPC    14      5.338   1.448  21.817  1.00  0.00           H
HETATM 5564  O   SPC    15      2.215   7.512  17.129  1.00  0.00           O
HETATM 5565  H1  SPC    15      3.003   8.023  17.503  1.00  0.00           H
HETATM 5566  H2  SPC    15      1.809   8.080  16.392  1.00  0.00           H
HETATM 5567  O   SPC    17      4.322   9.237  17.559  1.00  0.00           O
HETATM 5568  H1  SPC    17      4.600   9.228  16.589  1.00  0.00           H
HETATM 5569  H2  SPC    17      5.091   8.887  18.114  1.00  0.00           H
HETATM 5570  O   SPC    19     -5.751   2.877  19.695  1.00  0.00           O
HETATM 5571  H1  SPC    19     -6.118   2.610  20.589  1.00  0.00           H
HETATM 5572  H2  SPC    19     -4.947   2.295  19.494  1.00  0.00           H
HETATM 5573  O   SPC    21     -4.971   8.257  18.217  1.00  0.00           O
HETATM 5574  H1  SPC    21     -5.204   7.404  18.704  1.00  0.00           H
HETATM 5575  H2  SPC    21     -5.789   8.559  17.702  1.00  0.00           H
HETATM 5576  O   SPC    22     -7.204   3.083  17.330  1.00  0.00           O
HETATM 5577  H1  SPC    22     -6.418   3.124  16.697  1.00  0.00           H
HETATM 5578  H2  SPC    22     -6.843   3.087  18.273  1.00  0.00           H
HETATM 5579  O   SPC    26      6.395   7.904  18.794  1.00  0.00           O
HETATM 5580  H1  SPC    26      6.396   7.624  19.757  1.00  0.00           H
HETATM 5581  H2  SPC    26      6.182   7.091  18.224  1.00  0.00           H
HETATM 5582  O   SPC    31     -0.241   6.155  16.934  1.00  0.00           O
HETATM 5583  H1  SPC    31      0.618   6.647  17.127  1.00  0.00           H
HETATM 5584  H2  SPC    31     -1.015   6.777  17.121  1.00  0.00           H
HETATM 5585  O   SPC    32      5.778   5.783  17.279  1.00  0.00           O
HETATM 5586  H1  SPC    32      6.530   5.373  16.748  1.00  0.00           H
HETATM 5587  H2  SPC    32      4.898   5.452  16.908  1.00  0.00           H
HETATM 5588  O   SPC    34      1.464   4.785  22.049  1.00  0.00           O
HETATM 5589  H1  SPC    34      1.373   5.339  21.213  1.00  0.00           H
HETATM 5590  H2  SPC    34      0.577   4.331  22.231  1.00  0.00           H
HETATM 5591  O   SPC    35      0.619  -1.917  23.248  1.00  0.00           O
HETATM 5592  H1  SPC    35     -0.140  -2.289  22.683  1.00  0.00           H
HETATM 5593  H2  SPC    35      0.435  -2.182  24.199  1.00  0.00           H
HETATM 5594  O   SPC    37     -1.851   3.333  19.689  1.00  0.00           O
HETATM 5595  H1  SPC    37     -2.471   2.536  19.618  1.00  0.00           H
HETATM 5596  H2  SPC    37     -2.293   4.122  19.230  1.00  0.00           H
HETATM 5597  O   SPC    38      2.029   5.724  19.385  1.00  0.00           O
HETATM 5598  H1  SPC    38      2.933   5.494  19.776  1.00  0.00           H
HETATM 5599  H2  SPC    38      2.154   6.405  18.653  1.00  0.00           H
HETATM 5600  O   SPC    39      4.056   4.769  21.008  1.00  0.00           O
HETATM 5601  H1  SPC    39      3.256   4.839  21.617  1.00  0.00           H
HETATM 5602  H2  SPC    39      4.635   4.006  21.331  1.00  0.00           H
HETATM 5603  O   SPC    41     -5.643   5.597  18.968  1.00  0.00           O
HETATM 5604  H1  SPC    41     -6.528   5.878  18.561  1.00  0.00           H
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HETATM 5605  H2  SPC    41      -5.739   4.660  19.331  1.00  0.00           H
HETATM 5606  O   SPC    44       3.132  -1.844  22.010  1.00  0.00           O
HETATM 5607  H1  SPC    44       3.246  -2.789  21.674  1.00  0.00           H
HETATM 5608  H2  SPC    44       2.261  -1.794  22.518  1.00  0.00           H
HETATM 5609  O   SPC    46       3.342   5.203  16.113  1.00  0.00           O
HETATM 5610  H1  SPC    46       2.867   6.038  16.422  1.00  0.00           H
HETATM 5611  H2  SPC    46       3.505   5.268  15.119  1.00  0.00           H
HETATM 5612  O   SPC    52       2.292   2.118  22.472  1.00  0.00           O
HETATM 5613  H1  SPC    52       1.492   1.505  22.559  1.00  0.00           H
HETATM 5614  H2  SPC    52       1.972   3.073  22.533  1.00  0.00           H
HETATM 5615  O   SPC    53      -7.119   8.999  16.697  1.00  0.00           O
HETATM 5616  H1  SPC    53      -7.529   9.923  16.731  1.00  0.00           H
HETATM 5617  H2  SPC    53      -6.757   8.853  15.764  1.00  0.00           H
HETATM 5618  O   SPC    55      -2.432   7.828  17.422  1.00  0.00           O
HETATM 5619  H1  SPC    55      -1.911   8.699  17.445  1.00  0.00           H
HETATM 5620  H2  SPC    55      -3.361   8.007  17.790  1.00  0.00           H
HETATM 5621  O   SPC    57       5.288  -0.226  21.259  1.00  0.00           O
HETATM 5622  H1  SPC    57       6.090  -0.719  20.896  1.00  0.00           H
HETATM 5623  H2  SPC    57       4.631  -0.899  21.633  1.00  0.00           H
HETATM 5624  O   SPC    59       0.068   0.504  22.129  1.00  0.00           O
HETATM 5625  H1  SPC    59      -0.638   0.199  21.470  1.00  0.00           H
HETATM 5626  H2  SPC    59       0.330  -0.299  22.688  1.00  0.00           H
HETATM 5627  O   SPC    61      -0.706   3.187  22.178  1.00  0.00           O
HETATM 5628  H1  SPC    61      -0.563   2.200  22.337  1.00  0.00           H
HETATM 5629  H2  SPC    61      -1.251   3.300  21.336  1.00  0.00           H
HETATM 5630  O   SPC    62       0.833   3.276  19.169  1.00  0.00           O
HETATM 5631  H1  SPC    62       1.169   4.229  19.193  1.00  0.00           H
HETATM 5632  H2  SPC    62      -0.158   3.278  19.371  1.00  0.00           H
HETATM 5633  O   SPC    65      -3.516   1.197  19.390  1.00  0.00           O
HETATM 5634  H1  SPC    65      -3.432   0.768  18.475  1.00  0.00           H
HETATM 5635  H2  SPC    65      -3.069   0.582  20.056  1.00  0.00           H
HETATM 5636  O   SPC   384       1.193   1.579 -20.780  1.00  0.00           O
HETATM 5637  H1  SPC   384       0.405   0.933 -20.706  1.00  0.00           H
HETATM 5638  H2  SPC   384       0.843   2.439 -21.154  1.00  0.00           H
HETATM 5639  O   SPC   406       5.981   9.514 -15.872  1.00  0.00           O
HETATM 5640  H1  SPC   406       6.052  10.517 -15.835  1.00  0.00           H
HETATM 5641  H2  SPC   406       6.746   9.130 -15.331  1.00  0.00           H
HETATM 5642  O   SPC   447      -0.096   8.376 -16.230  1.00  0.00           O
HETATM 5643  H1  SPC   447      -0.615   7.964 -17.002  1.00  0.00           H
HETATM 5644  H2  SPC   447      -0.643   9.146 -15.862  1.00  0.00           H
HETATM 5645  O   SPC   454      -7.238  22.003   5.504  1.00  0.00           O
HETATM 5646  H1  SPC   454      -7.399  21.048   5.780  1.00  0.00           H
HETATM 5647  H2  SPC   454      -7.647  22.613   6.197  1.00  0.00           H
HETATM 5648  O   SPC   455       5.560  27.055  -7.136  1.00  0.00           O
HETATM 5649  H1  SPC   455       6.445  27.291  -7.562  1.00  0.00           H
HETATM 5650  H2  SPC   455       5.678  26.183  -6.635  1.00  0.00           H
HETATM 5651  O   SPC   457       4.524  21.789  -0.122  1.00  0.00           O
HETATM 5652  H1  SPC   457       4.145  21.089  -0.753  1.00  0.00           H
HETATM 5653  H2  SPC   457       3.775  22.390   0.190  1.00  0.00           H
HETATM 5654  O   SPC   458      -0.512  17.361   2.849  1.00  0.00           O
HETATM 5655  H1  SPC   458      -0.604  16.370   3.003  1.00  0.00           H
HETATM 5656  H2  SPC   458      -0.294  17.515   1.874  1.00  0.00           H
HETATM 5657  O   SPC   459       5.999  23.367  -8.405  1.00  0.00           O
HETATM 5658  H1  SPC   459       5.609  22.446  -8.557  1.00  0.00           H
HETATM 5659  H2  SPC   459       5.359  24.052  -8.790  1.00  0.00           H
HETATM 5660  O   SPC   460      -0.209  25.857  -5.172  1.00  0.00           O
HETATM 5661  H1  SPC   460       0.190  25.048  -4.713  1.00  0.00           H
HETATM 5662  H2  SPC   460      -1.201  25.883  -4.964  1.00  0.00           H
HETATM 5663  O   SPC   461      -3.150  18.277   6.858  1.00  0.00           O
HETATM 5664  H1  SPC   461      -3.071  18.248   5.853  1.00  0.00           H
HETATM 5665  H2  SPC   461      -3.843  18.971   7.112  1.00  0.00           H
HETATM 5666  O   SPC   462      -8.248  23.257   7.753  1.00  0.00           O
HETATM 5667  H1  SPC   462      -8.964  23.929   7.956  1.00  0.00           H
HETATM 5668  H2  SPC   462      -8.542  22.351   8.095  1.00  0.00           H
HETATM 5669  O   SPC   463       8.153  23.215   1.023  1.00  0.00           O
HETATM 5670  H1  SPC   463       8.800  22.620   1.533  1.00  0.00           H
HETATM 5671  H2  SPC   463       8.601  23.505   0.162  1.00  0.00           H
HETATM 5672  O   SPC   464       4.828  23.126  -4.203  1.00  0.00           O
HETATM 5673  H1  SPC   464       4.165  23.829  -3.903  1.00  0.00           H
HETATM 5674  H2  SPC   464       5.414  22.892  -3.414  1.00  0.00           H
HETATM 5675  O   SPC   466      -3.572  23.374   7.288  1.00  0.00           O
HETATM 5676  H1  SPC   466      -4.125  23.201   6.460  1.00  0.00           H
HETATM 5677  H2  SPC   466      -2.767  23.921   7.013  1.00  0.00           H
HETATM 5678  O   SPC   467      -0.819  19.678   7.133  1.00  0.00           O
HETATM 5679  H1  SPC   467      -0.962  20.428   7.795  1.00  0.00           H
HETATM 5680  H2  SPC   467      -1.660  19.117   7.104  1.00  0.00           H
HETATM 5681  O   SPC   468       7.789  28.446  -0.923  1.00  0.00           O
HETATM 5682  H1  SPC   468       8.490  27.781  -0.622  1.00  0.00           H
HETATM 5683  H2  SPC   468       7.724  28.412  -1.932  1.00  0.00           H
HETATM 5684  O   SPC   469       7.851  28.278  -3.637  1.00  0.00           O
HETATM 5685  H1  SPC   469       7.903  27.382  -4.106  1.00  0.00           H
HETATM 5686  H2  SPC   469       8.774  28.692  -3.645  1.00  0.00           H
HETATM 5687  O   SPC   470      -3.873  23.975   0.109  1.00  0.00           O
HETATM 5688  H1  SPC   470      -4.065  24.057  -0.874  1.00  0.00           H
HETATM 5689  H2  SPC   470      -4.737  24.108   0.622  1.00  0.00           H
HETATM 5690  O   SPC   471       3.391  26.316   0.772  1.00  0.00           O
HETATM 5691  H1  SPC   471       4.265  26.825   0.756  1.00  0.00           H
HETATM 5692  H2  SPC   471       2.848  26.570  -0.045  1.00  0.00           H
HETATM 5693  O   SPC   472      -5.347  19.356   4.527  1.00  0.00           O
HETATM 5694  H1  SPC   472      -4.414  18.997   4.401  1.00  0.00           H
HETATM 5695  H2  SPC   472      -5.434  20.217   4.015  1.00  0.00           H
HETATM 5696  O   SPC   473       5.919  27.365   0.721  1.00  0.00           O
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HETATM 5697  H1  SPC   473       6.473  27.938   0.096  1.00  0.00           H
HETATM 5698  H2  SPC   473       6.544  26.750   1.226  1.00  0.00           H
HETATM 5699  O   SPC   475       3.305  25.063  -3.200  1.00  0.00           O
HETATM 5700  H1  SPC   475       2.796  25.915  -3.389  1.00  0.00           H
HETATM 5701  H2  SPC   475       3.994  25.255  -2.487  1.00  0.00           H
HETATM 5702  O   SPC   476      -3.613  26.476  -7.238  1.00  0.00           O
HETATM 5703  H1  SPC   476      -3.272  25.912  -8.000  1.00  0.00           H
HETATM 5704  H2  SPC   476      -4.177  27.216  -7.607  1.00  0.00           H
HETATM 5705  O   SPC   477      -1.936  25.256   1.553  1.00  0.00           O
HETATM 5706  H1  SPC   477      -2.626  24.870   0.923  1.00  0.00           H
HETATM 5707  H2  SPC   477      -2.325  25.245   2.491  1.00  0.00           H
HETATM 5708  O   SPC   478       6.681  24.049   7.071  1.00  0.00           O
HETATM 5709  H1  SPC   478       7.520  24.425   7.492  1.00  0.00           H
HETATM 5710  H2  SPC   478       5.888  24.385   7.593  1.00  0.00           H
HETATM 5711  O   SPC   479       6.109  24.644  -6.023  1.00  0.00           O
HETATM 5712  H1  SPC   479       6.129  24.113  -6.885  1.00  0.00           H
HETATM 5713  H2  SPC   479       5.644  24.086  -5.318  1.00  0.00           H
HETATM 5714  O   SPC   480      -4.803  22.986   4.858  1.00  0.00           O
HETATM 5715  H1  SPC   480      -4.250  22.263   4.420  1.00  0.00           H
HETATM 5716  H2  SPC   480      -5.749  22.645   4.980  1.00  0.00           H
HETATM 5717  O   SPC   481       7.650  25.709   1.991  1.00  0.00           O
HETATM 5718  H1  SPC   481       7.132  25.727   2.857  1.00  0.00           H
HETATM 5719  H2  SPC   481       7.787  24.743   1.717  1.00  0.00           H
HETATM 5720  O   SPC   483       0.915  25.146   7.061  1.00  0.00           O
HETATM 5721  H1  SPC   483       1.482  24.607   7.700  1.00  0.00           H
HETATM 5722  H2  SPC   483       1.361  25.147   6.156  1.00  0.00           H
HETATM 5723  O   SPC   484       4.015  26.400   6.096  1.00  0.00           O
HETATM 5724  H1  SPC   484       3.973  27.389   6.262  1.00  0.00           H
HETATM 5725  H2  SPC   484       4.203  25.937   6.972  1.00  0.00           H
HETATM 5726  O   SPC   485       2.909  23.674   1.159  1.00  0.00           O
HETATM 5727  H1  SPC   485       3.115  24.643   0.950  1.00  0.00           H
HETATM 5728  H2  SPC   485       1.909  23.553   1.159  1.00  0.00           H
HETATM 5729  O   SPC   486       6.364  21.328   1.741  1.00  0.00           O
HETATM 5730  H1  SPC   486       7.073  21.977   1.420  1.00  0.00           H
HETATM 5731  H2  SPC   486       5.614  21.326   1.057  1.00  0.00           H
HETATM 5732  O   SPC   487       2.148  25.052   4.614  1.00  0.00           O
HETATM 5733  H1  SPC   487       2.895  25.552   5.076  1.00  0.00           H
HETATM 5734  H2  SPC   487       1.783  25.636   3.868  1.00  0.00           H
HETATM 5735  O   SPC   488       1.394  22.556   3.790  1.00  0.00           O
HETATM 5736  H1  SPC   488       1.750  23.443   4.127  1.00  0.00           H
HETATM 5737  H2  SPC   488       1.029  22.695   2.861  1.00  0.00           H
HETATM 5738  O   SPC   490      -2.354  21.978   1.269  1.00  0.00           O
HETATM 5739  H1  SPC   490      -2.945  22.677   0.837  1.00  0.00           H
HETATM 5740  H2  SPC   490      -1.402  22.311   1.246  1.00  0.00           H
HETATM 5741  O   SPC   491       5.081  23.518   2.839  1.00  0.00           O
HETATM 5742  H1  SPC   491       5.537  22.695   2.476  1.00  0.00           H
HETATM 5743  H2  SPC   491       4.194  23.617   2.363  1.00  0.00           H
HETATM 5744  O   SPC   492      -2.670  18.575   4.118  1.00  0.00           O
HETATM 5745  H1  SPC   492      -1.788  18.174   3.827  1.00  0.00           H
HETATM 5746  H2  SPC   492      -2.620  19.581   4.012  1.00  0.00           H
HETATM 5747  O   SPC   493      -0.307  24.732  -7.722  1.00  0.00           O
HETATM 5748  H1  SPC   493      -0.211  25.321  -6.906  1.00  0.00           H
HETATM 5749  H2  SPC   493       0.459  24.917  -8.355  1.00  0.00           H
HETATM 5750  O   SPC   494      -1.401  24.337   6.029  1.00  0.00           O
HETATM 5751  H1  SPC   494      -0.607  24.779   6.480  1.00  0.00           H
HETATM 5752  H2  SPC   494      -1.132  23.402   5.756  1.00  0.00           H
HETATM 5753  O   SPC   495      -2.861  25.574  -4.677  1.00  0.00           O
HETATM 5754  H1  SPC   495      -3.269  24.703  -4.367  1.00  0.00           H
HETATM 5755  H2  SPC   495      -3.303  25.858  -5.540  1.00  0.00           H
HETATM 5756  O   SPC   497       6.265  23.024  -1.876  1.00  0.00           O
HETATM 5757  H1  SPC   497       6.117  24.013  -1.726  1.00  0.00           H
HETATM 5758  H2  SPC   497       5.725  22.513  -1.191  1.00  0.00           H
HETATM 5759  O   SPC   498      -7.238  19.369   6.406  1.00  0.00           O
HETATM 5760  H1  SPC   498      -6.583  19.308   5.632  1.00  0.00           H
HETATM 5761  H2  SPC   498      -7.563  18.431   6.616  1.00  0.00           H
HETATM 5762  O   SPC   499      -3.086  24.947   3.970  1.00  0.00           O
HETATM 5763  H1  SPC   499      -3.852  24.347   4.239  1.00  0.00           H
HETATM 5764  H2  SPC   499      -2.402  24.935   4.714  1.00  0.00           H
HETATM 5765  O   SPC   500      -8.651  20.652   8.443  1.00  0.00           O
HETATM 5766  H1  SPC   500      -8.153  20.119   7.745  1.00  0.00           H
HETATM 5767  H2  SPC   500      -8.127  20.609   9.310  1.00  0.00           H
HETATM 5768  O   SPC   502      -2.668  24.487  -9.048  1.00  0.00           O
HETATM 5769  H1  SPC   502      -2.408  24.252 -10.001  1.00  0.00           H
HETATM 5770  H2  SPC   502      -1.816  24.559  -8.504  1.00  0.00           H
HETATM 5771  O   SPC   503       2.741  20.478   5.087  1.00  0.00           O
HETATM 5772  H1  SPC   503       2.527  19.649   4.554  1.00  0.00           H
HETATM 5773  H2  SPC   503       2.365  21.278   4.598  1.00  0.00           H
HETATM 5774  O   SPC   504      -8.848  24.139   1.317  1.00  0.00           O
HETATM 5775  H1  SPC   504      -9.200  23.633   0.520  1.00  0.00           H
HETATM 5776  H2  SPC   504      -7.850  24.226   1.240  1.00  0.00           H
HETATM 5777  O   SPC   505       0.705  24.099  -1.277  1.00  0.00           O
HETATM 5778  H1  SPC   505       1.071  25.039  -1.231  1.00  0.00           H
HETATM 5779  H2  SPC   505       0.702  23.809  -2.243  1.00  0.00           H
HETATM 5780  O   SPC   506       1.352  26.556   2.527  1.00  0.00           O
HETATM 5781  H1  SPC   506       0.607  26.951   1.976  1.00  0.00           H
HETATM 5782  H2  SPC   506       2.181  26.505   1.951  1.00  0.00           H
HETATM 5783  O   SPC   507       3.420  21.101   7.707  1.00  0.00           O
HETATM 5784  H1  SPC   507       2.799  20.533   8.270  1.00  0.00           H
HETATM 5785  H2  SPC   507       3.256  20.882   6.732  1.00  0.00           H
HETATM 5786  O   SPC   508      -5.126  23.588 -10.147  1.00  0.00           O
HETATM 5787  H1  SPC   508      -5.113  23.465 -11.147  1.00  0.00           H
HETATM 5788  H2  SPC   508      -4.241  23.975  -9.864  1.00  0.00           H
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HETATM 5789  O   SPC   509     -0.740  21.769   5.270  1.00  0.00           O
HETATM 5790  H1  SPC   509      0.123  21.974   4.783  1.00  0.00           H
HETATM 5791  H2  SPC   509     -0.578  21.009   5.916  1.00  0.00           H
HETATM 5792  O   SPC   510      2.593  23.595   8.545  1.00  0.00           O
HETATM 5793  H1  SPC   510      2.929  22.709   8.191  1.00  0.00           H
HETATM 5794  H2  SPC   510      3.375  24.228   8.622  1.00  0.00           H
HETATM 5795  O   SPC   511      1.066  23.739  -4.054  1.00  0.00           O
HETATM 5796  H1  SPC   511      2.018  24.011  -3.856  1.00  0.00           H
HETATM 5797  H2  SPC   511      1.062  23.045  -4.785  1.00  0.00           H
HETATM 5798  O   SPC   512     -2.929  21.242   3.788  1.00  0.00           O
HETATM 5799  H1  SPC   512     -2.157  21.546   4.370  1.00  0.00           H
HETATM 5800  H2  SPC   512     -2.753  21.548   2.837  1.00  0.00           H
HETATM 5801  O   SPC   513      8.215  25.903  -4.873  1.00  0.00           O
HETATM 5802  H1  SPC   513      8.749  25.185  -4.404  1.00  0.00           H
HETATM 5803  H2  SPC   513      7.429  25.462  -5.335  1.00  0.00           H
HETATM 5804  O   SPC   514      7.325  23.542   4.514  1.00  0.00           O
HETATM 5805  H1  SPC   514      7.054  23.742   5.471  1.00  0.00           H
HETATM 5806  H2  SPC   514      6.508  23.630   3.929  1.00  0.00           H
HETATM 5807  O   SPC   515     -6.046  24.179   1.718  1.00  0.00           O
HETATM 5808  H1  SPC   515     -6.135  23.236   2.074  1.00  0.00           H
HETATM 5809  H2  SPC   515     -6.032  24.814   2.495  1.00  0.00           H
HETATM 5810  O   SPC   516      0.099  23.386   1.235  1.00  0.00           O
HETATM 5811  H1  SPC   516      0.291  23.520   0.246  1.00  0.00           H
HETATM 5812  H2  SPC   516     -0.498  24.142   1.540  1.00  0.00           H
HETATM 5813  O   SPC   520     -4.830  19.958  12.219  1.00  0.00           O
HETATM 5814  H1  SPC   520     -4.220  20.537  12.782  1.00  0.00           H
HETATM 5815  H2  SPC   520     -4.767  19.006  12.562  1.00  0.00           H
HETATM 5816  O   SPC   522      4.788  25.382   8.637  1.00  0.00           O
HETATM 5817  H1  SPC   522      5.355  26.214   8.500  1.00  0.00           H
HETATM 5818  H2  SPC   522      4.841  25.117   9.612  1.00  0.00           H
HETATM 5819  O   SPC   523      5.034  20.757  12.175  1.00  0.00           O
HETATM 5820  H1  SPC   523      4.066  20.862  12.433  1.00  0.00           H
HETATM 5821  H2  SPC   523      5.159  21.185  11.267  1.00  0.00           H
HETATM 5822  O   SPC   525      0.226  12.164  18.585  1.00  0.00           O
HETATM 5823  H1  SPC   525     -0.072  12.342  19.525  1.00  0.00           H
HETATM 5824  H2  SPC   525      0.063  13.000  18.032  1.00  0.00           H
HETATM 5825  O   SPC   531      5.182  21.902   9.700  1.00  0.00           O
HETATM 5826  H1  SPC   531      6.148  21.624   9.607  1.00  0.00           H
HETATM 5827  H2  SPC   531      4.662  21.561   8.902  1.00  0.00           H
HETATM 5828  O   SPC   534     -6.497  16.463   9.615  1.00  0.00           O
HETATM 5829  H1  SPC   534     -7.436  16.688   9.911  1.00  0.00           H
HETATM 5830  H2  SPC   534     -6.034  16.008  10.392  1.00  0.00           H
HETATM 5831  O   SPC   542      3.501  23.644  13.489  1.00  0.00           O
HETATM 5832  H1  SPC   542      3.148  24.433  13.998  1.00  0.00           H
HETATM 5833  H2  SPC   542      3.914  22.993  14.149  1.00  0.00           H
HETATM 5834  O   SPC   543      0.935  18.603  15.626  1.00  0.00           O
HETATM 5835  H1  SPC   543      0.970  17.623  15.851  1.00  0.00           H
HETATM 5836  H2  SPC   543      1.879  18.954  15.570  1.00  0.00           H
HETATM 5837  O   SPC   546      3.936  18.149  10.080  1.00  0.00           O
HETATM 5838  H1  SPC   546      3.186  18.754   9.770  1.00  0.00           H
HETATM 5839  H2  SPC   546      4.242  17.600   9.287  1.00  0.00           H
HETATM 5840  O   SPC   547      6.766  20.144  14.255  1.00  0.00           O
HETATM 5841  H1  SPC   547      6.186  20.501  13.507  1.00  0.00           H
HETATM 5842  H2  SPC   547      6.497  19.185  14.422  1.00  0.00           H
HETATM 5843  O   SPC   551      6.822  18.770  11.519  1.00  0.00           O
HETATM 5844  H1  SPC   551      6.479  17.826  11.585  1.00  0.00           H
HETATM 5845  H2  SPC   551      6.069  19.400  11.750  1.00  0.00           H
HETATM 5846  O   SPC   557      4.180  15.749  15.988  1.00  0.00           O
HETATM 5847  H1  SPC   557      4.717  16.425  15.470  1.00  0.00           H
HETATM 5848  H2  SPC   557      4.804  15.047  16.349  1.00  0.00           H
HETATM 5849  O   SPC   559     -0.239  14.339  17.073  1.00  0.00           O
HETATM 5850  H1  SPC   559      0.405  14.984  16.639  1.00  0.00           H
HETATM 5851  H2  SPC   559     -1.100  14.350  16.546  1.00  0.00           H
HETATM 5852  O   SPC   560     -6.850  20.747  10.488  1.00  0.00           O
HETATM 5853  H1  SPC   560     -6.237  20.398  11.212  1.00  0.00           H
HETATM 5854  H2  SPC   560     -6.369  21.482   9.991  1.00  0.00           H
HETATM 5855  O   SPC   562     -0.192  19.916  11.119  1.00  0.00           O
HETATM 5856  H1  SPC   562     -0.416  19.752  12.091  1.00  0.00           H
HETATM 5857  H2  SPC   562     -0.135  20.909  10.962  1.00  0.00           H
HETATM 5858  O   SPC   565     -2.870  21.209  13.639  1.00  0.00           O
HETATM 5859  H1  SPC   565     -2.555  22.034  14.108  1.00  0.00           H
HETATM 5860  H2  SPC   565     -2.149  20.502  13.702  1.00  0.00           H
HETATM 5861  O   SPC   566     -6.265  11.688  14.065  1.00  0.00           O
HETATM 5862  H1  SPC   566     -6.386  12.640  13.755  1.00  0.00           H
HETATM 5863  H2  SPC   566     -6.809  11.561  14.907  1.00  0.00           H
HETATM 5864  O   SPC   568      4.680  13.787  12.231  1.00  0.00           O
HETATM 5865  H1  SPC   568      4.751  13.367  13.146  1.00  0.00           H
HETATM 5866  H2  SPC   568      3.907  13.358  11.742  1.00  0.00           H
HETATM 5867  O   SPC   572      5.720  17.513  14.444  1.00  0.00           O
HETATM 5868  H1  SPC   572      5.401  17.266  13.513  1.00  0.00           H
HETATM 5869  H2  SPC   572      6.459  16.870  14.697  1.00  0.00           H
HETATM 5870  O   SPC   575      4.880  12.533  14.698  1.00  0.00           O
HETATM 5871  H1  SPC   575      5.416  12.900  15.470  1.00  0.00           H
HETATM 5872  H2  SPC   575      3.899  12.725  14.870  1.00  0.00           H
HETATM 5873  O   SPC   577     -3.814  11.188  12.976  1.00  0.00           O
HETATM 5874  H1  SPC   577     -4.722  11.350  13.394  1.00  0.00           H
HETATM 5875  H2  SPC   577     -3.845  10.323  12.449  1.00  0.00           H
HETATM 5876  O   SPC   583     -3.303  19.985   9.944  1.00  0.00           O
HETATM 5877  H1  SPC   583     -3.952  19.848   9.184  1.00  0.00           H
HETATM 5878  H2  SPC   583     -3.819  19.968  10.813  1.00  0.00           H
HETATM 5879  O   SPC   587     -2.182  14.446   9.784  1.00  0.00           O
HETATM 5880  H1  SPC   587     -2.205  13.849   8.971  1.00  0.00           H
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HETATM 5881  H2  SPC   587     -2.677  15.300   9.567  1.00  0.00          H
HETATM 5882  O   SPC   591     -1.768  10.866  14.666  1.00  0.00          O
HETATM 5883  H1  SPC   591     -1.029  11.513  14.427  1.00  0.00          H
HETATM 5884  H2  SPC   591     -2.562  11.070  14.071  1.00  0.00          H
HETATM 5885  O   SPC   593     -4.187  13.140  11.125  1.00  0.00          O
HETATM 5886  H1  SPC   593     -3.382  13.549  10.671  1.00  0.00          H
HETATM 5887  H2  SPC   593     -3.869  12.477  11.819  1.00  0.00          H
HETATM 5888  O   SPC   596      2.561  18.836  12.448  1.00  0.00          O
HETATM 5889  H1  SPC   596      3.089  18.535  11.642  1.00  0.00          H
HETATM 5890  H2  SPC   596      2.226  19.775  12.278  1.00  0.00          H
HETATM 5891  O   SPC   597      4.500  21.791  15.187  1.00  0.00          O
HETATM 5892  H1  SPC   597      3.980  20.925  15.224  1.00  0.00          H
HETATM 5893  H2  SPC   597      5.479  21.572  15.233  1.00  0.00          H
HETATM 5894  O   SPC   598      4.881  24.188  11.131  1.00  0.00          O
HETATM 5895  H1  SPC   598      4.918  23.322  10.608  1.00  0.00          H
HETATM 5896  H2  SPC   598      4.327  24.039  11.963  1.00  0.00          H
HETATM 5897  O   SPC   599      7.481  15.519  14.865  1.00  0.00          O
HETATM 5898  H1  SPC   599      8.362  15.933  15.137  1.00  0.00          H
HETATM 5899  H2  SPC   599      7.582  15.084  13.955  1.00  0.00          H
HETATM 5900  O   SPC   600     -7.091  14.113  16.524  1.00  0.00          O
HETATM 5901  H1  SPC   600     -6.111  13.840  16.499  1.00  0.00          H
HETATM 5902  H2  SPC   600     -7.204  14.820  17.225  1.00  0.00          H
HETATM 5903  O   SPC   601     -6.274  11.455  10.441  1.00  0.00          O
HETATM 5904  H1  SPC   601     -5.591  12.178  10.617  1.00  0.00          H
HETATM 5905  H2  SPC   601     -5.818  10.694   9.960  1.00  0.00          H
HETATM 5906  O   SPC   607      7.350  14.346  12.432  1.00  0.00          O
HETATM 5907  H1  SPC   607      6.381  14.127  12.242  1.00  0.00          H
HETATM 5908  H2  SPC   607      7.688  14.974  11.718  1.00  0.00          H
HETATM 5909  O   SPC   612      2.289  13.075  15.173  1.00  0.00          O
HETATM 5910  H1  SPC   612      2.250  12.433  15.955  1.00  0.00          H
HETATM 5911  H2  SPC   612      1.979  13.984  15.480  1.00  0.00          H
HETATM 5912  O   SPC   614     -4.981  20.075   7.775  1.00  0.00          O
HETATM 5913  H1  SPC   614     -5.168  21.005   8.125  1.00  0.00          H
HETATM 5914  H2  SPC   614     -5.823  19.728   7.340  1.00  0.00          H
HETATM 5915  O   SPC   617      0.874  17.556   7.572  1.00  0.00          O
HETATM 5916  H1  SPC   617      0.243  18.283   7.259  1.00  0.00          H
HETATM 5917  H2  SPC   617      1.201  17.041   6.774  1.00  0.00          H
HETATM 5918  O   SPC   625      8.226  11.877  17.211  1.00  0.00          O
HETATM 5919  H1  SPC   625      7.412  12.445  17.038  1.00  0.00          H
HETATM 5920  H2  SPC   625      8.741  11.778  16.347  1.00  0.00          H
HETATM 5921  O   SPC   626      6.332  13.940  16.674  1.00  0.00          O
HETATM 5922  H1  SPC   626      6.772  14.455  15.919  1.00  0.00          H
HETATM 5923  H2  SPC   626      6.593  14.383  17.541  1.00  0.00          H
HETATM 5924  O   SPC   628     -1.657  16.573  13.313  1.00  0.00          O
HETATM 5925  H1  SPC   628     -0.668  16.398  13.415  1.00  0.00          H
HETATM 5926  H2  SPC   628     -1.832  16.810  12.343  1.00  0.00          H
HETATM 5927  O   SPC   630      1.537  15.790  15.529  1.00  0.00          O
HETATM 5928  H1  SPC   630      1.406  15.982  14.543  1.00  0.00          H
HETATM 5929  H2  SPC   630      2.527  15.852  15.742  1.00  0.00          H
HETATM 5930  O   SPC   631     -9.058  16.912  10.502  1.00  0.00          O
HETATM 5931  H1  SPC   631     -9.087  17.710  11.109  1.00  0.00          H
HETATM 5932  H2  SPC   631     -9.592  17.116   9.665  1.00  0.00          H
HETATM 5933  O   SPC   633     -3.706  16.666   9.032  1.00  0.00          O
HETATM 5934  H1  SPC   633     -4.709  16.632   9.145  1.00  0.00          H
HETATM 5935  H2  SPC   633     -3.494  17.186   8.191  1.00  0.00          H
HETATM 5936  O   SPC   634      1.517   9.355  15.319  1.00  0.00          O
HETATM 5937  H1  SPC   634      1.466   9.685  14.363  1.00  0.00          H
HETATM 5938  H2  SPC   634      1.763  10.134  15.912  1.00  0.00          H
HETATM 5939  O   SPC   639      7.790  15.928  18.140  1.00  0.00          O
HETATM 5940  H1  SPC   639      7.481  16.652  18.760  1.00  0.00          H
HETATM 5941  H2  SPC   639      8.331  16.347  17.394  1.00  0.00          H
HETATM 5942  O   SPC   641     -0.185  13.181  11.209  1.00  0.00          O
HETATM 5943  H1  SPC   641     -0.513  12.239  11.046  1.00  0.00          H
HETATM 5944  H2  SPC   641     -0.791  13.819  10.709  1.00  0.00          H
HETATM 5945  O   SPC   642     -7.187  14.314  13.775  1.00  0.00          O
HETATM 5946  H1  SPC   642     -7.182  14.394  14.782  1.00  0.00          H
HETATM 5947  H2  SPC   642     -8.079  13.933  13.486  1.00  0.00          H
HETATM 5948  O   SPC   643     -2.203  14.359  15.103  1.00  0.00          O
HETATM 5949  H1  SPC   643     -2.269  15.204  14.557  1.00  0.00          H
HETATM 5950  H2  SPC   643     -1.534  13.745  14.656  1.00  0.00          H
HETATM 5951  O   SPC   646     -4.516  13.402  16.454  1.00  0.00          O
HETATM 5952  H1  SPC   646     -3.689  13.718  15.968  1.00  0.00          H
HETATM 5953  H2  SPC   646     -4.318  12.510  16.889  1.00  0.00          H
HETATM 5954  O   SPC   647     -0.168  12.954  13.921  1.00  0.00          O
HETATM 5955  H1  SPC   647      0.784  12.913  14.256  1.00  0.00          H
HETATM 5956  H2  SPC   647     -0.152  13.106  12.920  1.00  0.00          H
HETATM 5957  O   SPC   648      2.958  15.052   9.726  1.00  0.00          O
HETATM 5958  H1  SPC   648      2.082  15.528   9.898  1.00  0.00          H
HETATM 5959  H2  SPC   648      2.890  14.116  10.092  1.00  0.00          H
HETATM 5960  O   SPC   649     -3.991  10.972  17.652  1.00  0.00          O
HETATM 5961  H1  SPC   649     -3.008  10.760  17.576  1.00  0.00          H
HETATM 5962  H2  SPC   649     -4.472  10.152  17.982  1.00  0.00          H
HETATM 5963  O   SPC   651      3.553  19.199  14.929  1.00  0.00          O
HETATM 5964  H1  SPC   651      3.130  19.085  14.016  1.00  0.00          H
HETATM 5965  H2  SPC   651      4.366  18.604  14.976  1.00  0.00          H
HETATM 5966  O   SPC   658      0.603  22.447  10.138  1.00  0.00          O
HETATM 5967  H1  SPC   658     -0.237  22.339   9.585  1.00  0.00          H
HETATM 5968  H2  SPC   658      1.279  22.966   9.594  1.00  0.00          H
HETATM 5969  O   SPC   666     -7.864  16.899   7.182  1.00  0.00          O
HETATM 5970  H1  SPC   666     -8.804  16.975   7.550  1.00  0.00          H
HETATM 5971  H2  SPC   666     -7.245  16.624   7.933  1.00  0.00          H
HETATM 5972  O   SPC   670     -1.690  21.777   8.738  1.00  0.00          O
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HETATM 5973  H1  SPC   670      -2.336  22.389   8.262  1.00  0.00          H
HETATM 5974  H2  SPC   670      -2.225  21.135   9.313  1.00  0.00          H
HETATM 5975  O   SPC   676      -6.119   8.986  14.164  1.00  0.00          O
HETATM 5976  H1  SPC   676      -5.154   8.742  14.351  1.00  0.00          H
HETATM 5977  H2  SPC   676      -6.164   9.976  13.962  1.00  0.00          H
HETATM 5978  O   SPC   679      -4.349  17.441  13.070  1.00  0.00          O
HETATM 5979  H1  SPC   679      -4.850  16.686  12.621  1.00  0.00          H
HETATM 5980  H2  SPC   679      -3.458  17.094  13.381  1.00  0.00          H
HETATM 5981  O   SPC   686       1.786  19.508   9.233  1.00  0.00          O
HETATM 5982  H1  SPC   686       1.458  18.778   8.614  1.00  0.00          H
HETATM 5983  H2  SPC   686       1.068  19.683   9.924  1.00  0.00          H
HETATM 5984  O   SPC   687       2.370  11.236  17.137  1.00  0.00          O
HETATM 5985  H1  SPC   687       3.060  10.615  17.534  1.00  0.00          H
HETATM 5986  H2  SPC   687       1.687  11.470  17.846  1.00  0.00          H
HETATM 5987  O   SPC   688      -5.725  22.541   8.722  1.00  0.00          O
HETATM 5988  H1  SPC   688      -6.548  23.008   8.371  1.00  0.00          H
HETATM 5989  H2  SPC   688      -4.906  23.011   8.358  1.00  0.00          H
HETATM 5990  O   SPC   691       0.614  16.404  10.079  1.00  0.00          O
HETATM 5991  H1  SPC   691      -0.301  16.699  10.393  1.00  0.00          H
HETATM 5992  H2  SPC   691       0.741  16.736   9.133  1.00  0.00          H
HETATM 5993  O   SPC   692      -1.344  10.283  17.285  1.00  0.00          O
HETATM 5994  H1  SPC   692      -1.379  10.505  16.297  1.00  0.00          H
HETATM 5995  H2  SPC   692      -0.705  10.921  17.738  1.00  0.00          H
HETATM 5996  O   SPC   693      -8.066  11.535  16.170  1.00  0.00          O
HETATM 5997  H1  SPC   693      -7.867  12.489  16.436  1.00  0.00          H
HETATM 5998  H2  SPC   693      -9.012  11.480  15.822  1.00  0.00          H
HETATM 5999  O   SPC   697       7.469  24.561  12.013  1.00  0.00          O
HETATM 6000  H1  SPC   697       7.729  23.665  12.400  1.00  0.00          H
HETATM 6001  H2  SPC   697       6.505  24.517  11.714  1.00  0.00          H
HETATM 6002  O   SPC   698      -5.559  15.313  11.880  1.00  0.00          O
HETATM 6003  H1  SPC   698      -6.207  15.021  12.602  1.00  0.00          H
HETATM 6004  H2  SPC   698      -5.036  14.500  11.576  1.00  0.00          H
HETATM 6005  O   SPC   703       5.081  16.563  11.985  1.00  0.00          O
HETATM 6006  H1  SPC   703       4.818  15.587  11.978  1.00  0.00          H
HETATM 6007  H2  SPC   703       4.580  17.036  11.244  1.00  0.00          H
HETATM 6008  O   SPC   706      -1.782  17.514  10.788  1.00  0.00          O
HETATM 6009  H1  SPC   706      -1.575  18.498  10.708  1.00  0.00          H
HETATM 6010  H2  SPC   706      -2.577  17.305  10.198  1.00  0.00          H
HETATM 6011  O   SPC   707      -0.917  19.287  13.745  1.00  0.00          O
HETATM 6012  H1  SPC   707      -0.225  19.193  14.479  1.00  0.00          H
HETATM 6013  H2  SPC   707      -1.370  18.395  13.626  1.00  0.00          H
HETATM 6014  O   SPC   709       2.315  21.569  12.130  1.00  0.00          O
HETATM 6015  H1  SPC   709       2.624  22.385  12.638  1.00  0.00          H
HETATM 6016  H2  SPC   709       1.697  21.870  11.388  1.00  0.00          H
HETATM 6017  O   SPC   712       1.126  16.518  12.898  1.00  0.00          O
HETATM 6018  H1  SPC   712       0.996  16.194  11.951  1.00  0.00          H
HETATM 6019  H2  SPC   712       1.594  17.414  12.858  1.00  0.00          H
HETATM 6020  O   SPC  1025       7.491  20.551 -14.027  1.00  0.00          O
HETATM 6021  H1  SPC  1025       8.206  19.841 -14.073  1.00  0.00          H
HETATM 6022  H2  SPC  1025       6.921  20.488 -14.854  1.00  0.00          H
HETATM 6023  O   SPC  1030       1.606  24.773  -9.736  1.00  0.00          O
HETATM 6024  H1  SPC  1030       1.142  24.982 -10.601  1.00  0.00          H
HETATM 6025  H2  SPC  1030       2.060  23.880  -9.822  1.00  0.00          H
HETATM 6026  O   SPC  1049       3.890  18.232 -16.044  1.00  0.00          O
HETATM 6027  H1  SPC  1049       4.668  18.868 -16.111  1.00  0.00          H
HETATM 6028  H2  SPC  1049       3.035  18.763 -16.174  1.00  0.00          H
HETATM 6029  O   SPC  1052       4.436  21.623 -12.265  1.00  0.00          O
HETATM 6030  H1  SPC  1052       3.629  21.021 -12.248  1.00  0.00          H
HETATM 6031  H2  SPC  1052       4.766  21.697 -13.209  1.00  0.00          H
HETATM 6032  O   SPC  1058       6.014  20.112 -16.448  1.00  0.00          O
HETATM 6033  H1  SPC  1058       5.649  20.740 -17.140  1.00  0.00          H
HETATM 6034  H2  SPC  1058       6.920  19.779 -16.754  1.00  0.00          H
HETATM 6035  O   SPC  1061       3.097  15.596 -15.598  1.00  0.00          O
HETATM 6036  H1  SPC  1061       3.399  16.562 -15.583  1.00  0.00          H
HETATM 6037  H2  SPC  1061       2.617  15.432 -16.462  1.00  0.00          H
HETATM 6038  O   SPC  1083       8.060   8.776 -14.265  1.00  0.00          O
HETATM 6039  H1  SPC  1083       8.479   8.044 -13.715  1.00  0.00          H
HETATM 6040  H2  SPC  1083       8.722   9.541 -14.322  1.00  0.00          H
HETATM 6041  O   SPC  1095       0.028  22.078 -12.569  1.00  0.00          O
HETATM 6042  H1  SPC  1095       0.850  21.508 -12.671  1.00  0.00          H
HETATM 6043  H2  SPC  1095      -0.293  22.343 -13.492  1.00  0.00          H
HETATM 6044  O   SPC  1096       9.177  15.085 -17.083  1.00  0.00          O
HETATM 6045  H1  SPC  1096       8.341  15.583 -17.355  1.00  0.00          H
HETATM 6046  H2  SPC  1096       9.890  15.759 -16.846  1.00  0.00          H
HETATM 6047  O   SPC  1097       7.036  16.780 -17.540  1.00  0.00          O
HETATM 6048  H1  SPC  1097       6.061  17.005 -17.487  1.00  0.00          H
HETATM 6049  H2  SPC  1097       7.574  17.625 -17.413  1.00  0.00          H
HETATM 6050  O   SPC  1101      -0.873   9.729 -19.118  1.00  0.00          O
HETATM 6051  H1  SPC  1101      -1.083   8.772 -18.858  1.00  0.00          H
HETATM 6052  H2  SPC  1101      -1.738  10.226 -19.203  1.00  0.00          H
HETATM 6053  O   SPC  1102       8.488  19.064 -16.940  1.00  0.00          O
HETATM 6054  H1  SPC  1102       8.685  18.771 -15.987  1.00  0.00          H
HETATM 6055  H2  SPC  1102       9.361  19.341 -17.362  1.00  0.00          H
HETATM 6056  O   SPC  1109       7.161  21.714 -11.564  1.00  0.00          O
HETATM 6057  H1  SPC  1109       7.434  21.306 -12.449  1.00  0.00          H
HETATM 6058  H2  SPC  1109       6.156  21.772 -11.542  1.00  0.00          H
HETATM 6059  O   SPC  1111       1.770  19.865 -16.382  1.00  0.00          O
HETATM 6060  H1  SPC  1111       1.598  20.747 -15.940  1.00  0.00          H
HETATM 6061  H2  SPC  1111       1.243  19.860 -17.253  1.00  0.00          H
HETATM 6062  O   SPC  1113      -2.044  23.726 -11.564  1.00  0.00          O
HETATM 6063  H1  SPC  1113      -1.272  23.184 -11.924  1.00  0.00          H
HETATM 6064  H2  SPC  1113      -2.810  23.668 -12.215  1.00  0.00          H
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HETATM 6065  O   SPC  1128      4.262  25.349  -8.988  1.00  0.00           O
HETATM 6066  H1  SPC  1128      3.281  25.422  -9.205  1.00  0.00           H
HETATM 6067  H2  SPC  1128      4.538  26.143  -8.433  1.00  0.00           H
HETATM 6068  O   SPC  1147     -0.552  27.381   0.601  1.00  0.00           O
HETATM 6069  H1  SPC  1147     -1.074  26.568   0.906  1.00  0.00           H
HETATM 6070  H2  SPC  1147     -1.175  28.165   0.557  1.00  0.00           H
HETATM 6071  O   SPC  1155      5.496  25.677  -1.579  1.00  0.00           O
HETATM 6072  H1  SPC  1155      5.614  26.093  -0.671  1.00  0.00           H
HETATM 6073  H2  SPC  1155      5.452  26.423  -2.266  1.00  0.00           H
HETATM 6074  O   SPC  1178      3.719  28.344  -5.574  1.00  0.00           O
HETATM 6075  H1  SPC  1178      4.366  27.847  -6.174  1.00  0.00           H
HETATM 6076  H2  SPC  1178      3.528  29.239  -5.983  1.00  0.00           H
HETATM 6077  O   SPC  1184      5.647  25.953   3.948  1.00  0.00           O
HETATM 6078  H1  SPC  1184      5.311  25.133   3.462  1.00  0.00           H
HETATM 6079  H2  SPC  1184      5.036  26.125   4.736  1.00  0.00           H
HETATM 6080  O   SPC  1190      6.332  27.503   7.973  1.00  0.00           O
HETATM 6081  H1  SPC  1190      6.519  27.744   7.009  1.00  0.00           H
HETATM 6082  H2  SPC  1190      7.102  27.829   8.539  1.00  0.00           H
HETATM 6083  O   SPC  1196      1.775  27.265  -3.880  1.00  0.00           O
HETATM 6084  H1  SPC  1196      2.417  27.721  -4.513  1.00  0.00           H
HETATM 6085  H2  SPC  1196      0.995  26.904  -4.413  1.00  0.00           H
HETATM 6086  O   SPC  1211      9.158  30.643  -0.068  1.00  0.00           O
HETATM 6087  H1  SPC  1211      8.594  29.887  -0.431  1.00  0.00           H
HETATM 6088  H2  SPC  1211      8.668  31.061   0.707  1.00  0.00           H
HETATM 6089  O   SPC  1220      7.727  31.455   2.165  1.00  0.00           O
HETATM 6090  H1  SPC  1220      7.141  32.269   2.162  1.00  0.00           H
HETATM 6091  H2  SPC  1220      7.159  30.651   2.414  1.00  0.00           H
HETATM 6092  O   SPC  1223      5.213  27.705  -3.310  1.00  0.00           O
HETATM 6093  H1  SPC  1223      4.613  27.979  -4.073  1.00  0.00           H
HETATM 6094  H2  SPC  1223      6.135  28.086  -3.471  1.00  0.00           H
HETATM 6095  O   SPC  1228      6.258  29.326   2.864  1.00  0.00           O
HETATM 6096  H1  SPC  1228      5.924  28.624   2.224  1.00  0.00           H
HETATM 6097  H2  SPC  1228      6.336  28.919   3.783  1.00  0.00           H
HETATM 6098  O   SPC  1230      1.528  26.762  -1.155  1.00  0.00           O
HETATM 6099  H1  SPC  1230      1.518  27.126  -2.098  1.00  0.00           H
HETATM 6100  H2  SPC  1230      0.727  27.119  -0.653  1.00  0.00           H
HETATM 6101  O   SPC  1254      6.925  27.991   5.302  1.00  0.00           O
HETATM 6102  H1  SPC  1254      6.668  27.154   4.800  1.00  0.00           H
HETATM 6103  H2  SPC  1254      7.918  28.153   5.184  1.00  0.00           H
HETATM 6104  O   SPC  1358      8.535  28.288   9.471  1.00  0.00           O
HETATM 6105  H1  SPC  1358      8.814  27.487  10.029  1.00  0.00           H
HETATM 6106  H2  SPC  1358      8.583  29.109  10.043  1.00  0.00           H
HETATM 6107  O   SPC  3122     23.170   9.299  -2.737  1.00  0.00           O
HETATM 6108  H1  SPC  3122     23.840   8.917  -3.377  1.00  0.00           H
HETATM 6109  H2  SPC  3122     23.048   8.644  -1.968  1.00  0.00           H
HETATM 6110  O   SPC  3135     23.425  11.288   0.839  1.00  0.00           O
HETATM 6111  H1  SPC  3135     23.036  11.500  -0.067  1.00  0.00           H
HETATM 6112  H2  SPC  3135     23.611  10.298   0.890  1.00  0.00           H
HETATM 6113  O   SPC  3137     20.462   8.928  -3.228  1.00  0.00           O
HETATM 6114  H1  SPC  3137     20.172   9.369  -4.089  1.00  0.00           H
HETATM 6115  H2  SPC  3137     21.449   9.087  -3.097  1.00  0.00           H
HETATM 6116  O   SPC  3144     24.191   8.634   1.433  1.00  0.00           O
HETATM 6117  H1  SPC  3144     24.009   8.702   2.429  1.00  0.00           H
HETATM 6118  H2  SPC  3144     25.119   8.280   1.306  1.00  0.00           H
HETATM 6119  O   SPC  3156     22.886   7.616  -0.717  1.00  0.00           O
HETATM 6120  H1  SPC  3156     23.290   7.951   0.146  1.00  0.00           H
HETATM 6121  H2  SPC  3156     22.374   6.766  -0.523  1.00  0.00           H
HETATM 6122  O   SPC  3162     23.960   8.997   4.080  1.00  0.00           O
HETATM 6123  H1  SPC  3162     24.101   9.996   4.023  1.00  0.00           H
HETATM 6124  H2  SPC  3162     23.851   8.735   5.048  1.00  0.00           H
HETATM 6125  O   SPC  3189     10.845   7.597  17.458  1.00  0.00           O
HETATM 6126  H1  SPC  3189     10.527   6.689  17.770  1.00  0.00           H
HETATM 6127  H2  SPC  3189     10.063   8.239  17.511  1.00  0.00           H
HETATM 6128  O   SPC  3194     13.261   8.814  17.402  1.00  0.00           O
HETATM 6129  H1  SPC  3194     12.408   8.271  17.312  1.00  0.00           H
HETATM 6130  H2  SPC  3194     13.364   9.076  18.364  1.00  0.00           H
HETATM 6131  O   SPC  3212      9.599   5.227  18.180  1.00  0.00           O
HETATM 6132  H1  SPC  3212      8.936   5.005  17.454  1.00  0.00           H
HETATM 6133  H2  SPC  3212      9.398   4.668  18.986  1.00  0.00           H
HETATM 6134  O   SPC  3266      8.621   9.154  17.659  1.00  0.00           O
HETATM 6135  H1  SPC  3266      7.814   8.714  18.077  1.00  0.00           H
HETATM 6136  H2  SPC  3266      8.453  10.148  17.604  1.00  0.00           H
HETATM 6137  O   SPC  3271     15.899   8.696  16.440  1.00  0.00           O
HETATM 6138  H1  SPC  3271     16.256   9.642  16.377  1.00  0.00           H
HETATM 6139  H2  SPC  3271     14.938   8.737  16.753  1.00  0.00           H
HETATM 6140  O   SPC  3671     16.131   8.349 -15.218  1.00  0.00           O
HETATM 6141  H1  SPC  3671     15.346   7.772 -14.944  1.00  0.00           H
HETATM 6142  H2  SPC  3671     16.436   8.888 -14.419  1.00  0.00           H
HETATM 6143  O   SPC  3690     12.442  10.265 -12.940  1.00  0.00           O
HETATM 6144  H1  SPC  3690     13.221  10.666 -13.441  1.00  0.00           H
HETATM 6145  H2  SPC  3690     12.793   9.895 -12.058  1.00  0.00           H
HETATM 6146  O   SPC  3693     18.920   8.222 -12.002  1.00  0.00           O
HETATM 6147  H1  SPC  3693     18.967   7.919 -11.041  1.00  0.00           H
HETATM 6148  H2  SPC  3693     19.040   7.413 -12.598  1.00  0.00           H
HETATM 6149  O   SPC  3704     18.961   6.016 -13.586  1.00  0.00           O
HETATM 6150  H1  SPC  3704     18.773   6.266 -14.545  1.00  0.00           H
HETATM 6151  H2  SPC  3704     18.377   5.239 -13.337  1.00  0.00           H
HETATM 6152  O   SPC  3725     16.405   4.834 -14.637  1.00  0.00           O
HETATM 6153  H1  SPC  3725     15.680   5.485 -14.375  1.00  0.00           H
HETATM 6154  H2  SPC  3725     17.039   5.300 -15.268  1.00  0.00           H
HETATM 6155  O   SPC  3734     14.183   6.493 -14.608  1.00  0.00           O
HETATM 6156  H1  SPC  3734     13.359   6.939 -14.217  1.00  0.00           H
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HETATM 6157  H2  SPC  3734      13.886   5.682 -15.131  1.00  0.00           H
HETATM 6158  O   SPC  3757      18.816   4.413  -9.068  1.00  0.00           O
HETATM 6159  H1  SPC  3757      19.066   3.627  -8.471  1.00  0.00           H
HETATM 6160  H2  SPC  3757      17.934   4.209  -9.506  1.00  0.00           H
HETATM 6161  O   SPC  3761      19.259   7.156  -9.398  1.00  0.00           O
HETATM 6162  H1  SPC  3761      18.981   6.189  -9.278  1.00  0.00           H
HETATM 6163  H2  SPC  3761      20.256   7.208  -9.318  1.00  0.00           H
HETATM 6164  O   SPC  3778      14.004   3.930 -15.687  1.00  0.00           O
HETATM 6165  H1  SPC  3778      13.576   3.096 -15.335  1.00  0.00           H
HETATM 6166  H2  SPC  3778      14.963   3.966 -15.374  1.00  0.00           H
HETATM 6167  O   SPC  3781      11.959   7.668 -13.680  1.00  0.00           O
HETATM 6168  H1  SPC  3781      12.122   8.629 -13.416  1.00  0.00           H
HETATM 6169  H2  SPC  3781      11.015   7.422 -13.432  1.00  0.00           H
HETATM 6170  O   SPC  3783      17.972   6.608 -16.107  1.00  0.00           O
HETATM 6171  H1  SPC  3783      18.306   6.823 -17.026  1.00  0.00           H
HETATM 6172  H2  SPC  3783      17.305   7.322 -15.830  1.00  0.00           H
HETATM 6173  O   SPC  3785      18.600   9.577  -7.869  1.00  0.00           O
HETATM 6174  H1  SPC  3785      17.619   9.783  -7.723  1.00  0.00           H
HETATM 6175  H2  SPC  3785      18.677   8.712  -8.384  1.00  0.00           H
HETATM 6176  O   SPC  3790      17.738  22.404   1.359  1.00  0.00           O
HETATM 6177  H1  SPC  3790      18.218  21.510   1.319  1.00  0.00           H
HETATM 6178  H2  SPC  3790      17.954  22.844   2.242  1.00  0.00           H
HETATM 6179  O   SPC  3794       9.215  22.268   8.382  1.00  0.00           O
HETATM 6180  H1  SPC  3794       9.056  23.259   8.263  1.00  0.00           H
HETATM 6181  H2  SPC  3794       8.529  21.898   9.025  1.00  0.00           H
HETATM 6182  O   SPC  3796      22.439  11.782  -1.812  1.00  0.00           O
HETATM 6183  H1  SPC  3796      22.792  10.871  -2.073  1.00  0.00           H
HETATM 6184  H2  SPC  3796      21.863  12.117  -2.571  1.00  0.00           H
HETATM 6185  O   SPC  3798      18.957  19.972   1.345  1.00  0.00           O
HETATM 6186  H1  SPC  3798      19.874  19.725   1.713  1.00  0.00           H
HETATM 6187  H2  SPC  3798      18.441  19.121   1.217  1.00  0.00           H
HETATM 6188  O   SPC  3799      15.413  28.663  -0.546  1.00  0.00           O
HETATM 6189  H1  SPC  3799      14.779  29.110   0.099  1.00  0.00           H
HETATM 6190  H2  SPC  3799      15.902  27.925  -0.064  1.00  0.00           H
HETATM 6191  O   SPC  3800      13.294  22.645   8.683  1.00  0.00           O
HETATM 6192  H1  SPC  3800      12.775  22.977   7.879  1.00  0.00           H
HETATM 6193  H2  SPC  3800      14.266  22.891   8.552  1.00  0.00           H
HETATM 6194  O   SPC  3803      16.144  20.290   8.464  1.00  0.00           O
HETATM 6195  H1  SPC  3803      15.287  20.213   8.992  1.00  0.00           H
HETATM 6196  H2  SPC  3803      16.536  19.358   8.379  1.00  0.00           H
HETATM 6197  O   SPC  3808      11.248  23.613   2.660  1.00  0.00           O
HETATM 6198  H1  SPC  3808      10.591  22.851   2.515  1.00  0.00           H
HETATM 6199  H2  SPC  3808      11.704  23.803   1.778  1.00  0.00           H
HETATM 6200  O   SPC  3810      14.986  22.516   1.188  1.00  0.00           O
HETATM 6201  H1  SPC  3810      14.698  22.778   0.259  1.00  0.00           H
HETATM 6202  H2  SPC  3810      15.983  22.358   1.188  1.00  0.00           H
HETATM 6203  O   SPC  3811       8.174  21.810  -3.456  1.00  0.00           O
HETATM 6204  H1  SPC  3811       7.528  22.209  -2.788  1.00  0.00           H
HETATM 6205  H2  SPC  3811       8.954  22.438  -3.558  1.00  0.00           H
HETATM 6206  O   SPC  3812      13.711  25.630   3.277  1.00  0.00           O
HETATM 6207  H1  SPC  3812      13.637  25.791   2.280  1.00  0.00           H
HETATM 6208  H2  SPC  3812      13.952  24.659   3.430  1.00  0.00           H
HETATM 6209  O   SPC  3813      13.900  24.304  -4.000  1.00  0.00           O
HETATM 6210  H1  SPC  3813      13.948  23.372  -4.396  1.00  0.00           H
HETATM 6211  H2  SPC  3813      13.502  24.919  -4.690  1.00  0.00           H
HETATM 6212  O   SPC  3814      14.453  23.628  -1.403  1.00  0.00           O
HETATM 6213  H1  SPC  3814      15.422  23.861  -1.241  1.00  0.00           H
HETATM 6214  H2  SPC  3814      14.219  23.887  -2.355  1.00  0.00           H
HETATM 6215  O   SPC  3815      16.096  10.619  -7.447  1.00  0.00           O
HETATM 6216  H1  SPC  3815      16.224  11.596  -7.237  1.00  0.00           H
HETATM 6217  H2  SPC  3815      15.599  10.541  -8.330  1.00  0.00           H
HETATM 6218  O   SPC  3818      19.586  10.367  -5.383  1.00  0.00           O
HETATM 6219  H1  SPC  3818      19.311  10.070  -6.311  1.00  0.00           H
HETATM 6220  H2  SPC  3818      18.787  10.773  -4.925  1.00  0.00           H
HETATM 6221  O   SPC  3822      21.545  14.346  -0.837  1.00  0.00           O
HETATM 6222  H1  SPC  3822      22.167  13.582  -1.046  1.00  0.00           H
HETATM 6223  H2  SPC  3822      20.635  14.121  -1.223  1.00  0.00           H
HETATM 6224  O   SPC  3823      13.464  26.055   0.618  1.00  0.00           O
HETATM 6225  H1  SPC  3823      13.257  26.706  -0.128  1.00  0.00           H
HETATM 6226  H2  SPC  3823      12.968  25.193   0.430  1.00  0.00           H
HETATM 6227  O   SPC  3825       9.984  27.605  -6.079  1.00  0.00           O
HETATM 6228  H1  SPC  3825      10.255  28.280  -5.382  1.00  0.00           H
HETATM 6229  H2  SPC  3825       9.367  26.929  -5.647  1.00  0.00           H
HETATM 6230  O   SPC  3826      12.133  25.705  -5.750  1.00  0.00           O
HETATM 6231  H1  SPC  3826      11.636  24.887  -6.077  1.00  0.00           H
HETATM 6232  H2  SPC  3826      11.684  26.519  -6.136  1.00  0.00           H
HETATM 6233  O   SPC  3827      11.356  20.822  -4.474  1.00  0.00           O
HETATM 6234  H1  SPC  3827      11.259  20.933  -5.472  1.00  0.00           H
HETATM 6235  H2  SPC  3827      10.691  20.136  -4.154  1.00  0.00           H
HETATM 6236  O   SPC  3829      11.464  26.228  -3.163  1.00  0.00           O
HETATM 6237  H1  SPC  3829      12.156  26.591  -2.518  1.00  0.00           H
HETATM 6238  H2  SPC  3829      11.914  26.052  -4.052  1.00  0.00           H
HETATM 6239  O   SPC  3831      16.612  13.296  -6.666  1.00  0.00           O
HETATM 6240  H1  SPC  3831      17.534  13.224  -6.251  1.00  0.00           H
HETATM 6241  H2  SPC  3831      16.706  13.712  -7.585  1.00  0.00           H
HETATM 6242  O   SPC  3832      15.125  27.314   4.785  1.00  0.00           O
HETATM 6243  H1  SPC  3832      14.574  26.717   4.178  1.00  0.00           H
HETATM 6244  H2  SPC  3832      14.954  27.030   5.735  1.00  0.00           H
HETATM 6245  O   SPC  3839      12.060  23.497   6.400  1.00  0.00           O
HETATM 6246  H1  SPC  3839      12.169  22.687   5.805  1.00  0.00           H
HETATM 6247  H2  SPC  3839      11.201  23.960   6.143  1.00  0.00           H
HETATM 6248  O   SPC  3843      11.327  26.632   4.103  1.00  0.00           O
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HETATM 6249 H1 SPC 3843 12.250 26.278 3.884 1.00 0.00 H
HETATM 6250 H2 SPC 3843 10.773 25.868 4.469 1.00 0.00 H
HETATM 6251 O SPC 3845 19.127 13.645 -1.818 1.00 0.00 O
HETATM 6252 H1 SPC 3845 18.836 12.842 -2.354 1.00 0.00 H
HETATM 6253 H2 SPC 3845 18.472 14.398 -1.975 1.00 0.00 H
HETATM 6254 O SPC 3847 11.761 21.488 -7.173 1.00 0.00 O
HETATM 6255 H1 SPC 3847 11.660 21.251 -8.152 1.00 0.00 H
HETATM 6256 H2 SPC 3847 12.738 21.618 -6.975 1.00 0.00 H
HETATM 6257 O SPC 3848 12.128 23.783 0.071 1.00 0.00 O
HETATM 6258 H1 SPC 3848 12.869 23.559 -0.580 1.00 0.00 H
HETATM 6259 H2 SPC 3848 11.248 23.802 -0.427 1.00 0.00 H
HETATM 6260 O SPC 3850 16.405 17.740 -6.266 1.00 0.00 O
HETATM 6261 H1 SPC 3850 15.961 18.645 -6.237 1.00 0.00 H
HETATM 6262 H2 SPC 3850 16.413 17.424 -7.228 1.00 0.00 H
HETATM 6263 O SPC 3851 18.352 23.883 3.691 1.00 0.00 O
HETATM 6264 H1 SPC 3851 19.341 23.991 3.804 1.00 0.00 H
HETATM 6265 H2 SPC 3851 17.947 24.792 3.491 1.00 0.00 H
HETATM 6266 O SPC 3853 9.919 24.059 -3.763 1.00 0.00 O
HETATM 6267 H1 SPC 3853 10.576 24.779 -3.488 1.00 0.00 H
HETATM 6268 H2 SPC 3853 10.151 23.758 -4.702 1.00 0.00 H
HETATM 6269 O SPC 3855 16.235 23.755 5.567 1.00 0.00 O
HETATM 6270 H1 SPC 3855 17.111 23.806 5.070 1.00 0.00 H
HETATM 6271 H2 SPC 3855 15.527 23.433 4.916 1.00 0.00 H
HETATM 6272 O SPC 3858 21.246 12.276 -4.329 1.00 0.00 O
HETATM 6273 H1 SPC 3858 20.683 11.512 -4.683 1.00 0.00 H
HETATM 6274 H2 SPC 3858 21.993 12.448 -4.974 1.00 0.00 H
HETATM 6275 O SPC 3859 17.617 15.865 -2.240 1.00 0.00 O
HETATM 6276 H1 SPC 3859 17.230 15.700 -3.164 1.00 0.00 H
HETATM 6277 H2 SPC 3859 18.218 16.665 -2.288 1.00 0.00 H
HETATM 6278 O SPC 3860 24.348 11.641 3.388 1.00 0.00 O
HETATM 6279 H1 SPC 3860 23.954 11.564 2.458 1.00 0.00 H
HETATM 6280 H2 SPC 3860 24.978 12.418 3.407 1.00 0.00 H
HETATM 6281 O SPC 3862 9.645 24.205 -1.019 1.00 0.00 O
HETATM 6282 H1 SPC 3862 9.643 25.185 -0.773 1.00 0.00 H
HETATM 6283 H2 SPC 3862 9.617 24.119 -2.025 1.00 0.00 H
HETATM 6284 O SPC 3863 14.411 22.991 3.742 1.00 0.00 O
HETATM 6285 H1 SPC 3863 13.723 22.323 4.058 1.00 0.00 H
HETATM 6286 H2 SPC 3863 14.641 22.777 2.776 1.00 0.00 H
HETATM 6287 O SPC 3864 18.895 13.505 -5.233 1.00 0.00 O
HETATM 6288 H1 SPC 3864 19.751 13.221 -4.784 1.00 0.00 H
HETATM 6289 H2 SPC 3864 18.612 14.398 -4.870 1.00 0.00 H
HETATM 6290 O SPC 3870 12.113 21.662 4.383 1.00 0.00 O
HETATM 6291 H1 SPC 3870 11.887 22.471 3.820 1.00 0.00 H
HETATM 6292 H2 SPC 3870 11.718 20.850 3.925 1.00 0.00 H
HETATM 6293 O SPC 3872 15.980 22.936 8.176 1.00 0.00 O
HETATM 6294 H1 SPC 3872 16.176 23.285 7.247 1.00 0.00 H
HETATM 6295 H2 SPC 3872 16.157 21.937 8.186 1.00 0.00 H
HETATM 6296 O SPC 3873 13.072 27.694 -1.557 1.00 0.00 O
HETATM 6297 H1 SPC 3873 14.031 28.005 -1.464 1.00 0.00 H
HETATM 6298 H2 SPC 3873 12.468 28.496 -1.439 1.00 0.00 H
HETATM 6299 O SPC 3874 12.361 26.209 8.610 1.00 0.00 O
HETATM 6300 H1 SPC 3874 11.616 26.679 8.117 1.00 0.00 H
HETATM 6301 H2 SPC 3874 13.104 26.006 7.957 1.00 0.00 H
HETATM 6302 O SPC 3876 14.142 25.322 6.653 1.00 0.00 O
HETATM 6303 H1 SPC 3876 13.369 24.694 6.483 1.00 0.00 H
HETATM 6304 H2 SPC 3876 14.993 24.866 6.363 1.00 0.00 H
HETATM 6305 O SPC 3877 7.748 21.103 10.381 1.00 0.00 O
HETATM 6306 H1 SPC 3877 7.585 20.134 10.622 1.00 0.00 H
HETATM 6307 H2 SPC 3877 7.990 21.596 11.230 1.00 0.00 H
HETATM 6308 O SPC 3879 8.920 24.993 8.299 1.00 0.00 O
HETATM 6309 H1 SPC 3879 8.972 25.320 9.253 1.00 0.00 H
HETATM 6310 H2 SPC 3879 9.408 25.658 7.716 1.00 0.00 H
HETATM 6311 O SPC 3881 9.514 26.690 0.225 1.00 0.00 O
HETATM 6312 H1 SPC 3881 8.895 26.322 0.935 1.00 0.00 H
HETATM 6313 H2 SPC 3881 10.222 27.250 0.682 1.00 0.00 H
HETATM 6314 O SPC 3883 16.175 26.274 0.710 1.00 0.00 O
HETATM 6315 H1 SPC 3883 16.586 25.529 0.165 1.00 0.00 H
HETATM 6316 H2 SPC 3883 15.171 26.154 0.708 1.00 0.00 H
HETATM 6317 O SPC 3888 10.392 23.686 -6.430 1.00 0.00 O
HETATM 6318 H1 SPC 3888 9.693 23.928 -7.122 1.00 0.00 H
HETATM 6319 H2 SPC 3888 10.869 22.847 -6.738 1.00 0.00 H
HETATM 6320 O SPC 3890 16.938 15.541 -4.815 1.00 0.00 O
HETATM 6321 H1 SPC 3890 16.600 14.782 -5.385 1.00 0.00 H
HETATM 6322 H2 SPC 3890 16.757 16.411 -5.306 1.00 0.00 H
HETATM 6323 O SPC 3891 17.118 24.078 -0.701 1.00 0.00 O
HETATM 6324 H1 SPC 3891 17.824 24.060 -1.413 1.00 0.00 H
HETATM 6325 H2 SPC 3891 17.396 23.453 0.046 1.00 0.00 H
HETATM 6326 O SPC 3895 13.835 21.858 -5.085 1.00 0.00 O
HETATM 6327 H1 SPC 3895 13.004 21.398 -4.738 1.00 0.00 H
HETATM 6328 H2 SPC 3895 14.433 21.172 -5.526 1.00 0.00 H
HETATM 6329 O SPC 3898 9.904 24.428 4.840 1.00 0.00 O
HETATM 6330 H1 SPC 3898 10.389 24.144 3.997 1.00 0.00 H
HETATM 6331 H2 SPC 3898 8.936 24.150 4.758 1.00 0.00 H
HETATM 6332 O SPC 3899 17.240 26.279 3.238 1.00 0.00 O
HETATM 6333 H1 SPC 3899 16.893 26.361 2.292 1.00 0.00 H
HETATM 6334 H2 SPC 3899 16.585 26.725 3.861 1.00 0.00 H
HETATM 6335 O SPC 3903 13.955 20.594 12.719 1.00 0.00 O
HETATM 6336 H1 SPC 3903 13.922 21.603 12.752 1.00 0.00 H
HETATM 6337 H2 SPC 3903 13.187 20.227 13.265 1.00 0.00 H
HETATM 6338 O SPC 3911 9.359 19.527 15.239 1.00 0.00 O
HETATM 6339 H1 SPC 3911 8.427 19.667 14.878 1.00 0.00 H
HETATM 6340 H2 SPC 3911 9.727 20.428 15.524 1.00 0.00 H

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HETATM 6341  O   SPC  3923       9.465  16.920  16.163  1.00  0.00           O
HETATM 6342  H1  SPC  3923       9.528  17.886  15.868  1.00  0.00           H
HETATM 6343  H2  SPC  3923      10.394  16.582  16.373  1.00  0.00           H
HETATM 6344  O   SPC  3942       8.331  22.104  12.867  1.00  0.00           O
HETATM 6345  H1  SPC  3942       7.934  21.438  13.511  1.00  0.00           H
HETATM 6346  H2  SPC  3942       9.309  22.227  13.086  1.00  0.00           H
HETATM 6347  O   SPC  3960       9.306  26.084  10.811  1.00  0.00           O
HETATM 6348  H1  SPC  3960      10.232  25.745  11.032  1.00  0.00           H
HETATM 6349  H2  SPC  3960       8.630  25.566  11.365  1.00  0.00           H
HETATM 6350  O   SPC  3961      11.807  24.850  10.871  1.00  0.00           O
HETATM 6351  H1  SPC  3961      11.531  23.943  10.535  1.00  0.00           H
HETATM 6352  H2  SPC  3961      12.107  25.409  10.078  1.00  0.00           H
HETATM 6353  O   SPC  3963      13.867  20.288   9.967  1.00  0.00           O
HETATM 6354  H1  SPC  3963      13.629  21.150   9.496  1.00  0.00           H
HETATM 6355  H2  SPC  3963      13.962  20.472  10.955  1.00  0.00           H
HETATM 6356  O   SPC  3965      13.663  23.377  12.378  1.00  0.00           O
HETATM 6357  H1  SPC  3965      14.551  23.289  11.897  1.00  0.00           H
HETATM 6358  H2  SPC  3965      13.132  24.109  11.928  1.00  0.00           H
HETATM 6359  O   SPC  3970      18.874   9.445  14.272  1.00  0.00           O
HETATM 6360  H1  SPC  3970      19.749   9.742  14.661  1.00  0.00           H
HETATM 6361  H2  SPC  3970      19.008   9.248  13.290  1.00  0.00           H
HETATM 6362  O   SPC  3978      11.822  15.541  16.878  1.00  0.00           O
HETATM 6363  H1  SPC  3978      12.492  14.876  16.510  1.00  0.00           H
HETATM 6364  H2  SPC  3978      11.151  15.028  17.437  1.00  0.00           H
HETATM 6365  O   SPC  3991      11.205  19.493  11.233  1.00  0.00           O
HETATM 6366  H1  SPC  3991      11.146  20.420  10.840  1.00  0.00           H
HETATM 6367  H2  SPC  3991      11.291  19.567  12.234  1.00  0.00           H
HETATM 6368  O   SPC  3992      10.359  22.004  15.540  1.00  0.00           O
HETATM 6369  H1  SPC  3992      10.732  22.163  14.614  1.00  0.00           H
HETATM 6370  H2  SPC  3992      10.560  22.803  16.111  1.00  0.00           H
HETATM 6371  O   SPC  3996      11.125  22.426  12.950  1.00  0.00           O
HETATM 6372  H1  SPC  3996      12.036  22.852  13.049  1.00  0.00           H
HETATM 6373  H2  SPC  3996      10.966  22.274  11.964  1.00  0.00           H
HETATM 6374  O   SPC  4004      15.932  16.609  14.908  1.00  0.00           O
HETATM 6375  H1  SPC  4004      16.625  17.070  15.466  1.00  0.00           H
HETATM 6376  H2  SPC  4004      15.798  17.150  14.060  1.00  0.00           H
HETATM 6377  O   SPC  4008      17.144  11.085  15.902  1.00  0.00           O
HETATM 6378  H1  SPC  4008      17.737  10.717  15.177  1.00  0.00           H
HETATM 6379  H2  SPC  4008      16.860  12.020  15.654  1.00  0.00           H
HETATM 6380  O   SPC  4015      16.279  13.839  15.607  1.00  0.00           O
HETATM 6381  H1  SPC  4015      16.598  14.029  16.538  1.00  0.00           H
HETATM 6382  H2  SPC  4015      16.145  14.719  15.129  1.00  0.00           H
HETATM 6383  O   SPC  4018      13.504  13.643  15.928  1.00  0.00           O
HETATM 6384  H1  SPC  4018      14.492  13.571  15.744  1.00  0.00           H
HETATM 6385  H2  SPC  4018      13.124  12.710  16.033  1.00  0.00           H
HETATM 6386  O   SPC  4019      12.398  11.167  16.149  1.00  0.00           O
HETATM 6387  H1  SPC  4019      12.693  10.292  16.555  1.00  0.00           H
HETATM 6388  H2  SPC  4019      11.406  11.136  15.993  1.00  0.00           H
HETATM 6389  O   SPC  4040      15.905  22.861  10.933  1.00  0.00           O
HETATM 6390  H1  SPC  4040      15.961  23.092   9.951  1.00  0.00           H
HETATM 6391  H2  SPC  4040      16.556  22.124  11.124  1.00  0.00           H
HETATM 6392  O   SPC  4047      11.864  19.307  14.023  1.00  0.00           O
HETATM 6393  H1  SPC  4047      12.434  18.715  14.615  1.00  0.00           H
HETATM 6394  H2  SPC  4047      10.949  19.389  14.441  1.00  0.00           H
HETATM 6395  O   SPC  4049      13.301  17.554  15.586  1.00  0.00           O
HETATM 6396  H1  SPC  4049      12.802  16.896  16.168  1.00  0.00           H
HETATM 6397  H2  SPC  4049      14.222  17.189  15.405  1.00  0.00           H
HETATM 6398  O   SPC  4057      11.156  22.123  10.218  1.00  0.00           O
HETATM 6399  H1  SPC  4057      10.404  22.106   9.538  1.00  0.00           H
HETATM 6400  H2  SPC  4057      12.025  22.260   9.715  1.00  0.00           H
HETATM 6401  O   SPC  4065       9.830  14.071  18.061  1.00  0.00           O
HETATM 6402  H1  SPC  4065       9.443  13.150  17.937  1.00  0.00           H
HETATM 6403  H2  SPC  4065       9.076  14.713  18.254  1.00  0.00           H
HETATM 6404  O   SPC  4072      15.593  18.313  12.840  1.00  0.00           O
HETATM 6405  H1  SPC  4072      15.140  19.215  12.842  1.00  0.00           H
HETATM 6406  H2  SPC  4072      15.720  18.020  11.876  1.00  0.00           H
HETATM 6407  O   SPC  4392       9.376  22.436 -10.100  1.00  0.00           O
HETATM 6408  H1  SPC  4392       8.576  22.171 -10.662  1.00  0.00           H
HETATM 6409  H2  SPC  4392       9.114  23.212  -9.513  1.00  0.00           H
HETATM 6410  O   SPC  4394      11.811  16.765 -12.226  1.00  0.00           O
HETATM 6411  H1  SPC  4394      11.936  16.018 -12.893  1.00  0.00           H
HETATM 6412  H2  SPC  4394      10.839  17.067 -12.275  1.00  0.00           H
HETATM 6413  O   SPC  4398      18.548  12.042  -9.315  1.00  0.00           O
HETATM 6414  H1  SPC  4398      18.755  11.195  -8.809  1.00  0.00           H
HETATM 6415  H2  SPC  4398      18.007  11.805 -10.134  1.00  0.00           H
HETATM 6416  O   SPC  4400      14.720  11.050 -14.345  1.00  0.00           O
HETATM 6417  H1  SPC  4400      14.694  10.548 -15.213  1.00  0.00           H
HETATM 6418  H2  SPC  4400      15.531  10.747 -13.828  1.00  0.00           H
HETATM 6419  O   SPC  4410      14.217  20.491  -9.012  1.00  0.00           O
HETATM 6420  H1  SPC  4410      14.660  19.986  -9.767  1.00  0.00           H
HETATM 6421  H2  SPC  4410      13.292  20.762  -9.314  1.00  0.00           H
HETATM 6422  O   SPC  4411       8.502  24.407  -8.294  1.00  0.00           O
HETATM 6423  H1  SPC  4411       8.360  25.405  -8.284  1.00  0.00           H
HETATM 6424  H2  SPC  4411       7.601  23.954  -8.387  1.00  0.00           H
HETATM 6425  O   SPC  4416      16.271  16.913  -8.856  1.00  0.00           O
HETATM 6426  H1  SPC  4416      15.418  16.907  -9.392  1.00  0.00           H
HETATM 6427  H2  SPC  4416      16.704  16.003  -8.935  1.00  0.00           H
HETATM 6428  O   SPC  4423      15.451  20.306  -6.636  1.00  0.00           O
HETATM 6429  H1  SPC  4423      16.347  20.731  -6.782  1.00  0.00           H
HETATM 6430  H2  SPC  4423      14.949  20.303  -7.519  1.00  0.00           H
HETATM 6431  O   SPC  4433      13.536  12.660  -9.547  1.00  0.00           O
HETATM 6432  H1  SPC  4433      13.143  12.659  -8.619  1.00  0.00           H
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HETATM 6433  H2  SPC  4433      13.954  11.749  -9.717  1.00  0.00          H
HETATM 6434  O   SPC  4458      12.514  19.450 -12.015  1.00  0.00          O
HETATM 6435  H1  SPC  4458      13.506  19.448 -11.834  1.00  0.00          H
HETATM 6436  H2  SPC  4458      12.202  18.492 -12.102  1.00  0.00          H
HETATM 6437  O   SPC  4466      11.272  19.613 -17.167  1.00  0.00          O
HETATM 6438  H1  SPC  4466      11.312  19.803 -16.170  1.00  0.00          H
HETATM 6439  H2  SPC  4466      11.966  20.169 -17.626  1.00  0.00          H
HETATM 6440  O   SPC  4479      11.643  14.879 -14.356  1.00  0.00          O
HETATM 6441  H1  SPC  4479      11.526  15.614 -15.039  1.00  0.00          H
HETATM 6442  H2  SPC  4479      10.894  14.212 -14.476  1.00  0.00          H
HETATM 6443  O   SPC  4481      17.053   9.898 -13.137  1.00  0.00          O
HETATM 6444  H1  SPC  4481      16.959  10.654 -12.471  1.00  0.00          H
HETATM 6445  H2  SPC  4481      17.773   9.272 -12.798  1.00  0.00          H
HETATM 6446  O   SPC  4484      10.012  10.672 -14.205  1.00  0.00          O
HETATM 6447  H1  SPC  4484      10.881  10.546 -13.705  1.00  0.00          H
HETATM 6448  H2  SPC  4484       9.974  11.617 -14.556  1.00  0.00          H
HETATM 6449  O   SPC  4485      11.680  21.039  -9.900  1.00  0.00          O
HETATM 6450  H1  SPC  4485      11.848  20.485 -10.730  1.00  0.00          H
HETATM 6451  H2  SPC  4485      10.832  21.577 -10.042  1.00  0.00          H
HETATM 6452  O   SPC  4491      14.070  13.701 -13.598  1.00  0.00          O
HETATM 6453  H1  SPC  4491      14.223  12.779 -13.980  1.00  0.00          H
HETATM 6454  H2  SPC  4491      13.193  14.060 -13.948  1.00  0.00          H
HETATM 6455  O   SPC  4519      15.056  14.109 -11.158  1.00  0.00          O
HETATM 6456  H1  SPC  4519      14.726  14.022 -12.116  1.00  0.00          H
HETATM 6457  H2  SPC  4519      14.418  13.594 -10.556  1.00  0.00          H
HETATM 6458  O   SPC  4533      14.134  16.626 -10.706  1.00  0.00          O
HETATM 6459  H1  SPC  4533      13.216  16.671 -11.129  1.00  0.00          H
HETATM 6460  H2  SPC  4533      14.509  15.700 -10.867  1.00  0.00          H
HETATM 6461  O   SPC  4538      15.145  19.068 -11.178  1.00  0.00          O
HETATM 6462  H1  SPC  4538      14.796  18.133 -10.994  1.00  0.00          H
HETATM 6463  H2  SPC  4538      16.113  19.003 -11.428  1.00  0.00          H
HETATM 6464  O   SPC  4549       8.193  27.221  -8.154  1.00  0.00          O
HETATM 6465  H1  SPC  4549       8.883  27.442  -7.447  1.00  0.00          H
HETATM 6466  H2  SPC  4549       8.485  27.623  -9.025  1.00  0.00          H
HETATM 6467  O   SPC  4562      17.019  14.301  -9.175  1.00  0.00          O
HETATM 6468  H1  SPC  4562      17.722  13.576  -9.262  1.00  0.00          H
HETATM 6469  H2  SPC  4562      16.364  14.206  -9.938  1.00  0.00          H
HETATM 6470  O   SPC  4578       9.442  13.276 -15.083  1.00  0.00          O
HETATM 6471  H1  SPC  4578       9.402  13.862 -15.908  1.00  0.00          H
HETATM 6472  H2  SPC  4578       8.521  12.900 -14.923  1.00  0.00          H
HETATM 6473  O   SPC  4583      10.917  16.984 -16.084  1.00  0.00          O
HETATM 6474  H1  SPC  4583      10.311  17.430 -15.407  1.00  0.00          H
HETATM 6475  H2  SPC  4583      11.307  17.700 -16.674  1.00  0.00          H
HETATM 6476  O   SPC  4591      11.302  19.915 -14.488  1.00  0.00          O
HETATM 6477  H1  SPC  4591      11.788  19.931 -13.604  1.00  0.00          H
HETATM 6478  H2  SPC  4591      10.464  19.354 -14.378  1.00  0.00          H
HETATM 6479  O   SPC  4593      16.620  11.806 -11.269  1.00  0.00          O
HETATM 6480  H1  SPC  4593      15.978  11.260 -10.699  1.00  0.00          H
HETATM 6481  H2  SPC  4593      16.185  12.692 -11.471  1.00  0.00          H
HETATM 6482  O   SPC  4595       9.598  28.493   4.971  1.00  0.00          O
HETATM 6483  H1  SPC  4595      10.269  27.804   4.651  1.00  0.00          H
HETATM 6484  H2  SPC  4595       9.725  29.334   4.424  1.00  0.00          H
HETATM 6485  O   SPC  4603      14.991  29.579   3.244  1.00  0.00          O
HETATM 6486  H1  SPC  4603      14.984  28.782   3.866  1.00  0.00          H
HETATM 6487  H2  SPC  4603      15.888  30.021   3.300  1.00  0.00          H
HETATM 6488  O   SPC  4655      10.121  27.350   7.419  1.00  0.00          O
HETATM 6489  H1  SPC  4655       9.970  27.831   6.543  1.00  0.00          H
HETATM 6490  H2  SPC  4655       9.575  27.809   8.134  1.00  0.00          H
HETATM 6491  O   SPC  4664      11.071  28.235   1.903  1.00  0.00          O
HETATM 6492  H1  SPC  4664      11.207  27.584   2.665  1.00  0.00          H
HETATM 6493  H2  SPC  4664      10.622  29.064   2.267  1.00  0.00          H
HETATM 6494  O   SPC  4699      13.330  29.575   1.098  1.00  0.00          O
HETATM 6495  H1  SPC  4699      13.924  29.666   1.913  1.00  0.00          H
HETATM 6496  H2  SPC  4699      12.545  28.985   1.341  1.00  0.00          H
HETATM 6497  O   SPC  4716      10.522  28.797  -3.518  1.00  0.00          O
HETATM 6498  H1  SPC  4716      10.837  27.856  -3.329  1.00  0.00          H
HETATM 6499  H2  SPC  4716      10.915  29.410  -2.819  1.00  0.00          H
HETATM 6500  O   SPC  4729      11.576  29.945  -1.109  1.00  0.00          O
HETATM 6501  H1  SPC  4729      12.274  30.089  -0.395  1.00  0.00          H
HETATM 6502  H2  SPC  4729      10.687  30.276  -0.756  1.00  0.00          H
HETATM 6503  O   SPC  4733      10.084  30.505   3.163  1.00  0.00          O
HETATM 6504  H1  SPC  4733       9.214  30.885   2.810  1.00  0.00          H
HETATM 6505  H2  SPC  4733      10.801  31.199   3.064  1.00  0.00          H
HETATM 6506  O   SPC  A25J    -18.035   6.816   8.135  1.00  0.00          O
HETATM 6507  H1  SPC  A25J    -17.774   6.467   7.221  1.00  0.00          H
HETATM 6508  H2  SPC  A25J    -18.982   7.139   8.087  1.00  0.00          H
HETATM 6509  O   SPC  A25P    -18.402  -2.799   8.155  1.00  0.00          O
HETATM 6510  H1  SPC  A25P    -17.905  -3.619   7.845  1.00  0.00          H
HETATM 6511  H2  SPC  A25P    -17.949  -2.460   8.990  1.00  0.00          H
HETATM 6512  O   SPC  A25R    -17.507   2.513   7.532  1.00  0.00          O
HETATM 6513  H1  SPC  A25R    -16.663   2.819   7.980  1.00  0.00          H
HETATM 6514  H2  SPC  A25R    -17.529   2.894   6.598  1.00  0.00          H
HETATM 6515  O   SPC  A25S    -18.877  -3.040   3.446  1.00  0.00          O
HETATM 6516  H1  SPC  A25S    -19.848  -3.132   3.220  1.00  0.00          H
HETATM 6517  H2  SPC  A25S    -18.450  -2.400   2.792  1.00  0.00          H
HETATM 6518  O   SPC  A26K    -17.032  -4.256   5.032  1.00  0.00          O
HETATM 6519  H1  SPC  A26K    -16.168  -4.144   4.531  1.00  0.00          H
HETATM 6520  H2  SPC  A26K    -17.777  -3.847   4.481  1.00  0.00          H
HETATM 6521  O   SPC  A26V    -17.802   6.063   5.485  1.00  0.00          O
HETATM 6522  H1  SPC  A26V    -18.294   6.313   4.627  1.00  0.00          H
HETATM 6523  H2  SPC  A26V    -17.525   5.095   5.411  1.00  0.00          H
HETATM 6524  O   SPC  A278    -16.608  -4.823   7.606  1.00  0.00          O
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HETATM 6525  H1  SPC  A278     -15.639  -4.609   7.794  1.00  0.00          H
HETATM 6526  H2  SPC  A278     -16.776  -4.681   6.614  1.00  0.00          H
HETATM 6527  O   SPC  A27A     -17.013   3.428   4.952  1.00  0.00          O
HETATM 6528  H1  SPC  A27A     -16.388   3.830   4.268  1.00  0.00          H
HETATM 6529  H2  SPC  A27A     -17.045   2.431   4.801  1.00  0.00          H
HETATM 6530  O   SPC  A281    -14.583   4.681  12.734  1.00  0.00          O
HETATM 6531  H1  SPC  A281    -14.414   5.669  12.603  1.00  0.00          H
HETATM 6532  H2  SPC  A281    -14.314   4.429  13.676  1.00  0.00          H
HETATM 6533  O   SPC  A287     -8.824   8.958  13.522  1.00  0.00          O
HETATM 6534  H1  SPC  A287     -7.882   8.728  13.802  1.00  0.00          H
HETATM 6535  H2  SPC  A287     -8.772   9.559  12.708  1.00  0.00          H
HETATM 6536  O   SPC  A28N    -10.675   0.809  17.207  1.00  0.00          O
HETATM 6537  H1  SPC  A28N    -11.021   0.774  18.148  1.00  0.00          H
HETATM 6538  H2  SPC  A28N     -9.672   0.675  17.230  1.00  0.00          H
HETATM 6539  O   SPC  A291     -9.306   4.803  16.166  1.00  0.00          O
HETATM 6540  H1  SPC  A291     -9.604   4.411  15.289  1.00  0.00          H
HETATM 6541  H2  SPC  A291     -8.657   4.165  16.603  1.00  0.00          H
HETATM 6542  O   SPC  A298    -13.800   3.940  15.217  1.00  0.00          O
HETATM 6543  H1  SPC  A298    -13.283   3.074  15.257  1.00  0.00          H
HETATM 6544  H2  SPC  A298    -13.169   4.701  15.442  1.00  0.00          H
HETATM 6545  O   SPC  A29N    -18.220   0.520   9.240  1.00  0.00          O
HETATM 6546  H1  SPC  A29N    -18.045   1.281   8.594  1.00  0.00          H
HETATM 6547  H2  SPC  A29N    -18.466  -0.296   8.713  1.00  0.00          H
HETATM 6548  O   SPC  A2AC    -12.173   1.675  15.030  1.00  0.00          O
HETATM 6549  H1  SPC  A2AC    -11.597   2.301  14.486  1.00  0.00          H
HETATM 6550  H2  SPC  A2AC    -11.662   1.406  15.860  1.00  0.00          H
HETATM 6551  O   SPC  A2AJ    -17.748   5.820  10.744  1.00  0.00          O
HETATM 6552  H1  SPC  A2AJ    -17.278   6.598  11.164  1.00  0.00          H
HETATM 6553  H2  SPC  A2AJ    -17.882   6.015   9.763  1.00  0.00          H
HETATM 6554  O   SPC  A2AP    -11.912   5.914  15.532  1.00  0.00          O
HETATM 6555  H1  SPC  A2AP    -11.783   6.698  14.911  1.00  0.00          H
HETATM 6556  H2  SPC  A2AP    -11.024   5.676  15.942  1.00  0.00          H
HETATM 6557  O   SPC  A2BE    -17.637   0.915  11.904  1.00  0.00          O
HETATM 6558  H1  SPC  A2BE    -17.581   1.911  12.052  1.00  0.00          H
HETATM 6559  H2  SPC  A2BE    -17.905   0.744  10.943  1.00  0.00          H
HETATM 6560  O   SPC  A2BQ    -16.245   2.580  14.928  1.00  0.00          O
HETATM 6561  H1  SPC  A2BQ    -16.723   3.003  14.148  1.00  0.00          H
HETATM 6562  H2  SPC  A2BQ    -15.449   3.151  15.169  1.00  0.00          H
HETATM 6563  O   SPC  A2BS    -17.105   3.678  12.438  1.00  0.00          O
HETATM 6564  H1  SPC  A2BS    -16.133   3.959  12.471  1.00  0.00          H
HETATM 6565  H2  SPC  A2BS    -17.598   4.336  11.852  1.00  0.00          H
HETATM 6566  O   SPC  A2BV    -16.235  -0.002  14.039  1.00  0.00          O
HETATM 6567  H1  SPC  A2BV    -16.801   0.157  13.214  1.00  0.00          H
HETATM 6568  H2  SPC  A2BV    -16.253   0.846  14.590  1.00  0.00          H
HETATM 6569  O   SPC  A2OW    -17.670   8.883   5.043  1.00  0.00          O
HETATM 6570  H1  SPC  A2OW    -18.147   8.969   4.149  1.00  0.00          H
HETATM 6571  H2  SPC  A2OW    -17.664   7.908   5.294  1.00  0.00          H
HETATM 6572  O   SPC  A2QF    -17.020  10.620   7.002  1.00  0.00          O
HETATM 6573  H1  SPC  A2QF    -17.203   9.953   6.260  1.00  0.00          H
HETATM 6574  H2  SPC  A2QF    -17.540  11.454   6.814  1.00  0.00          H
HETATM 6575  O   SPC  A2QT    -10.814  19.661   7.016  1.00  0.00          O
HETATM 6576  H1  SPC  A2QT    -10.212  20.198   7.625  1.00  0.00          H
HETATM 6577  H2  SPC  A2QT    -11.575  20.248   6.705  1.00  0.00          H
HETATM 6578  O   SPC  A2R4    -11.436   8.010  13.664  1.00  0.00          O
HETATM 6579  H1  SPC  A2R4    -10.429   8.086  13.652  1.00  0.00          H
HETATM 6580  H2  SPC  A2R4    -11.820   8.877  13.315  1.00  0.00          H
HETATM 6581  O   SPC  A2RI     -8.618  10.734  11.505  1.00  0.00          O
HETATM 6582  H1  SPC  A2RI     -9.384  11.028  10.913  1.00  0.00          H
HETATM 6583  H2  SPC  A2RI     -7.742  11.000  11.065  1.00  0.00          H
HETATM 6584  O   SPC  A2RJ    -10.876  11.761  10.421  1.00  0.00          O
HETATM 6585  H1  SPC  A2RJ    -10.745  12.762  10.449  1.00  0.00          H
HETATM 6586  H2  SPC  A2RJ    -11.694  11.554   9.864  1.00  0.00          H
HETATM 6587  O   SPC  A2RY    -16.501   8.954   9.129  1.00  0.00          O
HETATM 6588  H1  SPC  A2RY    -16.631   9.657   8.413  1.00  0.00          H
HETATM 6589  H2  SPC  A2RY    -16.957   8.107   8.823  1.00  0.00          H
HETATM 6590  O   SPC  A2S2    -14.572   9.546  10.983  1.00  0.00          O
HETATM 6591  H1  SPC  A2S2    -14.395   8.699  11.505  1.00  0.00          H
HETATM 6592  H2  SPC  A2S2    -15.359   9.380  10.367  1.00  0.00          H
HETATM 6593  O   SPC  A2S9    -10.331  14.441  10.883  1.00  0.00          O
HETATM 6594  H1  SPC  A2S9    -10.037  14.002  11.745  1.00  0.00          H
HETATM 6595  H2  SPC  A2S9     -9.800  15.293  10.764  1.00  0.00          H
HETATM 6596  O   SPC  A2T8    -12.087  15.283   8.865  1.00  0.00          O
HETATM 6597  H1  SPC  A2T8    -12.670  14.550   8.487  1.00  0.00          H
HETATM 6598  H2  SPC  A2T8    -11.591  14.924   9.667  1.00  0.00          H
HETATM 6599  O   SPC  A2TA    -10.383  10.985  14.674  1.00  0.00          O
HETATM 6600  H1  SPC  A2TA     -9.817  10.186  14.423  1.00  0.00          H
HETATM 6601  H2  SPC  A2TA    -11.291  10.873  14.253  1.00  0.00          H
HETATM 6602  O   SPC  A2TV    -12.260  10.391  12.529  1.00  0.00          O
HETATM 6603  H1  SPC  A2TV    -13.172  10.242  12.124  1.00  0.00          H
HETATM 6604  H2  SPC  A2TV    -11.687  10.877  11.856  1.00  0.00          H
HETATM 6605  O   SPC  A2UG    -13.520  13.192   7.735  1.00  0.00          O
HETATM 6606  H1  SPC  A2UG    -14.500  13.253   7.531  1.00  0.00          H
HETATM 6607  H2  SPC  A2UG    -13.351  12.327   8.235  1.00  0.00          H
HETATM 6608  O   SPC  A2UN     -9.383  12.930  13.006  1.00  0.00          O
HETATM 6609  H1  SPC  A2UN     -8.960  12.212  12.434  1.00  0.00          H
HETATM 6610  H2  SPC  A2UN     -9.888  12.473  13.750  1.00  0.00          H
HETATM 6611  O   SPC  A2V9    -10.364  17.245   8.181  1.00  0.00          O
HETATM 6612  H1  SPC  A2V9    -11.128  16.593   8.323  1.00  0.00          H
HETATM 6613  H2  SPC  A2V9    -10.724  18.081   7.740  1.00  0.00          H
HETATM 6614  O   SPC  A2W8    -13.088  10.916   9.142  1.00  0.00          O
HETATM 6615  H1  SPC  A2W8    -13.744  10.546   9.819  1.00  0.00          H
HETATM 6616  H2  SPC  A2W8    -12.672  10.139   8.653  1.00  0.00          H
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HETATM 6617 O SPC A4YB 2.469 12.604 10.995 1.00 0.00 O
HETATM 6618 H1 SPC A4YB 1.514 12.913 11.133 1.00 0.00 H
HETATM 6619 H2 SPC A4YB 2.480 11.947 10.230 1.00 0.00 H
HETATM 6620 O SPC A4YC -9.807 18.371 4.803 1.00 0.00 O
HETATM 6621 H1 SPC A4YC -10.528 17.668 4.718 1.00 0.00 H
HETATM 6622 H2 SPC A4YC -10.010 18.932 5.617 1.00 0.00 H
HETATM 6623 O SPC A4YD -9.967 7.993 -0.900 1.00 0.00 O
HETATM 6624 H1 SPC A4YD -9.875 7.078 -0.470 1.00 0.00 H
HETATM 6625 H2 SPC A4YD -10.905 8.328 -0.736 1.00 0.00 H
HETATM 6626 O SPC A4YE -0.823 8.639 8.897 1.00 0.00 O
HETATM 6627 H1 SPC A4YE -1.606 9.123 8.481 1.00 0.00 H
HETATM 6628 H2 SPC A4YE -1.164 7.801 9.239 1.00 0.00 H
HETATM 6629 O SPC A4YF -7.963 0.470 17.445 1.00 0.00 O
HETATM 6630 H1 SPC A4YF -7.141 -0.064 17.188 1.00 0.00 H
HETATM 6631 H2 SPC A4YF -7.724 1.453 17.414 1.00 0.00 H
HETATM 6632 O SPC A4YG 2.105 18.936 -3.842 1.00 0.00 O
HETATM 6633 H1 SPC A4YG 2.761 18.261 -4.200 1.00 0.00 H
HETATM 6634 H2 SPC A4YG 1.255 18.868 -4.379 1.00 0.00 H
HETATM 6635 O SPC A4YH 2.265 10.853 8.586 1.00 0.00 O
HETATM 6636 H1 SPC A4YH 2.952 11.339 8.059 1.00 0.00 H
HETATM 6637 H2 SPC A4YH 1.486 10.853 8.000 1.00 0.00 H
HETATM 6638 O SPC A4YJ 3.025 3.239 -3.143 1.00 0.00 O
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HETATM 6640 H2 SPC A4YJ 3.450 4.154 -3.118 1.00 0.00 H
HETATM 6641 O SPC A4YK -13.588 -0.497 13.965 1.00 0.00 O
HETATM 6642 H1 SPC A4YK -13.095 0.320 14.298 1.00 0.00 H
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HETATM 6644 O SPC A4YL 9.085 18.101 3.326 1.00 0.00 O
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HETATM 6646 H2 SPC A4YL 8.455 18.042 2.535 1.00 0.00 H
HETATM 6647 O SPC A4YM 4.364 16.478 7.958 1.00 0.00 O
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HETATM 6650 O SPC A4YN -12.074 5.381 5.799 1.00 0.00 O
HETATM 6651 H1 SPC A4YN -11.981 4.422 5.495 1.00 0.00 H
HETATM 6652 H2 SPC A4YN -12.030 5.985 4.999 1.00 0.00 H
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HETATM 6658 H2 SPC A4YP -4.174 9.118 10.611 1.00 0.00 H
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HETATM 6660 H1 SPC A4YQ 3.187 19.633 -2.598 1.00 0.00 H
HETATM 6661 H2 SPC A4YQ 4.696 19.347 -2.006 1.00 0.00 H
HETATM 6662 O SPC A4YS 1.520 10.400 12.821 1.00 0.00 O
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HETATM 6664 H2 SPC A4YS 2.109 11.062 12.347 1.00 0.00 H
HETATM 6665 O SPC A4YT 4.628 20.999 -8.509 1.00 0.00 O
HETATM 6666 H1 SPC A4YT 4.834 20.283 -9.190 1.00 0.00 H
HETATM 6667 H2 SPC A4YT 3.631 21.002 -8.334 1.00 0.00 H
HETATM 6668 O SPC A4YU -5.638 -0.827 16.839 1.00 0.00 O
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HETATM 6670 H2 SPC A4YU -4.704 -0.480 17.019 1.00 0.00 H
HETATM 6671 O SPC A4YV -1.065 22.509 -15.079 1.00 0.00 O
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HETATM 6673 H2 SPC A4YV -0.610 22.577 -15.988 1.00 0.00 H
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HETATM 6675 H1 SPC A4YY -12.044 5.290 10.839 1.00 0.00 H
HETATM 6676 H2 SPC A4YY -12.951 4.367 11.837 1.00 0.00 H
HETATM 6677 O SPC A4YZ 2.062 8.221 8.396 1.00 0.00 O
HETATM 6678 H1 SPC A4YZ 2.787 7.695 8.767 1.00 0.00 H
HETATM 6679 H2 SPC A4YZ 2.277 9.176 8.547 1.00 0.00 H
HETATM 6680 O SPC A4Z0 2.038 18.257 3.481 1.00 0.00 O
HETATM 6681 H1 SPC A4Z0 1.059 18.150 3.252 1.00 0.00 H
HETATM 6682 H2 SPC A4Z0 2.576 18.178 2.633 1.00 0.00 H
HETATM 6683 O SPC A4Z2 -5.097 9.325 9.193 1.00 0.00 O
HETATM 6684 H1 SPC A4Z2 -4.335 9.506 8.555 1.00 0.00 H
HETATM 6685 H2 SPC A4Z2 -5.841 8.874 8.691 1.00 0.00 H
HETATM 6686 O SPC A4Z3 7.170 18.634 1.512 1.00 0.00 O
HETATM 6687 H1 SPC A4Z3 6.795 19.559 1.386 1.00 0.00 H
HETATM 6688 H2 SPC A4Z3 7.085 18.132 0.630 1.00 0.00 H
HETATM 6689 O SPC A4Z5 -0.872 10.328 11.061 1.00 0.00 O
HETATM 6690 H1 SPC A4Z5 -1.750 10.011 11.322 1.00 0.00 H
HETATM 6691 H2 SPC A4Z5 -0.659 9.788 10.280 1.00 0.00 H
HETATM 6692 O SPC A4Z6 -13.682 7.240 12.203 1.00 0.00 O
HETATM 6693 H1 SPC A4Z6 -13.309 6.985 11.297 1.00 0.00 H
HETATM 6694 H2 SPC A4Z6 -12.910 7.366 12.842 1.00 0.00 H
HETATM 6695 O SPC A4Z7 -9.142 -1.266 19.209 1.00 0.00 O
HETATM 6696 H1 SPC A4Z7 -9.619 -1.932 18.619 1.00 0.00 H
HETATM 6697 H2 SPC A4Z7 -8.623 -0.632 18.619 1.00 0.00 H
HETATM 6698 O SPC A4Z8 5.025 20.951 -5.794 1.00 0.00 O
HETATM 6699 H1 SPC A4Z8 4.765 21.796 -5.303 1.00 0.00 H
HETATM 6700 H2 SPC A4Z8 4.823 21.067 -6.778 1.00 0.00 H
HETATM 6701 O SPC A4Z9 2.021 20.900 -7.751 1.00 0.00 O
HETATM 6702 H1 SPC A4Z9 2.039 19.923 -7.502 1.00 0.00 H
HETATM 6703 H2 SPC A4Z9 1.333 21.372 -7.181 1.00 0.00 H
HETATM 6704 O SPC A4ZA -0.958 14.619 4.423 1.00 0.00 O
HETATM 6705 H1 SPC A4ZA -0.694 13.773 4.844 1.00 0.00 H
HETATM 6706 H2 SPC A4ZA -1.883 14.699 4.690 1.00 0.00 H
HETATM 6707 O SPC A4ZB 0.104 22.364 -6.399 1.00 0.00 O
HETATM 6708 H1 SPC A4ZB -0.801 22.203 -5.969 1.00 0.00 H

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HETATM 6709  H2  SPC  A4ZB      0.033  23.196  -6.967  1.00  0.00          H
HETATM 6710  O   SPC  A4ZC    -12.655   6.630   9.775  1.00  0.00          O
HETATM 6711  H1  SPC  A4ZC    -12.214   7.399   9.294  1.00  0.00          H
HETATM 6712  H2  SPC  A4ZC    -13.257   6.153   9.119  1.00  0.00          H
HETATM 6713  C1  MMA A 901     -6.654   6.806   6.961  1.00 38.63          C
HETATM 6714  C2  MMA A 901     -6.213   7.874   5.977  1.00 39.79          C
HETATM 6715  O1  MMA A 901     -7.475   7.461   7.897  1.00 38.68          O
HETATM 6716  C3  MMA A 901     -7.414   8.348   5.172  1.00 38.55          C
HETATM 6717  C7  MMA A 901     -7.910   6.627   8.957  1.00 39.29          C
HETATM 6718  O2  MMA A 901     -5.169   7.401   5.135  1.00 42.66          O
HETATM 6719  C4  MMA A 901     -8.030   7.159   4.449  1.00 38.26          C
HETATM 6720  O3  MMA A 901     -7.086   9.424   4.336  1.00 36.39          O
HETATM 6721  C5  MMA A 901     -8.415   6.096   5.492  1.00 38.04          C
HETATM 6722  O4  MMA A 901     -9.154   7.635   3.756  1.00 36.12          O
HETATM 6723  C6  MMA A 901     -8.852   4.806   4.836  1.00 39.02          C
HETATM 6724  O5  MMA A 901     -7.296   5.743   6.325  1.00 38.49          O
HETATM 6725  O6  MMA A 901     -7.787   4.398   4.016  1.00 37.72          O
HETATM 6726  H1  MMA A 901     -5.776   6.366   7.456  1.00  0.00          H
HETATM 6727  H2  MMA A 901     -5.813   8.732   6.533  1.00  0.00          H
HETATM 6728  H3  MMA A 901     -8.143   8.740   5.890  1.00  0.00          H
HETATM 6729  H71 MMA A 901     -8.588   7.216   9.574  1.00  0.00          H
HETATM 6730  H72 MMA A 901     -8.426   5.741   8.575  1.00  0.00          H
HETATM 6731  H73 MMA A 901     -7.062   6.315   9.581  1.00  0.00          H
HETATM 6732  HO2 MMA A 901     -4.445   8.133   5.219  1.00  0.00          H
HETATM 6733  H4  MMA A 901     -7.299   6.721   3.763  1.00  0.00          H
HETATM 6734  HO3 MMA A 901     -6.328   9.211   3.762  1.00  0.00          H
HETATM 6735  H5  MMA A 901     -9.229   6.483   6.122  1.00  0.00          H
HETATM 6736  HO4 MMA A 901     -9.616   6.943   3.233  1.00  0.00          H
HETATM 6737  H61 MMA A 901     -9.086   4.069   5.616  1.00  0.00          H
HETATM 6738  H62 MMA A 901     -9.767   4.992   4.262  1.00  0.00          H
HETATM 6739  HO6 MMA A 901     -8.017   3.570   3.557  1.00  0.00          H
HETATM 6740  PB  GDP A 904     -2.427   9.362   6.176  1.00 26.19          P
HETATM 6741  O1B GDP A 904     -3.698   9.288   5.326  1.00 27.84          O
HETATM 6742  O2B GDP A 904     -1.575   8.100   6.124  1.00 26.32          O1-
HETATM 6743  O3B GDP A 904     -2.686   9.864   7.609  1.00 26.19          O1-
HETATM 6744  O3A GDP A 904     -1.637  10.572   5.404  1.00 25.44          O
HETATM 6745  PA  GDP A 904     -0.105  11.023   5.586  1.00 25.23          P
HETATM 6746  O1A GDP A 904      0.586  10.067   6.545  1.00 25.43          O
HETATM 6747  O2A GDP A 904     -0.061  12.494   5.860  1.00 26.02          O1-
HETATM 6748  O5' GDP A 904      0.458  10.858   4.088  1.00 25.21          O
HETATM 6749  C5' GDP A 904      0.626   9.587   3.487  1.00 23.27          C
HETATM 6750  C4' GDP A 904      2.081   9.438   3.005  1.00 23.57          C
HETATM 6751  O4' GDP A 904      2.341  10.486   2.074  1.00 24.01          O
HETATM 6752  C3' GDP A 904      3.140   9.574   4.103  1.00 23.80          C
HETATM 6753  O3' GDP A 904      4.225   8.711   3.806  1.00 22.36          O
HETATM 6754  C2' GDP A 904      3.615  11.017   3.985  1.00 23.31          C
HETATM 6755  O2' GDP A 904      4.972  11.061   4.390  1.00 21.65          O
HETATM 6756  C1' GDP A 904      3.410  11.283   2.488  1.00 24.11          C
HETATM 6757  N9  GDP A 904      3.047  12.709   2.211  1.00 24.67          N
HETATM 6758  C8  GDP A 904      1.850  13.355   2.426  1.00 24.89          C
HETATM 6759  N7  GDP A 904      1.844  14.615   2.084  1.00 24.52          N
HETATM 6760  C5  GDP A 904      3.124  14.830   1.593  1.00 24.90          C
HETATM 6761  C6  GDP A 904      3.726  16.034   1.098  1.00 26.54          C
HETATM 6762  O6  GDP A 904      3.239  17.170   1.084  1.00 27.33          O
HETATM 6763  N1  GDP A 904      5.028  15.822   0.647  1.00 26.79          N
HETATM 6764  C2  GDP A 904      5.703  14.615   0.750  1.00 25.66          C
HETATM 6765  N2  GDP A 904      6.975  14.617   0.358  1.00 26.54          N
HETATM 6766  N3  GDP A 904      5.168  13.513   1.243  1.00 26.00          N
HETATM 6767  C4  GDP A 904      3.868  13.667   1.649  1.00 24.67          C
HETATM 6768 H5'1 GDP A 904      0.353   8.776   4.163  1.00  0.00          H
HETATM 6769 H5'2 GDP A 904     -0.061   9.488   2.645  1.00  0.00          H
HETATM 6770  H4' GDP A 904      2.173   8.477   2.496  1.00  0.00          H
HETATM 6771  H3' GDP A 904      2.771   9.346   5.103  1.00  0.00          H
HETATM 6772  HO3 GDP A 904      4.989   9.289   3.894  1.00  0.00          H
HETATM 6773  H2' GDP A 904      2.987  11.682   4.579  1.00  0.00          H
HETATM 6774  HO2 GDP A 904      5.097  11.877   4.896  1.00  0.00          H
HETATM 6775  H1' GDP A 904      4.293  11.063   1.889  1.00  0.00          H
HETATM 6776  H8  GDP A 904      0.974  12.873   2.833  1.00  0.00          H
HETATM 6777  HN1 GDP A 904      5.526  16.615   0.222  1.00  0.00          H
HETATM 6778  HN2 GDP A 904      7.618  13.911   0.706  1.00  0.00          H
HETATM 6779  H1  GDP A 904      7.341  15.461  -0.079  1.00  0.00          H
HETATM 6780 MN1   MN A 909      0.358   7.943   7.071  1.00 24.77         Mn2+
HETATM 6781  C1  0MA   2     -4.255   5.768   4.250  0.00  0.00          C1+
HETATM 6782  C2  0MA   2     -2.930   6.400   3.825  0.00  0.00          C
HETATM 6783  O2  0MA   2     -2.036   5.356   4.119  0.00  0.00          O
HETATM 6784  C3  0MA   2     -2.915   6.821   2.338  0.00  0.00          C
HETATM 6785  O3  0MA   2     -1.583   6.715   1.885  0.00  0.00          O
HETATM 6786  C4  0MA   2     -3.875   5.979   1.507  0.00  0.00          C
HETATM 6787  O4  0MA   2     -3.993   6.475   0.204  0.00  0.00          O
HETATM 6788  C5  0MA   2     -5.251   6.116   2.147  0.00  0.00          C
HETATM 6789  O5  0MA   2     -5.177   5.444   3.449  0.00  0.00          O
HETATM 6790  C6  0MA   2     -6.442   5.544   1.402  0.00  0.00          C
HETATM 6791  O6  0MA   2     -7.483   6.472   1.525  0.00  0.00          O
HETATM 6792  H1  0MA   2     -4.245   5.204   5.177  0.00  0.00          H
HETATM 6793  H2  0MA   2     -2.721   7.265   4.459  0.00  0.00          H
HETATM 6794  H2O 0MA   2     -1.111   5.674   4.019  0.00  0.00          H
HETATM 6795  H3  0MA   2     -3.272   7.858   2.269  0.00  0.00          H
HETATM 6796  H3O 0MA   2     -1.551   7.032   0.969  0.00  0.00          H
HETATM 6797  H4  0MA   2     -3.530   4.936   1.533  0.00  0.00          H
HETATM 6798  H4O 0MA   2     -3.144   6.290  -0.286  0.00  0.00          H
HETATM 6799  H5  0MA   2     -5.456   7.175   2.352  0.00  0.00          H
HETATM 6800  H61 0MA   2     -6.702   4.581   1.855  0.00  0.00          H
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HETATM 6801  H62 0MA     2      -6.147   5.394   0.356  0.00  0.00           H
HETATM 6802  H6O 0MA     2      -8.325   6.112   1.138  0.00  0.00           H
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(h) The Cartesian coordinates (in the PDB format) of the M06-2X:OPLS2005 optimized product **3A** (**WT_Mn**).

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REMARK 888
REMARK 888 WRITTEN BY MAESTRO (A PRODUCT OF SCHRODINGER, LLC)
TITLE     3A (WT_Mn)
MODEL        1
ATOM      1  CH3 ACE A 103      -7.050 -19.296 -19.436  1.00  0.00           C
ATOM      2  C   ACE A 103      -5.969 -18.252 -19.668  1.00  0.00           C
ATOM      3  O   ACE A 103      -5.268 -18.303 -20.680  1.00  0.00           O
ATOM      4 1H   ACE A 103      -8.032 -18.821 -19.425  1.00  0.00           H
ATOM      5 2H   ACE A 103      -7.036 -20.055 -20.217  1.00  0.00           H
ATOM      6 3H   ACE A 103      -6.905 -19.781 -18.471  1.00  0.00           H
ATOM      7  N   LYS A 104      -5.834 -17.308 -18.735  1.00 36.95           N
ATOM      8  CA  LYS A 104      -4.827 -16.258 -18.711  1.00 37.33           C
ATOM      9  C   LYS A 104      -4.811 -15.656 -17.307  1.00 36.73           C
ATOM     10  O   LYS A 104      -5.645 -14.788 -17.017  1.00 37.03           O
ATOM     11  CB  LYS A 104      -5.116 -15.170 -19.783  1.00 38.20           C
ATOM     12  CG  LYS A 104      -4.011 -14.092 -19.907  1.00 40.08           C
ATOM     13  CD  LYS A 104      -4.504 -12.626 -19.876  1.00 40.86           C
ATOM     14  CE  LYS A 104      -4.397 -11.925 -18.504  1.00 41.37           C
ATOM     15  NZ  LYS A 104      -5.550 -12.172 -17.619  1.00 44.72           N1+
ATOM     16  HA  LYS A 104      -3.856 -16.713 -18.914  1.00  0.00           H
ATOM     17  HB2 LYS A 104      -5.237 -15.646 -20.757  1.00  0.00           H
ATOM     18  HB3 LYS A 104      -6.083 -14.710 -19.577  1.00  0.00           H
ATOM     19  HG2 LYS A 104      -3.225 -14.238 -19.165  1.00  0.00           H
ATOM     20  HG3 LYS A 104      -3.508 -14.260 -20.861  1.00  0.00           H
ATOM     21  HD2 LYS A 104      -3.857 -12.065 -20.551  1.00  0.00           H
ATOM     22  HD3 LYS A 104      -5.503 -12.527 -20.303  1.00  0.00           H
ATOM     23  HE2 LYS A 104      -3.473 -12.205 -18.002  1.00  0.00           H
ATOM     24  HE3 LYS A 104      -4.334 -10.847 -18.655  1.00  0.00           H
ATOM     25  HZ1 LYS A 104      -5.385 -11.698 -16.730  1.00  0.00           H
ATOM     26  HZ2 LYS A 104      -6.394 -11.771 -18.019  1.00  0.00           H
ATOM     27  HZ3 LYS A 104      -5.682 -13.168 -17.432  1.00  0.00           H
ATOM     28  H2  LYS A 104      -6.411 -17.419 -17.880  1.00  0.00           H
ATOM     29  N   THR A 105      -3.818 -15.996 -16.474  1.00 34.30           N
ATOM     30  CA  THR A 105      -3.613 -15.278 -15.221  1.00 33.23           C
ATOM     31  C   THR A 105      -2.978 -13.917 -15.569  1.00 32.56           C
ATOM     32  O   THR A 105      -2.175 -13.802 -16.499  1.00 32.13           O
ATOM     33  CB  THR A 105      -2.759 -16.088 -14.200  1.00 32.21           C
ATOM     34  OG1 THR A 105      -1.361 -15.829 -14.181  1.00 35.33           O
ATOM     35  CG2 THR A 105      -2.994 -17.606 -14.226  1.00 33.79           C
ATOM     36  H   THR A 105      -3.093 -16.635 -16.766  1.00  0.00           H
ATOM     37  HA  THR A 105      -4.596 -15.128 -14.772  1.00  0.00           H
ATOM     38  HB  THR A 105      -3.106 -15.740 -13.228  1.00  0.00           H
ATOM     39  HG1 THR A 105      -0.932 -16.212 -14.976  1.00  0.00           H
ATOM     40 HG21 THR A 105      -2.528 -18.089 -13.368  1.00  0.00           H
ATOM     41 HG22 THR A 105      -4.060 -17.835 -14.198  1.00  0.00           H
ATOM     42 HG23 THR A 105      -2.577 -18.059 -15.126  1.00  0.00           H
ATOM     43  N   THR A 106      -3.333 -12.866 -14.834  1.00 30.71           N
ATOM     44  CA  THR A 106      -2.708 -11.551 -14.964  1.00 29.71           C
ATOM     45  C   THR A 106      -1.388 -11.508 -14.147  1.00 28.38           C
ATOM     46  O   THR A 106      -0.635 -10.537 -14.237  1.00 26.84           O
ATOM     47  CB  THR A 106      -3.753 -10.483 -14.554  1.00 29.60           C
ATOM     48  OG1 THR A 106      -4.846 -10.557 -15.467  1.00 29.62           O
ATOM     49  CG2 THR A 106      -3.263  -9.030 -14.653  1.00 29.22           C
ATOM     50  H   THR A 106      -3.966 -13.047 -14.038  1.00  0.00           H
ATOM     51  HA  THR A 106      -2.426 -11.364 -16.001  1.00  0.00           H
ATOM     52  HB  THR A 106      -4.118 -10.688 -13.547  1.00  0.00           H
ATOM     53  HG1 THR A 106      -5.376  -9.768 -15.343  1.00  0.00           H
ATOM     54 HG21 THR A 106      -4.059  -8.318 -14.449  1.00  0.00           H
ATOM     55 HG22 THR A 106      -2.462  -8.816 -13.947  1.00  0.00           H
ATOM     56 HG23 THR A 106      -2.881  -8.807 -15.644  1.00  0.00           H
ATOM     57  N   MET A 107      -1.017 -12.609 -13.465  1.00 27.33           N
ATOM     58  CA  MET A 107       0.317 -12.814 -12.901  1.00 27.87           C
ATOM     59  C   MET A 107       1.348 -13.039 -14.018  1.00 27.83           C
ATOM     60  O   MET A 107       2.524 -12.760 -13.815  1.00 28.87           O
ATOM     61  CB  MET A 107       0.338 -14.052 -11.972  1.00 25.92           C
ATOM     62  CG  MET A 107       1.135 -13.846 -10.671  1.00 26.21           C
ATOM     63  SD  MET A 107       2.948 -13.750 -10.775  1.00 27.25           S
ATOM     64  CE  MET A 107       3.449 -15.197  -9.797  1.00 24.40           C
ATOM     65  H   MET A 107      -1.626 -13.415 -13.530  1.00  0.00           H
ATOM     66  HA  MET A 107       0.593 -11.922 -12.338  1.00  0.00           H
ATOM     67  HB2 MET A 107      -0.683 -14.303 -11.694  1.00  0.00           H
ATOM     68  HB3 MET A 107       0.701 -14.942 -12.491  1.00  0.00           H
ATOM     69  HG2 MET A 107       0.772 -12.956 -10.157  1.00  0.00           H
ATOM     70  HG3 MET A 107       0.914 -14.685 -10.021  1.00  0.00           H
ATOM     71  HE1 MET A 107       4.527 -15.337  -9.860  1.00  0.00           H
ATOM     72  HE2 MET A 107       3.191 -15.070  -8.747  1.00  0.00           H
ATOM     73  HE3 MET A 107       2.973 -16.105 -10.166  1.00  0.00           H
ATOM     74  N   ASP A 108       0.950 -13.510 -15.207  1.00 28.14           N
ATOM     75  CA  ASP A 108       1.877 -13.876 -16.289  1.00 28.57           C
ATOM     76  C   ASP A 108       2.482 -12.684 -17.050  1.00 28.39           C
ATOM     77  O   ASP A 108       3.250 -12.862 -17.993  1.00 28.31           O
ATOM     78  CB  ASP A 108       1.246 -14.920 -17.231  1.00 29.94           C
ATOM     79  CG  ASP A 108       1.156 -16.268 -16.526  1.00 31.66           C
ATOM     80  OD1 ASP A 108       2.245 -16.802 -16.206  1.00 31.67           O
ATOM     81  OD2 ASP A 108       0.014 -16.685 -16.224  1.00 33.98           O1-
ATOM     82  H   ASP A 108      -0.016 -13.794 -15.321  1.00  0.00           H
ATOM     83  HA  ASP A 108       2.740 -14.333 -15.820  1.00  0.00           H
ATOM     84  HB2 ASP A 108       0.260 -14.605 -17.571  1.00  0.00           H
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ATOM     85  HB3 ASP A 108       1.857 -15.067 -18.122  1.00  0.00           H
ATOM     86  N   TYR A 109       2.242 -11.461 -16.567  1.00 29.03           N
ATOM     87  CA  TYR A 109       3.049 -10.281 -16.878  1.00 29.95           C
ATOM     88  C   TYR A 109       4.190 -10.098 -15.843  1.00 29.37           C
ATOM     89  O   TYR A 109       4.974  -9.159 -15.968  1.00 30.93           O
ATOM     90  CB  TYR A 109       2.138  -9.036 -16.818  1.00 32.34           C
ATOM     91  CG  TYR A 109       0.948  -9.056 -17.770  1.00 34.77           C
ATOM     92  CD1 TYR A 109      -0.366  -8.948 -17.266  1.00 34.89           C
ATOM     93  CD2 TYR A 109       1.146  -9.203 -19.160  1.00 35.80           C
ATOM     94  CE1 TYR A 109      -1.468  -9.018 -18.141  1.00 34.99           C
ATOM     95  CE2 TYR A 109       0.043  -9.271 -20.033  1.00 35.75           C
ATOM     96  CZ  TYR A 109      -1.267  -9.192 -19.520  1.00 36.34           C
ATOM     97  OH  TYR A 109      -2.349  -9.293 -20.343  1.00 36.60           O
ATOM     98  H   TYR A 109       1.566 -11.398 -15.820  1.00  0.00           H
ATOM     99  HA  TYR A 109       3.498 -10.362 -17.869  1.00  0.00           H
ATOM    100  HB2 TYR A 109       1.774  -8.894 -15.800  1.00  0.00           H
ATOM    101  HB3 TYR A 109       2.727  -8.148 -17.052  1.00  0.00           H
ATOM    102  HD1 TYR A 109      -0.536  -8.832 -16.205  1.00  0.00           H
ATOM    103  HD2 TYR A 109       2.145  -9.290 -19.562  1.00  0.00           H
ATOM    104  HE1 TYR A 109      -2.476  -8.951 -17.763  1.00  0.00           H
ATOM    105  HE2 TYR A 109       0.213  -9.405 -21.091  1.00  0.00           H
ATOM    106  HH  TYR A 109      -2.130  -9.288 -21.263  1.00  0.00           H
ATOM    107  N   ILE A 110       4.278 -10.963 -14.819  1.00 28.23           N
ATOM    108  CA  ILE A 110       5.172 -10.894 -13.662  1.00 27.12           C
ATOM    109  C   ILE A 110       5.953 -12.212 -13.469  1.00 28.39           C
ATOM    110  O   ILE A 110       7.111 -12.144 -13.041  1.00 27.18           O
ATOM    111  CB  ILE A 110       4.389 -10.462 -12.381  1.00 26.29           C
ATOM    112  CG1 ILE A 110       3.599  -9.145 -12.561  1.00 26.10           C
ATOM    113  CG2 ILE A 110       5.284 -10.361 -11.129  1.00 24.77           C
ATOM    114  CD1 ILE A 110       2.114  -9.359 -12.888  1.00 26.96           C
ATOM    115  H   ILE A 110       3.565 -11.686 -14.763  1.00  0.00           H
ATOM    116  HA  ILE A 110       5.927 -10.129 -13.857  1.00  0.00           H
ATOM    117  HB  ILE A 110       3.668 -11.245 -12.146  1.00  0.00           H
ATOM    118 HG12 ILE A 110       3.645  -8.572 -11.638  1.00  0.00           H
ATOM    119 HG13 ILE A 110       4.070  -8.515 -13.316  1.00  0.00           H
ATOM    120 HG21 ILE A 110       4.716 -10.028 -10.260  1.00  0.00           H
ATOM    121 HG22 ILE A 110       5.715 -11.323 -10.857  1.00  0.00           H
ATOM    122 HG23 ILE A 110       6.101  -9.657 -11.285  1.00  0.00           H
ATOM    123 HD11 ILE A 110       1.611  -8.419 -13.112  1.00  0.00           H
ATOM    124 HD12 ILE A 110       1.977 -10.009 -13.749  1.00  0.00           H
ATOM    125 HD13 ILE A 110       1.593  -9.818 -12.050  1.00  0.00           H
ATOM    126  N   THR A 111       5.361 -13.385 -13.774  1.00 28.11           N
ATOM    127  CA  THR A 111       5.932 -14.740 -13.639  1.00 29.58           C
ATOM    128  C   THR A 111       7.449 -14.930 -13.901  1.00 30.49           C
ATOM    129  O   THR A 111       8.095 -15.547 -13.048  1.00 30.80           O
ATOM    130  CB  THR A 111       5.021 -15.864 -14.212  1.00 29.32           C
ATOM    131  OG1 THR A 111       4.717 -15.664 -15.574  1.00 32.94           O
ATOM    132  CG2 THR A 111       3.729 -16.081 -13.417  1.00 28.93           C
ATOM    133  H   THR A 111       4.391 -13.359 -14.070  1.00  0.00           H
ATOM    134  HA  THR A 111       5.870 -14.884 -12.560  1.00  0.00           H
ATOM    135  HB  THR A 111       5.570 -16.807 -14.162  1.00  0.00           H
ATOM    136  HG1 THR A 111       3.907 -16.153 -15.799  1.00  0.00           H
ATOM    137 HG21 THR A 111       3.163 -16.928 -13.805  1.00  0.00           H
ATOM    138 HG22 THR A 111       3.944 -16.296 -12.373  1.00  0.00           H
ATOM    139 HG23 THR A 111       3.077 -15.215 -13.454  1.00  0.00           H
ATOM    140  N   PRO A 112       8.073 -14.369 -14.969  1.00 32.29           N
ATOM    141  CA  PRO A 112       9.540 -14.307 -15.129  1.00 33.46           C
ATOM    142  C   PRO A 112      10.351 -13.845 -13.898  1.00 35.96           C
ATOM    143  O   PRO A 112      11.381 -14.442 -13.592  1.00 35.45           O
ATOM    144  CB  PRO A 112       9.775 -13.364 -16.316  1.00 33.51           C
ATOM    145  CG  PRO A 112       8.525 -13.509 -17.165  1.00 31.85           C
ATOM    146  CD  PRO A 112       7.413 -13.827 -16.165  1.00 31.36           C
ATOM    147  HA  PRO A 112       9.870 -15.313 -15.396  1.00  0.00           H
ATOM    148  HB2 PRO A 112       9.859 -12.328 -15.982  1.00  0.00           H
ATOM    149  HB3 PRO A 112      10.685 -13.606 -16.867  1.00  0.00           H
ATOM    150  HG2 PRO A 112       8.309 -12.626 -17.767  1.00  0.00           H
ATOM    151  HG3 PRO A 112       8.645 -14.351 -17.848  1.00  0.00           H
ATOM    152  HD2 PRO A 112       6.869 -12.913 -15.935  1.00  0.00           H
ATOM    153  HD3 PRO A 112       6.705 -14.532 -16.598  1.00  0.00           H
ATOM    154  N   SER A 113       9.886 -12.831 -13.150  1.00 36.66           N
ATOM    155  CA  SER A 113      10.566 -12.338 -11.944  1.00 35.89           C
ATOM    156  C   SER A 113      10.386 -13.289 -10.736  1.00 36.89           C
ATOM    157  O   SER A 113      11.140 -13.212  -9.767  1.00 37.22           O
ATOM    158  CB  SER A 113      10.087 -10.894 -11.642  1.00 35.80           C
ATOM    159  OG  SER A 113       8.731 -10.771 -11.231  1.00 33.01           O
ATOM    160  H   SER A 113       8.979 -12.436 -13.380  1.00  0.00           H
ATOM    161  HA  SER A 113      11.637 -12.287 -12.151  1.00  0.00           H
ATOM    162  HB2 SER A 113      10.712 -10.469 -10.854  1.00  0.00           H
ATOM    163  HB3 SER A 113      10.250 -10.263 -12.517  1.00  0.00           H
ATOM    164  HG  SER A 113       8.162 -11.183 -11.883  1.00  0.00           H
ATOM    165  N   PHE A 114       9.447 -14.241 -10.827  1.00 37.03           N
ATOM    166  CA  PHE A 114       9.186 -15.297  -9.851  1.00 38.15           C
ATOM    167  C   PHE A 114       9.880 -16.615 -10.238  1.00 40.29           C
ATOM    168  O   PHE A 114       9.707 -17.613  -9.536  1.00 41.86           O
ATOM    169  CB  PHE A 114       7.658 -15.515  -9.737  1.00 37.24           C
ATOM    170  CG  PHE A 114       7.030 -14.642  -8.673  1.00 37.59           C
ATOM    171  CD1 PHE A 114       6.949 -13.247  -8.863  1.00 37.08           C
ATOM    172  CD2 PHE A 114       6.555 -15.220  -7.477  1.00 36.59           C
ATOM    173  CE1 PHE A 114       6.421 -12.432  -7.848  1.00 37.47           C
ATOM    174  CE2 PHE A 114       6.031 -14.405  -6.461  1.00 35.73           C
ATOM    175  CZ  PHE A 114       5.978 -13.014  -6.647  1.00 36.89           C
ATOM    176  H   PHE A 114       8.918 -14.296 -11.690  1.00  0.00           H
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ATOM    177  HA  PHE A 114       9.580 -15.020  -8.871  1.00  0.00           H
ATOM    178  HB2 PHE A 114       7.155 -15.320 -10.682  1.00  0.00           H
ATOM    179  HB3 PHE A 114       7.407 -16.550  -9.503  1.00  0.00           H
ATOM    180  HD1 PHE A 114       7.300 -12.795  -9.780  1.00  0.00           H
ATOM    181  HD2 PHE A 114       6.588 -16.288  -7.327  1.00  0.00           H
ATOM    182  HE1 PHE A 114       6.359 -11.364  -7.990  1.00  0.00           H
ATOM    183  HE2 PHE A 114       5.682 -14.838  -5.536  1.00  0.00           H
ATOM    184  HZ  PHE A 114       5.591 -12.395  -5.859  1.00  0.00           H
ATOM    185  N   ALA A 115      10.702 -16.634 -11.299  1.00 -1.00           N
ATOM    186  CA  ALA A 115      11.538 -17.778 -11.674  1.00 -1.00           C
ATOM    187  C   ALA A 115      12.842 -17.818 -10.849  1.00 -1.00           C
ATOM    188  O   ALA A 115      13.516 -18.842 -10.805  1.00 -1.00           O
ATOM    189  CB  ALA A 115      11.923 -17.638 -13.154  1.00 -1.00           C
ATOM    190  H   ALA A 115      10.761 -15.802 -11.875  1.00 -1.00           H
ATOM    191  HA  ALA A 115      10.992 -18.712 -11.526  1.00 -1.00           H
ATOM    192  HB1 ALA A 115      12.477 -18.513 -13.497  1.00 -1.00           H
ATOM    193  HB2 ALA A 115      11.038 -17.546 -13.785  1.00 -1.00           H
ATOM    194  HB3 ALA A 115      12.552 -16.765 -13.333  1.00 -1.00           H
ATOM    195  N   ASN A 116      13.175 -16.721 -10.156  1.00 -1.00           N
ATOM    196  CA  ASN A 116      14.382 -16.464  -9.352  1.00 -1.00           C
ATOM    197  C   ASN A 116      14.389 -17.240  -8.002  1.00 -1.00           C
ATOM    198  O   ASN A 116      15.020 -16.826  -7.024  1.00 -1.00           O
ATOM    199  CB  ASN A 116      14.406 -14.928  -9.138  1.00 -1.00           C
ATOM    200  CG  ASN A 116      15.686 -14.362  -8.519  1.00 -1.00           C
ATOM    201  OD1 ASN A 116      16.780 -14.544  -9.041  1.00 -1.00           O
ATOM    202  ND2 ASN A 116      15.561 -13.686  -7.384  1.00 -1.00           N
ATOM    203  H   ASN A 116      12.523 -15.955 -10.235  1.00 -1.00           H
ATOM    204  HA  ASN A 116      15.260 -16.768  -9.924  1.00 -1.00           H
ATOM    205  HB2 ASN A 116      14.302 -14.430 -10.103  1.00 -1.00           H
ATOM    206  HB3 ASN A 116      13.537 -14.618  -8.559  1.00 -1.00           H
ATOM    207 HD21 ASN A 116      16.369 -13.248  -6.960  1.00 -1.00           H
ATOM    208 HD22 ASN A 116      14.639 -13.621  -6.946  1.00 -1.00           H
ATOM    209  N   LYS A 117      13.699 -18.387  -7.942  1.00 -1.00           N
ATOM    210  CA  LYS A 117      13.472 -19.274  -6.794  1.00 -1.00           C
ATOM    211  C   LYS A 117      14.751 -20.012  -6.339  1.00 -1.00           C
ATOM    212  O   LYS A 117      14.834 -21.240  -6.330  1.00 -1.00           O
ATOM    213  CB  LYS A 117      12.335 -20.257  -7.159  1.00 -1.00           C
ATOM    214  CG  LYS A 117      10.938 -19.618  -7.064  1.00 -1.00           C
ATOM    215  CD  LYS A 117       9.846 -20.501  -7.698  1.00 -1.00           C
ATOM    216  CE  LYS A 117       8.395 -20.117  -7.348  1.00 -1.00           C
ATOM    217  NZ  LYS A 117       8.090 -18.714  -7.649  1.00 -1.00          N1+
ATOM    218  H   LYS A 117      13.349 -18.713  -8.836  1.00 -1.00           H
ATOM    219  HA  LYS A 117      13.156 -18.665  -5.949  1.00 -1.00           H
ATOM    220  HB2 LYS A 117      12.509 -20.669  -8.154  1.00 -1.00           H
ATOM    221  HB3 LYS A 117      12.342 -21.110  -6.478  1.00 -1.00           H
ATOM    222  HG2 LYS A 117      10.724 -19.433  -6.012  1.00 -1.00           H
ATOM    223  HG3 LYS A 117      10.949 -18.638  -7.539  1.00 -1.00           H
ATOM    224  HD2 LYS A 117       9.974 -20.496  -8.782  1.00 -1.00           H
ATOM    225  HD3 LYS A 117       9.999 -21.536  -7.387  1.00 -1.00           H
ATOM    226  HE2 LYS A 117       7.709 -20.738  -7.926  1.00 -1.00           H
ATOM    227  HE3 LYS A 117       8.170 -20.312  -6.300  1.00 -1.00           H
ATOM    228  HZ1 LYS A 117       7.063 -18.626  -7.826  1.00 -1.00           H
ATOM    229  HZ2 LYS A 117       8.296 -18.117  -6.849  1.00 -1.00           H
ATOM    230  HZ3 LYS A 117       8.595 -18.381  -8.465  1.00 -1.00           H
ATOM    231  N   ALA A 118      15.764 -19.225  -5.981  1.00 -1.00           N
ATOM    232  CA  ALA A 118      17.031 -19.614  -5.382  1.00 -1.00           C
ATOM    233  C   ALA A 118      17.667 -18.437  -4.629  1.00 -1.00           C
ATOM    234  O   ALA A 118      18.354 -18.646  -3.632  1.00 -1.00           O
ATOM    235  CB  ALA A 118      17.977 -20.213  -6.436  1.00 -1.00           C
ATOM    236  H   ALA A 118      15.568 -18.237  -6.104  1.00 -1.00           H
ATOM    237  HA  ALA A 118      16.819 -20.384  -4.637  1.00 -1.00           H
ATOM    238  HB1 ALA A 118      18.929 -20.498  -5.988  1.00 -1.00           H
ATOM    239  HB2 ALA A 118      17.548 -21.108  -6.887  1.00 -1.00           H
ATOM    240  HB3 ALA A 118      18.183 -19.502  -7.236  1.00 -1.00           H
ATOM    241  N   GLY A 119      17.433 -17.195  -5.076  1.00 49.69           N
ATOM    242  CA  GLY A 119      18.065 -15.991  -4.544  1.00 48.49           C
ATOM    243  C   GLY A 119      17.050 -15.033  -3.923  1.00 47.46           C
ATOM    244  O   GLY A 119      15.856 -15.337  -3.839  1.00 48.38           O
ATOM    245  H   GLY A 119      16.829 -17.068  -5.880  1.00 -1.00           H
ATOM    246  HA2 GLY A 119      18.841 -16.219  -3.810  1.00  0.00           H
ATOM    247  HA3 GLY A 119      18.559 -15.483  -5.373  1.00  0.00           H
ATOM    248  N   LYS A 120      17.527 -13.859  -3.490  1.00 45.71           N
ATOM    249  CA  LYS A 120      16.688 -12.692  -3.204  1.00 42.69           C
ATOM    250  C   LYS A 120      16.313 -12.065  -4.565  1.00 40.13           C
ATOM    251  O   LYS A 120      17.151 -12.098  -5.474  1.00 39.70           O
ATOM    252  CB  LYS A 120      17.524 -11.611  -2.464  1.00 44.31           C
ATOM    253  CG  LYS A 120      17.869 -11.855  -0.980  1.00 45.11           C
ATOM    254  CD  LYS A 120      18.783 -10.722  -0.449  1.00 45.84           C
ATOM    255  CE  LYS A 120      18.932 -10.630   1.084  1.00 46.18           C
ATOM    256  NZ  LYS A 120      17.847  -9.856   1.702  1.00 44.91          N1+
ATOM    257  H   LYS A 120      18.495 -13.659  -3.687  1.00  0.00           H
ATOM    258  HA  LYS A 120      15.809 -12.977  -2.626  1.00  0.00           H
ATOM    259  HB2 LYS A 120      18.443 -11.422  -3.023  1.00  0.00           H
ATOM    260  HB3 LYS A 120      16.972 -10.669  -2.503  1.00  0.00           H
ATOM    261  HG2 LYS A 120      16.947 -11.910  -0.400  1.00  0.00           H
ATOM    262  HG3 LYS A 120      18.362 -12.819  -0.857  1.00  0.00           H
ATOM    263  HD2 LYS A 120      19.774 -10.869  -0.883  1.00  0.00           H
ATOM    264  HD3 LYS A 120      18.446  -9.757  -0.832  1.00  0.00           H
ATOM    265  HE2 LYS A 120      18.978 -11.621   1.538  1.00  0.00           H
ATOM    266  HE3 LYS A 120      19.867 -10.126   1.332  1.00  0.00           H
ATOM    267  HZ1 LYS A 120      17.281 -10.483   2.316  1.00  0.00           H
ATOM    268  HZ2 LYS A 120      18.151  -9.043   2.236  1.00  0.00           H
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ATOM    269  HZ3 LYS A 120      17.172  -9.556   1.012  1.00  0.00           H
ATOM    270  N   PRO A 121      15.126 -11.448  -4.720  1.00 37.16           N
ATOM    271  CA  PRO A 121      14.863 -10.545  -5.846  1.00 35.52           C
ATOM    272  C   PRO A 121      15.541  -9.184  -5.583  1.00 33.34           C
ATOM    273  O   PRO A 121      16.063  -8.941  -4.490  1.00 31.34           O
ATOM    274  CB  PRO A 121      13.337 -10.414  -5.860  1.00 35.26           C
ATOM    275  CG  PRO A 121      12.923 -10.584  -4.404  1.00 37.08           C
ATOM    276  CD  PRO A 121      13.975 -11.530  -3.817  1.00 36.33           C
ATOM    277  HA  PRO A 121      15.222 -10.953  -6.792  1.00  0.00           H
ATOM    278  HB2 PRO A 121      12.993  -9.472  -6.286  1.00  0.00           H
ATOM    279  HB3 PRO A 121      12.906 -11.216  -6.460  1.00  0.00           H
ATOM    280  HG2 PRO A 121      12.976  -9.616  -3.906  1.00  0.00           H
ATOM    281  HG3 PRO A 121      11.904 -10.961  -4.292  1.00  0.00           H
ATOM    282  HD2 PRO A 121      14.231 -11.237  -2.797  1.00  0.00           H
ATOM    283  HD3 PRO A 121      13.599 -12.554  -3.796  1.00  0.00           H
ATOM    284  N   LYS A 122      15.495  -8.261  -6.554  1.00 31.90           N
ATOM    285  CA  LYS A 122      15.867  -6.871  -6.308  1.00 31.10           C
ATOM    286  C   LYS A 122      14.673  -6.239  -5.568  1.00 29.95           C
ATOM    287  O   LYS A 122      13.641  -5.959  -6.175  1.00 31.41           O
ATOM    288  CB  LYS A 122      16.124  -6.125  -7.642  1.00 33.97           C
ATOM    289  CG  LYS A 122      17.139  -6.807  -8.582  1.00 35.41           C
ATOM    290  CD  LYS A 122      17.772  -5.867  -9.634  1.00 40.19           C
ATOM    291  CE  LYS A 122      16.955  -5.606 -10.919  1.00 42.24           C
ATOM    292  NZ  LYS A 122      15.733  -4.825 -10.684  1.00 43.94           N1+
ATOM    293  H   LYS A 122      15.017  -8.471  -7.418  1.00  0.00           H
ATOM    294  HA  LYS A 122      16.769  -6.816  -5.694  1.00  0.00           H
ATOM    295  HB2 LYS A 122      15.191  -5.971  -8.176  1.00  0.00           H
ATOM    296  HB3 LYS A 122      16.495  -5.130  -7.391  1.00  0.00           H
ATOM    297  HG2 LYS A 122      17.948  -7.204  -7.968  1.00  0.00           H
ATOM    298  HG3 LYS A 122      16.684  -7.671  -9.069  1.00  0.00           H
ATOM    299  HD2 LYS A 122      18.071  -4.926  -9.170  1.00  0.00           H
ATOM    300  HD3 LYS A 122      18.709  -6.328  -9.950  1.00  0.00           H
ATOM    301  HE2 LYS A 122      17.573  -5.049 -11.624  1.00  0.00           H
ATOM    302  HE3 LYS A 122      16.684  -6.544 -11.407  1.00  0.00           H
ATOM    303  HZ1 LYS A 122      15.378  -4.424 -11.536  1.00  0.00           H
ATOM    304  HZ2 LYS A 122      15.003  -5.502 -10.371  1.00  0.00           H
ATOM    305  HZ3 LYS A 122      15.899  -4.091 -10.001  1.00  0.00           H
ATOM    306  N   ALA A 123      14.805  -6.040  -4.257  1.00 25.55           N
ATOM    307  CA  ALA A 123      13.800  -5.452  -3.383  1.00 25.13           C
ATOM    308  C   ALA A 123      14.453  -4.371  -2.524  1.00 23.88           C
ATOM    309  O   ALA A 123      15.652  -4.442  -2.256  1.00 23.84           O
ATOM    310  CB  ALA A 123      13.149  -6.548  -2.530  1.00 23.35           C
ATOM    311  H   ALA A 123      15.689  -6.257  -3.816  1.00  0.00           H
ATOM    312  HA  ALA A 123      13.030  -4.973  -3.984  1.00  0.00           H
ATOM    313  HB1 ALA A 123      12.284  -6.156  -1.994  1.00  0.00           H
ATOM    314  HB2 ALA A 123      12.812  -7.385  -3.139  1.00  0.00           H
ATOM    315  HB3 ALA A 123      13.840  -6.945  -1.789  1.00  0.00           H
ATOM    316  N   CYS A 124      13.659  -3.400  -2.078  1.00 25.75           N
ATOM    317  CA  CYS A 124      14.058  -2.298  -1.213  1.00 23.52           C
ATOM    318  C   CYS A 124      12.941  -2.028  -0.204  1.00 23.67           C
ATOM    319  O   CYS A 124      11.793  -2.424  -0.425  1.00 24.40           O
ATOM    320  CB  CYS A 124      14.435  -1.064  -2.066  1.00 22.25           C
ATOM    321  SG  CYS A 124      12.998  -0.359  -2.948  1.00 23.91           S
ATOM    322  H   CYS A 124      12.683  -3.399  -2.342  1.00  0.00           H
ATOM    323  HA  CYS A 124      14.936  -2.599  -0.640  1.00  0.00           H
ATOM    324  HB2 CYS A 124      14.869  -0.286  -1.438  1.00  0.00           H
ATOM    325  HB3 CYS A 124      15.200  -1.334  -2.790  1.00  0.00           H
ATOM    326  HG  CYS A 124      12.472   0.240  -1.874  1.00  0.00           H
ATOM    327  N   TYR A 125      13.236  -1.264   0.849  1.00 21.36           N
ATOM    328  CA  TYR A 125      12.213  -0.490   1.545  1.00 22.40           C
ATOM    329  C   TYR A 125      12.021   0.797   0.730  1.00 21.88           C
ATOM    330  O   TYR A 125      13.003   1.356   0.235  1.00 20.40           O
ATOM    331  CB  TYR A 125      12.671  -0.094   2.961  1.00 21.32           C
ATOM    332  CG  TYR A 125      13.206  -1.212   3.836  1.00 22.30           C
ATOM    333  CD1 TYR A 125      12.338  -2.086   4.523  1.00 20.05           C
ATOM    334  CD2 TYR A 125      14.599  -1.355   3.982  1.00 18.10           C
ATOM    335  CE1 TYR A 125      12.871  -3.111   5.332  1.00 20.76           C
ATOM    336  CE2 TYR A 125      15.127  -2.375   4.787  1.00 18.47           C
ATOM    337  CZ  TYR A 125      14.265  -3.264   5.455  1.00 18.41           C
ATOM    338  OH  TYR A 125      14.782  -4.269   6.215  1.00 19.18           O
ATOM    339  H   TYR A 125      14.204  -0.965   0.963  1.00  0.00           H
ATOM    340  HA  TYR A 125      11.287  -1.045   1.597  1.00  0.00           H
ATOM    341  HB2 TYR A 125      13.446   0.661   2.888  1.00  0.00           H
ATOM    342  HB3 TYR A 125      11.848   0.392   3.487  1.00  0.00           H
ATOM    343  HD1 TYR A 125      11.267  -1.975   4.440  1.00  0.00           H
ATOM    344  HD2 TYR A 125      15.275  -0.678   3.482  1.00  0.00           H
ATOM    345  HE1 TYR A 125      12.210  -3.778   5.864  1.00  0.00           H
ATOM    346  HE2 TYR A 125      16.197  -2.455   4.878  1.00  0.00           H
ATOM    347  HH  TYR A 125      15.738  -4.267   6.185  1.00  0.00           H
ATOM    348  N   VAL A 126      10.780   1.261   0.583  1.00 22.88           N
ATOM    349  CA  VAL A 126      10.444   2.531  -0.037  1.00 20.05           C
ATOM    350  C   VAL A 126       9.665   3.364   0.982  1.00 20.90           C
ATOM    351  O   VAL A 126       8.770   2.869   1.676  1.00 19.39           O
ATOM    352  CB  VAL A 126       9.742   2.346  -1.406  1.00 21.97           C
ATOM    353  CG1 VAL A 126       8.342   1.722  -1.325  1.00 21.20           C
ATOM    354  CG2 VAL A 126       9.680   3.668  -2.192  1.00 17.14           C
ATOM    355  H   VAL A 126      10.015   0.759   1.036  1.00  0.00           H
ATOM    356  HA  VAL A 126      11.369   3.062  -0.248  1.00  0.00           H
ATOM    357  HB  VAL A 126      10.362   1.660  -1.985  1.00  0.00           H
ATOM    358 HG11 VAL A 126       7.942   1.545  -2.324  1.00  0.00           H
ATOM    359 HG12 VAL A 126       8.373   0.769  -0.800  1.00  0.00           H
ATOM    360 HG13 VAL A 126       7.635   2.371  -0.808  1.00  0.00           H
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ATOM    361 HG21 VAL A 126       9.271   3.519  -3.190  1.00  0.00           H
ATOM    362 HG22 VAL A 126       9.054   4.409  -1.693  1.00  0.00           H
ATOM    363 HG23 VAL A 126      10.675   4.102  -2.310  1.00  0.00           H
ATOM    364  N   THR A 127      10.017   4.642   1.058  1.00 20.50           N
ATOM    365  CA  THR A 127       9.454   5.609   1.968  1.00 20.93           C
ATOM    366  C   THR A 127       9.290   6.920   1.198  1.00 21.13           C
ATOM    367  O   THR A 127      10.283   7.594   0.939  1.00 23.81           O
ATOM    368  CB  THR A 127      10.382   5.689   3.205  1.00 22.06           C
ATOM    369  OG1 THR A 127      10.227   4.531   4.009  1.00 22.71           O
ATOM    370  CG2 THR A 127      10.126   6.889   4.115  1.00 19.49           C
ATOM    371  H   THR A 127      10.826   4.943   0.518  1.00  0.00           H
ATOM    372  HA  THR A 127       8.458   5.300   2.287  1.00  0.00           H
ATOM    373  HB  THR A 127      11.422   5.740   2.874  1.00  0.00           H
ATOM    374  HG1 THR A 127       9.287   4.383   4.130  1.00  0.00           H
ATOM    375 HG21 THR A 127      10.828   6.878   4.941  1.00  0.00           H
ATOM    376 HG22 THR A 127      10.306   7.821   3.585  1.00  0.00           H
ATOM    377 HG23 THR A 127       9.108   6.903   4.506  1.00  0.00           H
ATOM    378  N   LEU A 128       8.053   7.316   0.884  1.00 20.38           N
ATOM    379  CA  LEU A 128       7.735   8.697   0.540  1.00 18.73           C
ATOM    380  C   LEU A 128       7.497   9.416   1.869  1.00 18.52           C
ATOM    381  O   LEU A 128       6.765   8.907   2.722  1.00 17.90           O
ATOM    382  CB  LEU A 128       6.464   8.728  -0.327  1.00 18.41           C
ATOM    383  CG  LEU A 128       5.976  10.129  -0.766  1.00 18.76           C
ATOM    384  CD1 LEU A 128       7.091  11.042  -1.305  1.00 18.77           C
ATOM    385  CD2 LEU A 128       4.845   9.975  -1.788  1.00 14.06           C
ATOM    386  H   LEU A 128       7.273   6.748   1.205  1.00  0.00           H
ATOM    387  HA  LEU A 128       8.556   9.157   0.003  1.00  0.00           H
ATOM    388  HB2 LEU A 128       6.652   8.126  -1.218  1.00  0.00           H
ATOM    389  HB3 LEU A 128       5.654   8.230   0.206  1.00  0.00           H
ATOM    390  HG  LEU A 128       5.559  10.639   0.101  1.00  0.00           H
ATOM    391 HD11 LEU A 128       6.681  11.948  -1.752  1.00  0.00           H
ATOM    392 HD12 LEU A 128       7.753  11.378  -0.509  1.00  0.00           H
ATOM    393 HD13 LEU A 128       7.707  10.539  -2.049  1.00  0.00           H
ATOM    394 HD21 LEU A 128       4.477  10.941  -2.118  1.00  0.00           H
ATOM    395 HD22 LEU A 128       5.169   9.426  -2.672  1.00  0.00           H
ATOM    396 HD23 LEU A 128       4.005   9.441  -1.349  1.00  0.00           H
ATOM    397  N   VAL A 129       8.181  10.540   2.077  1.00 18.42           N
ATOM    398  CA  VAL A 129       8.245  11.245   3.342  1.00 18.44           C
ATOM    399  C   VAL A 129       8.454  12.746   3.097  1.00 18.85           C
ATOM    400  O   VAL A 129       9.012  13.139   2.072  1.00 19.12           O
ATOM    401  CB  VAL A 129       9.272  10.523   4.257  1.00 19.71           C
ATOM    402  CG1 VAL A 129      10.713  10.591   3.714  1.00 19.20           C
ATOM    403  CG2 VAL A 129       9.182  10.947   5.726  1.00 16.64           C
ATOM    404  H   VAL A 129       8.820  10.875   1.356  1.00  0.00           H
ATOM    405  HA  VAL A 129       7.273  11.160   3.815  1.00  0.00           H
ATOM    406  HB  VAL A 129       8.980   9.475   4.268  1.00  0.00           H
ATOM    407 HG11 VAL A 129      11.383   9.939   4.268  1.00  0.00           H
ATOM    408 HG12 VAL A 129      10.766  10.267   2.674  1.00  0.00           H
ATOM    409 HG13 VAL A 129      11.108  11.606   3.757  1.00  0.00           H
ATOM    410 HG21 VAL A 129       9.711  10.262   6.380  1.00  0.00           H
ATOM    411 HG22 VAL A 129       9.609  11.932   5.884  1.00  0.00           H
ATOM    412 HG23 VAL A 129       8.144  10.957   6.051  1.00  0.00           H
ATOM    413  N   ARG A 130       8.009  13.586   4.035  1.00 21.17           N
ATOM    414  CA  ARG A 130       8.375  14.996   4.125  1.00 21.51           C
ATOM    415  C   ARG A 130       9.586  15.128   5.063  1.00 21.74           C
ATOM    416  O   ARG A 130       9.740  14.337   5.993  1.00 18.71           O
ATOM    417  CB  ARG A 130       7.208  15.754   4.794  1.00 24.72           C
ATOM    418  CG  ARG A 130       5.977  15.857   3.887  1.00 26.46           C
ATOM    419  CD  ARG A 130       4.724  16.398   4.586  1.00 30.21           C
ATOM    420  NE  ARG A 130       4.021  15.308   5.272  1.00 33.85           N
ATOM    421  CZ  ARG A 130       2.706  15.101   5.426  1.00 35.23           C
ATOM    422  NH1 ARG A 130       1.786  15.961   4.987  1.00 35.12           N
ATOM    423  NH2 ARG A 130       2.321  14.004   6.059  1.00 31.29           N1+
ATOM    424  H   ARG A 130       7.466  13.203   4.801  1.00  0.00           H
ATOM    425  HA  ARG A 130       8.607  15.415   3.143  1.00  0.00           H
ATOM    426  HB2 ARG A 130       6.945  15.281   5.741  1.00  0.00           H
ATOM    427  HB3 ARG A 130       7.518  16.762   5.047  1.00  0.00           H
ATOM    428  HG2 ARG A 130       6.221  16.483   3.029  1.00  0.00           H
ATOM    429  HG3 ARG A 130       5.753  14.870   3.485  1.00  0.00           H
ATOM    430  HD2 ARG A 130       4.956  17.212   5.273  1.00  0.00           H
ATOM    431  HD3 ARG A 130       4.067  16.806   3.824  1.00  0.00           H
ATOM    432  HE  ARG A 130       4.642  14.484   5.481  1.00  0.00           H
ATOM    433 HH11 ARG A 130       2.041  16.790   4.435  1.00  0.00           H
ATOM    434 HH12 ARG A 130       0.818  15.643   4.893  1.00  0.00           H
ATOM    435 HH21 ARG A 130       3.011  13.345   6.492  1.00  0.00           H
ATOM    436 HH22 ARG A 130       1.357  13.650   6.094  1.00  0.00           H
ATOM    437  N   ASN A 131      10.386  16.194   4.930  1.00 21.83           N
ATOM    438  CA  ASN A 131      11.509  16.517   5.836  1.00 20.92           C
ATOM    439  C   ASN A 131      11.046  16.744   7.294  1.00 21.34           C
ATOM    440  O   ASN A 131      11.767  16.473   8.258  1.00 20.83           O
ATOM    441  CB  ASN A 131      12.319  17.736   5.335  1.00 24.29           C
ATOM    442  CG  ASN A 131      13.160  17.441   4.090  1.00 24.72           C
ATOM    443  OD1 ASN A 131      13.988  16.537   4.089  1.00 26.89           O
ATOM    444  ND2 ASN A 131      12.937  18.152   2.992  1.00 26.08           N
ATOM    445  H   ASN A 131      10.133  16.859   4.197  1.00  0.00           H
ATOM    446  HA  ASN A 131      12.163  15.649   5.849  1.00  0.00           H
ATOM    447  HB2 ASN A 131      11.665  18.591   5.161  1.00  0.00           H
ATOM    448  HB3 ASN A 131      13.027  18.051   6.104  1.00  0.00           H
ATOM    449 HD21 ASN A 131      12.205  18.878   2.952  1.00  0.00           H
ATOM    450 HD22 ASN A 131      13.574  18.068   2.197  1.00  0.00           H
ATOM    451  N   LYS A 132       9.777  17.143   7.437  1.00 21.47           N
ATOM    452  CA  LYS A 132       8.999  17.289   8.664  1.00 21.50           C
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ATOM    453  C   LYS A 132      8.744  15.938   9.356  1.00 20.13           C
ATOM    454  O   LYS A 132      8.599  15.880  10.576  1.00 20.64           O
ATOM    455  CB  LYS A 132      7.626  17.890   8.278  1.00 18.17           C
ATOM    456  CG  LYS A 132      7.695  19.298   7.662  1.00 -1.00          C
ATOM    457  CD  LYS A 132      7.680  19.293   6.129  1.00 -1.00          C
ATOM    458  CE  LYS A 132      7.918  20.669   5.502  1.00 -1.00          C
ATOM    459  NZ  LYS A 132      7.908  20.564   4.035  1.00 -1.00          N1+
ATOM    460  H   LYS A 132      9.287  17.303   6.572  1.00  0.00          H
ATOM    461  HA  LYS A 132      9.523  17.949   9.359  1.00  0.00          H
ATOM    462  HB2 LYS A 132      7.077  17.215   7.620  1.00  0.00          H
ATOM    463  HB3 LYS A 132      7.009  17.945   9.173  1.00  0.00          H
ATOM    464  HG2 LYS A 132      6.843  19.883   8.011  1.00 -1.00          H
ATOM    465  HG3 LYS A 132      8.586  19.805   8.030  1.00 -1.00          H
ATOM    466  HD2 LYS A 132      8.465  18.633   5.772  1.00 -1.00          H
ATOM    467  HD3 LYS A 132      6.730  18.888   5.780  1.00 -1.00          H
ATOM    468  HE2 LYS A 132      7.159  21.375   5.837  1.00 -1.00          H
ATOM    469  HE3 LYS A 132      8.887  21.063   5.813  1.00 -1.00          H
ATOM    470  HZ1 LYS A 132      7.008  20.735   3.605  1.00 -1.00          H
ATOM    471  HZ2 LYS A 132      8.560  21.227   3.601  1.00 -1.00          H
ATOM    472  HZ3 LYS A 132      8.249  19.652   3.741  1.00 -1.00          H
ATOM    473  N   GLU A 133      8.689  14.845   8.588  1.00 20.07           N
ATOM    474  CA  GLU A 133      8.315  13.517   9.053  1.00 17.67           C
ATOM    475  C   GLU A 133      9.538  12.634   9.312  1.00 18.46           C
ATOM    476  O   GLU A 133      9.343  11.486   9.700  1.00 15.28           O
ATOM    477  CB  GLU A 133      7.405  12.856   8.009  1.00 17.59           C
ATOM    478  CG  GLU A 133      5.950  13.294   8.191  1.00 20.24           C
ATOM    479  CD  GLU A 133      5.096  12.893   7.012  1.00 23.42           C
ATOM    480  OE1 GLU A 133      3.983  12.372   7.214  1.00 24.54           O
ATOM    481  OE2 GLU A 133      5.469  13.208   5.862  1.00 22.56           O1-
ATOM    482  H   GLU A 133      8.915  14.924   7.601  1.00  0.00          H
ATOM    483  HA  GLU A 133      7.772  13.566   9.996  1.00  0.00          H
ATOM    484  HB2 GLU A 133      7.757  13.080   7.004  1.00  0.00          H
ATOM    485  HB3 GLU A 133      7.422  11.770   8.099  1.00  0.00          H
ATOM    486  HG2 GLU A 133      5.532  12.874   9.107  1.00  0.00          H
ATOM    487  HG3 GLU A 133      5.894  14.377   8.288  1.00  0.00          H
ATOM    488  N   LEU A 134     10.777  13.158   9.247  1.00 18.65           N
ATOM    489  CA  LEU A 134     11.988  12.510   9.788  1.00 19.98           C
ATOM    490  C   LEU A 134     11.752  12.072  11.240  1.00 18.99           C
ATOM    491  O   LEU A 134     11.943  10.921  11.617  1.00 19.26           O
ATOM    492  CB  LEU A 134     13.188  13.487   9.727  1.00 19.11           C
ATOM    493  CG  LEU A 134     14.511  12.986  10.359  1.00 23.22           C
ATOM    494  CD1 LEU A 134     15.091  11.774   9.612  1.00 21.36           C
ATOM    495  CD2 LEU A 134     15.523  14.135  10.469  1.00 21.65           C
ATOM    496  H   LEU A 134     10.860  14.090   8.865  1.00  0.00          H
ATOM    497  HA  LEU A 134     12.201  11.629   9.181  1.00  0.00          H
ATOM    498  HB2 LEU A 134     13.371  13.779   8.701  1.00  0.00          H
ATOM    499  HB3 LEU A 134     12.915  14.414  10.223  1.00  0.00          H
ATOM    500  HG  LEU A 134     14.332  12.666  11.385  1.00  0.00          H
ATOM    501 HD11 LEU A 134     16.008  11.418  10.078  1.00  0.00          H
ATOM    502 HD12 LEU A 134     14.398  10.933   9.604  1.00  0.00          H
ATOM    503 HD13 LEU A 134     15.322  12.016   8.577  1.00  0.00          H
ATOM    504 HD21 LEU A 134     16.534  13.780  10.651  1.00  0.00          H
ATOM    505 HD22 LEU A 134     15.538  14.750   9.568  1.00  0.00          H
ATOM    506 HD23 LEU A 134     15.291  14.795  11.301  1.00  0.00          H
ATOM    507  N   LYS A 135     11.238  13.032  12.007  1.00 17.87           N
ATOM    508  CA  LYS A 135     10.937  13.014  13.424  1.00 18.77           C
ATOM    509  C   LYS A 135      9.856  11.979  13.813  1.00 18.88           C
ATOM    510  O   LYS A 135      9.718  11.661  14.994  1.00 18.40           O
ATOM    511  CB  LYS A 135     10.523  14.454  13.796  1.00 18.36           C
ATOM    512  CG  LYS A 135     11.601  15.526  13.504  1.00 19.77           C
ATOM    513  CD  LYS A 135     11.568  16.211  12.114  1.00 16.28           C
ATOM    514  CE  LYS A 135     12.929  16.865  11.800  1.00 18.85           C
ATOM    515  NZ  LYS A 135     13.022  17.529  10.488  1.00 18.17           N1+
ATOM    516  H   LYS A 135     11.047  13.905  11.543  1.00  0.00          H
ATOM    517  HA  LYS A 135     11.848  12.750  13.959  1.00  0.00          H
ATOM    518  HB2 LYS A 135      9.603  14.739  13.298  1.00  0.00          H
ATOM    519  HB3 LYS A 135     10.301  14.467  14.864  1.00  0.00          H
ATOM    520  HG2 LYS A 135     11.481  16.319  14.240  1.00  0.00          H
ATOM    521  HG3 LYS A 135     12.585  15.098  13.699  1.00  0.00          H
ATOM    522  HD2 LYS A 135     11.309  15.513  11.324  1.00  0.00          H
ATOM    523  HD3 LYS A 135     10.775  16.961  12.105  1.00  0.00          H
ATOM    524  HE2 LYS A 135     13.162  17.600  12.566  1.00  0.00          H
ATOM    525  HE3 LYS A 135     13.715  16.117  11.853  1.00  0.00          H
ATOM    526  HZ1 LYS A 135     14.024  17.701  10.298  1.00  0.00          H
ATOM    527  HZ2 LYS A 135     12.648  16.996   9.711  1.00  0.00          H
ATOM    528  HZ3 LYS A 135     12.546  18.431  10.529  1.00  0.00          H
ATOM    529  N   GLY A 136      9.147  11.409  12.831  1.00 19.43           N
ATOM    530  CA  GLY A 136      8.200  10.311  12.978  1.00 17.22           C
ATOM    531  C   GLY A 136      8.706   9.047  12.272  1.00 19.59           C
ATOM    532  O   GLY A 136      8.520   7.942  12.775  1.00 18.34           O
ATOM    533  H   GLY A 136      9.340  11.728  11.892  1.00  0.00          H
ATOM    534  HA2 GLY A 136      7.983  10.087  14.025  1.00  0.00          H
ATOM    535  HA3 GLY A 136      7.260  10.610  12.517  1.00  0.00          H
ATOM    536  N   LEU A 137      9.386   9.177  11.125  1.00 18.36           N
ATOM    537  CA  LEU A 137      9.992   8.091  10.354  1.00 21.19           C
ATOM    538  C   LEU A 137     11.080   7.347  11.134  1.00 22.14           C
ATOM    539  O   LEU A 137     11.247   6.142  10.956  1.00 24.02           O
ATOM    540  CB  LEU A 137     10.583   8.659   9.047  1.00 21.04           C
ATOM    541  CG  LEU A 137     11.197   7.616   8.090  1.00 21.35           C
ATOM    542  CD1 LEU A 137     10.140   6.652   7.527  1.00 23.22           C
ATOM    543  CD2 LEU A 137     11.991   8.313   6.985  1.00 20.28           C
ATOM    544  H   LEU A 137      9.471  10.108  10.719  1.00  0.00          H
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ATOM    545  HA  LEU A 137       9.210   7.370  10.134  1.00  0.00           H
ATOM    546  HB2 LEU A 137       9.822   9.218   8.508  1.00  0.00           H
ATOM    547  HB3 LEU A 137      11.350   9.390   9.307  1.00  0.00           H
ATOM    548  HG  LEU A 137      11.928   7.018   8.628  1.00  0.00           H
ATOM    549 HD11 LEU A 137      10.602   5.880   6.910  1.00  0.00           H
ATOM    550 HD12 LEU A 137       9.604   6.127   8.313  1.00  0.00           H
ATOM    551 HD13 LEU A 137       9.399   7.177   6.923  1.00  0.00           H
ATOM    552 HD21 LEU A 137      12.530   7.592   6.382  1.00  0.00           H
ATOM    553 HD22 LEU A 137      11.346   8.869   6.312  1.00  0.00           H
ATOM    554 HD23 LEU A 137      12.733   8.999   7.395  1.00  0.00           H
ATOM    555  N   LEU A 138     11.792   8.039  12.027  1.00 21.78           N
ATOM    556  CA  LEU A 138     12.776   7.445  12.923  1.00 22.46           C
ATOM    557  C   LEU A 138     12.181   6.354  13.838  1.00 21.43           C
ATOM    558  O   LEU A 138     12.909   5.419  14.164  1.00 22.46           O
ATOM    559  CB  LEU A 138     13.486   8.553  13.719  1.00 19.96           C
ATOM    560  CG  LEU A 138     14.445   9.419  12.865  1.00 22.18           C
ATOM    561 CD1 LEU A 138     14.680  10.781  13.532  1.00 21.53           C
ATOM    562 CD2 LEU A 138     15.782   8.725  12.576  1.00 21.97           C
ATOM    563  H   LEU A 138     11.667   9.049  12.053  1.00  0.00           H
ATOM    564  HA  LEU A 138     13.513   6.940  12.298  1.00  0.00           H
ATOM    565  HB2 LEU A 138     12.725   9.188  14.177  1.00  0.00           H
ATOM    566  HB3 LEU A 138     14.038   8.119  14.553  1.00  0.00           H
ATOM    567  HG  LEU A 138     13.990   9.609  11.894  1.00  0.00           H
ATOM    568 HD11 LEU A 138     15.442  11.362  13.013  1.00  0.00           H
ATOM    569 HD12 LEU A 138     13.767  11.374  13.545  1.00  0.00           H
ATOM    570 HD13 LEU A 138     14.989  10.662  14.567  1.00  0.00           H
ATOM    571 HD21 LEU A 138     16.391   9.325  11.898  1.00  0.00           H
ATOM    572 HD22 LEU A 138     16.349   8.592  13.491  1.00  0.00           H
ATOM    573 HD23 LEU A 138     15.641   7.754  12.102  1.00  0.00           H
ATOM    574  N   SER A 139     10.869   6.396  14.143  1.00 20.82           N
ATOM    575  CA  SER A 139     10.132   5.316  14.809  1.00 20.60           C
ATOM    576  C   SER A 139     10.045   4.091  13.887  1.00 21.37           C
ATOM    577  O   SER A 139     10.357   2.979  14.315  1.00 21.68           O
ATOM    578  CB  SER A 139      8.700   5.785  15.188  1.00 19.65           C
ATOM    579  OG  SER A 139      7.941   4.793  15.877  1.00 22.99           O
ATOM    580  H   SER A 139     10.327   7.177  13.795  1.00  0.00           H
ATOM    581  HA  SER A 139     10.678   5.035  15.711  1.00  0.00           H
ATOM    582  HB2 SER A 139      8.749   6.683  15.806  1.00  0.00           H
ATOM    583  HB3 SER A 139      8.131   6.051  14.299  1.00  0.00           H
ATOM    584  HG  SER A 139      7.723   4.099  15.247  1.00  0.00           H
ATOM    585  N   SER A 140      9.667   4.305  12.617  1.00 20.33           N
ATOM    586  CA  SER A 140      9.525   3.266  11.605  1.00 20.38           C
ATOM    587  C   SER A 140     10.881   2.581  11.376  1.00 20.79           C
ATOM    588  O   SER A 140     10.962   1.357  11.447  1.00 19.68           O
ATOM    589  CB  SER A 140      9.019   3.879  10.280  1.00 18.81           C
ATOM    590  OG  SER A 140      7.966   4.820  10.449  1.00 20.17           O
ATOM    591  H   SER A 140      9.454   5.242  12.310  1.00  0.00           H
ATOM    592  HA  SER A 140      8.807   2.531  11.972  1.00  0.00           H
ATOM    593  HB2 SER A 140      9.825   4.353   9.720  1.00  0.00           H
ATOM    594  HB3 SER A 140      8.654   3.069   9.650  1.00  0.00           H
ATOM    595  HG  SER A 140      7.490   4.840   9.616  1.00  0.00           H
ATOM    596  N   ILE A 141     11.945   3.378  11.183  1.00 20.52           N
ATOM    597  CA  ILE A 141     13.318   2.914  11.015  1.00 22.74           C
ATOM    598  C   ILE A 141     13.789   2.125  12.246  1.00 22.91           C
ATOM    599  O   ILE A 141     14.129   0.958  12.081  1.00 25.89           O
ATOM    600  CB  ILE A 141     14.284   4.074  10.641  1.00 21.78           C
ATOM    601 CG1 ILE A 141     13.898   4.738   9.296  1.00 21.69           C
ATOM    602 CG2 ILE A 141     15.743   3.575  10.566  1.00 19.44           C
ATOM    603 CD1 ILE A 141     14.565   6.102   9.056  1.00 20.88           C
ATOM    604  H   ILE A 141     11.778   4.382  11.164  1.00  0.00           H
ATOM    605  HA  ILE A 141     13.319   2.209  10.185  1.00  0.00           H
ATOM    606  HB  ILE A 141     14.222   4.830  11.424  1.00  0.00           H
ATOM    607 HG12 ILE A 141     14.141   4.067   8.470  1.00  0.00           H
ATOM    608 HG13 ILE A 141     12.820   4.880   9.236  1.00  0.00           H
ATOM    609 HG21 ILE A 141     16.418   4.337  10.192  1.00  0.00           H
ATOM    610 HG22 ILE A 141     16.132   3.266  11.536  1.00  0.00           H
ATOM    611 HG23 ILE A 141     15.826   2.714   9.901  1.00  0.00           H
ATOM    612 HD11 ILE A 141     14.240   6.523   8.104  1.00  0.00           H
ATOM    613 HD12 ILE A 141     14.304   6.817   9.836  1.00  0.00           H
ATOM    614 HD13 ILE A 141     15.651   6.031   9.007  1.00  0.00           H
ATOM    615  N   LYS A 142     13.799   2.719  13.455  1.00 22.93           N
ATOM    616  CA  LYS A 142     14.316   2.074  14.671  1.00 24.30           C
ATOM    617  C   LYS A 142     13.616   0.747  15.020  1.00 23.46           C
ATOM    618  O   LYS A 142     14.261  -0.139  15.582  1.00 20.35           O
ATOM    619  CB  LYS A 142     14.311   3.031  15.894  1.00 26.67           C
ATOM    620  CG  LYS A 142     15.660   3.722  16.199  1.00 31.03           C
ATOM    621  CD  LYS A 142     15.932   5.032  15.437  1.00 35.34           C
ATOM    622  CE  LYS A 142     17.299   5.643  15.821  1.00 39.87           C
ATOM    623  NZ  LYS A 142     17.517   6.970  15.222  1.00 41.29          N1+
ATOM    624  H   LYS A 142     13.418   3.656  13.547  1.00  0.00           H
ATOM    625  HA  LYS A 142     15.349   1.796  14.453  1.00  0.00           H
ATOM    626  HB2 LYS A 142     13.488   3.743  15.852  1.00  0.00           H
ATOM    627  HB3 LYS A 142     14.084   2.442  16.786  1.00  0.00           H
ATOM    628  HG2 LYS A 142     15.675   3.953  17.266  1.00  0.00           H
ATOM    629  HG3 LYS A 142     16.478   3.017  16.045  1.00  0.00           H
ATOM    630  HD2 LYS A 142     15.884   4.846  14.363  1.00  0.00           H
ATOM    631  HD3 LYS A 142     15.135   5.743  15.664  1.00  0.00           H
ATOM    632  HE2 LYS A 142     17.372   5.751  16.904  1.00  0.00           H
ATOM    633  HE3 LYS A 142     18.106   4.976  15.519  1.00  0.00           H
ATOM    634  HZ1 LYS A 142     18.476   7.284  15.320  1.00  0.00           H
ATOM    635  HZ2 LYS A 142     17.303   6.983  14.241  1.00  0.00           H
ATOM    636  HZ3 LYS A 142     16.907   7.662  15.687  1.00  0.00           H
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ATOM    637  N   TYR A 143      12.334   0.588  14.664  1.00 22.06           N
ATOM    638  CA  TYR A 143      11.641  -0.689  14.772  1.00 22.59           C
ATOM    639  C   TYR A 143      12.068  -1.649  13.642  1.00 21.72           C
ATOM    640  O   TYR A 143      12.644  -2.693  13.951  1.00 22.10           O
ATOM    641  CB  TYR A 143      10.107  -0.485  14.806  1.00 20.02           C
ATOM    642  CG  TYR A 143       9.493  -0.611  16.196  1.00 21.94           C
ATOM    643  CD1 TYR A 143       9.729  -1.780  16.947  1.00 23.77           C
ATOM    644  CD2 TYR A 143       8.659   0.393  16.738  1.00 22.49           C
ATOM    645  CE1 TYR A 143       9.096  -1.980  18.184  1.00 22.37           C
ATOM    646  CE2 TYR A 143       8.003   0.180  17.973  1.00 23.21           C
ATOM    647  CZ  TYR A 143       8.201  -1.022  18.685  1.00 22.87           C
ATOM    648  OH  TYR A 143       7.527  -1.278  19.845  1.00 21.97           O
ATOM    649  H   TYR A 143      11.842   1.372  14.249  1.00  0.00           H
ATOM    650  HA  TYR A 143      11.955  -1.163  15.704  1.00  0.00           H
ATOM    651  HB2 TYR A 143       9.822   0.462  14.349  1.00  0.00           H
ATOM    652  HB3 TYR A 143       9.614  -1.246  14.201  1.00  0.00           H
ATOM    653  HD1 TYR A 143      10.365  -2.563  16.568  1.00  0.00           H
ATOM    654  HD2 TYR A 143       8.497   1.316  16.200  1.00  0.00           H
ATOM    655  HE1 TYR A 143       9.277  -2.893  18.731  1.00  0.00           H
ATOM    656  HE2 TYR A 143       7.338   0.931  18.372  1.00  0.00           H
ATOM    657  HH  TYR A 143       7.747  -2.177  20.182  1.00  0.00           H
ATOM    658  N   VAL A 144      11.856  -1.304  12.357  1.00 22.79           N
ATOM    659  CA  VAL A 144      12.179  -2.122  11.167  1.00 22.01           C
ATOM    660  C   VAL A 144      13.635  -2.633  11.159  1.00 23.35           C
ATOM    661  O   VAL A 144      13.900  -3.778  10.788  1.00 21.03           O
ATOM    662  CB  VAL A 144      11.816  -1.337   9.869  1.00 21.23           C
ATOM    663  CG1 VAL A 144      12.317  -1.979   8.557  1.00 23.80           C
ATOM    664  CG2 VAL A 144      10.302  -1.076   9.728  1.00 17.15           C
ATOM    665  H   VAL A 144      11.483  -0.377  12.166  1.00  0.00           H
ATOM    666  HA  VAL A 144      11.560  -3.017  11.213  1.00  0.00           H
ATOM    667  HB  VAL A 144      12.313  -0.369   9.948  1.00  0.00           H
ATOM    668 HG11 VAL A 144      11.982  -1.412   7.688  1.00  0.00           H
ATOM    669 HG12 VAL A 144      13.405  -2.014   8.496  1.00  0.00           H
ATOM    670 HG13 VAL A 144      11.948  -2.999   8.443  1.00  0.00           H
ATOM    671 HG21 VAL A 144      10.119  -0.261   9.029  1.00  0.00           H
ATOM    672 HG22 VAL A 144       9.785  -1.948   9.330  1.00  0.00           H
ATOM    673 HG23 VAL A 144       9.826  -0.811  10.671  1.00  0.00           H
ATOM    674  N   GLU A 145      14.568  -1.797  11.624  1.00 23.20           N
ATOM    675  CA  GLU A 145      15.995  -2.070  11.694  1.00 23.64           C
ATOM    676  C   GLU A 145      16.333  -3.318  12.509  1.00 24.71           C
ATOM    677  O   GLU A 145      17.168  -4.129  12.117  1.00 23.64           O
ATOM    678  CB  GLU A 145      16.691  -0.848  12.319  1.00 25.26           C
ATOM    679  CG  GLU A 145      17.382  -0.012  11.240  1.00 25.70           C
ATOM    680  CD  GLU A 145      18.677  -0.669  10.787  1.00 24.54           C
ATOM    681  OE1 GLU A 145      19.432  -1.138  11.663  1.00 27.65           O
ATOM    682  OE2 GLU A 145      18.934  -0.711   9.570  1.00 28.24           O1-
ATOM    683  H   GLU A 145      14.270  -0.854  11.865  1.00  0.00           H
ATOM    684  HA  GLU A 145      16.333  -2.218  10.675  1.00  0.00           H
ATOM    685  HB2 GLU A 145      16.007  -0.243  12.906  1.00  0.00           H
ATOM    686  HB3 GLU A 145      17.425  -1.151  13.065  1.00  0.00           H
ATOM    687  HG2 GLU A 145      16.724   0.147  10.385  1.00  0.00           H
ATOM    688  HG3 GLU A 145      17.601   0.971  11.635  1.00  0.00           H
ATOM    689  N   ASN A 146      15.693  -3.441  13.668  1.00 25.05           N
ATOM    690  CA  ASN A 146      16.013  -4.470  14.649  1.00 28.02           C
ATOM    691  C   ASN A 146      15.001  -5.614  14.523  1.00 26.91           C
ATOM    692  O   ASN A 146      15.378  -6.770  14.699  1.00 26.71           O
ATOM    693  CB  ASN A 146      15.983  -3.850  16.062  1.00 31.59           C
ATOM    694  CG  ASN A 146      16.984  -2.694  16.218  1.00 35.43           C
ATOM    695  OD1 ASN A 146      18.176  -2.823  15.937  1.00 38.91           O
ATOM    696  ND2 ASN A 146      16.517  -1.504  16.570  1.00 38.29           N
ATOM    697  H   ASN A 146      14.946  -2.786  13.863  1.00  0.00           H
ATOM    698  HA  ASN A 146      17.009  -4.886  14.477  1.00  0.00           H
ATOM    699  HB2 ASN A 146      14.975  -3.510  16.307  1.00  0.00           H
ATOM    700  HB3 ASN A 146      16.232  -4.615  16.800  1.00  0.00           H
ATOM    701 HD21 ASN A 146      15.515  -1.323  16.598  1.00  0.00           H
ATOM    702 HD22 ASN A 146      17.151  -0.737  16.702  1.00  0.00           H
ATOM    703  N   LYS A 147      13.751  -5.315  14.133  1.00 25.17           N
ATOM    704  CA  LYS A 147      12.697  -6.302  13.912  1.00 25.56           C
ATOM    705  C   LYS A 147      12.912  -7.118  12.626  1.00 23.80           C
ATOM    706  O   LYS A 147      12.394  -8.234  12.549  1.00 24.25           O
ATOM    707  CB  LYS A 147      11.324  -5.592  13.845  1.00 26.51           C
ATOM    708  CG  LYS A 147      10.873  -5.011  15.202  1.00 27.65           C
ATOM    709  CD  LYS A 147      10.304  -6.084  16.142  1.00 29.92           C
ATOM    710  CE  LYS A 147      10.179  -5.671  17.613  1.00 29.66           C
ATOM    711  NZ  LYS A 147       9.871  -6.816  18.482  1.00 34.14           N1+
ATOM    712  H   LYS A 147      13.496  -4.340  14.005  1.00  0.00           H
ATOM    713  HA  LYS A 147      12.708  -7.008  14.743  1.00  0.00           H
ATOM    714  HB2 LYS A 147      11.359  -4.801  13.096  1.00  0.00           H
ATOM    715  HB3 LYS A 147      10.556  -6.284  13.492  1.00  0.00           H
ATOM    716  HG2 LYS A 147      11.704  -4.496  15.685  1.00  0.00           H
ATOM    717  HG3 LYS A 147      10.111  -4.254  15.025  1.00  0.00           H
ATOM    718  HD2 LYS A 147       9.327  -6.387  15.773  1.00  0.00           H
ATOM    719  HD3 LYS A 147      10.945  -6.955  16.095  1.00  0.00           H
ATOM    720  HE2 LYS A 147      11.108  -5.224  17.968  1.00  0.00           H
ATOM    721  HE3 LYS A 147       9.394  -4.925  17.735  1.00  0.00           H
ATOM    722  HZ1 LYS A 147       9.813  -6.415  19.437  1.00  0.00           H
ATOM    723  HZ2 LYS A 147       8.939  -7.169  18.303  1.00  0.00           H
ATOM    724  HZ3 LYS A 147      10.578  -7.557  18.407  1.00  0.00           H
ATOM    725  N   ILE A 148      13.705  -6.620  11.662  1.00 24.02           N
ATOM    726  CA  ILE A 148      14.147  -7.364  10.483  1.00 21.98           C
ATOM    727  C   ILE A 148      15.575  -7.034  10.011  1.00 23.64           C
ATOM    728  O   ILE A 148      16.375  -7.959   9.883  1.00 24.28           O
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ATOM    729  CB  ILE A 148      13.071  -7.428   9.366  1.00 21.36           C
ATOM    730  CG1 ILE A 148      13.528  -8.316   8.182  1.00 23.00           C
ATOM    731  CG2 ILE A 148      12.622  -6.034   8.892  1.00 19.78           C
ATOM    732  CD1 ILE A 148      12.403  -9.103   7.504  1.00 19.41           C
ATOM    733  H   ILE A 148      14.057  -5.677  11.771  1.00  0.00           H
ATOM    734  HA  ILE A 148      14.241  -8.398  10.818  1.00  0.00           H
ATOM    735  HB  ILE A 148      12.201  -7.908   9.809  1.00  0.00           H
ATOM    736 HG12 ILE A 148      14.072  -7.720   7.446  1.00  0.00           H
ATOM    737 HG13 ILE A 148      14.237  -9.060   8.544  1.00  0.00           H
ATOM    738 HG21 ILE A 148      11.883  -6.109   8.104  1.00  0.00           H
ATOM    739 HG22 ILE A 148      12.168  -5.462   9.701  1.00  0.00           H
ATOM    740 HG23 ILE A 148      13.449  -5.450   8.488  1.00  0.00           H
ATOM    741 HD11 ILE A 148      12.785  -9.666   6.653  1.00  0.00           H
ATOM    742 HD12 ILE A 148      11.964  -9.821   8.194  1.00  0.00           H
ATOM    743 HD13 ILE A 148      11.608  -8.458   7.145  1.00  0.00           H
ATOM    744  N   ASN A 149      15.887  -5.766   9.701  1.00 22.03           N
ATOM    745  CA  ASN A 149      17.003  -5.369   8.812  1.00 24.97           C
ATOM    746  C   ASN A 149      18.388  -5.917   9.203  1.00 27.08           C
ATOM    747  O   ASN A 149      19.130  -6.384   8.344  1.00 26.94           O
ATOM    748  CB  ASN A 149      17.065  -3.830   8.676  1.00 24.58           C
ATOM    749  CG  ASN A 149      17.745  -3.337   7.395  1.00 26.06           C
ATOM    750  OD1 ASN A 149      17.541  -3.901   6.321  1.00 24.50           O
ATOM    751  ND2 ASN A 149      18.537  -2.277   7.479  1.00 25.60           N
ATOM    752  H   ASN A 149      15.172  -5.067   9.875  1.00  0.00           H
ATOM    753  HA  ASN A 149      16.752  -5.801   7.841  1.00  0.00           H
ATOM    754  HB2 ASN A 149      16.062  -3.405   8.687  1.00  0.00           H
ATOM    755  HB3 ASN A 149      17.614  -3.420   9.522  1.00  0.00           H
ATOM    756 HD21 ASN A 149      18.681  -1.752   8.363  1.00  0.00           H
ATOM    757 HD22 ASN A 149      18.969  -1.885   6.641  1.00  0.00           H
ATOM    758  N   LYS A 150      18.721  -5.927  10.499  1.00 30.35           N
ATOM    759  CA  LYS A 150      19.992  -6.453  11.005  1.00 31.86           C
ATOM    760  C   LYS A 150      20.077  -7.994  10.982  1.00 30.69           C
ATOM    761  O   LYS A 150      21.164  -8.540  11.160  1.00 31.66           O
ATOM    762  CB  LYS A 150      20.184  -5.989  12.461  1.00 34.31           C
ATOM    763  CG  LYS A 150      20.551  -4.504  12.579  1.00 37.03           C
ATOM    764  CD  LYS A 150      20.872  -4.126  14.031  1.00 39.82           C
ATOM    765  CE  LYS A 150      21.189  -2.639  14.215  1.00 41.88           C
ATOM    766  NZ  LYS A 150      19.989  -1.813  14.034  1.00 43.28           N1+
ATOM    767  H   LYS A 150      18.090  -5.465  11.148  1.00  0.00           H
ATOM    768  HA  LYS A 150      20.812  -6.077  10.389  1.00  0.00           H
ATOM    769  HB2 LYS A 150      19.288  -6.207  13.045  1.00  0.00           H
ATOM    770  HB3 LYS A 150      20.988  -6.567  12.921  1.00  0.00           H
ATOM    771  HG2 LYS A 150      21.416  -4.289  11.948  1.00  0.00           H
ATOM    772  HG3 LYS A 150      19.740  -3.890  12.188  1.00  0.00           H
ATOM    773  HD2 LYS A 150      20.048  -4.418  14.684  1.00  0.00           H
ATOM    774  HD3 LYS A 150      21.734  -4.709  14.360  1.00  0.00           H
ATOM    775  HE2 LYS A 150      21.563  -2.475  15.225  1.00  0.00           H
ATOM    776  HE3 LYS A 150      21.972  -2.315  13.529  1.00  0.00           H
ATOM    777  HZ1 LYS A 150      20.156  -0.866  14.322  1.00  0.00           H
ATOM    778  HZ2 LYS A 150      19.753  -1.728  13.021  1.00  0.00           H
ATOM    779  HZ3 LYS A 150      19.204  -2.210  14.543  1.00  0.00           H
ATOM    780  N   LYS A 151      18.951  -8.690  10.792  1.00 29.61           N
ATOM    781  CA  LYS A 151      18.888 -10.141  10.641  1.00 28.95           C
ATOM    782  C   LYS A 151      18.808 -10.482   9.139  1.00 28.12           C
ATOM    783  O   LYS A 151      19.472 -11.412   8.688  1.00 26.36           O
ATOM    784  CB  LYS A 151      17.616 -10.670  11.355  1.00 30.41           C
ATOM    785  CG  LYS A 151      17.562 -10.340  12.867  1.00 32.64           C
ATOM    786  CD  LYS A 151      16.273 -10.789  13.589  1.00 35.44           C
ATOM    787  CE  LYS A 151      15.030 -10.007  13.135  1.00 35.31           C
ATOM    788  NZ  LYS A 151      13.823 -10.313  13.916  1.00 36.53           N1+
ATOM    789  H   LYS A 151      18.108  -8.165  10.588  1.00  0.00           H
ATOM    790  HA  LYS A 151      19.770 -10.625  11.065  1.00  0.00           H
ATOM    791  HB2 LYS A 151      16.730 -10.282  10.856  1.00  0.00           H
ATOM    792  HB3 LYS A 151      17.571 -11.753  11.227  1.00  0.00           H
ATOM    793  HG2 LYS A 151      18.420 -10.806  13.352  1.00  0.00           H
ATOM    794  HG3 LYS A 151      17.686  -9.267  13.022  1.00  0.00           H
ATOM    795  HD2 LYS A 151      16.119 -11.860  13.447  1.00  0.00           H
ATOM    796  HD3 LYS A 151      16.411 -10.639  14.661  1.00  0.00           H
ATOM    797  HE2 LYS A 151      15.213  -8.934  13.185  1.00  0.00           H
ATOM    798  HE3 LYS A 151      14.811 -10.245  12.094  1.00  0.00           H
ATOM    799  HZ1 LYS A 151      13.037  -9.956  13.387  1.00  0.00           H
ATOM    800  HZ2 LYS A 151      13.693 -11.312  14.067  1.00  0.00           H
ATOM    801  HZ3 LYS A 151      13.782  -9.830  14.832  1.00  0.00           H
ATOM    802  N   PHE A 152      18.013  -9.728   8.364  1.00 26.10           N
ATOM    803  CA  PHE A 152      17.738  -9.953   6.944  1.00 27.49           C
ATOM    804  C   PHE A 152      17.748  -8.597   6.211  1.00 27.68           C
ATOM    805  O   PHE A 152      16.704  -7.942   6.170  1.00 27.95           O
ATOM    806  CB  PHE A 152      16.413 -10.732   6.777  1.00 28.65           C
ATOM    807  CG  PHE A 152      16.349 -12.044   7.543  1.00 30.27           C
ATOM    808  CD1 PHE A 152      17.057 -13.175   7.084  1.00 29.39           C
ATOM    809  CD2 PHE A 152      15.637 -12.114   8.758  1.00 29.26           C
ATOM    810  CE1 PHE A 152      17.047 -14.368   7.830  1.00 29.40           C
ATOM    811  CE2 PHE A 152      15.659 -13.296   9.519  1.00 30.84           C
ATOM    812  CZ  PHE A 152      16.351 -14.428   9.052  1.00 29.38           C
ATOM    813  H   PHE A 152      17.508  -8.965   8.806  1.00  0.00           H
ATOM    814  HA  PHE A 152      18.514 -10.588   6.519  1.00  0.00           H
ATOM    815  HB2 PHE A 152      15.570 -10.111   7.076  1.00  0.00           H
ATOM    816  HB3 PHE A 152      16.256 -10.935   5.719  1.00  0.00           H
ATOM    817  HD1 PHE A 152      17.628 -13.122   6.169  1.00  0.00           H
ATOM    818  HD2 PHE A 152      15.097 -11.253   9.127  1.00  0.00           H
ATOM    819  HE1 PHE A 152      17.597 -15.229   7.479  1.00  0.00           H
ATOM    820  HE2 PHE A 152      15.147 -13.334  10.467  1.00  0.00           H
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ATOM    821  HZ  PHE A 152      16.356 -15.337   9.638  1.00  0.00           H
ATOM    822  N   PRO A 153      18.902  -8.132   5.680  1.00 27.92           N
ATOM    823  CA  PRO A 153      19.054  -6.756   5.188  1.00 26.86           C
ATOM    824  C   PRO A 153      18.479  -6.504   3.784  1.00 25.61           C
ATOM    825  O   PRO A 153      18.484  -7.397   2.925  1.00 23.81           O
ATOM    826  CB  PRO A 153      20.570  -6.510   5.204  1.00 28.24           C
ATOM    827  CG  PRO A 153      21.185  -7.887   5.005  1.00 29.29           C
ATOM    828  CD  PRO A 153      20.188  -8.835   5.676  1.00 28.25           C
ATOM    829  HA  PRO A 153      18.572  -6.078   5.887  1.00  0.00           H
ATOM    830  HB2 PRO A 153      20.908  -5.785   4.462  1.00  0.00           H
ATOM    831  HB3 PRO A 153      20.856  -6.122   6.184  1.00  0.00           H
ATOM    832  HG2 PRO A 153      21.246  -8.108   3.939  1.00  0.00           H
ATOM    833  HG3 PRO A 153      22.189  -7.967   5.422  1.00  0.00           H
ATOM    834  HD2 PRO A 153      20.137  -9.788   5.148  1.00  0.00           H
ATOM    835  HD3 PRO A 153      20.490  -9.030   6.708  1.00  0.00           H
ATOM    836  N   TYR A 154      18.057  -5.249   3.568  1.00 23.90           N
ATOM    837  CA  TYR A 154      17.624  -4.628   2.311  1.00 25.51           C
ATOM    838  C   TYR A 154      18.044  -3.142   2.277  1.00 24.53           C
ATOM    839  O   TYR A 154      18.249  -2.563   3.347  1.00 23.72           O
ATOM    840  CB  TYR A 154      16.107  -4.829   2.085  1.00 24.29           C
ATOM    841  CG  TYR A 154      15.750  -6.213   1.584  1.00 25.02           C
ATOM    842  CD1 TYR A 154      16.062  -6.577   0.258  1.00 24.50           C
ATOM    843  CD2 TYR A 154      15.162  -7.156   2.451  1.00 23.16           C
ATOM    844  CE1 TYR A 154      15.830  -7.886  -0.192  1.00 26.82           C
ATOM    845  CE2 TYR A 154      14.933  -8.468   2.003  1.00 25.35           C
ATOM    846  CZ  TYR A 154      15.287  -8.835   0.688  1.00 26.98           C
ATOM    847  OH  TYR A 154      15.228 -10.134   0.292  1.00 26.94           O
ATOM    848  H   TYR A 154      18.083  -4.611   4.360  1.00  0.00           H
ATOM    849  HA  TYR A 154      18.170  -5.125   1.509  1.00  0.00           H
ATOM    850  HB2 TYR A 154      15.559  -4.613   3.003  1.00  0.00           H
ATOM    851  HB3 TYR A 154      15.729  -4.111   1.355  1.00  0.00           H
ATOM    852  HD1 TYR A 154      16.512  -5.862  -0.414  1.00  0.00           H
ATOM    853  HD2 TYR A 154      14.929  -6.888   3.473  1.00  0.00           H
ATOM    854  HE1 TYR A 154      16.096  -8.164  -1.203  1.00  0.00           H
ATOM    855  HE2 TYR A 154      14.524  -9.193   2.691  1.00  0.00           H
ATOM    856  HH  TYR A 154      14.877 -10.733   0.987  1.00  0.00           H
ATOM    857  N   PRO A 155      18.178  -2.508   1.089  1.00 24.68           N
ATOM    858  CA  PRO A 155      18.415  -1.060   0.959  1.00 23.85           C
ATOM    859  C   PRO A 155      17.117  -0.257   1.183  1.00 24.27           C
ATOM    860  O   PRO A 155      16.020  -0.801   1.015  1.00 23.44           O
ATOM    861  CB  PRO A 155      18.917  -0.884  -0.482  1.00 23.62           C
ATOM    862  CG  PRO A 155      18.279  -2.029  -1.253  1.00 23.92           C
ATOM    863  CD  PRO A 155      18.138  -3.151  -0.227  1.00 24.00           C
ATOM    864  HA  PRO A 155      19.176  -0.736   1.668  1.00  0.00           H
ATOM    865  HB2 PRO A 155      18.689   0.092  -0.916  1.00  0.00           H
ATOM    866  HB3 PRO A 155      20.000  -0.991  -0.515  1.00  0.00           H
ATOM    867  HG2 PRO A 155      17.295  -1.723  -1.609  1.00  0.00           H
ATOM    868  HG3 PRO A 155      18.864  -2.325  -2.124  1.00  0.00           H
ATOM    869  HD2 PRO A 155      17.211  -3.695  -0.386  1.00  0.00           H
ATOM    870  HD3 PRO A 155      18.970  -3.849  -0.321  1.00  0.00           H
ATOM    871  N   TRP A 156      17.229   1.025   1.555  1.00 23.62           N
ATOM    872  CA  TRP A 156      16.098   1.908   1.846  1.00 24.34           C
ATOM    873  C   TRP A 156      16.111   3.118   0.902  1.00 24.58           C
ATOM    874  O   TRP A 156      17.009   3.956   0.962  1.00 24.78           O
ATOM    875  CB  TRP A 156      16.126   2.318   3.337  1.00 22.47           C
ATOM    876  CG  TRP A 156      14.797   2.620   3.973  1.00 23.60           C
ATOM    877  CD1 TRP A 156      13.782   3.325   3.416  1.00 23.21           C
ATOM    878  CD2 TRP A 156      14.297   2.170   5.273  1.00 24.20           C
ATOM    879  NE1 TRP A 156      12.699   3.334   4.272  1.00 23.02           N
ATOM    880  CE3 TRP A 156      14.824   1.395   6.334  1.00 22.06           C
ATOM    881  CE2 TRP A 156      12.958   2.640   5.427  1.00 24.32           C
ATOM    882  CZ3 TRP A 156      14.051   1.093   7.476  1.00 23.14           C
ATOM    883  CZ2 TRP A 156      12.185   2.365   6.564  1.00 23.17           C
ATOM    884  CH2 TRP A 156      12.731   1.573   7.588  1.00 23.12           C
ATOM    885  H   TRP A 156      18.165   1.413   1.656  1.00  0.00           H
ATOM    886  HA  TRP A 156      15.169   1.367   1.675  1.00  0.00           H
ATOM    887  HB2 TRP A 156      16.558   1.501   3.915  1.00  0.00           H
ATOM    888  HB3 TRP A 156      16.791   3.166   3.498  1.00  0.00           H
ATOM    889  HD1 TRP A 156      13.814   3.801   2.447  1.00  0.00           H
ATOM    890  HE1 TRP A 156      11.804   3.801   4.060  1.00  0.00           H
ATOM    891  HE3 TRP A 156      15.830   1.007   6.254  1.00  0.00           H
ATOM    892  HZ3 TRP A 156      14.474   0.479   8.259  1.00  0.00           H
ATOM    893  HZ2 TRP A 156      11.180   2.748   6.630  1.00  0.00           H
ATOM    894  HH2 TRP A 156      12.130   1.333   8.451  1.00  0.00           H
ATOM    895  N   VAL A 157      15.094   3.215   0.041  1.00 24.62           N
ATOM    896  CA  VAL A 157      14.877   4.319  -0.882  1.00 22.16           C
ATOM    897  C   VAL A 157      13.920   5.311  -0.196  1.00 21.82           C
ATOM    898  O   VAL A 157      12.741   5.021   0.029  1.00 22.52           O
ATOM    899  CB  VAL A 157      14.250   3.747  -2.184  1.00 20.88           C
ATOM    900  CG1 VAL A 157      13.823   4.852  -3.166  1.00 19.19           C
ATOM    901  CG2 VAL A 157      15.216   2.771  -2.886  1.00 20.83           C
ATOM    902  H   VAL A 157      14.360   2.510   0.076  1.00  0.00           H
ATOM    903  HA  VAL A 157      15.818   4.816  -1.125  1.00  0.00           H
ATOM    904  HB  VAL A 157      13.353   3.180  -1.927  1.00  0.00           H
ATOM    905 HG11 VAL A 157      13.592   4.448  -4.149  1.00  0.00           H
ATOM    906 HG12 VAL A 157      12.932   5.371  -2.819  1.00  0.00           H
ATOM    907 HG13 VAL A 157      14.610   5.595  -3.290  1.00  0.00           H
ATOM    908 HG21 VAL A 157      14.747   2.316  -3.757  1.00  0.00           H
ATOM    909 HG22 VAL A 157      16.120   3.277  -3.226  1.00  0.00           H
ATOM    910 HG23 VAL A 157      15.522   1.953  -2.235  1.00  0.00           H
ATOM    911  N   PHE A 158      14.432   6.495   0.133  1.00 22.60           N
ATOM    912  CA  PHE A 158      13.678   7.605   0.686  1.00 21.72           C
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ATOM    913  C   PHE A 158      13.349   8.554  -0.477  1.00 21.85           C
ATOM    914  O   PHE A 158      14.232   8.951  -1.240  1.00 21.79           O
ATOM    915  CB  PHE A 158      14.560   8.322   1.728  1.00 22.82           C
ATOM    916  CG  PHE A 158      14.951   7.437   2.900  1.00 22.97           C
ATOM    917  CD1 PHE A 158      14.000   7.103   3.886  1.00 20.44           C
ATOM    918  CD2 PHE A 158      16.251   6.896   2.972  1.00 23.38           C
ATOM    919  CE1 PHE A 158      14.347   6.222   4.929  1.00 23.63           C
ATOM    920  CE2 PHE A 158      16.593   6.023   4.019  1.00 22.41           C
ATOM    921  CZ  PHE A 158      15.646   5.692   5.004  1.00 21.10           C
ATOM    922  H   PHE A 158      15.413   6.680  -0.081  1.00  0.00           H
ATOM    923  HA  PHE A 158      12.768   7.256   1.172  1.00  0.00           H
ATOM    924  HB2 PHE A 158      15.457   8.728   1.260  1.00  0.00           H
ATOM    925  HB3 PHE A 158      14.021   9.170   2.143  1.00  0.00           H
ATOM    926  HD1 PHE A 158      12.995   7.491   3.822  1.00  0.00           H
ATOM    927  HD2 PHE A 158      16.985   7.126   2.212  1.00  0.00           H
ATOM    928  HE1 PHE A 158      13.612   5.901   5.650  1.00  0.00           H
ATOM    929  HE2 PHE A 158      17.579   5.592   4.054  1.00  0.00           H
ATOM    930  HZ  PHE A 158      15.895   4.994   5.788  1.00  0.00           H
ATOM    931  N   LEU A 159      12.067   8.898  -0.616  1.00 22.19           N
ATOM    932  CA  LEU A 159      11.485   9.748  -1.648  1.00 20.94           C
ATOM    933  C   LEU A 159      10.846  10.975  -0.973  1.00 21.28           C
ATOM    934  O   LEU A 159      10.314  10.865   0.134  1.00 22.09           O
ATOM    935  CB  LEU A 159      10.437   8.942  -2.450  1.00 22.79           C
ATOM    936  CG  LEU A 159      10.962   7.645  -3.109  1.00 22.80           C
ATOM    937  CD1 LEU A 159       9.821   6.822  -3.726  1.00 23.75           C
ATOM    938  CD2 LEU A 159      12.044   7.929  -4.161  1.00 19.61           C
ATOM    939  H   LEU A 159      11.399   8.510   0.051  1.00  0.00           H
ATOM    940  HA  LEU A 159      12.259  10.082  -2.331  1.00  0.00           H
ATOM    941  HB2 LEU A 159       9.610   8.674  -1.798  1.00  0.00           H
ATOM    942  HB3 LEU A 159      10.009   9.591  -3.212  1.00  0.00           H
ATOM    943  HG  LEU A 159      11.403   7.021  -2.331  1.00  0.00           H
ATOM    944 HD11 LEU A 159      10.193   5.871  -4.110  1.00  0.00           H
ATOM    945 HD12 LEU A 159       9.048   6.600  -2.990  1.00  0.00           H
ATOM    946 HD13 LEU A 159       9.352   7.339  -4.561  1.00  0.00           H
ATOM    947 HD21 LEU A 159      12.360   7.015  -4.665  1.00  0.00           H
ATOM    948 HD22 LEU A 159      11.678   8.613  -4.924  1.00  0.00           H
ATOM    949 HD23 LEU A 159      12.934   8.371  -3.715  1.00  0.00           H
ATOM    950  N   ASN A 160      10.897  12.144  -1.617  1.00 21.67           N
ATOM    951  CA  ASN A 160      10.449  13.439  -1.085  1.00 21.59           C
ATOM    952  C   ASN A 160       9.953  14.318  -2.243  1.00 22.22           C
ATOM    953  O   ASN A 160      10.103  13.954  -3.407  1.00 22.40           O
ATOM    954  CB  ASN A 160      11.609  14.058  -0.271  1.00 21.73           C
ATOM    955  CG  ASN A 160      11.276  15.173   0.724  1.00 20.70           C
ATOM    956  OD1 ASN A 160      10.281  15.889   0.612  1.00 17.56           O
ATOM    957  ND2 ASN A 160      12.134  15.336   1.723  1.00 20.24           N
ATOM    958  H   ASN A 160      11.369  12.177  -2.513  1.00  0.00           H
ATOM    959  HA  ASN A 160       9.595  13.269  -0.430  1.00  0.00           H
ATOM    960  HB2 ASN A 160      12.022  13.264   0.337  1.00  0.00           H
ATOM    961  HB3 ASN A 160      12.411  14.383  -0.934  1.00  0.00           H
ATOM    962 HD21 ASN A 160      12.944  14.733   1.790  1.00  0.00           H
ATOM    963 HD22 ASN A 160      12.042  16.114   2.357  1.00  0.00           H
ATOM    964  N   ASP A 161       9.375  15.481  -1.941  1.00 22.62           N
ATOM    965  CA  ASP A 161       8.910  16.485  -2.907  1.00 21.64           C
ATOM    966  C   ASP A 161       9.620  17.836  -2.677  1.00 24.09           C
ATOM    967  O   ASP A 161       9.625  18.699  -3.556  1.00 24.64           O
ATOM    968  CB  ASP A 161       7.362  16.542  -2.911  1.00 22.24           C
ATOM    969  CG  ASP A 161       6.698  17.538  -1.963  1.00 22.54           C
ATOM    970  OD1 ASP A 161       6.811  17.359  -0.731  1.00 19.79           O
ATOM    971  OD2 ASP A 161       6.010  18.447  -2.489  1.00 25.86           O1-
ATOM    972  H   ASP A 161       9.375  15.734  -0.956  1.00  0.00           H
ATOM    973  HA  ASP A 161       9.213  16.177  -3.910  1.00  0.00           H
ATOM    974  HB2 ASP A 161       7.038  16.773  -3.925  1.00  0.00           H
ATOM    975  HB3 ASP A 161       6.950  15.553  -2.710  1.00  0.00           H
ATOM    976  N   GLU A 162      10.292  17.992  -1.537  1.00 25.03           N
ATOM    977  CA  GLU A 162      11.418  18.895  -1.347  1.00 25.78           C
ATOM    978  C   GLU A 162      12.701  18.080  -1.612  1.00 26.36           C
ATOM    979  O   GLU A 162      12.641  16.847  -1.643  1.00 26.47           O
ATOM    980  CB  GLU A 162      11.430  19.279   0.145  1.00 28.39           C
ATOM    981  CG  GLU A 162      10.348  20.307   0.496  1.00 34.38           C
ATOM    982  CD  GLU A 162      10.317  20.629   1.975  1.00 38.51           C
ATOM    983  OE1 GLU A 162      10.877  19.879   2.806  1.00 40.07           O
ATOM    984  OE2 GLU A 162       9.653  21.617   2.355  1.00 39.26           O1-
ATOM    985  H   GLU A 162      10.278  17.213  -0.891  1.00  0.00           H
ATOM    986  HA  GLU A 162      11.370  19.773  -1.991  1.00  0.00           H
ATOM    987  HB2 GLU A 162      11.310  18.381   0.752  1.00  0.00           H
ATOM    988  HB3 GLU A 162      12.395  19.696   0.436  1.00  0.00           H
ATOM    989  HG2 GLU A 162      10.513  21.229  -0.064  1.00  0.00           H
ATOM    990  HG3 GLU A 162       9.364  19.936   0.206  1.00  0.00           H
ATOM    991  N   PRO A 163      13.882  18.722  -1.711  1.00 25.77           N
ATOM    992  CA  PRO A 163      15.153  18.014  -1.555  1.00 25.31           C
ATOM    993  C   PRO A 163      15.325  17.590  -0.082  1.00 24.48           C
ATOM    994  O   PRO A 163      14.766  18.212   0.827  1.00 23.95           O
ATOM    995  CB  PRO A 163      16.216  19.020  -2.018  1.00 25.46           C
ATOM    996  CG  PRO A 163      15.595  20.387  -1.763  1.00 26.93           C
ATOM    997  CD  PRO A 163      14.085  20.162  -1.886  1.00 25.47           C
ATOM    998  HA  PRO A 163      15.171  17.128  -2.193  1.00  0.00           H
ATOM    999  HB2 PRO A 163      17.176  18.899  -1.513  1.00  0.00           H
ATOM   1000  HB3 PRO A 163      16.389  18.892  -3.088  1.00  0.00           H
ATOM   1001  HG2 PRO A 163      15.832  20.701  -0.745  1.00  0.00           H
ATOM   1002  HG3 PRO A 163      15.963  21.159  -2.440  1.00  0.00           H
ATOM   1003  HD2 PRO A 163      13.543  20.767  -1.161  1.00  0.00           H
ATOM   1004  HD3 PRO A 163      13.735  20.440  -2.879  1.00  0.00           H
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ATOM   1005  N   PHE A 164      16.085  16.522   0.167  1.00 23.91           N
ATOM   1006  CA  PHE A 164      16.324  16.017   1.516  1.00 22.65           C
ATOM   1007  C   PHE A 164      17.338  16.913   2.229  1.00 22.61           C
ATOM   1008  O   PHE A 164      18.449  17.107   1.723  1.00 20.34           O
ATOM   1009  CB  PHE A 164      16.878  14.584   1.449  1.00 21.23           C
ATOM   1010  CG  PHE A 164      15.777  13.551   1.370  1.00 21.71           C
ATOM   1011  CD1 PHE A 164      15.029  13.256   2.527  1.00 21.29           C
ATOM   1012  CD2 PHE A 164      15.475  12.909   0.153  1.00 20.13           C
ATOM   1013  CE1 PHE A 164      13.991  12.312   2.475  1.00 22.86           C
ATOM   1014  CE2 PHE A 164      14.447  11.951   0.111  1.00 22.82           C
ATOM   1015  CZ  PHE A 164      13.707  11.652   1.269  1.00 20.54           C
ATOM   1016  H   PHE A 164      16.558  16.074  -0.616  1.00  0.00           H
ATOM   1017  HA  PHE A 164      15.390  16.017   2.076  1.00  0.00           H
ATOM   1018  HB2 PHE A 164      17.575  14.465   0.618  1.00  0.00           H
ATOM   1019  HB3 PHE A 164      17.450  14.355   2.350  1.00  0.00           H
ATOM   1020  HD1 PHE A 164      15.238  13.765   3.458  1.00  0.00           H
ATOM   1021  HD2 PHE A 164      16.021  13.145  -0.749  1.00  0.00           H
ATOM   1022  HE1 PHE A 164      13.408  12.101   3.356  1.00  0.00           H
ATOM   1023  HE2 PHE A 164      14.208  11.460  -0.819  1.00  0.00           H
ATOM   1024  HZ  PHE A 164      12.892  10.945   1.223  1.00  0.00           H
ATOM   1025  N   THR A 165      16.949  17.447   3.392  1.00 23.48           N
ATOM   1026  CA  THR A 165      17.768  18.265   4.276  1.00 23.94           C
ATOM   1027  C   THR A 165      18.902  17.419   4.879  1.00 26.62           C
ATOM   1028  O   THR A 165      18.736  16.225   5.139  1.00 21.92           O
ATOM   1029  CB  THR A 165      16.840  18.879   5.360  1.00 25.32           C
ATOM   1030  OG1 THR A 165      16.054  17.895   6.014  1.00 27.19           O
ATOM   1031  CG2 THR A 165      15.892  19.946   4.792  1.00 25.62           C
ATOM   1032  H   THR A 165      16.035  17.212   3.772  1.00  0.00           H
ATOM   1033  HA  THR A 165      18.216  19.073   3.697  1.00  0.00           H
ATOM   1034  HB  THR A 165      17.458  19.358   6.121  1.00  0.00           H
ATOM   1035  HG1 THR A 165      16.364  17.801   6.930  1.00  0.00           H
ATOM   1036 HG21 THR A 165      15.261  20.368   5.574  1.00  0.00           H
ATOM   1037 HG22 THR A 165      16.452  20.768   4.344  1.00  0.00           H
ATOM   1038 HG23 THR A 165      15.239  19.541   4.020  1.00  0.00           H
ATOM   1039  N   GLU A 166      20.085  18.018   5.054  1.00 27.49           N
ATOM   1040  CA  GLU A 166      21.317  17.342   5.470  1.00 30.60           C
ATOM   1041  C   GLU A 166      21.178  16.608   6.812  1.00 29.25           C
ATOM   1042  O   GLU A 166      21.650  15.480   6.943  1.00 31.53           O
ATOM   1043  CB  GLU A 166      22.518  18.318   5.438  1.00 34.11           C
ATOM   1044  CG  GLU A 166      22.585  19.286   4.225  1.00 40.02           C
ATOM   1045  CD  GLU A 166      22.191  18.648   2.897  1.00 44.19           C
ATOM   1046  OE1 GLU A 166      21.102  18.997   2.400  1.00 48.52           O
ATOM   1047  OE2 GLU A 166      22.847  17.677   2.468  1.00 46.29           O1-
ATOM   1048  H   GLU A 166      20.212  18.909   4.588  1.00  0.00           H
ATOM   1049  HA  GLU A 166      21.526  16.569   4.737  1.00  0.00           H
ATOM   1050  HB2 GLU A 166      22.531  18.915   6.350  1.00  0.00           H
ATOM   1051  HB3 GLU A 166      23.436  17.728   5.461  1.00  0.00           H
ATOM   1052  HG2 GLU A 166      21.933  20.142   4.398  1.00  0.00           H
ATOM   1053  HG3 GLU A 166      23.593  19.690   4.125  1.00  0.00           H
ATOM   1054  N   GLU A 167      20.437  17.207   7.756  1.00 29.61           N
ATOM   1055  CA  GLU A 167      20.020  16.624   9.031  1.00 30.74           C
ATOM   1056  C   GLU A 167      19.236  15.305   8.874  1.00 29.24           C
ATOM   1057  O   GLU A 167      19.458  14.382   9.655  1.00 26.20           O
ATOM   1058  CB  GLU A 167      19.334  17.724   9.894  1.00 33.76           C
ATOM   1059  CG  GLU A 167      18.000  17.404  10.613  1.00 39.85           C
ATOM   1060  CD  GLU A 167      16.756  17.543   9.738  1.00 43.67           C
ATOM   1061  OE1 GLU A 167      16.900  17.760   8.513  1.00 45.84           O
ATOM   1062  OE2 GLU A 167      15.647  17.521  10.319  1.00 45.11           O1-
ATOM   1063  H   GLU A 167      20.013  18.084   7.499  1.00  0.00           H
ATOM   1064  HA  GLU A 167      20.942  16.345   9.545  1.00  0.00           H
ATOM   1065  HB2 GLU A 167      20.049  18.023  10.661  1.00  0.00           H
ATOM   1066  HB3 GLU A 167      19.188  18.632   9.306  1.00  0.00           H
ATOM   1067  HG2 GLU A 167      18.013  16.420  11.081  1.00  0.00           H
ATOM   1068  HG3 GLU A 167      17.884  18.117  11.428  1.00  0.00           H
ATOM   1069  N   PHE A 168      18.377  15.187   7.849  1.00 26.92           N
ATOM   1070  CA  PHE A 168      17.616  13.985   7.503  1.00 25.65           C
ATOM   1071  C   PHE A 168      18.569  12.835   7.190  1.00 24.16           C
ATOM   1072  O   PHE A 168      18.487  11.763   7.787  1.00 21.85           O
ATOM   1073  CB  PHE A 168      16.678  14.258   6.298  1.00 25.88           C
ATOM   1074  CG  PHE A 168      15.503  13.305   6.137  1.00 25.83           C
ATOM   1075  CD1 PHE A 168      15.689  11.938   5.827  1.00 27.41           C
ATOM   1076  CD2 PHE A 168      14.197  13.805   6.288  1.00 26.00           C
ATOM   1077  CE1 PHE A 168      14.581  11.071   5.755  1.00 27.73           C
ATOM   1078  CE2 PHE A 168      13.088  12.943   6.203  1.00 24.69           C
ATOM   1079  CZ  PHE A 168      13.283  11.572   5.969  1.00 24.72           C
ATOM   1080  H   PHE A 168      18.230  16.007   7.274  1.00  0.00           H
ATOM   1081  HA  PHE A 168      17.024  13.696   8.363  1.00  0.00           H
ATOM   1082  HB2 PHE A 168      16.282  15.270   6.382  1.00  0.00           H
ATOM   1083  HB3 PHE A 168      17.226  14.247   5.356  1.00  0.00           H
ATOM   1084  HD1 PHE A 168      16.678  11.539   5.657  1.00  0.00           H
ATOM   1085  HD2 PHE A 168      14.057  14.856   6.496  1.00  0.00           H
ATOM   1086  HE1 PHE A 168      14.725  10.024   5.531  1.00  0.00           H
ATOM   1087  HE2 PHE A 168      12.087  13.326   6.336  1.00  0.00           H
ATOM   1088  HZ  PHE A 168      12.431  10.916   5.927  1.00  0.00           H
ATOM   1089  N   LYS A 169      19.503  13.092   6.275  1.00 24.01           N
ATOM   1090  CA  LYS A 169      20.455  12.120   5.764  1.00 26.45           C
ATOM   1091  C   LYS A 169      21.457  11.717   6.863  1.00 26.84           C
ATOM   1092  O   LYS A 169      21.724  10.526   7.029  1.00 27.09           O
ATOM   1093  CB  LYS A 169      21.130  12.728   4.517  1.00 29.03           C
ATOM   1094  CG  LYS A 169      20.101  13.008   3.393  1.00 31.88           C
ATOM   1095  CD  LYS A 169      20.639  13.733   2.151  1.00 35.09           C
ATOM   1096  CE  LYS A 169      21.080  15.168   2.468  1.00 37.28           C
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ATOM   1097  NZ  LYS A 169      21.196  16.040   1.295  1.00 38.69          N1+
ATOM   1098  H   LYS A 169      19.535  14.034   5.906  1.00  0.00           H
ATOM   1099  HA  LYS A 169      19.909  11.224   5.467  1.00  0.00           H
ATOM   1100  HB2 LYS A 169      21.666  13.637   4.794  1.00  0.00           H
ATOM   1101  HB3 LYS A 169      21.877  12.030   4.142  1.00  0.00           H
ATOM   1102  HG2 LYS A 169      19.680  12.058   3.075  1.00  0.00           H
ATOM   1103  HG3 LYS A 169      19.257  13.583   3.776  1.00  0.00           H
ATOM   1104  HD2 LYS A 169      21.462  13.167   1.713  1.00  0.00           H
ATOM   1105  HD3 LYS A 169      19.848  13.748   1.400  1.00  0.00           H
ATOM   1106  HE2 LYS A 169      20.361  15.638   3.133  1.00  0.00           H
ATOM   1107  HE3 LYS A 169      22.044  15.150   2.979  1.00  0.00           H
ATOM   1108  HZ1 LYS A 169      21.878  16.773   1.568  1.00  0.00           H
ATOM   1109  HZ2 LYS A 169      21.511  15.526   0.469  1.00  0.00           H
ATOM   1110  HZ3 LYS A 169      20.317  16.512   1.127  1.00  0.00           H
ATOM   1111  N   GLU A 170      21.907  12.672   7.694  1.00 26.50           N
ATOM   1112  CA  GLU A 170      22.752  12.445   8.872  1.00 27.91           C
ATOM   1113  C   GLU A 170      22.011  11.581   9.921  1.00 26.70           C
ATOM   1114  O   GLU A 170      22.566  10.601  10.425  1.00 25.68           O
ATOM   1115  CB  GLU A 170      23.168  13.817   9.480  1.00 30.74           C
ATOM   1116  CG  GLU A 170      24.653  13.935   9.885  1.00 38.58           C
ATOM   1117  CD  GLU A 170      25.077  12.880  10.888  1.00 44.74           C
ATOM   1118  OE1 GLU A 170      24.372  12.691  11.903  1.00 47.54           O
ATOM   1119  OE2 GLU A 170      26.010  12.102  10.588  1.00 48.23          O1-
ATOM   1120  H   GLU A 170      21.653  13.634   7.483  1.00  0.00           H
ATOM   1121  HA  GLU A 170      23.640  11.906   8.536  1.00  0.00           H
ATOM   1122  HB2 GLU A 170      22.995  14.616   8.768  1.00  0.00           H
ATOM   1123  HB3 GLU A 170      22.543  14.069  10.339  1.00  0.00           H
ATOM   1124  HG2 GLU A 170      25.287  13.856   9.001  1.00  0.00           H
ATOM   1125  HG3 GLU A 170      24.846  14.914  10.321  1.00  0.00           H
ATOM   1126  N   ALA A 171      20.741  11.901  10.214  1.00 23.76           N
ATOM   1127  CA  ALA A 171      19.924  11.220  11.215  1.00 23.64           C
ATOM   1128  C   ALA A 171      19.486   9.818  10.766  1.00 23.90           C
ATOM   1129  O   ALA A 171      19.373   8.930  11.615  1.00 22.94           O
ATOM   1130  CB  ALA A 171      18.662  12.045  11.490  1.00 23.80           C
ATOM   1131  H   ALA A 171      20.350  12.736   9.782  1.00  0.00           H
ATOM   1132  HA  ALA A 171      20.503  11.129  12.135  1.00  0.00           H
ATOM   1133  HB1 ALA A 171      18.000  11.553  12.203  1.00  0.00           H
ATOM   1134  HB2 ALA A 171      18.913  13.025  11.898  1.00  0.00           H
ATOM   1135  HB3 ALA A 171      18.104  12.203  10.568  1.00  0.00           H
ATOM   1136  N   VAL A 172      19.265   9.606   9.462  1.00 24.62           N
ATOM   1137  CA  VAL A 172      19.070   8.297   8.835  1.00 25.76           C
ATOM   1138  C   VAL A 172      20.365   7.464   8.934  1.00 26.15           C
ATOM   1139  O   VAL A 172      20.301   6.298   9.324  1.00 25.46           O
ATOM   1140  CB  VAL A 172      18.563   8.487   7.380  1.00 25.40           C
ATOM   1141  CG1 VAL A 172      18.717   7.249   6.480  1.00 25.21           C
ATOM   1142  CG2 VAL A 172      17.083   8.911   7.376  1.00 22.74           C
ATOM   1143  H   VAL A 172      19.266  10.419   8.847  1.00  0.00           H
ATOM   1144  HA  VAL A 172      18.303   7.761   9.396  1.00  0.00           H
ATOM   1145  HB  VAL A 172      19.146   9.282   6.913  1.00  0.00           H
ATOM   1146 HG11 VAL A 172      18.299   7.441   5.494  1.00  0.00           H
ATOM   1147 HG12 VAL A 172      19.760   6.973   6.323  1.00  0.00           H
ATOM   1148 HG13 VAL A 172      18.192   6.391   6.891  1.00  0.00           H
ATOM   1149 HG21 VAL A 172      16.746   9.130   6.365  1.00  0.00           H
ATOM   1150 HG22 VAL A 172      16.442   8.120   7.764  1.00  0.00           H
ATOM   1151 HG23 VAL A 172      16.904   9.799   7.981  1.00  0.00           H
ATOM   1152  N   THR A 173      21.539   8.084   8.738  1.00 26.81           N
ATOM   1153  CA  THR A 173      22.876   7.499   8.945  1.00 28.03           C
ATOM   1154  C   THR A 173      23.236   7.512  10.465  1.00 27.32           C
ATOM   1155  O   THR A 173      24.389   7.647  10.877  1.00 26.39           O
ATOM   1156  CB  THR A 173      23.908   8.301   8.093  1.00 27.81           C
ATOM   1157  OG1 THR A 173      23.415   8.494   6.775  1.00 30.64           O
ATOM   1158  CG2 THR A 173      25.257   7.589   7.891  1.00 27.52           C
ATOM   1159  H   THR A 173      21.513   9.053   8.441  1.00  0.00           H
ATOM   1160  HA  THR A 173      22.863   6.461   8.605  1.00  0.00           H
ATOM   1161  HB  THR A 173      24.082   9.285   8.534  1.00  0.00           H
ATOM   1162  HG1 THR A 173      22.725   9.162   6.818  1.00  0.00           H
ATOM   1163 HG21 THR A 173      25.911   8.173   7.242  1.00  0.00           H
ATOM   1164 HG22 THR A 173      25.795   7.439   8.826  1.00  0.00           H
ATOM   1165 HG23 THR A 173      25.122   6.612   7.427  1.00  0.00           H
ATOM   1166  N   LYS A 174      22.220   7.415  11.327  1.00 27.78           N
ATOM   1167  CA  LYS A 174      22.238   7.195  12.768  1.00 31.22           C
ATOM   1168  C   LYS A 174      20.913   6.528  13.183  1.00 30.61           C
ATOM   1169  O   LYS A 174      20.358   6.766  14.262  1.00 30.04           O
ATOM   1170  CB  LYS A 174      22.655   8.478  13.530  1.00 32.27           C
ATOM   1171  CG  LYS A 174      24.038   8.350  14.205  1.00 36.69           C
ATOM   1172  CD  LYS A 174      24.763   9.695  14.388  1.00 39.08           C
ATOM   1173  CE  LYS A 174      25.745  10.025  13.248  1.00 41.57           C
ATOM   1174  NZ  LYS A 174      25.079  10.114  11.947  1.00 43.16          N1+
ATOM   1175  H   LYS A 174      21.304   7.395  10.895  1.00  0.00           H
ATOM   1176  HA  LYS A 174      22.982   6.418  12.952  1.00  0.00           H
ATOM   1177  HB2 LYS A 174      22.639   9.325  12.844  1.00  0.00           H
ATOM   1178  HB3 LYS A 174      21.923   8.741  14.294  1.00  0.00           H
ATOM   1179  HG2 LYS A 174      23.901   7.873  15.176  1.00  0.00           H
ATOM   1180  HG3 LYS A 174      24.687   7.677  13.642  1.00  0.00           H
ATOM   1181  HD2 LYS A 174      24.046  10.508  14.520  1.00  0.00           H
ATOM   1182  HD3 LYS A 174      25.336   9.659  15.315  1.00  0.00           H
ATOM   1183  HE2 LYS A 174      26.215  10.991  13.440  1.00  0.00           H
ATOM   1184  HE3 LYS A 174      26.546   9.288  13.187  1.00  0.00           H
ATOM   1185  HZ1 LYS A 174      25.671  10.660  11.300  1.00  0.00           H
ATOM   1186  HZ2 LYS A 174      24.780   9.239  11.530  1.00  0.00           H
ATOM   1187  HZ3 LYS A 174      24.321  10.796  11.993  1.00  0.00           H
ATOM   1188  N   ALA A 175      20.371   5.716  12.271  1.00 28.23           N
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ATOM   1189  CA  ALA A 175      19.123   4.996  12.392  1.00 26.89           C
ATOM   1190  C   ALA A 175      19.237   3.680  11.633  1.00 26.79           C
ATOM   1191  O   ALA A 175      19.178   2.633  12.268  1.00 27.40           O
ATOM   1192  CB  ALA A 175      17.936   5.881  11.981  1.00 24.63           C
ATOM   1193  H   ALA A 175      20.901   5.533  11.425  1.00  0.00           H
ATOM   1194  HA  ALA A 175      18.995   4.724  13.439  1.00  0.00           H
ATOM   1195  HB1 ALA A 175      16.988   5.420  12.250  1.00  0.00           H
ATOM   1196  HB2 ALA A 175      17.982   6.857  12.458  1.00  0.00           H
ATOM   1197  HB3 ALA A 175      17.926   6.054  10.905  1.00  0.00           H
ATOM   1198  N   VAL A 176      19.430   3.754  10.310  1.00 27.12           N
ATOM   1199  CA  VAL A 176      19.582   2.616   9.404  1.00 25.91           C
ATOM   1200  C   VAL A 176      21.024   2.069   9.516  1.00 26.78           C
ATOM   1201  O   VAL A 176      21.953   2.822   9.822  1.00 26.76           O
ATOM   1202  CB  VAL A 176      19.287   3.084   7.944  1.00 24.16           C
ATOM   1203  CG1 VAL A 176      19.352   1.937   6.915  1.00 25.45           C
ATOM   1204  CG2 VAL A 176      17.918   3.770   7.800  1.00 19.93           C
ATOM   1205  H   VAL A 176      19.606   4.663   9.891  1.00  0.00           H
ATOM   1206  HA  VAL A 176      18.862   1.850   9.683  1.00  0.00           H
ATOM   1207  HB  VAL A 176      20.043   3.819   7.657  1.00  0.00           H
ATOM   1208 HG11 VAL A 176      18.906   2.212   5.960  1.00  0.00           H
ATOM   1209 HG12 VAL A 176      20.383   1.672   6.695  1.00  0.00           H
ATOM   1210 HG13 VAL A 176      18.833   1.044   7.265  1.00  0.00           H
ATOM   1211 HG21 VAL A 176      17.759   4.090   6.771  1.00  0.00           H
ATOM   1212 HG22 VAL A 176      17.107   3.086   8.049  1.00  0.00           H
ATOM   1213 HG23 VAL A 176      17.833   4.657   8.426  1.00  0.00           H
ATOM   1214  N   SER A 177      21.203   0.772   9.246  1.00 24.88           N
ATOM   1215  CA  SER A 177      22.480   0.062   9.207  1.00 26.57           C
ATOM   1216  C   SER A 177      22.642  -0.812   7.947  1.00 27.23           C
ATOM   1217  O   SER A 177      23.410  -1.773   7.929  1.00 28.95           O
ATOM   1218  CB  SER A 177      22.815  -0.548  10.587  1.00 24.99           C
ATOM   1219  OG  SER A 177      21.965  -1.608  10.997  1.00 23.21           O
ATOM   1220  H   SER A 177      20.361   0.188   9.158  1.00  0.00           H
ATOM   1221  HA  SER A 177      23.253   0.816   9.045  1.00  0.00           H
ATOM   1222  HB2 SER A 177      23.836  -0.932  10.568  1.00  0.00           H
ATOM   1223  HB3 SER A 177      22.794   0.233  11.348  1.00  0.00           H
ATOM   1224  HG  SER A 177      21.042  -1.323  10.964  1.00  0.00           H
ATOM   1225  N   SER A 178      21.973  -0.412   6.862  1.00 26.97           N
ATOM   1226  CA  SER A 178      22.115  -0.902   5.497  1.00 26.31           C
ATOM   1227  C   SER A 178      22.308   0.302   4.548  1.00 26.98           C
ATOM   1228  O   SER A 178      22.580   1.414   5.008  1.00 27.69           O
ATOM   1229  CB  SER A 178      20.944  -1.858   5.174  1.00 26.87           C
ATOM   1230  OG  SER A 178      19.691  -1.193   5.191  1.00 26.69           O
ATOM   1231  H   SER A 178      21.403   0.416   6.948  1.00  0.00           H
ATOM   1232  HA  SER A 178      23.040  -1.476   5.426  1.00  0.00           H
ATOM   1233  HB2 SER A 178      21.085  -2.299   4.187  1.00  0.00           H
ATOM   1234  HB3 SER A 178      20.924  -2.692   5.878  1.00  0.00           H
ATOM   1235  HG  SER A 178      19.121  -1.598   4.531  1.00  0.00           H
ATOM   1236  N   GLU A 179      22.227   0.081   3.228  1.00 28.23           N
ATOM   1237  CA  GLU A 179      22.401   1.104   2.195  1.00 30.32           C
ATOM   1238  C   GLU A 179      21.125   1.966   2.092  1.00 29.86           C
ATOM   1239  O   GLU A 179      20.022   1.496   2.388  1.00 29.62           O
ATOM   1240  CB  GLU A 179      22.710   0.378   0.867  1.00 30.92           C
ATOM   1241  CG  GLU A 179      23.300   1.271  -0.249  1.00 36.26           C
ATOM   1242  CD  GLU A 179      22.425   1.358  -1.492  1.00 40.60           C
ATOM   1243  OE1 GLU A 179      21.213   1.627  -1.365  1.00 42.26           O
ATOM   1244  OE2 GLU A 179      22.957   1.172  -2.608  1.00 41.15           O1-
ATOM   1245  H   GLU A 179      21.887  -0.810   2.913  1.00  0.00           H
ATOM   1246  HA  GLU A 179      23.246   1.738   2.472  1.00  0.00           H
ATOM   1247  HB2 GLU A 179      23.435  -0.414   1.054  1.00  0.00           H
ATOM   1248  HB3 GLU A 179      21.815  -0.135   0.515  1.00  0.00           H
ATOM   1249  HG2 GLU A 179      23.478   2.287   0.102  1.00  0.00           H
ATOM   1250  HG3 GLU A 179      24.273   0.884  -0.552  1.00  0.00           H
ATOM   1251  N   VAL A 180      21.291   3.241   1.731  1.00 28.50           N
ATOM   1252  CA  VAL A 180      20.261   4.270   1.732  1.00 27.87           C
ATOM   1253  C   VAL A 180      20.374   5.113   0.455  1.00 27.26           C
ATOM   1254  O   VAL A 180      21.491   5.433   0.038  1.00 25.36           O
ATOM   1255  CB  VAL A 180      20.311   5.097   3.050  1.00 28.46           C
ATOM   1256  CG1 VAL A 180      19.923   4.254   4.278  1.00 25.72           C
ATOM   1257  CG2 VAL A 180      21.666   5.788   3.308  1.00 29.12           C
ATOM   1258  H   VAL A 180      22.178   3.528   1.348  1.00  0.00           H
ATOM   1259  HA  VAL A 180      19.295   3.773   1.687  1.00  0.00           H
ATOM   1260  HB  VAL A 180      19.566   5.888   2.950  1.00  0.00           H
ATOM   1261 HG11 VAL A 180      19.793   4.874   5.164  1.00  0.00           H
ATOM   1262 HG12 VAL A 180      18.991   3.717   4.106  1.00  0.00           H
ATOM   1263 HG13 VAL A 180      20.686   3.511   4.512  1.00  0.00           H
ATOM   1264 HG21 VAL A 180      21.625   6.411   4.202  1.00  0.00           H
ATOM   1265 HG22 VAL A 180      22.466   5.062   3.452  1.00  0.00           H
ATOM   1266 HG23 VAL A 180      21.954   6.437   2.481  1.00  0.00           H
ATOM   1267  N   LYS A 181      19.238   5.513  -0.129  1.00 26.75           N
ATOM   1268  CA  LYS A 181      19.140   6.418  -1.275  1.00 27.00           C
ATOM   1269  C   LYS A 181      18.070   7.480  -1.001  1.00 26.79           C
ATOM   1270  O   LYS A 181      17.059   7.189  -0.363  1.00 26.53           O
ATOM   1271  CB  LYS A 181      18.911   5.648  -2.592  1.00 28.69           C
ATOM   1272  CG  LYS A 181      20.036   4.648  -2.912  1.00 31.19           C
ATOM   1273  CD  LYS A 181      20.047   4.167  -4.371  1.00 35.82           C
ATOM   1274  CE  LYS A 181      21.194   3.189  -4.648  1.00 35.27           C
ATOM   1275  NZ  LYS A 181      20.913   1.860  -4.105  1.00 36.42           N1+
ATOM   1276  H   LYS A 181      18.357   5.198   0.271  1.00  0.00           H
ATOM   1277  HA  LYS A 181      20.083   6.960  -1.369  1.00  0.00           H
ATOM   1278  HB2 LYS A 181      17.950   5.132  -2.571  1.00  0.00           H
ATOM   1279  HB3 LYS A 181      18.846   6.379  -3.400  1.00  0.00           H
ATOM   1280  HG2 LYS A 181      20.999   5.113  -2.694  1.00  0.00           H
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ATOM   1281  HG3 LYS A 181      19.955   3.794  -2.237  1.00  0.00           H
ATOM   1282  HD2 LYS A 181      19.091   3.716  -4.648  1.00  0.00           H
ATOM   1283  HD3 LYS A 181      20.178   5.031  -5.024  1.00  0.00           H
ATOM   1284  HE2 LYS A 181      21.353   3.083  -5.722  1.00  0.00           H
ATOM   1285  HE3 LYS A 181      22.127   3.557  -4.219  1.00  0.00           H
ATOM   1286  HZ1 LYS A 181      21.792   1.408  -3.827  1.00  0.00           H
ATOM   1287  HZ2 LYS A 181      20.441   1.893  -3.208  1.00  0.00           H
ATOM   1288  HZ3 LYS A 181      20.403   1.309  -4.813  1.00  0.00           H
ATOM   1289  N   PHE A 182      18.306   8.708  -1.469  1.00 25.47           N
ATOM   1290  CA  PHE A 182      17.560   9.919  -1.148  1.00 24.54           C
ATOM   1291  C   PHE A 182      17.214  10.640  -2.457  1.00 23.94           C
ATOM   1292  O   PHE A 182      18.076  11.308  -3.035  1.00 25.57           O
ATOM   1293  CB  PHE A 182      18.433  10.807  -0.232  1.00 24.23           C
ATOM   1294  CG  PHE A 182      18.837  10.200   1.098  1.00 25.85           C
ATOM   1295  CD1 PHE A 182      17.919  10.140   2.167  1.00 25.40           C
ATOM   1296  CD2 PHE A 182      20.150   9.712   1.271  1.00 27.19           C
ATOM   1297  CE1 PHE A 182      18.318   9.600   3.405  1.00 27.01           C
ATOM   1298  CE2 PHE A 182      20.548   9.182   2.510  1.00 25.63           C
ATOM   1299  CZ  PHE A 182      19.634   9.126   3.577  1.00 26.56           C
ATOM   1300  H   PHE A 182      19.128   8.827  -2.070  1.00  0.00           H
ATOM   1301  HA  PHE A 182      16.636   9.680  -0.622  1.00  0.00           H
ATOM   1302  HB2 PHE A 182      19.345  11.094  -0.759  1.00  0.00           H
ATOM   1303  HB3 PHE A 182      17.918  11.743  -0.024  1.00  0.00           H
ATOM   1304  HD1 PHE A 182      16.911  10.513   2.042  1.00  0.00           H
ATOM   1305  HD2 PHE A 182      20.858   9.749   0.455  1.00  0.00           H
ATOM   1306  HE1 PHE A 182      17.611   9.549   4.219  1.00  0.00           H
ATOM   1307  HE2 PHE A 182      21.558   8.819   2.641  1.00  0.00           H
ATOM   1308  HZ  PHE A 182      19.956   8.721   4.523  1.00  0.00           H
ATOM   1309  N   GLY A 183      15.974  10.518  -2.940  1.00 24.28           N
ATOM   1310  CA  GLY A 183      15.527  11.085  -4.213  1.00 21.73           C
ATOM   1311  C   GLY A 183      14.365  12.059  -4.047  1.00 22.11           C
ATOM   1312  O   GLY A 183      13.550  11.909  -3.139  1.00 22.30           O
ATOM   1313  H   GLY A 183      15.294   9.976  -2.407  1.00  0.00           H
ATOM   1314  HA2 GLY A 183      16.341  11.568  -4.751  1.00  0.00           H
ATOM   1315  HA3 GLY A 183      15.176  10.278  -4.853  1.00  0.00           H
ATOM   1316  N   ILE A 184      14.241  13.033  -4.954  1.00 24.31           N
ATOM   1317  CA  ILE A 184      13.029  13.836  -5.094  1.00 25.05           C
ATOM   1318  C   ILE A 184      12.118  13.116  -6.108  1.00 27.69           C
ATOM   1319  O   ILE A 184      12.595  12.431  -7.019  1.00 27.87           O
ATOM   1320  CB  ILE A 184      13.397  15.272  -5.574  1.00 25.38           C
ATOM   1321  CG1 ILE A 184      12.284  16.280  -5.212  1.00 25.06           C
ATOM   1322  CG2 ILE A 184      13.771  15.387  -7.070  1.00 20.90           C
ATOM   1323  CD1 ILE A 184      12.706  17.746  -5.358  1.00 26.79           C
ATOM   1324  H   ILE A 184      14.928  13.087  -5.704  1.00  0.00           H
ATOM   1325  HA  ILE A 184      12.530  13.906  -4.127  1.00  0.00           H
ATOM   1326  HB  ILE A 184      14.270  15.574  -4.997  1.00  0.00           H
ATOM   1327 HG12 ILE A 184      11.395  16.099  -5.816  1.00  0.00           H
ATOM   1328 HG13 ILE A 184      11.978  16.123  -4.177  1.00  0.00           H
ATOM   1329 HG21 ILE A 184      14.207  16.359  -7.290  1.00  0.00           H
ATOM   1330 HG22 ILE A 184      14.499  14.636  -7.369  1.00  0.00           H
ATOM   1331 HG23 ILE A 184      12.902  15.277  -7.720  1.00  0.00           H
ATOM   1332 HD11 ILE A 184      11.906  18.392  -5.009  1.00  0.00           H
ATOM   1333 HD12 ILE A 184      13.597  17.968  -4.769  1.00  0.00           H
ATOM   1334 HD13 ILE A 184      12.908  18.014  -6.395  1.00  0.00           H
ATOM   1335  N   LEU A 185      10.806  13.284  -5.970  1.00 28.44           N
ATOM   1336  CA  LEU A 185       9.814  12.905  -6.966  1.00 29.84           C
ATOM   1337  C   LEU A 185       9.629  14.079  -7.952  1.00 29.59           C
ATOM   1338  O   LEU A 185       9.541  15.219  -7.483  1.00 31.09           O
ATOM   1339  CB  LEU A 185       8.460  12.689  -6.259  1.00 30.35           C
ATOM   1340  CG  LEU A 185       8.435  11.556  -5.213  1.00 31.80           C
ATOM   1341  CD1 LEU A 185       6.998  11.357  -4.720  1.00 29.02           C
ATOM   1342  CD2 LEU A 185       9.046  10.249  -5.737  1.00 32.61           C
ATOM   1343  H   LEU A 185      10.474  13.793  -5.154  1.00  0.00           H
ATOM   1344  HA  LEU A 185      10.122  11.988  -7.462  1.00  0.00           H
ATOM   1345  HB2 LEU A 185       8.132  13.615  -5.783  1.00  0.00           H
ATOM   1346  HB3 LEU A 185       7.713  12.473  -7.025  1.00  0.00           H
ATOM   1347  HG  LEU A 185       9.028  11.850  -4.348  1.00  0.00           H
ATOM   1348 HD11 LEU A 185       6.890  10.451  -4.127  1.00  0.00           H
ATOM   1349 HD12 LEU A 185       6.690  12.204  -4.108  1.00  0.00           H
ATOM   1350 HD13 LEU A 185       6.300  11.288  -5.550  1.00  0.00           H
ATOM   1351 HD21 LEU A 185       8.740   9.395  -5.139  1.00  0.00           H
ATOM   1352 HD22 LEU A 185       8.762  10.051  -6.766  1.00  0.00           H
ATOM   1353 HD23 LEU A 185      10.135  10.293  -5.713  1.00  0.00           H
ATOM   1354  N   PRO A 186       9.544  13.827  -9.282  1.00 28.92           N
ATOM   1355  CA  PRO A 186       9.236  14.827 -10.318  1.00 29.13           C
ATOM   1356  C   PRO A 186       8.043  15.740  -9.973  1.00 28.44           C
ATOM   1357  O   PRO A 186       6.912  15.277  -9.795  1.00 28.12           O
ATOM   1358  CB  PRO A 186       8.978  14.017 -11.599  1.00 30.26           C
ATOM   1359  CG  PRO A 186       9.739  12.720 -11.404  1.00 28.14           C
ATOM   1360  CD  PRO A 186       9.791  12.519  -9.894  1.00 28.20           C
ATOM   1361  HA  PRO A 186      10.136  15.429 -10.451  1.00  0.00           H
ATOM   1362  HB2 PRO A 186       7.918  13.793 -11.724  1.00  0.00           H
ATOM   1363  HB3 PRO A 186       9.315  14.545 -12.490  1.00  0.00           H
ATOM   1364  HG2 PRO A 186       9.279  11.876 -11.919  1.00  0.00           H
ATOM   1365  HG3 PRO A 186      10.753  12.829 -11.792  1.00  0.00           H
ATOM   1366  HD2 PRO A 186       9.011  11.829  -9.579  1.00  0.00           H
ATOM   1367  HD3 PRO A 186      10.759  12.104  -9.606  1.00  0.00           H
ATOM   1368  N   LYS A 187       8.308  17.048  -9.893  1.00 28.27           N
ATOM   1369  CA  LYS A 187       7.375  18.096  -9.488  1.00 28.97           C
ATOM   1370  C   LYS A 187       6.268  18.334 -10.531  1.00 26.32           C
ATOM   1371  O   LYS A 187       5.198  18.837 -10.187  1.00 25.20           O
ATOM   1372  CB  LYS A 187       8.159  19.396  -9.251  1.00 32.18           C
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ATOM   1373  CG  LYS A 187       9.034  19.380  -7.979  1.00 34.77           C
ATOM   1374  CD  LYS A 187       8.374  19.984  -6.723  1.00 38.08           C
ATOM   1375  CE  LYS A 187       7.605  18.980  -5.848  1.00 37.86           C
ATOM   1376  NZ  LYS A 187       7.026  19.650  -4.668  1.00 39.41           N1+
ATOM   1377  H   LYS A 187       9.202  17.348 -10.264  1.00  0.00           H
ATOM   1378  HA  LYS A 187       6.918  17.792  -8.554  1.00  0.00           H
ATOM   1379  HB2 LYS A 187       8.793  19.582 -10.121  1.00  0.00           H
ATOM   1380  HB3 LYS A 187       7.483  20.252  -9.215  1.00  0.00           H
ATOM   1381  HG2 LYS A 187       9.440  18.387  -7.778  1.00  0.00           H
ATOM   1382  HG3 LYS A 187       9.902  19.993  -8.206  1.00  0.00           H
ATOM   1383  HD2 LYS A 187       9.165  20.420  -6.111  1.00  0.00           H
ATOM   1384  HD3 LYS A 187       7.734  20.823  -7.003  1.00  0.00           H
ATOM   1385  HE2 LYS A 187       6.795  18.527  -6.415  1.00  0.00           H
ATOM   1386  HE3 LYS A 187       8.259  18.164  -5.545  1.00  0.00           H
ATOM   1387  HZ1 LYS A 187       6.683  19.026  -3.933  1.00  0.00           H
ATOM   1388  HZ2 LYS A 187       7.674  20.307  -4.225  1.00  0.00           H
ATOM   1389  HZ3 LYS A 187       6.225  20.201  -4.997  1.00  0.00           H
ATOM   1390  N   GLU A 188       6.517  17.911 -11.774  1.00 26.19           N
ATOM   1391  CA  GLU A 188       5.619  17.876 -12.926  1.00 25.89           C
ATOM   1392  C   GLU A 188       4.416  16.971 -12.636  1.00 25.60           C
ATOM   1393  O   GLU A 188       3.265  17.408 -12.640  1.00 25.35           O
ATOM   1394  CB  GLU A 188       6.354  17.344 -14.193  1.00 28.34           C
ATOM   1395  CG  GLU A 188       7.686  16.596 -13.986  1.00 32.78           C
ATOM   1396  CD  GLU A 188       8.838  17.529 -13.666  1.00 33.60           C
ATOM   1397  OE1 GLU A 188       9.338  17.474 -12.529  1.00 31.32           O
ATOM   1398  OE2 GLU A 188       9.184  18.356 -14.539  1.00 35.45           O1-
ATOM   1399  H   GLU A 188       7.475  17.600 -11.931  1.00  0.00           H
ATOM   1400  HA  GLU A 188       5.247  18.885 -13.115  1.00  0.00           H
ATOM   1401  HB2 GLU A 188       5.699  16.701 -14.783  1.00  0.00           H
ATOM   1402  HB3 GLU A 188       6.541  18.186 -14.853  1.00  0.00           H
ATOM   1403  HG2 GLU A 188       7.581  15.833 -13.217  1.00  0.00           H
ATOM   1404  HG3 GLU A 188       7.946  16.060 -14.897  1.00  0.00           H
ATOM   1405  N   HIS A 189       4.708  15.697 -12.350  1.00 23.36           N
ATOM   1406  CA  HIS A 189       3.721  14.644 -12.118  1.00 23.70           C
ATOM   1407  C   HIS A 189       3.074  14.798 -10.731  1.00 22.66           C
ATOM   1408  O   HIS A 189       1.924  14.405 -10.529  1.00 23.19           O
ATOM   1409  CB  HIS A 189       4.399  13.265 -12.241  1.00 22.55           C
ATOM   1410  CG  HIS A 189       5.206  13.047 -13.505  1.00 24.25           C
ATOM   1411  ND1 HIS A 189       4.929  13.663 -14.722  1.00 24.12           N
ATOM   1412  CD2 HIS A 189       6.294  12.239 -13.751  1.00 22.85           C
ATOM   1413  CE1 HIS A 189       5.841  13.250 -15.602  1.00 22.58           C
ATOM   1414  NE2 HIS A 189       6.686  12.366 -15.086  1.00 24.93           N
ATOM   1415  H   HIS A 189       5.683  15.432 -12.371  1.00  0.00           H
ATOM   1416  HA  HIS A 189       2.948  14.726 -12.881  1.00  0.00           H
ATOM   1417  HB2 HIS A 189       5.061  13.088 -11.391  1.00  0.00           H
ATOM   1418  HB3 HIS A 189       3.635  12.487 -12.191  1.00  0.00           H
ATOM   1419  HD1 HIS A 189       4.207  14.368 -14.937  1.00  0.00           H
ATOM   1420  HD2 HIS A 189       6.822  11.576 -13.077  1.00  0.00           H
ATOM   1421  HE1 HIS A 189       5.888  13.597 -16.627  1.00  0.00           H
ATOM   1422  N   TRP A 190       3.768  15.493  -9.824  1.00 21.90           N
ATOM   1423  CA  TRP A 190       3.285  16.010  -8.549  1.00 22.07           C
ATOM   1424  C   TRP A 190       2.558  17.371  -8.735  1.00 22.09           C
ATOM   1425  O   TRP A 190       2.455  18.165  -7.799  1.00 23.25           O
ATOM   1426  CB  TRP A 190       4.526  16.197  -7.660  1.00 20.63           C
ATOM   1427  CG  TRP A 190       4.330  16.295  -6.183  1.00 20.86           C
ATOM   1428  CD1 TRP A 190       4.366  17.442  -5.471  1.00 20.30           C
ATOM   1429  CD2 TRP A 190       4.184  15.222  -5.207  1.00 20.57           C
ATOM   1430  NE1 TRP A 190       4.288  17.151  -4.128  1.00 22.97           N
ATOM   1431  CE3 TRP A 190       4.137  13.812  -5.277  1.00 20.34           C
ATOM   1432  CE2 TRP A 190       4.124  15.805  -3.908  1.00 21.62           C
ATOM   1433  CZ3 TRP A 190       4.043  13.030  -4.109  1.00 20.80           C
ATOM   1434  CZ2 TRP A 190       4.007  15.039  -2.740  1.00 20.94           C
ATOM   1435  CH2 TRP A 190       3.969  13.641  -2.840  1.00 23.55           C
ATOM   1436  H   TRP A 190       4.709  15.761 -10.089  1.00  0.00           H
ATOM   1437  HA  TRP A 190       2.607  15.282  -8.104  1.00  0.00           H
ATOM   1438  HB2 TRP A 190       5.227  15.374  -7.808  1.00  0.00           H
ATOM   1439  HB3 TRP A 190       5.042  17.097  -7.976  1.00  0.00           H
ATOM   1440  HD1 TRP A 190       4.507  18.419  -5.911  1.00  0.00           H
ATOM   1441  HE1 TRP A 190       4.661  17.783  -3.400  1.00  0.00           H
ATOM   1442  HE3 TRP A 190       4.204  13.329  -6.241  1.00  0.00           H
ATOM   1443  HZ3 TRP A 190       4.038  11.953  -4.191  1.00  0.00           H
ATOM   1444  HZ2 TRP A 190       3.977  15.521  -1.776  1.00  0.00           H
ATOM   1445  HH2 TRP A 190       3.902  13.052  -1.938  1.00  0.00           H
ATOM   1446  N   SER A 191       2.024  17.644  -9.930  1.00 23.12           N
ATOM   1447  CA  SER A 191       1.152  18.761 -10.269  1.00 23.81           C
ATOM   1448  C   SER A 191      -0.029  18.231 -11.099  1.00 24.41           C
ATOM   1449  O   SER A 191      -0.233  17.016 -11.175  1.00 24.90           O
ATOM   1450  CB  SER A 191       1.971  19.951 -10.824  1.00 25.10           C
ATOM   1451  OG  SER A 191       2.211  19.910 -12.222  1.00 24.23           O
ATOM   1452  H   SER A 191       2.135  16.955 -10.661  1.00  0.00           H
ATOM   1453  HA  SER A 191       0.697  19.114  -9.345  1.00  0.00           H
ATOM   1454  HB2 SER A 191       1.446  20.880 -10.598  1.00  0.00           H
ATOM   1455  HB3 SER A 191       2.924  20.024 -10.305  1.00  0.00           H
ATOM   1456  HG  SER A 191       2.579  19.043 -12.431  1.00  0.00           H
ATOM   1457  N   TYR A 192      -0.841  19.127 -11.666  1.00 24.18           N
ATOM   1458  CA  TYR A 192      -2.056  18.809 -12.410  1.00 22.22           C
ATOM   1459  C   TYR A 192      -1.710  18.918 -13.905  1.00 21.91           C
ATOM   1460  O   TYR A 192      -1.441  20.034 -14.348  1.00 20.67           O
ATOM   1461  CB  TYR A 192      -3.117  19.898 -12.092  1.00 22.43           C
ATOM   1462  CG  TYR A 192      -3.411  20.088 -10.615  1.00 24.33           C
ATOM   1463  CD1 TYR A 192      -4.498  19.435 -10.004  1.00 24.83           C
ATOM   1464  CD2 TYR A 192      -2.572  20.917  -9.842  1.00 24.09           C
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ATOM   1465  CE1 TYR A 192      -4.701  19.559  -8.616  1.00 24.93           C
ATOM   1466  CE2 TYR A 192      -2.771  21.032  -8.458  1.00 24.35           C
ATOM   1467  CZ  TYR A 192      -3.816  20.322  -7.838  1.00 24.98           C
ATOM   1468  OH  TYR A 192      -3.950  20.340  -6.485  1.00 28.04           O
ATOM   1469  H   TYR A 192      -0.555  20.098 -11.691  1.00  0.00           H
ATOM   1470  HA  TYR A 192      -2.454  17.830 -12.142  1.00  0.00           H
ATOM   1471  HB2 TYR A 192      -2.813  20.874 -12.475  1.00  0.00           H
ATOM   1472  HB3 TYR A 192      -4.047  19.661 -12.612  1.00  0.00           H
ATOM   1473  HD1 TYR A 192      -5.158  18.811 -10.589  1.00  0.00           H
ATOM   1474  HD2 TYR A 192      -1.750  21.446 -10.302  1.00  0.00           H
ATOM   1475  HE1 TYR A 192      -5.514  19.043  -8.132  1.00  0.00           H
ATOM   1476  HE2 TYR A 192      -2.097  21.646  -7.882  1.00  0.00           H
ATOM   1477  HH  TYR A 192      -3.380  21.007  -6.075  1.00  0.00           H
ATOM   1478  N   PRO A 193      -1.694  17.827 -14.699  1.00 22.36           N
ATOM   1479  CA  PRO A 193      -1.578  17.897 -16.163  1.00 24.02           C
ATOM   1480  C   PRO A 193      -2.632  18.800 -16.830  1.00 24.39           C
ATOM   1481  O   PRO A 193      -3.725  19.018 -16.305  1.00 24.70           O
ATOM   1482  CB  PRO A 193      -1.762  16.454 -16.646  1.00 24.46           C
ATOM   1483  CG  PRO A 193      -1.402  15.579 -15.461  1.00 25.42           C
ATOM   1484  CD  PRO A 193      -1.660  16.444 -14.229  1.00 24.13           C
ATOM   1485  HA  PRO A 193      -0.576  18.256 -16.407  1.00  0.00           H
ATOM   1486  HB2 PRO A 193      -2.801  16.261 -16.915  1.00  0.00           H
ATOM   1487  HB3 PRO A 193      -1.158  16.232 -17.527  1.00  0.00           H
ATOM   1488  HG2 PRO A 193      -1.976  14.652 -15.444  1.00  0.00           H
ATOM   1489  HG3 PRO A 193      -0.344  15.324 -15.519  1.00  0.00           H
ATOM   1490  HD2 PRO A 193      -2.605  16.166 -13.772  1.00  0.00           H
ATOM   1491  HD3 PRO A 193      -0.876  16.304 -13.489  1.00  0.00           H
ATOM   1492  N   GLU A 194      -2.322  19.289 -18.026  1.00 22.73           N
ATOM   1493  CA  GLU A 194      -3.135  20.217 -18.804  1.00 23.46           C
ATOM   1494  C   GLU A 194      -4.370  19.532 -19.436  1.00 23.36           C
ATOM   1495  O   GLU A 194      -5.212  20.222 -20.006  1.00 21.68           O
ATOM   1496  CB  GLU A 194      -2.227  20.831 -19.900  1.00 25.61           C
ATOM   1497  CG  GLU A 194      -1.213  21.892 -19.390  1.00 28.09           C
ATOM   1498  CD  GLU A 194      -0.205  21.392 -18.357  1.00 32.73           C
ATOM   1499  OE1 GLU A 194       0.073  22.141 -17.395  1.00 31.59           O
ATOM   1500  OE2 GLU A 194       0.218  20.217 -18.460  1.00 33.69           O1-
ATOM   1501  H   GLU A 194      -1.333  19.266 -18.294  1.00  0.00           H
ATOM   1502  HA  GLU A 194      -3.503  21.013 -18.154  1.00  0.00           H
ATOM   1503  HB2 GLU A 194      -1.695  20.041 -20.432  1.00  0.00           H
ATOM   1504  HB3 GLU A 194      -2.850  21.318 -20.652  1.00  0.00           H
ATOM   1505  HG2 GLU A 194      -0.645  22.286 -20.232  1.00  0.00           H
ATOM   1506  HG3 GLU A 194      -1.753  22.736 -18.962  1.00  0.00           H
ATOM   1507  N   TRP A 195      -4.512  18.202 -19.304  1.00 22.03           N
ATOM   1508  CA  TRP A 195      -5.723  17.460 -19.673  1.00 22.35           C
ATOM   1509  C   TRP A 195      -6.760  17.435 -18.531  1.00 22.75           C
ATOM   1510  O   TRP A 195      -7.907  17.058 -18.761  1.00 21.13           O
ATOM   1511  CB  TRP A 195      -5.364  15.999 -20.044  1.00 22.81           C
ATOM   1512  CG  TRP A 195      -4.750  15.081 -19.017  1.00 23.84           C
ATOM   1513  CD1 TRP A 195      -5.401  14.525 -17.968  1.00 25.41           C
ATOM   1514  CD2 TRP A 195      -3.404  14.510 -18.988  1.00 23.39           C
ATOM   1515  NE1 TRP A 195      -4.551  13.683 -17.282  1.00 26.41           N
ATOM   1516  CE3 TRP A 195      -2.252  14.637 -19.799  1.00 23.41           C
ATOM   1517  CE2 TRP A 195      -3.329  13.582 -17.904  1.00 24.13           C
ATOM   1518  CZ3 TRP A 195      -1.096  13.866 -19.555  1.00 26.61           C
ATOM   1519  CZ2 TRP A 195      -2.192  12.794 -17.662  1.00 24.83           C
ATOM   1520  CH2 TRP A 195      -1.068  12.940 -18.494  1.00 23.38           C
ATOM   1521  H   TRP A 195      -3.779  17.705 -18.824  1.00  0.00           H
ATOM   1522  HA  TRP A 195      -6.195  17.929 -20.539  1.00  0.00           H
ATOM   1523  HB2 TRP A 195      -6.272  15.501 -20.390  1.00  0.00           H
ATOM   1524  HB3 TRP A 195      -4.708  16.003 -20.914  1.00  0.00           H
ATOM   1525  HD1 TRP A 195      -6.445  14.693 -17.738  1.00  0.00           H
ATOM   1526  HE1 TRP A 195      -4.867  13.075 -16.518  1.00  0.00           H
ATOM   1527  HE3 TRP A 195      -2.273  15.309 -20.644  1.00  0.00           H
ATOM   1528  HZ3 TRP A 195      -0.242  13.957 -20.210  1.00  0.00           H
ATOM   1529  HZ2 TRP A 195      -2.192  12.067 -16.863  1.00  0.00           H
ATOM   1530  HH2 TRP A 195      -0.201  12.313 -18.340  1.00  0.00           H
ATOM   1531  N   ILE A 196      -6.372  17.802 -17.300  1.00 22.64           N
ATOM   1532  CA  ILE A 196      -7.232  17.772 -16.120  1.00 24.40           C
ATOM   1533  C   ILE A 196      -8.190  18.973 -16.195  1.00 23.38           C
ATOM   1534  O   ILE A 196      -7.768  20.096 -16.487  1.00 23.92           O
ATOM   1535  CB  ILE A 196      -6.345  17.879 -14.838  1.00 23.65           C
ATOM   1536  CG1 ILE A 196      -5.266  16.776 -14.746  1.00 23.75           C
ATOM   1537  CG2 ILE A 196      -7.124  17.950 -13.507  1.00 25.15           C
ATOM   1538  CD1 ILE A 196      -5.790  15.353 -14.536  1.00 22.43           C
ATOM   1539  H   ILE A 196      -5.442  18.181 -17.185  1.00  0.00           H
ATOM   1540  HA  ILE A 196      -7.803  16.842 -16.109  1.00  0.00           H
ATOM   1541  HB  ILE A 196      -5.811  18.828 -14.906  1.00  0.00           H
ATOM   1542 HG12 ILE A 196      -4.648  16.769 -15.640  1.00  0.00           H
ATOM   1543 HG13 ILE A 196      -4.599  17.030 -13.925  1.00  0.00           H
ATOM   1544 HG21 ILE A 196      -6.443  18.006 -12.658  1.00  0.00           H
ATOM   1545 HG22 ILE A 196      -7.761  18.832 -13.451  1.00  0.00           H
ATOM   1546 HG23 ILE A 196      -7.750  17.069 -13.371  1.00  0.00           H
ATOM   1547 HD11 ILE A 196      -4.967  14.636 -14.524  1.00  0.00           H
ATOM   1548 HD12 ILE A 196      -6.312  15.264 -13.590  1.00  0.00           H
ATOM   1549 HD13 ILE A 196      -6.472  15.049 -15.329  1.00  0.00           H
ATOM   1550  N   ASN A 197      -9.469  18.766 -15.858  1.00 22.81           N
ATOM   1551  CA  ASN A 197     -10.438  19.833 -15.616  1.00 22.80           C
ATOM   1552  C   ASN A 197     -10.040  20.560 -14.313  1.00 21.04           C
ATOM   1553  O   ASN A 197     -10.490  20.237 -13.211  1.00 21.74           O
ATOM   1554  CB  ASN A 197     -11.871  19.241 -15.562  1.00  0.00           C
ATOM   1555  CG  ASN A 197     -12.941  20.227 -15.078  1.00  0.00           C
ATOM   1556  OD1 ASN A 197     -13.488  20.046 -14.001  1.00  0.00           O
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ATOM   1557  ND2 ASN A 197     -13.244  21.293 -15.807  1.00  0.00           N
ATOM   1558  H   ASN A 197      -9.751  17.808 -15.646  1.00  0.00           H
ATOM   1559  HA  ASN A 197     -10.395  20.546 -16.442  1.00  0.00           H
ATOM   1560  HB2 ASN A 197     -12.158  18.861 -16.543  1.00  0.00           H
ATOM   1561  HB3 ASN A 197     -11.897  18.384 -14.891  1.00  0.00           H
ATOM   1562 HD22 ASN A 197     -13.868  21.969 -15.359  1.00  0.00           H
ATOM   1563 HD21 ASN A 197     -12.853  21.466 -16.717  1.00  0.00           H
ATOM   1564  N   GLN A 198      -9.195  21.584 -14.450  1.00 20.33           N
ATOM   1565  CA  GLN A 198      -8.777  22.506 -13.396  1.00 20.78           C
ATOM   1566  C   GLN A 198      -9.887  23.537 -13.078  1.00 22.61           C
ATOM   1567  O   GLN A 198      -9.602  24.697 -12.791  1.00 19.79           O
ATOM   1568  CB  GLN A 198      -7.420  23.147 -13.781  1.00 22.47           C
ATOM   1569  CG  GLN A 198      -6.307  22.081 -13.973  1.00 22.31           C
ATOM   1570  CD  GLN A 198      -4.879  22.621 -13.871  1.00 23.01           C
ATOM   1571  OE1 GLN A 198      -4.538  23.329 -12.924  1.00 21.95           O
ATOM   1572  NE2 GLN A 198      -4.015  22.255 -14.812  1.00 23.94           N
ATOM   1573  H   GLN A 198      -8.771  21.694 -15.365  1.00  0.00           H
ATOM   1574  HA  GLN A 198      -8.620  21.960 -12.471  1.00  0.00           H
ATOM   1575  HB2 GLN A 198      -7.520  23.748 -14.685  1.00  0.00           H
ATOM   1576  HB3 GLN A 198      -7.126  23.842 -12.992  1.00  0.00           H
ATOM   1577  HG2 GLN A 198      -6.401  21.310 -13.208  1.00  0.00           H
ATOM   1578  HG3 GLN A 198      -6.438  21.576 -14.929  1.00  0.00           H
ATOM   1579 HE21 GLN A 198      -4.296  21.625 -15.552  1.00  0.00           H
ATOM   1580 HE22 GLN A 198      -3.053  22.597 -14.815  1.00  0.00           H
ATOM   1581  N   THR A 199     -11.150  23.083 -13.073  1.00 22.32           N
ATOM   1582  CA  THR A 199     -12.287  23.723 -12.429  1.00 22.52           C
ATOM   1583  C   THR A 199     -12.685  22.768 -11.293  1.00 21.34           C
ATOM   1584  O   THR A 199     -12.463  23.131 -10.146  1.00 21.66           O
ATOM   1585  CB  THR A 199     -13.408  24.142 -13.426  1.00 21.15           C
ATOM   1586  OG1 THR A 199     -14.334  23.123 -13.748  1.00 24.02           O
ATOM   1587  CG2 THR A 199     -12.883  24.766 -14.728  1.00 20.12           C
ATOM   1588  H   THR A 199     -11.278  22.101 -13.279  1.00  0.00           H
ATOM   1589  HA  THR A 199     -11.949  24.647 -11.953  1.00  0.00           H
ATOM   1590  HB  THR A 199     -14.000  24.908 -12.920  1.00  0.00           H
ATOM   1591  HG1 THR A 199     -14.930  23.090 -12.985  1.00  0.00           H
ATOM   1592 HG21 THR A 199     -13.702  25.160 -15.330  1.00  0.00           H
ATOM   1593 HG22 THR A 199     -12.203  25.592 -14.513  1.00  0.00           H
ATOM   1594 HG23 THR A 199     -12.341  24.041 -15.334  1.00  0.00           H
ATOM   1595  N   LYS A 200     -13.104  21.511 -11.543  1.00 21.45           N
ATOM   1596  CA  LYS A 200     -13.477  20.551 -10.488  1.00 22.36           C
ATOM   1597  C   LYS A 200     -12.271  20.211  -9.591  1.00 21.80           C
ATOM   1598  O   LYS A 200     -12.409  20.085  -8.374  1.00 21.82           O
ATOM   1599  CB  LYS A 200     -14.079  19.271 -11.115  1.00 23.43           C
ATOM   1600  CG  LYS A 200     -14.738  18.301 -10.110  1.00 27.52           C
ATOM   1601  CD  LYS A 200     -15.245  17.011 -10.782  1.00 27.63           C
ATOM   1602  CE  LYS A 200     -15.744  15.955  -9.773  1.00 27.92           C
ATOM   1603  NZ  LYS A 200     -15.760  14.603 -10.364  1.00 31.29           N1+
ATOM   1604  H   LYS A 200     -13.327  21.253 -12.502  1.00  0.00           H
ATOM   1605  HA  LYS A 200     -14.241  21.016  -9.866  1.00  0.00           H
ATOM   1606  HB2 LYS A 200     -14.842  19.570 -11.835  1.00  0.00           H
ATOM   1607  HB3 LYS A 200     -13.307  18.750 -11.684  1.00  0.00           H
ATOM   1608  HG2 LYS A 200     -14.021  18.040  -9.332  1.00  0.00           H
ATOM   1609  HG3 LYS A 200     -15.560  18.811  -9.603  1.00  0.00           H
ATOM   1610  HD2 LYS A 200     -16.036  17.257 -11.493  1.00  0.00           H
ATOM   1611  HD3 LYS A 200     -14.427  16.603 -11.377  1.00  0.00           H
ATOM   1612  HE2 LYS A 200     -15.096  15.925  -8.898  1.00  0.00           H
ATOM   1613  HE3 LYS A 200     -16.735  16.212  -9.397  1.00  0.00           H
ATOM   1614  HZ1 LYS A 200     -15.710  13.879  -9.610  1.00  0.00           H
ATOM   1615  HZ2 LYS A 200     -16.587  14.434 -10.909  1.00  0.00           H
ATOM   1616  HZ3 LYS A 200     -14.939  14.443 -10.923  1.00  0.00           H
ATOM   1617  N   ALA A 201     -11.063  20.161 -10.171  1.00 21.18           N
ATOM   1618  CA  ALA A 201      -9.807  20.047  -9.432  1.00 21.35           C
ATOM   1619  C   ALA A 201      -9.399  21.347  -8.707  1.00 21.94           C
ATOM   1620  O   ALA A 201      -8.395  21.332  -7.999  1.00 19.69           O
ATOM   1621  CB  ALA A 201      -8.679  19.634 -10.396  1.00 16.72           C
ATOM   1622  H   ALA A 201     -11.029  20.287 -11.179  1.00  0.00           H
ATOM   1623  HA  ALA A 201      -9.914  19.279  -8.666  1.00  0.00           H
ATOM   1624  HB1 ALA A 201      -7.696  19.720  -9.933  1.00  0.00           H
ATOM   1625  HB2 ALA A 201      -8.789  18.605 -10.727  1.00  0.00           H
ATOM   1626  HB3 ALA A 201      -8.659  20.251 -11.286  1.00  0.00           H
ATOM   1627  N   ALA A 202     -10.136  22.457  -8.859  1.00 20.87           N
ATOM   1628  CA  ALA A 202      -9.972  23.719  -8.138  1.00 22.47           C
ATOM   1629  C   ALA A 202     -11.117  23.908  -7.122  1.00 22.33           C
ATOM   1630  O   ALA A 202     -10.851  24.210  -5.961  1.00 22.37           O
ATOM   1631  CB  ALA A 202      -9.957  24.893  -9.133  1.00 19.99           C
ATOM   1632  H   ALA A 202     -10.975  22.391  -9.431  1.00  0.00           H
ATOM   1633  HA  ALA A 202      -9.022  23.735  -7.610  1.00  0.00           H
ATOM   1634  HB1 ALA A 202      -9.738  25.829  -8.619  1.00  0.00           H
ATOM   1635  HB2 ALA A 202      -9.187  24.755  -9.894  1.00  0.00           H
ATOM   1636  HB3 ALA A 202     -10.907  25.028  -9.647  1.00  0.00           H
ATOM   1637  N   GLU A 203     -12.376  23.675  -7.527  1.00 22.02           N
ATOM   1638  CA  GLU A 203     -13.612  23.787  -6.742  1.00 23.59           C
ATOM   1639  C   GLU A 203     -13.542  22.934  -5.461  1.00 23.77           C
ATOM   1640  O   GLU A 203     -13.740  23.417  -4.342  1.00 22.97           O
ATOM   1641  CB  GLU A 203     -14.811  23.324  -7.611  1.00 24.19           C
ATOM   1642  CG  GLU A 203     -15.156  24.198  -8.847  1.00 28.14           C
ATOM   1643  CD  GLU A 203     -15.798  23.396  -9.989  1.00 30.24           C
ATOM   1644  OE1 GLU A 203     -16.465  22.386  -9.680  1.00 31.20           O
ATOM   1645  OE2 GLU A 203     -15.559  23.758 -11.165  1.00 32.85           O1-
ATOM   1646  H   GLU A 203     -12.507  23.457  -8.517  1.00  0.00           H
ATOM   1647  HA  GLU A 203     -13.752  24.830  -6.453  1.00  0.00           H
ATOM   1648  HB2 GLU A 203     -14.618  22.301  -7.937  1.00  0.00           H
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ATOM   1649  HB3 GLU A 203     -15.709  23.254  -6.996  1.00  0.00          H
ATOM   1650  HG2 GLU A 203     -15.839  24.998  -8.563  1.00  0.00          H
ATOM   1651  HG3 GLU A 203     -14.267  24.688  -9.241  1.00  0.00          H
ATOM   1652  N   ILE A 204     -13.178  21.659  -5.629  1.00 23.93           N
ATOM   1653  CA  ILE A 204     -13.164  20.647  -4.578  1.00 24.60           C
ATOM   1654  C   ILE A 204     -11.825  20.696  -3.791  1.00 24.13           C
ATOM   1655  O   ILE A 204     -11.614  19.886  -2.889  1.00 26.89           O
ATOM   1656  CB  ILE A 204     -13.482  19.263  -5.234  1.00 24.83           C
ATOM   1657  CG1 ILE A 204     -14.736  19.314  -6.157  1.00 27.64           C
ATOM   1658  CG2 ILE A 204     -13.660  18.109  -4.224  1.00 22.97           C
ATOM   1659  CD1 ILE A 204     -16.044  19.733  -5.470  1.00 28.38           C
ATOM   1660  H   ILE A 204     -13.012  21.339  -6.577  1.00  0.00          H
ATOM   1661  HA  ILE A 204     -13.952  20.868  -3.856  1.00  0.00          H
ATOM   1662  HB  ILE A 204     -12.638  18.993  -5.872  1.00  0.00          H
ATOM   1663 HG12 ILE A 204     -14.568  19.980  -7.003  1.00  0.00          H
ATOM   1664 HG13 ILE A 204     -14.890  18.338  -6.615  1.00  0.00          H
ATOM   1665 HG21 ILE A 204     -14.059  17.220  -4.711  1.00  0.00          H
ATOM   1666 HG22 ILE A 204     -12.722  17.810  -3.764  1.00  0.00          H
ATOM   1667 HG23 ILE A 204     -14.351  18.383  -3.429  1.00  0.00          H
ATOM   1668 HD11 ILE A 204     -16.867  19.737  -6.185  1.00  0.00          H
ATOM   1669 HD12 ILE A 204     -16.312  19.054  -4.662  1.00  0.00          H
ATOM   1670 HD13 ILE A 204     -15.979  20.739  -5.055  1.00  0.00          H
ATOM   1671  N   ARG A 205     -10.948  21.691  -4.033  1.00 23.13           N
ATOM   1672  CA  ARG A 205      -9.839  22.036  -3.127  1.00 25.14           C
ATOM   1673  C   ARG A 205     -10.391  22.788  -1.901  1.00 25.07           C
ATOM   1674  O   ARG A 205      -9.801  22.713  -0.823  1.00 22.75           O
ATOM   1675  CB  ARG A 205      -8.825  23.008  -3.785  1.00 25.21           C
ATOM   1676  CG  ARG A 205      -8.230  22.585  -5.136  1.00 29.73           C
ATOM   1677  CD  ARG A 205      -6.936  21.754  -5.086  1.00 29.20           C
ATOM   1678  NE  ARG A 205      -5.753  22.536  -5.488  1.00 29.90           N
ATOM   1679  CZ  ARG A 205      -5.396  22.939  -6.717  1.00 28.96           C
ATOM   1680  NH1 ARG A 205      -6.186  22.802  -7.779  1.00 29.65           N
ATOM   1681  NH2 ARG A 205      -4.200  23.489  -6.876  1.00 28.01           N1+
ATOM   1682  H   ARG A 205     -11.182  22.352  -4.766  1.00  0.00          H
ATOM   1683  HA  ARG A 205      -9.325  21.132  -2.799  1.00  0.00          H
ATOM   1684  HB2 ARG A 205      -9.313  23.973  -3.936  1.00  0.00          H
ATOM   1685  HB3 ARG A 205      -8.011  23.221  -3.090  1.00  0.00          H
ATOM   1686  HG2 ARG A 205      -8.987  22.059  -5.712  1.00  0.00          H
ATOM   1687  HG3 ARG A 205      -8.022  23.502  -5.687  1.00  0.00          H
ATOM   1688  HD2 ARG A 205      -6.771  21.344  -4.089  1.00  0.00          H
ATOM   1689  HD3 ARG A 205      -7.010  20.897  -5.755  1.00  0.00          H
ATOM   1690  HE  ARG A 205      -5.038  22.708  -4.745  1.00  0.00          H
ATOM   1691 HH11 ARG A 205      -7.051  22.251  -7.746  1.00  0.00          H
ATOM   1692 HH12 ARG A 205      -5.865  23.085  -8.722  1.00  0.00          H
ATOM   1693 HH21 ARG A 205      -3.480  23.248  -6.171  1.00  0.00          H
ATOM   1694 HH22 ARG A 205      -3.838  23.834  -7.765  1.00  0.00          H
ATOM   1695  N   ALA A 206     -11.487  23.540  -2.083  1.00 24.01           N
ATOM   1696  CA  ALA A 206     -12.115  24.363  -1.059  1.00 24.47           C
ATOM   1697  C   ALA A 206     -13.239  23.575  -0.377  1.00 24.30           C
ATOM   1698  O   ALA A 206     -13.192  23.398   0.837  1.00 25.49           O
ATOM   1699  CB  ALA A 206     -12.718  25.612  -1.728  1.00 23.88           C
ATOM   1700  H   ALA A 206     -11.921  23.529  -2.998  1.00  0.00          H
ATOM   1701  HA  ALA A 206     -11.388  24.673  -0.305  1.00  0.00          H
ATOM   1702  HB1 ALA A 206     -13.218  26.243  -0.992  1.00  0.00          H
ATOM   1703  HB2 ALA A 206     -11.938  26.215  -2.194  1.00  0.00          H
ATOM   1704  HB3 ALA A 206     -13.447  25.365  -2.501  1.00  0.00          H
ATOM   1705  N   ASP A 207     -14.229  23.083  -1.147  1.00 23.97           N
ATOM   1706  CA  ASP A 207     -15.443  22.395  -0.659  1.00 24.82           C
ATOM   1707  C   ASP A 207     -15.123  21.241   0.316  1.00 24.07           C
ATOM   1708  O   ASP A 207     -15.724  21.108   1.384  1.00 24.77           O
ATOM   1709  CB  ASP A 207     -16.354  21.988  -1.866  1.00 25.95           C
ATOM   1710  CG  ASP A 207     -16.931  20.569  -1.866  1.00 28.75           C
ATOM   1711  OD1 ASP A 207     -18.153  20.389  -1.670  1.00 30.03           O
ATOM   1712  OD2 ASP A 207     -16.169  19.586  -2.018  1.00 31.14           O1-
ATOM   1713  H   ASP A 207     -14.173  23.269  -2.141  1.00  0.00          H
ATOM   1714  HA  ASP A 207     -15.998  23.125  -0.068  1.00  0.00          H
ATOM   1715  HB2 ASP A 207     -17.186  22.689  -1.939  1.00  0.00          H
ATOM   1716  HB3 ASP A 207     -15.810  22.089  -2.804  1.00  0.00          H
ATOM   1717  N   ALA A 208     -14.131  20.427  -0.060  1.00 23.20           N
ATOM   1718  CA  ALA A 208     -13.768  19.195   0.616  1.00 22.76           C
ATOM   1719  C   ALA A 208     -13.060  19.432   1.959  1.00 22.38           C
ATOM   1720  O   ALA A 208     -13.025  18.521   2.788  1.00 24.01           O
ATOM   1721  CB  ALA A 208     -12.865  18.392  -0.317  1.00 19.96           C
ATOM   1722  H   ALA A 208     -13.745  20.593  -0.977  1.00  0.00          H
ATOM   1723  HA  ALA A 208     -14.676  18.626   0.799  1.00  0.00          H
ATOM   1724  HB1 ALA A 208     -12.542  17.469   0.153  1.00  0.00          H
ATOM   1725  HB2 ALA A 208     -13.388  18.124  -1.234  1.00  0.00          H
ATOM   1726  HB3 ALA A 208     -11.980  18.959  -0.589  1.00  0.00          H
ATOM   1727  N   ALA A 209     -12.581  20.661   2.218  1.00 22.75           N
ATOM   1728  CA  ALA A 209     -12.042  21.107   3.506  1.00 22.99           C
ATOM   1729  C   ALA A 209     -13.124  21.138   4.599  1.00 24.29           C
ATOM   1730  O   ALA A 209     -12.810  21.068   5.787  1.00 25.18           O
ATOM   1731  CB  ALA A 209     -11.461  22.520   3.352  1.00 23.91           C
ATOM   1732  H   ALA A 209     -12.730  21.377   1.513  1.00  0.00          H
ATOM   1733  HA  ALA A 209     -11.255  20.420   3.812  1.00  0.00          H
ATOM   1734  HB1 ALA A 209     -10.869  22.797   4.225  1.00  0.00          H
ATOM   1735  HB2 ALA A 209     -10.816  22.598   2.478  1.00  0.00          H
ATOM   1736  HB3 ALA A 209     -12.244  23.272   3.241  1.00  0.00          H
ATOM   1737  N   THR A 210     -14.391  21.195   4.183  1.00 22.25           N
ATOM   1738  CA  THR A 210     -15.591  21.144   4.999  1.00 22.42           C
ATOM   1739  C   THR A 210     -16.422  19.883   4.678  1.00 21.18           C
ATOM   1740  O   THR A 210     -17.615  19.857   4.974  1.00 19.00           O
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ATOM   1741  CB  THR A 210     -16.353  22.490   4.841  1.00 24.82           C
ATOM   1742  OG1 THR A 210     -16.464  22.894   3.484  1.00 24.17           O
ATOM   1743  CG2 THR A 210     -15.667  23.644   5.586  1.00 24.26           C
ATOM   1744  H   THR A 210     -14.553  21.342   3.193  1.00  0.00           H
ATOM   1745  HA  THR A 210     -15.325  21.033   6.052  1.00  0.00           H
ATOM   1746  HB  THR A 210     -17.362  22.385   5.243  1.00  0.00           H
ATOM   1747  HG1 THR A 210     -16.694  22.150   2.935  1.00  0.00           H
ATOM   1748 HG21 THR A 210     -16.241  24.566   5.491  1.00  0.00           H
ATOM   1749 HG22 THR A 210     -15.568  23.424   6.648  1.00  0.00           H
ATOM   1750 HG23 THR A 210     -14.668  23.836   5.191  1.00  0.00           H
ATOM   1751  N   LYS A 211     -15.805  18.826   4.114  1.00 20.79           N
ATOM   1752  CA  LYS A 211     -16.446  17.525   3.903  1.00 22.47           C
ATOM   1753  C   LYS A 211     -15.659  16.367   4.533  1.00 22.13           C
ATOM   1754  O   LYS A 211     -16.283  15.474   5.103  1.00 22.26           O
ATOM   1755  CB  LYS A 211     -16.741  17.234   2.411  1.00 24.94           C
ATOM   1756  CG  LYS A 211     -17.641  18.269   1.698  1.00 30.95           C
ATOM   1757  CD  LYS A 211     -18.760  17.652   0.840  1.00 35.72           C
ATOM   1758  CE  LYS A 211     -18.297  16.894  -0.418  1.00 40.53           C
ATOM   1759  NZ  LYS A 211     -17.982  17.792  -1.540  1.00 39.99           N1+
ATOM   1760  H   LYS A 211     -14.819  18.914   3.905  1.00  0.00           H
ATOM   1761  HA  LYS A 211     -17.409  17.509   4.417  1.00  0.00           H
ATOM   1762  HB2 LYS A 211     -15.810  17.103   1.863  1.00  0.00           H
ATOM   1763  HB3 LYS A 211     -17.227  16.258   2.370  1.00  0.00           H
ATOM   1764  HG2 LYS A 211     -18.121  18.903   2.445  1.00  0.00           H
ATOM   1765  HG3 LYS A 211     -17.037  18.944   1.094  1.00  0.00           H
ATOM   1766  HD2 LYS A 211     -19.335  16.972   1.471  1.00  0.00           H
ATOM   1767  HD3 LYS A 211     -19.462  18.438   0.554  1.00  0.00           H
ATOM   1768  HE2 LYS A 211     -17.446  16.246  -0.208  1.00  0.00           H
ATOM   1769  HE3 LYS A 211     -19.110  16.245  -0.747  1.00  0.00           H
ATOM   1770  HZ1 LYS A 211     -18.042  17.378  -2.451  1.00  0.00           H
ATOM   1771  HZ2 LYS A 211     -18.520  18.667  -1.538  1.00  0.00           H
ATOM   1772  HZ3 LYS A 211     -17.064  18.258  -1.489  1.00  0.00           H
ATOM   1773  N   TYR A 212     -14.323  16.316   4.399  1.00 21.51           N
ATOM   1774  CA  TYR A 212     -13.554  15.128   4.785  1.00 22.30           C
ATOM   1775  C   TYR A 212     -12.066  15.387   5.042  1.00 19.69           C
ATOM   1776  O   TYR A 212     -11.492  16.346   4.527  1.00 19.22           O
ATOM   1777  CB  TYR A 212     -13.794  13.973   3.782  1.00 22.78           C
ATOM   1778  CG  TYR A 212     -13.625  14.327   2.311  1.00 23.36           C
ATOM   1779  CD1 TYR A 212     -12.350  14.588   1.771  1.00 23.83           C
ATOM   1780  CD2 TYR A 212     -14.756  14.377   1.471  1.00 26.25           C
ATOM   1781  CE1 TYR A 212     -12.211  14.852   0.397  1.00 23.80           C
ATOM   1782  CE2 TYR A 212     -14.612  14.634   0.095  1.00 24.56           C
ATOM   1783  CZ  TYR A 212     -13.335  14.854  -0.447  1.00 23.94           C
ATOM   1784  OH  TYR A 212     -13.181  15.070  -1.784  1.00 25.44           O
ATOM   1785  H   TYR A 212     -13.815  17.048   3.911  1.00  0.00           H
ATOM   1786  HA  TYR A 212     -13.943  14.807   5.751  1.00  0.00           H
ATOM   1787  HB2 TYR A 212     -13.125  13.140   4.004  1.00  0.00           H
ATOM   1788  HB3 TYR A 212     -14.794  13.567   3.934  1.00  0.00           H
ATOM   1789  HD1 TYR A 212     -11.470  14.564   2.398  1.00  0.00           H
ATOM   1790  HD2 TYR A 212     -15.737  14.198   1.884  1.00  0.00           H
ATOM   1791  HE1 TYR A 212     -11.235  15.051  -0.009  1.00  0.00           H
ATOM   1792  HE2 TYR A 212     -15.485  14.639  -0.540  1.00  0.00           H
ATOM   1793  HH  TYR A 212     -13.975  14.909  -2.271  1.00  0.00           H
ATOM   1794  N   ILE A 213     -11.451  14.478   5.809  1.00 19.76           N
ATOM   1795  CA  ILE A 213     -10.023  14.287   6.077  1.00 18.38           C
ATOM   1796  C   ILE A 213      -9.151  14.332   4.798  1.00 19.12           C
ATOM   1797  O   ILE A 213      -9.363  13.550   3.866  1.00 20.73           O
ATOM   1798  CB  ILE A 213      -9.864  13.005   6.953  1.00 18.18           C
ATOM   1799  CG1 ILE A 213      -8.419  12.598   7.317  1.00 16.52           C
ATOM   1800  CG2 ILE A 213     -10.580  11.772   6.372  1.00 15.90           C
ATOM   1801  CD1 ILE A 213      -7.593  13.679   8.019  1.00 15.33           C
ATOM   1802  H   ILE A 213     -12.056  13.799   6.255  1.00  0.00           H
ATOM   1803  HA  ILE A 213      -9.728  15.131   6.697  1.00  0.00           H
ATOM   1804  HB  ILE A 213     -10.358  13.225   7.901  1.00  0.00           H
ATOM   1805 HG12 ILE A 213      -8.456  11.736   7.984  1.00  0.00           H
ATOM   1806 HG13 ILE A 213      -7.895  12.250   6.429  1.00  0.00           H
ATOM   1807 HG21 ILE A 213     -10.488  10.938   7.064  1.00  0.00           H
ATOM   1808 HG22 ILE A 213     -11.647  11.926   6.212  1.00  0.00           H
ATOM   1809 HG23 ILE A 213     -10.145  11.461   5.421  1.00  0.00           H
ATOM   1810 HD11 ILE A 213      -6.666  13.260   8.411  1.00  0.00           H
ATOM   1811 HD12 ILE A 213      -7.303  14.463   7.325  1.00  0.00           H
ATOM   1812 HD13 ILE A 213      -8.133  14.125   8.854  1.00  0.00           H
ATOM   1813  N   TYR A 214      -8.204  15.280   4.743  1.00 17.70           N
ATOM   1814  CA  TYR A 214      -7.235  15.529   3.668  1.00 17.21           C
ATOM   1815  C   TYR A 214      -7.910  16.025   2.370  1.00 16.96           C
ATOM   1816  O   TYR A 214      -7.408  15.834   1.263  1.00 18.78           O
ATOM   1817  CB  TYR A 214      -6.221  14.370   3.466  1.00 16.51           C
ATOM   1818  CG  TYR A 214      -5.391  13.970   4.663  1.00 22.99           C
ATOM   1819  CD1 TYR A 214      -4.452  14.827   5.249  1.00 22.50           C
ATOM   1820  CD2 TYR A 214      -5.455  12.659   5.137  1.00 22.11           C
ATOM   1821  CE1 TYR A 214      -3.598  14.386   6.256  1.00 25.16           C
ATOM   1822  CE2 TYR A 214      -4.627  12.209   6.156  1.00 24.75           C
ATOM   1823  CZ  TYR A 214      -3.669  13.062   6.702  1.00 24.22           C
ATOM   1824  OH  TYR A 214      -2.808  12.663   7.666  1.00 26.19           O
ATOM   1825  H   TYR A 214      -8.108  15.876   5.565  1.00  0.00           H
ATOM   1826  HA  TYR A 214      -6.661  16.392   4.009  1.00  0.00           H
ATOM   1827  HB2 TYR A 214      -6.765  13.495   3.107  1.00  0.00           H
ATOM   1828  HB3 TYR A 214      -5.538  14.640   2.654  1.00  0.00           H
ATOM   1829  HD1 TYR A 214      -4.374  15.858   4.909  1.00  0.00           H
ATOM   1830  HD2 TYR A 214      -6.156  11.956   4.690  1.00  0.00           H
ATOM   1831  HE1 TYR A 214      -2.876  15.055   6.715  1.00  0.00           H
ATOM   1832  HE2 TYR A 214      -4.712  11.190   6.513  1.00  0.00           H
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ATOM   1833 HH  TYR A 214      -2.816  11.686   7.755  1.00  0.00           H
ATOM   1834 N   GLY A 215      -9.046  16.712   2.508  1.00 19.32           N
ATOM   1835 CA  GLY A 215      -9.868  17.222   1.419  1.00 20.66           C
ATOM   1836 C   GLY A 215      -9.580  18.701   1.176  1.00 20.07           C
ATOM   1837 O   GLY A 215      -9.582  19.145   0.029  1.00 23.01           O
ATOM   1838 H   GLY A 215      -9.373  16.888   3.453  1.00  0.00           H
ATOM   1839 HA2 GLY A 215      -9.717  16.659   0.496  1.00  0.00           H
ATOM   1840 HA3 GLY A 215     -10.912  17.114   1.706  1.00  0.00           H
ATOM   1841 N   GLY A 216      -9.152  19.421   2.215  1.00 20.86           N
ATOM   1842 CA  GLY A 216      -8.600  20.768   2.130  1.00 19.87           C
ATOM   1843 C   GLY A 216      -7.074  20.698   2.040  1.00 20.78           C
ATOM   1844 O   GLY A 216      -6.368  21.603   2.482  1.00 20.29           O
ATOM   1845 H   GLY A 216      -9.215  19.003   3.146  1.00  0.00           H
ATOM   1846 HA2 GLY A 216      -9.001  21.321   1.280  1.00  0.00           H
ATOM   1847 HA3 GLY A 216      -8.869  21.320   3.030  1.00  0.00           H
ATOM   1848 N   SER A 217      -6.549  19.593   1.503  1.00 19.48           N
ATOM   1849 CA  SER A 217      -5.147  19.392   1.208  1.00 20.05           C
ATOM   1850 C   SER A 217      -4.943  19.602  -0.294  1.00 20.74           C
ATOM   1851 O   SER A 217      -5.761  19.183  -1.124  1.00 20.42           O
ATOM   1852 CB  SER A 217      -4.761  17.939   1.537  1.00 20.42           C
ATOM   1853 OG  SER A 217      -3.352  17.805   1.523  1.00 20.14           O
ATOM   1854 H   SER A 217      -7.196  18.913   1.132  1.00  0.00           H
ATOM   1855 HA  SER A 217      -4.525  20.082   1.782  1.00  0.00           H
ATOM   1856 HB2 SER A 217      -5.126  17.641   2.519  1.00  0.00           H
ATOM   1857 HB3 SER A 217      -5.205  17.249   0.819  1.00  0.00           H
ATOM   1858 HG  SER A 217      -3.034  18.088   2.381  1.00  0.00           H
ATOM   1859 N   GLU A 218      -3.807  20.210  -0.619  1.00 21.33           N
ATOM   1860 CA  GLU A 218      -3.252  20.304  -1.950  1.00 22.53           C
ATOM   1861 C   GLU A 218      -2.487  18.995  -2.239  1.00 21.12           C
ATOM   1862 O   GLU A 218      -2.910  18.186  -3.066  1.00 21.10           O
ATOM   1863 CB  GLU A 218      -2.303  21.525  -1.914  1.00 25.65           C
ATOM   1864 CG  GLU A 218      -1.640  21.916  -3.231  1.00 26.70           C
ATOM   1865 CD  GLU A 218      -2.623  22.410  -4.270  1.00 27.03           C
ATOM   1866 OE1 GLU A 218      -3.656  23.031  -3.941  1.00 26.49           O
ATOM   1867 OE2 GLU A 218      -2.366  22.179  -5.466  1.00 26.09           O1-
ATOM   1868 H   GLU A 218      -3.232  20.569   0.137  1.00  0.00           H
ATOM   1869 HA  GLU A 218      -4.042  20.447  -2.691  1.00  0.00           H
ATOM   1870 HB2 GLU A 218      -2.863  22.390  -1.565  1.00  0.00           H
ATOM   1871 HB3 GLU A 218      -1.513  21.384  -1.177  1.00  0.00           H
ATOM   1872 HG2 GLU A 218      -0.962  22.739  -3.030  1.00  0.00           H
ATOM   1873 HG3 GLU A 218      -1.038  21.100  -3.631  1.00  0.00           H
ATOM   1874 N   SER A 219      -1.388  18.766  -1.507  1.00 19.74           N
ATOM   1875 CA  SER A 219      -0.366  17.777  -1.824  1.00 18.94           C
ATOM   1876 C   SER A 219      -0.792  16.315  -1.622  1.00 18.73           C
ATOM   1877 O   SER A 219      -0.201  15.433  -2.243  1.00 18.43           O
ATOM   1878 CB  SER A 219       0.894  18.110  -1.007  1.00 17.41           C
ATOM   1879 OG  SER A 219       0.713  17.982   0.395  1.00 21.92           O
ATOM   1880 H   SER A 219      -1.144  19.426  -0.785  1.00  0.00           H
ATOM   1881 HA  SER A 219      -0.115  17.884  -2.875  1.00  0.00           H
ATOM   1882 HB2 SER A 219       1.702  17.441  -1.311  1.00  0.00           H
ATOM   1883 HB3 SER A 219       1.244  19.118  -1.232  1.00  0.00           H
ATOM   1884 HG  SER A 219       1.593  17.760   0.713  1.00  0.00           H
ATOM   1885 N   TYR A 220      -1.845  16.038  -0.834  1.00 20.35           N
ATOM   1886 CA  TYR A 220      -2.359  14.682  -0.626  1.00 20.31           C
ATOM   1887 C   TYR A 220      -2.895  14.060  -1.935  1.00 21.43           C
ATOM   1888 O   TYR A 220      -2.806  12.851  -2.142  1.00 21.25           O
ATOM   1889 CB  TYR A 220      -3.464  14.688   0.458  1.00 18.66           C
ATOM   1890 CG  TYR A 220      -3.840  13.358   1.065  1.00 19.79           C
ATOM   1891 CD1 TYR A 220      -3.139  12.930   2.198  1.00 20.92           C
ATOM   1892 CD2 TYR A 220      -4.903  12.582   0.603  1.00 19.71           C
ATOM   1893 CE1 TYR A 220      -3.446  11.729   2.816  1.00 21.76           C
ATOM   1894 CE2 TYR A 220      -5.235  11.378   1.216  1.00 20.40           C
ATOM   1895 CZ  TYR A 220      -4.482  10.947   2.304  1.00 22.36           C
ATOM   1896 OH  TYR A 220      -4.765   9.737   2.861  1.00 20.26           O
ATOM   1897 H   TYR A 220      -2.287  16.800  -0.334  1.00  0.00           H
ATOM   1898 HA  TYR A 220      -1.531  14.070  -0.262  1.00  0.00           H
ATOM   1899 HB2 TYR A 220      -3.067  15.308   1.261  1.00  0.00           H
ATOM   1900 HB3 TYR A 220      -4.345  15.191   0.049  1.00  0.00           H
ATOM   1901 HD1 TYR A 220      -2.338  13.544   2.606  1.00  0.00           H
ATOM   1902 HD2 TYR A 220      -5.471  12.913  -0.262  1.00  0.00           H
ATOM   1903 HE1 TYR A 220      -2.897  11.399   3.694  1.00  0.00           H
ATOM   1904 HE2 TYR A 220      -6.039  10.753   0.844  1.00  0.00           H
ATOM   1905 HH  TYR A 220      -4.251   9.673   3.686  1.00  0.00           H
ATOM   1906 N   ARG A 221      -3.383  14.900  -2.854  1.00 19.98           N
ATOM   1907 CA  ARG A 221      -3.924  14.497  -4.148  1.00 19.09           C
ATOM   1908 C   ARG A 221      -2.792  14.129  -5.124  1.00 20.19           C
ATOM   1909 O   ARG A 221      -2.915  13.172  -5.887  1.00 18.27           O
ATOM   1910 CB  ARG A 221      -4.703  15.692  -4.721  1.00 19.12           C
ATOM   1911 CG  ARG A 221      -5.858  16.157  -3.818  1.00 16.39           C
ATOM   1912 CD  ARG A 221      -6.518  17.450  -4.310  1.00 17.18           C
ATOM   1913 NE  ARG A 221      -7.976  17.357  -4.171  1.00 19.14           N
ATOM   1914 CZ  ARG A 221      -8.745  17.925  -3.240  1.00 18.73           C
ATOM   1915 NH1 ARG A 221      -8.243  18.688  -2.269  1.00 18.23           N
ATOM   1916 NH2 ARG A 221     -10.049  17.699  -3.288  1.00 17.55           N1+
ATOM   1917 H   ARG A 221      -3.336  15.890  -2.649  1.00  0.00           H
ATOM   1918 HA  ARG A 221      -4.588  13.637  -4.028  1.00  0.00           H
ATOM   1919 HB2 ARG A 221      -4.028  16.529  -4.915  1.00  0.00           H
ATOM   1920 HB3 ARG A 221      -5.116  15.396  -5.685  1.00  0.00           H
ATOM   1921 HG2 ARG A 221      -6.586  15.348  -3.733  1.00  0.00           H
ATOM   1922 HG3 ARG A 221      -5.503  16.341  -2.804  1.00  0.00           H
ATOM   1923 HD2 ARG A 221      -6.112  18.318  -3.790  1.00  0.00           H
ATOM   1924 HD3 ARG A 221      -6.300  17.617  -5.364  1.00  0.00           H
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ATOM   1925  HE  ARG A 221      -8.443  16.833  -4.911  1.00  0.00           H
ATOM   1926 HH11 ARG A 221      -7.240  18.825  -2.119  1.00  0.00           H
ATOM   1927 HH12 ARG A 221      -8.840  19.005  -1.494  1.00  0.00           H
ATOM   1928 HH21 ARG A 221     -10.419  16.935  -3.865  1.00  0.00           H
ATOM   1929 HH22 ARG A 221     -10.721  18.362  -2.886  1.00  0.00           H
ATOM   1930  N   HIS A 222     -1.670  14.860  -5.057  1.00 19.92           N
ATOM   1931  CA  HIS A 222     -0.453  14.611  -5.832  1.00 20.24           C
ATOM   1932  C   HIS A 222      0.244  13.355  -5.308  1.00 19.44           C
ATOM   1933  O   HIS A 222      0.646  12.499  -6.093  1.00 21.15           O
ATOM   1934  CB  HIS A 222      0.508  15.806  -5.694  1.00 18.79           C
ATOM   1935  CG  HIS A 222     -0.064  17.093  -6.201  1.00 19.64           C
ATOM   1936  ND1 HIS A 222     -0.209  18.212  -5.379  1.00 22.12           N
ATOM   1937  CD2 HIS A 222     -0.568  17.386  -7.448  1.00 20.71           C
ATOM   1938  CE1 HIS A 222     -0.847  19.099  -6.126  1.00 20.00           C
ATOM   1939  NE2 HIS A 222     -1.091  18.662  -7.358  1.00 22.40           N
ATOM   1940  H   HIS A 222     -1.636  15.590  -4.358  1.00  0.00           H
ATOM   1941  HA  HIS A 222     -0.712  14.460  -6.883  1.00  0.00           H
ATOM   1942  HB2 HIS A 222      0.817  15.946  -4.657  1.00  0.00           H
ATOM   1943  HB3 HIS A 222      1.426  15.611  -6.244  1.00  0.00           H
ATOM   1944  HD2 HIS A 222     -0.627  16.793  -8.350  1.00  0.00           H
ATOM   1945  HE1 HIS A 222     -1.154  20.067  -5.765  1.00  0.00           H
ATOM   1946  HE2 HIS A 222     -1.629  19.161  -8.059  1.00  0.00           H
ATOM   1947  N   MET A 223      0.305  13.221  -3.977  1.00 20.38           N
ATOM   1948  CA  MET A 223      0.752  12.047  -3.240  1.00 21.04           C
ATOM   1949  C   MET A 223     -0.018  10.791  -3.661  1.00 21.36           C
ATOM   1950  O   MET A 223      0.610   9.831  -4.100  1.00 20.45           O
ATOM   1951  CB  MET A 223      0.660  12.346  -1.733  1.00 20.16           C
ATOM   1952  CG  MET A 223      1.259  11.287  -0.800  1.00 21.68           C
ATOM   1953  SD  MET A 223      0.222   9.847  -0.410  1.00 24.24           S
ATOM   1954  CE  MET A 223     -1.138  10.643   0.478  1.00 23.61           C
ATOM   1955  H   MET A 223      0.002  14.019  -3.425  1.00  0.00           H
ATOM   1956  HA  MET A 223      1.794  11.870  -3.494  1.00  0.00           H
ATOM   1957  HB2 MET A 223      1.207  13.272  -1.547  1.00  0.00           H
ATOM   1958  HB3 MET A 223     -0.365  12.555  -1.447  1.00  0.00           H
ATOM   1959  HG2 MET A 223      2.211  10.939  -1.196  1.00  0.00           H
ATOM   1960  HG3 MET A 223      1.490  11.777   0.142  1.00  0.00           H
ATOM   1961  HE1 MET A 223     -1.813   9.889   0.883  1.00  0.00           H
ATOM   1962  HE2 MET A 223     -0.758  11.251   1.298  1.00  0.00           H
ATOM   1963  HE3 MET A 223     -1.718  11.285  -0.182  1.00  0.00           H
ATOM   1964  N   CYS A 224     -1.357  10.812  -3.603  1.00 20.63           N
ATOM   1965  CA  CYS A 224     -2.188   9.657  -3.949  1.00 20.63           C
ATOM   1966  C   CYS A 224     -2.124   9.298  -5.441  1.00 19.25           C
ATOM   1967  O   CYS A 224     -2.157   8.112  -5.766  1.00 18.72           O
ATOM   1968  CB  CYS A 224     -3.651   9.891  -3.547  1.00 18.88           C
ATOM   1969  SG  CYS A 224     -3.780   9.851  -1.742  1.00 21.25           S
ATOM   1970  H   CYS A 224     -1.817  11.620  -3.194  1.00  0.00           H
ATOM   1971  HA  CYS A 224     -1.811   8.793  -3.397  1.00  0.00           H
ATOM   1972  HB2 CYS A 224     -4.044  10.831  -3.938  1.00  0.00           H
ATOM   1973  HB3 CYS A 224     -4.275   9.088  -3.941  1.00  0.00           H
ATOM   1974  HG  CYS A 224     -3.236  11.062  -1.554  1.00  0.00           H
ATOM   1975  N   ARG A 225     -1.953  10.283  -6.339  1.00 20.13           N
ATOM   1976  CA  ARG A 225     -1.675  10.047  -7.758  1.00 18.90           C
ATOM   1977  C   ARG A 225     -0.302   9.366  -7.916  1.00 18.94           C
ATOM   1978  O   ARG A 225     -0.191   8.341  -8.588  1.00 18.24           O
ATOM   1979  CB  ARG A 225     -1.712  11.380  -8.545  1.00 19.79           C
ATOM   1980  CG  ARG A 225     -1.424  11.224 -10.055  1.00 22.48           C
ATOM   1981  CD  ARG A 225     -1.363  12.554 -10.813  1.00 21.79           C
ATOM   1982  NE  ARG A 225     -1.172  12.321 -12.247  1.00 21.49           N
ATOM   1983  CZ  ARG A 225     -0.444  12.977 -13.153  1.00 23.17           C
ATOM   1984 NH1 ARG A 225      0.319  14.017 -12.813  1.00 23.34           N
ATOM   1985 NH2 ARG A 225     -0.490  12.577 -14.421  1.00 25.08           N1+
ATOM   1986  H   ARG A 225     -1.971  11.242  -6.011  1.00  0.00           H
ATOM   1987  HA  ARG A 225     -2.442   9.379  -8.157  1.00  0.00           H
ATOM   1988  HB2 ARG A 225     -2.693  11.839  -8.421  1.00  0.00           H
ATOM   1989  HB3 ARG A 225     -0.996  12.083  -8.119  1.00  0.00           H
ATOM   1990  HG2 ARG A 225     -0.476  10.712 -10.219  1.00  0.00           H
ATOM   1991  HG3 ARG A 225     -2.193  10.588 -10.497  1.00  0.00           H
ATOM   1992  HD2 ARG A 225     -2.312  13.073 -10.693  1.00  0.00           H
ATOM   1993  HD3 ARG A 225     -0.573  13.189 -10.413  1.00  0.00           H
ATOM   1994  HE  ARG A 225     -1.817  11.564 -12.632  1.00  0.00           H
ATOM   1995 HH11 ARG A 225      0.491  14.241 -11.833  1.00  0.00           H
ATOM   1996 HH12 ARG A 225      0.813  14.566 -13.497  1.00  0.00           H
ATOM   1997 HH21 ARG A 225     -0.989  11.671 -14.656  1.00  0.00           H
ATOM   1998 HH22 ARG A 225     -0.028  13.011 -15.200  1.00  0.00           H
ATOM   1999  N   TYR A 226      0.741   9.915  -7.278  1.00 16.90           N
ATOM   2000  CA  TYR A 226      2.112   9.429  -7.400  1.00 18.14           C
ATOM   2001  C   TYR A 226      2.272   8.025  -6.787  1.00 17.98           C
ATOM   2002  O   TYR A 226      2.847   7.138  -7.422  1.00 18.92           O
ATOM   2003  CB  TYR A 226      3.106  10.432  -6.770  1.00 15.96           C
ATOM   2004  CG  TYR A 226      4.501  10.300  -7.353  1.00 20.33           C
ATOM   2005  CD1 TYR A 226      4.948  11.207  -8.340  1.00 18.06           C
ATOM   2006  CD2 TYR A 226      5.321   9.212  -6.983  1.00 19.81           C
ATOM   2007  CE1 TYR A 226      6.163  10.975  -9.014  1.00 20.94           C
ATOM   2008  CE2 TYR A 226      6.523   8.976  -7.669  1.00 22.35           C
ATOM   2009  CZ  TYR A 226      6.921   9.828  -8.713  1.00 20.61           C
ATOM   2010  OH  TYR A 226      8.010   9.508  -9.464  1.00 24.39           O
ATOM   2011  H   TYR A 226      0.586  10.763  -6.736  1.00  0.00           H
ATOM   2012  HA  TYR A 226      2.316   9.368  -8.467  1.00  0.00           H
ATOM   2013  HB2 TYR A 226      2.773  11.451  -6.959  1.00  0.00           H
ATOM   2014  HB3 TYR A 226      3.142  10.323  -5.685  1.00  0.00           H
ATOM   2015  HD1 TYR A 226      4.339  12.053  -8.628  1.00  0.00           H
ATOM   2016  HD2 TYR A 226      5.013   8.522  -6.212  1.00  0.00           H
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ATOM   2017  HE1 TYR A 226       6.482  11.641  -9.804  1.00  0.00           H
ATOM   2018  HE2 TYR A 226       7.128   8.122  -7.410  1.00  0.00           H
ATOM   2019  HH  TYR A 226       8.018   8.591  -9.723  1.00  0.00           H
ATOM   2020  N   GLN A 227       1.694   7.803  -5.600  1.00 19.29           N
ATOM   2021  CA  GLN A 227       1.675   6.523  -4.892  1.00 19.24           C
ATOM   2022  C   GLN A 227       0.718   5.515  -5.544  1.00 21.01           C
ATOM   2023  O   GLN A 227       0.758   4.342  -5.189  1.00 21.37           O
ATOM   2024  CB  GLN A 227       1.214   6.737  -3.434  1.00 19.57           C
ATOM   2025  CG  GLN A 227       2.222   7.472  -2.533  1.00 16.42           C
ATOM   2026  CD  GLN A 227       3.347   6.580  -2.007  1.00 20.53           C
ATOM   2027  OE1 GLN A 227       3.935   5.791  -2.739  1.00 21.69           O
ATOM   2028  NE2 GLN A 227       3.653   6.681  -0.720  1.00 19.47           N
ATOM   2029  H   GLN A 227       1.230   8.586  -5.136  1.00  0.00           H
ATOM   2030  HA  GLN A 227       2.672   6.084  -4.919  1.00  0.00           H
ATOM   2031  HB2 GLN A 227       0.267   7.278  -3.425  1.00  0.00           H
ATOM   2032  HB3 GLN A 227       0.988   5.776  -2.969  1.00  0.00           H
ATOM   2033  HG2 GLN A 227       2.651   8.330  -3.051  1.00  0.00           H
ATOM   2034  HG3 GLN A 227       1.678   7.869  -1.679  1.00  0.00           H
ATOM   2035 HE21 GLN A 227       3.141   7.317  -0.127  1.00  0.00           H
ATOM   2036 HE22 GLN A 227       4.393   6.112  -0.336  1.00  0.00           H
ATOM   2037  N   SER A 228      -0.121   5.918  -6.502  1.00 19.57           N
ATOM   2038  CA  SER A 228      -0.830   4.980  -7.361  1.00 20.36           C
ATOM   2039  C   SER A 228       0.039   4.672  -8.592  1.00 20.27           C
ATOM   2040  O   SER A 228       0.232   3.501  -8.916  1.00 23.07           O
ATOM   2041  CB  SER A 228      -2.151   5.603  -7.841  1.00 16.62           C
ATOM   2042  OG  SER A 228      -3.035   5.754  -6.752  1.00 18.44           O
ATOM   2043  H   SER A 228      -0.167   6.902  -6.726  1.00  0.00           H
ATOM   2044  HA  SER A 228      -1.058   4.045  -6.847  1.00  0.00           H
ATOM   2045  HB2 SER A 228      -2.002   6.574  -8.308  1.00  0.00           H
ATOM   2046  HB3 SER A 228      -2.625   4.955  -8.579  1.00  0.00           H
ATOM   2047  HG  SER A 228      -2.753   6.533  -6.268  1.00  0.00           H
ATOM   2048  N   GLY A 229       0.555   5.696  -9.280  1.00 19.50           N
ATOM   2049  CA  GLY A 229       0.909   5.583 -10.689  1.00 20.20           C
ATOM   2050  C   GLY A 229       2.341   5.888 -11.100  1.00 19.94           C
ATOM   2051  O   GLY A 229       2.652   5.715 -12.280  1.00 17.43           O
ATOM   2052  H   GLY A 229       0.359   6.640  -8.952  1.00  0.00           H
ATOM   2053  HA2 GLY A 229       0.584   4.643 -11.130  1.00  0.00           H
ATOM   2054  HA3 GLY A 229       0.334   6.350 -11.184  1.00  0.00           H
ATOM   2055  N   PHE A 230       3.191   6.396 -10.200  1.00 19.02           N
ATOM   2056  CA  PHE A 230       4.473   6.997 -10.585  1.00 20.56           C
ATOM   2057  C   PHE A 230       5.671   6.497  -9.771  1.00 21.40           C
ATOM   2058  O   PHE A 230       6.809   6.805 -10.123  1.00 24.25           O
ATOM   2059  CB  PHE A 230       4.378   8.533 -10.631  1.00 21.77           C
ATOM   2060  CG  PHE A 230       3.478   9.133 -11.697  1.00 22.64           C
ATOM   2061  CD1 PHE A 230       4.048   9.605 -12.898  1.00 24.17           C
ATOM   2062  CD2 PHE A 230       2.082   9.239 -11.501  1.00 24.47           C
ATOM   2063  CE1 PHE A 230       3.231  10.168 -13.895  1.00 25.11           C
ATOM   2064  CE2 PHE A 230       1.265   9.779 -12.512  1.00 23.94           C
ATOM   2065  CZ  PHE A 230       1.840  10.237 -13.711  1.00 26.08           C
ATOM   2066  H   PHE A 230       2.866   6.545  -9.250  1.00  0.00           H
ATOM   2067  HA  PHE A 230       4.724   6.698 -11.598  1.00  0.00           H
ATOM   2068  HB2 PHE A 230       4.075   8.905  -9.659  1.00  0.00           H
ATOM   2069  HB3 PHE A 230       5.375   8.940 -10.801  1.00  0.00           H
ATOM   2070  HD1 PHE A 230       5.114   9.533 -13.068  1.00  0.00           H
ATOM   2071  HD2 PHE A 230       1.625   8.880 -10.591  1.00  0.00           H
ATOM   2072  HE1 PHE A 230       3.674  10.528 -14.812  1.00  0.00           H
ATOM   2073  HE2 PHE A 230       0.193   9.835 -12.387  1.00  0.00           H
ATOM   2074  HZ  PHE A 230       1.209  10.619 -14.499  1.00  0.00           H
ATOM   2075  N   PHE A 231       5.454   5.732  -8.692  1.00 19.26           N
ATOM   2076  CA  PHE A 231       6.545   5.184  -7.877  1.00 21.27           C
ATOM   2077  C   PHE A 231       7.210   3.973  -8.559  1.00 20.88           C
ATOM   2078  O   PHE A 231       8.411   3.786  -8.413  1.00 21.71           O
ATOM   2079  CB  PHE A 231       6.040   4.850  -6.454  1.00 18.61           C
ATOM   2080  CG  PHE A 231       5.100   3.666  -6.277  1.00 18.09           C
ATOM   2081  CD1 PHE A 231       5.580   2.478  -5.686  1.00 16.51           C
ATOM   2082  CD2 PHE A 231       3.747   3.749  -6.667  1.00 15.34           C
ATOM   2083  CE1 PHE A 231       4.717   1.389  -5.476  1.00 15.19           C
ATOM   2084  CE2 PHE A 231       2.888   2.652  -6.467  1.00 15.58           C
ATOM   2085  CZ  PHE A 231       3.366   1.481  -5.855  1.00 17.00           C
ATOM   2086  H   PHE A 231       4.503   5.525  -8.429  1.00  0.00           H
ATOM   2087  HA  PHE A 231       7.323   5.942  -7.772  1.00  0.00           H
ATOM   2088  HB2 PHE A 231       6.913   4.682  -5.821  1.00  0.00           H
ATOM   2089  HB3 PHE A 231       5.555   5.729  -6.028  1.00  0.00           H
ATOM   2090  HD1 PHE A 231       6.613   2.394  -5.382  1.00  0.00           H
ATOM   2091  HD2 PHE A 231       3.353   4.647  -7.117  1.00  0.00           H
ATOM   2092  HE1 PHE A 231       5.094   0.481  -5.028  1.00  0.00           H
ATOM   2093  HE2 PHE A 231       1.858   2.702  -6.788  1.00  0.00           H
ATOM   2094  HZ  PHE A 231       2.696   0.650  -5.690  1.00  0.00           H
ATOM   2095  N   TRP A 232       6.468   3.235  -9.394  1.00 20.84           N
ATOM   2096  CA  TRP A 232       6.947   2.168 -10.286  1.00 21.29           C
ATOM   2097  C   TRP A 232       7.372   2.742 -11.655  1.00 22.43           C
ATOM   2098  O   TRP A 232       7.307   2.060 -12.676  1.00 24.91           O
ATOM   2099  CB  TRP A 232       5.803   1.147 -10.485  1.00 20.84           C
ATOM   2100  CG  TRP A 232       4.449   1.707 -10.813  1.00 22.17           C
ATOM   2101  CD1 TRP A 232       3.535   2.060  -9.886  1.00 22.45           C
ATOM   2102  CD2 TRP A 232       3.820   1.962 -12.109  1.00 25.05           C
ATOM   2103  NE1 TRP A 232       2.396   2.522 -10.503  1.00 24.51           N
ATOM   2104  CE3 TRP A 232       4.216   1.816 -13.460  1.00 25.82           C
ATOM   2105  CE2 TRP A 232       2.496   2.448 -11.880  1.00 26.33           C
ATOM   2106  CZ3 TRP A 232       3.351   2.143 -14.524  1.00 27.28           C
ATOM   2107  CZ2 TRP A 232       1.611   2.746 -12.933  1.00 26.19           C
ATOM   2108  CH2 TRP A 232       2.047   2.604 -14.262  1.00 25.91           C
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ATOM   2109  H   TRP A 232       5.495   3.482  -9.492  1.00  0.00           H
ATOM   2110  HA  TRP A 232       7.818   1.665  -9.859  1.00  0.00           H
ATOM   2111  HB2 TRP A 232       6.065   0.399 -11.234  1.00  0.00           H
ATOM   2112  HB3 TRP A 232       5.700   0.580  -9.559  1.00  0.00           H
ATOM   2113  HD1 TRP A 232       3.695   1.958  -8.824  1.00  0.00           H
ATOM   2114  HE1 TRP A 232       1.573   2.812  -9.970  1.00  0.00           H
ATOM   2115  HE3 TRP A 232       5.200   1.437 -13.684  1.00  0.00           H
ATOM   2116  HZ3 TRP A 232       3.687   2.025 -15.542  1.00  0.00           H
ATOM   2117  HZ2 TRP A 232       0.606   3.087 -12.738  1.00  0.00           H
ATOM   2118  HH2 TRP A 232       1.381   2.843 -15.078  1.00  0.00           H
ATOM   2119  N   ARG A 233       7.779   4.013 -11.679  1.00 22.95           N
ATOM   2120  CA  ARG A 233       8.477   4.673 -12.772  1.00 23.34           C
ATOM   2121  C   ARG A 233       9.359   5.798 -12.216  1.00 23.57           C
ATOM   2122  O   ARG A 233       9.429   6.877 -12.808  1.00 24.36           O
ATOM   2123  CB  ARG A 233       7.550   5.023 -13.961  1.00 23.72           C
ATOM   2124  CG  ARG A 233       6.256   5.765 -13.593  1.00 23.64           C
ATOM   2125  CD  ARG A 233       5.456   6.182 -14.835  1.00 22.56           C
ATOM   2126  NE  ARG A 233       4.041   6.446 -14.530  1.00 23.96           N
ATOM   2127  CZ  ARG A 233       3.183   7.191 -15.239  1.00 23.37           C
ATOM   2128  NH1 ARG A 233       3.596   7.998 -16.217  1.00 24.58           N
ATOM   2129  NH2 ARG A 233       1.885   7.095 -14.962  1.00 27.02           N1+
ATOM   2130  H   ARG A 233       7.837   4.478 -10.785  1.00  0.00           H
ATOM   2131  HA  ARG A 233       9.197   3.960 -13.172  1.00  0.00           H
ATOM   2132  HB2 ARG A 233       8.111   5.608 -14.691  1.00  0.00           H
ATOM   2133  HB3 ARG A 233       7.286   4.098 -14.475  1.00  0.00           H
ATOM   2134  HG2 ARG A 233       5.650   5.122 -12.954  1.00  0.00           H
ATOM   2135  HG3 ARG A 233       6.509   6.654 -13.014  1.00  0.00           H
ATOM   2136  HD2 ARG A 233       5.930   7.041 -15.302  1.00  0.00           H
ATOM   2137  HD3 ARG A 233       5.473   5.382 -15.576  1.00  0.00           H
ATOM   2138  HE  ARG A 233       3.660   5.945 -13.719  1.00  0.00           H
ATOM   2139 HH11 ARG A 233       4.555   8.378 -16.201  1.00  0.00           H
ATOM   2140 HH12 ARG A 233       2.919   8.487 -16.787  1.00  0.00           H
ATOM   2141 HH21 ARG A 233       1.565   6.553 -14.173  1.00  0.00           H
ATOM   2142 HH22 ARG A 233       1.143   7.616 -15.486  1.00  0.00           H
ATOM   2143  N   HIS A 234      10.001   5.562 -11.062  1.00 23.15           N
ATOM   2144  CA  HIS A 234      10.981   6.452 -10.438  1.00 24.03           C
ATOM   2145  C   HIS A 234      12.339   5.743 -10.478  1.00 25.68           C
ATOM   2146  O   HIS A 234      12.421   4.544 -10.211  1.00 24.39           O
ATOM   2147  CB  HIS A 234      10.585   6.735  -8.976  1.00 21.56           C
ATOM   2148  CG  HIS A 234      11.462   7.770  -8.319  1.00 23.59           C
ATOM   2149  ND1 HIS A 234      12.658   7.451  -7.662  1.00 24.32           N
ATOM   2150  CD2 HIS A 234      11.283   9.135  -8.278  1.00 21.93           C
ATOM   2151  CE1 HIS A 234      13.158   8.623  -7.284  1.00 24.17           C
ATOM   2152  NE2 HIS A 234      12.376   9.652  -7.604  1.00 23.23           N
ATOM   2153  H   HIS A 234      10.007   4.603 -10.727  1.00  0.00           H
ATOM   2154  HA  HIS A 234      11.053   7.400 -10.977  1.00  0.00           H
ATOM   2155  HB2 HIS A 234       9.560   7.103  -8.946  1.00  0.00           H
ATOM   2156  HB3 HIS A 234      10.600   5.823  -8.377  1.00  0.00           H
ATOM   2157  HD2 HIS A 234      10.507   9.757  -8.697  1.00  0.00           H
ATOM   2158  HE1 HIS A 234      14.099   8.740  -6.768  1.00  0.00           H
ATOM   2159  HE2 HIS A 234      12.587  10.637  -7.443  1.00  0.00           H
ATOM   2160  N   GLU A 235      13.405   6.481 -10.786  1.00 26.94           N
ATOM   2161  CA  GLU A 235      14.766   6.018 -11.026  1.00 29.85           C
ATOM   2162  C   GLU A 235      15.390   5.210  -9.871  1.00 27.43           C
ATOM   2163  O   GLU A 235      16.189   4.306 -10.123  1.00 27.58           O
ATOM   2164  CB  GLU A 235      15.639   7.234 -11.400  1.00 32.61           C
ATOM   2165  CG  GLU A 235      15.774   8.352 -10.334  1.00 40.85           C
ATOM   2166  CD  GLU A 235      14.663   9.396 -10.334  1.00 45.22           C
ATOM   2167  OE1 GLU A 235      13.573   9.158 -10.893  1.00 46.95           O
ATOM   2168  OE2 GLU A 235      14.929  10.487  -9.782  1.00 48.79           O1-
ATOM   2169  H   GLU A 235      13.280   7.497 -10.895  1.00  0.00           H
ATOM   2170  HA  GLU A 235      14.726   5.351 -11.889  1.00  0.00           H
ATOM   2171  HB2 GLU A 235      16.636   6.865 -11.637  1.00  0.00           H
ATOM   2172  HB3 GLU A 235      15.273   7.668 -12.332  1.00  0.00           H
ATOM   2173  HG2 GLU A 235      15.873   7.946  -9.330  1.00  0.00           H
ATOM   2174  HG3 GLU A 235      16.703   8.889 -10.519  1.00  0.00           H
ATOM   2175  N   LEU A 236      15.011   5.494  -8.617  1.00 26.47           N
ATOM   2176  CA  LEU A 236      15.481   4.751  -7.448  1.00 26.49           C
ATOM   2177  C   LEU A 236      14.640   3.485  -7.206  1.00 26.64           C
ATOM   2178  O   LEU A 236      15.006   2.687  -6.350  1.00 25.30           O
ATOM   2179  CB  LEU A 236      15.387   5.628  -6.178  1.00 24.84           C
ATOM   2180  CG  LEU A 236      16.312   6.862  -6.130  1.00 24.56           C
ATOM   2181  CD1 LEU A 236      16.122   7.620  -4.810  1.00 23.65           C
ATOM   2182  CD2 LEU A 236      17.789   6.486  -6.281  1.00 22.45           C
ATOM   2183  H   LEU A 236      14.314   6.219  -8.479  1.00  0.00           H
ATOM   2184  HA  LEU A 236      16.511   4.418  -7.586  1.00  0.00           H
ATOM   2185  HB2 LEU A 236      14.352   5.939  -6.027  1.00  0.00           H
ATOM   2186  HB3 LEU A 236      15.640   5.005  -5.319  1.00  0.00           H
ATOM   2187  HG  LEU A 236      16.051   7.533  -6.949  1.00  0.00           H
ATOM   2188 HD11 LEU A 236      16.744   8.514  -4.790  1.00  0.00           H
ATOM   2189 HD12 LEU A 236      15.085   7.925  -4.672  1.00  0.00           H
ATOM   2190 HD13 LEU A 236      16.404   7.011  -3.952  1.00  0.00           H
ATOM   2191 HD21 LEU A 236      18.446   7.338  -6.108  1.00  0.00           H
ATOM   2192 HD22 LEU A 236      18.058   5.701  -5.578  1.00  0.00           H
ATOM   2193 HD23 LEU A 236      18.000   6.117  -7.281  1.00  0.00           H
ATOM   2194  N   LEU A 237      13.541   3.277  -7.945  1.00 25.05           N
ATOM   2195  CA  LEU A 237      12.661   2.120  -7.819  1.00 27.46           C
ATOM   2196  C   LEU A 237      12.693   1.231  -9.065  1.00 27.75           C
ATOM   2197  O   LEU A 237      12.461   0.031  -8.924  1.00 28.17           O
ATOM   2198  CB  LEU A 237      11.228   2.550  -7.431  1.00 25.77           C
ATOM   2199  CG  LEU A 237      10.801   2.008  -6.049  1.00 26.56           C
ATOM   2200  CD1 LEU A 237      11.613   2.631  -4.907  1.00 26.59           C
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ATOM   2201  CD2 LEU A 237       9.303   2.206  -5.804  1.00 27.15           C
ATOM   2202  H   LEU A 237      13.298   3.964  -8.654  1.00  0.00           H
ATOM   2203  HA  LEU A 237      13.037   1.463  -7.036  1.00  0.00           H
ATOM   2204  HB2 LEU A 237      11.126   3.635  -7.453  1.00  0.00           H
ATOM   2205  HB3 LEU A 237      10.523   2.188  -8.182  1.00  0.00           H
ATOM   2206  HG  LEU A 237      10.991   0.935  -6.040  1.00  0.00           H
ATOM   2207 HD11 LEU A 237      11.341   2.192  -3.950  1.00  0.00           H
ATOM   2208 HD12 LEU A 237      12.681   2.457  -5.026  1.00  0.00           H
ATOM   2209 HD13 LEU A 237      11.454   3.708  -4.848  1.00  0.00           H
ATOM   2210 HD21 LEU A 237       8.988   1.727  -4.876  1.00  0.00           H
ATOM   2211 HD22 LEU A 237       9.051   3.265  -5.746  1.00  0.00           H
ATOM   2212 HD23 LEU A 237       8.718   1.774  -6.615  1.00  0.00           H
ATOM   2213  N   GLU A 238      13.074   1.737 -10.248  1.00 28.09           N
ATOM   2214  CA  GLU A 238      13.348   0.919 -11.447  1.00 29.19           C
ATOM   2215  C   GLU A 238      14.648   0.103 -11.299  1.00 29.11           C
ATOM   2216  O   GLU A 238      14.870  -0.880 -12.007  1.00 28.86           O
ATOM   2217  CB  GLU A 238      13.380   1.800 -12.720  1.00 32.53           C
ATOM   2218  CG  GLU A 238      12.084   2.600 -13.018  1.00 39.05           C
ATOM   2219  CD  GLU A 238      10.806   1.831 -12.717  1.00 42.35           C
ATOM   2220  OE1 GLU A 238      10.333   1.070 -13.584  1.00 44.53           O
ATOM   2221  OE2 GLU A 238      10.344   1.896 -11.558  1.00 42.36           O1-
ATOM   2222  H   GLU A 238      13.061   2.748 -10.351  1.00  0.00           H
ATOM   2223  HA  GLU A 238      12.575   0.165 -11.567  1.00  0.00           H
ATOM   2224  HB2 GLU A 238      14.220   2.494 -12.666  1.00  0.00           H
ATOM   2225  HB3 GLU A 238      13.578   1.153 -13.576  1.00  0.00           H
ATOM   2226  HG2 GLU A 238      12.064   3.518 -12.439  1.00  0.00           H
ATOM   2227  HG3 GLU A 238      12.056   2.911 -14.061  1.00  0.00           H
ATOM   2228  N   GLU A 239      15.451   0.448 -10.287  1.00 30.17           N
ATOM   2229  CA  GLU A 239      16.515  -0.352  -9.698  1.00 30.22           C
ATOM   2230  C   GLU A 239      15.971  -1.686  -9.109  1.00 30.36           C
ATOM   2231  O   GLU A 239      16.668  -2.704  -9.119  1.00 29.89           O
ATOM   2232  CB  GLU A 239      17.201   0.565  -8.654  1.00 31.52           C
ATOM   2233  CG  GLU A 239      18.519   0.053  -8.038  1.00 34.59           C
ATOM   2234  CD  GLU A 239      19.201   1.100  -7.153  1.00 35.31           C
ATOM   2235  OE1 GLU A 239      19.258   2.285  -7.545  1.00 38.54           O
ATOM   2236  OE2 GLU A 239      19.676   0.714  -6.060  1.00 36.01           O1-
ATOM   2237  H   GLU A 239      15.197   1.295  -9.799  1.00  0.00           H
ATOM   2238  HA  GLU A 239      17.231  -0.592 -10.485  1.00  0.00           H
ATOM   2239  HB2 GLU A 239      17.410   1.525  -9.130  1.00  0.00           H
ATOM   2240  HB3 GLU A 239      16.505   0.793  -7.846  1.00  0.00           H
ATOM   2241  HG2 GLU A 239      18.339  -0.849  -7.453  1.00  0.00           H
ATOM   2242  HG3 GLU A 239      19.220  -0.216  -8.827  1.00  0.00           H
ATOM   2243  N   TYR A 240      14.695  -1.739  -8.693  1.00 29.40           N
ATOM   2244  CA  TYR A 240      14.077  -2.816  -7.918  1.00 26.76           C
ATOM   2245  C   TYR A 240      12.850  -3.418  -8.621  1.00 26.94           C
ATOM   2246  O   TYR A 240      12.188  -2.785  -9.442  1.00 26.38           O
ATOM   2247  CB  TYR A 240      13.756  -2.308  -6.497  1.00 25.17           C
ATOM   2248  CG  TYR A 240      14.999  -1.848  -5.756  1.00 22.76           C
ATOM   2249  CD1 TYR A 240      15.942  -2.788  -5.296  1.00 23.97           C
ATOM   2250  CD2 TYR A 240      15.261  -0.474  -5.597  1.00 23.51           C
ATOM   2251  CE1 TYR A 240      17.146  -2.365  -4.711  1.00 21.82           C
ATOM   2252  CE2 TYR A 240      16.473  -0.044  -5.030  1.00 21.33           C
ATOM   2253  CZ  TYR A 240      17.420  -0.993  -4.604  1.00 21.91           C
ATOM   2254  OH  TYR A 240      18.634  -0.586  -4.157  1.00 23.59           O
ATOM   2255  H   TYR A 240      14.103  -0.929  -8.848  1.00  0.00           H
ATOM   2256  HA  TYR A 240      14.791  -3.630  -7.809  1.00  0.00           H
ATOM   2257  HB2 TYR A 240      13.029  -1.494  -6.538  1.00  0.00           H
ATOM   2258  HB3 TYR A 240      13.286  -3.097  -5.910  1.00  0.00           H
ATOM   2259  HD1 TYR A 240      15.767  -3.838  -5.418  1.00  0.00           H
ATOM   2260  HD2 TYR A 240      14.551   0.261  -5.939  1.00  0.00           H
ATOM   2261  HE1 TYR A 240      17.877  -3.088  -4.383  1.00  0.00           H
ATOM   2262  HE2 TYR A 240      16.685   1.014  -4.959  1.00  0.00           H
ATOM   2263  HH  TYR A 240      19.050  -0.084  -4.883  1.00  0.00           H
ATOM   2264  N   ASP A 241      12.559  -4.681  -8.311  1.00 27.29           N
ATOM   2265  CA  ASP A 241      11.441  -5.480  -8.822  1.00 26.93           C
ATOM   2266  C   ASP A 241      10.343  -5.605  -7.762  1.00 26.42           C
ATOM   2267  O   ASP A 241       9.205  -5.919  -8.098  1.00 27.05           O
ATOM   2268  CB  ASP A 241      11.926  -6.912  -9.138  1.00 27.77           C
ATOM   2269  CG  ASP A 241      12.818  -6.966 -10.361  1.00 27.65           C
ATOM   2270  OD1 ASP A 241      12.290  -7.314 -11.434  1.00 25.77           O
ATOM   2271  OD2 ASP A 241      14.014  -6.622 -10.218  1.00 26.65           O1-
ATOM   2272  H   ASP A 241      13.125  -5.145  -7.602  1.00  0.00           H
ATOM   2273  HA  ASP A 241      11.006  -5.039  -9.721  1.00  0.00           H
ATOM   2274  HB2 ASP A 241      12.482  -7.332  -8.301  1.00  0.00           H
ATOM   2275  HB3 ASP A 241      11.078  -7.577  -9.313  1.00  0.00           H
ATOM   2276  N   TRP A 242      10.667  -5.370  -6.486  1.00 24.04           N
ATOM   2277  CA  TRP A 242       9.769  -5.412  -5.339  1.00 24.23           C
ATOM   2278  C   TRP A 242      10.015  -4.193  -4.447  1.00 23.82           C
ATOM   2279  O   TRP A 242      11.063  -3.553  -4.535  1.00 22.71           O
ATOM   2280  CB  TRP A 242       9.925  -6.719  -4.532  1.00 23.96           C
ATOM   2281  CG  TRP A 242       9.687  -8.062  -5.160  1.00 23.75           C
ATOM   2282  CD1 TRP A 242      10.389  -8.598  -6.182  1.00 26.08           C
ATOM   2283  CD2 TRP A 242       8.773  -9.114  -4.724  1.00 25.48           C
ATOM   2284  NE1 TRP A 242       9.993  -9.902  -6.397  1.00 23.93           N
ATOM   2285  CE3 TRP A 242       7.762  -9.208  -3.738  1.00 25.82           C
ATOM   2286  CE2 TRP A 242       9.069 -10.301  -5.460  1.00 25.93           C
ATOM   2287  CZ3 TRP A 242       7.139 -10.437  -3.446  1.00 26.34           C
ATOM   2288  CZ2 TRP A 242       8.473 -11.534  -5.166  1.00 26.43           C
ATOM   2289  CH2 TRP A 242       7.519 -11.602  -4.137  1.00 24.99           C
ATOM   2290  H   TRP A 242      11.617  -5.087  -6.285  1.00  0.00           H
ATOM   2291  HA  TRP A 242       8.744  -5.314  -5.686  1.00  0.00           H
ATOM   2292  HB2 TRP A 242      10.933  -6.750  -4.129  1.00  0.00           H
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ATOM   2293  HB3 TRP A 242       9.275  -6.669  -3.661  1.00  0.00           H
ATOM   2294  HD1 TRP A 242      11.187  -8.087  -6.694  1.00  0.00           H
ATOM   2295  HE1 TRP A 242      10.442 -10.511  -7.072  1.00  0.00           H
ATOM   2296  HE3 TRP A 242       7.489  -8.330  -3.173  1.00  0.00           H
ATOM   2297  HZ3 TRP A 242       6.376 -10.487  -2.682  1.00  0.00           H
ATOM   2298  HZ2 TRP A 242       8.731 -12.419  -5.729  1.00  0.00           H
ATOM   2299  HH2 TRP A 242       7.052 -12.548  -3.907  1.00  0.00           H
ATOM   2300  N   TYR A 243       9.059  -3.901  -3.566  1.00 22.84           N
ATOM   2301  CA  TYR A 243       9.076  -2.799  -2.620  1.00 21.90           C
ATOM   2302  C   TYR A 243       8.460  -3.243  -1.294  1.00 22.39           C
ATOM   2303  O   TYR A 243       7.473  -3.983  -1.284  1.00 22.11           O
ATOM   2304  CB  TYR A 243       8.385  -1.558  -3.223  1.00 22.85           C
ATOM   2305  CG  TYR A 243       6.862  -1.609  -3.332  1.00 20.92           C
ATOM   2306  CD1 TYR A 243       6.238  -2.441  -4.286  1.00 18.97           C
ATOM   2307  CD2 TYR A 243       6.054  -0.837  -2.469  1.00 20.38           C
ATOM   2308  CE1 TYR A 243       4.841  -2.458  -4.420  1.00 18.11           C
ATOM   2309  CE2 TYR A 243       4.651  -0.867  -2.587  1.00 20.28           C
ATOM   2310  CZ  TYR A 243       4.047  -1.665  -3.573  1.00 19.55           C
ATOM   2311  OH  TYR A 243       2.694  -1.669  -3.718  1.00 19.44           O
ATOM   2312  H   TYR A 243       8.224  -4.489  -3.533  1.00  0.00           H
ATOM   2313  HA  TYR A 243      10.117  -2.533  -2.427  1.00  0.00           H
ATOM   2314  HB2 TYR A 243       8.661  -0.696  -2.620  1.00  0.00           H
ATOM   2315  HB3 TYR A 243       8.801  -1.351  -4.208  1.00  0.00           H
ATOM   2316  HD1 TYR A 243       6.818  -3.086  -4.921  1.00  0.00           H
ATOM   2317  HD2 TYR A 243       6.500  -0.224  -1.705  1.00  0.00           H
ATOM   2318  HE1 TYR A 243       4.387  -3.099  -5.165  1.00  0.00           H
ATOM   2319  HE2 TYR A 243       4.035  -0.270  -1.931  1.00  0.00           H
ATOM   2320  HH  TYR A 243       2.236  -1.280  -2.943  1.00  0.00           H
ATOM   2321  N   TRP A 244       9.027  -2.779  -0.176  1.00 20.85           N
ATOM   2322  CA  TRP A 244       8.367  -2.740   1.119  1.00 20.48           C
ATOM   2323  C   TRP A 244       8.007  -1.268   1.339  1.00 21.37           C
ATOM   2324  O   TRP A 244       8.895  -0.458   1.603  1.00 18.99           O
ATOM   2325  CB  TRP A 244       9.323  -3.215   2.229  1.00 20.36           C
ATOM   2326  CG  TRP A 244       8.704  -3.619   3.531  1.00 22.78           C
ATOM   2327  CD1 TRP A 244       7.509  -3.228   4.037  1.00 24.36           C
ATOM   2328  CD2 TRP A 244       9.248  -4.568   4.486  1.00 23.95           C
ATOM   2329  NE1 TRP A 244       7.288  -3.868   5.238  1.00 23.22           N
ATOM   2330  CE3 TRP A 244      10.425  -5.347   4.529  1.00 24.80           C
ATOM   2331  CE2 TRP A 244       8.328  -4.711   5.566  1.00 24.71           C
ATOM   2332  CZ3 TRP A 244      10.668  -6.239   5.588  1.00 26.03           C
ATOM   2333  CZ2 TRP A 244       8.562  -5.590   6.635  1.00 26.18           C
ATOM   2334  CH2 TRP A 244       9.730  -6.371   6.628  1.00 24.87           C
ATOM   2335  H   TRP A 244       9.925  -2.310  -0.254  1.00  0.00           H
ATOM   2336  HA  TRP A 244       7.502  -3.391   1.133  1.00  0.00           H
ATOM   2337  HB2 TRP A 244       9.864  -4.086   1.875  1.00  0.00           H
ATOM   2338  HB3 TRP A 244      10.095  -2.493   2.465  1.00  0.00           H
ATOM   2339  HD1 TRP A 244       6.822  -2.544   3.560  1.00  0.00           H
ATOM   2340  HE1 TRP A 244       6.406  -3.797   5.733  1.00  0.00           H
ATOM   2341  HE3 TRP A 244      11.149  -5.258   3.733  1.00  0.00           H
ATOM   2342  HZ3 TRP A 244      11.578  -6.821   5.591  1.00  0.00           H
ATOM   2343  HZ2 TRP A 244       7.845  -5.695   7.434  1.00  0.00           H
ATOM   2344  HH2 TRP A 244       9.913  -7.071   7.425  1.00  0.00           H
ATOM   2345  N   ARG A 245       6.732  -0.891   1.216  1.00 21.39           N
ATOM   2346  CA  ARG A 245       6.296   0.459   1.558  1.00 21.27           C
ATOM   2347  C   ARG A 245       6.251   0.591   3.084  1.00 18.90           C
ATOM   2348  O   ARG A 245       5.504  -0.129   3.748  1.00 20.72           O
ATOM   2349  CB  ARG A 245       4.920   0.783   0.949  1.00 22.80           C
ATOM   2350  CG  ARG A 245       4.383   2.178   1.347  1.00 24.05           C
ATOM   2351  CD  ARG A 245       3.433   2.743   0.303  1.00 22.81           C
ATOM   2352  NE  ARG A 245       2.602   3.782   0.894  1.00 24.70           N
ATOM   2353  CZ  ARG A 245       1.422   4.105   0.342  1.00 24.50           C
ATOM   2354  NH1 ARG A 245       1.176   3.695  -0.894  1.00 21.87           N
ATOM   2355  NH2 ARG A 245       0.532   4.839   1.010  1.00 25.57           N1+
ATOM   2356  H   ARG A 245       6.041  -1.616   1.022  1.00  0.00           H
ATOM   2357  HA  ARG A 245       7.007   1.176   1.152  1.00  0.00           H
ATOM   2358  HB2 ARG A 245       5.025   0.738  -0.134  1.00  0.00           H
ATOM   2359  HB3 ARG A 245       4.184   0.020   1.214  1.00  0.00           H
ATOM   2360  HG2 ARG A 245       3.896   2.113   2.325  1.00  0.00           H
ATOM   2361  HG3 ARG A 245       5.216   2.877   1.460  1.00  0.00           H
ATOM   2362  HD2 ARG A 245       4.026   3.127  -0.531  1.00  0.00           H
ATOM   2363  HD3 ARG A 245       2.797   1.929  -0.048  1.00  0.00           H
ATOM   2364  HE  ARG A 245       2.825   4.172   1.796  1.00  0.00           H
ATOM   2365 HH11 ARG A 245       1.914   3.385  -1.524  1.00  0.00           H
ATOM   2366 HH12 ARG A 245       0.208   3.766  -1.274  1.00  0.00           H
ATOM   2367 HH21 ARG A 245       0.575   4.957   2.021  1.00  0.00           H
ATOM   2368 HH22 ARG A 245      -0.334   5.093   0.535  1.00  0.00           H
ATOM   2369  N   VAL A 246       7.042   1.526   3.610  1.00 18.37           N
ATOM   2370  CA  VAL A 246       7.078   1.908   5.008  1.00 17.88           C
ATOM   2371  C   VAL A 246       6.749   3.408   5.045  1.00 17.66           C
ATOM   2372  O   VAL A 246       7.496   4.238   4.518  1.00 16.95           O
ATOM   2373  CB  VAL A 246       8.461   1.555   5.628  1.00 20.27           C
ATOM   2374  CG1 VAL A 246       8.509   1.890   7.130  1.00 18.44           C
ATOM   2375  CG2 VAL A 246       8.854   0.078   5.415  1.00 22.05           C
ATOM   2376  H   VAL A 246       7.656   2.038   2.977  1.00  0.00           H
ATOM   2377  HA  VAL A 246       6.308   1.369   5.565  1.00  0.00           H
ATOM   2378  HB  VAL A 246       9.225   2.156   5.130  1.00  0.00           H
ATOM   2379 HG11 VAL A 246       9.454   1.582   7.576  1.00  0.00           H
ATOM   2380 HG12 VAL A 246       8.405   2.962   7.298  1.00  0.00           H
ATOM   2381 HG13 VAL A 246       7.711   1.384   7.674  1.00  0.00           H
ATOM   2382 HG21 VAL A 246       9.808  -0.153   5.889  1.00  0.00           H
ATOM   2383 HG22 VAL A 246       8.104  -0.601   5.822  1.00  0.00           H
ATOM   2384 HG23 VAL A 246       8.969  -0.161   4.357  1.00  0.00           H
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ATOM   2385  N   GLU A 247      5.618   3.761   5.658  1.00 18.37           N
ATOM   2386  CA  GLU A 247      5.218   5.142   5.933  1.00 17.71           C
ATOM   2387  C   GLU A 247      5.906   5.631   7.236  1.00 18.77           C
ATOM   2388  O   GLU A 247      6.428   4.818   8.013  1.00 19.80           O
ATOM   2389  CB  GLU A 247      3.668   5.168   6.080  1.00 17.17           C
ATOM   2390  CG  GLU A 247      2.968   5.404   4.733  1.00 16.44           C
ATOM   2391  CD  GLU A 247      1.544   5.965   4.803  1.00 20.59           C
ATOM   2392  OE1 GLU A 247      1.407   6.968   5.573  1.00 21.32           O
ATOM   2393  OE2 GLU A 247      0.677   5.480   4.054  1.00 23.91           O1-
ATOM   2394  H   GLU A 247      5.041   3.024   6.037  1.00  0.00           H
ATOM   2395  HA  GLU A 247      5.547   5.792   5.123  1.00  0.00           H
ATOM   2396  HB2 GLU A 247      3.303   4.241   6.527  1.00  0.00           H
ATOM   2397  HB3 GLU A 247      3.384   5.942   6.795  1.00  0.00           H
ATOM   2398  HG2 GLU A 247      3.531   6.164   4.187  1.00  0.00           H
ATOM   2399  HG3 GLU A 247      3.006   4.474   4.167  1.00  0.00           H
ATOM   2400  N   PRO A 248      5.932   6.956   7.505  1.00 19.92           N
ATOM   2401  CA  PRO A 248      6.461   7.506   8.758  1.00 20.59           C
ATOM   2402  C   PRO A 248      5.501   7.260   9.937  1.00 20.76           C
ATOM   2403  O   PRO A 248      4.293   7.125   9.737  1.00 20.31           O
ATOM   2404  CB  PRO A 248      6.647   9.004   8.479  1.00 22.82           C
ATOM   2405  CG  PRO A 248      5.633   9.326   7.394  1.00 21.16           C
ATOM   2406  CD  PRO A 248      5.470   8.023   6.614  1.00 20.35           C
ATOM   2407  HA  PRO A 248      7.422   7.048   8.974  1.00  0.00           H
ATOM   2408  HB2 PRO A 248      6.530   9.637   9.360  1.00  0.00           H
ATOM   2409  HB3 PRO A 248      7.645   9.180   8.084  1.00  0.00           H
ATOM   2410  HG2 PRO A 248      4.683   9.603   7.849  1.00  0.00           H
ATOM   2411  HG3 PRO A 248      5.941  10.152   6.754  1.00  0.00           H
ATOM   2412  HD2 PRO A 248      4.432   7.892   6.309  1.00  0.00           H
ATOM   2413  HD3 PRO A 248      6.090   8.044   5.717  1.00  0.00           H
ATOM   2414  N   ASP A 249      6.043   7.190  11.162  1.00 20.20           N
ATOM   2415  CA  ASP A 249      5.322   7.045  12.437  1.00 19.81           C
ATOM   2416  C   ASP A 249      4.850   5.603  12.702  1.00 20.04           C
ATOM   2417  O   ASP A 249      3.935   5.381  13.493  1.00 20.11           O
ATOM   2418  CB  ASP A 249      4.248   8.152  12.675  1.00  0.00           C
ATOM   2419  CG  ASP A 249      4.682   9.219  13.678  1.00  0.00           C
ATOM   2420  OD1 ASP A 249      4.991   8.990  14.846  1.00  0.00           O
ATOM   2421  OD2 ASP A 249      4.697  10.462  13.130  1.00  0.00           O
ATOM   2422  H   ASP A 249      7.050   7.242  11.242  1.00  0.00           H
ATOM   2423  HA  ASP A 249      6.092   7.169  13.198  1.00  0.00           H
ATOM   2424  HB2 ASP A 249      3.935   8.637  11.752  1.00  0.00           H
ATOM   2425  HB3 ASP A 249      3.332   7.730  13.083  1.00  0.00           H
ATOM   2426  HD2 ASP A 249      4.849  11.149  13.790  1.00  0.00           H
ATOM   2427  N   ILE A 250      5.461   4.615  12.037  1.00 19.14           N
ATOM   2428  CA  ILE A 250      5.093   3.203  12.101  1.00 20.37           C
ATOM   2429  C   ILE A 250      5.789   2.518  13.293  1.00 19.83           C
ATOM   2430  O   ILE A 250      6.816   2.976  13.806  1.00 20.11           O
ATOM   2431  CB  ILE A 250      5.419   2.543  10.713  1.00 21.38           C
ATOM   2432  CG1 ILE A 250      4.155   2.464   9.833  1.00 23.63           C
ATOM   2433  CG2 ILE A 250      6.094   1.151  10.721  1.00 22.17           C
ATOM   2434  CD1 ILE A 250      3.476   3.804   9.543  1.00 20.80           C
ATOM   2435  H   ILE A 250      6.276   4.849  11.480  1.00  0.00           H
ATOM   2436  HA  ILE A 250      4.021   3.136  12.286  1.00  0.00           H
ATOM   2437  HB  ILE A 250      6.115   3.181  10.177  1.00  0.00           H
ATOM   2438 HG12 ILE A 250      4.416   2.011   8.876  1.00  0.00           H
ATOM   2439 HG13 ILE A 250      3.428   1.800  10.302  1.00  0.00           H
ATOM   2440 HG21 ILE A 250      6.317   0.820   9.707  1.00  0.00           H
ATOM   2441 HG22 ILE A 250      7.043   1.154  11.257  1.00  0.00           H
ATOM   2442 HG23 ILE A 250      5.454   0.393  11.174  1.00  0.00           H
ATOM   2443 HD11 ILE A 250      2.678   3.667   8.815  1.00  0.00           H
ATOM   2444 HD12 ILE A 250      3.044   4.249  10.438  1.00  0.00           H
ATOM   2445 HD13 ILE A 250      4.172   4.526   9.131  1.00  0.00           H
ATOM   2446  N   LYS A 251      5.194   1.398  13.712  1.00 20.52           N
ATOM   2447  CA  LYS A 251      5.692   0.441  14.688  1.00 20.36           C
ATOM   2448  C   LYS A 251      5.600  -0.945  14.024  1.00 21.67           C
ATOM   2449  O   LYS A 251      4.592  -1.229  13.372  1.00 19.23           O
ATOM   2450  CB  LYS A 251      4.826   0.502  15.971  1.00 20.47           C
ATOM   2451  CG  LYS A 251      4.608   1.917  16.562  1.00 20.09           C
ATOM   2452  CD  LYS A 251      3.443   1.989  17.563  1.00 22.23           C
ATOM   2453  CE  LYS A 251      3.805   1.623  19.005  1.00 20.07           C
ATOM   2454  NZ  LYS A 251      2.589   1.354  19.794  1.00 21.10           N1+
ATOM   2455  H   LYS A 251      4.344   1.120  13.233  1.00  0.00           H
ATOM   2456  HA  LYS A 251      6.732   0.660  14.920  1.00  0.00           H
ATOM   2457  HB2 LYS A 251      3.856   0.061  15.744  1.00  0.00           H
ATOM   2458  HB3 LYS A 251      5.262  -0.147  16.733  1.00  0.00           H
ATOM   2459  HG2 LYS A 251      5.529   2.301  17.002  1.00  0.00           H
ATOM   2460  HG3 LYS A 251      4.354   2.615  15.766  1.00  0.00           H
ATOM   2461  HD2 LYS A 251      3.047   3.005  17.571  1.00  0.00           H
ATOM   2462  HD3 LYS A 251      2.625   1.362  17.216  1.00  0.00           H
ATOM   2463  HE2 LYS A 251      4.462   0.756  19.021  1.00  0.00           H
ATOM   2464  HE3 LYS A 251      4.360   2.443  19.458  1.00  0.00           H
ATOM   2465  HZ1 LYS A 251      1.913   2.112  19.649  1.00  0.00           H
ATOM   2466  HZ2 LYS A 251      2.128   0.498  19.492  1.00  0.00           H
ATOM   2467  HZ3 LYS A 251      2.781   1.311  20.792  1.00  0.00           H
ATOM   2468  N   LEU A 252      6.615  -1.800  14.196  1.00 19.01           N
ATOM   2469  CA  LEU A 252      6.548  -3.239  13.934  1.00 20.86           C
ATOM   2470  C   LEU A 252      6.722  -3.893  15.299  1.00 19.45           C
ATOM   2471  O   LEU A 252      7.771  -3.735  15.914  1.00 21.96           O
ATOM   2472  CB  LEU A 252      7.703  -3.710  13.013  1.00 21.87           C
ATOM   2473  CG  LEU A 252      7.344  -3.837  11.520  1.00 22.64           C
ATOM   2474  CD1 LEU A 252      8.605  -4.176  10.714  1.00 23.58           C
ATOM   2475  CD2 LEU A 252      6.284  -4.922  11.271  1.00 23.00           C
ATOM   2476  H   LEU A 252      7.355  -1.533  14.833  1.00  0.00           H
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ATOM   2477  HA  LEU A 252       5.579  -3.531  13.535  1.00  0.00           H
ATOM   2478  HB2 LEU A 252       8.561  -3.050  13.137  1.00  0.00           H
ATOM   2479  HB3 LEU A 252       8.061  -4.692  13.335  1.00  0.00           H
ATOM   2480  HG  LEU A 252       6.959  -2.877  11.170  1.00  0.00           H
ATOM   2481 HD11 LEU A 252       8.412  -4.175   9.641  1.00  0.00           H
ATOM   2482 HD12 LEU A 252       9.393  -3.455  10.914  1.00  0.00           H
ATOM   2483 HD13 LEU A 252       8.996  -5.158  10.982  1.00  0.00           H
ATOM   2484 HD21 LEU A 252       6.106  -5.072  10.207  1.00  0.00           H
ATOM   2485 HD22 LEU A 252       6.601  -5.879  11.689  1.00  0.00           H
ATOM   2486 HD23 LEU A 252       5.325  -4.677  11.719  1.00  0.00           H
ATOM   2487  N   TYR A 253      5.704  -4.596  15.782  1.00 20.60           N
ATOM   2488  CA  TYR A 253      5.688  -5.151  17.128  1.00 20.37           C
ATOM   2489  C   TYR A 253      6.317  -6.544  17.140  1.00 19.45           C
ATOM   2490  O   TYR A 253      7.095  -6.858  18.035  1.00 22.46           O
ATOM   2491  CB  TYR A 253      4.223  -5.304  17.559  1.00 19.57           C
ATOM   2492  CG  TYR A 253      3.459  -3.999  17.676  1.00 20.14           C
ATOM   2493  CD1 TYR A 253      3.935  -2.986  18.530  1.00 20.07           C
ATOM   2494  CD2 TYR A 253      2.225  -3.828  17.016  1.00 19.83           C
ATOM   2495  CE1 TYR A 253      3.157  -1.842  18.762  1.00 20.33           C
ATOM   2496  CE2 TYR A 253      1.448  -2.682  17.252  1.00 19.82           C
ATOM   2497  CZ  TYR A 253      1.907  -1.689  18.135  1.00 18.82           C
ATOM   2498  OH  TYR A 253      1.135  -0.598  18.406  1.00 18.72           O
ATOM   2499  H   TYR A 253      4.907  -4.777  15.181  1.00  0.00           H
ATOM   2500  HA  TYR A 253      6.231  -4.512  17.829  1.00  0.00           H
ATOM   2501  HB2 TYR A 253      3.688  -5.980  16.891  1.00  0.00           H
ATOM   2502  HB3 TYR A 253      4.190  -5.781  18.538  1.00  0.00           H
ATOM   2503  HD1 TYR A 253      4.865  -3.103  19.070  1.00  0.00           H
ATOM   2504  HD2 TYR A 253      1.820  -4.605  16.388  1.00  0.00           H
ATOM   2505  HE1 TYR A 253      3.512  -1.130  19.484  1.00  0.00           H
ATOM   2506  HE2 TYR A 253      0.481  -2.601  16.778  1.00  0.00           H
ATOM   2507  HH  TYR A 253      0.193  -0.806  18.232  1.00  0.00           H
ATOM   2508  N   CYS A 254      6.001  -7.383  16.148  1.00 22.80           N
ATOM   2509  CA  CYS A 254      6.549  -8.732  16.048  1.00 23.68           C
ATOM   2510  C   CYS A 254      7.861  -8.658  15.270  1.00 22.63           C
ATOM   2511  O   CYS A 254      7.961  -7.960  14.257  1.00 23.04           O
ATOM   2512  CB  CYS A 254      5.582  -9.637  15.276  1.00 23.53           C
ATOM   2513  SG  CYS A 254      3.941  -9.801  16.033  1.00 25.59           S
ATOM   2514  H   CYS A 254      5.464  -7.029  15.370  1.00  0.00           H
ATOM   2515  HA  CYS A 254      6.726  -9.156  17.036  1.00  0.00           H
ATOM   2516  HB2 CYS A 254      5.451  -9.264  14.260  1.00  0.00           H
ATOM   2517  HB3 CYS A 254      6.003 -10.640  15.170  1.00  0.00           H
ATOM   2518  N   ASP A 255      8.863  -9.383  15.764  1.00 22.72           N
ATOM   2519  CA  ASP A 255     10.132  -9.651  15.110  1.00 23.70           C
ATOM   2520  C   ASP A 255      9.861 -10.604  13.956  1.00 24.37           C
ATOM   2521  O   ASP A 255      9.408 -11.725  14.164  1.00 24.71           O
ATOM   2522  CB  ASP A 255     11.102 -10.335  16.099  1.00 25.02           C
ATOM   2523  CG  ASP A 255     12.037  -9.342  16.748  1.00 25.86           C
ATOM   2524  OD1 ASP A 255     11.665  -8.780  17.805  1.00 25.31           O
ATOM   2525  OD2 ASP A 255     13.115  -9.156  16.143  1.00 30.23           O1-
ATOM   2526  H   ASP A 255      8.621 -10.019  16.527  1.00  0.00           H
ATOM   2527  HA  ASP A 255     10.558  -8.726  14.716  1.00  0.00           H
ATOM   2528  HB2 ASP A 255     10.569 -10.889  16.870  1.00  0.00           H
ATOM   2529  HB3 ASP A 255     11.723 -11.075  15.598  1.00  0.00           H
ATOM   2530  N   ILE A 256     10.146 -10.151  12.739  1.00 23.24           N
ATOM   2531  CA  ILE A 256      9.975 -10.924  11.526  1.00 25.08           C
ATOM   2532  C   ILE A 256     11.309 -11.676  11.396  1.00 24.17           C
ATOM   2533  O   ILE A 256     12.377 -11.065  11.284  1.00 23.01           O
ATOM   2534  CB  ILE A 256      9.726  -9.958  10.338  1.00 24.13           C
ATOM   2535  CG1 ILE A 256      8.602  -8.931  10.646  1.00 24.74           C
ATOM   2536  CG2 ILE A 256      9.387 -10.752   9.060  1.00 23.47           C
ATOM   2537  CD1 ILE A 256      8.489  -7.793   9.627  1.00 24.32           C
ATOM   2538  H   ILE A 256     10.580  -9.242  12.640  1.00  0.00           H
ATOM   2539  HA  ILE A 256      9.135 -11.617  11.621  1.00  0.00           H
ATOM   2540  HB  ILE A 256     10.641  -9.399  10.156  1.00  0.00           H
ATOM   2541 HG12 ILE A 256      7.651  -9.452  10.732  1.00  0.00           H
ATOM   2542 HG13 ILE A 256      8.754  -8.450  11.611  1.00  0.00           H
ATOM   2543 HG21 ILE A 256      9.283 -10.094   8.202  1.00  0.00           H
ATOM   2544 HG22 ILE A 256     10.161 -11.476   8.806  1.00  0.00           H
ATOM   2545 HG23 ILE A 256      8.450 -11.302   9.165  1.00  0.00           H
ATOM   2546 HD11 ILE A 256      7.680  -7.116   9.898  1.00  0.00           H
ATOM   2547 HD12 ILE A 256      9.411  -7.213   9.596  1.00  0.00           H
ATOM   2548 HD13 ILE A 256      8.274  -8.162   8.626  1.00  0.00           H
ATOM   2549  N   ASN A 257     11.255 -13.000  11.543  1.00 25.64           N
ATOM   2550  CA  ASN A 257     12.421 -13.867  11.734  1.00 27.73           C
ATOM   2551  C   ASN A 257     12.662 -14.738  10.497  1.00 27.85           C
ATOM   2552  O   ASN A 257     13.151 -15.862  10.585  1.00 27.48           O
ATOM   2553  CB  ASN A 257     12.295 -14.675  13.046  1.00 29.60           C
ATOM   2554  CG  ASN A 257     12.400 -13.784  14.287  1.00 31.61           C
ATOM   2555  OD1 ASN A 257     13.323 -12.975  14.404  1.00 33.94           O
ATOM   2556  ND2 ASN A 257     11.435 -13.859  15.192  1.00 33.79           N
ATOM   2557  H   ASN A 257     10.342 -13.414  11.678  1.00  0.00           H
ATOM   2558  HA  ASN A 257     13.327 -13.265  11.817  1.00  0.00           H
ATOM   2559  HB2 ASN A 257     11.362 -15.241  13.057  1.00  0.00           H
ATOM   2560  HB3 ASN A 257     13.099 -15.409  13.118  1.00  0.00           H
ATOM   2561 HD21 ASN A 257     10.585 -14.399  15.005  1.00  0.00           H
ATOM   2562 HD22 ASN A 257     11.468 -13.286  16.018  1.00  0.00           H
ATOM   2563  N   TYR A 258     12.358 -14.176   9.328  1.00 29.16           N
ATOM   2564  CA  TYR A 258     12.663 -14.678   8.002  1.00 29.16           C
ATOM   2565  C   TYR A 258     12.807 -13.470   7.070  1.00 28.34           C
ATOM   2566  O   TYR A 258     12.285 -12.391   7.359  1.00 28.39           O
ATOM   2567  CB  TYR A 258     11.628 -15.731   7.550  1.00 29.46           C
ATOM   2568  CG  TYR A 258     10.206 -15.215   7.410  1.00 30.02           C
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ATOM   2569  CD1 TYR A 258       9.356 -15.174   8.535  1.00 31.04          C
ATOM   2570  CD2 TYR A 258       9.735 -14.758   6.162  1.00 30.30          C
ATOM   2571  CE1 TYR A 258       8.048 -14.669   8.415  1.00 29.83          C
ATOM   2572  CE2 TYR A 258       8.422 -14.267   6.040  1.00 30.49          C
ATOM   2573  CZ  TYR A 258       7.583 -14.216   7.166  1.00 31.23          C
ATOM   2574  OH  TYR A 258       6.323 -13.723   7.038  1.00 30.56          O
ATOM   2575  H   TYR A 258      11.988 -13.233   9.330  1.00  0.00          H
ATOM   2576  HA  TYR A 258      13.641 -15.161   8.047  1.00  0.00          H
ATOM   2577  HB2 TYR A 258      11.936 -16.152   6.593  1.00  0.00          H
ATOM   2578  HB3 TYR A 258      11.628 -16.569   8.248  1.00  0.00          H
ATOM   2579  HD1 TYR A 258       9.702 -15.522   9.497  1.00  0.00          H
ATOM   2580  HD2 TYR A 258      10.376 -14.776   5.294  1.00  0.00          H
ATOM   2581  HE1 TYR A 258       7.400 -14.631   9.279  1.00  0.00          H
ATOM   2582  HE2 TYR A 258       8.051 -13.926   5.085  1.00  0.00          H
ATOM   2583  HH  TYR A 258       5.835 -13.673   7.889  1.00  0.00          H
ATOM   2584  N   ASP A 259      13.507 -13.645   5.946  1.00 26.74          N
ATOM   2585  CA  ASP A 259      13.638 -12.633   4.902  1.00 25.98          C
ATOM   2586  C   ASP A 259      12.373 -12.710   4.034  1.00 26.85          C
ATOM   2587  O   ASP A 259      12.150 -13.717   3.357  1.00 26.32          O
ATOM   2588  CB  ASP A 259      14.901 -12.956   4.076  1.00 24.33          C
ATOM   2589  CG  ASP A 259      15.208 -11.956   2.966  1.00 23.76          C
ATOM   2590  OD1 ASP A 259      14.358 -11.704   2.082  1.00 24.79          O
ATOM   2591  OD2 ASP A 259      16.338 -11.426   2.971  1.00 24.27          O1-
ATOM   2592  H   ASP A 259      13.890 -14.555   5.755  1.00  0.00          H
ATOM   2593  HA  ASP A 259      13.742 -11.639   5.342  1.00  0.00          H
ATOM   2594  HB2 ASP A 259      15.763 -12.986   4.735  1.00  0.00          H
ATOM   2595  HB3 ASP A 259      14.841 -13.956   3.655  1.00  0.00          H
ATOM   2596  N   VAL A 260      11.523 -11.680   4.107  1.00 27.13          N
ATOM   2597  CA  VAL A 260      10.194 -11.652   3.501  1.00 26.80          C
ATOM   2598  C   VAL A 260      10.220 -11.806   1.969  1.00 26.31          C
ATOM   2599  O   VAL A 260       9.451 -12.598   1.432  1.00 25.15          O
ATOM   2600  CB  VAL A 260       9.418 -10.388   3.957  1.00 27.92          C
ATOM   2601  CG1 VAL A 260       9.160 -10.412   5.472  1.00 27.39          C
ATOM   2602  CG2 VAL A 260      10.062  -9.047   3.550  1.00 30.01          C
ATOM   2603  H   VAL A 260      11.742 -10.941   4.756  1.00  0.00          H
ATOM   2604  HA  VAL A 260       9.658 -12.523   3.883  1.00  0.00          H
ATOM   2605  HB  VAL A 260       8.437 -10.427   3.479  1.00  0.00          H
ATOM   2606 HG11 VAL A 260       8.555  -9.561   5.787  1.00  0.00          H
ATOM   2607 HG12 VAL A 260       8.620 -11.312   5.770  1.00  0.00          H
ATOM   2608 HG13 VAL A 260      10.090 -10.384   6.040  1.00  0.00          H
ATOM   2609 HG21 VAL A 260       9.464  -8.209   3.909  1.00  0.00          H
ATOM   2610 HG22 VAL A 260      11.067  -8.931   3.955  1.00  0.00          H
ATOM   2611 HG23 VAL A 260      10.116  -8.935   2.468  1.00  0.00          H
ATOM   2612  N   PHE A 261      11.122 -11.122   1.256  1.00 25.12          N
ATOM   2613  CA  PHE A 261      11.154 -11.149  -0.210  1.00 24.42          C
ATOM   2614  C   PHE A 261      11.841 -12.417  -0.730  1.00 26.37          C
ATOM   2615  O   PHE A 261      11.458 -12.921  -1.783  1.00 26.96          O
ATOM   2616  CB  PHE A 261      11.898  -9.919  -0.748  1.00 24.90          C
ATOM   2617  CG  PHE A 261      11.170  -8.618  -0.490  1.00 24.87          C
ATOM   2618  CD1 PHE A 261       9.975  -8.348  -1.183  1.00 23.69          C
ATOM   2619  CD2 PHE A 261      11.667  -7.689   0.445  1.00 24.07          C
ATOM   2620  CE1 PHE A 261       9.261  -7.165  -0.925  1.00 23.05          C
ATOM   2621  CE2 PHE A 261      10.956  -6.506   0.705  1.00 26.09          C
ATOM   2622  CZ  PHE A 261       9.746  -6.256   0.031  1.00 24.79          C
ATOM   2623  H   PHE A 261      11.802 -10.561   1.747  1.00  0.00          H
ATOM   2624  HA  PHE A 261      10.135 -11.142  -0.602  1.00  0.00          H
ATOM   2625  HB2 PHE A 261      12.897  -9.865  -0.334  1.00  0.00          H
ATOM   2626  HB3 PHE A 261      12.024 -10.008  -1.826  1.00  0.00          H
ATOM   2627  HD1 PHE A 261       9.601  -9.059  -1.903  1.00  0.00          H
ATOM   2628  HD2 PHE A 261      12.587  -7.877   0.973  1.00  0.00          H
ATOM   2629  HE1 PHE A 261       8.333  -6.955  -1.438  1.00  0.00          H
ATOM   2630  HE2 PHE A 261      11.336  -5.797   1.425  1.00  0.00          H
ATOM   2631  HZ  PHE A 261       9.172  -5.375   0.250  1.00  0.00          H
ATOM   2632  N   LYS A 262      12.781 -12.997   0.033  1.00 25.29          N
ATOM   2633  CA  LYS A 262      13.324 -14.325  -0.231  1.00 27.76          C
ATOM   2634  C   LYS A 262      12.257 -15.416  -0.016  1.00 27.08          C
ATOM   2635  O   LYS A 262      12.378 -16.462  -0.644  1.00 27.65          O
ATOM   2636  CB  LYS A 262      14.521 -14.564   0.716  1.00 27.98          C
ATOM   2637  CG  LYS A 262      15.227 -15.940   0.694  1.00 31.68          C
ATOM   2638  CD  LYS A 262      16.092 -16.224  -0.549  1.00 35.77          C
ATOM   2639  CE  LYS A 262      15.622 -17.430  -1.385  1.00 38.98          C
ATOM   2640  NZ  LYS A 262      14.488 -17.089  -2.248  1.00 38.71          N1+
ATOM   2641  H   LYS A 262      13.102 -12.517   0.877  1.00  0.00          H
ATOM   2642  HA  LYS A 262      13.664 -14.363  -1.268  1.00  0.00          H
ATOM   2643  HB2 LYS A 262      15.263 -13.778   0.569  1.00  0.00          H
ATOM   2644  HB3 LYS A 262      14.137 -14.431   1.723  1.00  0.00          H
ATOM   2645  HG2 LYS A 262      15.888 -15.963   1.562  1.00  0.00          H
ATOM   2646  HG3 LYS A 262      14.521 -16.750   0.882  1.00  0.00          H
ATOM   2647  HD2 LYS A 262      16.191 -15.329  -1.163  1.00  0.00          H
ATOM   2648  HD3 LYS A 262      17.104 -16.443  -0.206  1.00  0.00          H
ATOM   2649  HE2 LYS A 262      16.431 -17.776  -2.026  1.00  0.00          H
ATOM   2650  HE3 LYS A 262      15.351 -18.275  -0.749  1.00  0.00          H
ATOM   2651  HZ1 LYS A 262      14.128 -17.948  -2.717  1.00  0.00          H
ATOM   2652  HZ2 LYS A 262      13.684 -16.770  -1.711  1.00  0.00          H
ATOM   2653  HZ3 LYS A 262      14.743 -16.415  -2.963  1.00  0.00          H
ATOM   2654  N   TRP A 263      11.260 -15.196   0.852  1.00 26.32          N
ATOM   2655  CA  TRP A 263      10.214 -16.155   1.208  1.00 26.06          C
ATOM   2656  C   TRP A 263       8.983 -16.016   0.290  1.00 28.00          C
ATOM   2657  O   TRP A 263       8.494 -17.025  -0.223  1.00 26.85          O
ATOM   2658  CB  TRP A 263       9.805 -15.876   2.671  1.00 25.69          C
ATOM   2659  CG  TRP A 263       8.760 -16.761   3.285  1.00 24.08          C
ATOM   2660  CD1 TRP A 263       8.996 -17.931   3.921  1.00 24.32          C
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ATOM   2661  CD2 TRP A 263       7.319 -16.541   3.372  1.00 24.24           C
ATOM   2662  NE1 TRP A 263       7.802 -18.455   4.378  1.00 24.75           N
ATOM   2663  CE3 TRP A 263       6.441 -15.521   2.936  1.00 25.60           C
ATOM   2664  CE2 TRP A 263       6.733 -17.636   4.076  1.00 24.89           C
ATOM   2665  CZ3 TRP A 263       5.054 -15.590   3.174  1.00 24.08           C
ATOM   2666  CZ2 TRP A 263       5.351 -17.719   4.321  1.00 24.80           C
ATOM   2667  CH2 TRP A 263       4.508 -16.689   3.863  1.00 25.33           C
ATOM   2668  H   TRP A 263      11.291 -14.327   1.373  1.00  0.00           H
ATOM   2669  HA  TRP A 263      10.598 -17.175   1.131  1.00  0.00           H
ATOM   2670  HB2 TRP A 263      10.695 -15.973   3.293  1.00  0.00           H
ATOM   2671  HB3 TRP A 263       9.473 -14.846   2.797  1.00  0.00           H
ATOM   2672  HD1 TRP A 263       9.977 -18.365   4.056  1.00  0.00           H
ATOM   2673  HE1 TRP A 263       7.736 -19.295   4.936  1.00  0.00           H
ATOM   2674  HE3 TRP A 263       6.846 -14.670   2.419  1.00  0.00           H
ATOM   2675  HZ3 TRP A 263       4.408 -14.791   2.836  1.00  0.00           H
ATOM   2676  HZ2 TRP A 263       4.937 -18.562   4.853  1.00  0.00           H
ATOM   2677  HH2 TRP A 263       3.445 -16.736   4.048  1.00  0.00           H
ATOM   2678  N   MET A 264       8.488 -14.789   0.060  1.00 26.69           N
ATOM   2679  CA  MET A 264       7.268 -14.467  -0.704  1.00 27.66           C
ATOM   2680  C   MET A 264       7.344 -14.965  -2.158  1.00 28.61           C
ATOM   2681  O   MET A 264       6.360 -15.447  -2.722  1.00 28.17           O
ATOM   2682  CB  MET A 264       7.057 -12.933  -0.716  1.00 26.75           C
ATOM   2683  CG  MET A 264       6.490 -12.326   0.579  1.00 27.80           C
ATOM   2684  SD  MET A 264       4.703 -12.505   0.805  1.00 32.27           S
ATOM   2685  CE  MET A 264       4.122 -11.195  -0.304  1.00 29.89           C
ATOM   2686  H   MET A 264       8.939 -14.010   0.541  1.00  0.00           H
ATOM   2687  HA  MET A 264       6.412 -14.951  -0.231  1.00  0.00           H
ATOM   2688  HB2 MET A 264       8.003 -12.445  -0.954  1.00  0.00           H
ATOM   2689  HB3 MET A 264       6.387 -12.661  -1.530  1.00  0.00           H
ATOM   2690  HG2 MET A 264       6.979 -12.751   1.452  1.00  0.00           H
ATOM   2691  HG3 MET A 264       6.721 -11.261   0.608  1.00  0.00           H
ATOM   2692  HE1 MET A 264       3.035 -11.213  -0.366  1.00  0.00           H
ATOM   2693  HE2 MET A 264       4.439 -10.221   0.065  1.00  0.00           H
ATOM   2694  HE3 MET A 264       4.517 -11.318  -1.310  1.00  0.00           H
ATOM   2695  N   GLN A 265       8.546 -14.876  -2.735  1.00 28.33           N
ATOM   2696  CA  GLN A 265       8.900 -15.258  -4.095  1.00 30.41           C
ATOM   2697  C   GLN A 265       8.750 -16.776  -4.342  1.00 30.83           C
ATOM   2698  O   GLN A 265       8.378 -17.182  -5.446  1.00 30.37           O
ATOM   2699  CB  GLN A 265      10.352 -14.784  -4.297  1.00 27.86           C
ATOM   2700  CG  GLN A 265      10.926 -14.925  -5.718  1.00 30.57           C
ATOM   2701  CD  GLN A 265      12.445 -14.809  -5.689  1.00 32.16           C
ATOM   2702  OE1 GLN A 265      13.027 -13.849  -6.186  1.00 31.72           O
ATOM   2703  NE2 GLN A 265      13.112 -15.791  -5.106  1.00 32.89           N
ATOM   2704  H   GLN A 265       9.284 -14.473  -2.174  1.00  0.00           H
ATOM   2705  HA  GLN A 265       8.245 -14.728  -4.787  1.00  0.00           H
ATOM   2706  HB2 GLN A 265      10.424 -13.730  -4.030  1.00  0.00           H
ATOM   2707  HB3 GLN A 265      10.985 -15.311  -3.580  1.00  0.00           H
ATOM   2708  HG2 GLN A 265      10.684 -15.895  -6.153  1.00  0.00           H
ATOM   2709  HG3 GLN A 265      10.505 -14.170  -6.383  1.00  0.00           H
ATOM   2710 HE21 GLN A 265      12.585 -16.608  -4.724  1.00  0.00           H
ATOM   2711 HE22 GLN A 265      14.114 -15.829  -5.221  1.00  0.00           H
ATOM   2712  N   GLU A 266       9.002 -17.615  -3.326  1.00 31.44           N
ATOM   2713  CA  GLU A 266       8.942 -19.075  -3.442  1.00 33.01           C
ATOM   2714  C   GLU A 266       7.524 -19.557  -3.121  1.00 32.66           C
ATOM   2715  O   GLU A 266       7.011 -20.456  -3.781  1.00 32.48           O
ATOM   2716  CB  GLU A 266       9.904 -19.788  -2.456  1.00 34.36           C
ATOM   2717  CG  GLU A 266      11.193 -19.051  -2.069  1.00 44.11           C
ATOM   2718  CD  GLU A 266      12.147 -18.723  -3.211  1.00 48.33           C
ATOM   2719  OE1 GLU A 266      13.314 -19.163  -3.156  1.00 49.69           O
ATOM   2720  OE2 GLU A 266      11.839 -17.821  -4.012  1.00 50.67           O1-
ATOM   2721  H   GLU A 266       9.352 -17.223  -2.465  1.00  0.00           H
ATOM   2722  HA  GLU A 266       9.201 -19.375  -4.454  1.00  0.00           H
ATOM   2723  HB2 GLU A 266       9.394 -20.012  -1.517  1.00  0.00           H
ATOM   2724  HB3 GLU A 266      10.165 -20.761  -2.873  1.00  0.00           H
ATOM   2725  HG2 GLU A 266      10.920 -18.131  -1.563  1.00  0.00           H
ATOM   2726  HG3 GLU A 266      11.737 -19.646  -1.335  1.00  0.00           H
ATOM   2727  N   ASN A 267       6.893 -18.924  -2.122  1.00 29.70           N
ATOM   2728  CA  ASN A 267       5.548 -19.236  -1.626  1.00 28.37           C
ATOM   2729  C   ASN A 267       4.446 -18.715  -2.559  1.00 26.52           C
ATOM   2730  O   ASN A 267       3.265 -18.956  -2.298  1.00 27.70           O
ATOM   2731  CB  ASN A 267       5.341 -18.601  -0.231  1.00 29.57           C
ATOM   2732  CG  ASN A 267       6.019 -19.398   0.879  1.00 30.12           C
ATOM   2733  OD1 ASN A 267       5.428 -20.304   1.456  1.00 32.14           O
ATOM   2734  ND2 ASN A 267       7.256 -19.064   1.211  1.00 27.84           N
ATOM   2735  H   ASN A 267       7.404 -18.183  -1.660  1.00  0.00           H
ATOM   2736  HA  ASN A 267       5.425 -20.319  -1.561  1.00  0.00           H
ATOM   2737  HB2 ASN A 267       5.674 -17.562  -0.214  1.00  0.00           H
ATOM   2738  HB3 ASN A 267       4.282 -18.572   0.030  1.00  0.00           H
ATOM   2739 HD21 ASN A 267       7.724 -18.293   0.739  1.00  0.00           H
ATOM   2740 HD22 ASN A 267       7.650 -19.462   2.050  1.00  0.00           H
ATOM   2741  N   GLU A 268       4.817 -18.001  -3.632  1.00 28.56           N
ATOM   2742  CA  GLU A 268       3.974 -17.549  -4.734  1.00 29.03           C
ATOM   2743  C   GLU A 268       3.042 -16.425  -4.267  1.00 27.53           C
ATOM   2744  O   GLU A 268       1.827 -16.532  -4.395  1.00 29.81           O
ATOM   2745  CB  GLU A 268       3.251 -18.748  -5.410  1.00 31.12           C
ATOM   2746  CG  GLU A 268       4.140 -19.509  -6.411  1.00 34.99           C
ATOM   2747  CD  GLU A 268       4.407 -18.681  -7.657  1.00 36.24           C
ATOM   2748  OE1 GLU A 268       3.411 -18.153  -8.198  1.00 38.70           O
ATOM   2749  OE2 GLU A 268       5.598 -18.540  -8.007  1.00 37.35           O1-
ATOM   2750  H   GLU A 268       5.806 -17.816  -3.714  1.00  0.00           H
ATOM   2751  HA  GLU A 268       4.634 -17.076  -5.462  1.00  0.00           H
ATOM   2752  HB2 GLU A 268       2.848 -19.454  -4.688  1.00  0.00           H
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ATOM   2753  HB3 GLU A 268       2.367 -18.391  -5.930  1.00  0.00           H
ATOM   2754  HG2 GLU A 268       5.079 -19.804  -5.942  1.00  0.00           H
ATOM   2755  HG3 GLU A 268       3.645 -20.428  -6.723  1.00  0.00           H
ATOM   2756  N   LYS A 269       3.585 -15.385  -3.632  1.00 25.71           N
ATOM   2757  CA  LYS A 269       2.830 -14.275  -3.065  1.00 25.50           C
ATOM   2758  C   LYS A 269       3.437 -12.984  -3.630  1.00 24.82           C
ATOM   2759  O   LYS A 269       4.624 -12.737  -3.442  1.00 25.11           O
ATOM   2760  CB  LYS A 269       2.850 -14.382  -1.524  1.00 23.34           C
ATOM   2761  CG  LYS A 269       2.324 -15.718  -0.936  1.00 24.75           C
ATOM   2762  CD  LYS A 269       0.815 -15.977  -1.143  1.00 23.23           C
ATOM   2763  CE  LYS A 269       0.402 -17.465  -1.184  1.00 22.16           C
ATOM   2764  NZ  LYS A 269       0.700 -18.085  -2.485  1.00 22.20           N1+
ATOM   2765  H   LYS A 269       4.594 -15.356  -3.495  1.00  0.00           H
ATOM   2766  HA  LYS A 269       1.794 -14.303  -3.392  1.00  0.00           H
ATOM   2767  HB2 LYS A 269       3.883 -14.262  -1.197  1.00  0.00           H
ATOM   2768  HB3 LYS A 269       2.300 -13.544  -1.097  1.00  0.00           H
ATOM   2769  HG2 LYS A 269       2.906 -16.540  -1.346  1.00  0.00           H
ATOM   2770  HG3 LYS A 269       2.533 -15.738   0.135  1.00  0.00           H
ATOM   2771  HD2 LYS A 269       0.259 -15.507  -0.334  1.00  0.00           H
ATOM   2772  HD3 LYS A 269       0.464 -15.479  -2.044  1.00  0.00           H
ATOM   2773  HE2 LYS A 269       0.879 -18.033  -0.385  1.00  0.00           H
ATOM   2774  HE3 LYS A 269      -0.673 -17.546  -1.019  1.00  0.00           H
ATOM   2775  HZ1 LYS A 269      -0.080 -18.659  -2.865  1.00  0.00           H
ATOM   2776  HZ2 LYS A 269       0.826 -17.373  -3.197  1.00  0.00           H
ATOM   2777  HZ3 LYS A 269       1.556 -18.630  -2.459  1.00  0.00           H
ATOM   2778  N   VAL A 270       2.645 -12.207  -4.376  1.00 24.36           N
ATOM   2779  CA  VAL A 270       3.070 -11.060  -5.185  1.00 23.54           C
ATOM   2780  C   VAL A 270       2.652  -9.740  -4.506  1.00 22.50           C
ATOM   2781  O   VAL A 270       3.264  -8.701  -4.756  1.00 23.72           O
ATOM   2782  CB  VAL A 270       2.429 -11.183  -6.604  1.00 23.18           C
ATOM   2783  CG1 VAL A 270       2.910 -10.103  -7.592  1.00 22.05           C
ATOM   2784  CG2 VAL A 270       2.657 -12.553  -7.281  1.00 23.42           C
ATOM   2785  H   VAL A 270       1.654 -12.433  -4.398  1.00  0.00           H
ATOM   2786  HA  VAL A 270       4.154 -11.023  -5.274  1.00  0.00           H
ATOM   2787  HB  VAL A 270       1.351 -11.063  -6.483  1.00  0.00           H
ATOM   2788 HG11 VAL A 270       2.479 -10.245  -8.584  1.00  0.00           H
ATOM   2789 HG12 VAL A 270       2.646  -9.096  -7.271  1.00  0.00           H
ATOM   2790 HG13 VAL A 270       3.992 -10.148  -7.713  1.00  0.00           H
ATOM   2791 HG21 VAL A 270       1.937 -12.698  -8.085  1.00  0.00           H
ATOM   2792 HG22 VAL A 270       3.639 -12.614  -7.743  1.00  0.00           H
ATOM   2793 HG23 VAL A 270       2.566 -13.406  -6.612  1.00  0.00           H
ATOM   2794  N   TYR A 271       1.643  -9.778  -3.629  1.00 21.55           N
ATOM   2795  CA  TYR A 271       1.160  -8.648  -2.851  1.00 22.01           C
ATOM   2796  C   TYR A 271       0.922  -9.147  -1.426  1.00 20.85           C
ATOM   2797  O   TYR A 271       0.043  -9.980  -1.210  1.00 21.84           O
ATOM   2798  CB  TYR A 271      -0.086  -8.042  -3.531  1.00 19.56           C
ATOM   2799  CG  TYR A 271      -0.638  -6.798  -2.859  1.00 18.54           C
ATOM   2800  CD1 TYR A 271      -0.200  -5.520  -3.264  1.00 18.88           C
ATOM   2801  CD2 TYR A 271      -1.582  -6.913  -1.816  1.00 19.17           C
ATOM   2802  CE1 TYR A 271      -0.702  -4.369  -2.627  1.00 16.85           C
ATOM   2803  CE2 TYR A 271      -2.077  -5.760  -1.180  1.00 18.66           C
ATOM   2804  CZ  TYR A 271      -1.643  -4.486  -1.588  1.00 18.55           C
ATOM   2805  OH  TYR A 271      -2.129  -3.370  -0.973  1.00 19.00           O
ATOM   2806  H   TYR A 271       1.181 -10.664  -3.455  1.00  0.00           H
ATOM   2807  HA  TYR A 271       1.928  -7.876  -2.807  1.00  0.00           H
ATOM   2808  HB2 TYR A 271       0.156  -7.785  -4.563  1.00  0.00           H
ATOM   2809  HB3 TYR A 271      -0.880  -8.788  -3.589  1.00  0.00           H
ATOM   2810  HD1 TYR A 271       0.522  -5.412  -4.061  1.00  0.00           H
ATOM   2811  HD2 TYR A 271      -1.923  -7.884  -1.489  1.00  0.00           H
ATOM   2812  HE1 TYR A 271      -0.357  -3.395  -2.935  1.00  0.00           H
ATOM   2813  HE2 TYR A 271      -2.790  -5.857  -0.374  1.00  0.00           H
ATOM   2814  HH  TYR A 271      -1.587  -2.581  -1.143  1.00  0.00           H
ATOM   2815  N   GLY A 272       1.717  -8.676  -0.465  1.00 20.02           N
ATOM   2816  CA  GLY A 272       1.623  -9.022   0.941  1.00 19.98           C
ATOM   2817  C   GLY A 272       1.351  -7.768   1.759  1.00 19.55           C
ATOM   2818  O   GLY A 272       2.090  -6.791   1.634  1.00 20.95           O
ATOM   2819  H   GLY A 272       2.465  -8.028  -0.695  1.00  0.00           H
ATOM   2820  HA2 GLY A 272       0.878  -9.785   1.123  1.00  0.00           H
ATOM   2821  HA3 GLY A 272       2.573  -9.445   1.252  1.00  0.00           H
ATOM   2822  N   PHE A 273       0.318  -7.795   2.600  1.00 19.12           N
ATOM   2823  CA  PHE A 273      -0.163  -6.663   3.388  1.00 19.96           C
ATOM   2824  C   PHE A 273      -0.466  -7.100   4.835  1.00 20.73           C
ATOM   2825  O   PHE A 273      -0.258  -8.257   5.209  1.00 21.45           O
ATOM   2826  CB  PHE A 273      -1.338  -5.969   2.647  1.00 20.09           C
ATOM   2827  CG  PHE A 273      -2.646  -6.743   2.701  1.00 21.22           C
ATOM   2828  CD1 PHE A 273      -2.859  -7.847   1.851  1.00 20.84           C
ATOM   2829  CD2 PHE A 273      -3.616  -6.418   3.671  1.00 20.08           C
ATOM   2830  CE1 PHE A 273      -3.993  -8.663   2.024  1.00 20.71           C
ATOM   2831  CE2 PHE A 273      -4.736  -7.246   3.858  1.00 20.46           C
ATOM   2832  CZ  PHE A 273      -4.921  -8.372   3.039  1.00 22.49           C
ATOM   2833  H   PHE A 273      -0.237  -8.647   2.661  1.00  0.00           H
ATOM   2834  HA  PHE A 273       0.644  -5.933   3.469  1.00  0.00           H
ATOM   2835  HB2 PHE A 273      -1.499  -4.977   3.071  1.00  0.00           H
ATOM   2836  HB3 PHE A 273      -1.069  -5.787   1.605  1.00  0.00           H
ATOM   2837  HD1 PHE A 273      -2.129  -8.105   1.096  1.00  0.00           H
ATOM   2838  HD2 PHE A 273      -3.478  -5.565   4.319  1.00  0.00           H
ATOM   2839  HE1 PHE A 273      -4.141  -9.526   1.396  1.00  0.00           H
ATOM   2840  HE2 PHE A 273      -5.442  -7.031   4.643  1.00  0.00           H
ATOM   2841  HZ  PHE A 273      -5.781  -9.003   3.183  1.00  0.00           H
ATOM   2842  N   THR A 274      -0.966  -6.169   5.651  1.00 20.67           N
ATOM   2843  CA  THR A 274      -1.453  -6.401   7.007  1.00 19.86           C
ATOM   2844  C   THR A 274      -2.863  -5.803   7.138  1.00 23.58           C
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ATOM   2845  O   THR A 274      -3.858  -6.451   6.818  1.00 27.01           O
ATOM   2846  CB  THR A 274      -0.412  -5.922   8.054  1.00 23.05           C
ATOM   2847  OG1 THR A 274       0.040  -4.603   7.781  1.00 20.98           O
ATOM   2848  CG2 THR A 274       0.790  -6.859   8.220  1.00 20.44           C
ATOM   2849  H   THR A 274      -1.156  -5.256   5.267  1.00  0.00           H
ATOM   2850  HA  THR A 274      -1.603  -7.471   7.171  1.00  0.00           H
ATOM   2851  HB  THR A 274      -0.907  -5.865   9.017  1.00  0.00           H
ATOM   2852  HG1 THR A 274       0.710  -4.665   7.112  1.00  0.00           H
ATOM   2853 HG21 THR A 274       1.500  -6.475   8.953  1.00  0.00           H
ATOM   2854 HG22 THR A 274       0.462  -7.838   8.573  1.00  0.00           H
ATOM   2855 HG23 THR A 274       1.320  -7.014   7.282  1.00  0.00           H
ATOM   2856  N   VAL A 275      -2.964  -4.549   7.579  1.00 21.17           N
ATOM   2857  CA  VAL A 275      -4.228  -3.890   7.891  1.00 19.25           C
ATOM   2858  C   VAL A 275      -5.057  -3.661   6.600  1.00 18.02           C
ATOM   2859  O   VAL A 275      -4.513  -3.395   5.526  1.00 19.67           O
ATOM   2860  CB  VAL A 275      -3.928  -2.557   8.626  1.00 17.62           C
ATOM   2861  CG1 VAL A 275      -5.195  -1.948   9.252  1.00 17.33           C
ATOM   2862  CG2 VAL A 275      -2.862  -2.695   9.736  1.00 17.17           C
ATOM   2863  H   VAL A 275      -2.098  -4.068   7.782  1.00  0.00           H
ATOM   2864  HA  VAL A 275      -4.782  -4.553   8.560  1.00  0.00           H
ATOM   2865  HB  VAL A 275      -3.537  -1.871   7.877  1.00  0.00           H
ATOM   2866 HG11 VAL A 275      -4.980  -1.038   9.811  1.00  0.00           H
ATOM   2867 HG12 VAL A 275      -5.951  -1.694   8.508  1.00  0.00           H
ATOM   2868 HG13 VAL A 275      -5.630  -2.654   9.958  1.00  0.00           H
ATOM   2869 HG21 VAL A 275      -2.711  -1.752  10.263  1.00  0.00           H
ATOM   2870 HG22 VAL A 275      -3.168  -3.436  10.475  1.00  0.00           H
ATOM   2871 HG23 VAL A 275      -1.890  -2.995   9.345  1.00  0.00           H
ATOM   2872  N   SER A 276      -6.382  -3.765   6.709  1.00 18.71           N
ATOM   2873  CA  SER A 276      -7.359  -3.595   5.638  1.00 19.95           C
ATOM   2874  C   SER A 276      -8.621  -2.962   6.237  1.00 18.73           C
ATOM   2875  O   SER A 276      -8.968  -3.253   7.382  1.00 22.68           O
ATOM   2876  CB  SER A 276      -7.535  -4.924   4.879  1.00 18.49           C
ATOM   2877  OG  SER A 276      -7.662  -6.014   5.771  1.00 20.03           O
ATOM   2878  H   SER A 276      -6.796  -3.943   7.614  1.00  0.00           H
ATOM   2879  HA  SER A 276      -6.966  -2.859   4.933  1.00  0.00           H
ATOM   2880  HB2 SER A 276      -8.407  -4.887   4.226  1.00  0.00           H
ATOM   2881  HB3 SER A 276      -6.672  -5.111   4.244  1.00  0.00           H
ATOM   2882  HG  SER A 276      -6.844  -6.086   6.248  1.00  0.00           H
ATOM   2883  N   ILE A 277      -9.262  -2.037   5.518  1.00 19.56           N
ATOM   2884  CA  ILE A 277     -10.156  -1.029   6.082  1.00 18.81           C
ATOM   2885  C   ILE A 277     -11.267  -0.650   5.089  1.00 17.40           C
ATOM   2886  O   ILE A 277     -11.174  -0.950   3.897  1.00 17.52           O
ATOM   2887  CB  ILE A 277      -9.286   0.149   6.622  1.00 16.88           C
ATOM   2888  CG1 ILE A 277     -10.039   1.102   7.571  1.00 21.77           C
ATOM   2889  CG2 ILE A 277      -8.627   0.941   5.485  1.00 21.13           C
ATOM   2890  CD1 ILE A 277      -9.119   1.983   8.432  1.00 19.17           C
ATOM   2891  H   ILE A 277      -9.023  -1.920   4.534  1.00  0.00           H
ATOM   2892  HA  ILE A 277     -10.679  -1.479   6.922  1.00  0.00           H
ATOM   2893  HB  ILE A 277      -8.480  -0.289   7.212  1.00  0.00           H
ATOM   2894 HG12 ILE A 277     -10.720   1.741   7.013  1.00  0.00           H
ATOM   2895 HG13 ILE A 277     -10.662   0.507   8.234  1.00  0.00           H
ATOM   2896 HG21 ILE A 277      -7.955   1.697   5.877  1.00  0.00           H
ATOM   2897 HG22 ILE A 277      -8.048   0.305   4.815  1.00  0.00           H
ATOM   2898 HG23 ILE A 277      -9.377   1.461   4.893  1.00  0.00           H
ATOM   2899 HD11 ILE A 277      -9.703   2.581   9.131  1.00  0.00           H
ATOM   2900 HD12 ILE A 277      -8.424   1.379   9.016  1.00  0.00           H
ATOM   2901 HD13 ILE A 277      -8.532   2.674   7.828  1.00  0.00           H
ATOM   2902  N   HIS A 278     -12.296   0.033   5.602  1.00 17.40           N
ATOM   2903  CA  HIS A 278     -13.330   0.748   4.860  1.00 18.62           C
ATOM   2904  C   HIS A 278     -12.767   2.081   4.348  1.00 20.19           C
ATOM   2905  O   HIS A 278     -12.033   2.763   5.068  1.00 22.16           O
ATOM   2906  CB  HIS A 278     -14.470   1.116   5.838  1.00 19.60           C
ATOM   2907  CG  HIS A 278     -15.690   0.255   5.742  1.00 19.20           C
ATOM   2908  ND1 HIS A 278     -16.734   0.556   4.861  1.00 19.72           N
ATOM   2909  CD2 HIS A 278     -16.015  -0.875   6.456  1.00 19.63           C
ATOM   2910  CE1 HIS A 278     -17.647  -0.382   5.084  1.00 18.30           C
ATOM   2911  NE2 HIS A 278     -17.279  -1.243   6.032  1.00 20.42           N
ATOM   2912  H   HIS A 278     -12.298   0.180   6.604  1.00  0.00           H
ATOM   2913  HA  HIS A 278     -13.700   0.143   4.029  1.00  0.00           H
ATOM   2914  HB2 HIS A 278     -14.123   1.108   6.870  1.00  0.00           H
ATOM   2915  HB3 HIS A 278     -14.818   2.140   5.692  1.00  0.00           H
ATOM   2916  HD2 HIS A 278     -15.475  -1.413   7.221  1.00  0.00           H
ATOM   2917  HE1 HIS A 278     -18.594  -0.431   4.566  1.00  0.00           H
ATOM   2918  HE2 HIS A 278     -17.841  -2.004   6.411  1.00  0.00           H
ATOM   2919  N   GLU A 279     -13.149   2.494   3.138  1.00 18.56           N
ATOM   2920  CA  GLU A 279     -12.901   3.835   2.618  1.00 20.35           C
ATOM   2921  C   GLU A 279     -14.107   4.741   2.906  1.00 20.15           C
ATOM   2922  O   GLU A 279     -15.229   4.264   3.096  1.00 21.21           O
ATOM   2923  CB  GLU A 279     -12.657   3.767   1.087  1.00 18.12           C
ATOM   2924  CG  GLU A 279     -12.155   5.066   0.408  1.00 19.55           C
ATOM   2925  CD  GLU A 279     -10.952   5.715   1.087  1.00 21.45           C
ATOM   2926  OE1 GLU A 279     -11.099   6.227   2.218  1.00 21.73           O
ATOM   2927  OE2 GLU A 279      -9.872   5.760   0.463  1.00 20.95           O1-
ATOM   2928  H   GLU A 279     -13.712   1.864   2.578  1.00  0.00           H
ATOM   2929  HA  GLU A 279     -12.031   4.239   3.128  1.00  0.00           H
ATOM   2930  HB2 GLU A 279     -11.934   2.988   0.863  1.00  0.00           H
ATOM   2931  HB3 GLU A 279     -13.574   3.448   0.589  1.00  0.00           H
ATOM   2932  HG2 GLU A 279     -11.886   4.845  -0.624  1.00  0.00           H
ATOM   2933  HG3 GLU A 279     -12.953   5.804   0.348  1.00  0.00           H
ATOM   2934  N   TYR A 280     -13.872   6.055   2.900  1.00 20.93           N
ATOM   2935  CA  TYR A 280     -14.915   7.074   2.957  1.00 21.95           C
ATOM   2936  C   TYR A 280     -15.452   7.242   1.526  1.00 20.59           C
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ATOM   2937  O   TYR A 280     -14.761   7.788   0.660  1.00 20.61           O
ATOM   2938  CB  TYR A 280     -14.297   8.424   3.376  1.00 23.30           C
ATOM   2939  CG  TYR A 280     -13.569   8.457   4.702  1.00 26.62           C
ATOM   2940  CD1 TYR A 280     -14.274   8.381   5.918  1.00 30.13           C
ATOM   2941  CD2 TYR A 280     -12.170   8.599   4.714  1.00 30.20           C
ATOM   2942  CE1 TYR A 280     -13.581   8.461   7.140  1.00 31.13           C
ATOM   2943  CE2 TYR A 280     -11.476   8.655   5.934  1.00 32.21           C
ATOM   2944  CZ  TYR A 280     -12.181   8.595   7.148  1.00 32.49           C
ATOM   2945  OH  TYR A 280     -11.509   8.693   8.332  1.00 34.99           O
ATOM   2946  H   TYR A 280     -12.920   6.345   2.663  1.00  0.00           H
ATOM   2947  HA  TYR A 280     -15.711   6.791   3.650  1.00  0.00           H
ATOM   2948  HB2 TYR A 280     -13.588   8.756   2.620  1.00  0.00           H
ATOM   2949  HB3 TYR A 280     -15.079   9.182   3.412  1.00  0.00           H
ATOM   2950  HD1 TYR A 280     -15.347   8.263   5.926  1.00  0.00           H
ATOM   2951  HD2 TYR A 280     -11.624   8.663   3.784  1.00  0.00           H
ATOM   2952  HE1 TYR A 280     -14.140   8.399   8.062  1.00  0.00           H
ATOM   2953  HE2 TYR A 280     -10.404   8.761   5.918  1.00  0.00           H
ATOM   2954  HH  TYR A 280     -10.569   8.743   8.202  1.00  0.00           H
ATOM   2955  N   GLU A 281     -16.681   6.787   1.277  1.00 22.29           N
ATOM   2956  CA  GLU A 281     -17.471   6.931   0.050  1.00 20.70           C
ATOM   2957  C   GLU A 281     -17.403   8.340  -0.580  1.00 20.87           C
ATOM   2958  O   GLU A 281     -17.160   8.470  -1.780  1.00 18.87           O
ATOM   2959  CB  GLU A 281     -18.908   6.408   0.319  1.00 21.60           C
ATOM   2960  CG  GLU A 281     -19.845   7.301   1.172  1.00 27.54           C
ATOM   2961  CD  GLU A 281     -19.223   7.661   2.513  1.00 30.84           C
ATOM   2962  OE1 GLU A 281     -18.878   6.729   3.265  1.00 32.62           O
ATOM   2963  OE2 GLU A 281     -18.853   8.840   2.689  1.00 35.66           O1-
ATOM   2964  H   GLU A 281     -17.211   6.453   2.082  1.00  0.00           H
ATOM   2965  HA  GLU A 281     -17.014   6.249  -0.668  1.00  0.00           H
ATOM   2966  HB2 GLU A 281     -19.394   6.242  -0.643  1.00  0.00           H
ATOM   2967  HB3 GLU A 281     -18.848   5.424   0.784  1.00  0.00           H
ATOM   2968  HG2 GLU A 281     -20.105   8.215   0.640  1.00  0.00           H
ATOM   2969  HG3 GLU A 281     -20.782   6.779   1.365  1.00  0.00           H
ATOM   2970  N   VAL A 282     -17.532   9.388   0.245  1.00 20.46           N
ATOM   2971  CA  VAL A 282     -17.488  10.801  -0.122  1.00 20.98           C
ATOM   2972  C   VAL A 282     -16.138  11.261  -0.731  1.00 20.93           C
ATOM   2973  O   VAL A 282     -16.112  12.281  -1.422  1.00 18.59           O
ATOM   2974  CB  VAL A 282     -17.906  11.634   1.126  1.00 21.34           C
ATOM   2975  CG1 VAL A 282     -16.909  11.540   2.301  1.00 22.74           C
ATOM   2976  CG2 VAL A 282     -18.263  13.096   0.798  1.00 22.47           C
ATOM   2977  H   VAL A 282     -17.836   9.180   1.203  1.00  0.00           H
ATOM   2978  HA  VAL A 282     -18.244  10.941  -0.897  1.00  0.00           H
ATOM   2979  HB  VAL A 282     -18.837  11.196   1.490  1.00  0.00           H
ATOM   2980 HG11 VAL A 282     -17.251  12.124   3.156  1.00  0.00           H
ATOM   2981 HG12 VAL A 282     -16.812  10.511   2.647  1.00  0.00           H
ATOM   2982 HG13 VAL A 282     -15.913  11.887   2.034  1.00  0.00           H
ATOM   2983 HG21 VAL A 282     -18.629  13.615   1.685  1.00  0.00           H
ATOM   2984 HG22 VAL A 282     -17.409  13.651   0.418  1.00  0.00           H
ATOM   2985 HG23 VAL A 282     -19.048  13.141   0.044  1.00  0.00           H
ATOM   2986  N   THR A 283     -15.034  10.524  -0.527  1.00 19.91           N
ATOM   2987  CA  THR A 283     -13.727  10.851  -1.110  1.00 18.39           C
ATOM   2988  C   THR A 283     -13.549  10.227  -2.512  1.00 19.45           C
ATOM   2989  O   THR A 283     -12.670  10.665  -3.255  1.00 20.36           O
ATOM   2990  CB  THR A 283     -12.586  10.376  -0.165  1.00 20.55           C
ATOM   2991  OG1 THR A 283     -12.465   8.972  -0.030  1.00 18.62           O
ATOM   2992  CG2 THR A 283     -12.638  10.999   1.232  1.00 17.56           C
ATOM   2993  H   THR A 283     -15.123   9.658  -0.006  1.00  0.00           H
ATOM   2994  HA  THR A 283     -13.631  11.933  -1.223  1.00  0.00           H
ATOM   2995  HB  THR A 283     -11.647  10.701  -0.613  1.00  0.00           H
ATOM   2996  HG1 THR A 283     -13.291   8.592   0.280  1.00  0.00           H
ATOM   2997 HG21 THR A 283     -11.834  10.625   1.867  1.00  0.00           H
ATOM   2998 HG22 THR A 283     -12.510  12.073   1.152  1.00  0.00           H
ATOM   2999 HG23 THR A 283     -13.586  10.821   1.737  1.00  0.00           H
ATOM   3000  N   ILE A 284     -14.393   9.252  -2.890  1.00 16.54           N
ATOM   3001  CA  ILE A 284     -14.270   8.414  -4.084  1.00 16.06           C
ATOM   3002  C   ILE A 284     -15.475   8.382  -5.079  1.00 16.32           C
ATOM   3003  O   ILE A 284     -15.550   7.380  -5.799  1.00 18.94           O
ATOM   3004  CB  ILE A 284     -13.808   6.991  -3.630  1.00 14.12           C
ATOM   3005  CG1 ILE A 284     -14.868   6.242  -2.790  1.00 16.19           C
ATOM   3006  CG2 ILE A 284     -12.461   7.010  -2.890  1.00 14.01           C
ATOM   3007  CD1 ILE A 284     -14.594   4.739  -2.664  1.00 12.12           C
ATOM   3008  H   ILE A 284     -15.146   9.008  -2.257  1.00  0.00           H
ATOM   3009  HA  ILE A 284     -13.467   8.815  -4.703  1.00  0.00           H
ATOM   3010  HB  ILE A 284     -13.641   6.408  -4.531  1.00  0.00           H
ATOM   3011 HG12 ILE A 284     -14.927   6.682  -1.794  1.00  0.00           H
ATOM   3012 HG13 ILE A 284     -15.859   6.363  -3.227  1.00  0.00           H
ATOM   3013 HG21 ILE A 284     -11.993   6.027  -2.869  1.00  0.00           H
ATOM   3014 HG22 ILE A 284     -11.759   7.702  -3.351  1.00  0.00           H
ATOM   3015 HG23 ILE A 284     -12.590   7.312  -1.856  1.00  0.00           H
ATOM   3016 HD11 ILE A 284     -15.385   4.258  -2.092  1.00  0.00           H
ATOM   3017 HD12 ILE A 284     -14.549   4.260  -3.642  1.00  0.00           H
ATOM   3018 HD13 ILE A 284     -13.656   4.540  -2.148  1.00  0.00           H
ATOM   3019  N   PRO A 285     -16.401   9.381  -5.187  1.00 17.10           N
ATOM   3020  CA  PRO A 285     -17.587   9.361  -6.077  1.00 18.10           C
ATOM   3021  C   PRO A 285     -17.456   8.795  -7.501  1.00 18.61           C
ATOM   3022  O   PRO A 285     -18.400   8.164  -7.982  1.00 21.16           O
ATOM   3023  CB  PRO A 285     -18.096  10.805  -6.137  1.00 19.30           C
ATOM   3024  CG  PRO A 285     -17.701  11.389  -4.800  1.00 19.72           C
ATOM   3025  CD  PRO A 285     -16.432  10.629  -4.417  1.00 17.67           C
ATOM   3026  HA  PRO A 285     -18.329   8.751  -5.558  1.00  0.00           H
ATOM   3027  HB2 PRO A 285     -17.596  11.358  -6.934  1.00  0.00           H
ATOM   3028  HB3 PRO A 285     -19.170  10.862  -6.319  1.00  0.00           H
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ATOM   3029  HG2 PRO A 285     -17.558  12.469  -4.827  1.00  0.00           H
ATOM   3030  HG3 PRO A 285     -18.482  11.178  -4.068  1.00  0.00           H
ATOM   3031  HD2 PRO A 285     -15.531  11.207  -4.619  1.00  0.00           H
ATOM   3032  HD3 PRO A 285     -16.491  10.433  -3.353  1.00  0.00           H
ATOM   3033  N   THR A 286     -16.318   8.991  -8.178  1.00 19.69           N
ATOM   3034  CA  THR A 286     -16.104   8.498  -9.532  1.00 19.30           C
ATOM   3035  C   THR A 286     -14.944   7.486  -9.642  1.00 20.60           C
ATOM   3036  O   THR A 286     -14.709   6.990 -10.743  1.00 18.78           O
ATOM   3037  CB  THR A 286     -16.150   9.663 -10.566  1.00 21.39           C
ATOM   3038  OG1 THR A 286     -15.100  10.605 -10.442  1.00 21.34           O
ATOM   3039  CG2 THR A 286     -17.469  10.449 -10.556  1.00 19.97           C
ATOM   3040  H   THR A 286     -15.624   9.652  -7.807  1.00  0.00           H
ATOM   3041  HA  THR A 286     -16.946   7.868  -9.814  1.00  0.00           H
ATOM   3042  HB  THR A 286     -16.044   9.221 -11.559  1.00  0.00           H
ATOM   3043  HG1 THR A 286     -15.151  11.033  -9.576  1.00  0.00           H
ATOM   3044 HG21 THR A 286     -17.505  11.163 -11.379  1.00  0.00           H
ATOM   3045 HG22 THR A 286     -18.324   9.783 -10.662  1.00  0.00           H
ATOM   3046 HG23 THR A 286     -17.597  11.007  -9.627  1.00  0.00           H
ATOM   3047  N   LEU A 287     -14.283   7.086  -8.537  1.00 19.85           N
ATOM   3048  CA  LEU A 287     -13.126   6.165  -8.520  1.00 20.60           C
ATOM   3049  C   LEU A 287     -13.546   4.775  -9.011  1.00 20.95           C
ATOM   3050  O   LEU A 287     -13.030   4.273 -10.012  1.00 18.74           O
ATOM   3051  CB  LEU A 287     -12.542   6.069  -7.086  1.00 19.84           C
ATOM   3052  CG  LEU A 287     -11.105   5.494  -6.937  1.00 24.19           C
ATOM   3053  CD1 LEU A 287     -10.614   5.675  -5.494  1.00 17.69           C
ATOM   3054  CD2 LEU A 287     -10.947   4.013  -7.325  1.00 20.76           C
ATOM   3055  H   LEU A 287     -14.577   7.489  -7.653  1.00  0.00           H
ATOM   3056  HA  LEU A 287     -12.359   6.546  -9.194  1.00  0.00           H
ATOM   3057  HB2 LEU A 287     -12.532   7.076  -6.670  1.00  0.00           H
ATOM   3058  HB3 LEU A 287     -13.216   5.499  -6.448  1.00  0.00           H
ATOM   3059  HG  LEU A 287     -10.439   6.073  -7.577  1.00  0.00           H
ATOM   3060 HD11 LEU A 287      -9.561   5.415  -5.394  1.00  0.00           H
ATOM   3061 HD12 LEU A 287     -10.722   6.707  -5.166  1.00  0.00           H
ATOM   3062 HD13 LEU A 287     -11.174   5.043  -4.805  1.00  0.00           H
ATOM   3063 HD21 LEU A 287      -9.980   3.621  -7.008  1.00  0.00           H
ATOM   3064 HD22 LEU A 287     -11.713   3.388  -6.866  1.00  0.00           H
ATOM   3065 HD23 LEU A 287     -10.984   3.870  -8.404  1.00  0.00           H
ATOM   3066  N   TRP A 288     -14.533   4.176  -8.330  1.00 18.96           N
ATOM   3067  CA  TRP A 288     -15.061   2.856  -8.663  1.00 20.78           C
ATOM   3068  C   TRP A 288     -15.761   2.878 -10.030  1.00 21.73           C
ATOM   3069  O   TRP A 288     -15.661   1.916 -10.782  1.00 21.01           O
ATOM   3070  CB  TRP A 288     -16.049   2.390  -7.580  1.00 16.55           C
ATOM   3071  CG  TRP A 288     -16.722   1.085  -7.885  1.00 19.20           C
ATOM   3072  CD1 TRP A 288     -18.007   0.946  -8.280  1.00 17.19           C
ATOM   3073  CD2 TRP A 288     -16.159  -0.264  -7.861  1.00 18.61           C
ATOM   3074  NE1 TRP A 288     -18.270  -0.384  -8.522  1.00 18.83           N
ATOM   3075  CE3 TRP A 288     -14.895  -0.809  -7.531  1.00 16.92           C
ATOM   3076  CE2 TRP A 288     -17.176  -1.182  -8.259  1.00 18.36           C
ATOM   3077  CZ3 TRP A 288     -14.660  -2.198  -7.587  1.00 21.22           C
ATOM   3078  CZ2 TRP A 288     -16.955  -2.569  -8.315  1.00 20.24           C
ATOM   3079  CH2 TRP A 288     -15.689  -3.079  -7.974  1.00 22.41           C
ATOM   3080  H   TRP A 288     -14.894   4.657  -7.519  1.00  0.00           H
ATOM   3081  HA  TRP A 288     -14.232   2.148  -8.708  1.00  0.00           H
ATOM   3082  HB2 TRP A 288     -15.533   2.282  -6.625  1.00  0.00           H
ATOM   3083  HB3 TRP A 288     -16.822   3.145  -7.429  1.00  0.00           H
ATOM   3084  HD1 TRP A 288     -18.699   1.765  -8.422  1.00  0.00           H
ATOM   3085  HE1 TRP A 288     -19.168  -0.703  -8.907  1.00  0.00           H
ATOM   3086  HE3 TRP A 288     -14.098  -0.151  -7.219  1.00  0.00           H
ATOM   3087  HZ3 TRP A 288     -13.687  -2.590  -7.328  1.00  0.00           H
ATOM   3088  HZ2 TRP A 288     -17.750  -3.235  -8.610  1.00  0.00           H
ATOM   3089  HH2 TRP A 288     -15.503  -4.142  -8.012  1.00  0.00           H
ATOM   3090  N   GLN A 289     -16.420   3.992 -10.373  1.00 23.21           N
ATOM   3091  CA  GLN A 289     -17.087   4.197 -11.655  1.00 24.00           C
ATOM   3092  C   GLN A 289     -16.066   4.168 -12.808  1.00 23.78           C
ATOM   3093  O   GLN A 289     -16.240   3.411 -13.755  1.00 21.70           O
ATOM   3094  CB  GLN A 289     -17.879   5.517 -11.581  1.00 26.05           C
ATOM   3095  CG  GLN A 289     -18.813   5.770 -12.782  1.00 30.79           C
ATOM   3096  CD  GLN A 289     -19.821   6.908 -12.582  1.00 32.56           C
ATOM   3097  OE1 GLN A 289     -20.594   7.204 -13.481  1.00 33.91           O
ATOM   3098  NE2 GLN A 289     -19.863   7.564 -11.425  1.00 33.71           N
ATOM   3099  H   GLN A 289     -16.390   4.756  -9.718  1.00  0.00           H
ATOM   3100  HA  GLN A 289     -17.787   3.372 -11.804  1.00  0.00           H
ATOM   3101  HB2 GLN A 289     -18.471   5.493 -10.665  1.00  0.00           H
ATOM   3102  HB3 GLN A 289     -17.192   6.357 -11.496  1.00  0.00           H
ATOM   3103  HG2 GLN A 289     -18.230   5.979 -13.680  1.00  0.00           H
ATOM   3104  HG3 GLN A 289     -19.386   4.868 -12.999  1.00  0.00           H
ATOM   3105 HE21 GLN A 289     -19.275   7.320 -10.643  1.00  0.00           H
ATOM   3106 HE22 GLN A 289     -20.554   8.291 -11.336  1.00  0.00           H
ATOM   3107  N   THR A 290     -14.945   4.887 -12.668  1.00 23.31           N
ATOM   3108  CA  THR A 290     -13.864   4.924 -13.656  1.00 22.84           C
ATOM   3109  C   THR A 290     -13.085   3.585 -13.682  1.00 22.38           C
ATOM   3110  O   THR A 290     -12.564   3.201 -14.726  1.00 22.84           O
ATOM   3111  CB  THR A 290     -12.935   6.117 -13.310  1.00 24.30           C
ATOM   3112  OG1 THR A 290     -13.713   7.299 -13.195  1.00 25.09           O
ATOM   3113  CG2 THR A 290     -11.870   6.414 -14.367  1.00 22.40           C
ATOM   3114  H   THR A 290     -14.834   5.465 -11.844  1.00  0.00           H
ATOM   3115  HA  THR A 290     -14.299   5.084 -14.644  1.00  0.00           H
ATOM   3116  HB  THR A 290     -12.440   5.939 -12.352  1.00  0.00           H
ATOM   3117  HG1 THR A 290     -14.155   7.246 -12.347  1.00  0.00           H
ATOM   3118 HG21 THR A 290     -11.283   7.294 -14.106  1.00  0.00           H
ATOM   3119 HG22 THR A 290     -11.168   5.588 -14.460  1.00  0.00           H
ATOM   3120 HG23 THR A 290     -12.309   6.586 -15.350  1.00  0.00           H
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ATOM   3121  N   SER A 291     -13.073   2.826 -12.572  1.00 19.88           N
ATOM   3122  CA  SER A 291     -12.538   1.463 -12.522  1.00 20.14           C
ATOM   3123  C   SER A 291     -13.491   0.472 -13.226  1.00 20.06           C
ATOM   3124  O   SER A 291     -13.041  -0.473 -13.872  1.00 19.13           O
ATOM   3125  CB  SER A 291     -12.364   1.032 -11.051  1.00 19.42           C
ATOM   3126  OG  SER A 291     -11.449   1.882 -10.373  1.00 19.96           O
ATOM   3127  H   SER A 291     -13.490   3.207 -11.734  1.00  0.00           H
ATOM   3128  HA  SER A 291     -11.577   1.438 -13.038  1.00  0.00           H
ATOM   3129  HB2 SER A 291     -13.313   1.014 -10.518  1.00  0.00           H
ATOM   3130  HB3 SER A 291     -11.981   0.010 -11.010  1.00  0.00           H
ATOM   3131  HG  SER A 291     -11.821   2.763 -10.347  1.00  0.00           H
ATOM   3132  N   MET A 292     -14.809   0.715 -13.177  1.00 22.05           N
ATOM   3133  CA  MET A 292     -15.827  -0.001 -13.944  1.00 23.75           C
ATOM   3134  C   MET A 292     -15.601   0.253 -15.446  1.00 23.08           C
ATOM   3135  O   MET A 292     -15.572  -0.696 -16.217  1.00 23.18           O
ATOM   3136  CB  MET A 292     -17.247   0.428 -13.492  1.00 23.46           C
ATOM   3137  CG  MET A 292     -18.180  -0.731 -13.095  1.00 23.79           C
ATOM   3138  SD  MET A 292     -19.019  -1.597 -14.455  1.00 24.01           S
ATOM   3139  CE  MET A 292     -17.879  -2.981 -14.741  1.00 23.71           C
ATOM   3140  H   MET A 292     -15.128   1.476 -12.585  1.00  0.00           H
ATOM   3141  HA  MET A 292     -15.689  -1.065 -13.749  1.00  0.00           H
ATOM   3142  HB2 MET A 292     -17.164   1.063 -12.613  1.00  0.00           H
ATOM   3143  HB3 MET A 292     -17.730   1.064 -14.235  1.00  0.00           H
ATOM   3144  HG2 MET A 292     -17.668  -1.448 -12.450  1.00  0.00           H
ATOM   3145  HG3 MET A 292     -18.976  -0.314 -12.476  1.00  0.00           H
ATOM   3146  HE1 MET A 292     -18.280  -3.650 -15.502  1.00  0.00           H
ATOM   3147  HE2 MET A 292     -16.912  -2.625 -15.089  1.00  0.00           H
ATOM   3148  HE3 MET A 292     -17.728  -3.554 -13.826  1.00  0.00           H
ATOM   3149  N   ASP A 293     -15.295   1.489 -15.859  1.00 25.20           N
ATOM   3150  CA  ASP A 293     -14.883   1.864 -17.228  1.00 24.42           C
ATOM   3151  C   ASP A 293     -13.409   1.521 -17.552  1.00 24.19           C
ATOM   3152  O   ASP A 293     -12.835   1.990 -18.545  1.00 22.66           O
ATOM   3153  CB  ASP A 293     -15.219   3.349 -17.510  1.00 25.99           C
ATOM   3154  CG  ASP A 293     -16.728   3.551 -17.582  1.00 25.87           C
ATOM   3155  OD1 ASP A 293     -17.404   3.584 -16.531  1.00 25.88           O
ATOM   3156  OD2 ASP A 293     -17.310   3.437 -18.680  1.00 26.97           O1-
ATOM   3157  H   ASP A 293     -15.427   2.248 -15.195  1.00  0.00           H
ATOM   3158  HA  ASP A 293     -15.452   1.263 -17.936  1.00  0.00           H
ATOM   3159  HB2 ASP A 293     -14.800   3.998 -16.742  1.00  0.00           H
ATOM   3160  HB3 ASP A 293     -14.799   3.675 -18.462  1.00  0.00           H
ATOM   3161  N   PHE A 294     -12.812   0.618 -16.767  1.00 22.53           N
ATOM   3162  CA  PHE A 294     -11.730  -0.266 -17.175  1.00 21.67           C
ATOM   3163  C   PHE A 294     -12.312  -1.682 -17.343  1.00 22.37           C
ATOM   3164  O   PHE A 294     -12.199  -2.248 -18.421  1.00 23.42           O
ATOM   3165  CB  PHE A 294     -10.590  -0.241 -16.140  1.00 21.57           C
ATOM   3166  CG  PHE A 294      -9.427  -1.150 -16.484  1.00 21.32           C
ATOM   3167  CD1 PHE A 294      -8.473  -0.753 -17.444  1.00 23.19           C
ATOM   3168  CD2 PHE A 294      -9.312  -2.409 -15.858  1.00 21.72           C
ATOM   3169  CE1 PHE A 294      -7.385  -1.595 -17.740  1.00 21.37           C
ATOM   3170  CE2 PHE A 294      -8.234  -3.253 -16.172  1.00 24.26           C
ATOM   3171  CZ  PHE A 294      -7.255  -2.832 -17.085  1.00 21.92           C
ATOM   3172  H   PHE A 294     -13.340   0.332 -15.954  1.00  0.00           H
ATOM   3173  HA  PHE A 294     -11.320   0.038 -18.137  1.00  0.00           H
ATOM   3174  HB2 PHE A 294     -10.208   0.775 -16.039  1.00  0.00           H
ATOM   3175  HB3 PHE A 294     -10.949  -0.516 -15.151  1.00  0.00           H
ATOM   3176  HD1 PHE A 294      -8.551   0.199 -17.946  1.00  0.00           H
ATOM   3177  HD2 PHE A 294     -10.048  -2.738 -15.138  1.00  0.00           H
ATOM   3178  HE1 PHE A 294      -6.642  -1.293 -18.464  1.00  0.00           H
ATOM   3179  HE2 PHE A 294      -8.142  -4.223 -15.711  1.00  0.00           H
ATOM   3180  HZ  PHE A 294      -6.401  -3.464 -17.277  1.00  0.00           H
ATOM   3181  N   ILE A 295     -12.994  -2.244 -16.334  1.00 24.85           N
ATOM   3182  CA  ILE A 295     -13.555  -3.607 -16.350  1.00 26.88           C
ATOM   3183  C   ILE A 295     -14.652  -3.843 -17.432  1.00 27.94           C
ATOM   3184  O   ILE A 295     -14.873  -4.982 -17.834  1.00 27.36           O
ATOM   3185  CB  ILE A 295     -14.007  -3.964 -14.898  1.00 28.74           C
ATOM   3186  CG1 ILE A 295     -12.831  -3.936 -13.882  1.00 30.86           C
ATOM   3187  CG2 ILE A 295     -14.786  -5.289 -14.759  1.00 29.65           C
ATOM   3188  CD1 ILE A 295     -11.754  -5.016 -14.093  1.00 31.32           C
ATOM   3189  H   ILE A 295     -13.059  -1.732 -15.462  1.00  0.00           H
ATOM   3190  HA  ILE A 295     -12.746  -4.283 -16.635  1.00  0.00           H
ATOM   3191  HB  ILE A 295     -14.695  -3.179 -14.584  1.00  0.00           H
ATOM   3192 HG12 ILE A 295     -12.343  -2.963 -13.890  1.00  0.00           H
ATOM   3193 HG13 ILE A 295     -13.231  -4.041 -12.873  1.00  0.00           H
ATOM   3194 HG21 ILE A 295     -14.989  -5.524 -13.714  1.00  0.00           H
ATOM   3195 HG22 ILE A 295     -15.750  -5.248 -15.267  1.00  0.00           H
ATOM   3196 HG23 ILE A 295     -14.229  -6.124 -15.187  1.00  0.00           H
ATOM   3197 HD11 ILE A 295     -10.970  -4.929 -13.341  1.00  0.00           H
ATOM   3198 HD12 ILE A 295     -12.167  -6.022 -14.016  1.00  0.00           H
ATOM   3199 HD13 ILE A 295     -11.269  -4.931 -15.066  1.00  0.00           H
ATOM   3200  N   LYS A 296     -15.298  -2.791 -17.957  1.00 27.30           N
ATOM   3201  CA  LYS A 296     -16.202  -2.843 -19.117  1.00 29.16           C
ATOM   3202  C   LYS A 296     -15.430  -2.927 -20.452  1.00 29.60           C
ATOM   3203  O   LYS A 296     -16.020  -3.260 -21.477  1.00 30.49           O
ATOM   3204  CB  LYS A 296     -16.964  -1.495 -19.228  1.00 30.80           C
ATOM   3205  CG  LYS A 296     -18.063  -1.182 -18.196  1.00 35.46           C
ATOM   3206  CD  LYS A 296     -18.477   0.296 -18.346  1.00 37.53           C
ATOM   3207  CE  LYS A 296     -19.359   0.872 -17.231  1.00 39.57           C
ATOM   3208  NZ  LYS A 296     -19.473   2.336 -17.363  1.00 42.84           N1+
ATOM   3209  H   LYS A 296     -15.169  -1.897 -17.490  1.00  0.00           H
ATOM   3210  HA  LYS A 296     -16.893  -3.684 -19.042  1.00  0.00           H
ATOM   3211  HB2 LYS A 296     -16.222  -0.695 -19.219  1.00  0.00           H
ATOM   3212  HB3 LYS A 296     -17.440  -1.426 -20.209  1.00  0.00           H
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ATOM   3213  HG2 LYS A 296     -18.919  -1.841 -18.342  1.00  0.00          H
ATOM   3214  HG3 LYS A 296     -17.704  -1.374 -17.189  1.00  0.00          H
ATOM   3215  HD2 LYS A 296     -17.569   0.893 -18.386  1.00  0.00          H
ATOM   3216  HD3 LYS A 296     -18.959   0.440 -19.314  1.00  0.00          H
ATOM   3217  HE2 LYS A 296     -20.348   0.416 -17.260  1.00  0.00          H
ATOM   3218  HE3 LYS A 296     -18.927   0.658 -16.254  1.00  0.00          H
ATOM   3219  HZ1 LYS A 296     -20.234   2.754 -16.863  1.00  0.00          H
ATOM   3220  HZ2 LYS A 296     -18.602   2.786 -16.997  1.00  0.00          H
ATOM   3221  HZ3 LYS A 296     -19.418   2.643 -18.325  1.00  0.00          H
ATOM   3222  N   LYS A 297    -14.166  -2.496 -20.452  1.00 28.79          N
ATOM   3223  CA  LYS A 297    -13.377  -2.117 -21.620  1.00 30.07          C
ATOM   3224  C   LYS A 297    -12.210  -3.089 -21.836  1.00 29.13          C
ATOM   3225  O   LYS A 297    -11.851  -3.348 -22.979  1.00 30.10          O
ATOM   3226  CB  LYS A 297    -12.863  -0.687 -21.330  1.00 31.69          C
ATOM   3227  CG  LYS A 297    -11.948  -0.033 -22.383  1.00 36.08          C
ATOM   3228  CD  LYS A 297    -11.490   1.365 -21.933  1.00 40.63          C
ATOM   3229  CE  LYS A 297    -10.381   1.340 -20.859  1.00 42.81          C
ATOM   3230  NZ  LYS A 297    -10.464   2.521 -19.986  1.00 42.47          N1+
ATOM   3231  H   LYS A 297    -13.721  -2.369 -19.550  1.00  0.00          H
ATOM   3232  HA  LYS A 297    -13.990  -2.113 -22.524  1.00  0.00          H
ATOM   3233  HB2 LYS A 297    -13.729  -0.040 -21.177  1.00  0.00          H
ATOM   3234  HB3 LYS A 297    -12.336  -0.696 -20.379  1.00  0.00          H
ATOM   3235  HG2 LYS A 297    -11.074  -0.654 -22.590  1.00  0.00          H
ATOM   3236  HG3 LYS A 297    -12.493   0.042 -23.325  1.00  0.00          H
ATOM   3237  HD2 LYS A 297    -11.127   1.919 -22.801  1.00  0.00          H
ATOM   3238  HD3 LYS A 297    -12.365   1.912 -21.576  1.00  0.00          H
ATOM   3239  HE2 LYS A 297    -10.455   0.459 -20.225  1.00  0.00          H
ATOM   3240  HE3 LYS A 297     -9.398   1.289 -21.331  1.00  0.00          H
ATOM   3241  HZ1 LYS A 297     -9.646   2.591 -19.370  1.00  0.00          H
ATOM   3242  HZ2 LYS A 297    -10.495   3.366 -20.530  1.00  0.00          H
ATOM   3243  HZ3 LYS A 297    -11.302   2.450 -19.410  1.00  0.00          H
ATOM   3244  N   ASN A 298    -11.635  -3.605 -20.744  1.00 28.47          N
ATOM   3245  CA  ASN A 298    -10.445  -4.452 -20.705  1.00 26.71          C
ATOM   3246  C   ASN A 298    -10.722  -5.741 -19.908  1.00 25.72          C
ATOM   3247  O   ASN A 298    -10.222  -5.879 -18.785  1.00 23.38          O
ATOM   3248  CB  ASN A 298     -9.252  -3.651 -20.124  1.00 27.91          C
ATOM   3249  CG  ASN A 298     -8.654  -2.640 -21.097  1.00 28.07          C
ATOM   3250  OD1 ASN A 298     -8.923  -1.439 -21.018  1.00 30.60          O
ATOM   3251  ND2 ASN A 298     -7.804  -3.119 -21.993  1.00 28.22          N
ATOM   3252  H   ASN A 298    -11.968  -3.286 -19.840  1.00  0.00          H
ATOM   3253  HA  ASN A 298    -10.173  -4.765 -21.713  1.00  0.00          H
ATOM   3254  HB2 ASN A 298     -9.540  -3.145 -19.202  1.00  0.00          H
ATOM   3255  HB3 ASN A 298     -8.451  -4.336 -19.847  1.00  0.00          H
ATOM   3256 HD21 ASN A 298     -7.650  -4.154 -22.009  1.00  0.00          H
ATOM   3257 HD22 ASN A 298     -7.345  -2.538 -22.668  1.00  0.00          H
ATOM   3258  N   PRO A 299    -11.539  -6.689 -20.425  1.00 25.00          N
ATOM   3259  CA  PRO A 299    -11.804  -7.965 -19.747  1.00 25.78          C
ATOM   3260  C   PRO A 299    -10.640  -8.974 -19.826  1.00 25.64          C
ATOM   3261  O   PRO A 299    -10.600  -9.896 -19.016  1.00 25.28          O
ATOM   3262  CB  PRO A 299    -13.058  -8.516 -20.441  1.00 26.77          C
ATOM   3263  CG  PRO A 299    -12.988  -7.949 -21.851  1.00 25.54          C
ATOM   3264  CD  PRO A 299    -12.308  -6.592 -21.671  1.00 25.40          C
ATOM   3265  HA  PRO A 299    -12.020  -7.791 -18.691  1.00  0.00          H
ATOM   3266  HB2 PRO A 299    -13.120  -9.606 -20.428  1.00  0.00          H
ATOM   3267  HB3 PRO A 299    -13.946  -8.133 -19.936  1.00  0.00          H
ATOM   3268  HG2 PRO A 299    -12.355  -8.587 -22.470  1.00  0.00          H
ATOM   3269  HG3 PRO A 299    -13.962  -7.874 -22.336  1.00  0.00          H
ATOM   3270  HD2 PRO A 299    -11.694  -6.332 -22.534  1.00  0.00          H
ATOM   3271  HD3 PRO A 299    -13.068  -5.820 -21.558  1.00  0.00          H
ATOM   3272  N   GLU A 300     -9.693  -8.823 -20.760  1.00 27.36          N
ATOM   3273  CA  GLU A 300     -8.496  -9.649 -20.907  1.00 30.62          C
ATOM   3274  C   GLU A 300     -7.489  -9.390 -19.771  1.00 31.01          C
ATOM   3275  O   GLU A 300     -6.849 -10.326 -19.292  1.00 30.85          O
ATOM   3276  CB  GLU A 300     -7.866  -9.375 -22.303  1.00 33.91          C
ATOM   3277  CG  GLU A 300     -7.150  -8.016 -22.546  1.00 38.15          C
ATOM   3278  CD  GLU A 300     -8.064  -6.804 -22.403  1.00 41.20          C
ATOM   3279  OE1 GLU A 300     -9.275  -6.965 -22.652  1.00 42.55          O
ATOM   3280  OE2 GLU A 300     -7.590  -5.758 -21.924  1.00 42.55          O1-
ATOM   3281  H   GLU A 300     -9.760  -8.047 -21.437  1.00  0.00          H
ATOM   3282  HA  GLU A 300     -8.801 -10.697 -20.859  1.00  0.00          H
ATOM   3283  HB2 GLU A 300     -7.136 -10.162 -22.495  1.00  0.00          H
ATOM   3284  HB3 GLU A 300     -8.631  -9.510 -23.068  1.00  0.00          H
ATOM   3285  HG2 GLU A 300     -6.293  -7.894 -21.884  1.00  0.00          H
ATOM   3286  HG3 GLU A 300     -6.749  -7.992 -23.558  1.00  0.00          H
ATOM   3287  N   TYR A 301     -7.365  -8.137 -19.314  1.00 29.28          N
ATOM   3288  CA  TYR A 301     -6.451  -7.720 -18.250  1.00 27.29          C
ATOM   3289  C   TYR A 301     -6.971  -8.076 -16.842  1.00 26.08          C
ATOM   3290  O   TYR A 301     -6.197  -8.073 -15.884  1.00 25.20          O
ATOM   3291  CB  TYR A 301     -6.246  -6.192 -18.346  1.00 25.45          C
ATOM   3292  CG  TYR A 301     -5.334  -5.655 -19.452  1.00 24.93          C
ATOM   3293  CD1 TYR A 301     -4.348  -6.451 -20.082  1.00 25.31          C
ATOM   3294  CD2 TYR A 301     -5.443  -4.298 -19.828  1.00 23.92          C
ATOM   3295  CE1 TYR A 301     -3.488  -5.890 -21.048  1.00 25.27          C
ATOM   3296  CE2 TYR A 301     -4.562  -3.731 -20.766  1.00 26.82          C
ATOM   3297  CZ  TYR A 301     -3.576  -4.524 -21.371  1.00 25.82          C
ATOM   3298  OH  TYR A 301     -2.693  -3.964 -22.246  1.00 26.18          O
ATOM   3299  H   TYR A 301     -7.864  -7.412 -19.818  1.00  0.00          H
ATOM   3300  HA  TYR A 301     -5.501  -8.244 -18.345  1.00  0.00          H
ATOM   3301  HB2 TYR A 301     -7.219  -5.705 -18.429  1.00  0.00          H
ATOM   3302  HB3 TYR A 301     -5.829  -5.827 -17.408  1.00  0.00          H
ATOM   3303  HD1 TYR A 301     -4.225  -7.494 -19.847  1.00  0.00          H
ATOM   3304  HD2 TYR A 301     -6.207  -3.669 -19.406  1.00  0.00          H
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ATOM   3305  HE1 TYR A 301      -2.737  -6.503 -21.521  1.00  0.00           H
ATOM   3306  HE2 TYR A 301      -4.647  -2.687 -21.026  1.00  0.00           H
ATOM   3307  HH  TYR A 301      -2.409  -3.075 -21.950  1.00  0.00           H
ATOM   3308  N   LEU A 302      -8.245  -8.462 -16.708  1.00 26.08           N
ATOM   3309  CA  LEU A 302      -8.813  -9.073 -15.508  1.00 25.64           C
ATOM   3310  C   LEU A 302      -8.305 -10.527 -15.412  1.00 26.50           C
ATOM   3311  O   LEU A 302      -8.132 -11.201 -16.431  1.00 26.41           O
ATOM   3312  CB  LEU A 302     -10.356  -9.017 -15.648  1.00 26.41           C
ATOM   3313  CG  LEU A 302     -11.213  -9.692 -14.553  1.00 28.11           C
ATOM   3314  CD1 LEU A 302     -10.958  -9.128 -13.150  1.00 26.19           C
ATOM   3315  CD2 LEU A 302     -12.705  -9.586 -14.904  1.00 28.85           C
ATOM   3316  H   LEU A 302      -8.778  -8.554 -17.563  1.00  0.00           H
ATOM   3317  HA  LEU A 302      -8.496  -8.510 -14.628  1.00  0.00           H
ATOM   3318  HB2 LEU A 302     -10.657  -7.972 -15.742  1.00  0.00           H
ATOM   3319  HB3 LEU A 302     -10.626  -9.483 -16.593  1.00  0.00           H
ATOM   3320  HG  LEU A 302     -10.972 -10.755 -14.538  1.00  0.00           H
ATOM   3321 HD11 LEU A 302     -11.592  -9.622 -12.413  1.00  0.00           H
ATOM   3322 HD12 LEU A 302      -9.929  -9.297 -12.839  1.00  0.00           H
ATOM   3323 HD13 LEU A 302     -11.156  -8.058 -13.104  1.00  0.00           H
ATOM   3324 HD21 LEU A 302     -13.320 -10.109 -14.171  1.00  0.00           H
ATOM   3325 HD22 LEU A 302     -13.033  -8.547 -14.941  1.00  0.00           H
ATOM   3326 HD23 LEU A 302     -12.909 -10.032 -15.878  1.00  0.00           H
ATOM   3327  N   ASP A 303      -8.031 -11.003 -14.193  1.00 26.14           N
ATOM   3328  CA  ASP A 303      -7.718 -12.404 -13.914  1.00 26.40           C
ATOM   3329  C   ASP A 303      -9.033 -13.157 -13.672  1.00 26.12           C
ATOM   3330  O   ASP A 303      -9.950 -12.631 -13.034  1.00 26.00           O
ATOM   3331  CB  ASP A 303      -6.871 -12.498 -12.628  1.00 24.91           C
ATOM   3332  CG  ASP A 303      -6.072 -13.791 -12.588  1.00 24.80           C
ATOM   3333  OD1 ASP A 303      -6.677 -14.873 -12.408  1.00 24.92           O
ATOM   3334  OD2 ASP A 303      -4.843 -13.680 -12.774  1.00 22.64           O1-
ATOM   3335  H   ASP A 303      -8.132 -10.397 -13.385  1.00  0.00           H
ATOM   3336  HA  ASP A 303      -7.172 -12.840 -14.754  1.00  0.00           H
ATOM   3337  HB2 ASP A 303      -6.161 -11.673 -12.586  1.00  0.00           H
ATOM   3338  HB3 ASP A 303      -7.475 -12.421 -11.722  1.00  0.00           H
ATOM   3339  N   GLU A 304      -9.127 -14.395 -14.153  1.00 27.08           N
ATOM   3340  CA  GLU A 304     -10.271 -15.282 -13.971  1.00 27.05           C
ATOM   3341  C   GLU A 304     -10.344 -15.841 -12.531  1.00 26.35           C
ATOM   3342  O   GLU A 304     -11.432 -16.168 -12.058  1.00 25.01           O
ATOM   3343  CB  GLU A 304     -10.143 -16.420 -15.007  1.00 29.55           C
ATOM   3344  CG  GLU A 304      -8.863 -17.280 -14.897  1.00 34.94           C
ATOM   3345  CD  GLU A 304      -8.401 -17.846 -16.233  1.00 38.80           C
ATOM   3346  OE1 GLU A 304      -9.271 -18.260 -17.025  1.00 40.86           O
ATOM   3347  OE2 GLU A 304      -7.171 -17.837 -16.451  1.00 37.70           O1-
ATOM   3348  H   GLU A 304      -8.314 -14.796 -14.603  1.00  0.00           H
ATOM   3349  HA  GLU A 304     -11.191 -14.728 -14.168  1.00  0.00           H
ATOM   3350  HB2 GLU A 304     -11.009 -17.080 -14.944  1.00  0.00           H
ATOM   3351  HB3 GLU A 304     -10.198 -15.979 -16.004  1.00  0.00           H
ATOM   3352  HG2 GLU A 304      -8.033 -16.688 -14.520  1.00  0.00           H
ATOM   3353  HG3 GLU A 304      -9.009 -18.103 -14.197  1.00  0.00           H
ATOM   3354  N   ASN A 305      -9.219 -15.894 -11.803  1.00 25.29           N
ATOM   3355  CA  ASN A 305      -9.083 -16.501 -10.470  1.00 24.94           C
ATOM   3356  C   ASN A 305      -9.112 -15.399  -9.385  1.00 25.14           C
ATOM   3357  O   ASN A 305      -8.520 -15.554  -8.313  1.00 24.32           O
ATOM   3358  CB  ASN A 305      -7.715 -17.222 -10.349  1.00 26.38           C
ATOM   3359  CG  ASN A 305      -7.344 -18.165 -11.489  1.00 26.41           C
ATOM   3360  OD1 ASN A 305      -7.642 -19.353 -11.435  1.00 28.64           O
ATOM   3361  ND2 ASN A 305      -6.660 -17.641 -12.501  1.00 27.76           N
ATOM   3362  H   ASN A 305      -8.357 -15.524 -12.218  1.00  0.00           H
ATOM   3363  HA  ASN A 305      -9.888 -17.215 -10.288  1.00  0.00           H
ATOM   3364  HB2 ASN A 305      -6.930 -16.484 -10.283  1.00  0.00           H
ATOM   3365  HB3 ASN A 305      -7.675 -17.790  -9.420  1.00  0.00           H
ATOM   3366 HD21 ASN A 305      -6.513 -16.618 -12.530  1.00  0.00           H
ATOM   3367 HD22 ASN A 305      -6.485 -18.188 -13.332  1.00  0.00           H
ATOM   3368  N   ASN A 306      -9.739 -14.258  -9.689  1.00 24.92           N
ATOM   3369  CA  ASN A 306      -9.757 -13.014  -8.915  1.00 24.17           C
ATOM   3370  C   ASN A 306     -10.446 -13.104  -7.533  1.00 23.07           C
ATOM   3371  O   ASN A 306     -11.072 -14.100  -7.163  1.00 22.07           O
ATOM   3372  CB  ASN A 306     -10.402 -11.881  -9.758  1.00 24.78           C
ATOM   3373  CG  ASN A 306     -11.865 -12.108 -10.145  1.00 23.30           C
ATOM   3374  OD1 ASN A 306     -12.759 -11.971  -9.314  1.00 23.64           O
ATOM   3375  ND2 ASN A 306     -12.126 -12.446 -11.400  1.00 30.14           N
ATOM   3376  H   ASN A 306     -10.187 -14.257 -10.594  1.00  0.00           H
ATOM   3377  HA  ASN A 306      -8.715 -12.743  -8.731  1.00  0.00           H
ATOM   3378  HB2 ASN A 306     -10.370 -10.946  -9.207  1.00  0.00           H
ATOM   3379  HB3 ASN A 306      -9.799 -11.699 -10.647  1.00  0.00           H
ATOM   3380 HD21 ASN A 306     -11.355 -12.525 -12.076  1.00  0.00           H
ATOM   3381 HD22 ASN A 306     -13.066 -12.667 -11.680  1.00  0.00           H
ATOM   3382  N   LEU A 307     -10.348 -12.006  -6.777  1.00 22.52           N
ATOM   3383  CA  LEU A 307     -10.927 -11.773  -5.463  1.00 20.85           C
ATOM   3384  C   LEU A 307     -11.917 -10.588  -5.548  1.00 21.65           C
ATOM   3385  O   LEU A 307     -11.959  -9.738  -4.657  1.00 22.08           O
ATOM   3386  CB  LEU A 307      -9.761 -11.527  -4.471  1.00 21.68           C
ATOM   3387  CG  LEU A 307     -10.127 -11.562  -2.970  1.00 24.57           C
ATOM   3388  CD1 LEU A 307     -10.270 -12.985  -2.430  1.00 25.54           C
ATOM   3389  CD2 LEU A 307      -9.100 -10.782  -2.142  1.00 24.54           C
ATOM   3390  H   LEU A 307      -9.816 -11.221  -7.158  1.00  0.00           H
ATOM   3391  HA  LEU A 307     -11.493 -12.648  -5.142  1.00  0.00           H
ATOM   3392  HB2 LEU A 307      -8.963 -12.247  -4.651  1.00  0.00           H
ATOM   3393  HB3 LEU A 307      -9.317 -10.560  -4.709  1.00  0.00           H
ATOM   3394  HG  LEU A 307     -11.090 -11.082  -2.823  1.00  0.00           H
ATOM   3395 HD11 LEU A 307     -10.498 -12.969  -1.365  1.00  0.00           H
ATOM   3396 HD12 LEU A 307     -11.075 -13.521  -2.932  1.00  0.00           H
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ATOM   3397 HD13 LEU A 307      -9.344 -13.544  -2.557  1.00  0.00           H
ATOM   3398 HD21 LEU A 307      -9.376 -10.780  -1.089  1.00  0.00           H
ATOM   3399 HD22 LEU A 307      -8.108 -11.223  -2.227  1.00  0.00           H
ATOM   3400 HD23 LEU A 307      -9.033  -9.742  -2.464  1.00  0.00           H
ATOM   3401  N   MET A 308     -12.756 -10.516  -6.597  1.00 20.81           N
ATOM   3402  CA  MET A 308     -13.810  -9.495  -6.760  1.00 22.78           C
ATOM   3403  C   MET A 308     -14.799  -9.456  -5.571  1.00 22.78           C
ATOM   3404  O   MET A 308     -15.330  -8.398  -5.233  1.00 22.72           O
ATOM   3405  CB  MET A 308     -14.546  -9.726  -8.102  1.00 21.26           C
ATOM   3406  CG  MET A 308     -15.672  -8.729  -8.430  1.00 20.59           C
ATOM   3407  SD  MET A 308     -15.158  -7.005  -8.663  1.00 23.31           S
ATOM   3408  CE  MET A 308     -14.733  -7.026 -10.429  1.00 20.96           C
ATOM   3409  H   MET A 308     -12.656 -11.208  -7.336  1.00  0.00           H
ATOM   3410  HA  MET A 308     -13.315  -8.523  -6.794  1.00  0.00           H
ATOM   3411  HB2 MET A 308     -13.824  -9.698  -8.917  1.00  0.00           H
ATOM   3412  HB3 MET A 308     -14.966 -10.733  -8.108  1.00  0.00           H
ATOM   3413  HG2 MET A 308     -16.192  -9.055  -9.332  1.00  0.00           H
ATOM   3414  HG3 MET A 308     -16.422  -8.749  -7.644  1.00  0.00           H
ATOM   3415  HE1 MET A 308     -14.324  -6.062 -10.731  1.00  0.00           H
ATOM   3416  HE2 MET A 308     -13.992  -7.795 -10.646  1.00  0.00           H
ATOM   3417  HE3 MET A 308     -15.616  -7.227 -11.035  1.00  0.00           H
ATOM   3418  N   SER A 309     -14.981 -10.590  -4.889  1.00 22.41           N
ATOM   3419  CA  SER A 309     -15.788 -10.771  -3.689  1.00 23.60           C
ATOM   3420  C   SER A 309     -15.248 -10.029  -2.448  1.00 22.97           C
ATOM   3421  O   SER A 309     -15.981  -9.875  -1.473  1.00 22.64           O
ATOM   3422  CB  SER A 309     -15.863 -12.291  -3.436  1.00 24.95           C
ATOM   3423  OG  SER A 309     -14.568 -12.887  -3.402  1.00 30.97           O
ATOM   3424  H   SER A 309     -14.467 -11.409  -5.181  1.00  0.00           H
ATOM   3425  HA  SER A 309     -16.793 -10.390  -3.881  1.00  0.00           H
ATOM   3426  HB2 SER A 309     -16.377 -12.487  -2.493  1.00  0.00           H
ATOM   3427  HB3 SER A 309     -16.457 -12.769  -4.217  1.00  0.00           H
ATOM   3428  HG  SER A 309     -14.651 -13.767  -3.064  1.00  0.00           H
ATOM   3429  N   PHE A 310     -13.997  -9.543  -2.471  1.00 22.04           N
ATOM   3430  CA  PHE A 310     -13.459  -8.662  -1.436  1.00 21.22           C
ATOM   3431  C   PHE A 310     -13.876  -7.209  -1.707  1.00 21.27           C
ATOM   3432  O   PHE A 310     -14.092  -6.464  -0.756  1.00 20.91           O
ATOM   3433  CB  PHE A 310     -11.916  -8.750  -1.439  1.00 20.01           C
ATOM   3434  CG  PHE A 310     -11.184  -7.778  -0.529  1.00 20.57           C
ATOM   3435  CD1 PHE A 310     -11.400  -7.812   0.863  1.00 21.24           C
ATOM   3436  CD2 PHE A 310     -10.307  -6.817  -1.077  1.00 21.25           C
ATOM   3437  CE1 PHE A 310     -10.741  -6.894   1.701  1.00 21.69           C
ATOM   3438  CE2 PHE A 310      -9.656  -5.895  -0.236  1.00 21.89           C
ATOM   3439  CZ  PHE A 310      -9.869  -5.936   1.155  1.00 21.34           C
ATOM   3440  H   PHE A 310     -13.429  -9.715  -3.295  1.00  0.00           H
ATOM   3441  HA  PHE A 310     -13.832  -8.954  -0.452  1.00  0.00           H
ATOM   3442  HB2 PHE A 310     -11.628  -9.751  -1.124  1.00  0.00           H
ATOM   3443  HB3 PHE A 310     -11.533  -8.618  -2.450  1.00  0.00           H
ATOM   3444  HD1 PHE A 310     -12.082  -8.533   1.291  1.00  0.00           H
ATOM   3445  HD2 PHE A 310     -10.129  -6.777  -2.142  1.00  0.00           H
ATOM   3446  HE1 PHE A 310     -10.903  -6.929   2.764  1.00  0.00           H
ATOM   3447  HE2 PHE A 310      -8.967  -5.178  -0.657  1.00  0.00           H
ATOM   3448  HZ  PHE A 310      -9.353  -5.244   1.803  1.00  0.00           H
ATOM   3449  N   LEU A 311     -14.009  -6.804  -2.977  1.00 20.63           N
ATOM   3450  CA  LEU A 311     -14.246  -5.416  -3.371  1.00 22.79           C
ATOM   3451  C   LEU A 311     -15.739  -5.090  -3.489  1.00 24.02           C
ATOM   3452  O   LEU A 311     -16.114  -3.922  -3.433  1.00 26.14           O
ATOM   3453  CB  LEU A 311     -13.699  -5.201  -4.802  1.00 23.27           C
ATOM   3454  CG  LEU A 311     -12.209  -5.515  -5.019  1.00 24.44           C
ATOM   3455  CD1 LEU A 311     -11.893  -5.376  -6.513  1.00 21.83           C
ATOM   3456  CD2 LEU A 311     -11.291  -4.621  -4.169  1.00 24.33           C
ATOM   3457  H   LEU A 311     -13.903  -7.489  -3.713  1.00  0.00           H
ATOM   3458  HA  LEU A 311     -13.784  -4.719  -2.668  1.00  0.00           H
ATOM   3459  HB2 LEU A 311     -14.277  -5.808  -5.503  1.00  0.00           H
ATOM   3460  HB3 LEU A 311     -13.879  -4.166  -5.099  1.00  0.00           H
ATOM   3461  HG  LEU A 311     -12.017  -6.553  -4.742  1.00  0.00           H
ATOM   3462 HD11 LEU A 311     -10.850  -5.593  -6.720  1.00  0.00           H
ATOM   3463 HD12 LEU A 311     -12.490  -6.065  -7.110  1.00  0.00           H
ATOM   3464 HD13 LEU A 311     -12.093  -4.368  -6.877  1.00  0.00           H
ATOM   3465 HD21 LEU A 311     -10.245  -4.882  -4.327  1.00  0.00           H
ATOM   3466 HD22 LEU A 311     -11.411  -3.567  -4.417  1.00  0.00           H
ATOM   3467 HD23 LEU A 311     -11.486  -4.737  -3.102  1.00  0.00           H
ATOM   3468  N   SER A 312     -16.593  -6.088  -3.721  1.00 24.95           N
ATOM   3469  CA  SER A 312     -17.923  -5.885  -4.265  1.00 24.03           C
ATOM   3470  C   SER A 312     -18.980  -6.658  -3.477  1.00 25.46           C
ATOM   3471  O   SER A 312     -18.709  -7.726  -2.931  1.00 23.59           O
ATOM   3472  CB  SER A 312     -17.873  -6.203  -5.771  1.00 22.48           C
ATOM   3473  OG  SER A 312     -19.113  -5.966  -6.411  1.00 23.27           O
ATOM   3474  H   SER A 312     -16.237  -7.036  -3.727  1.00  0.00           H
ATOM   3475  HA  SER A 312     -18.200  -4.835  -4.162  1.00  0.00           H
ATOM   3476  HB2 SER A 312     -17.111  -5.592  -6.261  1.00  0.00           H
ATOM   3477  HB3 SER A 312     -17.583  -7.242  -5.918  1.00  0.00           H
ATOM   3478  HG  SER A 312     -19.289  -5.018  -6.334  1.00  0.00           H
ATOM   3479  N   ASN A 313     -20.195  -6.098  -3.437  1.00 27.59           N
ATOM   3480  CA  ASN A 313     -21.359  -6.663  -2.750  1.00 30.50           C
ATOM   3481  C   ASN A 313     -22.068  -7.646  -3.698  1.00 30.83           C
ATOM   3482  O   ASN A 313     -22.579  -8.672  -3.260  1.00 32.14           O
ATOM   3483  CB  ASN A 313     -22.401  -5.553  -2.430  1.00 29.50           C
ATOM   3484  CG  ASN A 313     -21.821  -4.292  -1.789  1.00 31.80           C
ATOM   3485  OD1 ASN A 313     -21.496  -4.271  -0.608  1.00 30.49           O
ATOM   3486  ND2 ASN A 313     -21.658  -3.236  -2.579  1.00 31.11           N
ATOM   3487  H   ASN A 313     -20.317  -5.217  -3.915  1.00  0.00           H
ATOM   3488  HA  ASN A 313     -21.053  -7.171  -1.833  1.00  0.00           H
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ATOM   3489  HB2 ASN A 313     -22.959  -5.260  -3.321  1.00  0.00          H
ATOM   3490  HB3 ASN A 313     -23.147  -5.959  -1.745  1.00  0.00          H
ATOM   3491 HD21 ASN A 313     -21.954  -3.288  -3.558  1.00  0.00          H
ATOM   3492 HD22 ASN A 313     -21.232  -2.389  -2.219  1.00  0.00          H
ATOM   3493  N   ASP A 314     -22.125  -7.309  -4.995  1.00 32.03          N
ATOM   3494  CA  ASP A 314     -22.838  -8.051  -6.039  1.00 31.57          C
ATOM   3495  C   ASP A 314     -21.861  -8.894  -6.882  1.00 32.42          C
ATOM   3496  O   ASP A 314     -22.286  -9.870  -7.498  1.00 29.58          O
ATOM   3497  CB  ASP A 314     -23.542  -7.031  -6.975  1.00 33.24          C
ATOM   3498  CG  ASP A 314     -22.600  -6.169  -7.807  1.00 33.93          C
ATOM   3499  OD1 ASP A 314     -22.030  -5.210  -7.253  1.00 33.28          O
ATOM   3500  OD2 ASP A 314     -22.371  -6.501  -8.987  1.00 35.28          O1-
ATOM   3501  H   ASP A 314     -21.681  -6.446  -5.283  1.00  0.00          H
ATOM   3502  HA  ASP A 314     -23.586  -8.713  -5.599  1.00  0.00          H
ATOM   3503  HB2 ASP A 314     -24.201  -7.568  -7.659  1.00  0.00          H
ATOM   3504  HB3 ASP A 314     -24.189  -6.374  -6.394  1.00  0.00          H
ATOM   3505  N   ASN A 315     -20.579  -8.506  -6.934  1.00 31.75          N
ATOM   3506  CA  ASN A 315     -19.498  -9.031  -7.772  1.00 32.79          C
ATOM   3507  C   ASN A 315     -19.358  -8.235  -9.076  1.00 31.79          C
ATOM   3508  O   ASN A 315     -19.557  -8.761 -10.174  1.00 30.01          O
ATOM   3509  CB  ASN A 315     -19.404 -10.571  -7.923  1.00 34.98          C
ATOM   3510  CG  ASN A 315     -19.165 -11.289  -6.597  1.00 39.86          C
ATOM   3511  OD1 ASN A 315     -18.031 -11.436  -6.154  1.00 41.48          O
ATOM   3512  ND2 ASN A 315     -20.230 -11.737  -5.945  1.00 39.98          N
ATOM   3513  H   ASN A 315     -20.355  -7.652  -6.435  1.00  0.00          H
ATOM   3514  HA  ASN A 315     -18.606  -8.766  -7.209  1.00  0.00          H
ATOM   3515  HB2 ASN A 315     -20.273 -10.985  -8.434  1.00  0.00          H
ATOM   3516  HB3 ASN A 315     -18.558 -10.812  -8.569  1.00  0.00          H
ATOM   3517 HD21 ASN A 315     -21.152 -11.529  -6.309  1.00  0.00          H
ATOM   3518 HD22 ASN A 315     -20.108 -12.172  -5.046  1.00  0.00          H
ATOM   3519  N   GLY A 316     -19.044  -6.943  -8.963  1.00 29.91          N
ATOM   3520  CA  GLY A 316     -18.420  -6.136 -10.005  1.00 28.90          C
ATOM   3521  C   GLY A 316     -19.170  -4.884 -10.451  1.00 29.49          C
ATOM   3522  O   GLY A 316     -18.610  -4.151 -11.260  1.00 31.30          O
ATOM   3523  H   GLY A 316     -19.039  -6.550  -8.017  1.00  0.00          H
ATOM   3524  HA2 GLY A 316     -17.466  -5.787  -9.615  1.00  0.00          H
ATOM   3525  HA3 GLY A 316     -18.183  -6.731 -10.889  1.00  0.00          H
ATOM   3526  N   LYS A 317     -20.399  -4.616  -9.984  1.00 28.46          N
ATOM   3527  CA  LYS A 317     -21.103  -3.377 -10.330  1.00 29.26          C
ATOM   3528  C   LYS A 317     -21.003  -2.361  -9.177  1.00 28.45          C
ATOM   3529  O   LYS A 317     -20.746  -1.186  -9.432  1.00 29.61          O
ATOM   3530  CB  LYS A 317     -22.587  -3.655 -10.667  1.00 30.65          C
ATOM   3531  CG  LYS A 317     -22.836  -4.274 -12.068  1.00 32.56          C
ATOM   3532  CD  LYS A 317     -23.139  -5.788 -12.093  1.00 33.46          C
ATOM   3533  CE  LYS A 317     -21.898  -6.703 -12.187  1.00 35.75          C
ATOM   3534  NZ  LYS A 317     -21.896  -7.721 -11.125  1.00 33.98          N1+
ATOM   3535  H   LYS A 317     -20.850  -5.238  -9.311  1.00  0.00          H
ATOM   3536  HA  LYS A 317     -20.658  -2.890 -11.201  1.00  0.00          H
ATOM   3537  HB2 LYS A 317     -23.080  -4.223  -9.880  1.00  0.00          H
ATOM   3538  HB3 LYS A 317     -23.101  -2.692 -10.662  1.00  0.00          H
ATOM   3539  HG2 LYS A 317     -23.717  -3.775 -12.475  1.00  0.00          H
ATOM   3540  HG3 LYS A 317     -22.031  -4.021 -12.760  1.00  0.00          H
ATOM   3541  HD2 LYS A 317     -23.766  -6.044 -11.237  1.00  0.00          H
ATOM   3542  HD3 LYS A 317     -23.763  -5.992 -12.965  1.00  0.00          H
ATOM   3543  HE2 LYS A 317     -21.861  -7.200 -13.156  1.00  0.00          H
ATOM   3544  HE3 LYS A 317     -20.983  -6.121 -12.120  1.00  0.00          H
ATOM   3545  HZ1 LYS A 317     -20.987  -8.167 -11.006  1.00  0.00          H
ATOM   3546  HZ2 LYS A 317     -22.080  -7.225 -10.222  1.00  0.00          H
ATOM   3547  HZ3 LYS A 317     -22.613  -8.415 -11.232  1.00  0.00          H
ATOM   3548  N   THR A 318     -21.164  -2.784  -7.919  1.00 28.25          N
ATOM   3549  CA  THR A 318     -21.095  -1.938  -6.727  1.00 25.97          C
ATOM   3550  C   THR A 318     -19.790  -2.225  -5.960  1.00 24.96          C
ATOM   3551  O   THR A 318     -19.321  -3.363  -5.939  1.00 24.07          O
ATOM   3552  CB  THR A 318     -22.338  -2.227  -5.840  1.00 27.38          C
ATOM   3553  OG1 THR A 318     -22.346  -3.540  -5.299  1.00 30.36          O
ATOM   3554  CG2 THR A 318     -23.675  -1.998  -6.560  1.00 28.55          C
ATOM   3555  H   THR A 318     -21.390  -3.774  -7.752  1.00  0.00          H
ATOM   3556  HA  THR A 318     -21.107  -0.882  -7.004  1.00  0.00          H
ATOM   3557  HB  THR A 318     -22.303  -1.541  -4.991  1.00  0.00          H
ATOM   3558  HG1 THR A 318     -22.279  -4.164  -6.046  1.00  0.00          H
ATOM   3559 HG21 THR A 318     -24.514  -2.108  -5.872  1.00  0.00          H
ATOM   3560 HG22 THR A 318     -23.725  -0.994  -6.982  1.00  0.00          H
ATOM   3561 HG23 THR A 318     -23.824  -2.708  -7.375  1.00  0.00          H
ATOM   3562  N   TYR A 319     -19.223  -1.206  -5.306  1.00 22.19          N
ATOM   3563  CA  TYR A 319     -18.091  -1.326  -4.387  1.00 21.55          C
ATOM   3564  C   TYR A 319     -18.671  -1.485  -2.970  1.00 20.73          C
ATOM   3565  O   TYR A 319     -19.707  -0.886  -2.670  1.00 22.78          O
ATOM   3566  CB  TYR A 319     -17.283  -0.004  -4.451  1.00 17.02          C
ATOM   3567  CG  TYR A 319     -15.873  -0.000  -3.872  1.00 18.70          C
ATOM   3568  CD1 TYR A 319     -15.021  -1.115  -4.018  1.00 15.33          C
ATOM   3569  CD2 TYR A 319     -15.386   1.149  -3.215  1.00 16.65          C
ATOM   3570  CE1 TYR A 319     -13.756  -1.137  -3.403  1.00 16.26          C
ATOM   3571  CE2 TYR A 319     -14.098   1.150  -2.642  1.00 16.78          C
ATOM   3572  CZ  TYR A 319     -13.304  -0.010  -2.696  1.00 15.64          C
ATOM   3573  OH  TYR A 319     -12.113  -0.050  -2.042  1.00 14.07          O
ATOM   3574  H   TYR A 319     -19.681  -0.309  -5.322  1.00  0.00          H
ATOM   3575  HA  TYR A 319     -17.482  -2.183  -4.671  1.00  0.00          H
ATOM   3576  HB2 TYR A 319     -17.180   0.293  -5.485  1.00  0.00          H
ATOM   3577  HB3 TYR A 319     -17.855   0.800  -3.983  1.00  0.00          H
ATOM   3578  HD1 TYR A 319     -15.324  -1.973  -4.596  1.00  0.00          H
ATOM   3579  HD2 TYR A 319     -15.999   2.034  -3.140  1.00  0.00          H
ATOM   3580  HE1 TYR A 319     -13.140  -2.021  -3.477  1.00  0.00          H
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ATOM   3581  HE2 TYR A 319     -13.735   2.020  -2.115  1.00  0.00           H
ATOM   3582  HH  TYR A 319     -11.954  -0.921  -1.674  1.00  0.00           H
ATOM   3583  N   ASN A 320     -18.039  -2.285  -2.104  1.00 18.73           N
ATOM   3584  CA  ASN A 320     -18.446  -2.455  -0.697  1.00 19.06           C
ATOM   3585  C   ASN A 320     -17.673  -1.518   0.257  1.00 16.51           C
ATOM   3586  O   ASN A 320     -17.996  -1.475   1.443  1.00 16.08           O
ATOM   3587  CB  ASN A 320     -18.268  -3.927  -0.230  1.00 19.10           C
ATOM   3588  CG  ASN A 320     -16.848  -4.491  -0.264  1.00 19.82           C
ATOM   3589  OD1 ASN A 320     -15.874  -3.758  -0.399  1.00 21.01           O
ATOM   3590  ND2 ASN A 320     -16.700  -5.805  -0.197  1.00 17.92           N
ATOM   3591  H   ASN A 320     -17.213  -2.795  -2.422  1.00  0.00           H
ATOM   3592  HA  ASN A 320     -19.503  -2.212  -0.581  1.00  0.00           H
ATOM   3593  HB2 ASN A 320     -18.649  -4.040   0.785  1.00  0.00           H
ATOM   3594  HB3 ASN A 320     -18.893  -4.567  -0.852  1.00  0.00           H
ATOM   3595 HD21 ASN A 320     -17.479  -6.443  -0.142  1.00  0.00           H
ATOM   3596 HD22 ASN A 320     -15.742  -6.156  -0.272  1.00  0.00           H
ATOM   3597  N   LEU A 321     -16.658  -0.806  -0.258  1.00 16.54           N
ATOM   3598  CA  LEU A 321     -15.762   0.152   0.402  1.00 16.81           C
ATOM   3599  C   LEU A 321     -14.445  -0.448   0.929  1.00 19.47           C
ATOM   3600  O   LEU A 321     -13.582   0.307   1.380  1.00 17.04           O
ATOM   3601  CB  LEU A 321     -16.456   1.140   1.379  1.00 17.52           C
ATOM   3602  CG  LEU A 321     -17.620   1.972   0.790  1.00 19.03           C
ATOM   3603  CD1 LEU A 321     -18.440   2.636   1.904  1.00 18.92           C
ATOM   3604  CD2 LEU A 321     -17.128   3.038  -0.199  1.00 19.85           C
ATOM   3605  H   LEU A 321     -16.447  -0.999  -1.226  1.00  0.00           H
ATOM   3606  HA  LEU A 321     -15.411   0.774  -0.414  1.00  0.00           H
ATOM   3607  HB2 LEU A 321     -16.816   0.575   2.236  1.00  0.00           H
ATOM   3608  HB3 LEU A 321     -15.718   1.826   1.796  1.00  0.00           H
ATOM   3609  HG  LEU A 321     -18.296   1.302   0.260  1.00  0.00           H
ATOM   3610 HD11 LEU A 321     -19.333   3.119   1.506  1.00  0.00           H
ATOM   3611 HD12 LEU A 321     -18.769   1.908   2.647  1.00  0.00           H
ATOM   3612 HD13 LEU A 321     -17.861   3.401   2.421  1.00  0.00           H
ATOM   3613 HD21 LEU A 321     -17.961   3.609  -0.608  1.00  0.00           H
ATOM   3614 HD22 LEU A 321     -16.447   3.742   0.282  1.00  0.00           H
ATOM   3615 HD23 LEU A 321     -16.607   2.586  -1.037  1.00  0.00           H
ATOM   3616  N   CYS A 322     -14.255  -1.773   0.868  1.00 19.78           N
ATOM   3617  CA  CYS A 322     -13.101  -2.456   1.453  1.00 21.80           C
ATOM   3618  C   CYS A 322     -11.840  -2.329   0.589  1.00 21.81           C
ATOM   3619  O   CYS A 322     -11.904  -2.363  -0.644  1.00 21.18           O
ATOM   3620  CB  CYS A 322     -13.389  -3.961   1.599  1.00 20.40           C
ATOM   3621  SG  CYS A 322     -14.536  -4.412   2.932  1.00 21.81           S
ATOM   3622  H   CYS A 322     -14.960  -2.360   0.427  1.00  0.00           H
ATOM   3623  HA  CYS A 322     -12.901  -2.026   2.433  1.00  0.00           H
ATOM   3624  HB2 CYS A 322     -13.737  -4.378   0.657  1.00  0.00           H
ATOM   3625  HB3 CYS A 322     -12.462  -4.495   1.808  1.00  0.00           H
ATOM   3626  N   HIS A 323     -10.682  -2.199   1.242  1.00 21.47           N
ATOM   3627  CA  HIS A 323      -9.365  -2.149   0.620  1.00 21.03           C
ATOM   3628  C   HIS A 323      -8.270  -2.571   1.614  1.00 21.77           C
ATOM   3629  O   HIS A 323      -8.506  -2.644   2.822  1.00 21.97           O
ATOM   3630  CB  HIS A 323      -9.128  -0.768  -0.013  1.00 19.56           C
ATOM   3631  CG  HIS A 323      -9.104   0.376   0.952  1.00 20.31           C
ATOM   3632  ND1 HIS A 323     -10.236   1.025   1.405  1.00 18.55           N
ATOM   3633  CD2 HIS A 323      -8.046   0.962   1.600  1.00 19.48           C
ATOM   3634  CE1 HIS A 323      -9.822   1.979   2.236  1.00 19.82           C
ATOM   3635  NE2 HIS A 323      -8.506   2.002   2.393  1.00 17.55           N
ATOM   3636  H   HIS A 323     -10.697  -2.045   2.248  1.00  0.00           H
ATOM   3637  HA  HIS A 323      -9.349  -2.889  -0.181  1.00  0.00           H
ATOM   3638  HB2 HIS A 323      -8.161  -0.744  -0.502  1.00  0.00           H
ATOM   3639  HB3 HIS A 323      -9.859  -0.564  -0.792  1.00  0.00           H
ATOM   3640  HD1 HIS A 323     -11.206   0.799   1.199  1.00  0.00           H
ATOM   3641  HD2 HIS A 323      -7.001   0.706   1.554  1.00  0.00           H
ATOM   3642  HE1 HIS A 323     -10.477   2.659   2.755  1.00  0.00           H
ATOM   3643  N   PHE A 324      -7.071  -2.848   1.097  1.00 20.35           N
ATOM   3644  CA  PHE A 324      -5.828  -3.128   1.809  1.00 21.54           C
ATOM   3645  C   PHE A 324      -5.171  -1.771   2.107  1.00 21.67           C
ATOM   3646  O   PHE A 324      -5.113  -0.919   1.220  1.00 19.86           O
ATOM   3647  CB  PHE A 324      -4.899  -3.916   0.853  1.00 21.99           C
ATOM   3648  CG  PHE A 324      -5.511  -5.149   0.197  1.00 23.32           C
ATOM   3649  CD1 PHE A 324      -6.225  -6.092   0.961  1.00 23.40           C
ATOM   3650  CD2 PHE A 324      -5.362  -5.360  -1.191  1.00 21.47           C
ATOM   3651  CE1 PHE A 324      -6.772  -7.233   0.349  1.00 23.76           C
ATOM   3652  CE2 PHE A 324      -5.920  -6.498  -1.808  1.00 21.69           C
ATOM   3653  CZ  PHE A 324      -6.625  -7.439  -1.036  1.00 21.06           C
ATOM   3654  H   PHE A 324      -6.938  -2.709   0.091  1.00  0.00           H
ATOM   3655  HA  PHE A 324      -6.011  -3.683   2.725  1.00  0.00           H
ATOM   3656  HB2 PHE A 324      -4.543  -3.258   0.059  1.00  0.00           H
ATOM   3657  HB3 PHE A 324      -4.003  -4.231   1.390  1.00  0.00           H
ATOM   3658  HD1 PHE A 324      -6.347  -5.955   2.023  1.00  0.00           H
ATOM   3659  HD2 PHE A 324      -4.798  -4.651  -1.782  1.00  0.00           H
ATOM   3660  HE1 PHE A 324      -7.315  -7.941   0.952  1.00  0.00           H
ATOM   3661  HE2 PHE A 324      -5.802  -6.656  -2.869  1.00  0.00           H
ATOM   3662  HZ  PHE A 324      -7.052  -8.313  -1.503  1.00  0.00           H
ATOM   3663  N   TRP A 325      -4.721  -1.536   3.346  1.00 22.91           N
ATOM   3664  CA  TRP A 325      -4.194  -0.247   3.799  1.00 25.28           C
ATOM   3665  C   TRP A 325      -2.705  -0.193   3.395  1.00 26.42           C
ATOM   3666  O   TRP A 325      -1.861  -0.871   3.984  1.00 30.29           O
ATOM   3667  CB  TRP A 325      -4.386  -0.168   5.342  1.00 24.63           C
ATOM   3668  CG  TRP A 325      -4.778   1.146   5.960  1.00 24.92           C
ATOM   3669  CD1 TRP A 325      -5.443   2.153   5.350  1.00 22.73           C
ATOM   3670  CD2 TRP A 325      -4.548   1.610   7.332  1.00 22.74           C
ATOM   3671  NE1 TRP A 325      -5.696   3.158   6.256  1.00 25.68           N
ATOM   3672  CE3 TRP A 325      -3.866   1.093   8.457  1.00 22.84           C
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ATOM   3673  CE2 TRP A 325      -5.153   2.892   7.491  1.00 24.25           C
ATOM   3674  CZ3 TRP A 325      -3.812   1.791   9.678  1.00 20.89           C
ATOM   3675  CZ2 TRP A 325      -5.106   3.600   8.704  1.00 22.79           C
ATOM   3676  CH2 TRP A 325      -4.428   3.048   9.803  1.00 24.61           C
ATOM   3677  H   TRP A 325     -4.673  -2.301   4.014  1.00  0.00           H
ATOM   3678  HA  TRP A 325      -4.745   0.550   3.300  1.00  0.00           H
ATOM   3679  HB2 TRP A 325      -5.188  -0.839   5.645  1.00  0.00           H
ATOM   3680  HB3 TRP A 325      -3.499  -0.531   5.861  1.00  0.00           H
ATOM   3681  HD1 TRP A 325      -5.788   2.151   4.326  1.00  0.00           H
ATOM   3682  HE1 TRP A 325      -6.261   3.968   5.992  1.00  0.00           H
ATOM   3683  HE3 TRP A 325      -3.362   0.148   8.378  1.00  0.00           H
ATOM   3684  HZ3 TRP A 325      -3.290   1.362  10.522  1.00  0.00           H
ATOM   3685  HZ2 TRP A 325      -5.576   4.561   8.797  1.00  0.00           H
ATOM   3686  HH2 TRP A 325      -4.374   3.586  10.737  1.00  0.00           H
ATOM   3687  N   SER A 326     -2.397   0.567   2.336  1.00 24.03           N
ATOM   3688  CA  SER A 326      -1.170   0.487   1.541  1.00 22.71           C
ATOM   3689  C   SER A 326      0.115   0.992   2.235  1.00 21.08           C
ATOM   3690  O   SER A 326      1.218   0.816   1.728  1.00 19.92           O
ATOM   3691  CB  SER A 326      -1.424   1.239   0.221  1.00 22.45           C
ATOM   3692  OG  SER A 326      -1.919   2.550   0.437  1.00 23.98           O
ATOM   3693  H   SER A 326     -3.116   1.139   1.918  1.00  0.00           H
ATOM   3694  HA  SER A 326      -1.018  -0.565   1.304  1.00  0.00           H
ATOM   3695  HB2 SER A 326      -0.505   1.300  -0.363  1.00  0.00           H
ATOM   3696  HB3 SER A 326      -2.132   0.683  -0.394  1.00  0.00           H
ATOM   3697  HG  SER A 326      -1.826   3.020  -0.406  1.00  0.00           H
ATOM   3698  N   ASN A 327     -0.002   1.549   3.442  1.00 18.51           N
ATOM   3699  CA  ASN A 327      1.070   1.919   4.372  1.00 18.42           C
ATOM   3700  C   ASN A 327      1.973   0.744   4.836  1.00 19.32           C
ATOM   3701  O   ASN A 327      2.992   0.974   5.496  1.00 18.72           O
ATOM   3702  CB  ASN A 327      0.433   2.634   5.594  1.00 18.64           C
ATOM   3703  CG  ASN A 327      -0.784   1.946   6.183  1.00 18.91           C
ATOM   3704  OD1 ASN A 327      -1.907   2.232   5.812  1.00 17.18           O
ATOM   3705  ND2 ASN A 327      -0.571   1.049   7.184  1.00 16.88           N
ATOM   3706  H   ASN A 327     -0.959   1.661   3.756  1.00  0.00           H
ATOM   3707  HA  ASN A 327      1.723   2.615   3.845  1.00  0.00           H
ATOM   3708  HB2 ASN A 327      1.185   2.819   6.369  1.00  0.00           H
ATOM   3709  HB3 ASN A 327      0.088   3.599   5.219  1.00  0.00           H
ATOM   3710 HD21 ASN A 327      0.368   0.742   7.425  1.00  0.00           H
ATOM   3711 HD22 ASN A 327      -1.346   0.438   7.394  1.00  0.00           H
ATOM   3712  N   PHE A 328      1.592  -0.501   4.520  1.00 18.00           N
ATOM   3713  CA  PHE A 328      2.384  -1.714   4.655  1.00 19.94           C
ATOM   3714  C   PHE A 328      2.056  -2.612   3.467  1.00 20.27           C
ATOM   3715  O   PHE A 328      1.051  -3.325   3.493  1.00 20.85           O
ATOM   3716  CB  PHE A 328      2.138  -2.396   6.011  1.00 20.17           C
ATOM   3717  CG  PHE A 328      3.078  -3.548   6.336  1.00 21.71           C
ATOM   3718  CD1 PHE A 328      2.795  -4.857   5.890  1.00 20.89           C
ATOM   3719  CD2 PHE A 328      4.243  -3.311   7.094  1.00 21.40           C
ATOM   3720  CE1 PHE A 328      3.662  -5.918   6.213  1.00 23.81           C
ATOM   3721  CE2 PHE A 328      5.095  -4.375   7.441  1.00 23.59           C
ATOM   3722  CZ  PHE A 328      4.805  -5.679   6.996  1.00 20.62           C
ATOM   3723  H   PHE A 328      0.736  -0.604   3.985  1.00  0.00           H
ATOM   3724  HA  PHE A 328      3.441  -1.451   4.601  1.00  0.00           H
ATOM   3725  HB2 PHE A 328      2.244  -1.656   6.792  1.00  0.00           H
ATOM   3726  HB3 PHE A 328      1.106  -2.740   6.075  1.00  0.00           H
ATOM   3727  HD1 PHE A 328      1.922  -5.054   5.286  1.00  0.00           H
ATOM   3728  HD2 PHE A 328      4.485  -2.311   7.417  1.00  0.00           H
ATOM   3729  HE1 PHE A 328      3.448  -6.918   5.862  1.00  0.00           H
ATOM   3730  HE2 PHE A 328      5.978  -4.189   8.034  1.00  0.00           H
ATOM   3731  HZ  PHE A 328      5.464  -6.498   7.243  1.00  0.00           H
ATOM   3732  N   GLU A 329      2.902  -2.570   2.440  1.00 21.96           N
ATOM   3733  CA  GLU A 329      2.871  -3.457   1.290  1.00 21.09           C
ATOM   3734  C   GLU A 329      4.281  -4.006   1.145  1.00 20.76           C
ATOM   3735  O   GLU A 329      5.195  -3.220   0.916  1.00 20.35           O
ATOM   3736  CB  GLU A 329      2.466  -2.672   0.033  1.00 20.27           C
ATOM   3737  CG  GLU A 329      0.997  -2.243   0.076  1.00 21.97           C
ATOM   3738  CD  GLU A 329      0.596  -1.363  -1.090  1.00 23.07           C
ATOM   3739  OE1 GLU A 329      1.453  -0.712  -1.719  1.00 20.27           O
ATOM   3740  OE2 GLU A 329      -0.612  -1.318  -1.406  1.00 25.60           O1-
ATOM   3741  H   GLU A 329      3.704  -1.958   2.500  1.00  0.00           H
ATOM   3742  HA  GLU A 329      2.170  -4.279   1.440  1.00  0.00           H
ATOM   3743  HB2 GLU A 329      3.110  -1.800  -0.087  1.00  0.00           H
ATOM   3744  HB3 GLU A 329      2.624  -3.286  -0.856  1.00  0.00           H
ATOM   3745  HG2 GLU A 329      0.355  -3.123   0.108  1.00  0.00           H
ATOM   3746  HG3 GLU A 329      0.810  -1.691   0.991  1.00  0.00           H
ATOM   3747  N   ILE A 330      4.447  -5.322   1.278  1.00 20.01           N
ATOM   3748  CA  ILE A 330      5.604  -6.089   0.830  1.00 21.19           C
ATOM   3749  C   ILE A 330      5.093  -6.675  -0.494  1.00 21.93           C
ATOM   3750  O   ILE A 330      4.350  -7.659  -0.495  1.00 20.27           O
ATOM   3751  CB  ILE A 330      5.909  -7.203   1.878  1.00 20.93           C
ATOM   3752  CG1 ILE A 330      6.388  -6.591   3.214  1.00 21.73           C
ATOM   3753  CG2 ILE A 330      6.934  -8.258   1.398  1.00 18.92           C
ATOM   3754  CD1 ILE A 330      6.394  -7.567   4.398  1.00 23.49           C
ATOM   3755  H   ILE A 330      3.602  -5.869   1.445  1.00  0.00           H
ATOM   3756  HA  ILE A 330      6.483  -5.465   0.664  1.00  0.00           H
ATOM   3757  HB  ILE A 330      4.973  -7.725   2.062  1.00  0.00           H
ATOM   3758 HG12 ILE A 330      7.390  -6.184   3.078  1.00  0.00           H
ATOM   3759 HG13 ILE A 330      5.762  -5.743   3.492  1.00  0.00           H
ATOM   3760 HG21 ILE A 330      6.964  -9.112   2.070  1.00  0.00           H
ATOM   3761 HG22 ILE A 330      6.705  -8.658   0.411  1.00  0.00           H
ATOM   3762 HG23 ILE A 330      7.939  -7.842   1.365  1.00  0.00           H
ATOM   3763 HD11 ILE A 330      6.816  -7.100   5.283  1.00  0.00           H
ATOM   3764 HD12 ILE A 330      5.383  -7.869   4.661  1.00  0.00           H
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ATOM   3765 HD13 ILE A 330      6.978  -8.464   4.204  1.00  0.00           H
ATOM   3766  N   ALA A 331      5.397  -6.021  -1.614  1.00 21.39           N
ATOM   3767  CA  ALA A 331      4.784  -6.304  -2.903  1.00 22.41           C
ATOM   3768  C   ALA A 331      5.787  -6.175  -4.045  1.00 21.44           C
ATOM   3769  O   ALA A 331      6.856  -5.582  -3.895  1.00 20.66           O
ATOM   3770  CB  ALA A 331      3.504  -5.471  -3.078  1.00 21.06           C
ATOM   3771  H   ALA A 331      6.037  -5.227  -1.572  1.00  0.00           H
ATOM   3772  HA  ALA A 331      4.491  -7.355  -2.920  1.00  0.00           H
ATOM   3773  HB1 ALA A 331      3.055  -5.624  -4.060  1.00  0.00           H
ATOM   3774  HB2 ALA A 331      2.757  -5.730  -2.328  1.00  0.00           H
ATOM   3775  HB3 ALA A 331      3.707  -4.409  -2.967  1.00  0.00           H
ATOM   3776  N   ASN A 332      5.448  -6.775  -5.183  1.00 22.89           N
ATOM   3777  CA  ASN A 332      6.214  -6.744  -6.422  1.00 20.34           C
ATOM   3778  C   ASN A 332      5.817  -5.465  -7.192  1.00 21.01           C
ATOM   3779  O   ASN A 332      4.632  -5.166  -7.324  1.00 20.20           O
ATOM   3780  CB  ASN A 332      5.811  -8.001  -7.214  1.00 21.25           C
ATOM   3781  CG  ASN A 332      6.635  -8.212  -8.478  1.00 19.39           C
ATOM   3782  OD1 ASN A 332      6.288  -7.667  -9.515  1.00 19.86           O
ATOM   3783  ND2 ASN A 332      7.700  -9.003  -8.435  1.00 20.38           N
ATOM   3784  H   ASN A 332      4.546  -7.241  -5.209  1.00  0.00           H
ATOM   3785  HA  ASN A 332      7.281  -6.779  -6.216  1.00  0.00           H
ATOM   3786  HB2 ASN A 332      5.902  -8.888  -6.585  1.00  0.00           H
ATOM   3787  HB3 ASN A 332      4.761  -7.934  -7.502  1.00  0.00           H
ATOM   3788 HD21 ASN A 332      8.058  -9.365  -7.558  1.00  0.00           H
ATOM   3789 HD22 ASN A 332      8.188  -9.210  -9.296  1.00  0.00           H
ATOM   3790  N   LEU A 333      6.802  -4.720  -7.708  1.00 20.23           N
ATOM   3791  CA  LEU A 333      6.612  -3.487  -8.479  1.00 22.19           C
ATOM   3792  C   LEU A 333      6.269  -3.799  -9.940  1.00 22.56           C
ATOM   3793  O   LEU A 333      5.600  -3.000 -10.592  1.00 23.16           O
ATOM   3794  CB  LEU A 333      7.933  -2.675  -8.518  1.00 20.41           C
ATOM   3795  CG  LEU A 333      8.311  -1.979  -7.201  1.00 19.24           C
ATOM   3796  CD1 LEU A 333      9.780  -1.540  -7.193  1.00 21.42           C
ATOM   3797  CD2 LEU A 333      7.393  -0.778  -6.917  1.00 20.07           C
ATOM   3798  H   LEU A 333      7.745  -5.104  -7.683  1.00  0.00           H
ATOM   3799  HA  LEU A 333      5.799  -2.896  -8.056  1.00  0.00           H
ATOM   3800  HB2 LEU A 333      8.743  -3.335  -8.828  1.00  0.00           H
ATOM   3801  HB3 LEU A 333      7.881  -1.909  -9.297  1.00  0.00           H
ATOM   3802  HG  LEU A 333      8.218  -2.710  -6.403  1.00  0.00           H
ATOM   3803 HD11 LEU A 333     10.067  -1.150  -6.218  1.00  0.00           H
ATOM   3804 HD12 LEU A 333     10.442  -2.378  -7.400  1.00  0.00           H
ATOM   3805 HD13 LEU A 333      9.973  -0.762  -7.931  1.00  0.00           H
ATOM   3806 HD21 LEU A 333      7.654  -0.291  -5.978  1.00  0.00           H
ATOM   3807 HD22 LEU A 333      7.463  -0.028  -7.705  1.00  0.00           H
ATOM   3808 HD23 LEU A 333      6.347  -1.072  -6.837  1.00  0.00           H
ATOM   3809  N   ASN A 334      6.697  -4.956 -10.467  1.00 22.33           N
ATOM   3810  CA  ASN A 334      6.465  -5.348 -11.862  1.00 23.39           C
ATOM   3811  C   ASN A 334      4.982  -5.675 -12.116  1.00 23.98           C
ATOM   3812  O   ASN A 334      4.530  -5.588 -13.255  1.00 23.96           O
ATOM   3813  CB  ASN A 334      7.358  -6.530 -12.318  1.00 25.18           C
ATOM   3814  CG  ASN A 334      8.862  -6.278 -12.161  1.00 27.49           C
ATOM   3815  OD1 ASN A 334      9.326  -5.145 -12.289  1.00 28.65           O
ATOM   3816  ND2 ASN A 334      9.628  -7.317 -11.845  1.00 26.16           N
ATOM   3817  H   ASN A 334      7.165  -5.621  -9.862  1.00  0.00           H
ATOM   3818  HA  ASN A 334      6.721  -4.490 -12.479  1.00  0.00           H
ATOM   3819  HB2 ASN A 334      7.081  -7.451 -11.809  1.00  0.00           H
ATOM   3820  HB3 ASN A 334      7.176  -6.722 -13.376  1.00  0.00           H
ATOM   3821 HD21 ASN A 334      9.229  -8.233 -11.722  1.00  0.00           H
ATOM   3822 HD22 ASN A 334     10.659  -7.211 -11.758  1.00  0.00           H
ATOM   3823  N   LEU A 335      4.203  -5.936 -11.053  1.00 23.74           N
ATOM   3824  CA  LEU A 335      2.738  -5.975 -11.048  1.00 22.83           C
ATOM   3825  C   LEU A 335      2.139  -4.612 -11.427  1.00 23.38           C
ATOM   3826  O   LEU A 335      1.166  -4.551 -12.175  1.00 20.24           O
ATOM   3827  CB  LEU A 335      2.247  -6.425  -9.650  1.00 22.39           C
ATOM   3828  CG  LEU A 335      0.712  -6.506  -9.453  1.00 22.32           C
ATOM   3829  CD1 LEU A 335      0.049  -7.522 -10.396  1.00 21.69           C
ATOM   3830  CD2 LEU A 335      0.370  -6.808  -7.986  1.00 20.81           C
ATOM   3831  H   LEU A 335      4.679  -6.046 -10.168  1.00  0.00           H
ATOM   3832  HA  LEU A 335      2.409  -6.688 -11.801  1.00  0.00           H
ATOM   3833  HB2 LEU A 335      2.686  -7.396  -9.416  1.00  0.00           H
ATOM   3834  HB3 LEU A 335      2.645  -5.733  -8.906  1.00  0.00           H
ATOM   3835  HG  LEU A 335      0.273  -5.532  -9.666  1.00  0.00           H
ATOM   3836 HD11 LEU A 335     -1.014  -7.634 -10.180  1.00  0.00           H
ATOM   3837 HD12 LEU A 335      0.125  -7.212 -11.439  1.00  0.00           H
ATOM   3838 HD13 LEU A 335      0.508  -8.506 -10.313  1.00  0.00           H
ATOM   3839 HD21 LEU A 335     -0.709  -6.837  -7.829  1.00  0.00           H
ATOM   3840 HD22 LEU A 335      0.780  -7.765  -7.671  1.00  0.00           H
ATOM   3841 HD23 LEU A 335      0.773  -6.039  -7.324  1.00  0.00           H
ATOM   3842  N   TRP A 336      2.736  -3.513 -10.960  1.00 20.71           N
ATOM   3843  CA  TRP A 336      2.275  -2.165 -11.270  1.00 21.14           C
ATOM   3844  C   TRP A 336      2.848  -1.682 -12.614  1.00 20.82           C
ATOM   3845  O   TRP A 336      2.200  -0.912 -13.316  1.00 21.72           O
ATOM   3846  CB  TRP A 336      2.689  -1.213 -10.142  1.00 19.56           C
ATOM   3847  CG  TRP A 336      2.308  -1.590  -8.736  1.00 21.10           C
ATOM   3848  CD1 TRP A 336      3.084  -1.365  -7.651  1.00 20.91           C
ATOM   3849  CD2 TRP A 336      1.091  -2.233  -8.224  1.00 20.60           C
ATOM   3850  NE1 TRP A 336      2.417  -1.770  -6.514  1.00 21.76           N
ATOM   3851  CE3 TRP A 336     -0.084  -2.781  -8.793  1.00 21.74           C
ATOM   3852  CE2 TRP A 336      1.181  -2.287  -6.801  1.00 18.03           C
ATOM   3853  CZ3 TRP A 336     -1.117  -3.311  -7.991  1.00 18.29           C
ATOM   3854  CZ2 TRP A 336      0.153  -2.788  -5.989  1.00 20.48           C
ATOM   3855  CH2 TRP A 336     -1.010  -3.297  -6.589  1.00 21.36           C
ATOM   3856  H   TRP A 336      3.562  -3.608 -10.385  1.00  0.00           H
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ATOM   3857  HA  TRP A 336       1.193  -2.153 -11.353  1.00  0.00           H
ATOM   3858  HB2 TRP A 336       3.764  -1.036 -10.172  1.00  0.00           H
ATOM   3859  HB3 TRP A 336       2.214  -0.253 -10.339  1.00  0.00           H
ATOM   3860  HD1 TRP A 336       4.058  -0.897  -7.685  1.00  0.00           H
ATOM   3861  HE1 TRP A 336       2.770  -1.691  -5.553  1.00  0.00           H
ATOM   3862  HE3 TRP A 336      -0.203  -2.799  -9.863  1.00  0.00           H
ATOM   3863  HZ3 TRP A 336      -1.994  -3.729  -8.457  1.00  0.00           H
ATOM   3864  HZ2 TRP A 336       0.271  -2.784  -4.918  1.00  0.00           H
ATOM   3865  HH2 TRP A 336      -1.808  -3.684  -5.976  1.00  0.00           H
ATOM   3866  N   ARG A 337       4.006  -2.204 -13.041  1.00 21.65           N
ATOM   3867  CA  ARG A 337       4.547  -1.962 -14.381  1.00 20.04           C
ATOM   3868  C   ARG A 337       3.846  -2.816 -15.460  1.00 18.23           C
ATOM   3869  O   ARG A 337       4.145  -2.625 -16.643  1.00 17.77           O
ATOM   3870  CB  ARG A 337       6.052  -2.305 -14.424  1.00 21.14           C
ATOM   3871  CG  ARG A 337       6.918  -1.465 -13.472  1.00 20.85           C
ATOM   3872  CD  ARG A 337       8.398  -1.870 -13.498  1.00 23.87           C
ATOM   3873  NE  ARG A 337       9.154  -1.060 -12.546  1.00 23.95           N
ATOM   3874  CZ  ARG A 337       9.848  -1.446 -11.474  1.00 25.49           C
ATOM   3875  NH1 ARG A 337      10.076  -2.726 -11.178  1.00 26.97           N
ATOM   3876  NH2 ARG A 337      10.325  -0.509 -10.669  1.00 26.66          N1+
ATOM   3877  H   ARG A 337       4.512  -2.800 -12.398  1.00  0.00           H
ATOM   3878  HA  ARG A 337       4.413  -0.911 -14.644  1.00  0.00           H
ATOM   3879  HB2 ARG A 337       6.190  -3.367 -14.230  1.00  0.00           H
ATOM   3880  HB3 ARG A 337       6.430  -2.149 -15.435  1.00  0.00           H
ATOM   3881  HG2 ARG A 337       6.827  -0.410 -13.729  1.00  0.00           H
ATOM   3882  HG3 ARG A 337       6.550  -1.556 -12.452  1.00  0.00           H
ATOM   3883  HD2 ARG A 337       8.506  -2.929 -13.274  1.00  0.00           H
ATOM   3884  HD3 ARG A 337       8.821  -1.709 -14.490  1.00  0.00           H
ATOM   3885  HE  ARG A 337       9.407  -0.105 -12.910  1.00  0.00           H
ATOM   3886 HH11 ARG A 337       9.753  -3.514 -11.749  1.00  0.00           H
ATOM   3887 HH12 ARG A 337      10.794  -2.920 -10.477  1.00  0.00           H
ATOM   3888 HH21 ARG A 337      10.257   0.499 -10.984  1.00  0.00           H
ATOM   3889 HH22 ARG A 337      10.992  -0.670  -9.917  1.00  0.00           H
ATOM   3890  N   SER A 338       2.949  -3.744 -15.086  1.00 17.15           N
ATOM   3891  CA  SER A 338       2.230  -4.629 -16.004  1.00 19.46           C
ATOM   3892  C   SER A 338       1.175  -3.840 -16.812  1.00 20.12           C
ATOM   3893  O   SER A 338       0.605  -2.889 -16.266  1.00 21.09           O
ATOM   3894  CB  SER A 338       1.549  -5.781 -15.222  1.00 20.32           C
ATOM   3895  OG  SER A 338       0.360  -5.425 -14.534  1.00 21.76           O
ATOM   3896  H   SER A 338       2.740  -3.827 -14.102  1.00  0.00           H
ATOM   3897  HA  SER A 338       2.989  -5.064 -16.652  1.00  0.00           H
ATOM   3898  HB2 SER A 338       1.257  -6.551 -15.934  1.00  0.00           H
ATOM   3899  HB3 SER A 338       2.246  -6.258 -14.532  1.00  0.00           H
ATOM   3900  HG  SER A 338       0.602  -5.044 -13.684  1.00  0.00           H
ATOM   3901  N   PRO A 339       0.893  -4.216 -18.084  1.00 22.35           N
ATOM   3902  CA  PRO A 339      -0.158  -3.612 -18.929  1.00 21.08           C
ATOM   3903  C   PRO A 339      -1.515  -3.425 -18.222  1.00 19.47           C
ATOM   3904  O   PRO A 339      -2.078  -2.332 -18.219  1.00 20.76           O
ATOM   3905  CB  PRO A 339      -0.267  -4.543 -20.142  1.00 20.47           C
ATOM   3906  CG  PRO A 339       1.071  -5.249 -20.241  1.00 21.32           C
ATOM   3907  CD  PRO A 339       1.608  -5.268 -18.814  1.00 19.67           C
ATOM   3908  HA  PRO A 339       0.184  -2.635 -19.273  1.00  0.00           H
ATOM   3909  HB2 PRO A 339      -1.053  -5.284 -20.002  1.00  0.00           H
ATOM   3910  HB3 PRO A 339      -0.490  -3.987 -21.051  1.00  0.00           H
ATOM   3911  HG2 PRO A 339       0.990  -6.244 -20.680  1.00  0.00           H
ATOM   3912  HG3 PRO A 339       1.734  -4.660 -20.876  1.00  0.00           H
ATOM   3913  HD2 PRO A 339       1.404  -6.234 -18.352  1.00  0.00           H
ATOM   3914  HD3 PRO A 339       2.687  -5.108 -18.823  1.00  0.00           H
ATOM   3915  N   ALA A 340      -1.967  -4.470 -17.510  1.00 19.58           N
ATOM   3916  CA  ALA A 340      -3.189  -4.490 -16.714  1.00 19.57           C
ATOM   3917  C   ALA A 340      -3.295  -3.351 -15.691  1.00 19.42           C
ATOM   3918  O   ALA A 340      -4.348  -2.728 -15.591  1.00 17.04           O
ATOM   3919  CB  ALA A 340      -3.330  -5.856 -16.029  1.00 20.76           C
ATOM   3920  H   ALA A 340      -1.445  -5.328 -17.572  1.00  0.00           H
ATOM   3921  HA  ALA A 340      -4.017  -4.356 -17.408  1.00  0.00           H
ATOM   3922  HB1 ALA A 340      -4.237  -5.897 -15.422  1.00  0.00           H
ATOM   3923  HB2 ALA A 340      -3.397  -6.657 -16.765  1.00  0.00           H
ATOM   3924  HB3 ALA A 340      -2.485  -6.066 -15.371  1.00  0.00           H
ATOM   3925  N   TYR A 341      -2.210  -3.037 -14.967  1.00 18.41           N
ATOM   3926  CA  TYR A 341      -2.220  -1.923 -14.022  1.00 20.02           C
ATOM   3927  C   TYR A 341      -1.918  -0.586 -14.717  1.00 20.29           C
ATOM   3928  O   TYR A 341      -2.452   0.437 -14.291  1.00 20.54           O
ATOM   3929  CB  TYR A 341      -1.187  -2.133 -12.907  1.00 19.15           C
ATOM   3930  CG  TYR A 341      -1.342  -1.123 -11.776  1.00 19.29           C
ATOM   3931  CD1 TYR A 341      -2.358  -1.286 -10.815  1.00 18.41           C
ATOM   3932  CD2 TYR A 341      -0.520   0.017 -11.716  1.00 17.75           C
ATOM   3933  CE1 TYR A 341      -2.509  -0.359  -9.761  1.00 19.60           C
ATOM   3934  CE2 TYR A 341      -0.679   0.948 -10.679  1.00 19.82           C
ATOM   3935  CZ  TYR A 341      -1.651   0.751  -9.683  1.00 19.34           C
ATOM   3936  OH  TYR A 341      -1.747   1.641  -8.654  1.00 19.62           O
ATOM   3937  H   TYR A 341      -1.346  -3.534 -15.145  1.00  0.00           H
ATOM   3938  HA  TYR A 341      -3.199  -1.861 -13.549  1.00  0.00           H
ATOM   3939  HB2 TYR A 341      -1.296  -3.132 -12.485  1.00  0.00           H
ATOM   3940  HB3 TYR A 341      -0.176  -2.091 -13.316  1.00  0.00           H
ATOM   3941  HD1 TYR A 341      -3.017  -2.130 -10.900  1.00  0.00           H
ATOM   3942  HD2 TYR A 341       0.225   0.199 -12.476  1.00  0.00           H
ATOM   3943  HE1 TYR A 341      -3.276  -0.497  -9.014  1.00  0.00           H
ATOM   3944  HE2 TYR A 341      -0.045   1.813 -10.670  1.00  0.00           H
ATOM   3945  HH  TYR A 341      -1.026   2.264  -8.719  1.00  0.00           H
ATOM   3946  N   ARG A 342      -1.106  -0.568 -15.783  1.00 20.95           N
ATOM   3947  CA  ARG A 342      -0.752   0.637 -16.536  1.00 21.79           C
ATOM   3948  C   ARG A 342      -1.992   1.299 -17.143  1.00 22.81           C
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ATOM   3949  O   ARG A 342      -2.299   2.450 -16.830  1.00 22.78           O
ATOM   3950  CB  ARG A 342       0.202   0.287 -17.683  1.00 23.26           C
ATOM   3951  CG  ARG A 342       1.643  -0.022 -17.296  1.00 23.00           C
ATOM   3952  CD  ARG A 342       2.342  -0.728 -18.465  1.00 25.52           C
ATOM   3953  NE  ARG A 342       3.785  -0.488 -18.437  1.00 27.12           N
ATOM   3954  CZ  ARG A 342       4.435   0.457 -19.124  1.00 24.20           C
ATOM   3955  NH1 ARG A 342       3.790   1.289 -19.949  1.00 21.44           N
ATOM   3956  NH2 ARG A 342       5.755   0.572 -18.964  1.00 25.12           N1+
ATOM   3957  H   ARG A 342      -0.718  -1.453 -16.097  1.00  0.00           H
ATOM   3958  HA  ARG A 342      -0.279   1.352 -15.862  1.00  0.00           H
ATOM   3959  HB2 ARG A 342      -0.208  -0.555 -18.238  1.00  0.00           H
ATOM   3960  HB3 ARG A 342       0.226   1.115 -18.393  1.00  0.00           H
ATOM   3961  HG2 ARG A 342       2.149   0.907 -17.037  1.00  0.00           H
ATOM   3962  HG3 ARG A 342       1.680  -0.643 -16.401  1.00  0.00           H
ATOM   3963  HD2 ARG A 342       2.179  -1.800 -18.404  1.00  0.00           H
ATOM   3964  HD3 ARG A 342       1.928  -0.439 -19.429  1.00  0.00           H
ATOM   3965  HE  ARG A 342       4.238  -1.176 -17.828  1.00  0.00           H
ATOM   3966 HH11 ARG A 342       2.765   1.223 -20.126  1.00  0.00           H
ATOM   3967 HH12 ARG A 342       4.232   2.017 -20.483  1.00  0.00           H
ATOM   3968 HH21 ARG A 342       6.250  -0.040 -18.331  1.00  0.00           H
ATOM   3969 HH22 ARG A 342       6.296   1.277 -19.440  1.00  0.00           H
ATOM   3970  N   GLU A 343      -2.722   0.543 -17.968  1.00 24.14           N
ATOM   3971  CA  GLU A 343      -3.894   1.012 -18.688  1.00 24.75           C
ATOM   3972  C   GLU A 343      -5.087   1.188 -17.721  1.00 24.10           C
ATOM   3973  O   GLU A 343      -5.966   2.011 -17.988  1.00 24.31           O
ATOM   3974  CB  GLU A 343      -4.223  -0.000 -19.808  1.00 25.68           C
ATOM   3975  CG  GLU A 343      -3.337   0.144 -21.073  1.00 30.62           C
ATOM   3976  CD  GLU A 343      -1.953  -0.500 -20.987  1.00 30.71           C
ATOM   3977  OE1 GLU A 343      -1.859  -1.691 -21.351  1.00 32.63           O
ATOM   3978  OE2 GLU A 343      -0.992   0.202 -20.596  1.00 29.45           O1-
ATOM   3979  H   GLU A 343      -2.376  -0.386 -18.205  1.00  0.00           H
ATOM   3980  HA  GLU A 343      -3.680   1.988 -19.129  1.00  0.00           H
ATOM   3981  HB2 GLU A 343      -4.172  -1.022 -19.428  1.00  0.00           H
ATOM   3982  HB3 GLU A 343      -5.258   0.140 -20.124  1.00  0.00           H
ATOM   3983  HG2 GLU A 343      -3.847  -0.327 -21.914  1.00  0.00           H
ATOM   3984  HG3 GLU A 343      -3.221   1.193 -21.345  1.00  0.00           H
ATOM   3985  N   TYR A 344      -5.091   0.498 -16.566  1.00 22.33           N
ATOM   3986  CA  TYR A 344      -6.000   0.762 -15.447  1.00 19.95           C
ATOM   3987  C   TYR A 344      -5.671   2.114 -14.808  1.00 21.16           C
ATOM   3988  O   TYR A 344      -6.559   2.957 -14.700  1.00 19.78           O
ATOM   3989  CB  TYR A 344      -5.926  -0.354 -14.381  1.00 17.99           C
ATOM   3990  CG  TYR A 344      -6.704  -0.083 -13.098  1.00 21.67           C
ATOM   3991  CD1 TYR A 344      -8.109  -0.008 -13.139  1.00 21.18           C
ATOM   3992  CD2 TYR A 344      -6.032   0.135 -11.875  1.00 21.43           C
ATOM   3993  CE1 TYR A 344      -8.833   0.323 -11.981  1.00 20.99           C
ATOM   3994  CE2 TYR A 344      -6.763   0.451 -10.711  1.00 21.57           C
ATOM   3995  CZ  TYR A 344      -8.165   0.577 -10.770  1.00 21.53           C
ATOM   3996  OH  TYR A 344      -8.872   0.970  -9.670  1.00 19.87           O
ATOM   3997  H   TYR A 344      -4.353  -0.181 -16.434  1.00  0.00           H
ATOM   3998  HA  TYR A 344      -7.021   0.817 -15.823  1.00  0.00           H
ATOM   3999  HB2 TYR A 344      -6.305  -1.280 -14.810  1.00  0.00           H
ATOM   4000  HB3 TYR A 344      -4.889  -0.543 -14.119  1.00  0.00           H
ATOM   4001  HD1 TYR A 344      -8.630  -0.181 -14.066  1.00  0.00           H
ATOM   4002  HD2 TYR A 344      -4.953   0.080 -11.824  1.00  0.00           H
ATOM   4003  HE1 TYR A 344      -9.904   0.389 -12.036  1.00  0.00           H
ATOM   4004  HE2 TYR A 344      -6.244   0.619  -9.780  1.00  0.00           H
ATOM   4005  HH  TYR A 344      -9.767   1.234  -9.882  1.00  0.00           H
ATOM   4006  N   PHE A 345      -4.408   2.350 -14.424  1.00 20.71           N
ATOM   4007  CA  PHE A 345      -3.974   3.601 -13.816  1.00 20.36           C
ATOM   4008  C   PHE A 345      -4.200   4.787 -14.764  1.00 21.44           C
ATOM   4009  O   PHE A 345      -4.757   5.794 -14.338  1.00 22.30           O
ATOM   4010  CB  PHE A 345      -2.502   3.550 -13.339  1.00 18.78           C
ATOM   4011  CG  PHE A 345      -2.073   4.889 -12.755  1.00 18.84           C
ATOM   4012  CD1 PHE A 345      -2.638   5.328 -11.538  1.00 19.24           C
ATOM   4013  CD2 PHE A 345      -1.299   5.779 -13.532  1.00 17.98           C
ATOM   4014  CE1 PHE A 345      -2.493   6.670 -11.141  1.00 17.82           C
ATOM   4015  CE2 PHE A 345      -1.153   7.118 -13.124  1.00 18.95           C
ATOM   4016  CZ  PHE A 345      -1.766   7.569 -11.940  1.00 18.47           C
ATOM   4017  H   PHE A 345      -3.707   1.619 -14.542  1.00  0.00           H
ATOM   4018  HA  PHE A 345      -4.606   3.764 -12.942  1.00  0.00           H
ATOM   4019  HB2 PHE A 345      -2.379   2.773 -12.584  1.00  0.00           H
ATOM   4020  HB3 PHE A 345      -1.844   3.280 -14.167  1.00  0.00           H
ATOM   4021  HD1 PHE A 345      -3.260   4.661 -10.958  1.00  0.00           H
ATOM   4022  HD2 PHE A 345      -0.904   5.472 -14.491  1.00  0.00           H
ATOM   4023  HE1 PHE A 345      -2.977   7.033 -10.249  1.00  0.00           H
ATOM   4024  HE2 PHE A 345      -0.619   7.823 -13.745  1.00  0.00           H
ATOM   4025  HZ  PHE A 345      -1.691   8.608 -11.659  1.00  0.00           H
ATOM   4026  N   ASP A 346      -3.835   4.676 -16.047  1.00 21.25           N
ATOM   4027  CA  ASP A 346      -4.011   5.785 -16.987  1.00 20.54           C
ATOM   4028  C   ASP A 346      -5.497   6.062 -17.293  1.00 20.57           C
ATOM   4029  O   ASP A 346      -5.870   7.217 -17.480  1.00 18.80           O
ATOM   4030  CB  ASP A 346      -3.181   5.575 -18.268  1.00 21.13           C
ATOM   4031  CG  ASP A 346      -2.600   6.906 -18.733  1.00 21.90           C
ATOM   4032  OD1 ASP A 346      -1.570   7.336 -18.164  1.00 20.23           O
ATOM   4033  OD2 ASP A 346      -3.219   7.540 -19.608  1.00 24.56           O1-
ATOM   4034  H   ASP A 346      -3.342   3.839 -16.358  1.00  0.00           H
ATOM   4035  HA  ASP A 346      -3.623   6.668 -16.475  1.00  0.00           H
ATOM   4036  HB2 ASP A 346      -2.340   4.907 -18.086  1.00  0.00           H
ATOM   4037  HB3 ASP A 346      -3.769   5.125 -19.069  1.00  0.00           H
ATOM   4038  N   THR A 347      -6.385   5.054 -17.179  1.00 20.11           N
ATOM   4039  CA  THR A 347      -7.844   5.243 -17.158  1.00 20.50           C
ATOM   4040  C   THR A 347      -8.302   6.113 -15.954  1.00 19.74           C
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ATOM   4041  O   THR A 347      -9.308   6.809 -16.068  1.00 19.02           O
ATOM   4042  CB  THR A 347      -8.578   3.862 -17.196  1.00 17.98           C
ATOM   4043  OG1 THR A 347      -8.339   3.194 -18.430  1.00 21.15           O
ATOM   4044  CG2 THR A 347     -10.110   3.924 -17.069  1.00 18.73           C
ATOM   4045  H   THR A 347      -6.017   4.137 -16.965  1.00  0.00           H
ATOM   4046  HA  THR A 347      -8.114   5.802 -18.056  1.00  0.00           H
ATOM   4047  HB  THR A 347      -8.218   3.220 -16.398  1.00  0.00           H
ATOM   4048  HG1 THR A 347      -7.417   2.901 -18.397  1.00  0.00           H
ATOM   4049 HG21 THR A 347     -10.563   2.938 -17.168  1.00  0.00           H
ATOM   4050 HG22 THR A 347     -10.404   4.282 -16.086  1.00  0.00           H
ATOM   4051 HG23 THR A 347     -10.555   4.592 -17.807  1.00  0.00           H
ATOM   4052  N   LEU A 348      -7.572   6.120 -14.826  1.00 20.95           N
ATOM   4053  CA  LEU A 348      -7.823   6.994 -13.678  1.00 20.70           C
ATOM   4054  C   LEU A 348      -7.133   8.362 -13.879  1.00 20.77           C
ATOM   4055  O   LEU A 348      -7.691   9.396 -13.503  1.00 22.33           O
ATOM   4056  CB  LEU A 348      -7.236   6.351 -12.388  1.00 19.16           C
ATOM   4057  CG  LEU A 348      -7.752   4.936 -12.031  1.00 19.34           C
ATOM   4058  CD1 LEU A 348      -6.974   4.371 -10.837  1.00 18.78           C
ATOM   4059  CD2 LEU A 348      -9.262   4.852 -11.755  1.00 16.55           C
ATOM   4060  H   LEU A 348      -6.724   5.564 -14.803  1.00  0.00           H
ATOM   4061  HA  LEU A 348      -8.893   7.162 -13.557  1.00  0.00           H
ATOM   4062  HB2 LEU A 348      -6.152   6.301 -12.466  1.00  0.00           H
ATOM   4063  HB3 LEU A 348      -7.379   7.015 -11.538  1.00  0.00           H
ATOM   4064  HG  LEU A 348      -7.549   4.283 -12.877  1.00  0.00           H
ATOM   4065 HD11 LEU A 348      -7.303   3.359 -10.604  1.00  0.00           H
ATOM   4066 HD12 LEU A 348      -5.904   4.326 -11.043  1.00  0.00           H
ATOM   4067 HD13 LEU A 348      -7.115   4.981  -9.945  1.00  0.00           H
ATOM   4068 HD21 LEU A 348      -9.571   3.810 -11.655  1.00  0.00           H
ATOM   4069 HD22 LEU A 348      -9.534   5.354 -10.827  1.00  0.00           H
ATOM   4070 HD23 LEU A 348      -9.846   5.280 -12.566  1.00  0.00           H
ATOM   4071  N   ASP A 349      -5.927   8.374 -14.462  1.00 21.51           N
ATOM   4072  CA  ASP A 349      -5.047   9.543 -14.563  1.00 21.24           C
ATOM   4073  C   ASP A 349      -5.469  10.512 -15.678  1.00 21.96           C
ATOM   4074  O   ASP A 349      -5.499  11.725 -15.461  1.00 19.94           O
ATOM   4075  CB  ASP A 349      -3.601   9.074 -14.838  1.00 18.89           C
ATOM   4076  CG  ASP A 349      -2.562  10.060 -14.328  1.00 19.84           C
ATOM   4077  OD1 ASP A 349      -2.699  10.549 -13.188  1.00 20.50           O
ATOM   4078  OD2 ASP A 349      -1.564  10.332 -15.032  1.00 19.99           O1-
ATOM   4079  H   ASP A 349      -5.518   7.471 -14.689  1.00  0.00           H
ATOM   4080  HA  ASP A 349      -5.100  10.070 -13.608  1.00  0.00           H
ATOM   4081  HB2 ASP A 349      -3.409   8.132 -14.328  1.00  0.00           H
ATOM   4082  HB3 ASP A 349      -3.427   8.888 -15.900  1.00  0.00           H
ATOM   4083  N   HIS A 350      -5.869   9.984 -16.846  1.00 22.62           N
ATOM   4084  CA  HIS A 350      -6.453  10.757 -17.950  1.00 23.51           C
ATOM   4085  C   HIS A 350      -7.938  11.089 -17.698  1.00 22.85           C
ATOM   4086  O   HIS A 350      -8.537  11.827 -18.477  1.00 22.01           O
ATOM   4087  CB  HIS A 350      -6.293  10.022 -19.305  1.00  0.00           C
ATOM   4088  CG  HIS A 350      -5.165  10.553 -20.158  1.00  0.00           C
ATOM   4089  ND1 HIS A 350      -3.988   9.863 -20.394  1.00  0.00           N
ATOM   4090  CD2 HIS A 350      -5.032  11.741 -20.845  1.00  0.00           C
ATOM   4091  CE1 HIS A 350      -3.237  10.611 -21.201  1.00  0.00           C
ATOM   4092  NE2 HIS A 350      -3.807  11.769 -21.517  1.00  0.00           N
ATOM   4093  H   HIS A 350      -5.779   8.978 -16.986  1.00  0.00           H
ATOM   4094  HA  HIS A 350      -5.949  11.715 -18.033  1.00  0.00           H
ATOM   4095  HB2 HIS A 350      -6.175   8.949 -19.184  1.00  0.00           H
ATOM   4096  HB3 HIS A 350      -7.188  10.137 -19.918  1.00  0.00           H
ATOM   4097  HD1 HIS A 350      -3.715   8.898 -20.056  1.00  0.00           H
ATOM   4098  HD2 HIS A 350      -5.723  12.569 -20.909  1.00  0.00           H
ATOM   4099  HE1 HIS A 350      -2.264  10.301 -21.558  1.00  0.00           H
ATOM   4100  N   GLN A 351      -8.530  10.596 -16.597  1.00 22.30           N
ATOM   4101  CA  GLN A 351      -9.795  11.097 -16.067  1.00 23.00           C
ATOM   4102  C   GLN A 351      -9.451  12.321 -15.199  1.00 22.67           C
ATOM   4103  O   GLN A 351      -9.825  13.437 -15.556  1.00 19.82           O
ATOM   4104  CB  GLN A 351     -10.510   9.974 -15.270  1.00 23.52           C
ATOM   4105  CG  GLN A 351     -12.029  10.160 -15.053  1.00 26.12           C
ATOM   4106  CD  GLN A 351     -12.418  10.705 -13.678  1.00 28.38           C
ATOM   4107  OE1 GLN A 351     -11.806  11.630 -13.164  1.00 27.29           O
ATOM   4108  NE2 GLN A 351     -13.437  10.130 -13.053  1.00 27.43           N
ATOM   4109  H   GLN A 351      -7.954  10.018 -16.003  1.00  0.00           H
ATOM   4110  HA  GLN A 351     -10.437  11.413 -16.892  1.00  0.00           H
ATOM   4111  HB2 GLN A 351     -10.399   9.056 -15.846  1.00  0.00           H
ATOM   4112  HB3 GLN A 351     -10.019   9.769 -14.320  1.00  0.00           H
ATOM   4113  HG2 GLN A 351     -12.448  10.811 -15.820  1.00  0.00           H
ATOM   4114  HG3 GLN A 351     -12.517   9.194 -15.189  1.00  0.00           H
ATOM   4115 HE21 GLN A 351     -13.776   9.236 -13.404  1.00  0.00           H
ATOM   4116 HE22 GLN A 351     -13.749  10.470 -12.150  1.00  0.00           H
ATOM   4117  N   GLY A 352      -8.675  12.133 -14.120  1.00 21.90           N
ATOM   4118  CA  GLY A 352      -8.120  13.200 -13.280  1.00 22.88           C
ATOM   4119  C   GLY A 352      -8.562  13.141 -11.812  1.00 23.50           C
ATOM   4120  O   GLY A 352      -8.013  13.848 -10.964  1.00 20.98           O
ATOM   4121  H   GLY A 352      -8.347  11.188 -13.934  1.00  0.00           H
ATOM   4122  HA2 GLY A 352      -7.035  13.099 -13.310  1.00  0.00           H
ATOM   4123  HA3 GLY A 352      -8.363  14.189 -13.671  1.00  0.00           H
ATOM   4124  N   GLY A 353      -9.545  12.283 -11.524  1.00 21.49           N
ATOM   4125  CA  GLY A 353     -10.111  11.802 -10.265  1.00 20.56           C
ATOM   4126  C   GLY A 353      -9.480  12.216  -8.934  1.00 21.34           C
ATOM   4127  O   GLY A 353     -10.146  12.836  -8.104  1.00 20.96           O
ATOM   4128  H   GLY A 353      -9.997  11.894 -12.348  1.00  0.00           H
ATOM   4129  HA2 GLY A 353     -11.182  12.009 -10.250  1.00  0.00           H
ATOM   4130  HA3 GLY A 353     -10.002  10.730 -10.322  1.00  0.00           H
ATOM   4131  N   PHE A 354      -8.190  11.896  -8.750  1.00 21.51           N
ATOM   4132  CA  PHE A 354      -7.342  12.205  -7.590  1.00 21.68           C
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ATOM   4133 C   PHE A 354      -7.430  13.671  -7.144  1.00 22.65          C
ATOM   4134 O   PHE A 354      -7.394  13.974  -5.952  1.00 23.57          O
ATOM   4135 CB  PHE A 354      -5.876  11.835  -7.907  1.00 20.06          C
ATOM   4136 CG  PHE A 354      -5.653  10.384  -8.294  1.00 22.30          C
ATOM   4137 CD1 PHE A 354      -5.552   9.398  -7.291  1.00 22.41          C
ATOM   4138 CD2 PHE A 354      -5.547  10.012  -9.652  1.00 19.69          C
ATOM   4139 CE1 PHE A 354      -5.382   8.047  -7.640  1.00 22.82          C
ATOM   4140 CE2 PHE A 354      -5.371   8.660 -10.002  1.00 19.35          C
ATOM   4141 CZ  PHE A 354      -5.302   7.675  -8.996  1.00 19.73          C
ATOM   4142 H   PHE A 354      -7.744  11.384  -9.499  1.00  0.00          H
ATOM   4143 HA  PHE A 354      -7.685  11.598  -6.754  1.00  0.00          H
ATOM   4144 HB2 PHE A 354      -5.491  12.475  -8.704  1.00  0.00          H
ATOM   4145 HB3 PHE A 354      -5.250  12.050  -7.038  1.00  0.00          H
ATOM   4146 HD1 PHE A 354      -5.612   9.673  -6.248  1.00  0.00          H
ATOM   4147 HD2 PHE A 354      -5.597  10.755 -10.437  1.00  0.00          H
ATOM   4148 HE1 PHE A 354      -5.308   7.295  -6.866  1.00  0.00          H
ATOM   4149 HE2 PHE A 354      -5.283   8.381 -11.043  1.00  0.00          H
ATOM   4150 HZ  PHE A 354      -5.171   6.635  -9.261  1.00  0.00          H
ATOM   4151 N   PHE A 355      -7.572  14.571  -8.120  1.00 22.12          N
ATOM   4152 CA  PHE A 355      -7.676  16.004  -7.922  1.00 21.19          C
ATOM   4153 C   PHE A 355      -9.139  16.445  -7.803  1.00 20.42          C
ATOM   4154 O   PHE A 355      -9.434  17.343  -7.017  1.00 20.48          O
ATOM   4155 CB  PHE A 355      -7.074  16.679  -9.166  1.00 22.36          C
ATOM   4156 CG  PHE A 355      -5.638  16.279  -9.451  1.00 24.02          C
ATOM   4157 CD1 PHE A 355      -4.673  16.321  -8.426  1.00 22.48          C
ATOM   4158 CD2 PHE A 355      -5.263  15.848 -10.739  1.00 24.49          C
ATOM   4159 CE1 PHE A 355      -3.350  15.930  -8.681  1.00 22.98          C
ATOM   4160 CE2 PHE A 355      -3.929  15.490 -11.006  1.00 25.14          C
ATOM   4161 CZ  PHE A 355      -2.968  15.547  -9.978  1.00 26.02          C
ATOM   4162 H   PHE A 355      -7.593  14.227  -9.077  1.00  0.00          H
ATOM   4163 HA  PHE A 355      -7.141  16.310  -7.025  1.00  0.00          H
ATOM   4164 HB2 PHE A 355      -7.683  16.471 -10.048  1.00  0.00          H
ATOM   4165 HB3 PHE A 355      -7.099  17.757  -9.029  1.00  0.00          H
ATOM   4166 HD1 PHE A 355      -4.933  16.669  -7.440  1.00  0.00          H
ATOM   4167 HD2 PHE A 355      -6.001  15.791 -11.524  1.00  0.00          H
ATOM   4168 HE1 PHE A 355      -2.639  15.935  -7.873  1.00  0.00          H
ATOM   4169 HE2 PHE A 355      -3.647  15.160 -11.995  1.00  0.00          H
ATOM   4170 HZ  PHE A 355      -1.940  15.287 -10.183  1.00  0.00          H
ATOM   4171 N   TYR A 356     -10.040  15.810  -8.563  1.00 19.12          N
ATOM   4172 CA  TYR A 356     -11.453  16.169  -8.703  1.00 18.71          C
ATOM   4173 C   TYR A 356     -12.284  15.819  -7.471  1.00 20.13          C
ATOM   4174 O   TYR A 356     -13.270  16.488  -7.182  1.00 17.47          O
ATOM   4175 CB  TYR A 356     -12.059  15.320  -9.835  1.00 17.74          C
ATOM   4176 CG  TYR A 356     -11.635  15.599 -11.257  1.00 21.18          C
ATOM   4177 CD1 TYR A 356     -10.923  16.760 -11.617  1.00 20.84          C
ATOM   4178 CD2 TYR A 356     -11.982  14.661 -12.246  1.00 21.61          C
ATOM   4179 CE1 TYR A 356     -10.495  16.938 -12.942  1.00 22.87          C
ATOM   4180 CE2 TYR A 356     -11.574  14.854 -13.574  1.00 22.71          C
ATOM   4181 CZ  TYR A 356     -10.792  15.971 -13.916  1.00 24.04          C
ATOM   4182 OH  TYR A 356     -10.293  16.099 -15.177  1.00 25.85          O
ATOM   4183 H   TYR A 356      -9.709  15.030  -9.114  1.00  0.00          H
ATOM   4184 HA  TYR A 356     -11.566  17.238  -8.890  1.00  0.00          H
ATOM   4185 HB2 TYR A 356     -11.881  14.262  -9.634  1.00  0.00          H
ATOM   4186 HB3 TYR A 356     -13.136  15.428  -9.826  1.00  0.00          H
ATOM   4187 HD1 TYR A 356     -10.680  17.514 -10.888  1.00  0.00          H
ATOM   4188 HD2 TYR A 356     -12.530  13.766 -11.992  1.00  0.00          H
ATOM   4189 HE1 TYR A 356      -9.921  17.811 -13.202  1.00  0.00          H
ATOM   4190 HE2 TYR A 356     -11.834  14.111 -14.314  1.00  0.00          H
ATOM   4191 HH  TYR A 356     -10.179  15.228 -15.572  1.00  0.00          H
ATOM   4192 N   GLU A 357     -11.920  14.737  -6.793  1.00 19.72          N
ATOM   4193 CA  GLU A 357     -12.472  14.311  -5.525  1.00 19.69          C
ATOM   4194 C   GLU A 357     -11.251  14.270  -4.603  1.00 21.19          C
ATOM   4195 O   GLU A 357     -10.549  15.281  -4.489  1.00 22.16          O
ATOM   4196 CB  GLU A 357     -13.267  12.999  -5.727  1.00 19.32          C
ATOM   4197 CG  GLU A 357     -14.614  13.221  -6.462  1.00 20.09          C
ATOM   4198 CD  GLU A 357     -14.881  12.280  -7.631  1.00 23.06          C
ATOM   4199 OE1 GLU A 357     -14.604  11.064  -7.538  1.00 20.05          O
ATOM   4200 OE2 GLU A 357     -15.416  12.772  -8.649  1.00 23.66          O1-
ATOM   4201 H   GLU A 357     -11.116  14.217  -7.135  1.00  0.00          H
ATOM   4202 HA  GLU A 357     -13.137  15.067  -5.104  1.00  0.00          H
ATOM   4203 HB2 GLU A 357     -12.644  12.278  -6.255  1.00  0.00          H
ATOM   4204 HB3 GLU A 357     -13.493  12.552  -4.760  1.00  0.00          H
ATOM   4205 HG2 GLU A 357     -15.442  13.147  -5.761  1.00  0.00          H
ATOM   4206 HG3 GLU A 357     -14.669  14.238  -6.847  1.00  0.00          H
ATOM   4207 N   ARG A 358     -10.968  13.138  -3.961  1.00 19.68          N
ATOM   4208 CA  ARG A 358      -9.759  12.925  -3.184  1.00 19.97          C
ATOM   4209 C   ARG A 358      -9.500  11.423  -3.157  1.00 20.10          C
ATOM   4210 O   ARG A 358      -9.514  10.822  -2.085  1.00 19.00          O
ATOM   4211 CB  ARG A 358      -9.877  13.599  -1.800  1.00 19.86          C
ATOM   4212 CG  ARG A 358      -8.603  13.541  -0.931  1.00 19.86          C
ATOM   4213 CD  ARG A 358      -8.857  12.990   0.480  1.00 19.26          C
ATOM   4214 NE  ARG A 358      -9.079  11.539   0.443  1.00 20.24          N
ATOM   4215 CZ  ARG A 358      -9.002  10.690   1.470  1.00 19.04          C
ATOM   4216 NH1 ARG A 358      -8.833  11.133   2.713  1.00 17.28          N
ATOM   4217 NH2 ARG A 358      -9.082   9.384   1.252  1.00 18.85          N1+
ATOM   4218 H   ARG A 358     -11.586  12.337  -4.058  1.00  0.00          H
ATOM   4219 HA  ARG A 358      -8.916  13.375  -3.714  1.00  0.00          H
ATOM   4220 HB2 ARG A 358     -10.149  14.647  -1.930  1.00  0.00          H
ATOM   4221 HB3 ARG A 358     -10.713  13.139  -1.271  1.00  0.00          H
ATOM   4222 HG2 ARG A 358      -7.826  12.947  -1.416  1.00  0.00          H
ATOM   4223 HG3 ARG A 358      -8.179  14.543  -0.858  1.00  0.00          H
ATOM   4224 HD2 ARG A 358      -7.972  13.173   1.087  1.00  0.00          H
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ATOM   4225  HD3 ARG A 358      -9.688  13.491   0.974  1.00  0.00           H
ATOM   4226  HE  ARG A 358      -9.239  11.151  -0.503  1.00  0.00           H
ATOM   4227 HH11 ARG A 358      -8.961  12.111   2.991  1.00  0.00           H
ATOM   4228 HH12 ARG A 358      -8.502  10.485   3.430  1.00  0.00           H
ATOM   4229 HH21 ARG A 358      -9.286   8.968   0.328  1.00  0.00           H
ATOM   4230 HH22 ARG A 358      -9.008   8.704   2.010  1.00  0.00           H
ATOM   4231  N   TRP A 359      -9.325  10.809  -4.332  1.00 19.26           N
ATOM   4232  CA  TRP A 359      -9.102   9.370  -4.462  1.00 19.61           C
ATOM   4233  C   TRP A 359      -7.776   8.983  -3.799  1.00 18.49           C
ATOM   4234  O   TRP A 359      -6.765   9.655  -4.010  1.00 21.29           O
ATOM   4235  CB  TRP A 359      -9.049   8.953  -5.945  1.00 19.93           C
ATOM   4236  CG  TRP A 359     -10.247   9.188  -6.817  1.00 23.18           C
ATOM   4237  CD1 TRP A 359     -11.419   9.766  -6.465  1.00 23.43           C
ATOM   4238  CD2 TRP A 359     -10.384   8.849  -8.228  1.00 22.00           C
ATOM   4239  NE1 TRP A 359     -12.255   9.834  -7.560  1.00 26.12           N
ATOM   4240  CE3 TRP A 359      -9.544   8.231  -9.185  1.00 22.65           C
ATOM   4241  CE2 TRP A 359     -11.666   9.284  -8.676  1.00 24.16           C
ATOM   4242  CZ3 TRP A 359      -9.971   8.057 -10.517  1.00 21.38           C
ATOM   4243  CZ2 TRP A 359     -12.082   9.126 -10.007  1.00 24.29           C
ATOM   4244  CH2 TRP A 359     -11.237   8.496 -10.931  1.00 23.99           C
ATOM   4245  H   TRP A 359      -9.330  11.364  -5.173  1.00  0.00           H
ATOM   4246  HA  TRP A 359      -9.920   8.848  -3.964  1.00  0.00           H
ATOM   4247  HB2 TRP A 359      -8.206   9.438  -6.433  1.00  0.00           H
ATOM   4248  HB3 TRP A 359      -8.824   7.887  -6.005  1.00  0.00           H
ATOM   4249  HD1 TRP A 359     -11.648  10.139  -5.479  1.00  0.00           H
ATOM   4250  HE1 TRP A 359     -13.185  10.315  -7.540  1.00  0.00           H
ATOM   4251  HE3 TRP A 359      -8.558   7.897  -8.892  1.00  0.00           H
ATOM   4252  HZ3 TRP A 359      -9.328   7.604 -11.246  1.00  0.00           H
ATOM   4253  HZ2 TRP A 359     -13.040   9.481 -10.326  1.00  0.00           H
ATOM   4254  HH2 TRP A 359     -11.544   8.373 -11.958  1.00  0.00           H
ATOM   4255  N   GLY A 360      -7.790   7.899  -3.028  1.00 20.56           N
ATOM   4256  CA  GLY A 360      -6.652   7.408  -2.277  1.00 19.56           C
ATOM   4257  C   GLY A 360      -5.984   6.263  -3.032  1.00 19.97           C
ATOM   4258  O   GLY A 360      -6.630   5.554  -3.807  1.00 19.92           O
ATOM   4259  H   GLY A 360      -8.680   7.463  -2.828  1.00  0.00           H
ATOM   4260  HA2 GLY A 360      -5.946   8.202  -2.051  1.00  0.00           H
ATOM   4261  HA3 GLY A 360      -7.013   7.032  -1.321  1.00  0.00           H
ATOM   4262  N   ASP A 361      -4.682   6.074  -2.805  1.00 18.87           N
ATOM   4263  CA  ASP A 361      -3.865   5.067  -3.488  1.00 20.81           C
ATOM   4264  C   ASP A 361      -4.220   3.638  -3.019  1.00 20.03           C
ATOM   4265  O   ASP A 361      -4.139   2.694  -3.805  1.00 22.19           O
ATOM   4266  CB  ASP A 361      -2.360   5.385  -3.265  1.00 21.93           C
ATOM   4267  CG  ASP A 361      -1.757   4.960  -1.929  1.00 21.87           C
ATOM   4268  OD1 ASP A 361      -1.699   5.765  -0.975  1.00 25.70           O
ATOM   4269  OD2 ASP A 361      -1.332   3.795  -1.819  1.00 23.34           O1-
ATOM   4270  H   ASP A 361      -4.227   6.682  -2.137  1.00  0.00           H
ATOM   4271  HA  ASP A 361      -4.087   5.128  -4.552  1.00  0.00           H
ATOM   4272  HB2 ASP A 361      -1.795   4.867  -4.039  1.00  0.00           H
ATOM   4273  HB3 ASP A 361      -2.165   6.444  -3.424  1.00  0.00           H
ATOM   4274  N   ALA A 362      -4.635   3.477  -1.756  1.00 20.12           N
ATOM   4275  CA  ALA A 362      -4.964   2.198  -1.131  1.00 19.36           C
ATOM   4276  C   ALA A 362      -6.136   1.447  -1.807  1.00 19.28           C
ATOM   4277  O   ALA A 362      -5.925   0.292  -2.190  1.00 17.72           O
ATOM   4278  CB  ALA A 362      -5.190   2.402   0.369  1.00 20.36           C
ATOM   4279  H   ALA A 362      -4.659   4.306  -1.181  1.00  0.00           H
ATOM   4280  HA  ALA A 362      -4.078   1.572  -1.245  1.00  0.00           H
ATOM   4281  HB1 ALA A 362      -5.065   1.467   0.902  1.00  0.00           H
ATOM   4282  HB2 ALA A 362      -4.458   3.081   0.794  1.00  0.00           H
ATOM   4283  HB3 ALA A 362      -6.178   2.784   0.598  1.00  0.00           H
ATOM   4284  N   PRO A 363      -7.324   2.056  -2.063  1.00 17.22           N
ATOM   4285  CA  PRO A 363      -8.355   1.432  -2.903  1.00 17.69           C
ATOM   4286  C   PRO A 363      -7.917   1.168  -4.353  1.00 17.56           C
ATOM   4287  O   PRO A 363      -8.186   0.075  -4.843  1.00 18.84           O
ATOM   4288  CB  PRO A 363      -9.606   2.312  -2.782  1.00 18.18           C
ATOM   4289  CG  PRO A 363      -9.089   3.664  -2.329  1.00 20.02           C
ATOM   4290  CD  PRO A 363      -7.794   3.357  -1.573  1.00 17.04           C
ATOM   4291  HA  PRO A 363      -8.598   0.460  -2.478  1.00  0.00           H
ATOM   4292  HB2 PRO A 363     -10.192   2.370  -3.701  1.00  0.00           H
ATOM   4293  HB3 PRO A 363     -10.259   1.905  -2.009  1.00  0.00           H
ATOM   4294  HG2 PRO A 363      -8.865   4.276  -3.203  1.00  0.00           H
ATOM   4295  HG3 PRO A 363      -9.808   4.215  -1.723  1.00  0.00           H
ATOM   4296  HD2 PRO A 363      -7.076   4.161  -1.670  1.00  0.00           H
ATOM   4297  HD3 PRO A 363      -8.033   3.262  -0.513  1.00  0.00           H
ATOM   4298  N   VAL A 364      -7.179   2.080  -5.006  1.00 15.81           N
ATOM   4299  CA  VAL A 364      -6.610   1.886  -6.350  1.00 13.67           C
ATOM   4300  C   VAL A 364      -5.665   0.660  -6.405  1.00 15.13           C
ATOM   4301  O   VAL A 364      -5.769  -0.165  -7.312  1.00 12.77           O
ATOM   4302  CB  VAL A 364      -5.933   3.207  -6.816  1.00 16.16           C
ATOM   4303  CG1 VAL A 364      -5.146   3.080  -8.133  1.00 13.85           C
ATOM   4304  CG2 VAL A 364      -6.967   4.339  -6.954  1.00 15.04           C
ATOM   4305  H   VAL A 364      -6.981   2.959  -4.548  1.00  0.00           H
ATOM   4306  HA  VAL A 364      -7.436   1.666  -7.031  1.00  0.00           H
ATOM   4307  HB  VAL A 364      -5.215   3.516  -6.056  1.00  0.00           H
ATOM   4308 HG11 VAL A 364      -4.782   4.050  -8.469  1.00  0.00           H
ATOM   4309 HG12 VAL A 364      -4.275   2.432  -8.030  1.00  0.00           H
ATOM   4310 HG13 VAL A 364      -5.769   2.670  -8.925  1.00  0.00           H
ATOM   4311 HG21 VAL A 364      -6.488   5.278  -7.231  1.00  0.00           H
ATOM   4312 HG22 VAL A 364      -7.706   4.106  -7.720  1.00  0.00           H
ATOM   4313 HG23 VAL A 364      -7.502   4.518  -6.023  1.00  0.00           H
ATOM   4314  N   HIS A 365      -4.805   0.484  -5.390  1.00 14.05           N
ATOM   4315  CA  HIS A 365      -3.942  -0.694  -5.253  1.00 17.18           C
ATOM   4316  C   HIS A 365      -4.756  -1.969  -4.995  1.00 16.98           C
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ATOM   4317  O   HIS A 365     -4.379  -3.032  -5.476  1.00 19.79          O
ATOM   4318  CB  HIS A 365     -2.970  -0.555  -4.065  1.00 16.11          C
ATOM   4319  CG  HIS A 365     -1.836   0.424  -4.199  1.00 19.71          C
ATOM   4320  ND1 HIS A 365     -0.771   0.364  -3.326  1.00 19.57          N1+
ATOM   4321  CD2 HIS A 365     -1.597   1.491  -5.047  1.00 18.63          C
ATOM   4322  CE1 HIS A 365      0.061   1.346  -3.622  1.00 21.02          C
ATOM   4323  NE2 HIS A 365     -0.393   2.054  -4.648  1.00 20.54          N
ATOM   4324  H   HIS A 365     -4.744   1.223  -4.692  1.00  0.00          H
ATOM   4325  HA  HIS A 365     -3.372  -0.835  -6.175  1.00  0.00          H
ATOM   4326  HB2 HIS A 365     -3.513  -0.315  -3.151  1.00  0.00          H
ATOM   4327  HB3 HIS A 365     -2.498  -1.524  -3.878  1.00  0.00          H
ATOM   4328  HD1 HIS A 365     -0.621  -0.325  -2.538  1.00  0.00          H
ATOM   4329  HD2 HIS A 365     -2.179   1.907  -5.858  1.00  0.00          H
ATOM   4330  HE1 HIS A 365      0.973   1.549  -3.076  1.00  0.00          H
ATOM   4331  HE2 HIS A 365      0.046   2.932  -4.964  1.00  0.00          H
ATOM   4332  N   SER A 366     -5.858  -1.878  -4.244  1.00 18.87          N
ATOM   4333  CA  SER A 366     -6.635  -3.038  -3.818  1.00 18.88          C
ATOM   4334  C   SER A 366     -7.591  -3.514  -4.913  1.00 19.48          C
ATOM   4335  O   SER A 366     -7.710  -4.721  -5.116  1.00 17.62          O
ATOM   4336  CB  SER A 366     -7.480  -2.650  -2.604  1.00 18.94          C
ATOM   4337  OG  SER A 366     -6.617  -2.293  -1.545  1.00 19.20          O
ATOM   4338  H   SER A 366     -6.131  -0.965  -3.903  1.00  0.00          H
ATOM   4339  HA  SER A 366     -5.970  -3.863  -3.559  1.00  0.00          H
ATOM   4340  HB2 SER A 366     -8.162  -1.829  -2.829  1.00  0.00          H
ATOM   4341  HB3 SER A 366     -8.090  -3.497  -2.285  1.00  0.00          H
ATOM   4342  HG  SER A 366     -6.137  -1.500  -1.789  1.00  0.00          H
ATOM   4343  N   ILE A 367     -8.232  -2.589  -5.646  1.00 19.28          N
ATOM   4344  CA  ILE A 367     -9.052  -2.883  -6.822  1.00 18.73          C
ATOM   4345  C   ILE A 367     -8.189  -3.561  -7.904  1.00 19.02          C
ATOM   4346  O   ILE A 367     -8.652  -4.487  -8.560  1.00 20.14          O
ATOM   4347  CB  ILE A 367     -9.785  -1.597  -7.310  1.00 16.72          C
ATOM   4348  CG1 ILE A 367    -10.807  -1.099  -6.254  1.00 15.35          C
ATOM   4349  CG2 ILE A 367    -10.500  -1.784  -8.668  1.00 14.85          C
ATOM   4350  CD1 ILE A 367    -11.225   0.370  -6.434  1.00 15.61          C
ATOM   4351  H   ILE A 367     -8.094  -1.604  -5.422  1.00  0.00          H
ATOM   4352  HA  ILE A 367     -9.803  -3.609  -6.522  1.00  0.00          H
ATOM   4353  HB  ILE A 367     -9.027  -0.822  -7.448  1.00  0.00          H
ATOM   4354 HG12 ILE A 367    -11.690  -1.737  -6.261  1.00  0.00          H
ATOM   4355 HG13 ILE A 367    -10.397  -1.197  -5.250  1.00  0.00          H
ATOM   4356 HG21 ILE A 367    -11.043  -0.889  -8.963  1.00  0.00          H
ATOM   4357 HG22 ILE A 367     -9.792  -1.986  -9.473  1.00  0.00          H
ATOM   4358 HG23 ILE A 367    -11.210  -2.612  -8.635  1.00  0.00          H
ATOM   4359 HD11 ILE A 367    -11.890   0.681  -5.629  1.00  0.00          H
ATOM   4360 HD12 ILE A 367    -10.354   1.026  -6.413  1.00  0.00          H
ATOM   4361 HD13 ILE A 367    -11.743   0.540  -7.376  1.00  0.00          H
ATOM   4362  N   ALA A 368     -6.915  -3.168  -8.018  1.00 17.53          N
ATOM   4363  CA  ALA A 368     -5.937  -3.840  -8.855  1.00 16.44          C
ATOM   4364  C   ALA A 368     -5.494  -5.190  -8.266  1.00 18.86          C
ATOM   4365  O   ALA A 368     -5.653  -6.213  -8.923  1.00 20.08          O
ATOM   4366  CB  ALA A 368     -4.722  -2.929  -8.998  1.00 16.29          C
ATOM   4367  H   ALA A 368     -6.615  -2.362  -7.486  1.00  0.00          H
ATOM   4368  HA  ALA A 368     -6.372  -4.019  -9.841  1.00  0.00          H
ATOM   4369  HB1 ALA A 368     -3.933  -3.455  -9.529  1.00  0.00          H
ATOM   4370  HB2 ALA A 368     -4.986  -2.037  -9.567  1.00  0.00          H
ATOM   4371  HB3 ALA A 368     -4.318  -2.608  -8.039  1.00  0.00          H
ATOM   4372  N   ALA A 369     -4.959  -5.232  -7.036  1.00 18.52          N
ATOM   4373  CA  ALA A 369     -4.380  -6.434  -6.418  1.00 20.68          C
ATOM   4374  C   ALA A 369     -5.383  -7.580  -6.206  1.00 20.05          C
ATOM   4375  O   ALA A 369     -4.977  -8.735  -6.138  1.00 18.61          O
ATOM   4376  CB  ALA A 369     -3.742  -6.076  -5.067  1.00 20.85          C
ATOM   4377  H   ALA A 369     -4.852  -4.356  -6.527  1.00  0.00          H
ATOM   4378  HA  ALA A 369     -3.599  -6.812  -7.081  1.00  0.00          H
ATOM   4379  HB1 ALA A 369     -3.370  -6.965  -4.554  1.00  0.00          H
ATOM   4380  HB2 ALA A 369     -2.891  -5.410  -5.192  1.00  0.00          H
ATOM   4381  HB3 ALA A 369     -4.451  -5.586  -4.402  1.00  0.00          H
ATOM   4382  N   ALA A 370     -6.682  -7.277  -6.119  1.00 20.81          N
ATOM   4383  CA  ALA A 370     -7.741  -8.272  -6.017  1.00 23.03          C
ATOM   4384  C   ALA A 370     -8.236  -8.757  -7.394  1.00 24.19          C
ATOM   4385  O   ALA A 370     -8.954  -9.755  -7.432  1.00 25.96          O
ATOM   4386  CB  ALA A 370     -8.928  -7.626  -5.288  1.00 24.55          C
ATOM   4387  H   ALA A 370     -6.946  -6.297  -6.116  1.00  0.00          H
ATOM   4388  HA  ALA A 370     -7.402  -9.138  -5.448  1.00  0.00          H
ATOM   4389  HB1 ALA A 370     -9.780  -8.300  -5.218  1.00  0.00          H
ATOM   4390  HB2 ALA A 370     -8.654  -7.336  -4.274  1.00  0.00          H
ATOM   4391  HB3 ALA A 370     -9.260  -6.731  -5.808  1.00  0.00          H
ATOM   4392  N   LEU A 371     -7.896  -8.083  -8.504  1.00 24.56          N
ATOM   4393  CA  LEU A 371     -8.402  -8.387  -9.850  1.00 24.21          C
ATOM   4394  C   LEU A 371     -7.300  -8.735 -10.855  1.00 24.41          C
ATOM   4395  O   LEU A 371     -7.564  -9.464 -11.808  1.00 21.31          O
ATOM   4396  CB  LEU A 371     -9.245  -7.213 -10.393  1.00 24.83          C
ATOM   4397  CG  LEU A 371    -10.508  -6.863  -9.579  1.00 27.38          C
ATOM   4398  CD1 LEU A 371    -11.264  -5.692 -10.225  1.00 25.79          C
ATOM   4399  CD2 LEU A 371    -11.450  -8.054  -9.365  1.00 27.66          C
ATOM   4400  H   LEU A 371     -7.279  -7.285  -8.406  1.00  0.00          H
ATOM   4401  HA  LEU A 371     -9.032  -9.273  -9.830  1.00  0.00          H
ATOM   4402  HB2 LEU A 371     -8.609  -6.328 -10.463  1.00  0.00          H
ATOM   4403  HB3 LEU A 371     -9.539  -7.427 -11.420  1.00  0.00          H
ATOM   4404  HG  LEU A 371    -10.176  -6.538  -8.596  1.00  0.00          H
ATOM   4405 HD11 LEU A 371    -12.094  -5.364  -9.599  1.00  0.00          H
ATOM   4406 HD12 LEU A 371    -10.609  -4.832 -10.370  1.00  0.00          H
ATOM   4407 HD13 LEU A 371    -11.667  -5.970 -11.199  1.00  0.00          H
ATOM   4408 HD21 LEU A 371    -12.359  -7.733  -8.864  1.00  0.00          H
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ATOM   4409 HD22 LEU A 371     -11.727  -8.527 -10.306  1.00  0.00          H
ATOM   4410 HD23 LEU A 371     -11.006  -8.811  -8.724  1.00  0.00          H
ATOM   4411  N   PHE A 372      -6.088  -8.203 -10.678  1.00 22.29          N
ATOM   4412  CA  PHE A 372      -4.945  -8.367 -11.580  1.00 20.76          C
ATOM   4413  C   PHE A 372      -3.931  -9.356 -10.987  1.00 22.10          C
ATOM   4414  O   PHE A 372      -2.817  -9.482 -11.488  1.00 20.77          O
ATOM   4415  CB  PHE A 372      -4.249  -7.001 -11.796  1.00 20.58          C
ATOM   4416  CG  PHE A 372      -5.115  -5.860 -12.314  1.00 20.46          C
ATOM   4417  CD1 PHE A 372      -6.361  -6.089 -12.941  1.00 19.24          C
ATOM   4418  CD2 PHE A 372      -4.669  -4.536 -12.133  1.00 17.33          C
ATOM   4419  CE1 PHE A 372      -7.191  -5.010 -13.285  1.00 21.85          C
ATOM   4420  CE2 PHE A 372      -5.490  -3.455 -12.501  1.00 20.11          C
ATOM   4421  CZ  PHE A 372      -6.760  -3.691 -13.058  1.00 20.51          C
ATOM   4422  H   PHE A 372      -5.963  -7.526  -9.925  1.00  0.00          H
ATOM   4423  HA  PHE A 372      -5.269  -8.767 -12.540  1.00  0.00          H
ATOM   4424  HB2 PHE A 372      -3.797  -6.678 -10.857  1.00  0.00          H
ATOM   4425  HB3 PHE A 372      -3.416  -7.112 -12.491  1.00  0.00          H
ATOM   4426  HD1 PHE A 372      -6.714  -7.090 -13.141  1.00  0.00          H
ATOM   4427  HD2 PHE A 372      -3.701  -4.348 -11.692  1.00  0.00          H
ATOM   4428  HE1 PHE A 372      -8.160  -5.200 -13.722  1.00  0.00          H
ATOM   4429  HE2 PHE A 372      -5.152  -2.443 -12.346  1.00  0.00          H
ATOM   4430  HZ  PHE A 372      -7.396  -2.861 -13.327  1.00  0.00          H
ATOM   4431  N   LEU A 373      -4.319 -10.075  -9.933  1.00 21.49          N
ATOM   4432  CA  LEU A 373      -3.642 -11.259  -9.440  1.00 22.37          C
ATOM   4433  C   LEU A 373      -4.670 -12.391  -9.377  1.00 22.61          C
ATOM   4434  O   LEU A 373      -5.822 -12.125  -9.011  1.00 21.20          O
ATOM   4435  CB  LEU A 373      -3.085 -11.011  -8.021  1.00 21.57          C
ATOM   4436  CG  LEU A 373      -1.869 -10.071  -7.929  1.00 21.65          C
ATOM   4437  CD1 LEU A 373      -1.518  -9.791  -6.459  1.00 25.02          C
ATOM   4438  CD2 LEU A 373      -0.647 -10.633  -8.672  1.00 24.25          C
ATOM   4439  H   LEU A 373      -5.273  -9.961  -9.620  1.00  0.00          H
ATOM   4440  HA  LEU A 373      -2.844 -11.536 -10.124  1.00  0.00          H
ATOM   4441  HB2 LEU A 373      -3.890 -10.630  -7.393  1.00  0.00          H
ATOM   4442  HB3 LEU A 373      -2.822 -11.970  -7.578  1.00  0.00          H
ATOM   4443  HG  LEU A 373      -2.135  -9.118  -8.390  1.00  0.00          H
ATOM   4444 HD11 LEU A 373      -0.658  -9.128  -6.377  1.00  0.00          H
ATOM   4445 HD12 LEU A 373      -2.348  -9.309  -5.942  1.00  0.00          H
ATOM   4446 HD13 LEU A 373      -1.281 -10.707  -5.919  1.00  0.00          H
ATOM   4447 HD21 LEU A 373       0.215  -9.986  -8.528  1.00  0.00          H
ATOM   4448 HD22 LEU A 373      -0.380 -11.628  -8.318  1.00  0.00          H
ATOM   4449 HD23 LEU A 373      -0.815 -10.690  -9.748  1.00  0.00          H
ATOM   4450  N   PRO A 374      -4.252 -13.654  -9.605  1.00 23.37          N
ATOM   4451  CA  PRO A 374      -5.044 -14.815  -9.210  1.00 23.61          C
ATOM   4452  C   PRO A 374      -4.952 -14.927  -7.678  1.00 24.19          C
ATOM   4453  O   PRO A 374      -3.867 -14.750  -7.119  1.00 25.28          O
ATOM   4454  CB  PRO A 374      -4.386 -15.992  -9.950  1.00 21.86          C
ATOM   4455  CG  PRO A 374      -2.940 -15.585 -10.168  1.00 25.99          C
ATOM   4456  CD  PRO A 374      -2.973 -14.054 -10.198  1.00 23.76          C
ATOM   4457  HA  PRO A 374      -6.080 -14.673  -9.519  1.00  0.00          H
ATOM   4458  HB2 PRO A 374      -4.490 -16.948  -9.435  1.00  0.00          H
ATOM   4459  HB3 PRO A 374      -4.844 -16.100 -10.933  1.00  0.00          H
ATOM   4460  HG2 PRO A 374      -2.348 -15.943  -9.338  1.00  0.00          H
ATOM   4461  HG3 PRO A 374      -2.514 -16.015 -11.074  1.00  0.00          H
ATOM   4462  HD2 PRO A 374      -2.129 -13.636  -9.652  1.00  0.00          H
ATOM   4463  HD3 PRO A 374      -2.919 -13.690 -11.224  1.00  0.00          H
ATOM   4464  N   LYS A 375      -6.072 -15.137  -6.974  1.00 23.78          N
ATOM   4465  CA  LYS A 375      -6.199 -14.831  -5.543  1.00 23.97          C
ATOM   4466  C   LYS A 375      -5.270 -15.605  -4.579  1.00 22.75          C
ATOM   4467  O   LYS A 375      -5.167 -15.227  -3.413  1.00 21.14          O
ATOM   4468  CB  LYS A 375      -7.679 -14.897  -5.109  1.00 23.67          C
ATOM   4469  CG  LYS A 375      -8.307 -16.295  -4.949  1.00 25.99          C
ATOM   4470  CD  LYS A 375      -9.777 -16.193  -4.499  1.00 27.02          C
ATOM   4471  CE  LYS A 375     -10.230 -17.355  -3.603  1.00 27.83          C
ATOM   4472  NZ  LYS A 375     -11.531 -17.079  -2.965  1.00 29.10          N1+
ATOM   4473  H   LYS A 375      -6.941 -15.272  -7.494  1.00  0.00          H
ATOM   4474  HA  LYS A 375      -5.897 -13.786  -5.449  1.00  0.00          H
ATOM   4475  HB2 LYS A 375      -7.754 -14.379  -4.152  1.00  0.00          H
ATOM   4476  HB3 LYS A 375      -8.277 -14.308  -5.805  1.00  0.00          H
ATOM   4477  HG2 LYS A 375      -8.236 -16.857  -5.882  1.00  0.00          H
ATOM   4478  HG3 LYS A 375      -7.734 -16.853  -4.207  1.00  0.00          H
ATOM   4479  HD2 LYS A 375      -9.899 -15.270  -3.938  1.00  0.00          H
ATOM   4480  HD3 LYS A 375     -10.420 -16.092  -5.376  1.00  0.00          H
ATOM   4481  HE2 LYS A 375     -10.285 -18.282  -4.176  1.00  0.00          H
ATOM   4482  HE3 LYS A 375      -9.503 -17.528  -2.809  1.00  0.00          H
ATOM   4483  HZ1 LYS A 375     -11.663 -17.720  -2.185  1.00  0.00          H
ATOM   4484  HZ2 LYS A 375     -11.555 -16.148  -2.565  1.00  0.00          H
ATOM   4485  HZ3 LYS A 375     -12.285 -17.164  -3.626  1.00  0.00          H
ATOM   4486  N   ASP A 376      -4.550 -16.629  -5.064  1.00 22.97          N
ATOM   4487  CA  ASP A 376      -3.407 -17.274  -4.396  1.00 23.49          C
ATOM   4488  C   ASP A 376      -2.296 -16.258  -4.060  1.00 24.05          C
ATOM   4489  O   ASP A 376      -1.668 -16.349  -3.012  1.00 23.37          O
ATOM   4490  CB  ASP A 376      -2.877 -18.462  -5.263  1.00 26.21          C
ATOM   4491  CG  ASP A 376      -1.436 -18.927  -4.990  1.00 25.03          C
ATOM   4492  OD1 ASP A 376      -0.614 -18.905  -5.935  1.00 24.00          O
ATOM   4493  OD2 ASP A 376      -1.134 -19.268  -3.825  1.00 25.73          O1-
ATOM   4494  H   ASP A 376      -4.667 -16.801  -6.051  1.00  0.00          H
ATOM   4495  HA  ASP A 376      -3.751 -17.680  -3.443  1.00  0.00          H
ATOM   4496  HB2 ASP A 376      -3.533 -19.324  -5.146  1.00  0.00          H
ATOM   4497  HB3 ASP A 376      -2.923 -18.187  -6.317  1.00  0.00          H
ATOM   4498  N   LYS A 377      -2.052 -15.278  -4.937  1.00 23.50          N
ATOM   4499  CA  LYS A 377      -0.866 -14.423  -4.886  1.00 22.56          C
ATOM   4500  C   LYS A 377      -1.004 -13.228  -3.927  1.00 21.29          C
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ATOM   4501  O   LYS A 377      -0.084 -12.411  -3.839  1.00 20.97          O
ATOM   4502  CB  LYS A 377      -0.582 -13.870  -6.293  1.00 21.84          C
ATOM   4503  CG  LYS A 377      -0.569 -14.905  -7.429  1.00 23.25          C
ATOM   4504  CD  LYS A 377       0.419 -16.071  -7.290  1.00 21.18          C
ATOM   4505  CE  LYS A 377       0.215 -17.144  -8.378  1.00 22.85          C
ATOM   4506  NZ  LYS A 377       0.859 -18.408  -8.017  1.00 23.32          N1+
ATOM   4507  H   LYS A 377      -2.668 -15.189  -5.741  1.00  0.00          H
ATOM   4508  HA  LYS A 377      -0.020 -15.012  -4.552  1.00  0.00          H
ATOM   4509  HB2 LYS A 377      -1.334 -13.121  -6.533  1.00  0.00          H
ATOM   4510  HB3 LYS A 377       0.361 -13.333  -6.280  1.00  0.00          H
ATOM   4511  HG2 LYS A 377      -1.561 -15.333  -7.494  1.00  0.00          H
ATOM   4512  HG3 LYS A 377      -0.408 -14.380  -8.365  1.00  0.00          H
ATOM   4513  HD2 LYS A 377       1.450 -15.714  -7.282  1.00  0.00          H
ATOM   4514  HD3 LYS A 377       0.247 -16.536  -6.322  1.00  0.00          H
ATOM   4515  HE2 LYS A 377      -0.845 -17.367  -8.490  1.00  0.00          H
ATOM   4516  HE3 LYS A 377       0.586 -16.812  -9.347  1.00  0.00          H
ATOM   4517  HZ1 LYS A 377       0.459 -18.693  -7.105  1.00  0.00          H
ATOM   4518  HZ2 LYS A 377       0.662 -19.125  -8.690  1.00  0.00          H
ATOM   4519  HZ3 LYS A 377       1.890 -18.288  -7.975  1.00  0.00          H
ATOM   4520  N   ILE A 378      -2.132 -13.121  -3.224  1.00 20.46          N
ATOM   4521  CA  ILE A 378      -2.430 -12.079  -2.257  1.00 19.71          C
ATOM   4522  C   ILE A 378      -2.183 -12.724  -0.876  1.00 21.20          C
ATOM   4523  O   ILE A 378      -2.715 -13.799  -0.595  1.00 23.96          O
ATOM   4524  CB  ILE A 378      -3.920 -11.644  -2.416  1.00 19.96          C
ATOM   4525  CG1 ILE A 378      -4.331 -11.383  -3.892  1.00 16.92          C
ATOM   4526  CG2 ILE A 378      -4.201 -10.390  -1.566  1.00 15.66          C
ATOM   4527  CD1 ILE A 378      -5.843 -11.211  -4.098  1.00 19.39          C
ATOM   4528  H   ILE A 378      -2.776 -13.900  -3.259  1.00  0.00          H
ATOM   4529  HA  ILE A 378      -1.783 -11.215  -2.410  1.00  0.00          H
ATOM   4530  HB  ILE A 378      -4.552 -12.454  -2.046  1.00  0.00          H
ATOM   4531 HG12 ILE A 378      -3.805 -10.509  -4.279  1.00  0.00          H
ATOM   4532 HG13 ILE A 378      -4.034 -12.211  -4.534  1.00  0.00          H
ATOM   4533 HG21 ILE A 378      -5.246 -10.091  -1.606  1.00  0.00          H
ATOM   4534 HG22 ILE A 378      -3.961 -10.562  -0.520  1.00  0.00          H
ATOM   4535 HG23 ILE A 378      -3.609  -9.539  -1.905  1.00  0.00          H
ATOM   4536 HD11 ILE A 378      -6.074 -11.151  -5.163  1.00  0.00          H
ATOM   4537 HD12 ILE A 378      -6.397 -12.054  -3.687  1.00  0.00          H
ATOM   4538 HD13 ILE A 378      -6.213 -10.295  -3.638  1.00  0.00          H
ATOM   4539  N   HIS A 379      -1.376 -12.090  -0.018  1.00 20.04          N
ATOM   4540  CA  HIS A 379      -1.012 -12.577   1.312  1.00 20.47          C
ATOM   4541  C   HIS A 379      -1.392 -11.545   2.378  1.00 21.04          C
ATOM   4542  O   HIS A 379      -1.144 -10.355   2.208  1.00 19.94          O
ATOM   4543  CB  HIS A 379       0.494 -12.905   1.352  1.00 21.51          C
ATOM   4544  CG  HIS A 379       0.973 -13.476   2.659  1.00 21.45          C
ATOM   4545  ND1 HIS A 379       0.412 -14.626   3.223  1.00 20.38          N
ATOM   4546  CD2 HIS A 379       1.976 -13.025   3.483  1.00 22.37          C
ATOM   4547  CE1 HIS A 379       1.071 -14.803   4.364  1.00 22.41          C
ATOM   4548  NE2 HIS A 379       2.016 -13.886   4.566  1.00 22.62          N
ATOM   4549  H   HIS A 379      -0.962 -11.207  -0.316  1.00  0.00          H
ATOM   4550  HA  HIS A 379      -1.553 -13.499   1.534  1.00  0.00          H
ATOM   4551  HB2 HIS A 379       0.735 -13.621   0.576  1.00  0.00          H
ATOM   4552  HB3 HIS A 379       1.085 -12.018   1.131  1.00  0.00          H
ATOM   4553  HD2 HIS A 379       2.638 -12.179   3.392  1.00  0.00          H
ATOM   4554  HE1 HIS A 379       0.858 -15.600   5.063  1.00  0.00          H
ATOM   4555  HE2 HIS A 379       2.626 -13.811   5.376  1.00  0.00          H
ATOM   4556  N   TYR A 380      -1.949 -12.009   3.497  1.00 21.37          N
ATOM   4557  CA  TYR A 380      -2.085 -11.242   4.729  1.00 21.69          C
ATOM   4558  C   TYR A 380      -1.062 -11.870   5.679  1.00 20.30          C
ATOM   4559  O   TYR A 380      -1.133 -13.075   5.935  1.00 21.92          O
ATOM   4560  CB  TYR A 380      -3.514 -11.419   5.292  1.00 19.97          C
ATOM   4561  CG  TYR A 380      -3.708 -10.963   6.730  1.00 21.86          C
ATOM   4562  CD1 TYR A 380      -3.841  -9.596   7.041  1.00 18.74          C
ATOM   4563  CD2 TYR A 380      -3.707 -11.912   7.771  1.00 19.94          C
ATOM   4564  CE1 TYR A 380      -3.935  -9.183   8.386  1.00 21.73          C
ATOM   4565  CE2 TYR A 380      -3.805 -11.495   9.111  1.00 22.01          C
ATOM   4566  CZ  TYR A 380      -3.890 -10.131   9.424  1.00 22.98          C
ATOM   4567  OH  TYR A 380      -3.938  -9.750  10.732  1.00 22.49          O
ATOM   4568  H   TYR A 380      -1.925 -13.012   3.631  1.00  0.00          H
ATOM   4569  HA  TYR A 380      -1.877 -10.180   4.590  1.00  0.00          H
ATOM   4570  HB2 TYR A 380      -4.211 -10.864   4.664  1.00  0.00          H
ATOM   4571  HB3 TYR A 380      -3.813 -12.466   5.228  1.00  0.00          H
ATOM   4572  HD1 TYR A 380      -3.847  -8.863   6.248  1.00  0.00          H
ATOM   4573  HD2 TYR A 380      -3.607 -12.963   7.545  1.00  0.00          H
ATOM   4574  HE1 TYR A 380      -4.031  -8.135   8.625  1.00  0.00          H
ATOM   4575  HE2 TYR A 380      -3.816 -12.222   9.908  1.00  0.00          H
ATOM   4576  HH  TYR A 380      -4.359  -8.897  10.887  1.00  0.00          H
ATOM   4577  N   PHE A 381      -0.126 -11.072   6.196  1.00 21.02          N
ATOM   4578  CA  PHE A 381       0.865 -11.517   7.169  1.00 22.01          C
ATOM   4579  C   PHE A 381       0.214 -11.564   8.562  1.00 21.75          C
ATOM   4580  O   PHE A 381       0.207 -10.579   9.302  1.00 21.88          O
ATOM   4581  CB  PHE A 381       2.038 -10.525   7.187  1.00 21.96          C
ATOM   4582  CG  PHE A 381       2.984 -10.608   6.005  1.00 23.44          C
ATOM   4583  CD1 PHE A 381       4.036 -11.547   6.016  1.00 24.95          C
ATOM   4584  CD2 PHE A 381       2.854  -9.720   4.920  1.00 24.30          C
ATOM   4585  CE1 PHE A 381       4.959 -11.593   4.954  1.00 24.65          C
ATOM   4586  CE2 PHE A 381       3.775  -9.771   3.860  1.00 24.16          C
ATOM   4587  CZ  PHE A 381       4.832 -10.700   3.876  1.00 22.13          C
ATOM   4588  H   PHE A 381      -0.134 -10.088   5.945  1.00  0.00          H
ATOM   4589  HA  PHE A 381       1.244 -12.510   6.920  1.00  0.00          H
ATOM   4590  HB2 PHE A 381       1.684  -9.501   7.302  1.00  0.00          H
ATOM   4591  HB3 PHE A 381       2.635 -10.735   8.071  1.00  0.00          H
ATOM   4592  HD1 PHE A 381       4.153 -12.222   6.855  1.00  0.00          H
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ATOM   4593  HD2 PHE A 381       2.065  -8.986   4.904  1.00  0.00           H
ATOM   4594  HE1 PHE A 381       5.766 -12.311   4.978  1.00  0.00           H
ATOM   4595  HE2 PHE A 381       3.682  -9.072   3.049  1.00  0.00           H
ATOM   4596  HZ  PHE A 381       5.543 -10.729   3.065  1.00  0.00           H
ATOM   4597  N   SER A 382      -0.338 -12.728   8.917  1.00 22.55           N
ATOM   4598  CA  SER A 382      -0.958 -13.025  10.206  1.00 23.85           C
ATOM   4599  C   SER A 382       0.060 -13.261  11.334  1.00 23.18           C
ATOM   4600  O   SER A 382      -0.330 -13.403  12.488  1.00 24.66           O
ATOM   4601  CB  SER A 382      -1.810 -14.297  10.009  1.00 23.74           C
ATOM   4602  OG  SER A 382      -1.076 -15.389   9.468  1.00 23.95           O
ATOM   4603  H   SER A 382      -0.314 -13.483   8.243  1.00  0.00           H
ATOM   4604  HA  SER A 382      -1.585 -12.189  10.516  1.00  0.00           H
ATOM   4605  HB2 SER A 382      -2.269 -14.599  10.953  1.00  0.00           H
ATOM   4606  HB3 SER A 382      -2.625 -14.085   9.325  1.00  0.00           H
ATOM   4607  HG  SER A 382      -0.291 -15.513   9.986  1.00  0.00           H
ATOM   4608  N   ASP A 383       1.341 -13.345  10.979  1.00 25.17           N
ATOM   4609  CA  ASP A 383       2.529 -13.512  11.804  1.00 23.87           C
ATOM   4610  C   ASP A 383       3.143 -12.141  12.153  1.00 23.92           C
ATOM   4611  O   ASP A 383       3.930 -12.056  13.096  1.00 24.24           O
ATOM   4612  CB  ASP A 383       3.578 -14.294  10.959  1.00 23.64           C
ATOM   4613  CG  ASP A 383       3.900 -13.713   9.574  1.00 23.19           C
ATOM   4614  OD1 ASP A 383       2.940 -13.397   8.833  1.00 22.50           O
ATOM   4615  OD2 ASP A 383       5.099 -13.596   9.255  1.00 22.18           O1-
ATOM   4616  H   ASP A 383       1.578 -13.254   9.986  1.00  0.00           H
ATOM   4617  HA  ASP A 383       2.294 -14.048  12.725  1.00  0.00           H
ATOM   4618  HB2 ASP A 383       4.509 -14.381  11.521  1.00  0.00           H
ATOM   4619  HB3 ASP A 383       3.230 -15.314  10.805  1.00  0.00           H
ATOM   4620  N   ILE A 384       2.788 -11.068  11.429  1.00 22.55           N
ATOM   4621  CA  ILE A 384       3.320  -9.729  11.642  1.00 22.33           C
ATOM   4622  C   ILE A 384       2.282  -8.912  12.427  1.00 23.48           C
ATOM   4623  O   ILE A 384       1.110  -8.804  12.062  1.00 25.39           O
ATOM   4624  CB  ILE A 384       3.680  -9.060  10.282  1.00 22.93           C
ATOM   4625  CG1 ILE A 384       4.786  -9.885   9.572  1.00 21.02           C
ATOM   4626  CG2 ILE A 384       4.125  -7.587  10.442  1.00 18.69           C
ATOM   4627  CD1 ILE A 384       5.341  -9.276   8.276  1.00 22.41           C
ATOM   4628  H   ILE A 384       2.095 -11.193  10.704  1.00  0.00           H
ATOM   4629  HA  ILE A 384       4.238  -9.783  12.229  1.00  0.00           H
ATOM   4630  HB  ILE A 384       2.787  -9.057   9.656  1.00  0.00           H
ATOM   4631 HG12 ILE A 384       5.609 -10.065  10.260  1.00  0.00           H
ATOM   4632 HG13 ILE A 384       4.412 -10.881   9.340  1.00  0.00           H
ATOM   4633 HG21 ILE A 384       4.330  -7.120   9.481  1.00  0.00           H
ATOM   4634 HG22 ILE A 384       3.358  -6.968  10.907  1.00  0.00           H
ATOM   4635 HG23 ILE A 384       5.027  -7.520  11.050  1.00  0.00           H
ATOM   4636 HD11 ILE A 384       5.970 -10.000   7.756  1.00  0.00           H
ATOM   4637 HD12 ILE A 384       4.543  -8.983   7.595  1.00  0.00           H
ATOM   4638 HD13 ILE A 384       5.952  -8.400   8.474  1.00  0.00           H
ATOM   4639  N   GLY A 385       2.765  -8.259  13.481  1.00 22.88           N
ATOM   4640  CA  GLY A 385       2.056  -7.294  14.296  1.00 21.82           C
ATOM   4641  C   GLY A 385       2.711  -5.946  14.030  1.00 20.82           C
ATOM   4642  O   GLY A 385       3.940  -5.842  13.999  1.00 19.73           O
ATOM   4643  H   GLY A 385       3.739  -8.397  13.697  1.00  0.00           H
ATOM   4644  HA2 GLY A 385       0.997  -7.281  14.046  1.00  0.00           H
ATOM   4645  HA3 GLY A 385       2.141  -7.548  15.352  1.00  0.00           H
ATOM   4646  N   TYR A 386       1.894  -4.928  13.786  1.00 21.09           N
ATOM   4647  CA  TYR A 386       2.257  -3.671  13.144  1.00 20.61           C
ATOM   4648  C   TYR A 386       1.279  -2.583  13.608  1.00 20.86           C
ATOM   4649  O   TYR A 386       0.184  -2.914  14.051  1.00 21.94           O
ATOM   4650  CB  TYR A 386       2.270  -3.920  11.616  1.00 21.65           C
ATOM   4651  CG  TYR A 386       2.270  -2.695  10.728  1.00 21.23           C
ATOM   4652  CD1 TYR A 386       3.477  -2.085  10.332  1.00 20.92           C
ATOM   4653  CD2 TYR A 386       1.038  -2.165  10.297  1.00 17.77           C
ATOM   4654  CE1 TYR A 386       3.447  -0.968   9.476  1.00 20.13           C
ATOM   4655  CE2 TYR A 386       1.010  -1.036   9.468  1.00 19.71           C
ATOM   4656  CZ  TYR A 386       2.214  -0.452   9.034  1.00 19.65           C
ATOM   4657  OH  TYR A 386       2.171   0.581   8.146  1.00 20.30           O
ATOM   4658  H   TYR A 386       0.904  -5.044  13.998  1.00  0.00           H
ATOM   4659  HA  TYR A 386       3.250  -3.374  13.474  1.00  0.00           H
ATOM   4660  HB2 TYR A 386       3.123  -4.541  11.347  1.00  0.00           H
ATOM   4661  HB3 TYR A 386       1.397  -4.513  11.337  1.00  0.00           H
ATOM   4662  HD1 TYR A 386       4.426  -2.482  10.664  1.00  0.00           H
ATOM   4663  HD2 TYR A 386       0.110  -2.628  10.600  1.00  0.00           H
ATOM   4664  HE1 TYR A 386       4.374  -0.527   9.145  1.00  0.00           H
ATOM   4665  HE2 TYR A 386       0.054  -0.655   9.150  1.00  0.00           H
ATOM   4666  HH  TYR A 386       2.872   0.589   7.495  1.00  0.00           H
ATOM   4667  N   HIS A 387       1.628  -1.298  13.480  1.00 19.49           N
ATOM   4668  CA  HIS A 387       0.725  -0.165  13.694  1.00 20.54           C
ATOM   4669  C   HIS A 387       1.123   1.011  12.801  1.00 18.80           C
ATOM   4670  O   HIS A 387       2.248   1.495  12.912  1.00 18.62           O
ATOM   4671  CB  HIS A 387       0.623   0.175  15.201  1.00 20.00           C
ATOM   4672  CG  HIS A 387      -0.017   1.491  15.608  1.00 25.81           C
ATOM   4673  ND1 HIS A 387      -1.306   1.589  16.116  1.00 22.90           N1+
ATOM   4674  CD2 HIS A 387       0.514   2.771  15.647  1.00 23.86           C
ATOM   4675  CE1 HIS A 387      -1.502   2.848  16.476  1.00 24.18           C
ATOM   4676  NE2 HIS A 387      -0.456   3.607  16.172  1.00 25.10           N
ATOM   4677  H   HIS A 387       2.558  -1.092  13.122  1.00  0.00           H
ATOM   4678  HA  HIS A 387      -0.261  -0.474  13.356  1.00  0.00           H
ATOM   4679  HB2 HIS A 387       0.096  -0.628  15.709  1.00  0.00           H
ATOM   4680  HB3 HIS A 387       1.624   0.172  15.621  1.00  0.00           H
ATOM   4681  HD1 HIS A 387      -1.957   0.831  16.435  1.00  0.00           H
ATOM   4682  HD2 HIS A 387       1.494   3.150  15.386  1.00  0.00           H
ATOM   4683  HE1 HIS A 387      -2.386   3.189  16.996  1.00  0.00           H
ATOM   4684  HE2 HIS A 387      -0.345   4.604  16.466  1.00  0.00           H
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ATOM   4685  N   HIS A 388       0.182   1.510  11.989  1.00 18.98           N
ATOM   4686  CA  HIS A 388       0.200   2.839  11.381  1.00 18.64           C
ATOM   4687  C   HIS A 388      -0.906   3.623  12.115  1.00 20.19           C
ATOM   4688  O   HIS A 388      -2.022   3.107  12.184  1.00 20.72           O
ATOM   4689  CB  HIS A 388      -0.195   2.747   9.886  1.00  0.00           C
ATOM   4690  CG  HIS A 388      -0.405   3.992   9.066  1.00  0.00           C
ATOM   4691  ND1 HIS A 388      -1.369   4.024   8.081  1.00  0.00           N
ATOM   4692  CD2 HIS A 388       0.249   5.191   8.938  1.00  0.00           C
ATOM   4693  CE1 HIS A 388      -1.262   5.181   7.397  1.00  0.00           C
ATOM   4694  NE2 HIS A 388      -0.294   5.920   7.907  1.00  0.00           N
ATOM   4695  H   HIS A 388      -0.745   1.095  12.052  1.00  0.00           H
ATOM   4696  HA  HIS A 388       1.182   3.301  11.470  1.00  0.00           H
ATOM   4697  HB2 HIS A 388       0.605   2.160   9.436  1.00  0.00           H
ATOM   4698  HB3 HIS A 388      -1.087   2.126   9.817  1.00  0.00           H
ATOM   4699  HD1 HIS A 388      -2.024   3.286   7.838  1.00  0.00           H
ATOM   4700  HD2 HIS A 388       1.087   5.582   9.496  1.00  0.00           H
ATOM   4701  HE1 HIS A 388      -1.856   5.416   6.519  1.00  0.00           H
ATOM   4702  N   PRO A 389      -0.642   4.813  12.696  1.00 19.60           N
ATOM   4703  CA  PRO A 389      -1.647   5.605  13.428  1.00 19.62           C
ATOM   4704  C   PRO A 389      -2.984   5.801  12.668  1.00 19.23           C
ATOM   4705  O   PRO A 389      -2.938   6.267  11.524  1.00 20.06           O
ATOM   4706  CB  PRO A 389      -0.959   6.956  13.691  1.00 19.61           C
ATOM   4707  CG  PRO A 389       0.533   6.686  13.615  1.00 19.36           C
ATOM   4708  CD  PRO A 389       0.678   5.443  12.749  1.00 19.21           C
ATOM   4709  HA  PRO A 389      -1.799   5.091  14.372  1.00  0.00           H
ATOM   4710  HB2 PRO A 389      -1.222   7.694  12.930  1.00  0.00           H
ATOM   4711  HB3 PRO A 389      -1.235   7.382  14.654  1.00  0.00           H
ATOM   4712  HG2 PRO A 389       1.076   7.540  13.211  1.00  0.00           H
ATOM   4713  HG3 PRO A 389       0.931   6.489  14.609  1.00  0.00           H
ATOM   4714  HD2 PRO A 389       1.003   5.729  11.752  1.00  0.00           H
ATOM   4715  HD3 PRO A 389       1.424   4.770  13.172  1.00  0.00           H
ATOM   4716  N   PRO A 390      -4.168   5.517  13.260  1.00 19.23           N
ATOM   4717  CA  PRO A 390      -4.405   5.036  14.634  1.00 19.78           C
ATOM   4718  C   PRO A 390      -4.502   3.498  14.821  1.00 19.82           C
ATOM   4719  O   PRO A 390      -4.855   3.088  15.927  1.00 20.50           O
ATOM   4720  CB  PRO A 390      -5.782   5.639  14.967  1.00 16.45           C
ATOM   4721  CG  PRO A 390      -6.531   5.597  13.645  1.00 19.09           C
ATOM   4722  CD  PRO A 390      -5.436   5.897  12.623  1.00 19.54           C
ATOM   4723  HA  PRO A 390      -3.681   5.433  15.346  1.00  0.00           H
ATOM   4724  HB2 PRO A 390      -6.325   5.134  15.765  1.00  0.00           H
ATOM   4725  HB3 PRO A 390      -5.654   6.669  15.296  1.00  0.00           H
ATOM   4726  HG2 PRO A 390      -6.936   4.599  13.487  1.00  0.00           H
ATOM   4727  HG3 PRO A 390      -7.361   6.303  13.602  1.00  0.00           H
ATOM   4728  HD2 PRO A 390      -5.601   5.353  11.692  1.00  0.00           H
ATOM   4729  HD3 PRO A 390      -5.424   6.962  12.389  1.00  0.00           H
ATOM   4730  N   TYR A 391      -4.261   2.638  13.818  1.00 21.44           N
ATOM   4731  CA  TYR A 391      -4.703   1.231  13.833  1.00 22.01           C
ATOM   4732  C   TYR A 391      -3.567   0.207  13.760  1.00 21.91           C
ATOM   4733  O   TYR A 391      -2.557   0.408  13.081  1.00 21.23           O
ATOM   4734  CB  TYR A 391      -5.745   0.979  12.722  1.00 25.04           C
ATOM   4735  CG  TYR A 391      -7.073   1.680  12.933  1.00 26.98           C
ATOM   4736  CD1 TYR A 391      -7.725   1.559  14.175  1.00 27.76           C
ATOM   4737  CD2 TYR A 391      -7.670   2.436  11.901  1.00 28.12           C
ATOM   4738  CE1 TYR A 391      -8.943   2.211  14.401  1.00 29.80           C
ATOM   4739  CE2 TYR A 391      -8.903   3.083  12.126  1.00 28.51           C
ATOM   4740  CZ  TYR A 391      -9.530   2.975  13.382  1.00 30.11           C
ATOM   4741  OH  TYR A 391     -10.709   3.601  13.645  1.00 29.73           O
ATOM   4742  H   TYR A 391      -3.766   2.947  12.988  1.00  0.00           H
ATOM   4743  HA  TYR A 391      -5.181   1.018  14.788  1.00  0.00           H
ATOM   4744  HB2 TYR A 391      -5.339   1.255  11.755  1.00  0.00           H
ATOM   4745  HB3 TYR A 391      -5.961  -0.088  12.651  1.00  0.00           H
ATOM   4746  HD1 TYR A 391      -7.309   0.953  14.964  1.00  0.00           H
ATOM   4747  HD2 TYR A 391      -7.192   2.520  10.935  1.00  0.00           H
ATOM   4748  HE1 TYR A 391      -9.419   2.112  15.363  1.00  0.00           H
ATOM   4749  HE2 TYR A 391      -9.359   3.661  11.334  1.00  0.00           H
ATOM   4750  HH  TYR A 391     -11.105   4.023  12.863  1.00  0.00           H
ATOM   4751  N   ASP A 392      -3.758  -0.896  14.495  1.00 20.65           N
ATOM   4752  CA  ASP A 392      -2.797  -1.963  14.754  1.00 21.18           C
ATOM   4753  C   ASP A 392      -3.242  -3.237  14.037  1.00 20.89           C
ATOM   4754  O   ASP A 392      -4.431  -3.542  13.991  1.00 20.18           O
ATOM   4755  CB  ASP A 392      -2.686  -2.305  16.270  1.00 22.25           C
ATOM   4756  CG  ASP A 392      -2.346  -1.133  17.179  1.00 21.58           C
ATOM   4757  OD1 ASP A 392      -3.053  -0.100  17.127  1.00 20.66           O
ATOM   4758  OD2 ASP A 392      -1.312  -1.162  17.874  1.00 21.72           O1-
ATOM   4759  H   ASP A 392      -4.629  -0.974  15.013  1.00  0.00           H
ATOM   4760  HA  ASP A 392      -1.825  -1.649  14.392  1.00  0.00           H
ATOM   4761  HB2 ASP A 392      -3.618  -2.742  16.632  1.00  0.00           H
ATOM   4762  HB3 ASP A 392      -1.928  -3.076  16.414  1.00  0.00           H
ATOM   4763  N   ASN A 393      -2.275  -4.009  13.545  1.00 20.94           N
ATOM   4764  CA  ASN A 393      -2.412  -5.424  13.207  1.00 20.94           C
ATOM   4765  C   ASN A 393      -1.796  -6.168  14.396  1.00 23.33           C
ATOM   4766  O   ASN A 393      -0.728  -5.753  14.863  1.00 20.26           O
ATOM   4767  CB  ASN A 393      -1.517  -5.736  11.977  1.00 21.01           C
ATOM   4768  CG  ASN A 393      -2.069  -6.900  11.160  1.00 21.80           C
ATOM   4769  OD1 ASN A 393      -3.023  -6.702  10.421  1.00 21.19           O
ATOM   4770  ND2 ASN A 393      -1.476  -8.087  11.212  1.00 18.99           N
ATOM   4771  H   ASN A 393      -1.325  -3.697  13.743  1.00  0.00           H
ATOM   4772  HA  ASN A 393      -3.456  -5.703  13.041  1.00  0.00           H
ATOM   4773  HB2 ASN A 393      -1.495  -4.876  11.309  1.00  0.00           H
ATOM   4774  HB3 ASN A 393      -0.475  -5.925  12.238  1.00  0.00           H
ATOM   4775 HD21 ASN A 393      -0.591  -8.273  11.685  1.00  0.00           H
ATOM   4776 HD22 ASN A 393      -1.916  -8.854  10.714  1.00  0.00           H
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ATOM   4777  N   CYS A 394     -2.396  -7.260  14.875  1.00 21.34           N
ATOM   4778  CA  CYS A 394     -1.774  -8.122  15.884  1.00 23.77           C
ATOM   4779  C   CYS A 394     -2.169  -9.594  15.684  1.00 23.91           C
ATOM   4780  O   CYS A 394     -3.370  -9.864  15.667  1.00 23.61           O
ATOM   4781  CB  CYS A 394     -2.045  -7.593  17.306  1.00 24.76           C
ATOM   4782  SG  CYS A 394     -1.121  -8.425  18.627  1.00 21.89           S
ATOM   4783  H   CYS A 394     -3.325  -7.520  14.526  1.00  0.00           H
ATOM   4784  HA  CYS A 394     -0.699  -8.036  15.753  1.00  0.00           H
ATOM   4785  HB2 CYS A 394     -1.826  -6.527  17.365  1.00  0.00           H
ATOM   4786  HB3 CYS A 394     -3.099  -7.697  17.548  1.00  0.00           H
ATOM   4787  N   PRO A 395     -1.211 -10.551  15.570  1.00 24.08           N
ATOM   4788  CA  PRO A 395     -1.476 -12.001  15.566  1.00 23.62           C
ATOM   4789  C   PRO A 395     -2.319 -12.437  16.777  1.00 23.97           C
ATOM   4790  O   PRO A 395     -1.962 -12.135  17.916  1.00 22.43           O
ATOM   4791  CB  PRO A 395     -0.090 -12.665  15.624  1.00 22.83           C
ATOM   4792  CG  PRO A 395      0.867 -11.637  15.061  1.00 22.60           C
ATOM   4793  CD  PRO A 395      0.217 -10.293  15.366  1.00 24.08           C
ATOM   4794  HA  PRO A 395     -1.973 -12.253  14.628  1.00  0.00           H
ATOM   4795  HB2 PRO A 395      0.207 -12.889  16.649  1.00  0.00           H
ATOM   4796  HB3 PRO A 395     -0.054 -13.605  15.075  1.00  0.00           H
ATOM   4797  HG2 PRO A 395      1.876 -11.739  15.458  1.00  0.00           H
ATOM   4798  HG3 PRO A 395      0.933 -11.756  13.982  1.00  0.00           H
ATOM   4799  HD2 PRO A 395      0.649  -9.876  16.276  1.00  0.00           H
ATOM   4800  HD3 PRO A 395      0.383  -9.599  14.545  1.00  0.00           H
ATOM   4801  N   LEU A 396     -3.447 -13.118  16.538  1.00 23.38           N
ATOM   4802  CA  LEU A 396     -4.419 -13.498  17.569  1.00 25.21           C
ATOM   4803  C   LEU A 396     -4.332 -14.988  17.934  1.00 27.18           C
ATOM   4804  O   LEU A 396     -5.194 -15.502  18.652  1.00 29.80           O
ATOM   4805  CB  LEU A 396     -5.849 -13.176  17.089  1.00 24.81           C
ATOM   4806  CG  LEU A 396     -6.100 -11.695  16.756  1.00 23.79           C
ATOM   4807  CD1 LEU A 396     -7.546 -11.510  16.294  1.00 23.36           C
ATOM   4808  CD2 LEU A 396     -5.774 -10.766  17.937  1.00 21.88           C
ATOM   4809  H   LEU A 396     -3.676 -13.286  15.571  1.00  0.00           H
ATOM   4810  HA  LEU A 396     -4.232 -12.951  18.494  1.00  0.00           H
ATOM   4811  HB2 LEU A 396     -6.094 -13.784  16.221  1.00  0.00           H
ATOM   4812  HB3 LEU A 396     -6.558 -13.471  17.862  1.00  0.00           H
ATOM   4813  HG  LEU A 396     -5.465 -11.400  15.920  1.00  0.00           H
ATOM   4814 HD11 LEU A 396     -7.747 -10.462  16.068  1.00  0.00           H
ATOM   4815 HD12 LEU A 396     -7.741 -12.086  15.390  1.00  0.00           H
ATOM   4816 HD13 LEU A 396     -8.252 -11.832  17.056  1.00  0.00           H
ATOM   4817 HD21 LEU A 396     -6.111  -9.751  17.742  1.00  0.00           H
ATOM   4818 HD22 LEU A 396     -6.245 -11.100  18.858  1.00  0.00           H
ATOM   4819 HD23 LEU A 396     -4.699 -10.707  18.110  1.00  0.00           H
ATOM   4820  N   ASP A 397     -3.279 -15.684  17.498  1.00 26.31           N
ATOM   4821  CA  ASP A 397     -2.892 -17.038  17.906  1.00 26.97           C
ATOM   4822  C   ASP A 397     -2.345 -16.992  19.357  1.00 27.26           C
ATOM   4823  O   ASP A 397     -2.512 -15.996  20.066  1.00 24.89           O
ATOM   4824  CB  ASP A 397     -1.804 -17.533  16.923  1.00 27.87           C
ATOM   4825  CG  ASP A 397     -0.495 -16.778  17.084  1.00 31.48           C
ATOM   4826  OD1 ASP A 397     -0.472 -15.604  16.683  1.00 33.62           O
ATOM   4827  OD2 ASP A 397      0.411 -17.327  17.741  1.00 32.96           O1-
ATOM   4828  H   ASP A 397     -2.533 -15.167  17.030  1.00  0.00           H
ATOM   4829  HA  ASP A 397     -3.755 -17.699  17.861  1.00  0.00           H
ATOM   4830  HB2 ASP A 397     -1.611 -18.596  17.066  1.00  0.00           H
ATOM   4831  HB3 ASP A 397     -2.137 -17.425  15.891  1.00  0.00           H
ATOM   4832  N   LYS A 398     -1.740 -18.078  19.842  1.00 27.55           N
ATOM   4833  CA  LYS A 398     -1.101 -18.163  21.150  1.00 28.98           C
ATOM   4834  C   LYS A 398      0.246 -18.909  21.050  1.00 28.03           C
ATOM   4835  O   LYS A 398      0.674 -19.509  22.037  1.00 27.56           O
ATOM   4836  CB  LYS A 398     -2.083 -18.749  22.206  1.00 32.65           C
ATOM   4837  CG  LYS A 398     -3.486 -18.093  22.305  1.00 38.44           C
ATOM   4838  CD  LYS A 398     -3.509 -16.699  22.968  1.00 40.86           C
ATOM   4839  CE  LYS A 398     -4.803 -15.903  22.677  1.00 42.41           C
ATOM   4840  NZ  LYS A 398     -4.674 -15.044  21.490  1.00 44.87           N1+
ATOM   4841  H   LYS A 398     -1.593 -18.897  19.237  1.00  0.00           H
ATOM   4842  HA  LYS A 398     -0.818 -17.160  21.474  1.00  0.00           H
ATOM   4843  HB2 LYS A 398     -2.219 -19.806  21.973  1.00  0.00           H
ATOM   4844  HB3 LYS A 398     -1.608 -18.730  23.188  1.00  0.00           H
ATOM   4845  HG2 LYS A 398     -3.952 -18.058  21.322  1.00  0.00           H
ATOM   4846  HG3 LYS A 398     -4.129 -18.751  22.890  1.00  0.00           H
ATOM   4847  HD2 LYS A 398     -3.410 -16.837  24.045  1.00  0.00           H
ATOM   4848  HD3 LYS A 398     -2.637 -16.108  22.681  1.00  0.00           H
ATOM   4849  HE2 LYS A 398     -5.656 -16.572  22.559  1.00  0.00           H
ATOM   4850  HE3 LYS A 398     -5.029 -15.249  23.520  1.00  0.00           H
ATOM   4851  HZ1 LYS A 398     -5.559 -14.629  21.189  1.00  0.00           H
ATOM   4852  HZ2 LYS A 398     -4.038 -14.278  21.733  1.00  0.00           H
ATOM   4853  HZ3 LYS A 398     -4.246 -15.525  20.704  1.00  0.00           H
ATOM   4854  N   GLU A 399      0.920 -18.889  19.891  1.00 29.00           N
ATOM   4855  CA  GLU A 399      2.094 -19.709  19.584  1.00 29.56           C
ATOM   4856  C   GLU A 399      3.142 -18.947  18.758  1.00 27.81           C
ATOM   4857  O   GLU A 399      4.265 -18.743  19.219  1.00 26.43           O
ATOM   4858  CB  GLU A 399      1.693 -21.072  18.969  1.00 34.33           C
ATOM   4859  CG  GLU A 399      0.615 -21.030  17.856  1.00 42.27           C
ATOM   4860  CD  GLU A 399     -0.760 -21.443  18.346  1.00 46.74           C
ATOM   4861  OE1 GLU A 399     -1.561 -20.591  18.802  1.00 49.38           O
ATOM   4862  OE2 GLU A 399     -1.089 -22.647  18.309  1.00 48.28           O1-
ATOM   4863  H   GLU A 399      0.572 -18.302  19.119  1.00  0.00           H
ATOM   4864  HA  GLU A 399      2.610 -19.936  20.519  1.00  0.00           H
ATOM   4865  HB2 GLU A 399      2.586 -21.556  18.572  1.00  0.00           H
ATOM   4866  HB3 GLU A 399      1.360 -21.731  19.773  1.00  0.00           H
ATOM   4867  HG2 GLU A 399      0.546 -20.049  17.389  1.00  0.00           H
ATOM   4868  HG3 GLU A 399      0.894 -21.721  17.060  1.00  0.00           H
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ATOM   4869  N   VAL A 400      2.767 -18.492  17.558  1.00 26.01           N
ATOM   4870  CA  VAL A 400      3.568 -17.715  16.614  1.00 24.53           C
ATOM   4871  C   VAL A 400      3.802 -16.313  17.202  1.00 24.42           C
ATOM   4872  O   VAL A 400      4.927 -15.817  17.139  1.00 22.04           O
ATOM   4873  CB  VAL A 400      2.827 -17.628  15.246  1.00 24.87           C
ATOM   4874  CG1 VAL A 400      3.621 -16.859  14.169  1.00 22.22           C
ATOM   4875  CG2 VAL A 400      2.445 -19.018  14.701  1.00 22.82           C
ATOM   4876  H   VAL A 400      1.757 -18.408  17.425  1.00  0.00           H
ATOM   4877  HA  VAL A 400      4.530 -18.211  16.480  1.00  0.00           H
ATOM   4878  HB  VAL A 400      1.897 -17.076  15.396  1.00  0.00           H
ATOM   4879 HG11 VAL A 400      3.070 -16.820  13.229  1.00  0.00           H
ATOM   4880 HG12 VAL A 400      3.808 -15.823  14.457  1.00  0.00           H
ATOM   4881 HG13 VAL A 400      4.582 -17.331  13.967  1.00  0.00           H
ATOM   4882 HG21 VAL A 400      1.951 -18.937  13.733  1.00  0.00           H
ATOM   4883 HG22 VAL A 400      3.326 -19.649  14.573  1.00  0.00           H
ATOM   4884 HG23 VAL A 400      1.755 -19.540  15.363  1.00  0.00           H
ATOM   4885  N   TYR A 401      2.779 -15.747  17.858  1.00 25.28           N
ATOM   4886  CA  TYR A 401      2.808 -14.521  18.656  1.00 27.50           C
ATOM   4887  C   TYR A 401      3.933 -14.550  19.713  1.00 27.74           C
ATOM   4888  O   TYR A 401      4.752 -13.634  19.810  1.00 28.01           O
ATOM   4889  CB  TYR A 401      1.409 -14.334  19.288  1.00 26.68           C
ATOM   4890  CG  TYR A 401      1.244 -13.192  20.278  1.00 28.89           C
ATOM   4891  CD1 TYR A 401      1.393 -13.427  21.662  1.00 27.82           C
ATOM   4892  CD2 TYR A 401      0.915 -11.897  19.824  1.00 27.03           C
ATOM   4893  CE1 TYR A 401      1.203 -12.382  22.585  1.00 26.44           C
ATOM   4894  CE2 TYR A 401      0.738 -10.851  20.751  1.00 26.20           C
ATOM   4895  CZ  TYR A 401      0.866 -11.094  22.131  1.00 27.15           C
ATOM   4896  OH  TYR A 401      0.636 -10.097  23.033  1.00 23.75           O
ATOM   4897  H   TYR A 401      1.870 -16.216  17.770  1.00  0.00           H
ATOM   4898  HA  TYR A 401      2.996 -13.695  17.975  1.00  0.00           H
ATOM   4899  HB2 TYR A 401      0.678 -14.189  18.494  1.00  0.00           H
ATOM   4900  HB3 TYR A 401      1.104 -15.256  19.785  1.00  0.00           H
ATOM   4901  HD1 TYR A 401      1.655 -14.408  22.029  1.00  0.00           H
ATOM   4902  HD2 TYR A 401      0.795 -11.698  18.768  1.00  0.00           H
ATOM   4903  HE1 TYR A 401      1.317 -12.568  23.643  1.00  0.00           H
ATOM   4904  HE2 TYR A 401      0.489  -9.863  20.401  1.00  0.00           H
ATOM   4905  HH  TYR A 401      0.488  -9.241  22.629  1.00  0.00           H
ATOM   4906  N   ASN A 402      4.004 -15.658  20.464  1.00 27.33           N
ATOM   4907  CA  ASN A 402      4.959 -15.858  21.558  1.00 29.34           C
ATOM   4908  C   ASN A 402      6.362 -16.216  21.045  1.00 27.72           C
ATOM   4909  O   ASN A 402      7.336 -16.041  21.772  1.00 27.54           O
ATOM   4910  CB  ASN A 402      4.488 -17.011  22.480  1.00 30.12           C
ATOM   4911  CG  ASN A 402      3.291 -16.637  23.356  1.00 33.27           C
ATOM   4912  OD1 ASN A 402      3.312 -15.635  24.057  1.00 33.60           O
ATOM   4913  ND2 ASN A 402      2.209 -17.405  23.336  1.00 34.63           N
ATOM   4914  H   ASN A 402      3.354 -16.398  20.249  1.00  0.00           H
ATOM   4915  HA  ASN A 402      5.049 -14.936  22.138  1.00  0.00           H
ATOM   4916  HB2 ASN A 402      4.274 -17.907  21.897  1.00  0.00           H
ATOM   4917  HB3 ASN A 402      5.291 -17.283  23.168  1.00  0.00           H
ATOM   4918 HD21 ASN A 402      2.141 -18.259  22.792  1.00  0.00           H
ATOM   4919 HD22 ASN A 402      1.456 -17.136  23.945  1.00  0.00           H
ATOM   4920  N   SER A 403      6.481 -16.701  19.803  1.00 27.84           N
ATOM   4921  CA  SER A 403      7.753 -17.093  19.195  1.00 28.74           C
ATOM   4922  C   SER A 403      8.429 -15.914  18.466  1.00 28.13           C
ATOM   4923  O   SER A 403      9.555 -16.062  17.997  1.00 27.53           O
ATOM   4924  CB  SER A 403      7.465 -18.175  18.133  1.00 28.94           C
ATOM   4925  OG  SER A 403      6.895 -19.333  18.723  1.00 35.87           O
ATOM   4926  H   SER A 403      5.644 -16.804  19.248  1.00  0.00           H
ATOM   4927  HA  SER A 403      8.445 -17.485  19.944  1.00  0.00           H
ATOM   4928  HB2 SER A 403      6.803 -17.800  17.351  1.00  0.00           H
ATOM   4929  HB3 SER A 403      8.392 -18.473  17.639  1.00  0.00           H
ATOM   4930  HG  SER A 403      6.016 -19.114  19.030  1.00  0.00           H
ATOM   4931  N   ASN A 404      7.751 -14.763  18.335  1.00 25.90           N
ATOM   4932  CA  ASN A 404      8.151 -13.655  17.460  1.00 25.37           C
ATOM   4933  C   ASN A 404      8.122 -12.301  18.172  1.00 25.69           C
ATOM   4934  O   ASN A 404      8.042 -11.268  17.515  1.00 25.02           O
ATOM   4935  CB  ASN A 404      7.386 -13.674  16.113  1.00 26.10           C
ATOM   4936  CG  ASN A 404      7.774 -14.839  15.202  1.00 26.26           C
ATOM   4937  OD1 ASN A 404      8.872 -14.890  14.652  1.00 29.36           O
ATOM   4938  ND2 ASN A 404      6.891 -15.818  15.061  1.00 28.99           N
ATOM   4939  H   ASN A 404      6.829 -14.711  18.748  1.00  0.00           H
ATOM   4940  HA  ASN A 404      9.208 -13.761  17.213  1.00  0.00           H
ATOM   4941  HB2 ASN A 404      6.310 -13.668  16.292  1.00  0.00           H
ATOM   4942  HB3 ASN A 404      7.581 -12.765  15.546  1.00  0.00           H
ATOM   4943 HD21 ASN A 404      6.027 -15.773  15.596  1.00  0.00           H
ATOM   4944 HD22 ASN A 404      7.101 -16.583  14.443  1.00  0.00           H
ATOM   4945  N   ASN A 405      8.212 -12.282  19.510  1.00 25.25           N
ATOM   4946  CA  ASN A 405      8.408 -11.090  20.360  1.00 26.77           C
ATOM   4947  C   ASN A 405      7.298 -10.038  20.165  1.00 26.11           C
ATOM   4948  O   ASN A 405      7.586  -8.845  20.095  1.00 25.19           O
ATOM   4949  CB  ASN A 405      9.785 -10.404  20.128  1.00 28.88           C
ATOM   4950  CG  ASN A 405     11.027 -11.270  20.293  1.00 29.98           C
ATOM   4951  OD1 ASN A 405     11.038 -12.244  21.037  1.00 31.34           O
ATOM   4952  ND2 ASN A 405     12.090 -10.924  19.578  1.00 32.27           N
ATOM   4953  H   ASN A 405      8.305 -13.179  19.965  1.00  0.00           H
ATOM   4954  HA  ASN A 405      8.359 -11.423  21.398  1.00  0.00           H
ATOM   4955  HB2 ASN A 405      9.799  -9.964  19.130  1.00  0.00           H
ATOM   4956  HB3 ASN A 405      9.903  -9.572  20.824  1.00  0.00           H
ATOM   4957 HD21 ASN A 405     12.042 -10.092  18.971  1.00  0.00           H
ATOM   4958 HD22 ASN A 405     12.937 -11.458  19.657  1.00  0.00           H
ATOM   4959  N   CYS A 406      6.046 -10.460  19.968  1.00 25.69           N
ATOM   4960  CA  CYS A 406      4.962  -9.587  19.526  1.00 25.23           C
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ATOM   4961  C   CYS A 406      4.472  -8.643  20.636  1.00 26.10           C
ATOM   4962  O   CYS A 406      3.563  -8.971  21.396  1.00 26.16           O
ATOM   4963  CB  CYS A 406      3.814 -10.466  19.020  1.00 27.05           C
ATOM   4964  SG  CYS A 406      4.129 -11.270  17.424  1.00 25.91           S
ATOM   4965  H   CYS A 406      5.859 -11.454  19.998  1.00  0.00           H
ATOM   4966  HA  CYS A 406      5.299  -8.965  18.699  1.00  0.00           H
ATOM   4967  HB2 CYS A 406      3.583 -11.231  19.761  1.00  0.00           H
ATOM   4968  HB3 CYS A 406      2.905  -9.876  18.903  1.00  0.00           H
ATOM   4969  N   GLU A 407      5.050  -7.436  20.686  1.00 25.27           N
ATOM   4970  CA  GLU A 407      4.747  -6.324  21.593  1.00 25.75           C
ATOM   4971  C   GLU A 407      3.364  -5.682  21.301  1.00 24.42           C
ATOM   4972  O   GLU A 407      3.263  -4.460  21.188  1.00 22.09           O
ATOM   4973  CB  GLU A 407      5.848  -5.249  21.401  1.00 29.18           C
ATOM   4974  CG  GLU A 407      7.299  -5.684  21.696  1.00 35.84           C
ATOM   4975  CD  GLU A 407      8.317  -4.843  20.931  1.00 38.75           C
ATOM   4976  OE1 GLU A 407      9.373  -5.407  20.566  1.00 41.17           O
ATOM   4977  OE2 GLU A 407      8.017  -3.660  20.653  1.00 43.63           O1-
ATOM   4978  H   GLU A 407      5.884  -7.326  20.118  1.00  0.00           H
ATOM   4979  HA  GLU A 407      4.753  -6.683  22.624  1.00  0.00           H
ATOM   4980  HB2 GLU A 407      5.787  -4.883  20.375  1.00  0.00           H
ATOM   4981  HB3 GLU A 407      5.641  -4.380  22.029  1.00  0.00           H
ATOM   4982  HG2 GLU A 407      7.510  -5.610  22.762  1.00  0.00           H
ATOM   4983  HG3 GLU A 407      7.465  -6.724  21.426  1.00  0.00           H
ATOM   4984  N   CYS A 408      2.302  -6.477  21.120  1.00 23.64           N
ATOM   4985  CA  CYS A 408      0.999  -6.015  20.646  1.00 21.06           C
ATOM   4986  C   CYS A 408     -0.175  -6.589  21.427  1.00 21.00           C
ATOM   4987  O   CYS A 408     -0.122  -7.693  21.977  1.00 19.91           O
ATOM   4988  CB  CYS A 408      0.873  -6.157  19.120  1.00 20.88           C
ATOM   4989  SG  CYS A 408      0.815  -7.816  18.384  1.00 22.25           S
ATOM   4990  H   CYS A 408      2.423  -7.473  21.289  1.00  0.00           H
ATOM   4991  HA  CYS A 408      0.942  -4.941  20.840  1.00  0.00           H
ATOM   4992  HB2 CYS A 408      0.011  -5.592  18.764  1.00  0.00           H
ATOM   4993  HB3 CYS A 408      1.739  -5.676  18.692  1.00  0.00           H
ATOM   4994  N   ASP A 409     -1.243  -5.794  21.454  1.00 17.35           N
ATOM   4995  CA  ASP A 409     -2.446  -5.956  22.246  1.00 19.95           C
ATOM   4996  C   ASP A 409     -3.418  -6.850  21.462  1.00 21.68           C
ATOM   4997  O   ASP A 409     -4.124  -6.391  20.562  1.00 21.54           O
ATOM   4998  CB  ASP A 409     -3.093  -4.554  22.459  1.00 20.43           C
ATOM   4999  CG  ASP A 409     -2.097  -3.465  22.846  1.00 23.66           C
ATOM   5000  OD1 ASP A 409     -1.832  -3.295  24.050  1.00 21.49           O
ATOM   5001  OD2 ASP A 409     -1.506  -2.861  21.918  1.00 21.32           O1-
ATOM   5002  H   ASP A 409     -1.146  -4.866  21.055  1.00  0.00           H
ATOM   5003  HA  ASP A 409     -2.196  -6.391  23.216  1.00  0.00           H
ATOM   5004  HB2 ASP A 409     -3.568  -4.200  21.545  1.00  0.00           H
ATOM   5005  HB3 ASP A 409     -3.876  -4.602  23.216  1.00  0.00           H
ATOM   5006  N   GLN A 410     -3.517  -8.136  21.828  1.00 19.59           N
ATOM   5007  CA  GLN A 410     -4.413  -9.129  21.207  1.00 20.13           C
ATOM   5008  C   GLN A 410     -5.920  -8.880  21.472  1.00 21.87           C
ATOM   5009  O   GLN A 410     -6.760  -9.707  21.108  1.00 20.41           O
ATOM   5010  CB  GLN A 410     -4.055 -10.540  21.715  1.00 20.31           C
ATOM   5011  CG  GLN A 410     -2.671 -11.033  21.263  1.00 21.69           C
ATOM   5012  CD  GLN A 410     -2.557 -12.550  21.400  1.00 20.78           C
ATOM   5013  OE1 GLN A 410     -3.037 -13.142  22.366  1.00 24.03           O
ATOM   5014  NE2 GLN A 410     -2.039 -13.228  20.391  1.00 20.56           N
ATOM   5015  H   GLN A 410     -2.846  -8.462  22.510  1.00  0.00           H
ATOM   5016  HA  GLN A 410     -4.271  -9.090  20.124  1.00  0.00           H
ATOM   5017  HB2 GLN A 410     -4.126 -10.583  22.803  1.00  0.00           H
ATOM   5018  HB3 GLN A 410     -4.797 -11.248  21.341  1.00  0.00           H
ATOM   5019  HG2 GLN A 410     -2.491 -10.750  20.225  1.00  0.00           H
ATOM   5020  HG3 GLN A 410     -1.891 -10.557  21.856  1.00  0.00           H
ATOM   5021 HE21 GLN A 410     -1.731 -12.717  19.555  1.00  0.00           H
ATOM   5022 HE22 GLN A 410     -1.886 -14.230  20.412  1.00  0.00           H
ATOM   5023  N   GLY A 411     -6.259  -7.749  22.097  1.00 24.50           N
ATOM   5024  CA  GLY A 411     -7.602  -7.242  22.329  1.00 26.96           C
ATOM   5025  C   GLY A 411     -7.852  -5.912  21.609  1.00 27.55           C
ATOM   5026  O   GLY A 411     -8.962  -5.399  21.706  1.00 30.46           O
ATOM   5027  H   GLY A 411     -5.497  -7.127  22.328  1.00  0.00           H
ATOM   5028  HA2 GLY A 411     -8.367  -7.955  22.017  1.00  0.00           H
ATOM   5029  HA3 GLY A 411     -7.737  -7.080  23.399  1.00  0.00           H
ATOM   5030  N   ASN A 412     -6.869  -5.381  20.861  1.00 27.68           N
ATOM   5031  CA  ASN A 412     -6.942  -4.119  20.108  1.00 25.90           C
ATOM   5032  C   ASN A 412     -6.312  -4.250  18.712  1.00 24.16           C
ATOM   5033  O   ASN A 412     -5.824  -3.270  18.142  1.00 24.85           O
ATOM   5034  CB  ASN A 412     -6.465  -2.884  20.916  1.00 26.56           C
ATOM   5035  CG  ASN A 412     -7.373  -2.515  22.088  1.00 27.79           C
ATOM   5036  OD1 ASN A 412     -7.111  -2.879  23.229  1.00 32.66           O
ATOM   5037  ND2 ASN A 412     -8.446  -1.777  21.833  1.00 25.88           N
ATOM   5038  H   ASN A 412     -5.978  -5.864  20.790  1.00  0.00           H
ATOM   5039  HA  ASN A 412     -7.993  -3.936  19.870  1.00  0.00           H
ATOM   5040  HB2 ASN A 412     -5.457  -3.046  21.294  1.00  0.00           H
ATOM   5041  HB3 ASN A 412     -6.397  -2.008  20.270  1.00  0.00           H
ATOM   5042 HD21 ASN A 412     -8.698  -1.546  20.861  1.00  0.00           H
ATOM   5043 HD22 ASN A 412     -9.064  -1.553  22.591  1.00  0.00           H
ATOM   5044  N   ASP A 413     -6.358  -5.463  18.141  1.00 22.31           N
ATOM   5045  CA  ASP A 413     -6.093  -5.729  16.723  1.00 22.05           C
ATOM   5046  C   ASP A 413     -7.240  -5.114  15.908  1.00 21.82           C
ATOM   5047  O   ASP A 413     -8.403  -5.242  16.290  1.00 21.38           O
ATOM   5048  CB  ASP A 413     -6.031  -7.259  16.463  1.00 20.91           C
ATOM   5049  CG  ASP A 413     -6.166  -7.655  14.991  1.00 19.89           C
ATOM   5050  OD1 ASP A 413     -5.290  -7.247  14.194  1.00 19.55           O
ATOM   5051  OD2 ASP A 413     -7.214  -8.232  14.637  1.00 19.62           O1-
ATOM   5052  H   ASP A 413     -6.868  -6.172  18.639  1.00  0.00           H
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ATOM   5053  HA  ASP A 413      -5.147  -5.272  16.424  1.00  0.00           H
ATOM   5054  HB2 ASP A 413      -5.118  -7.692  16.855  1.00  0.00           H
ATOM   5055  HB3 ASP A 413      -6.855  -7.741  16.988  1.00  0.00           H
ATOM   5056  N   PHE A 414      -6.922  -4.468  14.787  1.00 21.02           N
ATOM   5057  CA  PHE A 414      -7.924  -3.899  13.911  1.00 18.26           C
ATOM   5058  C   PHE A 414      -8.444  -4.932  12.899  1.00 19.44           C
ATOM   5059  O   PHE A 414      -9.562  -4.744  12.426  1.00 21.11           O
ATOM   5060  CB  PHE A 414      -7.311  -2.714  13.142  1.00 18.35           C
ATOM   5061  CG  PHE A 414      -8.333  -1.886  12.385  1.00 17.60           C
ATOM   5062  CD1 PHE A 414      -9.267  -1.105  13.095  1.00 19.23           C
ATOM   5063  CD2 PHE A 414      -8.388  -1.930  10.978  1.00 17.55           C
ATOM   5064  CE1 PHE A 414     -10.242  -0.364  12.402  1.00 20.54           C
ATOM   5065  CE2 PHE A 414      -9.346  -1.173  10.286  1.00 16.66           C
ATOM   5066  CZ  PHE A 414     -10.274  -0.390  10.997  1.00 18.35           C
ATOM   5067  H   PHE A 414      -5.943  -4.389  14.516  1.00  0.00           H
ATOM   5068  HA  PHE A 414      -8.762  -3.528  14.502  1.00  0.00           H
ATOM   5069  HB2 PHE A 414      -6.810  -2.049  13.847  1.00  0.00           H
ATOM   5070  HB3 PHE A 414      -6.538  -3.061  12.454  1.00  0.00           H
ATOM   5071  HD1 PHE A 414      -9.234  -1.069  14.174  1.00  0.00           H
ATOM   5072  HD2 PHE A 414      -7.721  -2.564  10.417  1.00  0.00           H
ATOM   5073  HE1 PHE A 414     -10.953   0.238  12.948  1.00  0.00           H
ATOM   5074  HE2 PHE A 414      -9.378  -1.218   9.208  1.00  0.00           H
ATOM   5075  HZ  PHE A 414     -11.014   0.184  10.467  1.00  0.00           H
ATOM   5076  N   THR A 415      -7.703  -6.003  12.556  1.00 20.19           N
ATOM   5077  CA  THR A 415      -7.967  -6.930  11.438  1.00 20.23           C
ATOM   5078  C   THR A 415      -9.423  -7.435  11.370  1.00 22.22           C
ATOM   5079  O   THR A 415      -9.993  -7.573  10.287  1.00 22.79           O
ATOM   5080  CB  THR A 415      -6.980  -8.129  11.453  1.00 21.37           C
ATOM   5081  OG1 THR A 415      -5.642  -7.696  11.610  1.00 17.64           O
ATOM   5082  CG2 THR A 415      -7.038  -8.986  10.175  1.00 20.76           C
ATOM   5083  H   THR A 415      -6.870  -6.212  13.103  1.00  0.00           H
ATOM   5084  HA  THR A 415      -7.786  -6.360  10.525  1.00  0.00           H
ATOM   5085  HB  THR A 415      -7.210  -8.783  12.290  1.00  0.00           H
ATOM   5086  HG1 THR A 415      -5.501  -7.541  12.562  1.00  0.00           H
ATOM   5087 HG21 THR A 415      -6.437  -9.885  10.283  1.00  0.00           H
ATOM   5088 HG22 THR A 415      -8.045  -9.342   9.960  1.00  0.00           H
ATOM   5089 HG23 THR A 415      -6.680  -8.436   9.305  1.00  0.00           H
ATOM   5090  N   PHE A 416     -10.049  -7.665  12.524  1.00 22.70           N
ATOM   5091  CA  PHE A 416     -11.373  -8.265  12.604  1.00 23.45           C
ATOM   5092  C   PHE A 416     -12.422  -7.311  13.190  1.00 22.80           C
ATOM   5093  O   PHE A 416     -13.512  -7.771  13.522  1.00 25.25           O
ATOM   5094  CB  PHE A 416     -11.264  -9.610  13.347  1.00 20.24           C
ATOM   5095  CG  PHE A 416     -10.305 -10.577  12.675  1.00 20.62           C
ATOM   5096  CD1 PHE A 416     -10.682 -11.259  11.502  1.00 20.38           C
ATOM   5097  CD2 PHE A 416      -8.992 -10.716  13.167  1.00 18.91           C
ATOM   5098  CE1 PHE A 416      -9.740 -12.030  10.797  1.00 19.44           C
ATOM   5099  CE2 PHE A 416      -8.054 -11.503  12.477  1.00 18.21           C
ATOM   5100  CZ  PHE A 416      -8.425 -12.149  11.284  1.00 20.50           C
ATOM   5101  H   PHE A 416      -9.495  -7.563  13.370  1.00  0.00           H
ATOM   5102  HA  PHE A 416     -11.756  -8.494  11.609  1.00  0.00           H
ATOM   5103  HB2 PHE A 416     -10.936  -9.445  14.374  1.00  0.00           H
ATOM   5104  HB3 PHE A 416     -12.246 -10.080  13.402  1.00  0.00           H
ATOM   5105  HD1 PHE A 416     -11.679 -11.154  11.116  1.00  0.00           H
ATOM   5106  HD2 PHE A 416      -8.676 -10.159  14.038  1.00  0.00           H
ATOM   5107  HE1 PHE A 416     -10.012 -12.496   9.864  1.00  0.00           H
ATOM   5108  HE2 PHE A 416      -7.035 -11.557  12.837  1.00  0.00           H
ATOM   5109  HZ  PHE A 416      -7.687 -12.709  10.731  1.00  0.00           H
ATOM   5110  N   GLN A 417     -12.136  -6.004  13.313  1.00 23.60           N
ATOM   5111  CA  GLN A 417     -13.077  -4.985  13.803  1.00 22.99           C
ATOM   5112  C   GLN A 417     -14.141  -4.606  12.748  1.00 22.57           C
ATOM   5113  O   GLN A 417     -14.242  -5.239  11.694  1.00 22.49           O
ATOM   5114  CB  GLN A 417     -12.296  -3.737  14.261  1.00 22.97           C
ATOM   5115  CG  GLN A 417     -11.529  -3.978  15.575  1.00 23.29           C
ATOM   5116  CD  GLN A 417     -11.067  -2.711  16.299  1.00 26.35           C
ATOM   5117  OE1 GLN A 417     -10.440  -2.792  17.349  1.00 25.95           O
ATOM   5118  NE2 GLN A 417     -11.388  -1.524  15.799  1.00 24.11           N
ATOM   5119  H   GLN A 417     -11.220  -5.691  13.000  1.00  0.00           H
ATOM   5120  HA  GLN A 417     -13.628  -5.384  14.652  1.00  0.00           H
ATOM   5121  HB2 GLN A 417     -11.622  -3.377  13.482  1.00  0.00           H
ATOM   5122  HB3 GLN A 417     -13.005  -2.936  14.447  1.00  0.00           H
ATOM   5123  HG2 GLN A 417     -12.176  -4.502  16.277  1.00  0.00           H
ATOM   5124  HG3 GLN A 417     -10.676  -4.632  15.400  1.00  0.00           H
ATOM   5125 HE21 GLN A 417     -11.971  -1.427  14.974  1.00  0.00           H
ATOM   5126 HE22 GLN A 417     -11.103  -0.685  16.307  1.00  0.00           H
ATOM   5127  N   GLY A 418     -14.969  -3.591  13.028  1.00 22.92           N
ATOM   5128  CA  GLY A 418     -16.213  -3.321  12.310  1.00 21.05           C
ATOM   5129  C   GLY A 418     -16.056  -2.265  11.218  1.00 21.18           C
ATOM   5130  O   GLY A 418     -16.756  -2.347  10.214  1.00 21.14           O
ATOM   5131  H   GLY A 418     -14.805  -3.048  13.866  1.00  0.00           H
ATOM   5132  HA2 GLY A 418     -16.627  -4.233  11.875  1.00  0.00           H
ATOM   5133  HA3 GLY A 418     -16.952  -2.953  13.023  1.00  0.00           H
ATOM   5134  N   TYR A 419     -15.084  -1.354  11.346  1.00 20.25           N
ATOM   5135  CA  TYR A 419     -14.665  -0.448  10.271  1.00 21.27           C
ATOM   5136  C   TYR A 419     -13.542  -1.111   9.437  1.00 20.92           C
ATOM   5137  O   TYR A 419     -13.040  -0.544   8.468  1.00 19.73           O
ATOM   5138  CB  TYR A 419     -14.135   0.849  10.922  1.00 21.11           C
ATOM   5139  CG  TYR A 419     -14.099   2.057  10.004  1.00 22.25           C
ATOM   5140  CD1 TYR A 419     -15.254   2.846   9.843  1.00 23.37           C
ATOM   5141  CD2 TYR A 419     -12.919   2.408   9.318  1.00 21.83           C
ATOM   5142  CE1 TYR A 419     -15.221   3.994   9.033  1.00 23.61           C
ATOM   5143  CE2 TYR A 419     -12.896   3.528   8.469  1.00 24.89           C
ATOM   5144  CZ  TYR A 419     -14.047   4.326   8.341  1.00 22.99           C
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ATOM   5145  OH  TYR A 419     -14.019   5.458   7.591  1.00 26.03           O
ATOM   5146  H   TYR A 419     -14.575  -1.292  12.221  1.00  0.00           H
ATOM   5147  HA  TYR A 419     -15.508  -0.210   9.619  1.00  0.00           H
ATOM   5148  HB2 TYR A 419     -14.775   1.121  11.762  1.00  0.00           H
ATOM   5149  HB3 TYR A 419     -13.148   0.694  11.357  1.00  0.00           H
ATOM   5150  HD1 TYR A 419     -16.167   2.582  10.355  1.00  0.00           H
ATOM   5151  HD2 TYR A 419     -12.026   1.821   9.439  1.00  0.00           H
ATOM   5152  HE1 TYR A 419     -16.098   4.621   8.943  1.00  0.00           H
ATOM   5153  HE2 TYR A 419     -11.984   3.782   7.948  1.00  0.00           H
ATOM   5154  HH  TYR A 419     -13.323   5.457   6.916  1.00  0.00           H
ATOM   5155  N   SER A 420     -13.132  -2.324   9.817  1.00 19.72           N
ATOM   5156  CA  SER A 420     -12.085  -3.094   9.174  1.00 19.12           C
ATOM   5157  C   SER A 420     -12.682  -4.010   8.101  1.00 19.14           C
ATOM   5158  O   SER A 420     -13.891  -4.269   8.070  1.00 18.72           O
ATOM   5159  CB  SER A 420     -11.413  -3.949  10.253  1.00 20.59           C
ATOM   5160  OG  SER A 420     -10.249  -4.598   9.792  1.00 18.07           O
ATOM   5161  H   SER A 420     -13.667  -2.779  10.538  1.00  0.00           H
ATOM   5162  HA  SER A 420     -11.345  -2.429   8.735  1.00  0.00           H
ATOM   5163  HB2 SER A 420     -11.137  -3.308  11.091  1.00  0.00           H
ATOM   5164  HB3 SER A 420     -12.082  -4.713  10.640  1.00  0.00           H
ATOM   5165  HG  SER A 420      -9.729  -4.760  10.577  1.00  0.00           H
ATOM   5166  N   CYS A 421     -11.790  -4.525   7.255  1.00 20.98           N
ATOM   5167  CA  CYS A 421     -12.071  -5.436   6.159  1.00 19.83           C
ATOM   5168  C   CYS A 421     -11.120  -6.642   6.148  1.00 21.04           C
ATOM   5169  O   CYS A 421     -11.023  -7.342   5.140  1.00 23.25           O
ATOM   5170  CB  CYS A 421     -12.163  -4.677   4.824  1.00 20.05           C
ATOM   5171  SG  CYS A 421     -13.653  -3.661   4.610  1.00 22.53           S
ATOM   5172  H   CYS A 421     -10.815  -4.291   7.434  1.00  0.00           H
ATOM   5173  HA  CYS A 421     -13.050  -5.886   6.323  1.00  0.00           H
ATOM   5174  HB2 CYS A 421     -11.285  -4.046   4.684  1.00  0.00           H
ATOM   5175  HB3 CYS A 421     -12.150  -5.387   3.999  1.00  0.00           H
ATOM   5176  N   GLY A 422     -10.458  -6.960   7.267  1.00 20.19           N
ATOM   5177  CA  GLY A 422      -9.491  -8.058   7.302  1.00 22.14           C
ATOM   5178  C   GLY A 422     -10.193  -9.398   7.513  1.00 22.26           C
ATOM   5179  O   GLY A 422      -9.789 -10.396   6.916  1.00 19.11           O
ATOM   5180  H   GLY A 422     -10.527  -6.362   8.085  1.00  0.00           H
ATOM   5181  HA2 GLY A 422      -8.918  -8.113   6.376  1.00  0.00           H
ATOM   5182  HA3 GLY A 422      -8.765  -7.885   8.094  1.00  0.00           H
ATOM   5183  N   LYS A 423     -11.335  -9.414   8.223  1.00 24.00           N
ATOM   5184  CA  LYS A 423     -12.260 -10.546   8.217  1.00 25.44           C
ATOM   5185  C   LYS A 423     -12.799 -10.771   6.793  1.00 25.53           C
ATOM   5186  O   LYS A 423     -12.785 -11.898   6.310  1.00 26.66           O
ATOM   5187  CB  LYS A 423     -13.440 -10.337   9.196  1.00 26.73           C
ATOM   5188  CG  LYS A 423     -14.177 -11.668   9.478  1.00 31.23           C
ATOM   5189  CD  LYS A 423     -15.587 -11.565  10.085  1.00 34.49           C
ATOM   5190  CE  LYS A 423     -16.581 -10.651   9.346  1.00 36.84           C
ATOM   5191  NZ  LYS A 423     -16.761 -10.975   7.920  1.00 39.84           N1+
ATOM   5192  H   LYS A 423     -11.595  -8.544   8.668  1.00  0.00           H
ATOM   5193  HA  LYS A 423     -11.698 -11.431   8.517  1.00  0.00           H
ATOM   5194  HB2 LYS A 423     -13.104  -9.889  10.130  1.00  0.00           H
ATOM   5195  HB3 LYS A 423     -14.121  -9.606   8.768  1.00  0.00           H
ATOM   5196  HG2 LYS A 423     -14.254 -12.246   8.561  1.00  0.00           H
ATOM   5197  HG3 LYS A 423     -13.556 -12.284  10.129  1.00  0.00           H
ATOM   5198  HD2 LYS A 423     -16.012 -12.569  10.119  1.00  0.00           H
ATOM   5199  HD3 LYS A 423     -15.501 -11.232  11.119  1.00  0.00           H
ATOM   5200  HE2 LYS A 423     -17.557 -10.704   9.830  1.00  0.00           H
ATOM   5201  HE3 LYS A 423     -16.268  -9.612   9.434  1.00  0.00           H
ATOM   5202  HZ1 LYS A 423     -16.502 -10.127   7.393  1.00  0.00           H
ATOM   5203  HZ2 LYS A 423     -16.239 -11.809   7.579  1.00  0.00           H
ATOM   5204  HZ3 LYS A 423     -17.722 -11.145   7.693  1.00  0.00           H
ATOM   5205  N   GLU A 424     -13.230  -9.695   6.126  1.00 23.69           N
ATOM   5206  CA  GLU A 424     -13.807  -9.667   4.785  1.00 23.47           C
ATOM   5207  C   GLU A 424     -12.816 -10.213   3.745  1.00 23.14           C
ATOM   5208  O   GLU A 424     -13.220 -11.003   2.896  1.00 18.61           O
ATOM   5209  CB  GLU A 424     -14.244  -8.224   4.437  1.00 24.63           C
ATOM   5210  CG  GLU A 424     -15.519  -7.704   5.140  1.00 25.57           C
ATOM   5211  CD  GLU A 424     -15.588  -7.928   6.643  1.00 28.25           C
ATOM   5212  OE1 GLU A 424     -14.649  -7.579   7.390  1.00 27.71           O
ATOM   5213  OE2 GLU A 424     -16.578  -8.537   7.105  1.00 33.30           O1-
ATOM   5214  H   GLU A 424     -13.293  -8.819   6.642  1.00  0.00           H
ATOM   5215  HA  GLU A 424     -14.684 -10.318   4.772  1.00  0.00           H
ATOM   5216  HB2 GLU A 424     -13.434  -7.526   4.615  1.00  0.00           H
ATOM   5217  HB3 GLU A 424     -14.427  -8.161   3.362  1.00  0.00           H
ATOM   5218  HG2 GLU A 424     -15.624  -6.636   4.953  1.00  0.00           H
ATOM   5219  HG3 GLU A 424     -16.392  -8.173   4.686  1.00  0.00           H
ATOM   5220  N   TYR A 425     -11.519  -9.885   3.862  1.00 21.56           N
ATOM   5221  CA  TYR A 425     -10.435 -10.501   3.092  1.00 21.96           C
ATOM   5222  C   TYR A 425     -10.380 -12.023   3.320  1.00 23.23           C
ATOM   5223  O   TYR A 425     -10.484 -12.799   2.368  1.00 21.80           O
ATOM   5224  CB  TYR A 425      -9.074  -9.846   3.430  1.00 21.92           C
ATOM   5225  CG  TYR A 425      -7.910 -10.557   2.760  1.00 20.41           C
ATOM   5226  CD1 TYR A 425      -7.796 -10.512   1.358  1.00 20.32           C
ATOM   5227  CD2 TYR A 425      -7.020 -11.358   3.512  1.00 20.40           C
ATOM   5228  CE1 TYR A 425      -6.824 -11.287   0.705  1.00 17.64           C
ATOM   5229  CE2 TYR A 425      -6.041 -12.129   2.855  1.00 18.10           C
ATOM   5230  CZ  TYR A 425      -5.956 -12.101   1.450  1.00 19.87           C
ATOM   5231  OH  TYR A 425      -5.078 -12.894   0.782  1.00 16.52           O
ATOM   5232  H   TYR A 425     -11.277  -9.166   4.538  1.00  0.00           H
ATOM   5233  HA  TYR A 425     -10.642 -10.342   2.033  1.00  0.00           H
ATOM   5234  HB2 TYR A 425      -9.071  -8.802   3.114  1.00  0.00           H
ATOM   5235  HB3 TYR A 425      -8.909  -9.832   4.507  1.00  0.00           H
ATOM   5236  HD1 TYR A 425      -8.477  -9.907   0.777  1.00  0.00           H
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ATOM   5237  HD2 TYR A 425      -7.106 -11.411   4.589  1.00  0.00           H
ATOM   5238  HE1 TYR A 425      -6.759 -11.275  -0.371  1.00  0.00           H
ATOM   5239  HE2 TYR A 425      -5.386 -12.765   3.430  1.00  0.00           H
ATOM   5240  HH  TYR A 425      -4.269 -13.114   1.226  1.00  0.00           H
ATOM   5241  N   TYR A 426     -10.261 -12.447   4.587  1.00 21.99           N
ATOM   5242  CA  TYR A 426     -10.216 -13.850   4.998  1.00 23.50           C
ATOM   5243  C   TYR A 426     -11.437 -14.655   4.513  1.00 23.34           C
ATOM   5244  O   TYR A 426     -11.288 -15.799   4.086  1.00 24.05           O
ATOM   5245  CB  TYR A 426     -10.087 -13.946   6.534  1.00 22.73           C
ATOM   5246  CG  TYR A 426      -8.688 -14.155   7.085  1.00 23.27           C
ATOM   5247  CD1 TYR A 426      -7.979 -13.098   7.690  1.00 22.47           C
ATOM   5248  CD2 TYR A 426      -8.120 -15.445   7.082  1.00 22.87           C
ATOM   5249  CE1 TYR A 426      -6.739 -13.336   8.306  1.00 21.19           C
ATOM   5250  CE2 TYR A 426      -6.860 -15.676   7.662  1.00 22.99           C
ATOM   5251  CZ  TYR A 426      -6.181 -14.626   8.302  1.00 22.86           C
ATOM   5252  OH  TYR A 426      -5.003 -14.862   8.943  1.00 23.29           O
ATOM   5253  H   TYR A 426     -10.196 -11.739   5.311  1.00  0.00           H
ATOM   5254  HA  TYR A 426      -9.336 -14.303   4.536  1.00  0.00           H
ATOM   5255  HB2 TYR A 426     -10.533 -13.074   7.013  1.00  0.00           H
ATOM   5256  HB3 TYR A 426     -10.674 -14.789   6.897  1.00  0.00           H
ATOM   5257  HD1 TYR A 426      -8.384 -12.101   7.729  1.00  0.00           H
ATOM   5258  HD2 TYR A 426      -8.669 -16.275   6.676  1.00  0.00           H
ATOM   5259  HE1 TYR A 426      -6.227 -12.520   8.794  1.00  0.00           H
ATOM   5260  HE2 TYR A 426      -6.441 -16.671   7.651  1.00  0.00           H
ATOM   5261  HH  TYR A 426      -4.527 -15.613   8.615  1.00  0.00           H
ATOM   5262  N   ASP A 427     -12.632 -14.059   4.571  1.00 22.93           N
ATOM   5263  CA  ASP A 427     -13.909 -14.665   4.183  1.00 24.60           C
ATOM   5264  C   ASP A 427     -14.090 -14.674   2.655  1.00 23.59           C
ATOM   5265  O   ASP A 427     -14.612 -15.654   2.129  1.00 22.45           O
ATOM   5266  CB  ASP A 427     -15.098 -13.907   4.831  1.00 25.71           C
ATOM   5267  CG  ASP A 427     -15.169 -13.984   6.357  1.00 25.52           C
ATOM   5268  OD1 ASP A 427     -14.489 -14.848   6.957  1.00 30.54           O
ATOM   5269  OD2 ASP A 427     -15.911 -13.171   6.954  1.00 26.99          O1-
ATOM   5270  H   ASP A 427     -12.668 -13.131   4.992  1.00  0.00           H
ATOM   5271  HA  ASP A 427     -13.928 -15.702   4.521  1.00  0.00           H
ATOM   5272  HB2 ASP A 427     -15.070 -12.855   4.542  1.00  0.00           H
ATOM   5273  HB3 ASP A 427     -16.039 -14.303   4.449  1.00  0.00           H
ATOM   5274  N   ALA A 428     -13.611 -13.648   1.931  1.00 23.60           N
ATOM   5275  CA  ALA A 428     -13.618 -13.586   0.463  1.00 22.71           C
ATOM   5276  C   ALA A 428     -12.603 -14.567  -0.150  1.00 22.99           C
ATOM   5277  O   ALA A 428     -12.822 -15.113  -1.239  1.00 21.89           O
ATOM   5278  CB  ALA A 428     -13.252 -12.164   0.007  1.00 22.18           C
ATOM   5279  H   ALA A 428     -13.247 -12.835   2.423  1.00  0.00           H
ATOM   5280  HA  ALA A 428     -14.614 -13.838   0.096  1.00  0.00           H
ATOM   5281  HB1 ALA A 428     -13.208 -12.096  -1.081  1.00  0.00           H
ATOM   5282  HB2 ALA A 428     -13.996 -11.442   0.342  1.00  0.00           H
ATOM   5283  HB3 ALA A 428     -12.282 -11.849   0.393  1.00  0.00           H
ATOM   5284  N   GLN A 429     -11.495 -14.825   0.558  1.00 21.48           N
ATOM   5285  CA  GLN A 429     -10.574 -15.910   0.253  1.00 23.47           C
ATOM   5286  C   GLN A 429     -11.242 -17.262   0.563  1.00 23.16           C
ATOM   5287  O   GLN A 429     -11.352 -18.101  -0.336  1.00 24.44           O
ATOM   5288  CB  GLN A 429      -9.258 -15.753   1.049  1.00 24.04           C
ATOM   5289  CG  GLN A 429      -8.301 -14.667   0.508  1.00 23.93           C
ATOM   5290  CD  GLN A 429      -7.598 -15.060  -0.796  1.00 27.30           C
ATOM   5291  OE1 GLN A 429      -8.121 -15.843  -1.584  1.00 28.29           O
ATOM   5292  NE2 GLN A 429      -6.405 -14.542  -1.042  1.00 21.69           N
ATOM   5293  H   GLN A 429     -11.311 -14.242   1.372  1.00  0.00           H
ATOM   5294  HA  GLN A 429     -10.372 -15.884  -0.813  1.00  0.00           H
ATOM   5295  HB2 GLN A 429      -9.475 -15.547   2.096  1.00  0.00           H
ATOM   5296  HB3 GLN A 429      -8.718 -16.701   1.041  1.00  0.00           H
ATOM   5297  HG2 GLN A 429      -8.828 -13.724   0.360  1.00  0.00           H
ATOM   5298  HG3 GLN A 429      -7.538 -14.473   1.262  1.00  0.00           H
ATOM   5299 HE21 GLN A 429      -5.943 -13.908  -0.386  1.00  0.00           H
ATOM   5300 HE22 GLN A 429      -5.905 -14.818  -1.891  1.00  0.00           H
ATOM   5301  N   GLY A 430     -11.741 -17.424   1.794  1.00 24.56           N
ATOM   5302  CA  GLY A 430     -12.428 -18.610   2.307  1.00 25.89           C
ATOM   5303  C   GLY A 430     -11.663 -19.267   3.466  1.00 27.73           C
ATOM   5304  O   GLY A 430     -11.901 -20.428   3.789  1.00 27.40           O
ATOM   5305  H   GLY A 430     -11.658 -16.640   2.434  1.00  0.00           H
ATOM   5306  HA2 GLY A 430     -13.415 -18.313   2.662  1.00  0.00           H
ATOM   5307  HA3 GLY A 430     -12.586 -19.353   1.523  1.00  0.00           H
ATOM   5308  N   LEU A 431     -10.710 -18.547   4.066  1.00 26.14           N
ATOM   5309  CA  LEU A 431      -9.691 -19.062   4.970  1.00 27.26           C
ATOM   5310  C   LEU A 431     -10.115 -18.949   6.448  1.00 25.34           C
ATOM   5311  O   LEU A 431     -10.887 -18.067   6.850  1.00 25.57           O
ATOM   5312  CB  LEU A 431      -8.416 -18.214   4.753  1.00 26.32           C
ATOM   5313  CG  LEU A 431      -7.688 -18.461   3.414  1.00 26.85           C
ATOM   5314  CD1 LEU A 431      -6.677 -17.337   3.135  1.00 28.01           C
ATOM   5315  CD2 LEU A 431      -6.988 -19.829   3.371  1.00 26.82           C
ATOM   5316  H   LEU A 431     -10.684 -17.555   3.860  1.00  0.00           H
ATOM   5317  HA  LEU A 431      -9.492 -20.111   4.745  1.00  0.00           H
ATOM   5318  HB2 LEU A 431      -8.699 -17.162   4.780  1.00  0.00           H
ATOM   5319  HB3 LEU A 431      -7.708 -18.358   5.573  1.00  0.00           H
ATOM   5320  HG  LEU A 431      -8.424 -18.440   2.609  1.00  0.00           H
ATOM   5321 HD11 LEU A 431      -6.200 -17.466   2.162  1.00  0.00           H
ATOM   5322 HD12 LEU A 431      -7.156 -16.357   3.130  1.00  0.00           H
ATOM   5323 HD13 LEU A 431      -5.888 -17.312   3.888  1.00  0.00           H
ATOM   5324 HD21 LEU A 431      -6.459 -19.965   2.426  1.00  0.00           H
ATOM   5325 HD22 LEU A 431      -6.254 -19.928   4.172  1.00  0.00           H
ATOM   5326 HD23 LEU A 431      -7.695 -20.654   3.458  1.00  0.00           H
ATOM   5327  N   VAL A 432      -9.557 -19.852   7.266  1.00 24.67           N
ATOM   5328  CA  VAL A 432      -9.666 -19.920   8.723  1.00 24.91           C
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ATOM   5329  C   VAL A 432      -8.813 -18.788   9.332  1.00 24.65          C
ATOM   5330  O   VAL A 432      -7.775 -18.432   8.782  1.00 23.35          O
ATOM   5331  CB  VAL A 432      -9.161 -21.314   9.200  1.00 26.40          C
ATOM   5332  CG1 VAL A 432      -9.294 -21.520  10.724  1.00 27.65          C
ATOM   5333  CG2 VAL A 432      -9.875 -22.473   8.471  1.00 27.01          C
ATOM   5334  H   VAL A 432      -8.883 -20.477   6.850  1.00  0.00          H
ATOM   5335  HA  VAL A 432     -10.712 -19.786   9.002  1.00  0.00          H
ATOM   5336  HB  VAL A 432      -8.098 -21.390   8.961  1.00  0.00          H
ATOM   5337 HG11 VAL A 432      -8.958 -22.517  11.013  1.00  0.00          H
ATOM   5338 HG12 VAL A 432      -8.685 -20.815  11.290  1.00  0.00          H
ATOM   5339 HG13 VAL A 432     -10.328 -21.414  11.054  1.00  0.00          H
ATOM   5340 HG21 VAL A 432      -9.525 -23.440   8.834  1.00  0.00          H
ATOM   5341 HG22 VAL A 432     -10.954 -22.434   8.622  1.00  0.00          H
ATOM   5342 HG23 VAL A 432      -9.692 -22.462   7.397  1.00  0.00          H
ATOM   5343  N   LYS A 433      -9.279 -18.210  10.443  1.00 25.23          N
ATOM   5344  CA  LYS A 433      -8.775 -16.976  11.048  1.00 27.01          C
ATOM   5345  C   LYS A 433      -8.182 -17.268  12.449  1.00 28.68          C
ATOM   5346  O   LYS A 433      -8.595 -18.255  13.069  1.00 29.12          O
ATOM   5347  CB  LYS A 433      -9.982 -16.017  11.117  1.00 26.07          C
ATOM   5348  CG  LYS A 433     -10.394 -15.480   9.731  1.00 25.95          C
ATOM   5349  CD  LYS A 433     -11.849 -14.987   9.647  1.00 27.29          C
ATOM   5350  CE  LYS A 433     -12.856 -16.124   9.390  1.00 27.92          C
ATOM   5351  NZ  LYS A 433     -12.918 -16.520   7.971  1.00 27.82          N1+
ATOM   5352  H   LYS A 433     -10.011 -18.678  10.951  1.00  0.00          H
ATOM   5353  HA  LYS A 433      -7.999 -16.538  10.418  1.00  0.00          H
ATOM   5354  HB2 LYS A 433     -10.820 -16.531  11.587  1.00  0.00          H
ATOM   5355  HB3 LYS A 433      -9.759 -15.167  11.761  1.00  0.00          H
ATOM   5356  HG2 LYS A 433      -9.717 -14.661   9.498  1.00  0.00          H
ATOM   5357  HG3 LYS A 433     -10.219 -16.220   8.951  1.00  0.00          H
ATOM   5358  HD2 LYS A 433     -12.098 -14.473  10.575  1.00  0.00          H
ATOM   5359  HD3 LYS A 433     -11.951 -14.229   8.868  1.00  0.00          H
ATOM   5360  HE2 LYS A 433     -12.625 -16.992  10.008  1.00  0.00          H
ATOM   5361  HE3 LYS A 433     -13.856 -15.791   9.673  1.00  0.00          H
ATOM   5362  HZ1 LYS A 433     -13.492 -17.334   7.841  1.00  0.00          H
ATOM   5363  HZ2 LYS A 433     -13.438 -15.765   7.463  1.00  0.00          H
ATOM   5364  HZ3 LYS A 433     -12.018 -16.700   7.537  1.00  0.00          H
ATOM   5365  N   PRO A 434      -7.228 -16.451  12.959  1.00 29.99          N
ATOM   5366  CA  PRO A 434      -6.476 -16.729  14.195  1.00 31.36          C
ATOM   5367  C   PRO A 434      -7.302 -16.577  15.491  1.00 32.47          C
ATOM   5368  O   PRO A 434      -8.223 -15.767  15.571  1.00 33.32          O
ATOM   5369  CB  PRO A 434      -5.277 -15.769  14.146  1.00 31.69          C
ATOM   5370  CG  PRO A 434      -5.752 -14.594  13.306  1.00 29.64          C
ATOM   5371  CD  PRO A 434      -6.759 -15.211  12.336  1.00 30.38          C
ATOM   5372  HA  PRO A 434      -6.106 -17.755  14.144  1.00  0.00          H
ATOM   5373  HB2 PRO A 434      -4.910 -15.468  15.125  1.00  0.00          H
ATOM   5374  HB3 PRO A 434      -4.444 -16.256  13.636  1.00  0.00          H
ATOM   5375  HG2 PRO A 434      -6.261 -13.862  13.935  1.00  0.00          H
ATOM   5376  HG3 PRO A 434      -4.938 -14.075  12.796  1.00  0.00          H
ATOM   5377  HD2 PRO A 434      -7.582 -14.527  12.143  1.00  0.00          H
ATOM   5378  HD3 PRO A 434      -6.266 -15.432  11.388  1.00  0.00          H
ATOM   5379  N   LYS A 435      -6.944 -17.396  16.491  1.00 34.56          N
ATOM   5380  CA  LYS A 435      -7.635 -17.836  17.715  1.00 36.88          C
ATOM   5381  C   LYS A 435      -8.627 -16.944  18.497  1.00 37.85          C
ATOM   5382  O   LYS A 435      -9.352 -17.489  19.328  1.00 39.08          O
ATOM   5383  CB  LYS A 435      -6.648 -18.564  18.655  1.00 38.28          C
ATOM   5384  CG  LYS A 435      -6.074 -19.876  18.091  1.00 40.34          C
ATOM   5385  CD  LYS A 435      -5.074 -20.519  19.062  1.00 42.32          C
ATOM   5386  CE  LYS A 435      -4.507 -21.852  18.551  1.00 43.22          C
ATOM   5387  NZ  LYS A 435      -3.406 -22.306  19.405  1.00 42.23          N1+
ATOM   5388  H   LYS A 435      -6.093 -17.901  16.305  1.00  0.00          H
ATOM   5389  HA  LYS A 435      -8.304 -18.611  17.337  1.00  0.00          H
ATOM   5390  HB2 LYS A 435      -5.837 -17.891  18.925  1.00  0.00          H
ATOM   5391  HB3 LYS A 435      -7.146 -18.798  19.598  1.00  0.00          H
ATOM   5392  HG2 LYS A 435      -6.889 -20.571  17.884  1.00  0.00          H
ATOM   5393  HG3 LYS A 435      -5.576 -19.689  17.138  1.00  0.00          H
ATOM   5394  HD2 LYS A 435      -4.251 -19.819  19.226  1.00  0.00          H
ATOM   5395  HD3 LYS A 435      -5.547 -20.669  20.034  1.00  0.00          H
ATOM   5396  HE2 LYS A 435      -5.279 -22.620  18.497  1.00  0.00          H
ATOM   5397  HE3 LYS A 435      -4.103 -21.724  17.545  1.00  0.00          H
ATOM   5398  HZ1 LYS A 435      -2.830 -23.020  18.956  1.00  0.00          H
ATOM   5399  HZ2 LYS A 435      -2.678 -21.567  19.346  1.00  0.00          H
ATOM   5400  HZ3 LYS A 435      -3.608 -22.522  20.362  1.00  0.00          H
ATOM   5401  N   ASN A 436      -8.711 -15.628  18.273  1.00 38.38          N
ATOM   5402  CA  ASN A 436      -9.700 -14.751  18.919  1.00 38.54          C
ATOM   5403  C   ASN A 436     -10.364 -13.722  17.997  1.00 36.60          C
ATOM   5404  O   ASN A 436     -11.000 -12.789  18.489  1.00 35.38          O
ATOM   5405  CB  ASN A 436      -9.321 -14.266  20.344  1.00 41.89          C
ATOM   5406  CG  ASN A 436      -8.093 -13.361  20.451  1.00 46.16          C
ATOM   5407  OD1 ASN A 436      -6.991 -13.834  20.729  1.00 46.58          O
ATOM   5408  ND2 ASN A 436      -8.287 -12.052  20.327  1.00 48.00          N
ATOM   5409  H   ASN A 436      -8.115 -15.246  17.547  1.00  0.00          H
ATOM   5410  HA  ASN A 436     -10.569 -15.385  19.106  1.00  0.00          H
ATOM   5411  HB2 ASN A 436     -10.169 -13.752  20.797  1.00  0.00          H
ATOM   5412  HB3 ASN A 436      -9.148 -15.136  20.978  1.00  0.00          H
ATOM   5413 HD21 ASN A 436      -9.193 -11.682  20.077  1.00  0.00          H
ATOM   5414 HD22 ASN A 436      -7.532 -11.386  20.498  1.00  0.00          H
ATOM   5415  N   TRP A 437     -10.274 -13.933  16.674  1.00 33.69          N
ATOM   5416  CA  TRP A 437     -10.812 -13.106  15.584  1.00 32.40          C
ATOM   5417  C   TRP A 437     -12.257 -12.607  15.780  1.00 31.88          C
ATOM   5418  O   TRP A 437     -12.570 -11.446  15.533  1.00 31.51          O
ATOM   5419  CB  TRP A 437     -10.663 -13.864  14.244  1.00 31.53          C
ATOM   5420  CG  TRP A 437     -11.537 -15.073  14.031  1.00 29.81          C
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ATOM   5421  CD1 TRP A 437     -11.242 -16.346  14.381  1.00 30.15           C
ATOM   5422  CD2 TRP A 437     -12.861 -15.136  13.412  1.00 29.74           C
ATOM   5423  NE1 TRP A 437     -12.279 -17.182  14.025  1.00 29.97           N
ATOM   5424  CE3 TRP A 437     -13.738 -14.179  12.850  1.00 28.47           C
ATOM   5425  CE2 TRP A 437     -13.309 -16.492  13.426  1.00 28.86           C
ATOM   5426  CZ3 TRP A 437     -14.996 -14.554  12.336  1.00 29.95           C
ATOM   5427  CZ2 TRP A 437     -14.555 -16.881  12.905  1.00 30.78           C
ATOM   5428  CH2 TRP A 437     -15.403 -15.902  12.357  1.00 28.37           C
ATOM   5429  H   TRP A 437      -9.687 -14.707  16.376  1.00  0.00           H
ATOM   5430  HA  TRP A 437     -10.186 -12.214  15.531  1.00  0.00           H
ATOM   5431  HB2 TRP A 437     -10.876 -13.180  13.426  1.00  0.00           H
ATOM   5432  HB3 TRP A 437      -9.621 -14.149  14.100  1.00  0.00           H
ATOM   5433  HD1 TRP A 437     -10.327 -16.661  14.857  1.00  0.00           H
ATOM   5434  HE1 TRP A 437     -12.244 -18.179  14.198  1.00  0.00           H
ATOM   5435  HE3 TRP A 437     -13.437 -13.140  12.827  1.00  0.00           H
ATOM   5436  HZ3 TRP A 437     -15.653 -13.804  11.928  1.00  0.00           H
ATOM   5437  HZ2 TRP A 437     -14.863 -17.916  12.931  1.00  0.00           H
ATOM   5438  HH2 TRP A 437     -16.367 -16.183  11.956  1.00  0.00           H
ATOM   5439  N   LYS A 438     -13.153 -13.500  16.222  1.00 30.82           N
ATOM   5440  CA  LYS A 438     -14.597 -13.268  16.252  1.00 31.39           C
ATOM   5441  C   LYS A 438     -14.978 -12.180  17.277  1.00 29.84           C
ATOM   5442  O   LYS A 438     -15.949 -11.461  17.060  1.00 28.51           O
ATOM   5443  CB  LYS A 438     -15.306 -14.614  16.565  1.00 33.89           C
ATOM   5444  CG  LYS A 438     -16.744 -14.785  16.014  1.00 35.72           C
ATOM   5445  CD  LYS A 438     -17.776 -13.815  16.613  1.00 37.55           C
ATOM   5446  CE  LYS A 438     -19.244 -14.235  16.477  1.00 37.38           C
ATOM   5447  NZ  LYS A 438     -20.108 -13.280  17.190  1.00 33.68           N1+
ATOM   5448  H   LYS A 438     -12.809 -14.434  16.382  1.00  0.00           H
ATOM   5449  HA  LYS A 438     -14.898 -12.924  15.260  1.00  0.00           H
ATOM   5450  HB2 LYS A 438     -14.718 -15.425  16.130  1.00  0.00           H
ATOM   5451  HB3 LYS A 438     -15.297 -14.801  17.641  1.00  0.00           H
ATOM   5452  HG2 LYS A 438     -16.738 -14.698  14.927  1.00  0.00           H
ATOM   5453  HG3 LYS A 438     -17.056 -15.808  16.229  1.00  0.00           H
ATOM   5454  HD2 LYS A 438     -17.547 -13.676  17.671  1.00  0.00           H
ATOM   5455  HD3 LYS A 438     -17.669 -12.845  16.130  1.00  0.00           H
ATOM   5456  HE2 LYS A 438     -19.535 -14.284  15.427  1.00  0.00           H
ATOM   5457  HE3 LYS A 438     -19.396 -15.225  16.909  1.00  0.00           H
ATOM   5458  HZ1 LYS A 438     -21.083 -13.520  17.141  1.00  0.00           H
ATOM   5459  HZ2 LYS A 438     -19.831 -13.322  18.199  1.00  0.00           H
ATOM   5460  HZ3 LYS A 438     -19.951 -12.327  16.891  1.00  0.00           H
ATOM   5461  N   LYS A 439     -14.200 -12.008  18.358  1.00 29.46           N
ATOM   5462  CA  LYS A 439     -14.491 -11.070  19.447  1.00 32.01           C
ATOM   5463  C   LYS A 439     -14.545  -9.595  19.014  1.00 31.47           C
ATOM   5464  O   LYS A 439     -15.205  -8.787  19.667  1.00 31.96           O
ATOM   5465  CB  LYS A 439     -13.448 -11.239  20.574  1.00 33.79           C
ATOM   5466  CG  LYS A 439     -13.543 -12.564  21.361  1.00 37.29           C
ATOM   5467  CD  LYS A 439     -14.928 -12.877  21.965  1.00 37.29           C
ATOM   5468  CE  LYS A 439     -15.504 -11.764  22.865  1.00 40.03           C
ATOM   5469  NZ  LYS A 439     -16.874 -12.080  23.297  1.00 40.12           N1+
ATOM   5470  H   LYS A 439     -13.323 -12.513  18.391  1.00  0.00           H
ATOM   5471  HA  LYS A 439     -15.491 -11.294  19.820  1.00  0.00           H
ATOM   5472  HB2 LYS A 439     -12.444 -11.139  20.155  1.00  0.00           H
ATOM   5473  HB3 LYS A 439     -13.530 -10.408  21.277  1.00  0.00           H
ATOM   5474  HG2 LYS A 439     -13.250 -13.386  20.706  1.00  0.00           H
ATOM   5475  HG3 LYS A 439     -12.797 -12.547  22.157  1.00  0.00           H
ATOM   5476  HD2 LYS A 439     -15.627 -13.097  21.156  1.00  0.00           H
ATOM   5477  HD3 LYS A 439     -14.853 -13.803  22.537  1.00  0.00           H
ATOM   5478  HE2 LYS A 439     -14.868 -11.605  23.736  1.00  0.00           H
ATOM   5479  HE3 LYS A 439     -15.552 -10.818  22.323  1.00  0.00           H
ATOM   5480  HZ1 LYS A 439     -17.288 -11.325  23.818  1.00  0.00           H
ATOM   5481  HZ2 LYS A 439     -17.455 -12.192  22.426  1.00  0.00           H
ATOM   5482  HZ3 LYS A 439     -16.935 -12.949  23.799  1.00  0.00           H
ATOM   5483  N   PHE A 440     -13.899  -9.262  17.898  1.00 29.67           N
ATOM   5484  CA  PHE A 440     -13.845  -7.921  17.333  1.00 30.46           C
ATOM   5485  C   PHE A 440     -15.073  -7.625  16.443  1.00 32.12           C
ATOM   5486  O   PHE A 440     -15.352  -6.463  16.164  1.00 32.41           O
ATOM   5487  CB  PHE A 440     -12.557  -7.842  16.511  1.00 27.41           C
ATOM   5488  CG  PHE A 440     -11.294  -7.940  17.343  1.00 25.90           C
ATOM   5489  CD1 PHE A 440     -10.802  -6.787  17.984  1.00 25.42           C
ATOM   5490  CD2 PHE A 440     -10.603  -9.164  17.479  1.00 24.33           C
ATOM   5491  CE1 PHE A 440      -9.624  -6.849  18.742  1.00 23.50           C
ATOM   5492  CE2 PHE A 440      -9.429  -9.225  18.254  1.00 24.72           C
ATOM   5493  CZ  PHE A 440      -8.936  -8.068  18.882  1.00 23.12           C
ATOM   5494  H   PHE A 440     -13.366  -9.976  17.420  1.00  0.00           H
ATOM   5495  HA  PHE A 440     -13.811  -7.171  18.127  1.00  0.00           H
ATOM   5496  HB2 PHE A 440     -12.549  -8.626  15.756  1.00  0.00           H
ATOM   5497  HB3 PHE A 440     -12.516  -6.891  15.983  1.00  0.00           H
ATOM   5498  HD1 PHE A 440     -11.300  -5.834  17.884  1.00  0.00           H
ATOM   5499  HD2 PHE A 440     -10.953 -10.053  16.980  1.00  0.00           H
ATOM   5500  HE1 PHE A 440      -9.247  -5.941  19.187  1.00  0.00           H
ATOM   5501  HE2 PHE A 440      -8.883 -10.148  18.348  1.00  0.00           H
ATOM   5502  HZ  PHE A 440      -8.017  -8.111  19.445  1.00  0.00           H
ATOM   5503  N   ARG A 441     -15.882  -8.639  16.089  1.00 33.77           N
ATOM   5504  CA  ARG A 441     -17.256  -8.477  15.600  1.00 36.52           C
ATOM   5505  C   ARG A 441     -18.209  -8.940  16.724  1.00 38.32           C
ATOM   5506  O   ARG A 441     -19.143  -9.717  16.496  1.00 39.68           O
ATOM   5507  CB  ARG A 441     -17.495  -9.264  14.282  1.00 36.16           C
ATOM   5508  CG  ARG A 441     -16.592  -8.897  13.082  1.00 36.35           C
ATOM   5509  CD  ARG A 441     -16.651  -7.430  12.591  1.00 37.85           C
ATOM   5510  NE  ARG A 441     -17.266  -7.285  11.254  1.00 37.46           N
ATOM   5511  CZ  ARG A 441     -16.662  -7.102  10.067  1.00 38.15           C
ATOM   5512  NH1 ARG A 441     -15.342  -7.039   9.915  1.00 39.40           N
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ATOM   5513  NH2 ARG A 441     -17.446  -7.012   9.004  1.00 37.27          N1+
ATOM   5514  H   ARG A 441     -15.632  -9.563  16.426  1.00  0.00           H
ATOM   5515  HA  ARG A 441     -17.489  -7.426  15.427  1.00  0.00           H
ATOM   5516  HB2 ARG A 441     -17.379 -10.330  14.484  1.00  0.00           H
ATOM   5517  HB3 ARG A 441     -18.534  -9.130  13.978  1.00  0.00           H
ATOM   5518  HG2 ARG A 441     -15.564  -9.147  13.340  1.00  0.00           H
ATOM   5519  HG3 ARG A 441     -16.838  -9.562  12.255  1.00  0.00           H
ATOM   5520  HD2 ARG A 441     -17.187  -6.790  13.291  1.00  0.00           H
ATOM   5521  HD3 ARG A 441     -15.646  -7.032  12.557  1.00  0.00           H
ATOM   5522  HE  ARG A 441     -18.275  -7.210  11.236  1.00  0.00           H
ATOM   5523 HH11 ARG A 441     -14.763  -6.579  10.625  1.00  0.00           H
ATOM   5524 HH12 ARG A 441     -14.945  -7.089   8.947  1.00  0.00           H
ATOM   5525 HH21 ARG A 441     -17.350  -6.094   8.528  1.00  0.00           H
ATOM   5526 HH22 ARG A 441     -17.165  -7.647   8.216  1.00  0.00           H
ATOM   5527  N   GLU A 442     -17.930  -8.467  17.946  1.00 40.76           N
ATOM   5528  CA  GLU A 442     -18.743  -8.527  19.161  1.00 41.35           C
ATOM   5529  C   GLU A 442     -18.517  -7.249  19.976  1.00 40.88           C
ATOM   5530  O   GLU A 442     -19.476  -6.629  20.425  1.00 41.44           O
ATOM   5531  CB  GLU A 442     -18.495  -9.802  19.996  1.00 43.85           C
ATOM   5532  CG  GLU A 442     -18.830 -11.099  19.251  1.00 47.68           C
ATOM   5533  CD  GLU A 442     -18.796 -12.349  20.107  1.00 49.70           C
ATOM   5534  OE1 GLU A 442     -18.202 -12.321  21.206  1.00 49.65           O
ATOM   5535  OE2 GLU A 442     -19.335 -13.354  19.599  1.00 50.39          O1-
ATOM   5536  H   GLU A 442     -17.141  -7.836  17.995  1.00  0.00           H
ATOM   5537  HA  GLU A 442     -19.792  -8.514  18.859  1.00  0.00           H
ATOM   5538  HB2 GLU A 442     -17.463  -9.835  20.340  1.00  0.00           H
ATOM   5539  HB3 GLU A 442     -19.107  -9.747  20.899  1.00  0.00           H
ATOM   5540  HG2 GLU A 442     -19.828 -11.005  18.824  1.00  0.00           H
ATOM   5541  HG3 GLU A 442     -18.131 -11.246  18.430  1.00  0.00           H
ATOM   5542  N   NMA A 442A    -17.249  -6.851  20.150  1.00  0.00           N
ATOM   5543  CA  NMA A 442A    -16.871  -5.616  20.822  1.00  0.00           C
ATOM   5544  H   NMA A 442A    -16.498  -7.473  19.858  1.00  0.00           H
ATOM   5545 1HA  NMA A 442A    -15.786  -5.514  20.842  1.00  0.00           H
ATOM   5546 2HA  NMA A 442A    -17.285  -4.751  20.301  1.00  0.00           H
ATOM   5547 3HA  NMA A 442A    -17.238  -5.604  21.850  1.00  0.00           H
TER    5548      NMA A 442A
HETATM 5549  O   SPC     5      -1.773  -0.683  20.474  1.00  0.00           O
HETATM 5550  H1  SPC     5      -1.738  -1.529  21.039  1.00  0.00           H
HETATM 5551  H2  SPC     5      -1.606  -0.939  19.507  1.00  0.00           H
HETATM 5552  O   SPC     9      -3.528   8.600  14.910  1.00  0.00           O
HETATM 5553  H1  SPC     9      -2.900   9.366  14.723  1.00  0.00           H
HETATM 5554  H2  SPC     9      -3.243   8.158  15.768  1.00  0.00           H
HETATM 5555  O   SPC    12      -7.852   6.539  17.734  1.00  0.00           O
HETATM 5556  H1  SPC    12      -8.505   6.025  17.160  1.00  0.00           H
HETATM 5557  H2  SPC    12      -7.753   7.471  17.360  1.00  0.00           H
HETATM 5558  O   SPC    13      -3.070   5.266  18.248  1.00  0.00           O
HETATM 5559  H1  SPC    13      -2.742   6.178  17.971  1.00  0.00           H
HETATM 5560  H2  SPC    13      -4.049   5.341  18.497  1.00  0.00           H
HETATM 5561  O   SPC    14       4.972   2.374  22.016  1.00  0.00           O
HETATM 5562  H1  SPC    14       4.075   2.273  22.467  1.00  0.00           H
HETATM 5563  H2  SPC    14       5.326   1.449  21.810  1.00  0.00           H
HETATM 5564  O   SPC    15       2.203   7.499  17.128  1.00  0.00           O
HETATM 5565  H1  SPC    15       2.994   8.010  17.497  1.00  0.00           H
HETATM 5566  H2  SPC    15       1.793   8.066  16.392  1.00  0.00           H
HETATM 5567  O   SPC    17       4.311   9.225  17.549  1.00  0.00           O
HETATM 5568  H1  SPC    17       4.588   9.211  16.579  1.00  0.00           H
HETATM 5569  H2  SPC    17       5.080   8.876  18.105  1.00  0.00           H
HETATM 5570  O   SPC    19      -5.763   2.863  19.682  1.00  0.00           O
HETATM 5571  H1  SPC    19      -6.134   2.590  20.573  1.00  0.00           H
HETATM 5572  H2  SPC    19      -4.957   2.283  19.482  1.00  0.00           H
HETATM 5573  O   SPC    21      -4.983   8.244  18.206  1.00  0.00           O
HETATM 5574  H1  SPC    21      -5.216   7.392  18.696  1.00  0.00           H
HETATM 5575  H2  SPC    21      -5.801   8.545  17.692  1.00  0.00           H
HETATM 5576  O   SPC    22      -7.209   3.072  17.314  1.00  0.00           O
HETATM 5577  H1  SPC    22      -6.423   3.112  16.681  1.00  0.00           H
HETATM 5578  H2  SPC    22      -6.848   3.076  18.257  1.00  0.00           H
HETATM 5579  O   SPC    26       6.384   7.896  18.787  1.00  0.00           O
HETATM 5580  H1  SPC    26       6.389   7.614  19.750  1.00  0.00           H
HETATM 5581  H2  SPC    26       6.167   7.084  18.217  1.00  0.00           H
HETATM 5582  O   SPC    31      -0.251   6.138  16.938  1.00  0.00           O
HETATM 5583  H1  SPC    31       0.607   6.629  17.135  1.00  0.00           H
HETATM 5584  H2  SPC    31      -1.025   6.761  17.121  1.00  0.00           H
HETATM 5585  O   SPC    32       5.756   5.780  17.269  1.00  0.00           O
HETATM 5586  H1  SPC    32       6.512   5.371  16.742  1.00  0.00           H
HETATM 5587  H2  SPC    32       4.879   5.447  16.894  1.00  0.00           H
HETATM 5588  O   SPC    34       1.449   4.782  22.050  1.00  0.00           O
HETATM 5589  H1  SPC    34       1.361   5.335  21.213  1.00  0.00           H
HETATM 5590  H2  SPC    34       0.562   4.327  22.229  1.00  0.00           H
HETATM 5591  O   SPC    35       0.611  -1.917  23.243  1.00  0.00           O
HETATM 5592  H1  SPC    35      -0.148  -2.290  22.678  1.00  0.00           H
HETATM 5593  H2  SPC    35       0.427  -2.182  24.194  1.00  0.00           H
HETATM 5594  O   SPC    37      -1.867   3.328  19.681  1.00  0.00           O
HETATM 5595  H1  SPC    37      -2.484   2.528  19.609  1.00  0.00           H
HETATM 5596  H2  SPC    37      -2.309   4.114  19.218  1.00  0.00           H
HETATM 5597  O   SPC    38       2.019   5.720  19.387  1.00  0.00           O
HETATM 5598  H1  SPC    38       2.922   5.491  19.783  1.00  0.00           H
HETATM 5599  H2  SPC    38       2.146   6.398  18.654  1.00  0.00           H
HETATM 5600  O   SPC    39       4.045   4.774  21.014  1.00  0.00           O
HETATM 5601  H1  SPC    39       3.246   4.842  21.625  1.00  0.00           H
HETATM 5602  H2  SPC    39       4.623   4.009  21.332  1.00  0.00           H
HETATM 5603  O   SPC    41      -5.656   5.585  18.963  1.00  0.00           O
HETATM 5604  H1  SPC    41      -6.540   5.866  18.553  1.00  0.00           H
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HETATM 5605  H2  SPC    41      -5.752   4.648  19.325  1.00  0.00           H
HETATM 5606  O   SPC    44       3.123  -1.843  22.003  1.00  0.00           O
HETATM 5607  H1  SPC    44       3.237  -2.788  21.668  1.00  0.00           H
HETATM 5608  H2  SPC    44       2.251  -1.794  22.512  1.00  0.00           H
HETATM 5609  O   SPC    46       3.325   5.196  16.093  1.00  0.00           O
HETATM 5610  H1  SPC    46       2.851   6.028  16.412  1.00  0.00           H
HETATM 5611  H2  SPC    46       3.490   5.274  15.100  1.00  0.00           H
HETATM 5612  O   SPC    52       2.279   2.116  22.466  1.00  0.00           O
HETATM 5613  H1  SPC    52       1.480   1.503  22.553  1.00  0.00           H
HETATM 5614  H2  SPC    52       1.959   3.071  22.529  1.00  0.00           H
HETATM 5615  O   SPC    53      -7.128   8.989  16.685  1.00  0.00           O
HETATM 5616  H1  SPC    53      -7.537   9.913  16.720  1.00  0.00           H
HETATM 5617  H2  SPC    53      -6.770   8.841  15.752  1.00  0.00           H
HETATM 5618  O   SPC    55      -2.446   7.815  17.405  1.00  0.00           O
HETATM 5619  H1  SPC    55      -1.925   8.685  17.427  1.00  0.00           H
HETATM 5620  H2  SPC    55      -3.374   7.993  17.775  1.00  0.00           H
HETATM 5621  O   SPC    57       5.277  -0.225  21.251  1.00  0.00           O
HETATM 5622  H1  SPC    57       6.081  -0.716  20.890  1.00  0.00           H
HETATM 5623  H2  SPC    57       4.621  -0.898  21.625  1.00  0.00           H
HETATM 5624  O   SPC    59       0.057   0.501  22.119  1.00  0.00           O
HETATM 5625  H1  SPC    59      -0.648   0.195  21.460  1.00  0.00           H
HETATM 5626  H2  SPC    59       0.319  -0.301  22.679  1.00  0.00           H
HETATM 5627  O   SPC    61      -0.720   3.183  22.171  1.00  0.00           O
HETATM 5628  H1  SPC    61      -0.577   2.196  22.328  1.00  0.00           H
HETATM 5629  H2  SPC    61      -1.266   3.296  21.329  1.00  0.00           H
HETATM 5630  O   SPC    62       0.818   3.275  19.165  1.00  0.00           O
HETATM 5631  H1  SPC    62       1.155   4.228  19.192  1.00  0.00           H
HETATM 5632  H2  SPC    62      -0.174   3.277  19.366  1.00  0.00           H
HETATM 5633  O   SPC    65      -3.525   1.188  19.377  1.00  0.00           O
HETATM 5634  H1  SPC    65      -3.442   0.758  18.461  1.00  0.00           H
HETATM 5635  H2  SPC    65      -3.076   0.573  20.042  1.00  0.00           H
HETATM 5636  O   SPC   384       1.190   1.582 -20.773  1.00  0.00           O
HETATM 5637  H1  SPC   384       0.402   0.935 -20.699  1.00  0.00           H
HETATM 5638  H2  SPC   384       0.838   2.443 -21.143  1.00  0.00           H
HETATM 5639  O   SPC   406       5.966   9.506 -15.862  1.00  0.00           O
HETATM 5640  H1  SPC   406       6.039  10.509 -15.831  1.00  0.00           H
HETATM 5641  H2  SPC   406       6.732   9.124 -15.320  1.00  0.00           H
HETATM 5642  O   SPC   447      -0.105   8.371 -16.213  1.00  0.00           O
HETATM 5643  H1  SPC   447      -0.622   7.960 -16.988  1.00  0.00           H
HETATM 5644  H2  SPC   447      -0.650   9.143 -15.849  1.00  0.00           H
HETATM 5645  O   SPC   454      -7.247  22.058   5.540  1.00  0.00           O
HETATM 5646  H1  SPC   454      -7.416  21.098   5.795  1.00  0.00           H
HETATM 5647  H2  SPC   454      -7.661  22.655   6.240  1.00  0.00           H
HETATM 5648  O   SPC   455       5.559  27.057  -7.141  1.00  0.00           O
HETATM 5649  H1  SPC   455       6.443  27.293  -7.568  1.00  0.00           H
HETATM 5650  H2  SPC   455       5.676  26.185  -6.641  1.00  0.00           H
HETATM 5651  O   SPC   457       4.521  21.793  -0.121  1.00  0.00           O
HETATM 5652  H1  SPC   457       4.146  21.102  -0.765  1.00  0.00           H
HETATM 5653  H2  SPC   457       3.772  22.396   0.188  1.00  0.00           H
HETATM 5654  O   SPC   458      -0.510  17.427   2.829  1.00  0.00           O
HETATM 5655  H1  SPC   458      -0.599  16.433   2.960  1.00  0.00           H
HETATM 5656  H2  SPC   458      -0.299  17.605   1.856  1.00  0.00           H
HETATM 5657  O   SPC   459       5.997  23.370  -8.409  1.00  0.00           O
HETATM 5658  H1  SPC   459       5.608  22.449  -8.561  1.00  0.00           H
HETATM 5659  H2  SPC   459       5.356  24.055  -8.793  1.00  0.00           H
HETATM 5660  O   SPC   460      -0.196  25.856  -5.189  1.00  0.00           O
HETATM 5661  H1  SPC   460       0.196  25.045  -4.727  1.00  0.00           H
HETATM 5662  H2  SPC   460      -1.188  25.890  -4.982  1.00  0.00           H
HETATM 5663  O   SPC   461      -3.168  18.306   6.847  1.00  0.00           O
HETATM 5664  H1  SPC   461      -3.083  18.286   5.842  1.00  0.00           H
HETATM 5665  H2  SPC   461      -3.864  18.997   7.102  1.00  0.00           H
HETATM 5666  O   SPC   462      -8.270  23.279   7.800  1.00  0.00           O
HETATM 5667  H1  SPC   462      -8.986  23.947   8.012  1.00  0.00           H
HETATM 5668  H2  SPC   462      -8.565  22.367   8.126  1.00  0.00           H
HETATM 5669  O   SPC   463       8.148  23.213   1.020  1.00  0.00           O
HETATM 5670  H1  SPC   463       8.796  22.619   1.529  1.00  0.00           H
HETATM 5671  H2  SPC   463       8.595  23.505   0.159  1.00  0.00           H
HETATM 5672  O   SPC   464       4.830  23.127  -4.206  1.00  0.00           O
HETATM 5673  H1  SPC   464       4.168  23.832  -3.905  1.00  0.00           H
HETATM 5674  H2  SPC   464       5.416  22.892  -3.416  1.00  0.00           H
HETATM 5675  O   SPC   466      -3.595  23.402   7.301  1.00  0.00           O
HETATM 5676  H1  SPC   466      -4.150  23.242   6.472  1.00  0.00           H
HETATM 5677  H2  SPC   466      -2.784  23.943   7.030  1.00  0.00           H
HETATM 5678  O   SPC   467      -0.832  19.694   7.141  1.00  0.00           O
HETATM 5679  H1  SPC   467      -0.979  20.446   7.801  1.00  0.00           H
HETATM 5680  H2  SPC   467      -1.675  19.136   7.104  1.00  0.00           H
HETATM 5681  O   SPC   468       7.789  28.445  -0.924  1.00  0.00           O
HETATM 5682  H1  SPC   468       8.490  27.779  -0.623  1.00  0.00           H
HETATM 5683  H2  SPC   468       7.724  28.412  -1.933  1.00  0.00           H
HETATM 5684  O   SPC   469       7.852  28.279  -3.637  1.00  0.00           O
HETATM 5685  H1  SPC   469       7.903  27.384  -4.107  1.00  0.00           H
HETATM 5686  H2  SPC   469       8.774  28.694  -3.647  1.00  0.00           H
HETATM 5687  O   SPC   470      -3.900  24.002   0.141  1.00  0.00           O
HETATM 5688  H1  SPC   470      -4.105  24.100  -0.838  1.00  0.00           H
HETATM 5689  H2  SPC   470      -4.758  24.127   0.667  1.00  0.00           H
HETATM 5690  O   SPC   471       3.391  26.317   0.768  1.00  0.00           O
HETATM 5691  H1  SPC   471       4.265  26.825   0.753  1.00  0.00           H
HETATM 5692  H2  SPC   471       2.849  26.571  -0.050  1.00  0.00           H
HETATM 5693  O   SPC   472      -5.373  19.417   4.511  1.00  0.00           O
HETATM 5694  H1  SPC   472      -4.430  19.083   4.390  1.00  0.00           H
HETATM 5695  H2  SPC   472      -5.482  20.271   3.992  1.00  0.00           H
HETATM 5696  O   SPC   473       5.918  27.365   0.721  1.00  0.00           O
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HETATM 5697  H1  SPC   473       6.473  27.938   0.096  1.00  0.00           H
HETATM 5698  H2  SPC   473       6.543  26.750   1.226  1.00  0.00           H
HETATM 5699  O   SPC   475       3.309  25.066  -3.204  1.00  0.00           O
HETATM 5700  H1  SPC   475       2.800  25.918  -3.395  1.00  0.00           H
HETATM 5701  H2  SPC   475       3.998  25.259  -2.491  1.00  0.00           H
HETATM 5702  O   SPC   476      -3.610  26.498  -7.266  1.00  0.00           O
HETATM 5703  H1  SPC   476      -3.273  25.926  -8.023  1.00  0.00           H
HETATM 5704  H2  SPC   476      -4.172  27.237  -7.640  1.00  0.00           H
HETATM 5705  O   SPC   477      -1.937  25.276   1.558  1.00  0.00           O
HETATM 5706  H1  SPC   477      -2.637  24.894   0.936  1.00  0.00           H
HETATM 5707  H2  SPC   477      -2.315  25.268   2.500  1.00  0.00           H
HETATM 5708  O   SPC   478       6.672  24.050   7.069  1.00  0.00           O
HETATM 5709  H1  SPC   478       7.512  24.425   7.489  1.00  0.00           H
HETATM 5710  H2  SPC   478       5.879  24.385   7.593  1.00  0.00           H
HETATM 5711  O   SPC   479       6.107  24.647  -6.027  1.00  0.00           O
HETATM 5712  H1  SPC   479       6.128  24.115  -6.889  1.00  0.00           H
HETATM 5713  H2  SPC   479       5.644  24.088  -5.322  1.00  0.00           H
HETATM 5714  O   SPC   480      -4.822  23.038   4.862  1.00  0.00           O
HETATM 5715  H1  SPC   480      -4.271  22.310   4.430  1.00  0.00           H
HETATM 5716  H2  SPC   480      -5.766  22.696   4.998  1.00  0.00           H
HETATM 5717  O   SPC   481       7.647  25.707   1.991  1.00  0.00           O
HETATM 5718  H1  SPC   481       7.128  25.725   2.856  1.00  0.00           H
HETATM 5719  H2  SPC   481       7.784  24.742   1.716  1.00  0.00           H
HETATM 5720  O   SPC   483       0.913  25.158   7.073  1.00  0.00           O
HETATM 5721  H1  SPC   483       1.480  24.616   7.710  1.00  0.00           H
HETATM 5722  H2  SPC   483       1.357  25.161   6.167  1.00  0.00           H
HETATM 5723  O   SPC   484       4.015  26.404   6.098  1.00  0.00           O
HETATM 5724  H1  SPC   484       3.990  27.394   6.263  1.00  0.00           H
HETATM 5725  H2  SPC   484       4.198  25.939   6.974  1.00  0.00           H
HETATM 5726  O   SPC   485       2.903  23.676   1.157  1.00  0.00           O
HETATM 5727  H1  SPC   485       3.112  24.645   0.948  1.00  0.00           H
HETATM 5728  H2  SPC   485       1.902  23.558   1.153  1.00  0.00           H
HETATM 5729  O   SPC   486       6.360  21.327   1.742  1.00  0.00           O
HETATM 5730  H1  SPC   486       7.069  21.976   1.420  1.00  0.00           H
HETATM 5731  H2  SPC   486       5.610  21.326   1.057  1.00  0.00           H
HETATM 5732  O   SPC   487       2.138  25.066   4.622  1.00  0.00           O
HETATM 5733  H1  SPC   487       2.887  25.565   5.082  1.00  0.00           H
HETATM 5734  H2  SPC   487       1.777  25.647   3.872  1.00  0.00           H
HETATM 5735  O   SPC   488       1.383  22.572   3.794  1.00  0.00           O
HETATM 5736  H1  SPC   488       1.738  23.459   4.132  1.00  0.00           H
HETATM 5737  H2  SPC   488       1.024  22.710   2.863  1.00  0.00           H
HETATM 5738  O   SPC   490      -2.366  22.004   1.271  1.00  0.00           O
HETATM 5739  H1  SPC   490      -2.958  22.708   0.848  1.00  0.00           H
HETATM 5740  H2  SPC   490      -1.412  22.335   1.245  1.00  0.00           H
HETATM 5741  O   SPC   491       5.074  23.517   2.837  1.00  0.00           O
HETATM 5742  H1  SPC   491       5.531  22.694   2.474  1.00  0.00           H
HETATM 5743  H2  SPC   491       4.187  23.616   2.360  1.00  0.00           H
HETATM 5744  O   SPC   492      -2.674  18.630   4.116  1.00  0.00           O
HETATM 5745  H1  SPC   492      -1.792  18.233   3.819  1.00  0.00           H
HETATM 5746  H2  SPC   492      -2.627  19.637   4.017  1.00  0.00           H
HETATM 5747  O   SPC   493      -0.313  24.737  -7.742  1.00  0.00           O
HETATM 5748  H1  SPC   493      -0.210  25.325  -6.925  1.00  0.00           H
HETATM 5749  H2  SPC   493       0.453  24.915  -8.376  1.00  0.00           H
HETATM 5750  O   SPC   494      -1.409  24.350   6.058  1.00  0.00           O
HETATM 5751  H1  SPC   494      -0.613  24.792   6.504  1.00  0.00           H
HETATM 5752  H2  SPC   494      -1.141  23.416   5.780  1.00  0.00           H
HETATM 5753  O   SPC   495      -2.854  25.613  -4.705  1.00  0.00           O
HETATM 5754  H1  SPC   495      -3.273  24.749  -4.393  1.00  0.00           H
HETATM 5755  H2  SPC   495      -3.291  25.899  -5.570  1.00  0.00           H
HETATM 5756  O   SPC   497       6.266  23.025  -1.877  1.00  0.00           O
HETATM 5757  H1  SPC   497       6.119  24.015  -1.729  1.00  0.00           H
HETATM 5758  H2  SPC   497       5.727  22.516  -1.191  1.00  0.00           H
HETATM 5759  O   SPC   498      -7.265  19.403   6.389  1.00  0.00           O
HETATM 5760  H1  SPC   498      -6.612  19.350   5.614  1.00  0.00           H
HETATM 5761  H2  SPC   498      -7.585  18.463   6.594  1.00  0.00           H
HETATM 5762  O   SPC   499      -3.070  24.973   3.983  1.00  0.00           O
HETATM 5763  H1  SPC   499      -3.848  24.385   4.247  1.00  0.00           H
HETATM 5764  H2  SPC   499      -2.393  24.955   4.733  1.00  0.00           H
HETATM 5765  O   SPC   500      -8.673  20.661   8.443  1.00  0.00           O
HETATM 5766  H1  SPC   500      -8.177  20.138   7.735  1.00  0.00           H
HETATM 5767  H2  SPC   500      -8.146  20.608   9.307  1.00  0.00           H
HETATM 5768  O   SPC   502      -2.677  24.496  -9.065  1.00  0.00           O
HETATM 5769  H1  SPC   502      -2.418  24.261 -10.018  1.00  0.00           H
HETATM 5770  H2  SPC   502      -1.825  24.566  -8.521  1.00  0.00           H
HETATM 5771  O   SPC   503       2.729  20.497   5.098  1.00  0.00           O
HETATM 5772  H1  SPC   503       2.523  19.670   4.558  1.00  0.00           H
HETATM 5773  H2  SPC   503       2.354  21.298   4.609  1.00  0.00           H
HETATM 5774  O   SPC   504      -8.865  24.137   1.335  1.00  0.00           O
HETATM 5775  H1  SPC   504      -9.213  23.645   0.528  1.00  0.00           H
HETATM 5776  H2  SPC   504      -7.867  24.231   1.261  1.00  0.00           H
HETATM 5777  O   SPC   505       0.712  24.103  -1.284  1.00  0.00           O
HETATM 5778  H1  SPC   505       1.077  25.044  -1.239  1.00  0.00           H
HETATM 5779  H2  SPC   505       0.714  23.810  -2.249  1.00  0.00           H
HETATM 5780  O   SPC   506       1.352  26.560   2.523  1.00  0.00           O
HETATM 5781  H1  SPC   506       0.610  26.959   1.972  1.00  0.00           H
HETATM 5782  H2  SPC   506       2.181  26.506   1.948  1.00  0.00           H
HETATM 5783  O   SPC   507       3.412  21.105   7.718  1.00  0.00           O
HETATM 5784  H1  SPC   507       2.790  20.537   8.281  1.00  0.00           H
HETATM 5785  H2  SPC   507       3.244  20.890   6.743  1.00  0.00           H
HETATM 5786  O   SPC   508      -5.136  23.589 -10.162  1.00  0.00           O
HETATM 5787  H1  SPC   508      -5.124  23.465 -11.162  1.00  0.00           H
HETATM 5788  H2  SPC   508      -4.251  23.977  -9.881  1.00  0.00           H
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HETATM 5789  O   SPC   509     -0.749  21.789   5.279  1.00  0.00          O
HETATM 5790  H1  SPC   509      0.113  21.993   4.789  1.00  0.00          H
HETATM 5791  H2  SPC   509     -0.585  21.027   5.922  1.00  0.00          H
HETATM 5792  O   SPC   510      2.586  23.599   8.555  1.00  0.00          O
HETATM 5793  H1  SPC   510      2.922  22.713   8.201  1.00  0.00          H
HETATM 5794  H2  SPC   510      3.368  24.232   8.630  1.00  0.00          H
HETATM 5795  O   SPC   511      1.076  23.736  -4.063  1.00  0.00          O
HETATM 5796  H1  SPC   511      2.027  24.011  -3.867  1.00  0.00          H
HETATM 5797  H2  SPC   511      1.073  23.043  -4.795  1.00  0.00          H
HETATM 5798  O   SPC   512     -2.945  21.294   3.796  1.00  0.00          O
HETATM 5799  H1  SPC   512     -2.171  21.593   4.378  1.00  0.00          H
HETATM 5800  H2  SPC   512     -2.766  21.593   2.844  1.00  0.00          H
HETATM 5801  O   SPC   513      8.213  25.906  -4.876  1.00  0.00          O
HETATM 5802  H1  SPC   513      8.747  25.187  -4.408  1.00  0.00          H
HETATM 5803  H2  SPC   513      7.427  25.466  -5.339  1.00  0.00          H
HETATM 5804  O   SPC   514      7.317  23.542   4.512  1.00  0.00          O
HETATM 5805  H1  SPC   514      7.046  23.743   5.469  1.00  0.00          H
HETATM 5806  H2  SPC   514      6.500  23.630   3.927  1.00  0.00          H
HETATM 5807  O   SPC   515     -6.064  24.187   1.763  1.00  0.00          O
HETATM 5808  H1  SPC   515     -6.167  23.248   2.122  1.00  0.00          H
HETATM 5809  H2  SPC   515     -6.059  24.827   2.536  1.00  0.00          H
HETATM 5810  O   SPC   516      0.092  23.400   1.227  1.00  0.00          O
HETATM 5811  H1  SPC   516      0.287  23.533   0.239  1.00  0.00          H
HETATM 5812  H2  SPC   516     -0.501  24.160   1.532  1.00  0.00          H
HETATM 5813  O   SPC   520     -4.856  19.913  12.206  1.00  0.00          O
HETATM 5814  H1  SPC   520     -4.256  20.484  12.788  1.00  0.00          H
HETATM 5815  H2  SPC   520     -4.787  18.954  12.528  1.00  0.00          H
HETATM 5816  O   SPC   522      4.783  25.383   8.641  1.00  0.00          O
HETATM 5817  H1  SPC   522      5.350  26.214   8.503  1.00  0.00          H
HETATM 5818  H2  SPC   522      4.836  25.119   9.616  1.00  0.00          H
HETATM 5819  O   SPC   523      5.023  20.751  12.180  1.00  0.00          O
HETATM 5820  H1  SPC   523      4.054  20.858  12.438  1.00  0.00          H
HETATM 5821  H2  SPC   523      5.149  21.181  11.274  1.00  0.00          H
HETATM 5822  O   SPC   525      0.210  12.145  18.579  1.00  0.00          O
HETATM 5823  H1  SPC   525     -0.091  12.316  19.520  1.00  0.00          H
HETATM 5824  H2  SPC   525      0.050  12.986  18.032  1.00  0.00          H
HETATM 5825  O   SPC   531      5.175  21.901   9.709  1.00  0.00          O
HETATM 5826  H1  SPC   531      6.141  21.623   9.616  1.00  0.00          H
HETATM 5827  H2  SPC   531      4.656  21.562   8.910  1.00  0.00          H
HETATM 5828  O   SPC   534     -6.508  16.493   9.601  1.00  0.00          O
HETATM 5829  H1  SPC   534     -7.441  16.728   9.906  1.00  0.00          H
HETATM 5830  H2  SPC   534     -6.055  15.997  10.358  1.00  0.00          H
HETATM 5831  O   SPC   542      3.488  23.639  13.491  1.00  0.00          O
HETATM 5832  H1  SPC   542      3.134  24.427  13.999  1.00  0.00          H
HETATM 5833  H2  SPC   542      3.902  22.988  14.152  1.00  0.00          H
HETATM 5834  O   SPC   543      0.923  18.594  15.630  1.00  0.00          O
HETATM 5835  H1  SPC   543      0.961  17.614  15.856  1.00  0.00          H
HETATM 5836  H2  SPC   543      1.865  18.949  15.574  1.00  0.00          H
HETATM 5837  O   SPC   546      3.922  18.147  10.086  1.00  0.00          O
HETATM 5838  H1  SPC   546      3.174  18.754   9.778  1.00  0.00          H
HETATM 5839  H2  SPC   546      4.231  17.604   9.290  1.00  0.00          H
HETATM 5840  O   SPC   547      6.757  20.141  14.260  1.00  0.00          O
HETATM 5841  H1  SPC   547      6.177  20.498  13.511  1.00  0.00          H
HETATM 5842  H2  SPC   547      6.488  19.183  14.429  1.00  0.00          H
HETATM 5843  O   SPC   551      6.812  18.767  11.522  1.00  0.00          O
HETATM 5844  H1  SPC   551      6.470  17.823  11.590  1.00  0.00          H
HETATM 5845  H2  SPC   551      6.060  19.398  11.754  1.00  0.00          H
HETATM 5846  O   SPC   557      4.170  15.745  15.996  1.00  0.00          O
HETATM 5847  H1  SPC   557      4.706  16.423  15.478  1.00  0.00          H
HETATM 5848  H2  SPC   557      4.798  15.050  16.364  1.00  0.00          H
HETATM 5849  O   SPC   559     -0.246  14.332  17.079  1.00  0.00          O
HETATM 5850  H1  SPC   559      0.397  14.979  16.648  1.00  0.00          H
HETATM 5851  H2  SPC   559     -1.109  14.347  16.556  1.00  0.00          H
HETATM 5852  O   SPC   560     -6.868  20.732  10.483  1.00  0.00          O
HETATM 5853  H1  SPC   560     -6.256  20.372  11.203  1.00  0.00          H
HETATM 5854  H2  SPC   560     -6.384  21.472   9.997  1.00  0.00          H
HETATM 5855  O   SPC   562     -0.217  19.924  11.130  1.00  0.00          O
HETATM 5856  H1  SPC   562     -0.432  19.768  12.105  1.00  0.00          H
HETATM 5857  H2  SPC   562     -0.153  20.916  10.966  1.00  0.00          H
HETATM 5858  O   SPC   565     -2.927  21.157  13.674  1.00  0.00          O
HETATM 5859  H1  SPC   565     -2.641  21.974  14.175  1.00  0.00          H
HETATM 5860  H2  SPC   565     -2.188  20.468  13.724  1.00  0.00          H
HETATM 5861  O   SPC   566     -6.269  11.674  14.059  1.00  0.00          O
HETATM 5862  H1  SPC   566     -6.393  12.626  13.751  1.00  0.00          H
HETATM 5863  H2  SPC   566     -6.812  11.545  14.902  1.00  0.00          H
HETATM 5864  O   SPC   568      4.663  13.789  12.247  1.00  0.00          O
HETATM 5865  H1  SPC   568      4.739  13.371  13.163  1.00  0.00          H
HETATM 5866  H2  SPC   568      3.890  13.356  11.762  1.00  0.00          H
HETATM 5867  O   SPC   572      5.710  17.511  14.451  1.00  0.00          O
HETATM 5868  H1  SPC   572      5.391  17.264  13.520  1.00  0.00          H
HETATM 5869  H2  SPC   572      6.450  16.868  14.704  1.00  0.00          H
HETATM 5870  O   SPC   575      4.869  12.538  14.719  1.00  0.00          O
HETATM 5871  H1  SPC   575      5.405  12.907  15.491  1.00  0.00          H
HETATM 5872  H2  SPC   575      3.887  12.729  14.890  1.00  0.00          H
HETATM 5873  O   SPC   577     -3.835  11.161  12.944  1.00  0.00          O
HETATM 5874  H1  SPC   577     -4.735  11.328  13.377  1.00  0.00          H
HETATM 5875  H2  SPC   577     -3.877  10.295  12.422  1.00  0.00          H
HETATM 5876  O   SPC   583     -3.330  20.002   9.932  1.00  0.00          O
HETATM 5877  H1  SPC   583     -3.980  19.868   9.172  1.00  0.00          H
HETATM 5878  H2  SPC   583     -3.842  19.962  10.803  1.00  0.00          H
HETATM 5879  O   SPC   587     -2.220  14.504   9.850  1.00  0.00          O
HETATM 5880  H1  SPC   587     -2.232  13.932   9.020  1.00  0.00          H
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HETATM 5881  H2  SPC   587     -2.701  15.370   9.648  1.00  0.00          H
HETATM 5882  O   SPC   591     -1.790  10.860  14.646  1.00  0.00          O
HETATM 5883  H1  SPC   591     -1.055  11.514  14.416  1.00  0.00          H
HETATM 5884  H2  SPC   591     -2.581  11.058  14.044  1.00  0.00          H
HETATM 5885  O   SPC   593     -4.230  13.062  11.047  1.00  0.00          O
HETATM 5886  H1  SPC   593     -3.425  13.523  10.645  1.00  0.00          H
HETATM 5887  H2  SPC   593     -3.914  12.417  11.759  1.00  0.00          H
HETATM 5888  O   SPC   596      2.544  18.830  12.452  1.00  0.00          O
HETATM 5889  H1  SPC   596      3.075  18.531  11.647  1.00  0.00          H
HETATM 5890  H2  SPC   596      2.214  19.772  12.285  1.00  0.00          H
HETATM 5891  O   SPC   597      4.488  21.786  15.190  1.00  0.00          O
HETATM 5892  H1  SPC   597      3.969  20.920  15.227  1.00  0.00          H
HETATM 5893  H2  SPC   597      5.467  21.569  15.238  1.00  0.00          H
HETATM 5894  O   SPC   598      4.872  24.188  11.136  1.00  0.00          O
HETATM 5895  H1  SPC   598      4.912  23.322  10.613  1.00  0.00          H
HETATM 5896  H2  SPC   598      4.317  24.039  11.967  1.00  0.00          H
HETATM 5897  O   SPC   599      7.471  15.516  14.868  1.00  0.00          O
HETATM 5898  H1  SPC   599      8.353  15.930  15.140  1.00  0.00          H
HETATM 5899  H2  SPC   599      7.572  15.081  13.958  1.00  0.00          H
HETATM 5900  O   SPC   600     -7.097  14.110  16.510  1.00  0.00          O
HETATM 5901  H1  SPC   600     -6.118  13.836  16.492  1.00  0.00          H
HETATM 5902  H2  SPC   600     -7.216  14.816  17.212  1.00  0.00          H
HETATM 5903  O   SPC   601     -6.325  11.381  10.374  1.00  0.00          O
HETATM 5904  H1  SPC   601     -5.625  12.090  10.539  1.00  0.00          H
HETATM 5905  H2  SPC   601     -5.889  10.602   9.902  1.00  0.00          H
HETATM 5906  O   SPC   607      7.337  14.344  12.433  1.00  0.00          O
HETATM 5907  H1  SPC   607      6.367  14.128  12.246  1.00  0.00          H
HETATM 5908  H2  SPC   607      7.673  14.972  11.718  1.00  0.00          H
HETATM 5909  O   SPC   612      2.273  13.068  15.180  1.00  0.00          O
HETATM 5910  H1  SPC   612      2.235  12.421  15.959  1.00  0.00          H
HETATM 5911  H2  SPC   612      1.967  13.976  15.494  1.00  0.00          H
HETATM 5912  O   SPC   614     -5.006  20.094   7.762  1.00  0.00          O
HETATM 5913  H1  SPC   614     -5.191  21.022   8.121  1.00  0.00          H
HETATM 5914  H2  SPC   614     -5.848  19.754   7.322  1.00  0.00          H
HETATM 5915  O   SPC   617      0.864  17.573   7.570  1.00  0.00          O
HETATM 5916  H1  SPC   617      0.232  18.302   7.264  1.00  0.00          H
HETATM 5917  H2  SPC   617      1.207  17.079   6.766  1.00  0.00          H
HETATM 5918  O   SPC   625      8.217  11.877  17.214  1.00  0.00          O
HETATM 5919  H1  SPC   625      7.403  12.448  17.046  1.00  0.00          H
HETATM 5920  H2  SPC   625      8.730  11.780  16.349  1.00  0.00          H
HETATM 5921  O   SPC   626      6.326  13.947  16.688  1.00  0.00          O
HETATM 5922  H1  SPC   626      6.765  14.457  15.929  1.00  0.00          H
HETATM 5923  H2  SPC   626      6.594  14.392  17.552  1.00  0.00          H
HETATM 5924  O   SPC   628     -1.663  16.557  13.302  1.00  0.00          O
HETATM 5925  H1  SPC   628     -0.676  16.379  13.413  1.00  0.00          H
HETATM 5926  H2  SPC   628     -1.826  16.810  12.334  1.00  0.00          H
HETATM 5927  O   SPC   630      1.528  15.785  15.535  1.00  0.00          O
HETATM 5928  H1  SPC   630      1.400  15.974  14.548  1.00  0.00          H
HETATM 5929  H2  SPC   630      2.518  15.847  15.749  1.00  0.00          H
HETATM 5930  O   SPC   631     -9.068  16.931  10.504  1.00  0.00          O
HETATM 5931  H1  SPC   631     -9.105  17.730  11.111  1.00  0.00          H
HETATM 5932  H2  SPC   631     -9.602  17.132   9.666  1.00  0.00          H
HETATM 5933  O   SPC   633     -3.716  16.734   9.053  1.00  0.00          O
HETATM 5934  H1  SPC   633     -4.719  16.702   9.168  1.00  0.00          H
HETATM 5935  H2  SPC   633     -3.505  17.240   8.204  1.00  0.00          H
HETATM 5936  O   SPC   634      1.494   9.340  15.320  1.00  0.00          O
HETATM 5937  H1  SPC   634      1.445   9.672  14.364  1.00  0.00          H
HETATM 5938  H2  SPC   634      1.745  10.116  15.914  1.00  0.00          H
HETATM 5939  O   SPC   639      7.790  15.928  18.148  1.00  0.00          O
HETATM 5940  H1  SPC   639      7.493  16.652  18.774  1.00  0.00          H
HETATM 5941  H2  SPC   639      8.329  16.346  17.400  1.00  0.00          H
HETATM 5942  O   SPC   641     -0.197  13.209  11.219  1.00  0.00          O
HETATM 5943  H1  SPC   641     -0.538  12.273  11.051  1.00  0.00          H
HETATM 5944  H2  SPC   641     -0.810  13.860  10.745  1.00  0.00          H
HETATM 5945  O   SPC   642     -7.184  14.295  13.759  1.00  0.00          O
HETATM 5946  H1  SPC   642     -7.177  14.386  14.765  1.00  0.00          H
HETATM 5947  H2  SPC   642     -8.082  13.924  13.475  1.00  0.00          H
HETATM 5948  O   SPC   643     -2.212  14.358  15.110  1.00  0.00          O
HETATM 5949  H1  SPC   643     -2.279  15.201  14.562  1.00  0.00          H
HETATM 5950  H2  SPC   643     -1.544  13.743  14.666  1.00  0.00          H
HETATM 5951  O   SPC   646     -4.525  13.395  16.453  1.00  0.00          O
HETATM 5952  H1  SPC   646     -3.696  13.713  15.973  1.00  0.00          H
HETATM 5953  H2  SPC   646     -4.329  12.501  16.885  1.00  0.00          H
HETATM 5954  O   SPC   647     -0.183  12.950  13.928  1.00  0.00          O
HETATM 5955  H1  SPC   647      0.768  12.909  14.269  1.00  0.00          H
HETATM 5956  H2  SPC   647     -0.161  13.117  12.931  1.00  0.00          H
HETATM 5957  O   SPC   648      2.963  15.044   9.715  1.00  0.00          O
HETATM 5958  H1  SPC   648      2.087  15.521   9.885  1.00  0.00          H
HETATM 5959  H2  SPC   648      2.897  14.112  10.092  1.00  0.00          H
HETATM 5960  O   SPC   649     -4.005  10.958  17.638  1.00  0.00          O
HETATM 5961  H1  SPC   649     -3.022  10.745  17.562  1.00  0.00          H
HETATM 5962  H2  SPC   649     -4.486  10.140  17.972  1.00  0.00          H
HETATM 5963  O   SPC   651      3.540  19.194  14.933  1.00  0.00          O
HETATM 5964  H1  SPC   651      3.116  19.078  14.020  1.00  0.00          H
HETATM 5965  H2  SPC   651      4.354  18.601  14.979  1.00  0.00          H
HETATM 5966  O   SPC   658      0.591  22.445  10.139  1.00  0.00          O
HETATM 5967  H1  SPC   658     -0.251  22.346   9.588  1.00  0.00          H
HETATM 5968  H2  SPC   658      1.267  22.967   9.599  1.00  0.00          H
HETATM 5969  O   SPC   666     -7.878  16.928   7.170  1.00  0.00          O
HETATM 5970  H1  SPC   666     -8.817  17.001   7.540  1.00  0.00          H
HETATM 5971  H2  SPC   666     -7.256  16.659   7.919  1.00  0.00          H
HETATM 5972  O   SPC   670     -1.709  21.793   8.741  1.00  0.00          O
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HETATM 5973  H1  SPC   670      -2.352  22.411   8.269  1.00  0.00          H
HETATM 5974  H2  SPC   670      -2.248  21.150   9.311  1.00  0.00          H
HETATM 5975  O   SPC   676      -6.128   8.972  14.149  1.00  0.00          O
HETATM 5976  H1  SPC   676      -5.164   8.727  14.336  1.00  0.00          H
HETATM 5977  H2  SPC   676      -6.174   9.963  13.955  1.00  0.00          H
HETATM 5978  O   SPC   679      -4.366  17.380  13.005  1.00  0.00          O
HETATM 5979  H1  SPC   679      -4.861  16.621  12.556  1.00  0.00          H
HETATM 5980  H2  SPC   679      -3.477  17.038  13.328  1.00  0.00          H
HETATM 5981  O   SPC   686       1.774  19.514   9.245  1.00  0.00          O
HETATM 5982  H1  SPC   686       1.443  18.788   8.624  1.00  0.00          H
HETATM 5983  H2  SPC   686       1.056  19.694   9.934  1.00  0.00          H
HETATM 5984  O   SPC   687       2.357  11.220  17.134  1.00  0.00          O
HETATM 5985  H1  SPC   687       3.049  10.599  17.528  1.00  0.00          H
HETATM 5986  H2  SPC   687       1.675  11.450  17.844  1.00  0.00          H
HETATM 5987  O   SPC   688      -5.740  22.550   8.740  1.00  0.00          O
HETATM 5988  H1  SPC   688      -6.566  23.022   8.403  1.00  0.00          H
HETATM 5989  H2  SPC   688      -4.923  23.025   8.376  1.00  0.00          H
HETATM 5990  O   SPC   691       0.620  16.394  10.066  1.00  0.00          O
HETATM 5991  H1  SPC   691      -0.291  16.694  10.387  1.00  0.00          H
HETATM 5992  H2  SPC   691       0.745  16.733   9.122  1.00  0.00          H
HETATM 5993  O   SPC   692      -1.359  10.270  17.267  1.00  0.00          O
HETATM 5994  H1  SPC   692      -1.394  10.495  16.279  1.00  0.00          H
HETATM 5995  H2  SPC   692      -0.720  10.906  17.722  1.00  0.00          H
HETATM 5996  O   SPC   693      -8.070  11.529  16.163  1.00  0.00          O
HETATM 5997  H1  SPC   693      -7.870  12.483  16.427  1.00  0.00          H
HETATM 5998  H2  SPC   693      -9.018  11.474  15.820  1.00  0.00          H
HETATM 5999  O   SPC   697       7.462  24.559  12.013  1.00  0.00          O
HETATM 6000  H1  SPC   697       7.722  23.663  12.402  1.00  0.00          H
HETATM 6001  H2  SPC   697       6.498  24.516  11.717  1.00  0.00          H
HETATM 6002  O   SPC   698      -5.582  15.248  11.819  1.00  0.00          O
HETATM 6003  H1  SPC   698      -6.219  14.971  12.557  1.00  0.00          H
HETATM 6004  H2  SPC   698      -5.083  14.425  11.505  1.00  0.00          H
HETATM 6005  O   SPC   703       5.069  16.563  11.993  1.00  0.00          O
HETATM 6006  H1  SPC   703       4.804  15.588  11.989  1.00  0.00          H
HETATM 6007  H2  SPC   703       4.569  17.035  11.250  1.00  0.00          H
HETATM 6008  O   SPC   706      -1.749  17.543  10.793  1.00  0.00          O
HETATM 6009  H1  SPC   706      -1.490  18.517  10.735  1.00  0.00          H
HETATM 6010  H2  SPC   706      -2.560  17.391  10.209  1.00  0.00          H
HETATM 6011  O   SPC   707      -0.933  19.276  13.753  1.00  0.00          O
HETATM 6012  H1  SPC   707      -0.240  19.181  14.486  1.00  0.00          H
HETATM 6013  H2  SPC   707      -1.383  18.382  13.630  1.00  0.00          H
HETATM 6014  O   SPC   709       2.302  21.563  12.132  1.00  0.00          O
HETATM 6015  H1  SPC   709       2.612  22.379  12.642  1.00  0.00          H
HETATM 6016  H2  SPC   709       1.686  21.866  11.390  1.00  0.00          H
HETATM 6017  O   SPC   712       1.123  16.502  12.898  1.00  0.00          O
HETATM 6018  H1  SPC   712       1.000  16.174  11.952  1.00  0.00          H
HETATM 6019  H2  SPC   712       1.584  17.401  12.858  1.00  0.00          H
HETATM 6020  O   SPC  1025       7.493  20.554 -14.033  1.00  0.00          O
HETATM 6021  H1  SPC  1025       8.208  19.843 -14.079  1.00  0.00          H
HETATM 6022  H2  SPC  1025       6.924  20.491 -14.861  1.00  0.00          H
HETATM 6023  O   SPC  1030       1.603  24.768  -9.752  1.00  0.00          O
HETATM 6024  H1  SPC  1030       1.140  24.973 -10.619  1.00  0.00          H
HETATM 6025  H2  SPC  1030       2.063  23.879  -9.835  1.00  0.00          H
HETATM 6026  O   SPC  1049       3.892  18.237 -16.051  1.00  0.00          O
HETATM 6027  H1  SPC  1049       4.670  18.873 -16.119  1.00  0.00          H
HETATM 6028  H2  SPC  1049       3.038  18.768 -16.181  1.00  0.00          H
HETATM 6029  O   SPC  1052       4.440  21.630 -12.280  1.00  0.00          O
HETATM 6030  H1  SPC  1052       3.632  21.028 -12.264  1.00  0.00          H
HETATM 6031  H2  SPC  1052       4.775  21.699 -13.222  1.00  0.00          H
HETATM 6032  O   SPC  1058       6.019  20.116 -16.455  1.00  0.00          O
HETATM 6033  H1  SPC  1058       5.655  20.743 -17.148  1.00  0.00          H
HETATM 6034  H2  SPC  1058       6.924  19.781 -16.760  1.00  0.00          H
HETATM 6035  O   SPC  1061       3.102  15.600 -15.607  1.00  0.00          O
HETATM 6036  H1  SPC  1061       3.404  16.567 -15.593  1.00  0.00          H
HETATM 6037  H2  SPC  1061       2.619  15.436 -16.469  1.00  0.00          H
HETATM 6038  O   SPC  1083       8.049   8.774 -14.255  1.00  0.00          O
HETATM 6039  H1  SPC  1083       8.468   8.042 -13.705  1.00  0.00          H
HETATM 6040  H2  SPC  1083       8.712   9.539 -14.315  1.00  0.00          H
HETATM 6041  O   SPC  1095       0.026  22.086 -12.578  1.00  0.00          O
HETATM 6042  H1  SPC  1095       0.848  21.515 -12.682  1.00  0.00          H
HETATM 6043  H2  SPC  1095      -0.297  22.349 -13.501  1.00  0.00          H
HETATM 6044  O   SPC  1096       9.179  15.083 -17.085  1.00  0.00          O
HETATM 6045  H1  SPC  1096       8.344  15.581 -17.359  1.00  0.00          H
HETATM 6046  H2  SPC  1096       9.892  15.756 -16.849  1.00  0.00          H
HETATM 6047  O   SPC  1097       7.041  16.780 -17.547  1.00  0.00          O
HETATM 6048  H1  SPC  1097       6.066  17.005 -17.496  1.00  0.00          H
HETATM 6049  H2  SPC  1097       7.579  17.625 -17.419  1.00  0.00          H
HETATM 6050  O   SPC  1101      -0.877   9.729 -19.105  1.00  0.00          O
HETATM 6051  H1  SPC  1101      -1.086   8.772 -18.844  1.00  0.00          H
HETATM 6052  H2  SPC  1101      -1.742  10.225 -19.192  1.00  0.00          H
HETATM 6053  O   SPC  1102       8.491  19.065 -16.946  1.00  0.00          O
HETATM 6054  H1  SPC  1102       8.688  18.773 -15.993  1.00  0.00          H
HETATM 6055  H2  SPC  1102       9.365  19.341 -17.368  1.00  0.00          H
HETATM 6056  O   SPC  1109       7.164  21.721 -11.573  1.00  0.00          O
HETATM 6057  H1  SPC  1109       7.436  21.311 -12.456  1.00  0.00          H
HETATM 6058  H2  SPC  1109       6.158  21.779 -11.552  1.00  0.00          H
HETATM 6059  O   SPC  1111       1.772  19.869 -16.389  1.00  0.00          O
HETATM 6060  H1  SPC  1111       1.600  20.752 -15.947  1.00  0.00          H
HETATM 6061  H2  SPC  1111       1.244  19.864 -17.258  1.00  0.00          H
HETATM 6062  O   SPC  1113      -2.051  23.732 -11.579  1.00  0.00          O
HETATM 6063  H1  SPC  1113      -1.278  23.191 -11.938  1.00  0.00          H
HETATM 6064  H2  SPC  1113      -2.817  23.672 -12.231  1.00  0.00          H
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HETATM 6065  O   SPC  1128      4.255  25.349  -8.990  1.00  0.00           O
HETATM 6066  H1  SPC  1128      3.276  25.424  -9.212  1.00  0.00           H
HETATM 6067  H2  SPC  1128      4.532  26.144  -8.437  1.00  0.00           H
HETATM 6068  O   SPC  1147     -0.547  27.393   0.596  1.00  0.00           O
HETATM 6069  H1  SPC  1147     -1.074  26.584   0.905  1.00  0.00           H
HETATM 6070  H2  SPC  1147     -1.166  28.180   0.553  1.00  0.00           H
HETATM 6071  O   SPC  1155      5.498  25.679  -1.582  1.00  0.00           O
HETATM 6072  H1  SPC  1155      5.617  26.095  -0.673  1.00  0.00           H
HETATM 6073  H2  SPC  1155      5.455  26.426  -2.268  1.00  0.00           H
HETATM 6074  O   SPC  1178      3.722  28.350  -5.576  1.00  0.00           O
HETATM 6075  H1  SPC  1178      4.368  27.852  -6.178  1.00  0.00           H
HETATM 6076  H2  SPC  1178      3.533  29.245  -5.985  1.00  0.00           H
HETATM 6077  O   SPC  1184      5.641  25.952   3.946  1.00  0.00           O
HETATM 6078  H1  SPC  1184      5.303  25.133   3.459  1.00  0.00           H
HETATM 6079  H2  SPC  1184      5.031  26.124   4.734  1.00  0.00           H
HETATM 6080  O   SPC  1190      6.328  27.502   7.972  1.00  0.00           O
HETATM 6081  H1  SPC  1190      6.516  27.742   7.009  1.00  0.00           H
HETATM 6082  H2  SPC  1190      7.096  27.829   8.540  1.00  0.00           H
HETATM 6083  O   SPC  1196      1.779  27.267  -3.886  1.00  0.00           O
HETATM 6084  H1  SPC  1196      2.422  27.725  -4.518  1.00  0.00           H
HETATM 6085  H2  SPC  1196      1.003  26.903  -4.423  1.00  0.00           H
HETATM 6086  O   SPC  1211      9.157  30.642  -0.069  1.00  0.00           O
HETATM 6087  H1  SPC  1211      8.593  29.886  -0.432  1.00  0.00           H
HETATM 6088  H2  SPC  1211      8.667  31.061   0.705  1.00  0.00           H
HETATM 6089  O   SPC  1220      7.724  31.455   2.163  1.00  0.00           O
HETATM 6090  H1  SPC  1220      7.139  32.269   2.159  1.00  0.00           H
HETATM 6091  H2  SPC  1220      7.156  30.651   2.413  1.00  0.00           H
HETATM 6092  O   SPC  1223      5.213  27.708  -3.312  1.00  0.00           O
HETATM 6093  H1  SPC  1223      4.614  27.983  -4.076  1.00  0.00           H
HETATM 6094  H2  SPC  1223      6.136  28.088  -3.472  1.00  0.00           H
HETATM 6095  O   SPC  1228      6.255  29.326   2.863  1.00  0.00           O
HETATM 6096  H1  SPC  1228      5.923  28.624   2.222  1.00  0.00           H
HETATM 6097  H2  SPC  1228      6.331  28.919   3.782  1.00  0.00           H
HETATM 6098  O   SPC  1230      1.531  26.766  -1.161  1.00  0.00           O
HETATM 6099  H1  SPC  1230      1.522  27.130  -2.104  1.00  0.00           H
HETATM 6100  H2  SPC  1230      0.730  27.127  -0.660  1.00  0.00           H
HETATM 6101  O   SPC  1254      6.920  27.989   5.302  1.00  0.00           O
HETATM 6102  H1  SPC  1254      6.662  27.152   4.798  1.00  0.00           H
HETATM 6103  H2  SPC  1254      7.912  28.152   5.182  1.00  0.00           H
HETATM 6104  O   SPC  1358      8.530  28.288   9.470  1.00  0.00           O
HETATM 6105  H1  SPC  1358      8.807  27.487  10.028  1.00  0.00           H
HETATM 6106  H2  SPC  1358      8.580  29.109  10.041  1.00  0.00           H
HETATM 6107  O   SPC  3122     23.160   9.296  -2.740  1.00  0.00           O
HETATM 6108  H1  SPC  3122     23.827   8.911  -3.381  1.00  0.00           H
HETATM 6109  H2  SPC  3122     23.040   8.643  -1.970  1.00  0.00           H
HETATM 6110  O   SPC  3135     23.420  11.288   0.836  1.00  0.00           O
HETATM 6111  H1  SPC  3135     23.032  11.499  -0.070  1.00  0.00           H
HETATM 6112  H2  SPC  3135     23.607  10.298   0.887  1.00  0.00           H
HETATM 6113  O   SPC  3137     20.450   8.931  -3.224  1.00  0.00           O
HETATM 6114  H1  SPC  3137     20.160   9.371  -4.085  1.00  0.00           H
HETATM 6115  H2  SPC  3137     21.437   9.088  -3.094  1.00  0.00           H
HETATM 6116  O   SPC  3144     24.186   8.634   1.432  1.00  0.00           O
HETATM 6117  H1  SPC  3144     24.003   8.704   2.428  1.00  0.00           H
HETATM 6118  H2  SPC  3144     25.113   8.276   1.305  1.00  0.00           H
HETATM 6119  O   SPC  3156     22.877   7.617  -0.717  1.00  0.00           O
HETATM 6120  H1  SPC  3156     23.283   7.952   0.146  1.00  0.00           H
HETATM 6121  H2  SPC  3156     22.363   6.769  -0.522  1.00  0.00           H
HETATM 6122  O   SPC  3162     23.953   8.999   4.078  1.00  0.00           O
HETATM 6123  H1  SPC  3162     24.095   9.999   4.021  1.00  0.00           H
HETATM 6124  H2  SPC  3162     23.846   8.737   5.047  1.00  0.00           H
HETATM 6125  O   SPC  3189     10.834   7.595  17.454  1.00  0.00           O
HETATM 6126  H1  SPC  3189     10.516   6.687  17.766  1.00  0.00           H
HETATM 6127  H2  SPC  3189     10.051   8.236  17.506  1.00  0.00           H
HETATM 6128  O   SPC  3194     13.249   8.812  17.396  1.00  0.00           O
HETATM 6129  H1  SPC  3194     12.396   8.269  17.306  1.00  0.00           H
HETATM 6130  H2  SPC  3194     13.354   9.073  18.358  1.00  0.00           H
HETATM 6131  O   SPC  3212      9.590   5.225  18.176  1.00  0.00           O
HETATM 6132  H1  SPC  3212      8.925   5.003  17.451  1.00  0.00           H
HETATM 6133  H2  SPC  3212      9.396   4.657  18.979  1.00  0.00           H
HETATM 6134  O   SPC  3266      8.608   9.151  17.653  1.00  0.00           O
HETATM 6135  H1  SPC  3266      7.802   8.709  18.071  1.00  0.00           H
HETATM 6136  H2  SPC  3266      8.441  10.145  17.603  1.00  0.00           H
HETATM 6137  O   SPC  3271     15.885   8.695  16.431  1.00  0.00           O
HETATM 6138  H1  SPC  3271     16.243   9.641  16.368  1.00  0.00           H
HETATM 6139  H2  SPC  3271     14.924   8.736  16.744  1.00  0.00           H
HETATM 6140  O   SPC  3671     16.122   8.350 -15.215  1.00  0.00           O
HETATM 6141  H1  SPC  3671     15.337   7.773 -14.941  1.00  0.00           H
HETATM 6142  H2  SPC  3671     16.428   8.889 -14.416  1.00  0.00           H
HETATM 6143  O   SPC  3690     12.434  10.263 -12.938  1.00  0.00           O
HETATM 6144  H1  SPC  3690     13.212  10.664 -13.439  1.00  0.00           H
HETATM 6145  H2  SPC  3690     12.785   9.895 -12.055  1.00  0.00           H
HETATM 6146  O   SPC  3693     18.912   8.222 -12.000  1.00  0.00           O
HETATM 6147  H1  SPC  3693     18.960   7.920 -11.040  1.00  0.00           H
HETATM 6148  H2  SPC  3693     19.032   7.414 -12.597  1.00  0.00           H
HETATM 6149  O   SPC  3704     18.956   6.018 -13.586  1.00  0.00           O
HETATM 6150  H1  SPC  3704     18.766   6.268 -14.544  1.00  0.00           H
HETATM 6151  H2  SPC  3704     18.371   5.241 -13.337  1.00  0.00           H
HETATM 6152  O   SPC  3725     16.399   4.836 -14.633  1.00  0.00           O
HETATM 6153  H1  SPC  3725     15.673   5.487 -14.370  1.00  0.00           H
HETATM 6154  H2  SPC  3725     17.031   5.303 -15.265  1.00  0.00           H
HETATM 6155  O   SPC  3734     14.175   6.494 -14.604  1.00  0.00           O
HETATM 6156  H1  SPC  3734     13.351   6.937 -14.212  1.00  0.00           H
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HETATM 6157  H2  SPC  3734      13.879   5.683 -15.128  1.00  0.00           H
HETATM 6158  O   SPC  3757      18.810   4.417  -9.063  1.00  0.00           O
HETATM 6159  H1  SPC  3757      19.061   3.631  -8.467  1.00  0.00           H
HETATM 6160  H2  SPC  3757      17.927   4.212  -9.501  1.00  0.00           H
HETATM 6161  O   SPC  3761      19.253   7.159  -9.397  1.00  0.00           O
HETATM 6162  H1  SPC  3761      18.976   6.192  -9.275  1.00  0.00           H
HETATM 6163  H2  SPC  3761      20.250   7.210  -9.319  1.00  0.00           H
HETATM 6164  O   SPC  3778      13.999   3.932 -15.686  1.00  0.00           O
HETATM 6165  H1  SPC  3778      13.569   3.098 -15.334  1.00  0.00           H
HETATM 6166  H2  SPC  3778      14.957   3.966 -15.372  1.00  0.00           H
HETATM 6167  O   SPC  3781      11.951   7.664 -13.674  1.00  0.00           O
HETATM 6168  H1  SPC  3781      12.113   8.626 -13.410  1.00  0.00           H
HETATM 6169  H2  SPC  3781      11.007   7.418 -13.425  1.00  0.00           H
HETATM 6170  O   SPC  3783      17.963   6.610 -16.106  1.00  0.00           O
HETATM 6171  H1  SPC  3783      18.295   6.824 -17.026  1.00  0.00           H
HETATM 6172  H2  SPC  3783      17.297   7.324 -15.828  1.00  0.00           H
HETATM 6173  O   SPC  3785      18.594   9.579  -7.869  1.00  0.00           O
HETATM 6174  H1  SPC  3785      17.613   9.785  -7.723  1.00  0.00           H
HETATM 6175  H2  SPC  3785      18.672   8.714  -8.383  1.00  0.00           H
HETATM 6176  O   SPC  3790      17.730  22.399   1.357  1.00  0.00           O
HETATM 6177  H1  SPC  3790      18.210  21.505   1.316  1.00  0.00           H
HETATM 6178  H2  SPC  3790      17.947  22.838   2.241  1.00  0.00           H
HETATM 6179  O   SPC  3794       9.205  22.269   8.384  1.00  0.00           O
HETATM 6180  H1  SPC  3794       9.046  23.260   8.265  1.00  0.00           H
HETATM 6181  H2  SPC  3794       8.520  21.899   9.028  1.00  0.00           H
HETATM 6182  O   SPC  3796      22.434  11.780  -1.816  1.00  0.00           O
HETATM 6183  H1  SPC  3796      22.786  10.869  -2.076  1.00  0.00           H
HETATM 6184  H2  SPC  3796      21.859  12.116  -2.575  1.00  0.00           H
HETATM 6185  O   SPC  3798      18.949  19.967   1.339  1.00  0.00           O
HETATM 6186  H1  SPC  3798      19.866  19.723   1.708  1.00  0.00           H
HETATM 6187  H2  SPC  3798      18.434  19.116   1.212  1.00  0.00           H
HETATM 6188  O   SPC  3799      15.410  28.659  -0.548  1.00  0.00           O
HETATM 6189  H1  SPC  3799      14.777  29.107   0.097  1.00  0.00           H
HETATM 6190  H2  SPC  3799      15.899  27.921  -0.066  1.00  0.00           H
HETATM 6191  O   SPC  3800      13.285  22.644   8.681  1.00  0.00           O
HETATM 6192  H1  SPC  3800      12.766  22.977   7.877  1.00  0.00           H
HETATM 6193  H2  SPC  3800      14.257  22.890   8.551  1.00  0.00           H
HETATM 6194  O   SPC  3803      16.132  20.287   8.459  1.00  0.00           O
HETATM 6195  H1  SPC  3803      15.276  20.210   8.988  1.00  0.00           H
HETATM 6196  H2  SPC  3803      16.524  19.356   8.374  1.00  0.00           H
HETATM 6197  O   SPC  3808      11.242  23.613   2.658  1.00  0.00           O
HETATM 6198  H1  SPC  3808      10.586  22.851   2.512  1.00  0.00           H
HETATM 6199  H2  SPC  3808      11.699  23.804   1.776  1.00  0.00           H
HETATM 6200  O   SPC  3810      14.978  22.509   1.186  1.00  0.00           O
HETATM 6201  H1  SPC  3810      14.691  22.772   0.257  1.00  0.00           H
HETATM 6202  H2  SPC  3810      15.976  22.352   1.186  1.00  0.00           H
HETATM 6203  O   SPC  3811       8.172  21.809  -3.460  1.00  0.00           O
HETATM 6204  H1  SPC  3811       7.527  22.209  -2.791  1.00  0.00           H
HETATM 6205  H2  SPC  3811       8.953  22.437  -3.562  1.00  0.00           H
HETATM 6206  O   SPC  3812      13.704  25.628   3.275  1.00  0.00           O
HETATM 6207  H1  SPC  3812      13.631  25.790   2.278  1.00  0.00           H
HETATM 6208  H2  SPC  3812      13.946  24.657   3.427  1.00  0.00           H
HETATM 6209  O   SPC  3813      13.894  24.305  -4.000  1.00  0.00           O
HETATM 6210  H1  SPC  3813      13.941  23.373  -4.395  1.00  0.00           H
HETATM 6211  H2  SPC  3813      13.498  24.920  -4.691  1.00  0.00           H
HETATM 6212  O   SPC  3814      14.447  23.624  -1.404  1.00  0.00           O
HETATM 6213  H1  SPC  3814      15.416  23.856  -1.242  1.00  0.00           H
HETATM 6214  H2  SPC  3814      14.213  23.885  -2.356  1.00  0.00           H
HETATM 6215  O   SPC  3815      16.091  10.622  -7.445  1.00  0.00           O
HETATM 6216  H1  SPC  3815      16.219  11.599  -7.234  1.00  0.00           H
HETATM 6217  H2  SPC  3815      15.594  10.544  -8.328  1.00  0.00           H
HETATM 6218  O   SPC  3818      19.576  10.368  -5.381  1.00  0.00           O
HETATM 6219  H1  SPC  3818      19.302  10.071  -6.309  1.00  0.00           H
HETATM 6220  H2  SPC  3818      18.776  10.773  -4.923  1.00  0.00           H
HETATM 6221  O   SPC  3822      21.538  14.343  -0.841  1.00  0.00           O
HETATM 6222  H1  SPC  3822      22.160  13.579  -1.050  1.00  0.00           H
HETATM 6223  H2  SPC  3822      20.628  14.118  -1.227  1.00  0.00           H
HETATM 6224  O   SPC  3823      13.459  26.052   0.615  1.00  0.00           O
HETATM 6225  H1  SPC  3823      13.253  26.704  -0.130  1.00  0.00           H
HETATM 6226  H2  SPC  3823      12.962  25.191   0.427  1.00  0.00           H
HETATM 6227  O   SPC  3825       9.982  27.608  -6.084  1.00  0.00           O
HETATM 6228  H1  SPC  3825      10.253  28.283  -5.387  1.00  0.00           H
HETATM 6229  H2  SPC  3825       9.364  26.932  -5.651  1.00  0.00           H
HETATM 6230  O   SPC  3826      12.129  25.706  -5.753  1.00  0.00           O
HETATM 6231  H1  SPC  3826      11.632  24.888  -6.080  1.00  0.00           H
HETATM 6232  H2  SPC  3826      11.682  26.521  -6.140  1.00  0.00           H
HETATM 6233  O   SPC  3827      11.346  20.823  -4.475  1.00  0.00           O
HETATM 6234  H1  SPC  3827      11.252  20.934  -5.473  1.00  0.00           H
HETATM 6235  H2  SPC  3827      10.682  20.136  -4.156  1.00  0.00           H
HETATM 6236  O   SPC  3829      11.459  26.229  -3.166  1.00  0.00           O
HETATM 6237  H1  SPC  3829      12.152  26.591  -2.521  1.00  0.00           H
HETATM 6238  H2  SPC  3829      11.909  26.054  -4.055  1.00  0.00           H
HETATM 6239  O   SPC  3831      16.606  13.300  -6.661  1.00  0.00           O
HETATM 6240  H1  SPC  3831      17.529  13.227  -6.247  1.00  0.00           H
HETATM 6241  H2  SPC  3831      16.701  13.714  -7.580  1.00  0.00           H
HETATM 6242  O   SPC  3832      15.120  27.311   4.782  1.00  0.00           O
HETATM 6243  H1  SPC  3832      14.568  26.715   4.176  1.00  0.00           H
HETATM 6244  H2  SPC  3832      14.948  27.027   5.732  1.00  0.00           H
HETATM 6245  O   SPC  3839      12.052  23.496   6.398  1.00  0.00           O
HETATM 6246  H1  SPC  3839      12.161  22.686   5.803  1.00  0.00           H
HETATM 6247  H2  SPC  3839      11.194  23.959   6.140  1.00  0.00           H
HETATM 6248  O   SPC  3843      11.321  26.631   4.103  1.00  0.00           O
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HETATM 6249  H1  SPC  3843      12.244  26.276   3.882  1.00  0.00           H
HETATM 6250  H2  SPC  3843      10.767  25.867   4.467  1.00  0.00           H
HETATM 6251  O   SPC  3845      19.120  13.642  -1.823  1.00  0.00           O
HETATM 6252  H1  SPC  3845      18.826  12.840  -2.358  1.00  0.00           H
HETATM 6253  H2  SPC  3845      18.466  14.396  -1.978  1.00  0.00           H
HETATM 6254  O   SPC  3847      11.758  21.489  -7.175  1.00  0.00           O
HETATM 6255  H1  SPC  3847      11.658  21.253  -8.154  1.00  0.00           H
HETATM 6256  H2  SPC  3847      12.735  21.619  -6.975  1.00  0.00           H
HETATM 6257  O   SPC  3848      12.122  23.781   0.068  1.00  0.00           O
HETATM 6258  H1  SPC  3848      12.863  23.557  -0.582  1.00  0.00           H
HETATM 6259  H2  SPC  3848      11.242  23.800  -0.430  1.00  0.00           H
HETATM 6260  O   SPC  3850      16.399  17.743  -6.266  1.00  0.00           O
HETATM 6261  H1  SPC  3850      15.955  18.648  -6.237  1.00  0.00           H
HETATM 6262  H2  SPC  3850      16.409  17.426  -7.228  1.00  0.00           H
HETATM 6263  O   SPC  3851      18.346  23.876   3.690  1.00  0.00           O
HETATM 6264  H1  SPC  3851      19.335  23.984   3.802  1.00  0.00           H
HETATM 6265  H2  SPC  3851      17.941  24.786   3.489  1.00  0.00           H
HETATM 6266  O   SPC  3853       9.915  24.060  -3.766  1.00  0.00           O
HETATM 6267  H1  SPC  3853      10.572  24.780  -3.491  1.00  0.00           H
HETATM 6268  H2  SPC  3853      10.147  23.759  -4.705  1.00  0.00           H
HETATM 6269  O   SPC  3855      16.227  23.752   5.565  1.00  0.00           O
HETATM 6270  H1  SPC  3855      17.104  23.803   5.069  1.00  0.00           H
HETATM 6271  H2  SPC  3855      15.520  23.431   4.914  1.00  0.00           H
HETATM 6272  O   SPC  3858      21.241  12.274  -4.332  1.00  0.00           O
HETATM 6273  H1  SPC  3858      20.676  11.511  -4.685  1.00  0.00           H
HETATM 6274  H2  SPC  3858      21.988  12.443  -4.978  1.00  0.00           H
HETATM 6275  O   SPC  3859      17.612  15.865  -2.239  1.00  0.00           O
HETATM 6276  H1  SPC  3859      17.225  15.702  -3.163  1.00  0.00           H
HETATM 6277  H2  SPC  3859      18.214  16.664  -2.285  1.00  0.00           H
HETATM 6278  O   SPC  3860      24.342  11.643   3.385  1.00  0.00           O
HETATM 6279  H1  SPC  3860      23.948  11.565   2.455  1.00  0.00           H
HETATM 6280  H2  SPC  3860      24.974  12.418   3.402  1.00  0.00           H
HETATM 6281  O   SPC  3862       9.639  24.204  -1.022  1.00  0.00           O
HETATM 6282  H1  SPC  3862       9.638  25.184  -0.776  1.00  0.00           H
HETATM 6283  H2  SPC  3862       9.612  24.119  -2.028  1.00  0.00           H
HETATM 6284  O   SPC  3863      14.404  22.989   3.739  1.00  0.00           O
HETATM 6285  H1  SPC  3863      13.717  22.321   4.056  1.00  0.00           H
HETATM 6286  H2  SPC  3863      14.634  22.774   2.773  1.00  0.00           H
HETATM 6287  O   SPC  3864      18.891  13.507  -5.232  1.00  0.00           O
HETATM 6288  H1  SPC  3864      19.749  13.222  -4.785  1.00  0.00           H
HETATM 6289  H2  SPC  3864      18.612  14.402  -4.868  1.00  0.00           H
HETATM 6290  O   SPC  3870      12.105  21.661   4.381  1.00  0.00           O
HETATM 6291  H1  SPC  3870      11.881  22.470   3.818  1.00  0.00           H
HETATM 6292  H2  SPC  3870      11.711  20.849   3.922  1.00  0.00           H
HETATM 6293  O   SPC  3872      15.971  22.934   8.174  1.00  0.00           O
HETATM 6294  H1  SPC  3872      16.168  23.283   7.246  1.00  0.00           H
HETATM 6295  H2  SPC  3872      16.147  21.934   8.184  1.00  0.00           H
HETATM 6296  O   SPC  3873      13.069  27.693  -1.558  1.00  0.00           O
HETATM 6297  H1  SPC  3873      14.028  28.002  -1.466  1.00  0.00           H
HETATM 6298  H2  SPC  3873      12.465  28.495  -1.441  1.00  0.00           H
HETATM 6299  O   SPC  3874      12.353  26.206   8.608  1.00  0.00           O
HETATM 6300  H1  SPC  3874      11.608  26.677   8.114  1.00  0.00           H
HETATM 6301  H2  SPC  3874      13.097  26.004   7.955  1.00  0.00           H
HETATM 6302  O   SPC  3876      14.134  25.320   6.651  1.00  0.00           O
HETATM 6303  H1  SPC  3876      13.361  24.692   6.481  1.00  0.00           H
HETATM 6304  H2  SPC  3876      14.985  24.863   6.361  1.00  0.00           H
HETATM 6305  O   SPC  3877       7.741  21.100  10.385  1.00  0.00           O
HETATM 6306  H1  SPC  3877       7.579  20.131  10.625  1.00  0.00           H
HETATM 6307  H2  SPC  3877       7.983  21.594  11.233  1.00  0.00           H
HETATM 6308  O   SPC  3879       8.911  24.994   8.298  1.00  0.00           O
HETATM 6309  H1  SPC  3879       8.963  25.320   9.252  1.00  0.00           H
HETATM 6310  H2  SPC  3879       9.400  25.658   7.715  1.00  0.00           H
HETATM 6311  O   SPC  3881       9.512  26.688   0.225  1.00  0.00           O
HETATM 6312  H1  SPC  3881       8.893  26.320   0.935  1.00  0.00           H
HETATM 6313  H2  SPC  3881      10.220  27.248   0.681  1.00  0.00           H
HETATM 6314  O   SPC  3883      16.170  26.270   0.708  1.00  0.00           O
HETATM 6315  H1  SPC  3883      16.581  25.525   0.163  1.00  0.00           H
HETATM 6316  H2  SPC  3883      15.166  26.150   0.706  1.00  0.00           H
HETATM 6317  O   SPC  3888      10.388  23.688  -6.433  1.00  0.00           O
HETATM 6318  H1  SPC  3888       9.690  23.930  -7.125  1.00  0.00           H
HETATM 6319  H2  SPC  3888      10.865  22.849  -6.740  1.00  0.00           H
HETATM 6320  O   SPC  3890      16.932  15.544  -4.814  1.00  0.00           O
HETATM 6321  H1  SPC  3890      16.598  14.784  -5.384  1.00  0.00           H
HETATM 6322  H2  SPC  3890      16.751  16.414  -5.305  1.00  0.00           H
HETATM 6323  O   SPC  3891      17.112  24.073  -0.703  1.00  0.00           O
HETATM 6324  H1  SPC  3891      17.818  24.054  -1.415  1.00  0.00           H
HETATM 6325  H2  SPC  3891      17.390  23.448   0.045  1.00  0.00           H
HETATM 6326  O   SPC  3895      13.828  21.859  -5.083  1.00  0.00           O
HETATM 6327  H1  SPC  3895      12.997  21.399  -4.738  1.00  0.00           H
HETATM 6328  H2  SPC  3895      14.426  21.173  -5.524  1.00  0.00           H
HETATM 6329  O   SPC  3898       9.897  24.426   4.837  1.00  0.00           O
HETATM 6330  H1  SPC  3898      10.382  24.144   3.994  1.00  0.00           H
HETATM 6331  H2  SPC  3898       8.928  24.149   4.755  1.00  0.00           H
HETATM 6332  O   SPC  3899      17.235  26.273   3.237  1.00  0.00           O
HETATM 6333  H1  SPC  3899      16.888  26.355   2.290  1.00  0.00           H
HETATM 6334  H2  SPC  3899      16.580  26.720   3.860  1.00  0.00           H
HETATM 6335  O   SPC  3903      13.946  20.593  12.716  1.00  0.00           O
HETATM 6336  H1  SPC  3903      13.913  21.602  12.749  1.00  0.00           H
HETATM 6337  H2  SPC  3903      13.179  20.226  13.263  1.00  0.00           H
HETATM 6338  O   SPC  3911       9.352  19.523  15.239  1.00  0.00           O
HETATM 6339  H1  SPC  3911       8.419  19.665  14.880  1.00  0.00           H
HETATM 6340  H2  SPC  3911       9.720  20.424  15.524  1.00  0.00           H
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HETATM 6341  O   SPC  3923       9.458  16.917  16.164  1.00  0.00           O
HETATM 6342  H1  SPC  3923       9.521  17.883  15.868  1.00  0.00           H
HETATM 6343  H2  SPC  3923      10.387  16.578  16.371  1.00  0.00           H
HETATM 6344  O   SPC  3942       8.323  22.103  12.870  1.00  0.00           O
HETATM 6345  H1  SPC  3942       7.926  21.438  13.516  1.00  0.00           H
HETATM 6346  H2  SPC  3942       9.300  22.226  13.087  1.00  0.00           H
HETATM 6347  O   SPC  3960       9.298  26.083  10.811  1.00  0.00           O
HETATM 6348  H1  SPC  3960      10.224  25.744  11.030  1.00  0.00           H
HETATM 6349  H2  SPC  3960       8.623  25.565  11.364  1.00  0.00           H
HETATM 6350  O   SPC  3961      11.798  24.849  10.869  1.00  0.00           O
HETATM 6351  H1  SPC  3961      11.523  23.941  10.534  1.00  0.00           H
HETATM 6352  H2  SPC  3961      12.098  25.407  10.075  1.00  0.00           H
HETATM 6353  O   SPC  3963      13.856  20.286   9.964  1.00  0.00           O
HETATM 6354  H1  SPC  3963      13.620  21.148   9.493  1.00  0.00           H
HETATM 6355  H2  SPC  3963      13.953  20.470  10.952  1.00  0.00           H
HETATM 6356  O   SPC  3965      13.655  23.376  12.376  1.00  0.00           O
HETATM 6357  H1  SPC  3965      14.543  23.288  11.895  1.00  0.00           H
HETATM 6358  H2  SPC  3965      13.123  24.108  11.927  1.00  0.00           H
HETATM 6359  O   SPC  3970      18.859   9.447  14.265  1.00  0.00           O
HETATM 6360  H1  SPC  3970      19.735   9.742  14.655  1.00  0.00           H
HETATM 6361  H2  SPC  3970      18.994   9.250  13.283  1.00  0.00           H
HETATM 6362  O   SPC  3978      11.814  15.538  16.873  1.00  0.00           O
HETATM 6363  H1  SPC  3978      12.484  14.873  16.504  1.00  0.00           H
HETATM 6364  H2  SPC  3978      11.146  15.025  17.435  1.00  0.00           H
HETATM 6365  O   SPC  3991      11.195  19.491  11.230  1.00  0.00           O
HETATM 6366  H1  SPC  3991      11.139  20.418  10.838  1.00  0.00           H
HETATM 6367  H2  SPC  3991      11.283  19.564  12.232  1.00  0.00           H
HETATM 6368  O   SPC  3992      10.354  22.000  15.540  1.00  0.00           O
HETATM 6369  H1  SPC  3992      10.726  22.159  14.613  1.00  0.00           H
HETATM 6370  H2  SPC  3992      10.561  22.795  16.113  1.00  0.00           H
HETATM 6371  O   SPC  3996      11.117  22.425  12.950  1.00  0.00           O
HETATM 6372  H1  SPC  3996      12.027  22.851  13.048  1.00  0.00           H
HETATM 6373  H2  SPC  3996      10.958  22.272  11.963  1.00  0.00           H
HETATM 6374  O   SPC  4004      15.924  16.609  14.906  1.00  0.00           O
HETATM 6375  H1  SPC  4004      16.619  17.069  15.462  1.00  0.00           H
HETATM 6376  H2  SPC  4004      15.790  17.150  14.057  1.00  0.00           H
HETATM 6377  O   SPC  4008      17.130  11.084  15.894  1.00  0.00           O
HETATM 6378  H1  SPC  4008      17.724  10.717  15.169  1.00  0.00           H
HETATM 6379  H2  SPC  4008      16.847  12.020  15.646  1.00  0.00           H
HETATM 6380  O   SPC  4015      16.269  13.839  15.602  1.00  0.00           O
HETATM 6381  H1  SPC  4015      16.592  14.027  16.532  1.00  0.00           H
HETATM 6382  H2  SPC  4015      16.135  14.720  15.125  1.00  0.00           H
HETATM 6383  O   SPC  4018      13.494  13.640  15.919  1.00  0.00           O
HETATM 6384  H1  SPC  4018      14.482  13.569  15.738  1.00  0.00           H
HETATM 6385  H2  SPC  4018      13.114  12.707  16.025  1.00  0.00           H
HETATM 6386  O   SPC  4019      12.386  11.166  16.143  1.00  0.00           O
HETATM 6387  H1  SPC  4019      12.682  10.291  16.549  1.00  0.00           H
HETATM 6388  H2  SPC  4019      11.393  11.136  15.990  1.00  0.00           H
HETATM 6389  O   SPC  4040      15.897  22.863  10.932  1.00  0.00           O
HETATM 6390  H1  SPC  4040      15.952  23.091   9.948  1.00  0.00           H
HETATM 6391  H2  SPC  4040      16.554  22.132  11.126  1.00  0.00           H
HETATM 6392  O   SPC  4047      11.855  19.305  14.020  1.00  0.00           O
HETATM 6393  H1  SPC  4047      12.425  18.714  14.612  1.00  0.00           H
HETATM 6394  H2  SPC  4047      10.940  19.387  14.439  1.00  0.00           H
HETATM 6395  O   SPC  4049      13.293  17.552  15.583  1.00  0.00           O
HETATM 6396  H1  SPC  4049      12.795  16.894  16.164  1.00  0.00           H
HETATM 6397  H2  SPC  4049      14.215  17.189  15.402  1.00  0.00           H
HETATM 6398  O   SPC  4057      11.148  22.121  10.217  1.00  0.00           O
HETATM 6399  H1  SPC  4057      10.395  22.105   9.537  1.00  0.00           H
HETATM 6400  H2  SPC  4057      12.017  22.259   9.714  1.00  0.00           H
HETATM 6401  O   SPC  4065       9.826  14.068  18.062  1.00  0.00           O
HETATM 6402  H1  SPC  4065       9.438  13.147  17.939  1.00  0.00           H
HETATM 6403  H2  SPC  4065       9.073  14.710  18.258  1.00  0.00           H
HETATM 6404  O   SPC  4072      15.585  18.312  12.837  1.00  0.00           O
HETATM 6405  H1  SPC  4072      15.132  19.214  12.839  1.00  0.00           H
HETATM 6406  H2  SPC  4072      15.712  18.019  11.873  1.00  0.00           H
HETATM 6407  O   SPC  4392       9.377  22.441 -10.105  1.00  0.00           O
HETATM 6408  H1  SPC  4392       8.578  22.176 -10.668  1.00  0.00           H
HETATM 6409  H2  SPC  4392       9.114  23.216  -9.517  1.00  0.00           H
HETATM 6410  O   SPC  4394      11.809  16.767 -12.228  1.00  0.00           O
HETATM 6411  H1  SPC  4394      11.934  16.018 -12.893  1.00  0.00           H
HETATM 6412  H2  SPC  4394      10.838  17.069 -12.278  1.00  0.00           H
HETATM 6413  O   SPC  4398      18.544  12.043  -9.313  1.00  0.00           O
HETATM 6414  H1  SPC  4398      18.750  11.197  -8.807  1.00  0.00           H
HETATM 6415  H2  SPC  4398      18.003  11.807 -10.132  1.00  0.00           H
HETATM 6416  O   SPC  4400      14.712  11.049 -14.342  1.00  0.00           O
HETATM 6417  H1  SPC  4400      14.685  10.547 -15.210  1.00  0.00           H
HETATM 6418  H2  SPC  4400      15.523  10.746 -13.825  1.00  0.00           H
HETATM 6419  O   SPC  4410      14.216  20.494  -9.012  1.00  0.00           O
HETATM 6420  H1  SPC  4410      14.659  19.989  -9.767  1.00  0.00           H
HETATM 6421  H2  SPC  4410      13.292  20.766  -9.316  1.00  0.00           H
HETATM 6422  O   SPC  4411       8.500  24.409  -8.299  1.00  0.00           O
HETATM 6423  H1  SPC  4411       8.358  25.408  -8.288  1.00  0.00           H
HETATM 6424  H2  SPC  4411       7.599  23.957  -8.392  1.00  0.00           H
HETATM 6425  O   SPC  4416      16.268  16.915  -8.855  1.00  0.00           O
HETATM 6426  H1  SPC  4416      15.415  16.909  -9.392  1.00  0.00           H
HETATM 6427  H2  SPC  4416      16.700  16.004  -8.933  1.00  0.00           H
HETATM 6428  O   SPC  4423      15.445  20.308  -6.634  1.00  0.00           O
HETATM 6429  H1  SPC  4423      16.342  20.732  -6.779  1.00  0.00           H
HETATM 6430  H2  SPC  4423      14.945  20.306  -7.518  1.00  0.00           H
HETATM 6431  O   SPC  4433      13.530  12.664  -9.547  1.00  0.00           O
HETATM 6432  H1  SPC  4433      13.136  12.664  -8.621  1.00  0.00           H
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HETATM 6433  H2  SPC  4433      13.948  11.753  -9.717  1.00  0.00          H
HETATM 6434  O   SPC  4458      12.512  19.452 -12.016  1.00  0.00          O
HETATM 6435  H1  SPC  4458      13.505  19.450 -11.835  1.00  0.00          H
HETATM 6436  H2  SPC  4458      12.200  18.494 -12.104  1.00  0.00          H
HETATM 6437  O   SPC  4466      11.277  19.611 -17.170  1.00  0.00          O
HETATM 6438  H1  SPC  4466      11.316  19.802 -16.174  1.00  0.00          H
HETATM 6439  H2  SPC  4466      11.972  20.166 -17.629  1.00  0.00          H
HETATM 6440  O   SPC  4479      11.639  14.878 -14.356  1.00  0.00          O
HETATM 6441  H1  SPC  4479      11.523  15.612 -15.040  1.00  0.00          H
HETATM 6442  H2  SPC  4479      10.890  14.210 -14.476  1.00  0.00          H
HETATM 6443  O   SPC  4481      17.045   9.898 -13.135  1.00  0.00          O
HETATM 6444  H1  SPC  4481      16.952  10.655 -12.469  1.00  0.00          H
HETATM 6445  H2  SPC  4481      17.765   9.273 -12.796  1.00  0.00          H
HETATM 6446  O   SPC  4484      10.003  10.670 -14.202  1.00  0.00          O
HETATM 6447  H1  SPC  4484      10.872  10.543 -13.702  1.00  0.00          H
HETATM 6448  H2  SPC  4484       9.967  11.614 -14.554  1.00  0.00          H
HETATM 6449  O   SPC  4485      11.680  21.043  -9.902  1.00  0.00          O
HETATM 6450  H1  SPC  4485      11.847  20.489 -10.732  1.00  0.00          H
HETATM 6451  H2  SPC  4485      10.832  21.582 -10.045  1.00  0.00          H
HETATM 6452  O   SPC  4491      14.066  13.701 -13.598  1.00  0.00          O
HETATM 6453  H1  SPC  4491      14.218  12.778 -13.978  1.00  0.00          H
HETATM 6454  H2  SPC  4491      13.189  14.060 -13.947  1.00  0.00          H
HETATM 6455  O   SPC  4519      15.052  14.111 -11.158  1.00  0.00          O
HETATM 6456  H1  SPC  4519      14.722  14.024 -12.116  1.00  0.00          H
HETATM 6457  H2  SPC  4519      14.414  13.596 -10.556  1.00  0.00          H
HETATM 6458  O   SPC  4533      14.132  16.628 -10.707  1.00  0.00          O
HETATM 6459  H1  SPC  4533      13.214  16.674 -11.130  1.00  0.00          H
HETATM 6460  H2  SPC  4533      14.507  15.702 -10.867  1.00  0.00          H
HETATM 6461  O   SPC  4538      15.143  19.070 -11.179  1.00  0.00          O
HETATM 6462  H1  SPC  4538      14.795  18.135 -10.995  1.00  0.00          H
HETATM 6463  H2  SPC  4538      16.111  19.005 -11.430  1.00  0.00          H
HETATM 6464  O   SPC  4549       8.191  27.224  -8.159  1.00  0.00          O
HETATM 6465  H1  SPC  4549       8.881  27.444  -7.452  1.00  0.00          H
HETATM 6466  H2  SPC  4549       8.483  27.625  -9.030  1.00  0.00          H
HETATM 6467  O   SPC  4562      17.013  14.301  -9.171  1.00  0.00          O
HETATM 6468  H1  SPC  4562      17.716  13.577  -9.258  1.00  0.00          H
HETATM 6469  H2  SPC  4562      16.358  14.206  -9.935  1.00  0.00          H
HETATM 6470  O   SPC  4578       9.437  13.274 -15.084  1.00  0.00          O
HETATM 6471  H1  SPC  4578       9.399  13.860 -15.910  1.00  0.00          H
HETATM 6472  H2  SPC  4578       8.516  12.897 -14.925  1.00  0.00          H
HETATM 6473  O   SPC  4583      10.919  16.982 -16.087  1.00  0.00          O
HETATM 6474  H1  SPC  4583      10.313  17.430 -15.412  1.00  0.00          H
HETATM 6475  H2  SPC  4583      11.309  17.698 -16.678  1.00  0.00          H
HETATM 6476  O   SPC  4591      11.304  19.915 -14.491  1.00  0.00          O
HETATM 6477  H1  SPC  4591      11.789  19.932 -13.607  1.00  0.00          H
HETATM 6478  H2  SPC  4591      10.467  19.355 -14.383  1.00  0.00          H
HETATM 6479  O   SPC  4593      16.615  11.807 -11.266  1.00  0.00          O
HETATM 6480  H1  SPC  4593      15.973  11.262 -10.696  1.00  0.00          H
HETATM 6481  H2  SPC  4593      16.180  12.693 -11.470  1.00  0.00          H
HETATM 6482  O   SPC  4595       9.592  28.491   4.968  1.00  0.00          O
HETATM 6483  H1  SPC  4595      10.263  27.803   4.649  1.00  0.00          H
HETATM 6484  H2  SPC  4595       9.720  29.332   4.422  1.00  0.00          H
HETATM 6485  O   SPC  4603      14.988  29.577   3.243  1.00  0.00          O
HETATM 6486  H1  SPC  4603      14.981  28.779   3.865  1.00  0.00          H
HETATM 6487  H2  SPC  4603      15.885  30.019   3.299  1.00  0.00          H
HETATM 6488  O   SPC  4655      10.113  27.349   7.416  1.00  0.00          O
HETATM 6489  H1  SPC  4655       9.963  27.830   6.541  1.00  0.00          H
HETATM 6490  H2  SPC  4655       9.568  27.808   8.132  1.00  0.00          H
HETATM 6491  O   SPC  4664      11.068  28.235   1.902  1.00  0.00          O
HETATM 6492  H1  SPC  4664      11.204  27.583   2.664  1.00  0.00          H
HETATM 6493  H2  SPC  4664      10.619  29.063   2.266  1.00  0.00          H
HETATM 6494  O   SPC  4699      13.327  29.573   1.096  1.00  0.00          O
HETATM 6495  H1  SPC  4699      13.922  29.664   1.911  1.00  0.00          H
HETATM 6496  H2  SPC  4699      12.542  28.983   1.339  1.00  0.00          H
HETATM 6497  O   SPC  4716      10.522  28.800  -3.522  1.00  0.00          O
HETATM 6498  H1  SPC  4716      10.836  27.858  -3.334  1.00  0.00          H
HETATM 6499  H2  SPC  4716      10.915  29.412  -2.823  1.00  0.00          H
HETATM 6500  O   SPC  4729      11.575  29.945  -1.112  1.00  0.00          O
HETATM 6501  H1  SPC  4729      12.273  30.088  -0.397  1.00  0.00          H
HETATM 6502  H2  SPC  4729      10.685  30.276  -0.758  1.00  0.00          H
HETATM 6503  O   SPC  4733      10.081  30.504   3.162  1.00  0.00          O
HETATM 6504  H1  SPC  4733       9.212  30.884   2.808  1.00  0.00          H
HETATM 6505  H2  SPC  4733      10.798  31.198   3.064  1.00  0.00          H
HETATM 6506  O   SPC  A25J    -18.036   6.814   8.145  1.00  0.00          O
HETATM 6507  H1  SPC  A25J    -17.775   6.460   7.233  1.00  0.00          H
HETATM 6508  H2  SPC  A25J    -18.985   7.134   8.095  1.00  0.00          H
HETATM 6509  O   SPC  A25P    -18.419  -2.834   8.163  1.00  0.00          O
HETATM 6510  H1  SPC  A25P    -17.913  -3.649   7.853  1.00  0.00          H
HETATM 6511  H2  SPC  A25P    -17.961  -2.481   8.989  1.00  0.00          H
HETATM 6512  O   SPC  A25R    -17.489   2.512   7.552  1.00  0.00          O
HETATM 6513  H1  SPC  A25R    -16.645   2.822   7.996  1.00  0.00          H
HETATM 6514  H2  SPC  A25R    -17.513   2.886   6.615  1.00  0.00          H
HETATM 6515  O   SPC  A25S    -18.898  -3.062   3.449  1.00  0.00          O
HETATM 6516  H1  SPC  A25S    -19.869  -3.154   3.222  1.00  0.00          H
HETATM 6517  H2  SPC  A25S    -18.470  -2.424   2.793  1.00  0.00          H
HETATM 6518  O   SPC  A26K    -17.055  -4.278   5.037  1.00  0.00          O
HETATM 6519  H1  SPC  A26K    -16.192  -4.171   4.532  1.00  0.00          H
HETATM 6520  H2  SPC  A26K    -17.799  -3.869   4.486  1.00  0.00          H
HETATM 6521  O   SPC  A26V    -17.801   6.049   5.500  1.00  0.00          O
HETATM 6522  H1  SPC  A26V    -18.298   6.299   4.645  1.00  0.00          H
HETATM 6523  H2  SPC  A26V    -17.526   5.081   5.426  1.00  0.00          H
HETATM 6524  O   SPC  A278    -16.613  -4.841   7.609  1.00  0.00          O
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HETATM 6525  H1  SPC  A278     -15.642  -4.627   7.793  1.00  0.00          H
HETATM 6526  H2  SPC  A278     -16.784  -4.699   6.617  1.00  0.00          H
HETATM 6527  O   SPC  A27A     -17.021   3.408   4.969  1.00  0.00          O
HETATM 6528  H1  SPC  A27A     -16.401   3.812   4.281  1.00  0.00          H
HETATM 6529  H2  SPC  A27A     -17.055   2.412   4.815  1.00  0.00          H
HETATM 6530  O   SPC  A281    -14.593   4.681  12.738  1.00  0.00          O
HETATM 6531  H1  SPC  A281    -14.421   5.668  12.607  1.00  0.00          H
HETATM 6532  H2  SPC  A281    -14.319   4.427  13.678  1.00  0.00          H
HETATM 6533  O   SPC  A287     -8.841   8.961  13.528  1.00  0.00          O
HETATM 6534  H1  SPC  A287     -7.897   8.724  13.796  1.00  0.00          H
HETATM 6535  H2  SPC  A287     -8.794   9.563  12.714  1.00  0.00          H
HETATM 6536  O   SPC  A28N    -10.681   0.799  17.194  1.00  0.00          O
HETATM 6537  H1  SPC  A28N    -11.027   0.760  18.135  1.00  0.00          H
HETATM 6538  H2  SPC  A28N     -9.677   0.665  17.218  1.00  0.00          H
HETATM 6539  O   SPC  A291     -9.310   4.791  16.150  1.00  0.00          O
HETATM 6540  H1  SPC  A291     -9.610   4.398  15.273  1.00  0.00          H
HETATM 6541  H2  SPC  A291     -8.662   4.152  16.586  1.00  0.00          H
HETATM 6542  O   SPC  A298    -13.801   3.930  15.216  1.00  0.00          O
HETATM 6543  H1  SPC  A298    -13.285   3.064  15.250  1.00  0.00          H
HETATM 6544  H2  SPC  A298    -13.170   4.690  15.441  1.00  0.00          H
HETATM 6545  O   SPC  A29N    -18.219   0.525   9.254  1.00  0.00          O
HETATM 6546  H1  SPC  A29N    -18.036   1.286   8.611  1.00  0.00          H
HETATM 6547  H2  SPC  A29N    -18.461  -0.290   8.725  1.00  0.00          H
HETATM 6548  O   SPC  A2AC    -12.176   1.666  15.018  1.00  0.00          O
HETATM 6549  H1  SPC  A2AC    -11.599   2.291  14.474  1.00  0.00          H
HETATM 6550  H2  SPC  A2AC    -11.665   1.397  15.848  1.00  0.00          H
HETATM 6551  O   SPC  A2AJ    -17.757   5.818  10.756  1.00  0.00          O
HETATM 6552  H1  SPC  A2AJ    -17.283   6.595  11.175  1.00  0.00          H
HETATM 6553  H2  SPC  A2AJ    -17.889   6.013   9.775  1.00  0.00          H
HETATM 6554  O   SPC  A2AP    -11.915   5.904  15.530  1.00  0.00          O
HETATM 6555  H1  SPC  A2AP    -11.790   6.693  14.914  1.00  0.00          H
HETATM 6556  H2  SPC  A2AP    -11.024   5.664  15.933  1.00  0.00          H
HETATM 6557  O   SPC  A2BE    -17.631   0.914  11.914  1.00  0.00          O
HETATM 6558  H1  SPC  A2BE    -17.580   1.910  12.065  1.00  0.00          H
HETATM 6559  H2  SPC  A2BE    -17.900   0.744  10.953  1.00  0.00          H
HETATM 6560  O   SPC  A2BQ    -16.246   2.570  14.936  1.00  0.00          O
HETATM 6561  H1  SPC  A2BQ    -16.728   2.993  14.158  1.00  0.00          H
HETATM 6562  H2  SPC  A2BQ    -15.448   3.140  15.173  1.00  0.00          H
HETATM 6563  O   SPC  A2BS    -17.114   3.677  12.452  1.00  0.00          O
HETATM 6564  H1  SPC  A2BS    -16.143   3.960  12.483  1.00  0.00          H
HETATM 6565  H2  SPC  A2BS    -17.610   4.334  11.866  1.00  0.00          H
HETATM 6566  O   SPC  A2BV    -16.231  -0.013  14.043  1.00  0.00          O
HETATM 6567  H1  SPC  A2BV    -16.796   0.150  13.218  1.00  0.00          H
HETATM 6568  H2  SPC  A2BV    -16.249   0.833  14.598  1.00  0.00          H
HETATM 6569  O   SPC  A2OW    -17.662   8.867   5.049  1.00  0.00          O
HETATM 6570  H1  SPC  A2OW    -18.147   8.952   4.160  1.00  0.00          H
HETATM 6571  H2  SPC  A2OW    -17.656   7.892   5.303  1.00  0.00          H
HETATM 6572  O   SPC  A2QF    -17.012  10.618   6.995  1.00  0.00          O
HETATM 6573  H1  SPC  A2QF    -17.192   9.946   6.257  1.00  0.00          H
HETATM 6574  H2  SPC  A2QF    -17.544  11.444   6.807  1.00  0.00          H
HETATM 6575  O   SPC  A2QT    -10.827  19.668   7.005  1.00  0.00          O
HETATM 6576  H1  SPC  A2QT    -10.229  20.205   7.616  1.00  0.00          H
HETATM 6577  H2  SPC  A2QT    -11.594  20.250   6.698  1.00  0.00          H
HETATM 6578  O   SPC  A2R4    -11.452   8.013  13.673  1.00  0.00          O
HETATM 6579  H1  SPC  A2R4    -10.445   8.090  13.659  1.00  0.00          H
HETATM 6580  H2  SPC  A2R4    -11.837   8.880  13.326  1.00  0.00          H
HETATM 6581  O   SPC  A2RI     -8.656  10.738  11.509  1.00  0.00          O
HETATM 6582  H1  SPC  A2RI     -9.428  11.033  10.924  1.00  0.00          H
HETATM 6583  H2  SPC  A2RI     -7.784  10.977  11.046  1.00  0.00          H
HETATM 6584  O   SPC  A2RJ    -10.907  11.775  10.429  1.00  0.00          O
HETATM 6585  H1  SPC  A2RJ    -10.775  12.776  10.454  1.00  0.00          H
HETATM 6586  H2  SPC  A2RJ    -11.724  11.566   9.870  1.00  0.00          H
HETATM 6587  O   SPC  A2RY    -16.499   8.954   9.125  1.00  0.00          O
HETATM 6588  H1  SPC  A2RY    -16.627   9.655   8.407  1.00  0.00          H
HETATM 6589  H2  SPC  A2RY    -16.957   8.108   8.823  1.00  0.00          H
HETATM 6590  O   SPC  A2S2    -14.580   9.545  10.987  1.00  0.00          O
HETATM 6591  H1  SPC  A2S2    -14.401   8.696  11.507  1.00  0.00          H
HETATM 6592  H2  SPC  A2S2    -15.365   9.378  10.368  1.00  0.00          H
HETATM 6593  O   SPC  A2S9    -10.345  14.457  10.886  1.00  0.00          O
HETATM 6594  H1  SPC  A2S9    -10.052  14.015  11.748  1.00  0.00          H
HETATM 6595  H2  SPC  A2S9     -9.812  15.307  10.769  1.00  0.00          H
HETATM 6596  O   SPC  A2T8    -12.102  15.301   8.871  1.00  0.00          O
HETATM 6597  H1  SPC  A2T8    -12.688  14.569   8.495  1.00  0.00          H
HETATM 6598  H2  SPC  A2T8    -11.606  14.942   9.673  1.00  0.00          H
HETATM 6599  O   SPC  A2TA    -10.395  10.989  14.681  1.00  0.00          O
HETATM 6600  H1  SPC  A2TA     -9.832  10.189  14.427  1.00  0.00          H
HETATM 6601  H2  SPC  A2TA    -11.306  10.878  14.265  1.00  0.00          H
HETATM 6602  O   SPC  A2TV    -12.280  10.395  12.539  1.00  0.00          O
HETATM 6603  H1  SPC  A2TV    -13.191  10.239  12.134  1.00  0.00          H
HETATM 6604  H2  SPC  A2TV    -11.711  10.886  11.867  1.00  0.00          H
HETATM 6605  O   SPC  A2UG    -13.539  13.210   7.746  1.00  0.00          O
HETATM 6606  H1  SPC  A2UG    -14.519  13.275   7.541  1.00  0.00          H
HETATM 6607  H2  SPC  A2UG    -13.373  12.342   8.240  1.00  0.00          H
HETATM 6608  O   SPC  A2UN     -9.401  12.938  13.007  1.00  0.00          O
HETATM 6609  H1  SPC  A2UN     -8.988  12.215  12.434  1.00  0.00          H
HETATM 6610  H2  SPC  A2UN     -9.905  12.486  13.756  1.00  0.00          H
HETATM 6611  O   SPC  A2V9    -10.375  17.258   8.182  1.00  0.00          O
HETATM 6612  H1  SPC  A2V9    -11.140  16.607   8.326  1.00  0.00          H
HETATM 6613  H2  SPC  A2V9    -10.736  18.093   7.737  1.00  0.00          H
HETATM 6614  O   SPC  A2W8    -13.110  10.923   9.139  1.00  0.00          O
HETATM 6615  H1  SPC  A2W8    -13.762  10.551   9.818  1.00  0.00          H
HETATM 6616  H2  SPC  A2W8    -12.697  10.148   8.645  1.00  0.00          H
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HETATM 6617 O SPC A4YB 2.453 12.608 11.005 1.00 0.00 O
HETATM 6618 H1 SPC A4YB 1.501 12.926 11.139 1.00 0.00 H
HETATM 6619 H2 SPC A4YB 2.461 11.949 10.241 1.00 0.00 H
HETATM 6620 O SPC A4YC -9.825 18.376 4.789 1.00 0.00 O
HETATM 6621 H1 SPC A4YC -10.548 17.676 4.703 1.00 0.00 H
HETATM 6622 H2 SPC A4YC -10.026 18.938 5.603 1.00 0.00 H
HETATM 6623 O SPC A4YD -10.009 7.986 -0.916 1.00 0.00 O
HETATM 6624 H1 SPC A4YD -9.916 7.073 -0.482 1.00 0.00 H
HETATM 6625 H2 SPC A4YD -10.945 8.325 -0.745 1.00 0.00 H
HETATM 6626 O SPC A4YE -0.810 8.599 8.938 1.00 0.00 O
HETATM 6627 H1 SPC A4YE -1.601 9.078 8.577 1.00 0.00 H
HETATM 6628 H2 SPC A4YE -1.128 7.745 9.263 1.00 0.00 H
HETATM 6629 O SPC A4YF -7.970 0.461 17.430 1.00 0.00 O
HETATM 6630 H1 SPC A4YF -7.149 -0.074 17.172 1.00 0.00 H
HETATM 6631 H2 SPC A4YF -7.729 1.443 17.398 1.00 0.00 H
HETATM 6632 O SPC A4YG 2.117 18.987 -3.887 1.00 0.00 O
HETATM 6633 H1 SPC A4YG 2.767 18.301 -4.237 1.00 0.00 H
HETATM 6634 H2 SPC A4YG 1.262 18.913 -4.416 1.00 0.00 H
HETATM 6635 O SPC A4YH 2.246 10.856 8.586 1.00 0.00 O
HETATM 6636 H1 SPC A4YH 2.932 11.343 8.059 1.00 0.00 H
HETATM 6637 H2 SPC A4YH 1.464 10.863 8.005 1.00 0.00 H
HETATM 6638 O SPC A4YJ 3.080 3.232 -3.124 1.00 0.00 O
HETATM 6639 H1 SPC A4YJ 3.381 2.771 -3.965 1.00 0.00 H
HETATM 6640 H2 SPC A4YJ 3.484 4.157 -3.101 1.00 0.00 H
HETATM 6641 O SPC A4YK -13.586 -0.508 13.956 1.00 0.00 O
HETATM 6642 H1 SPC A4YK -13.092 0.310 14.287 1.00 0.00 H
HETATM 6643 H2 SPC A4YK -14.580 -0.336 14.050 1.00 0.00 H
HETATM 6644 O SPC A4YL 9.079 18.099 3.323 1.00 0.00 O
HETATM 6645 H1 SPC A4YL 9.873 18.677 3.058 1.00 0.00 H
HETATM 6646 H2 SPC A4YL 8.449 18.039 2.531 1.00 0.00 H
HETATM 6647 O SPC A4YM 4.360 16.490 7.955 1.00 0.00 O
HETATM 6648 H1 SPC A4YM 4.246 16.114 7.031 1.00 0.00 H
HETATM 6649 H2 SPC A4YM 3.877 15.883 8.609 1.00 0.00 H
HETATM 6650 O SPC A4YN -12.092 5.378 5.790 1.00 0.00 O
HETATM 6651 H1 SPC A4YN -12.004 4.418 5.488 1.00 0.00 H
HETATM 6652 H2 SPC A4YN -12.043 5.981 4.989 1.00 0.00 H
HETATM 6653 O SPC A4YO 5.834 6.146 2.323 1.00 0.00 O
HETATM 6654 H1 SPC A4YO 6.194 5.575 3.064 1.00 0.00 H
HETATM 6655 H2 SPC A4YO 5.687 7.081 2.668 1.00 0.00 H
HETATM 6656 O SPC A4YP -3.583 8.963 11.349 1.00 0.00 O
HETATM 6657 H1 SPC A4YP -3.374 7.983 11.459 1.00 0.00 H
HETATM 6658 H2 SPC A4YP -4.232 9.067 10.580 1.00 0.00 H
HETATM 6659 O SPC A4YQ 3.846 19.901 -1.896 1.00 0.00 O
HETATM 6660 H1 SPC A4YQ 3.200 19.676 -2.639 1.00 0.00 H
HETATM 6661 H2 SPC A4YQ 4.700 19.371 -2.030 1.00 0.00 H
HETATM 6662 O SPC A4YS 1.495 10.397 12.826 1.00 0.00 O
HETATM 6663 H1 SPC A4YS 0.630 10.317 12.314 1.00 0.00 H
HETATM 6664 H2 SPC A4YS 2.085 11.063 12.359 1.00 0.00 H
HETATM 6665 O SPC A4YT 4.627 21.002 -8.514 1.00 0.00 O
HETATM 6666 H1 SPC A4YT 4.832 20.286 -9.195 1.00 0.00 H
HETATM 6667 H2 SPC A4YT 3.629 21.008 -8.341 1.00 0.00 H
HETATM 6668 O SPC A4YU -5.648 -0.839 16.822 1.00 0.00 O
HETATM 6669 H1 SPC A4YU -5.741 -1.745 17.260 1.00 0.00 H
HETATM 6670 H2 SPC A4YU -4.714 -0.492 17.002 1.00 0.00 H
HETATM 6671 O SPC A4YV -1.072 22.513 -15.086 1.00 0.00 O
HETATM 6672 H1 SPC A4YV -1.251 21.534 -14.908 1.00 0.00 H
HETATM 6673 H2 SPC A4YV -0.615 22.581 -15.995 1.00 0.00 H
HETATM 6674 O SPC A4YY -12.015 4.612 11.584 1.00 0.00 O
HETATM 6675 H1 SPC A4YY -12.052 5.288 10.837 1.00 0.00 H
HETATM 6676 H2 SPC A4YY -12.961 4.362 11.832 1.00 0.00 H
HETATM 6677 O SPC A4YZ 2.042 8.224 8.387 1.00 0.00 O
HETATM 6678 H1 SPC A4YZ 2.771 7.697 8.751 1.00 0.00 H
HETATM 6679 H2 SPC A4YZ 2.256 9.179 8.539 1.00 0.00 H
HETATM 6680 O SPC A4Z0 2.044 18.282 3.483 1.00 0.00 O
HETATM 6681 H1 SPC A4Z0 1.065 18.187 3.253 1.00 0.00 H
HETATM 6682 H2 SPC A4Z0 2.582 18.196 2.635 1.00 0.00 H
HETATM 6683 O SPC A4Z2 -5.176 9.222 9.149 1.00 0.00 O
HETATM 6684 H1 SPC A4Z2 -4.405 9.455 8.540 1.00 0.00 H
HETATM 6685 H2 SPC A4Z2 -5.864 8.709 8.625 1.00 0.00 H
HETATM 6686 O SPC A4Z3 7.162 18.631 1.509 1.00 0.00 O
HETATM 6687 H1 SPC A4Z3 6.791 19.559 1.383 1.00 0.00 H
HETATM 6688 H2 SPC A4Z3 7.074 18.130 0.627 1.00 0.00 H
HETATM 6689 O SPC A4Z5 -0.911 10.355 11.064 1.00 0.00 O
HETATM 6690 H1 SPC A4Z5 -1.790 10.031 11.313 1.00 0.00 H
HETATM 6691 H2 SPC A4Z5 -0.663 9.791 10.315 1.00 0.00 H
HETATM 6692 O SPC A4Z6 -13.689 7.238 12.204 1.00 0.00 O
HETATM 6693 H1 SPC A4Z6 -13.313 6.984 11.298 1.00 0.00 H
HETATM 6694 H2 SPC A4Z6 -12.919 7.365 12.845 1.00 0.00 H
HETATM 6695 O SPC A4Z7 -9.147 -1.273 19.196 1.00 0.00 O
HETATM 6696 H1 SPC A4Z7 -9.625 -1.941 18.608 1.00 0.00 H
HETATM 6697 H2 SPC A4Z7 -8.629 -0.641 18.605 1.00 0.00 H
HETATM 6698 O SPC A4Z8 5.024 20.954 -5.799 1.00 0.00 O
HETATM 6699 H1 SPC A4Z8 4.765 21.799 -5.307 1.00 0.00 H
HETATM 6700 H2 SPC A4Z8 4.822 21.070 -6.782 1.00 0.00 H
HETATM 6701 O SPC A4Z9 2.017 20.912 -7.760 1.00 0.00 O
HETATM 6702 H1 SPC A4Z9 2.037 19.935 -7.511 1.00 0.00 H
HETATM 6703 H2 SPC A4Z9 1.325 21.381 -7.192 1.00 0.00 H
HETATM 6704 O SPC A4ZA -0.962 14.657 4.438 1.00 0.00 O
HETATM 6705 H1 SPC A4ZA -0.704 13.808 4.852 1.00 0.00 H
HETATM 6706 H2 SPC A4ZA -1.886 14.746 4.706 1.00 0.00 H
HETATM 6707 O SPC A4ZB 0.090 22.371 -6.413 1.00 0.00 O
HETATM 6708 H1 SPC A4ZB -0.815 22.214 -5.982 1.00 0.00 H

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HETATM 6709  H2  SPC  A4ZB      0.022  23.202  -6.983  1.00  0.00          H
HETATM 6710  O   SPC  A4ZC    -12.655   6.635   9.776  1.00  0.00          O
HETATM 6711  H1  SPC  A4ZC    -12.215   7.405   9.296  1.00  0.00          H
HETATM 6712  H2  SPC  A4ZC    -13.255   6.156   9.119  1.00  0.00          H
HETATM 6713  C1  MMA A 901     -6.508   6.669   6.741  1.00 38.63          C
HETATM 6714  C2  MMA A 901     -6.137   7.767   5.756  1.00 39.79          C
HETATM 6715  O1  MMA A 901     -7.238   7.361   7.735  1.00 38.68          O
HETATM 6716  C3  MMA A 901     -7.384   8.234   5.021  1.00 38.55          C
HETATM 6717  C7  MMA A 901     -7.745   6.537   8.774  1.00 39.29          C
HETATM 6718  O2  MMA A 901     -5.059   7.479   4.839  1.00 42.66          O
HETATM 6719  C4  MMA A 901     -8.061   7.064   4.330  1.00 38.26          C
HETATM 6720  O3  MMA A 901     -7.103   9.329   4.195  1.00 36.39          O
HETATM 6721  C5  MMA A 901     -8.397   6.012   5.400  1.00 38.04          C
HETATM 6722  O4  MMA A 901     -9.220   7.573   3.726  1.00 36.12          O
HETATM 6723  C6  MMA A 901     -8.892   4.725   4.780  1.00 39.02          C
HETATM 6724  O5  MMA A 901     -7.228   5.639   6.158  1.00 38.49          O
HETATM 6725  O6  MMA A 901     -7.867   4.294   3.931  1.00 37.72          O
HETATM 6726  H1  MMA A 901     -5.613   6.202   7.178  1.00  0.00          H
HETATM 6727  H2  MMA A 901     -5.762   8.617   6.336  1.00  0.00          H
HETATM 6728  H3  MMA A 901     -8.064   8.614   5.793  1.00  0.00          H
HETATM 6729  H71 MMA A 901     -8.482   7.128   9.318  1.00  0.00          H
HETATM 6730  H72 MMA A 901     -8.218   5.639   8.368  1.00  0.00          H
HETATM 6731  H73 MMA A 901     -6.950   6.255   9.474  1.00  0.00          H
HETATM 6732  HO2 MMA A 901     -4.156   8.452   5.174  1.00  0.00          H
HETATM 6733  H4  MMA A 901     -7.397   6.610   3.595  1.00  0.00          H
HETATM 6734  HO3 MMA A 901     -6.390   9.125   3.566  1.00  0.00          H
HETATM 6735  H5  MMA A 901     -9.158   6.416   6.083  1.00  0.00          H
HETATM 6736  HO4 MMA A 901     -9.704   6.911   3.180  1.00  0.00          H
HETATM 6737  H61 MMA A 901     -9.117   4.004   5.578  1.00  0.00          H
HETATM 6738  H62 MMA A 901     -9.824   4.933   4.241  1.00  0.00          H
HETATM 6739  HO6 MMA A 901     -8.116   3.470   3.474  1.00  0.00          H
HETATM 6740  PB  GDP A 904     -2.421   9.433   6.265  1.00 26.19          P
HETATM 6741  O1B GDP A 904     -3.714   9.375   5.369  1.00 27.84          O
HETATM 6742  O2B GDP A 904     -1.620   8.154   6.202  1.00 26.32          O1-
HETATM 6743  O3B GDP A 904     -2.742   9.928   7.672  1.00 26.19          O1-
HETATM 6744  O3A GDP A 904     -1.682  10.631   5.466  1.00 25.44          O
HETATM 6745  PA  GDP A 904     -0.120  11.044   5.593  1.00 25.23          P
HETATM 6746  O1A GDP A 904      0.558  10.067   6.539  1.00 25.43          O
HETATM 6747  O2A GDP A 904     -0.055  12.512   5.862  1.00 26.02          O1-
HETATM 6748  O5' GDP A 904      0.382  10.857   4.081  1.00 25.21          O
HETATM 6749  C5' GDP A 904      0.578   9.582   3.493  1.00 23.27          C
HETATM 6750  C4' GDP A 904      2.034   9.450   3.005  1.00 23.57          C
HETATM 6751  O4' GDP A 904      2.278  10.510   2.084  1.00 24.01          O
HETATM 6752  C3' GDP A 904      3.104   9.580   4.093  1.00 23.80          C
HETATM 6753  O3' GDP A 904      4.186   8.719   3.783  1.00 22.36          O
HETATM 6754  C2' GDP A 904      3.579  11.024   3.978  1.00 23.31          C
HETATM 6755  O2' GDP A 904      4.938  11.068   4.373  1.00 21.65          O
HETATM 6756  C1' GDP A 904      3.361  11.295   2.484  1.00 24.11          C
HETATM 6757  N9  GDP A 904      3.007  12.725   2.215  1.00 24.67          N
HETATM 6758  C8  GDP A 904      1.815  13.375   2.436  1.00 24.89          C
HETATM 6759  N7  GDP A 904      1.812  14.635   2.095  1.00 24.52          N
HETATM 6760  C5  GDP A 904      3.093  14.846   1.598  1.00 24.90          C
HETATM 6761  C6  GDP A 904      3.699  16.047   1.101  1.00 26.54          C
HETATM 6762  O6  GDP A 904      3.217  17.185   1.089  1.00 27.33          O
HETATM 6763  N1  GDP A 904      4.998  15.830   0.647  1.00 26.79          N
HETATM 6764  C2  GDP A 904      5.668  14.620   0.748  1.00 25.66          C
HETATM 6765  N2  GDP A 904      6.938  14.616   0.352  1.00 26.54          N
HETATM 6766  N3  GDP A 904      5.129  13.520   1.241  1.00 26.00          N
HETATM 6767  C4  GDP A 904      3.832  13.680   1.653  1.00 24.67          C
HETATM 6768 H5'1 GDP A 904      0.315   8.773   4.174  1.00  0.00          H
HETATM 6769 H5'2 GDP A 904     -0.107   9.465   2.652  1.00  0.00          H
HETATM 6770  H4' GDP A 904      2.131   8.496   2.484  1.00  0.00          H
HETATM 6771  H3' GDP A 904      2.743   9.346   5.095  1.00  0.00          H
HETATM 6772  HO3 GDP A 904      4.953   9.293   3.871  1.00  0.00          H
HETATM 6773  H2' GDP A 904      2.955  11.686   4.579  1.00  0.00          H
HETATM 6774  HO2 GDP A 904      5.068  11.884   4.878  1.00  0.00          H
HETATM 6775  H1' GDP A 904      4.235  11.068   1.875  1.00  0.00          H
HETATM 6776  H8  GDP A 904      0.939  12.894   2.844  1.00  0.00          H
HETATM 6777  HN1 GDP A 904      5.499  16.621   0.221  1.00  0.00          H
HETATM 6778  HN2 GDP A 904      7.579  13.905   0.692  1.00  0.00          H
HETATM 6779  H1  GDP A 904      7.307  15.459  -0.087  1.00  0.00          H
HETATM 6780 MN1   MN A 909      0.356   7.911   7.060  1.00 24.77         Mn2+
HETATM 6781  C1  0MA   2     -4.508   6.176   4.438  0.00  0.00          C1+
HETATM 6782  C2  0MA   2     -3.054   6.451   3.970  0.00  0.00          C
HETATM 6783  O2  0MA   2     -2.329   5.273   4.237  0.00  0.00          O
HETATM 6784  C3  0MA   2     -2.976   6.848   2.491  0.00  0.00          C
HETATM 6785  O3  0MA   2     -1.618   6.744   2.100  0.00  0.00          O
HETATM 6786  C4  0MA   2     -3.898   5.999   1.630  0.00  0.00          C
HETATM 6787  O4  0MA   2     -3.909   6.469   0.302  0.00  0.00          O
HETATM 6788  C5  0MA   2     -5.299   6.175   2.202  0.00  0.00          C
HETATM 6789  O5  0MA   2     -5.318   5.585   3.512  0.00  0.00          O
HETATM 6790  C6  0MA   2     -6.440   5.574   1.395  0.00  0.00          C
HETATM 6791  O6  0MA   2     -7.495   6.504   1.412  0.00  0.00          O
HETATM 6792  H1  0MA   2     -4.478   5.516   5.308  0.00  0.00          H
HETATM 6793  H2  0MA   2     -2.633   7.262   4.566  0.00  0.00          H
HETATM 6794  H2O 0MA   2     -1.399   5.446   3.992  0.00  0.00          H
HETATM 6795  H3  0MA   2     -3.322   7.887   2.383  0.00  0.00          H
HETATM 6796  H3O 0MA   2     -1.564   7.004   1.169  0.00  0.00          H
HETATM 6797  H4  0MA   2     -3.580   4.951   1.701  0.00  0.00          H
HETATM 6798  H4O 0MA   2     -3.064   6.197  -0.142  0.00  0.00          H
HETATM 6799  H5  0MA   2     -5.505   7.254   2.274  0.00  0.00          H
HETATM 6800  H61 0MA   2     -6.728   4.629   1.866  0.00  0.00          H
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HETATM 6801  H62 0MA     2      -6.084   5.390   0.373  0.00  0.00           H
HETATM 6802  H6O 0MA     2      -8.331   6.105   1.063  0.00  0.00           H
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(i) The Cartesian coordinates (in the PDB format) of the M06-2X:OPLS2005 optimized product **3B** (**WT_Mn**).

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REMARK 888
REMARK 888 WRITTEN BY MAESTRO (A PRODUCT OF SCHRODINGER, LLC)
TITLE     3B (WT_Mn)
MODEL        1
ATOM      1  CH3 ACE A 103      -7.095 -19.144 -19.485  1.00  0.00          C
ATOM      2  C   ACE A 103      -6.012 -18.101 -19.711  1.00  0.00          C
ATOM      3  O   ACE A 103      -5.312 -18.149 -20.725  1.00  0.00          O
ATOM      4 1H   ACE A 103      -8.076 -18.667 -19.470  1.00  0.00          H
ATOM      5 2H   ACE A 103      -7.084 -19.899 -20.269  1.00  0.00          H
ATOM      6 3H   ACE A 103      -6.951 -19.635 -18.522  1.00  0.00          H
ATOM      7  N   LYS A 104      -5.874 -17.163 -18.773  1.00 36.95          N
ATOM      8  CA  LYS A 104      -4.865 -16.116 -18.744  1.00 37.33          C
ATOM      9  C   LYS A 104      -4.850 -15.521 -17.337  1.00 36.73          C
ATOM     10  O   LYS A 104      -5.684 -14.655 -17.044  1.00 37.03          O
ATOM     11  CB  LYS A 104      -5.149 -15.022 -19.811  1.00 38.20          C
ATOM     12  CG  LYS A 104      -4.043 -13.944 -19.926  1.00 40.08          C
ATOM     13  CD  LYS A 104      -4.535 -12.479 -19.888  1.00 40.86          C
ATOM     14  CE  LYS A 104      -4.431 -11.784 -18.512  1.00 41.37          C
ATOM     15  NZ  LYS A 104      -5.584 -12.036 -17.630  1.00 44.72          N1+
ATOM     16  HA  LYS A 104      -3.894 -16.572 -18.947  1.00  0.00          H
ATOM     17  HB2 LYS A 104      -5.269 -15.492 -20.787  1.00  0.00          H
ATOM     18  HB3 LYS A 104      -6.117 -14.562 -19.605  1.00  0.00          H
ATOM     19  HG2 LYS A 104      -3.259 -14.095 -19.181  1.00  0.00          H
ATOM     20  HG3 LYS A 104      -3.537 -14.108 -20.878  1.00  0.00          H
ATOM     21  HD2 LYS A 104      -3.886 -11.914 -20.560  1.00  0.00          H
ATOM     22  HD3 LYS A 104      -5.533 -12.377 -20.317  1.00  0.00          H
ATOM     23  HE2 LYS A 104      -3.507 -12.063 -18.011  1.00  0.00          H
ATOM     24  HE3 LYS A 104      -4.371 -10.704 -18.659  1.00  0.00          H
ATOM     25  HZ1 LYS A 104      -5.422 -11.567 -16.738  1.00  0.00          H
ATOM     26  HZ2 LYS A 104      -6.428 -11.635 -18.030  1.00  0.00          H
ATOM     27  HZ3 LYS A 104      -5.716 -13.033 -17.448  1.00  0.00          H
ATOM     28  H2  LYS A 104      -6.450 -17.279 -17.918  1.00  0.00          H
ATOM     29  N   THR A 105      -3.856 -15.863 -16.505  1.00 34.30          N
ATOM     30  CA  THR A 105      -3.654 -15.152 -15.249  1.00 33.23          C
ATOM     31  C   THR A 105      -3.017 -13.790 -15.588  1.00 32.56          C
ATOM     32  O   THR A 105      -2.212 -13.670 -16.516  1.00 32.13          O
ATOM     33  CB  THR A 105      -2.801 -15.968 -14.231  1.00 32.21          C
ATOM     34  OG1 THR A 105      -1.403 -15.710 -14.209  1.00 35.33          O
ATOM     35  CG2 THR A 105      -3.037 -17.485 -14.265  1.00 33.79          C
ATOM     36  H   THR A 105      -3.131 -16.501 -16.799  1.00  0.00          H
ATOM     37  HA  THR A 105      -4.637 -15.004 -14.800  1.00  0.00          H
ATOM     38  HB  THR A 105      -3.151 -15.624 -13.259  1.00  0.00          H
ATOM     39  HG1 THR A 105      -0.973 -16.092 -15.002  1.00  0.00          H
ATOM     40 HG21 THR A 105      -2.573 -17.973 -13.409  1.00  0.00          H
ATOM     41 HG22 THR A 105      -4.104 -17.713 -14.240  1.00  0.00          H
ATOM     42 HG23 THR A 105      -2.619 -17.935 -15.167  1.00  0.00          H
ATOM     43  N   THR A 106      -3.372 -12.742 -14.849  1.00 30.71          N
ATOM     44  CA  THR A 106      -2.746 -11.427 -14.967  1.00 29.71          C
ATOM     45  C   THR A 106      -1.428 -11.391 -14.147  1.00 28.38          C
ATOM     46  O   THR A 106      -0.677 -10.419 -14.227  1.00 26.84          O
ATOM     47  CB  THR A 106      -3.792 -10.361 -14.552  1.00 29.60          C
ATOM     48  OG1 THR A 106      -4.884 -10.431 -15.467  1.00 29.62          O
ATOM     49  CG2 THR A 106      -3.302  -8.907 -14.644  1.00 29.22          C
ATOM     50  H   THR A 106      -4.007 -12.928 -14.055  1.00  0.00          H
ATOM     51  HA  THR A 106      -2.462 -11.234 -16.003  1.00  0.00          H
ATOM     52  HB  THR A 106      -4.157 -10.569 -13.546  1.00  0.00          H
ATOM     53  HG1 THR A 106      -5.412  -9.641 -15.346  1.00  0.00          H
ATOM     54 HG21 THR A 106      -4.100  -8.196 -14.439  1.00  0.00          H
ATOM     55 HG22 THR A 106      -2.503  -8.696 -13.935  1.00  0.00          H
ATOM     56 HG23 THR A 106      -2.918  -8.680 -15.633  1.00  0.00          H
ATOM     57  N   MET A 107      -1.059 -12.497 -13.473  1.00 27.33          N
ATOM     58  CA  MET A 107       0.275 -12.708 -12.910  1.00 27.87          C
ATOM     59  C   MET A 107       1.305 -12.929 -14.028  1.00 27.83          C
ATOM     60  O   MET A 107       2.481 -12.653 -13.823  1.00 28.87          O
ATOM     61  CB  MET A 107       0.294 -13.951 -11.987  1.00 25.92          C
ATOM     62  CG  MET A 107       1.093 -13.755 -10.686  1.00 26.21          C
ATOM     63  SD  MET A 107       2.905 -13.653 -10.790  1.00 27.25          S
ATOM     64  CE  MET A 107       3.411 -15.098  -9.812  1.00 24.40          C
ATOM     65  H   MET A 107      -1.667 -13.304 -13.547  1.00  0.00          H
ATOM     66  HA  MET A 107       0.552 -11.819 -12.341  1.00  0.00          H
ATOM     67  HB2 MET A 107      -0.727 -14.201 -11.711  1.00  0.00          H
ATOM     68  HB3 MET A 107       0.655 -14.838 -12.512  1.00  0.00          H
ATOM     69  HG2 MET A 107       0.727 -12.871 -10.163  1.00  0.00          H
ATOM     70  HG3 MET A 107       0.876 -14.602 -10.045  1.00  0.00          H
ATOM     71  HE1 MET A 107       4.489 -15.237  -9.878  1.00  0.00          H
ATOM     72  HE2 MET A 107       3.156 -14.970  -8.762  1.00  0.00          H
ATOM     73  HE3 MET A 107       2.935 -16.008 -10.178  1.00  0.00          H
ATOM     74  N   ASP A 108       0.908 -13.394 -15.219  1.00 28.14          N
ATOM     75  CA  ASP A 108       1.837 -13.754 -16.302  1.00 28.57          C
ATOM     76  C   ASP A 108       2.441 -12.559 -17.057  1.00 28.39          C
ATOM     77  O   ASP A 108       3.208 -12.730 -18.003  1.00 28.31          O
ATOM     78  CB  ASP A 108       1.208 -14.795 -17.249  1.00 29.94          C
ATOM     79  CG  ASP A 108       1.120 -16.146 -16.549  1.00 31.66          C
ATOM     80  OD1 ASP A 108       2.210 -16.679 -16.230  1.00 31.67          O
ATOM     81  OD2 ASP A 108      -0.021 -16.565 -16.248  1.00 33.98          O1-
ATOM     82  H   ASP A 108      -0.058 -13.677 -15.335  1.00  0.00          H
ATOM     83  HA  ASP A 108       2.700 -14.213 -15.834  1.00  0.00          H
ATOM     84  HB2 ASP A 108       0.222 -14.480 -17.588  1.00  0.00          H
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ATOM     85  HB3 ASP A 108       1.819 -14.938 -18.140  1.00  0.00           H
ATOM     86  N   TYR A 109       2.201 -11.338 -16.566  1.00 29.03           N
ATOM     87  CA  TYR A 109       3.005 -10.155 -16.870  1.00 29.95           C
ATOM     88  C   TYR A 109       4.142  -9.973 -15.831  1.00 29.37           C
ATOM     89  O   TYR A 109       4.922  -9.029 -15.948  1.00 30.93           O
ATOM     90  CB  TYR A 109       2.088  -8.914 -16.808  1.00 32.34           C
ATOM     91  CG  TYR A 109       0.898  -8.938 -17.760  1.00 34.77           C
ATOM     92  CD1 TYR A 109      -0.415  -8.826 -17.256  1.00 34.89           C
ATOM     93  CD2 TYR A 109       1.096  -9.092 -19.149  1.00 35.80           C
ATOM     94  CE1 TYR A 109      -1.518  -8.899 -18.131  1.00 34.99           C
ATOM     95  CE2 TYR A 109      -0.008  -9.163 -20.022  1.00 35.75           C
ATOM     96  CZ  TYR A 109      -1.317  -9.080 -19.509  1.00 36.34           C
ATOM     97  OH  TYR A 109      -2.399  -9.183 -20.332  1.00 36.60           O
ATOM     98  H   TYR A 109       1.525 -11.281 -15.818  1.00  0.00           H
ATOM     99  HA  TYR A 109       3.458 -10.231 -17.860  1.00  0.00           H
ATOM    100  HB2 TYR A 109       1.724  -8.777 -15.789  1.00  0.00           H
ATOM    101  HB3 TYR A 109       2.674  -8.023 -17.039  1.00  0.00           H
ATOM    102  HD1 TYR A 109      -0.585  -8.705 -16.195  1.00  0.00           H
ATOM    103  HD2 TYR A 109       2.094  -9.183 -19.551  1.00  0.00           H
ATOM    104  HE1 TYR A 109      -2.526  -8.829 -17.753  1.00  0.00           H
ATOM    105  HE2 TYR A 109       0.163  -9.303 -21.079  1.00  0.00           H
ATOM    106  HH  TYR A 109      -2.180  -9.181 -21.252  1.00  0.00           H
ATOM    107  N   ILE A 110       4.230 -10.842 -14.811  1.00 28.23           N
ATOM    108  CA  ILE A 110       5.120 -10.777 -13.651  1.00 27.12           C
ATOM    109  C   ILE A 110       5.907 -12.092 -13.464  1.00 28.39           C
ATOM    110  O   ILE A 110       7.064 -12.021 -13.033  1.00 27.18           O
ATOM    111  CB  ILE A 110       4.329 -10.358 -12.370  1.00 26.29           C
ATOM    112  CG1 ILE A 110       3.539  -9.041 -12.542  1.00 26.10           C
ATOM    113  CG2 ILE A 110       5.218 -10.270 -11.113  1.00 24.77           C
ATOM    114  CD1 ILE A 110       2.055  -9.253 -12.872  1.00 26.96           C
ATOM    115  H   ILE A 110       3.521 -11.570 -14.762  1.00  0.00           H
ATOM    116  HA  ILE A 110       5.871 -10.006 -13.838  1.00  0.00           H
ATOM    117  HB  ILE A 110       3.607 -11.143 -12.146  1.00  0.00           H
ATOM    118 HG12 ILE A 110       3.585  -8.472 -11.616  1.00  0.00           H
ATOM    119 HG13 ILE A 110       4.010  -8.406 -13.294  1.00  0.00           H
ATOM    120 HG21 ILE A 110       4.648  -9.938 -10.245  1.00  0.00           H
ATOM    121 HG22 ILE A 110       5.641 -11.236 -10.844  1.00  0.00           H
ATOM    122 HG23 ILE A 110       6.040  -9.571 -11.262  1.00  0.00           H
ATOM    123 HD11 ILE A 110       1.552  -8.312 -13.095  1.00  0.00           H
ATOM    124 HD12 ILE A 110       1.920  -9.902 -13.734  1.00  0.00           H
ATOM    125 HD13 ILE A 110       1.532  -9.713 -12.034  1.00  0.00           H
ATOM    126  N   THR A 111       5.320 -13.266 -13.776  1.00 28.11           N
ATOM    127  CA  THR A 111       5.894 -14.620 -13.646  1.00 29.58           C
ATOM    128  C   THR A 111       7.413 -14.804 -13.902  1.00 30.49           C
ATOM    129  O   THR A 111       8.057 -15.424 -13.050  1.00 30.80           O
ATOM    130  CB  THR A 111       4.988 -15.743 -14.228  1.00 29.32           C
ATOM    131  OG1 THR A 111       4.685 -15.534 -15.590  1.00 32.94           O
ATOM    132  CG2 THR A 111       3.696 -15.970 -13.438  1.00 28.93           C
ATOM    133  H   THR A 111       4.350 -13.241 -14.073  1.00  0.00           H
ATOM    134  HA  THR A 111       5.828 -14.770 -12.568  1.00  0.00           H
ATOM    135  HB  THR A 111       5.540 -16.684 -14.184  1.00  0.00           H
ATOM    136  HG1 THR A 111       3.878 -16.025 -15.818  1.00  0.00           H
ATOM    137 HG21 THR A 111       3.133 -16.818 -13.832  1.00  0.00           H
ATOM    138 HG22 THR A 111       3.909 -16.191 -12.394  1.00  0.00           H
ATOM    139 HG23 THR A 111       3.040 -15.107 -13.471  1.00  0.00           H
ATOM    140  N   PRO A 112       8.041 -14.235 -14.964  1.00 32.29           N
ATOM    141  CA  PRO A 112       9.508 -14.167 -15.115  1.00 33.46           C
ATOM    142  C   PRO A 112      10.310 -13.709 -13.877  1.00 35.96           C
ATOM    143  O   PRO A 112      11.336 -14.309 -13.563  1.00 35.45           O
ATOM    144  CB  PRO A 112       9.745 -13.216 -16.297  1.00 33.51           C
ATOM    145  CG  PRO A 112       8.500 -13.362 -17.153  1.00 31.85           C
ATOM    146  CD  PRO A 112       7.384 -13.689 -16.160  1.00 31.36           C
ATOM    147  HA  PRO A 112       9.843 -15.170 -15.387  1.00  0.00           H
ATOM    148  HB2 PRO A 112       9.823 -12.182 -15.956  1.00  0.00           H
ATOM    149  HB3 PRO A 112      10.659 -13.451 -16.844  1.00  0.00           H
ATOM    150  HG2 PRO A 112       8.284 -12.477 -17.752  1.00  0.00           H
ATOM    151  HG3 PRO A 112       8.627 -14.200 -17.840  1.00  0.00           H
ATOM    152  HD2 PRO A 112       6.835 -12.779 -15.928  1.00  0.00           H
ATOM    153  HD3 PRO A 112       6.681 -14.396 -16.600  1.00  0.00           H
ATOM    154  N   SER A 113       9.840 -12.697 -13.130  1.00 36.66           N
ATOM    155  CA  SER A 113      10.510 -12.205 -11.918  1.00 35.89           C
ATOM    156  C   SER A 113      10.316 -13.155 -10.710  1.00 36.89           C
ATOM    157  O   SER A 113      11.039 -13.056  -9.720  1.00 37.22           O
ATOM    158  CB  SER A 113      10.037 -10.758 -11.623  1.00 35.80           C
ATOM    159  OG  SER A 113       8.676 -10.625 -11.226  1.00 33.01           O
ATOM    160  H   SER A 113       8.935 -12.300 -13.367  1.00  0.00           H
ATOM    161  HA  SER A 113      11.584 -12.160 -12.115  1.00  0.00           H
ATOM    162  HB2 SER A 113      10.657 -10.334 -10.831  1.00  0.00           H
ATOM    163  HB3 SER A 113      10.212 -10.131 -12.498  1.00  0.00           H
ATOM    164  HG  SER A 113       8.113 -11.046 -11.877  1.00  0.00           H
ATOM    165  N   PHE A 114       9.400 -14.127 -10.822  1.00 37.03           N
ATOM    166  CA  PHE A 114       9.136 -15.188  -9.853  1.00 38.15           C
ATOM    167  C   PHE A 114       9.827 -16.505 -10.249  1.00 40.29           C
ATOM    168  O   PHE A 114       9.654 -17.506  -9.551  1.00 41.86           O
ATOM    169  CB  PHE A 114       7.607 -15.405  -9.743  1.00 37.24           C
ATOM    170  CG  PHE A 114       6.977 -14.536  -8.678  1.00 37.59           C
ATOM    171  CD1 PHE A 114       6.889 -13.142  -8.866  1.00 37.08           C
ATOM    172  CD2 PHE A 114       6.503 -15.118  -7.483  1.00 36.59           C
ATOM    173  CE1 PHE A 114       6.356 -12.331  -7.850  1.00 37.47           C
ATOM    174  CE2 PHE A 114       5.975 -14.307  -6.466  1.00 35.73           C
ATOM    175  CZ  PHE A 114       5.913 -12.917  -6.651  1.00 36.89           C
ATOM    176  H   PHE A 114       8.891 -14.192 -11.697  1.00  0.00           H
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ATOM    177  HA  PHE A 114       9.529 -14.919  -8.870  1.00  0.00           H
ATOM    178  HB2 PHE A 114       7.107 -15.206 -10.688  1.00  0.00           H
ATOM    179  HB3 PHE A 114       7.355 -16.441  -9.513  1.00  0.00           H
ATOM    180  HD1 PHE A 114       7.240 -12.687  -9.781  1.00  0.00           H
ATOM    181  HD2 PHE A 114       6.542 -16.186  -7.335  1.00  0.00           H
ATOM    182  HE1 PHE A 114       6.287 -11.263  -7.991  1.00  0.00           H
ATOM    183  HE2 PHE A 114       5.628 -14.744  -5.542  1.00  0.00           H
ATOM    184  HZ  PHE A 114       5.521 -12.301  -5.864  1.00  0.00           H
ATOM    185  N   ALA A 115      10.644 -16.521 -11.313  1.00 -1.00           N
ATOM    186  CA  ALA A 115      11.466 -17.671 -11.703  1.00 -1.00           C
ATOM    187  C   ALA A 115      12.774 -17.733 -10.887  1.00 -1.00           C
ATOM    188  O   ALA A 115      13.436 -18.766 -10.853  1.00 -1.00           O
ATOM    189  CB  ALA A 115      11.843 -17.522 -13.185  1.00 -1.00           C
ATOM    190  H   ALA A 115      10.706 -15.686 -11.885  1.00 -1.00           H
ATOM    191  HA  ALA A 115      10.910 -18.600 -11.562  1.00 -1.00           H
ATOM    192  HB1 ALA A 115      12.387 -18.399 -13.539  1.00 -1.00           H
ATOM    193  HB2 ALA A 115      10.956 -17.415 -13.810  1.00 -1.00           H
ATOM    194  HB3 ALA A 115      12.480 -16.653 -13.360  1.00 -1.00           H
ATOM    195  N   ASN A 116      13.124 -16.645 -10.190  1.00 -1.00           N
ATOM    196  CA  ASN A 116      14.337 -16.405  -9.390  1.00 -1.00           C
ATOM    197  C   ASN A 116      14.339 -17.187  -8.044  1.00 -1.00           C
ATOM    198  O   ASN A 116      14.971 -16.781  -7.063  1.00 -1.00           O
ATOM    199  CB  ASN A 116      14.377 -14.870  -9.170  1.00 -1.00           C
ATOM    200  CG  ASN A 116      15.662 -14.319  -8.548  1.00 -1.00           C
ATOM    201  OD1 ASN A 116      16.754 -14.505  -9.072  1.00 -1.00           O
ATOM    202  ND2 ASN A 116      15.541 -13.650  -7.409  1.00 -1.00           N
ATOM    203  H   ASN A 116      12.479 -15.872 -10.262  1.00 -1.00           H
ATOM    204  HA  ASN A 116      15.210 -16.716  -9.967  1.00 -1.00           H
ATOM    205  HB2 ASN A 116      14.280 -14.369 -10.134  1.00 -1.00           H
ATOM    206  HB3 ASN A 116      13.510 -14.553  -8.592  1.00 -1.00           H
ATOM    207 HD21 ASN A 116      16.351 -13.218  -6.983  1.00 -1.00           H
ATOM    208 HD22 ASN A 116      14.619 -13.583  -6.970  1.00 -1.00           H
ATOM    209  N   LYS A 117      13.644 -18.332  -7.990  1.00 -1.00           N
ATOM    210  CA  LYS A 117      13.411 -19.222  -6.845  1.00 -1.00           C
ATOM    211  C   LYS A 117      14.686 -19.967  -6.390  1.00 -1.00           C
ATOM    212  O   LYS A 117      14.764 -21.195  -6.385  1.00 -1.00           O
ATOM    213  CB  LYS A 117      12.269 -20.198  -7.216  1.00 -1.00           C
ATOM    214  CG  LYS A 117      10.875 -19.554  -7.106  1.00 -1.00           C
ATOM    215  CD  LYS A 117       9.776 -20.421  -7.751  1.00 -1.00           C
ATOM    216  CE  LYS A 117       8.329 -20.032  -7.391  1.00 -1.00           C
ATOM    217  NZ  LYS A 117       8.030 -18.625  -7.678  1.00 -1.00          N1+
ATOM    218  H   LYS A 117      13.291 -18.650  -8.885  1.00 -1.00           H
ATOM    219  HA  LYS A 117      13.097 -18.615  -5.999  1.00 -1.00           H
ATOM    220  HB2 LYS A 117      12.437 -20.599  -8.216  1.00 -1.00           H
ATOM    221  HB3 LYS A 117      12.276 -21.059  -6.545  1.00 -1.00           H
ATOM    222  HG2 LYS A 117      10.665 -19.387  -6.051  1.00 -1.00           H
ATOM    223  HG3 LYS A 117      10.889 -18.566  -7.565  1.00 -1.00           H
ATOM    224  HD2 LYS A 117       9.902 -20.401  -8.835  1.00 -1.00           H
ATOM    225  HD3 LYS A 117       9.924 -21.461  -7.455  1.00 -1.00           H
ATOM    226  HE2 LYS A 117       7.638 -20.644  -7.972  1.00 -1.00           H
ATOM    227  HE3 LYS A 117       8.108 -20.236  -6.344  1.00 -1.00           H
ATOM    228  HZ1 LYS A 117       7.002 -18.531  -7.852  1.00 -1.00           H
ATOM    229  HZ2 LYS A 117       8.240 -18.035  -6.875  1.00 -1.00           H
ATOM    230  HZ3 LYS A 117       8.534 -18.286  -8.493  1.00 -1.00           H
ATOM    231  N   ALA A 118      15.702 -19.185  -6.026  1.00 -1.00           N
ATOM    232  CA  ALA A 118      16.964 -19.580  -5.421  1.00 -1.00           C
ATOM    233  C   ALA A 118      17.602 -18.407  -4.664  1.00 -1.00           C
ATOM    234  O   ALA A 118      18.285 -18.620  -3.665  1.00 -1.00           O
ATOM    235  CB  ALA A 118      17.911 -20.184  -6.470  1.00 -1.00           C
ATOM    236  H   ALA A 118      15.510 -18.196  -6.145  1.00 -1.00           H
ATOM    237  HA  ALA A 118      16.744 -20.349  -4.677  1.00 -1.00           H
ATOM    238  HB1 ALA A 118      18.860 -20.474  -6.018  1.00 -1.00           H
ATOM    239  HB2 ALA A 118      17.480 -21.077  -6.923  1.00 -1.00           H
ATOM    240  HB3 ALA A 118      18.125 -19.474  -7.270  1.00 -1.00           H
ATOM    241  N   GLY A 119      17.378 -17.164  -5.113  1.00 49.69           N
ATOM    242  CA  GLY A 119      18.017 -15.964  -4.578  1.00 48.49           C
ATOM    243  C   GLY A 119      17.007 -14.999  -3.958  1.00 47.46           C
ATOM    244  O   GLY A 119      15.811 -15.295  -3.877  1.00 48.38           O
ATOM    245  H   GLY A 119      16.777 -17.033  -5.919  1.00 -1.00           H
ATOM    246  HA2 GLY A 119      18.789 -16.197  -3.844  1.00  0.00           H
ATOM    247  HA3 GLY A 119      18.515 -15.458  -5.407  1.00  0.00           H
ATOM    248  N   LYS A 120      17.491 -13.829  -3.522  1.00 45.71           N
ATOM    249  CA  LYS A 120      16.659 -12.658  -3.234  1.00 42.69           C
ATOM    250  C   LYS A 120      16.285 -12.027  -4.594  1.00 40.13           C
ATOM    251  O   LYS A 120      17.124 -12.059  -5.501  1.00 39.70           O
ATOM    252  CB  LYS A 120      17.501 -11.583  -2.492  1.00 44.31           C
ATOM    253  CG  LYS A 120      17.837 -11.829  -1.007  1.00 45.11           C
ATOM    254  CD  LYS A 120      18.756 -10.703  -0.470  1.00 45.84           C
ATOM    255  CE  LYS A 120      18.896 -10.615   1.064  1.00 46.18           C
ATOM    256  NZ  LYS A 120      17.812  -9.834   1.676  1.00 44.91          N1+
ATOM    257  H   LYS A 120      18.461 -13.636  -3.716  1.00  0.00           H
ATOM    258  HA  LYS A 120      15.779 -12.939  -2.655  1.00  0.00           H
ATOM    259  HB2 LYS A 120      18.423 -11.401  -3.048  1.00  0.00           H
ATOM    260  HB3 LYS A 120      16.956 -10.636  -2.534  1.00  0.00           H
ATOM    261  HG2 LYS A 120      16.913 -11.880  -0.432  1.00  0.00           H
ATOM    262  HG3 LYS A 120      18.325 -12.797  -0.883  1.00  0.00           H
ATOM    263  HD2 LYS A 120      19.748 -10.856  -0.897  1.00  0.00           H
ATOM    264  HD3 LYS A 120      18.428  -9.735  -0.854  1.00  0.00           H
ATOM    265  HE2 LYS A 120      18.931 -11.607   1.516  1.00  0.00           H
ATOM    266  HE3 LYS A 120      19.833 -10.119   1.320  1.00  0.00           H
ATOM    267  HZ1 LYS A 120      17.244 -10.456   2.294  1.00  0.00           H
ATOM    268  HZ2 LYS A 120      18.117  -9.019   2.206  1.00  0.00           H
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ATOM    269  HZ3 LYS A 120      17.138  -9.537   0.984  1.00  0.00           H
ATOM    270  N   PRO A 121      15.097 -11.412  -4.749  1.00 37.16           N
ATOM    271  CA  PRO A 121      14.831 -10.514  -5.879  1.00 35.52           C
ATOM    272  C   PRO A 121      15.508  -9.151  -5.625  1.00 33.34           C
ATOM    273  O   PRO A 121      16.034  -8.902  -4.535  1.00 31.34           O
ATOM    274  CB  PRO A 121      13.304 -10.384  -5.891  1.00 35.26           C
ATOM    275  CG  PRO A 121      12.892 -10.551  -4.435  1.00 37.08           C
ATOM    276  CD  PRO A 121      13.947 -11.493  -3.845  1.00 36.33           C
ATOM    277  HA  PRO A 121      15.189 -10.926  -6.824  1.00  0.00           H
ATOM    278  HB2 PRO A 121      12.959  -9.444  -6.319  1.00  0.00           H
ATOM    279  HB3 PRO A 121      12.874 -11.188  -6.489  1.00  0.00           H
ATOM    280  HG2 PRO A 121      12.945  -9.581  -3.940  1.00  0.00           H
ATOM    281  HG3 PRO A 121      11.875 -10.929  -4.320  1.00  0.00           H
ATOM    282  HD2 PRO A 121      14.203 -11.197  -2.826  1.00  0.00           H
ATOM    283  HD3 PRO A 121      13.573 -12.518  -3.821  1.00  0.00           H
ATOM    284  N   LYS A 122      15.455  -8.233  -6.600  1.00 31.90           N
ATOM    285  CA  LYS A 122      15.827  -6.841  -6.365  1.00 31.10           C
ATOM    286  C   LYS A 122      14.639  -6.205  -5.618  1.00 29.95           C
ATOM    287  O   LYS A 122      13.608  -5.912  -6.221  1.00 31.41           O
ATOM    288  CB  LYS A 122      16.072  -6.102  -7.704  1.00 33.97           C
ATOM    289  CG  LYS A 122      17.086  -6.784  -8.647  1.00 35.41           C
ATOM    290  CD  LYS A 122      17.716  -5.844  -9.700  1.00 40.19           C
ATOM    291  CE  LYS A 122      16.894  -5.578 -10.981  1.00 42.24           C
ATOM    292  NZ  LYS A 122      15.680  -4.787 -10.739  1.00 43.94           N1+
ATOM    293  H   LYS A 122      14.974  -8.450  -7.460  1.00  0.00           H
ATOM    294  HA  LYS A 122      16.734  -6.782  -5.758  1.00  0.00           H
ATOM    295  HB2 LYS A 122      15.136  -5.956  -8.236  1.00  0.00           H
ATOM    296  HB3 LYS A 122      16.440  -5.104  -7.461  1.00  0.00           H
ATOM    297  HG2 LYS A 122      17.897  -7.180  -8.034  1.00  0.00           H
ATOM    298  HG3 LYS A 122      16.631  -7.649  -9.132  1.00  0.00           H
ATOM    299  HD2 LYS A 122      18.021  -4.905  -9.235  1.00  0.00           H
ATOM    300  HD3 LYS A 122      18.650  -6.308 -10.021  1.00  0.00           H
ATOM    301  HE2 LYS A 122      17.513  -5.025 -11.688  1.00  0.00           H
ATOM    302  HE3 LYS A 122      16.614  -6.513 -11.467  1.00  0.00           H
ATOM    303  HZ1 LYS A 122      15.328  -4.379 -11.590  1.00  0.00           H
ATOM    304  HZ2 LYS A 122      14.943  -5.459 -10.430  1.00  0.00           H
ATOM    305  HZ3 LYS A 122      15.852  -4.057 -10.054  1.00  0.00           H
ATOM    306  N   ALA A 123      14.774  -6.018  -4.305  1.00 25.55           N
ATOM    307  CA  ALA A 123      13.776  -5.427  -3.426  1.00 25.13           C
ATOM    308  C   ALA A 123      14.435  -4.348  -2.571  1.00 23.88           C
ATOM    309  O   ALA A 123      15.635  -4.425  -2.303  1.00 23.84           O
ATOM    310  CB  ALA A 123      13.131  -6.521  -2.566  1.00 23.35           C
ATOM    311  H   ALA A 123      15.656  -6.250  -3.868  1.00  0.00           H
ATOM    312  HA  ALA A 123      13.001  -4.948  -4.021  1.00  0.00           H
ATOM    313  HB1 ALA A 123      12.272  -6.127  -2.022  1.00  0.00           H
ATOM    314  HB2 ALA A 123      12.786  -7.358  -3.171  1.00  0.00           H
ATOM    315  HB3 ALA A 123      13.828  -6.919  -1.831  1.00  0.00           H
ATOM    316  N   CYS A 124      13.647  -3.372  -2.126  1.00 25.75           N
ATOM    317  CA  CYS A 124      14.051  -2.272  -1.261  1.00 23.52           C
ATOM    318  C   CYS A 124      12.939  -2.001  -0.247  1.00 23.67           C
ATOM    319  O   CYS A 124      11.789  -2.397  -0.462  1.00 24.40           O
ATOM    320  CB  CYS A 124      14.426  -1.038  -2.114  1.00 22.25           C
ATOM    321  SG  CYS A 124      12.988  -0.329  -2.991  1.00 23.91           S
ATOM    322  H   CYS A 124      12.671  -3.366  -2.391  1.00  0.00           H
ATOM    323  HA  CYS A 124      14.931  -2.575  -0.692  1.00  0.00           H
ATOM    324  HB2 CYS A 124      14.864  -0.260  -1.487  1.00  0.00           H
ATOM    325  HB3 CYS A 124      15.189  -1.308  -2.841  1.00  0.00           H
ATOM    326  HG  CYS A 124      12.466   0.270  -1.915  1.00  0.00           H
ATOM    327  N   TYR A 125      13.240  -1.234   0.803  1.00 21.36           N
ATOM    328  CA  TYR A 125      12.221  -0.452   1.496  1.00 22.40           C
ATOM    329  C   TYR A 125      12.041   0.832   0.674  1.00 21.88           C
ATOM    330  O   TYR A 125      13.029   1.392   0.195  1.00 20.40           O
ATOM    331  CB  TYR A 125      12.685  -0.052   2.909  1.00 21.32           C
ATOM    332  CG  TYR A 125      13.209  -1.171   3.788  1.00 22.30           C
ATOM    333  CD1 TYR A 125      12.334  -2.033   4.481  1.00 20.05           C
ATOM    334  CD2 TYR A 125      14.601  -1.328   3.933  1.00 18.10           C
ATOM    335  CE1 TYR A 125      12.856  -3.058   5.296  1.00 20.76           C
ATOM    336  CE2 TYR A 125      15.119  -2.350   4.743  1.00 18.47           C
ATOM    337  CZ  TYR A 125      14.249  -3.225   5.417  1.00 18.41           C
ATOM    338  OH  TYR A 125      14.755  -4.232   6.183  1.00 19.18           O
ATOM    339  H   TYR A 125      14.209  -0.936   0.911  1.00  0.00           H
ATOM    340  HA  TYR A 125      11.292  -1.002   1.552  1.00  0.00           H
ATOM    341  HB2 TYR A 125      13.466   0.696   2.834  1.00  0.00           H
ATOM    342  HB3 TYR A 125      11.866   0.443   3.434  1.00  0.00           H
ATOM    343  HD1 TYR A 125      11.264  -1.912   4.398  1.00  0.00           H
ATOM    344  HD2 TYR A 125      15.284  -0.662   3.429  1.00  0.00           H
ATOM    345  HE1 TYR A 125      12.189  -3.715   5.832  1.00  0.00           H
ATOM    346  HE2 TYR A 125      16.189  -2.442   4.832  1.00  0.00           H
ATOM    347  HH  TYR A 125      15.711  -4.238   6.156  1.00  0.00           H
ATOM    348  N   VAL A 126      10.801   1.290   0.499  1.00 22.88           N
ATOM    349  CA  VAL A 126      10.475   2.568  -0.112  1.00 20.05           C
ATOM    350  C   VAL A 126       9.711   3.397   0.922  1.00 20.90           C
ATOM    351  O   VAL A 126       8.832   2.894   1.630  1.00 19.39           O
ATOM    352  CB  VAL A 126       9.745   2.396  -1.469  1.00 21.97           C
ATOM    353  CG1 VAL A 126       8.338   1.793  -1.368  1.00 21.20           C
ATOM    354  CG2 VAL A 126       9.690   3.722  -2.249  1.00 17.14           C
ATOM    355  H   VAL A 126      10.031   0.792   0.947  1.00  0.00           H
ATOM    356  HA  VAL A 126      11.402   3.091  -0.333  1.00  0.00           H
ATOM    357  HB  VAL A 126      10.345   1.702  -2.058  1.00  0.00           H
ATOM    358 HG11 VAL A 126       7.922   1.621  -2.361  1.00  0.00           H
ATOM    359 HG12 VAL A 126       8.362   0.840  -0.843  1.00  0.00           H
ATOM    360 HG13 VAL A 126       7.647   2.452  -0.842  1.00  0.00           H
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ATOM    361 HG21 VAL A 126       9.265   3.582  -3.242  1.00  0.00          H
ATOM    362 HG22 VAL A 126       9.081   4.469  -1.739  1.00  0.00          H
ATOM    363 HG23 VAL A 126      10.688   4.144  -2.379  1.00  0.00          H
ATOM    364  N   THR A 127      10.058   4.676   0.995  1.00 20.50          N
ATOM    365  CA  THR A 127       9.498   5.638   1.913  1.00 20.93          C
ATOM    366  C   THR A 127       9.328   6.957   1.156  1.00 21.13          C
ATOM    367  O   THR A 127      10.309   7.665   0.955  1.00 23.81          O
ATOM    368  CB  THR A 127      10.423   5.706   3.154  1.00 22.06          C
ATOM    369  OG1 THR A 127      10.291   4.527   3.929  1.00 22.71          O
ATOM    370  CG2 THR A 127      10.132   6.873   4.095  1.00 19.49          C
ATOM    371  H   THR A 127      10.862   4.980   0.449  1.00  0.00          H
ATOM    372  HA  THR A 127       8.503   5.325   2.228  1.00  0.00          H
ATOM    373  HB  THR A 127      11.462   5.788   2.827  1.00  0.00          H
ATOM    374  HG1 THR A 127       9.353   4.346   4.024  1.00  0.00          H
ATOM    375 HG21 THR A 127      10.823   6.851   4.930  1.00  0.00          H
ATOM    376 HG22 THR A 127      10.298   7.824   3.594  1.00  0.00          H
ATOM    377 HG23 THR A 127       9.110   6.855   4.474  1.00  0.00          H
ATOM    378  N   LEU A 128       8.094   7.323   0.791  1.00 20.38          N
ATOM    379  CA  LEU A 128       7.753   8.704   0.465  1.00 18.73          C
ATOM    380  C   LEU A 128       7.495   9.402   1.802  1.00 18.52          C
ATOM    381  O   LEU A 128       6.764   8.870   2.642  1.00 17.90          O
ATOM    382  CB  LEU A 128       6.488   8.740  -0.413  1.00 18.41          C
ATOM    383  CG  LEU A 128       5.993  10.149  -0.824  1.00 18.76          C
ATOM    384  CD1 LEU A 128       7.106  11.070  -1.356  1.00 18.77          C
ATOM    385  CD2 LEU A 128       4.848  10.025  -1.835  1.00 14.06          C
ATOM    386  H   LEU A 128       7.319   6.727   1.075  1.00  0.00          H
ATOM    387  HA  LEU A 128       8.573   9.182  -0.058  1.00  0.00          H
ATOM    388  HB2 LEU A 128       6.687   8.160  -1.316  1.00  0.00          H
ATOM    389  HB3 LEU A 128       5.679   8.224   0.104  1.00  0.00          H
ATOM    390  HG  LEU A 128       5.586  10.645   0.056  1.00  0.00          H
ATOM    391 HD11 LEU A 128       6.694  11.982  -1.788  1.00  0.00          H
ATOM    392 HD12 LEU A 128       7.771  11.394  -0.558  1.00  0.00          H
ATOM    393 HD13 LEU A 128       7.718  10.577  -2.110  1.00  0.00          H
ATOM    394 HD21 LEU A 128       4.503  11.001  -2.164  1.00  0.00          H
ATOM    395 HD22 LEU A 128       5.148   9.466  -2.721  1.00  0.00          H
ATOM    396 HD23 LEU A 128       3.995   9.517  -1.387  1.00  0.00          H
ATOM    397  N   VAL A 129       8.160  10.532   2.028  1.00 18.42          N
ATOM    398  CA  VAL A 129       8.193  11.228   3.300  1.00 18.44          C
ATOM    399  C   VAL A 129       8.390  12.733   3.070  1.00 18.85          C
ATOM    400  O   VAL A 129       8.941  13.143   2.047  1.00 19.12          O
ATOM    401  CB  VAL A 129       9.207  10.509   4.231  1.00 19.71          C
ATOM    402  CG1 VAL A 129      10.657  10.592   3.716  1.00 19.20          C
ATOM    403  CG2 VAL A 129       9.086  10.920   5.702  1.00 16.64          C
ATOM    404  H   VAL A 129       8.802  10.884   1.319  1.00  0.00          H
ATOM    405  HA  VAL A 129       7.212  11.130   3.750  1.00  0.00          H
ATOM    406  HB  VAL A 129       8.924   9.458   4.228  1.00  0.00          H
ATOM    407 HG11 VAL A 129      11.319   9.934   4.274  1.00  0.00          H
ATOM    408 HG12 VAL A 129      10.732  10.282   2.673  1.00  0.00          H
ATOM    409 HG13 VAL A 129      11.046  11.608   3.780  1.00  0.00          H
ATOM    410 HG21 VAL A 129       9.594  10.221   6.360  1.00  0.00          H
ATOM    411 HG22 VAL A 129       9.516  11.899   5.881  1.00  0.00          H
ATOM    412 HG23 VAL A 129       8.040  10.936   6.004  1.00  0.00          H
ATOM    413  N   ARG A 130       7.937  13.557   4.018  1.00 21.17          N
ATOM    414  CA  ARG A 130       8.284  14.971   4.123  1.00 21.51          C
ATOM    415  C   ARG A 130       9.489  15.106   5.068  1.00 21.74          C
ATOM    416  O   ARG A 130       9.642  14.311   5.995  1.00 18.71          O
ATOM    417  CB  ARG A 130       7.102  15.708   4.792  1.00 24.72          C
ATOM    418  CG  ARG A 130       5.870  15.789   3.883  1.00 26.46          C
ATOM    419  CD  ARG A 130       4.606  16.322   4.571  1.00 30.21          C
ATOM    420  NE  ARG A 130       3.885  15.226   5.234  1.00 33.85          N
ATOM    421  CZ  ARG A 130       2.565  15.022   5.359  1.00 35.23          C
ATOM    422  NH1 ARG A 130       1.664  15.902   4.919  1.00 35.12          N
ATOM    423  NH2 ARG A 130       2.156  13.912   5.960  1.00 31.29          N1+
ATOM    424  H   ARG A 130       7.408  13.158   4.785  1.00  0.00          H
ATOM    425  HA  ARG A 130       8.516  15.402   3.146  1.00  0.00          H
ATOM    426  HB2 ARG A 130       6.844  15.229   5.737  1.00  0.00          H
ATOM    427  HB3 ARG A 130       7.395  16.721   5.045  1.00  0.00          H
ATOM    428  HG2 ARG A 130       6.110  16.414   3.022  1.00  0.00          H
ATOM    429  HG3 ARG A 130       5.659  14.798   3.485  1.00  0.00          H
ATOM    430  HD2 ARG A 130       4.827  17.131   5.267  1.00  0.00          H
ATOM    431  HD3 ARG A 130       3.964  16.735   3.801  1.00  0.00          H
ATOM    432  HE  ARG A 130       4.505  14.406   5.460  1.00  0.00          H
ATOM    433 HH11 ARG A 130       1.941  16.738   4.391  1.00  0.00          H
ATOM    434 HH12 ARG A 130       0.693  15.595   4.803  1.00  0.00          H
ATOM    435 HH21 ARG A 130       2.839  13.266   6.421  1.00  0.00          H
ATOM    436 HH22 ARG A 130       1.191  13.565   5.963  1.00  0.00          H
ATOM    437  N   ASN A 131      10.287  16.174   4.941  1.00 21.83          N
ATOM    438  CA  ASN A 131      11.406  16.496   5.854  1.00 20.92          C
ATOM    439  C   ASN A 131      10.932  16.725   7.308  1.00 21.34          C
ATOM    440  O   ASN A 131      11.649  16.459   8.277  1.00 20.83          O
ATOM    441  CB  ASN A 131      12.221  17.714   5.358  1.00 24.29          C
ATOM    442  CG  ASN A 131      13.070  17.423   4.117  1.00 24.72          C
ATOM    443  OD1 ASN A 131      13.898  16.519   4.118  1.00 26.89          O
ATOM    444  ND2 ASN A 131      12.852  18.136   3.020  1.00 26.08          N
ATOM    445  H   ASN A 131      10.037  16.840   4.209  1.00  0.00          H
ATOM    446  HA  ASN A 131      12.060  15.627   5.873  1.00  0.00          H
ATOM    447  HB2 ASN A 131      11.569  18.571   5.183  1.00  0.00          H
ATOM    448  HB3 ASN A 131      12.925  18.027   6.132  1.00  0.00          H
ATOM    449 HD21 ASN A 131      12.119  18.860   2.977  1.00  0.00          H
ATOM    450 HD22 ASN A 131      13.494  18.054   2.227  1.00  0.00          H
ATOM    451  N   LYS A 132       9.661  17.119   7.443  1.00 21.47          N
ATOM    452  CA  LYS A 132       8.873  17.259   8.665  1.00 21.50          C
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ATOM    453  C   LYS A 132      8.626  15.906   9.356  1.00 20.13           C
ATOM    454  O   LYS A 132      8.498  15.843  10.577  1.00 20.64           O
ATOM    455  CB  LYS A 132      7.497  17.848   8.271  1.00 18.17           C
ATOM    456  CG  LYS A 132      7.557  19.261   7.662  1.00 -1.00          C
ATOM    457  CD  LYS A 132      7.552  19.263   6.129  1.00 -1.00          C
ATOM    458  CE  LYS A 132      7.801  20.641   5.510  1.00 -1.00          C
ATOM    459  NZ  LYS A 132      7.819  20.543   4.043  1.00 -1.00          N1+
ATOM    460  H   LYS A 132      9.175  17.278   6.575  1.00  0.00           H
ATOM    461  HA  LYS A 132      9.387  17.924   9.363  1.00  0.00           H
ATOM    462  HB2 LYS A 132      6.960  17.171   7.605  1.00  0.00           H
ATOM    463  HB3 LYS A 132      6.872  17.893   9.160  1.00  0.00           H
ATOM    464  HG2 LYS A 132      6.698  19.837   8.009  1.00 -1.00          H
ATOM    465  HG3 LYS A 132      8.441  19.774   8.037  1.00 -1.00          H
ATOM    466  HD2 LYS A 132      8.337  18.601   5.774  1.00 -1.00          H
ATOM    467  HD3 LYS A 132      6.603  18.862   5.770  1.00 -1.00          H
ATOM    468  HE2 LYS A 132      7.036  21.347   5.835  1.00 -1.00          H
ATOM    469  HE3 LYS A 132      8.765  21.033   5.839  1.00 -1.00          H
ATOM    470  HZ1 LYS A 132      6.924  20.704   3.599  1.00 -1.00          H
ATOM    471  HZ2 LYS A 132      8.469  21.217   3.625  1.00 -1.00          H
ATOM    472  HZ3 LYS A 132      8.176  19.636   3.752  1.00 -1.00          H
ATOM    473  N   GLU A 133      8.563  14.815   8.584  1.00 20.07           N
ATOM    474  CA  GLU A 133      8.190  13.485   9.046  1.00 17.67           C
ATOM    475  C   GLU A 133      9.417  12.607   9.316  1.00 18.46           C
ATOM    476  O   GLU A 133      9.226  11.462   9.718  1.00 15.28           O
ATOM    477  CB  GLU A 133      7.288  12.824   7.994  1.00 17.59           C
ATOM    478  CG  GLU A 133      5.819  13.212   8.201  1.00 20.24           C
ATOM    479  CD  GLU A 133      4.961  12.852   7.010  1.00 23.42           C
ATOM    480  OE1 GLU A 133      3.834  12.351   7.194  1.00 24.54           O
ATOM    481  OE2 GLU A 133      5.351  13.166   5.866  1.00 22.56           O1-
ATOM    482  H   GLU A 133      8.782  14.899   7.596  1.00  0.00           H
ATOM    483  HA  GLU A 133      7.640  13.534   9.985  1.00  0.00           H
ATOM    484  HB2 GLU A 133      7.625  13.079   6.991  1.00  0.00           H
ATOM    485  HB3 GLU A 133      7.341  11.739   8.058  1.00  0.00           H
ATOM    486  HG2 GLU A 133      5.419  12.737   9.098  1.00  0.00           H
ATOM    487  HG3 GLU A 133      5.734  14.287   8.354  1.00  0.00           H
ATOM    488  N   LEU A 134     10.654  13.135   9.243  1.00 18.65           N
ATOM    489  CA  LEU A 134     11.872  12.496   9.779  1.00 19.98           C
ATOM    490  C   LEU A 134     11.651  12.063  11.235  1.00 18.99           C
ATOM    491  O   LEU A 134     11.869  10.918  11.619  1.00 19.26           O
ATOM    492  CB  LEU A 134     13.068  13.476   9.707  1.00 19.11           C
ATOM    493  CG  LEU A 134     14.397  12.982  10.334  1.00 23.22           C
ATOM    494  CD1 LEU A 134     14.976  11.766   9.593  1.00 21.36           C
ATOM    495  CD2 LEU A 134     15.408  14.133  10.429  1.00 21.65           C
ATOM    496  H   LEU A 134     10.732  14.064   8.851  1.00  0.00           H
ATOM    497  HA  LEU A 134     12.085  11.613   9.175  1.00  0.00           H
ATOM    498  HB2 LEU A 134     13.244  13.765   8.678  1.00  0.00           H
ATOM    499  HB3 LEU A 134     12.795  14.405  10.201  1.00  0.00           H
ATOM    500  HG  LEU A 134     14.226  12.669  11.363  1.00  0.00           H
ATOM    501 HD11 LEU A 134     15.896  11.416  10.058  1.00  0.00           H
ATOM    502 HD12 LEU A 134     14.285  10.924   9.592  1.00  0.00           H
ATOM    503 HD13 LEU A 134     15.205  12.004   8.556  1.00  0.00           H
ATOM    504 HD21 LEU A 134     16.419  13.779  10.620  1.00  0.00           H
ATOM    505 HD22 LEU A 134     15.424  14.734   9.520  1.00  0.00           H
ATOM    506 HD23 LEU A 134     15.174  14.805  11.250  1.00  0.00           H
ATOM    507  N   LYS A 135     11.126  13.018  12.002  1.00 17.87           N
ATOM    508  CA  LYS A 135     10.840  12.998  13.421  1.00 18.77           C
ATOM    509  C   LYS A 135      9.776  11.950  13.819  1.00 18.88           C
ATOM    510  O   LYS A 135      9.655  11.626  15.001  1.00 18.40           O
ATOM    511  CB  LYS A 135     10.413  14.434  13.796  1.00 18.36           C
ATOM    512  CG  LYS A 135     11.484  15.514  13.512  1.00 19.77           C
ATOM    513  CD  LYS A 135     11.458  16.197  12.121  1.00 16.28           C
ATOM    514  CE  LYS A 135     12.821  16.849  11.813  1.00 18.85           C
ATOM    515  NZ  LYS A 135     12.919  17.513  10.502  1.00 18.17           N1+
ATOM    516  H   LYS A 135     10.915  13.885  11.534  1.00  0.00           H
ATOM    517  HA  LYS A 135     11.759  12.746  13.949  1.00  0.00           H
ATOM    518  HB2 LYS A 135      9.493  14.714  13.296  1.00  0.00           H
ATOM    519  HB3 LYS A 135     10.188  14.442  14.864  1.00  0.00           H
ATOM    520  HG2 LYS A 135     11.354  16.306  14.247  1.00  0.00           H
ATOM    521  HG3 LYS A 135     12.470  15.092  13.716  1.00  0.00           H
ATOM    522  HD2 LYS A 135     11.203  15.498  11.331  1.00  0.00           H
ATOM    523  HD3 LYS A 135     10.666  16.948  12.108  1.00  0.00           H
ATOM    524  HE2 LYS A 135     13.053  17.585  12.579  1.00  0.00           H
ATOM    525  HE3 LYS A 135     13.605  16.101  11.870  1.00  0.00           H
ATOM    526  HZ1 LYS A 135     13.922  17.683  10.313  1.00  0.00           H
ATOM    527  HZ2 LYS A 135     12.544  16.981   9.724  1.00  0.00           H
ATOM    528  HZ3 LYS A 135     12.445  18.416  10.542  1.00  0.00           H
ATOM    529  N   GLY A 136      9.064  11.372  12.844  1.00 19.43           N
ATOM    530  CA  GLY A 136      8.141  10.255  13.000  1.00 17.22           C
ATOM    531  C   GLY A 136      8.662   9.001  12.288  1.00 19.59           C
ATOM    532  O   GLY A 136      8.466   7.889  12.773  1.00 18.34           O
ATOM    533  H   GLY A 136      9.235  11.701  11.904  1.00  0.00           H
ATOM    534  HA2 GLY A 136      7.938  10.026  14.048  1.00  0.00           H
ATOM    535  HA3 GLY A 136      7.190  10.536  12.549  1.00  0.00           H
ATOM    536  N   LEU A 137      9.362   9.143  11.154  1.00 18.36           N
ATOM    537  CA  LEU A 137      9.984   8.063  10.387  1.00 21.19           C
ATOM    538  C   LEU A 137     11.088   7.344  11.165  1.00 22.14           C
ATOM    539  O   LEU A 137     11.284   6.143  10.984  1.00 24.02           O
ATOM    540  CB  LEU A 137     10.554   8.635   9.073  1.00 21.04           C
ATOM    541  CG  LEU A 137     11.141   7.594   8.098  1.00 21.35           C
ATOM    542  CD1 LEU A 137     10.062   6.660   7.524  1.00 23.22           C
ATOM    543  CD2 LEU A 137     11.938   8.296   6.996  1.00 20.28           C
ATOM    544  H   LEU A 137      9.446  10.077  10.756  1.00  0.00           H
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ATOM    545  HA  LEU A 137       9.224   7.318  10.182  1.00  0.00           H
ATOM    546  HB2 LEU A 137       9.787   9.201   8.549  1.00  0.00           H
ATOM    547  HB3 LEU A 137      11.330   9.360   9.324  1.00  0.00           H
ATOM    548  HG  LEU A 137      11.864   6.973   8.622  1.00  0.00           H
ATOM    549 HD11 LEU A 137      10.507   5.883   6.902  1.00  0.00           H
ATOM    550 HD12 LEU A 137       9.511   6.141   8.304  1.00  0.00           H
ATOM    551 HD13 LEU A 137       9.337   7.209   6.922  1.00  0.00           H
ATOM    552 HD21 LEU A 137      12.452   7.576   6.370  1.00  0.00           H
ATOM    553 HD22 LEU A 137      11.296   8.883   6.347  1.00  0.00           H
ATOM    554 HD23 LEU A 137      12.701   8.956   7.411  1.00  0.00           H
ATOM    555  N   LEU A 138     11.778   8.046  12.067  1.00 21.78           N
ATOM    556  CA  LEU A 138     12.765   7.465  12.967  1.00 22.46           C
ATOM    557  C   LEU A 138     12.178   6.368  13.880  1.00 21.43           C
ATOM    558  O   LEU A 138     12.912   5.436  14.202  1.00 22.46           O
ATOM    559  CB  LEU A 138     13.455   8.585  13.764  1.00 19.96           C
ATOM    560  CG  LEU A 138     14.398   9.467  12.908  1.00 22.18           C
ATOM    561 CD1 LEU A 138     14.604  10.836  13.567  1.00 21.53           C
ATOM    562 CD2 LEU A 138     15.748   8.796  12.625  1.00 21.97           C
ATOM    563  H   LEU A 138     11.634   9.053  12.094  1.00  0.00           H
ATOM    564  HA  LEU A 138     13.512   6.969  12.347  1.00  0.00           H
ATOM    565  HB2 LEU A 138     12.682   9.206  14.220  1.00  0.00           H
ATOM    566  HB3 LEU A 138     14.013   8.160  14.598  1.00  0.00           H
ATOM    567  HG  LEU A 138     13.942   9.643  11.935  1.00  0.00           H
ATOM    568 HD11 LEU A 138     15.356  11.430  13.047  1.00  0.00           H
ATOM    569 HD12 LEU A 138     13.679  11.412  13.570  1.00  0.00           H
ATOM    570 HD13 LEU A 138     14.910  10.731  14.605  1.00  0.00           H
ATOM    571 HD21 LEU A 138     16.348   9.404  11.946  1.00  0.00           H
ATOM    572 HD22 LEU A 138     16.315   8.677  13.542  1.00  0.00           H
ATOM    573 HD23 LEU A 138     15.627   7.820  12.154  1.00  0.00           H
ATOM    574  N   SER A 139     10.866   6.399  14.185  1.00 20.82           N
ATOM    575  CA  SER A 139     10.138   5.310  14.848  1.00 20.60           C
ATOM    576  C   SER A 139     10.066   4.087  13.923  1.00 21.37           C
ATOM    577  O   SER A 139     10.396   2.977  14.343  1.00 21.68           O
ATOM    578  CB  SER A 139      8.699   5.763  15.224  1.00 19.65           C
ATOM    579  OG  SER A 139      7.946   4.761  15.905  1.00 22.99           O
ATOM    580  H   SER A 139     10.319   7.176  13.840  1.00  0.00           H
ATOM    581  HA  SER A 139     10.683   5.032  15.752  1.00  0.00           H
ATOM    582  HB2 SER A 139      8.736   6.659  15.845  1.00  0.00           H
ATOM    583  HB3 SER A 139      8.131   6.026  14.333  1.00  0.00           H
ATOM    584  HG  SER A 139      7.746   4.063  15.276  1.00  0.00           H
ATOM    585  N   SER A 140      9.678   4.303  12.656  1.00 20.33           N
ATOM    586  CA  SER A 140      9.531   3.272  11.638  1.00 20.38           C
ATOM    587  C   SER A 140     10.881   2.583  11.398  1.00 20.79           C
ATOM    588  O   SER A 140     10.957   1.358  11.460  1.00 19.68           O
ATOM    589  CB  SER A 140      9.025   3.905  10.325  1.00 18.81           C
ATOM    590  OG  SER A 140      7.980   4.849  10.525  1.00 20.17           O
ATOM    591  H   SER A 140      9.440   5.238  12.360  1.00  0.00           H
ATOM    592  HA  SER A 140      8.810   2.537  11.999  1.00  0.00           H
ATOM    593  HB2 SER A 140      9.829   4.389   9.770  1.00  0.00           H
ATOM    594  HB3 SER A 140      8.653   3.110   9.678  1.00  0.00           H
ATOM    595  HG  SER A 140      7.513   4.901   9.685  1.00  0.00           H
ATOM    596  N   ILE A 141     11.946   3.377  11.204  1.00 20.52           N
ATOM    597  CA  ILE A 141     13.316   2.909  11.028  1.00 22.74           C
ATOM    598  C   ILE A 141     13.789   2.122  12.260  1.00 22.91           C
ATOM    599  O   ILE A 141     14.130   0.956  12.096  1.00 25.89           O
ATOM    600  CB  ILE A 141     14.281   4.067  10.650  1.00 21.78           C
ATOM    601 CG1 ILE A 141     13.888   4.736   9.309  1.00 21.69           C
ATOM    602 CG2 ILE A 141     15.737   3.563  10.561  1.00 19.44           C
ATOM    603 CD1 ILE A 141     14.537   6.112   9.084  1.00 20.88           C
ATOM    604  H   ILE A 141     11.784   4.382  11.191  1.00  0.00           H
ATOM    605  HA  ILE A 141     13.311   2.203  10.199  1.00  0.00           H
ATOM    606  HB  ILE A 141     14.227   4.821  11.436  1.00  0.00           H
ATOM    607 HG12 ILE A 141     14.143   4.076   8.478  1.00  0.00           H
ATOM    608 HG13 ILE A 141     12.808   4.865   9.247  1.00  0.00           H
ATOM    609 HG21 ILE A 141     16.410   4.326  10.183  1.00  0.00           H
ATOM    610 HG22 ILE A 141     16.133   3.249  11.527  1.00  0.00           H
ATOM    611 HG23 ILE A 141     15.812   2.704   9.892  1.00  0.00           H
ATOM    612 HD11 ILE A 141     14.213   6.534   8.132  1.00  0.00           H
ATOM    613 HD12 ILE A 141     14.259   6.817   9.867  1.00  0.00           H
ATOM    614 HD13 ILE A 141     15.624   6.056   9.046  1.00  0.00           H
ATOM    615  N   LYS A 142     13.793   2.715  13.470  1.00 22.93           N
ATOM    616  CA  LYS A 142     14.303   2.066  14.687  1.00 24.30           C
ATOM    617  C   LYS A 142     13.595   0.741  15.033  1.00 23.46           C
ATOM    618  O   LYS A 142     14.236  -0.149  15.595  1.00 20.35           O
ATOM    619  CB  LYS A 142     14.299   3.023  15.911  1.00 26.67           C
ATOM    620  CG  LYS A 142     15.647   3.722  16.209  1.00 31.03           C
ATOM    621  CD  LYS A 142     15.901   5.041  15.457  1.00 35.34           C
ATOM    622  CE  LYS A 142     17.267   5.660  15.829  1.00 39.87           C
ATOM    623  NZ  LYS A 142     17.468   6.992  15.235  1.00 41.29          N1+
ATOM    624  H   LYS A 142     13.411   3.652  13.562  1.00  0.00           H
ATOM    625  HA  LYS A 142     15.335   1.783  14.472  1.00  0.00           H
ATOM    626  HB2 LYS A 142     13.472   3.729  15.874  1.00  0.00           H
ATOM    627  HB3 LYS A 142     14.082   2.431  16.803  1.00  0.00           H
ATOM    628  HG2 LYS A 142     15.671   3.942  17.277  1.00  0.00           H
ATOM    629  HG3 LYS A 142     16.469   3.025  16.040  1.00  0.00           H
ATOM    630  HD2 LYS A 142     15.841   4.866  14.382  1.00  0.00           H
ATOM    631  HD3 LYS A 142     15.102   5.744  15.702  1.00  0.00           H
ATOM    632  HE2 LYS A 142     17.352   5.762  16.912  1.00  0.00           H
ATOM    633  HE3 LYS A 142     18.076   5.001  15.514  1.00  0.00           H
ATOM    634  HZ1 LYS A 142     18.427   7.311  15.323  1.00  0.00           H
ATOM    635  HZ2 LYS A 142     17.242   7.008  14.256  1.00  0.00           H
ATOM    636  HZ3 LYS A 142     16.859   7.677  15.711  1.00  0.00           H
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ATOM    637  N   TYR A 143      12.314   0.586  14.672  1.00 22.06           N
ATOM    638  CA  TYR A 143      11.617  -0.690  14.771  1.00 22.59           C
ATOM    639  C   TYR A 143      12.051  -1.648  13.641  1.00 21.72           C
ATOM    640  O   TYR A 143      12.628  -2.692  13.948  1.00 22.10           O
ATOM    641  CB  TYR A 143      10.082  -0.483  14.789  1.00 20.02           C
ATOM    642  CG  TYR A 143       9.452  -0.619  16.171  1.00 21.94           C
ATOM    643  CD1 TYR A 143       9.670  -1.798  16.911  1.00 23.77           C
ATOM    644  CD2 TYR A 143       8.622   0.386  16.716  1.00 22.49           C
ATOM    645  CE1 TYR A 143       9.024  -2.005  18.141  1.00 22.37           C
ATOM    646  CE2 TYR A 143       7.953   0.166  17.943  1.00 23.21           C
ATOM    647  CZ  TYR A 143       8.134  -1.044  18.645  1.00 22.87           C
ATOM    648  OH  TYR A 143       7.448  -1.306  19.797  1.00 21.97           O
ATOM    649  H   TYR A 143      11.825   1.375  14.263  1.00  0.00           H
ATOM    650  HA  TYR A 143      11.921  -1.167  15.704  1.00  0.00           H
ATOM    651  HB2 TYR A 143       9.805   0.469  14.338  1.00  0.00           H
ATOM    652  HB3 TYR A 143       9.593  -1.238  14.172  1.00  0.00           H
ATOM    653  HD1 TYR A 143      10.305  -2.582  16.531  1.00  0.00           H
ATOM    654  HD2 TYR A 143       8.472   1.316  16.186  1.00  0.00           H
ATOM    655  HE1 TYR A 143       9.191  -2.925  18.680  1.00  0.00           H
ATOM    656  HE2 TYR A 143       7.291   0.919  18.344  1.00  0.00           H
ATOM    657  HH  TYR A 143       7.661  -2.209  20.129  1.00  0.00           H
ATOM    658  N   VAL A 144      11.841  -1.299  12.357  1.00 22.79           N
ATOM    659  CA  VAL A 144      12.161  -2.115  11.165  1.00 22.01           C
ATOM    660  C   VAL A 144      13.617  -2.625  11.150  1.00 23.35           C
ATOM    661  O   VAL A 144      13.880  -3.767  10.770  1.00 21.03           O
ATOM    662  CB  VAL A 144      11.788  -1.330   9.871  1.00 21.23           C
ATOM    663  CG1 VAL A 144      12.283  -1.967   8.554  1.00 23.80           C
ATOM    664  CG2 VAL A 144      10.272  -1.078   9.743  1.00 17.15           C
ATOM    665  H   VAL A 144      11.470  -0.372  12.168  1.00  0.00           H
ATOM    666  HA  VAL A 144      11.546  -3.013  11.214  1.00  0.00           H
ATOM    667  HB  VAL A 144      12.280  -0.360   9.947  1.00  0.00           H
ATOM    668 HG11 VAL A 144      11.942  -1.398   7.688  1.00  0.00           H
ATOM    669 HG12 VAL A 144      13.371  -1.999   8.487  1.00  0.00           H
ATOM    670 HG13 VAL A 144      11.915  -2.987   8.439  1.00  0.00           H
ATOM    671 HG21 VAL A 144      10.077  -0.271   9.038  1.00  0.00           H
ATOM    672 HG22 VAL A 144       9.754  -1.957   9.361  1.00  0.00           H
ATOM    673 HG23 VAL A 144       9.804  -0.805  10.689  1.00  0.00           H
ATOM    674  N   GLU A 145      14.552  -1.794  11.619  1.00 23.20           N
ATOM    675  CA  GLU A 145      15.978  -2.071  11.686  1.00 23.64           C
ATOM    676  C   GLU A 145      16.311  -3.324  12.496  1.00 24.71           C
ATOM    677  O   GLU A 145      17.141  -4.138  12.100  1.00 23.64           O
ATOM    678  CB  GLU A 145      16.679  -0.856  12.316  1.00 25.26           C
ATOM    679  CG  GLU A 145      17.361  -0.009  11.238  1.00 25.70           C
ATOM    680  CD  GLU A 145      18.654  -0.661  10.771  1.00 24.54           C
ATOM    681  OE1 GLU A 145      19.416  -1.133  11.640  1.00 27.65           O
ATOM    682  OE2 GLU A 145      18.902  -0.695   9.553  1.00 28.24           O1-
ATOM    683  H   GLU A 145      14.257  -0.851  11.868  1.00  0.00           H
ATOM    684  HA  GLU A 145      16.315  -2.217  10.667  1.00  0.00           H
ATOM    685  HB2 GLU A 145      16.001  -0.257  12.915  1.00  0.00           H
ATOM    686  HB3 GLU A 145      17.420  -1.166  13.052  1.00  0.00           H
ATOM    687  HG2 GLU A 145      16.696   0.155  10.389  1.00  0.00           H
ATOM    688  HG3 GLU A 145      17.581   0.971  11.640  1.00  0.00           H
ATOM    689  N   ASN A 146      15.672  -3.447  13.656  1.00 25.05           N
ATOM    690  CA  ASN A 146      15.992  -4.476  14.636  1.00 28.02           C
ATOM    691  C   ASN A 146      14.978  -5.619  14.513  1.00 26.91           C
ATOM    692  O   ASN A 146      15.352  -6.774  14.693  1.00 26.71           O
ATOM    693  CB  ASN A 146      15.968  -3.854  16.049  1.00 31.59           C
ATOM    694  CG  ASN A 146      16.970  -2.697  16.198  1.00 35.43           C
ATOM    695  OD1 ASN A 146      18.162  -2.826  15.913  1.00 38.91           O
ATOM    696  ND2 ASN A 146      16.505  -1.507  16.551  1.00 38.29           N
ATOM    697  H   ASN A 146      14.929  -2.789  13.854  1.00  0.00           H
ATOM    698  HA  ASN A 146      16.987  -4.894  14.461  1.00  0.00           H
ATOM    699  HB2 ASN A 146      14.961  -3.514  16.297  1.00  0.00           H
ATOM    700  HB3 ASN A 146      16.221  -4.618  16.786  1.00  0.00           H
ATOM    701 HD21 ASN A 146      15.502  -1.326  16.583  1.00  0.00           H
ATOM    702 HD22 ASN A 146      17.139  -0.739  16.679  1.00  0.00           H
ATOM    703  N   LYS A 147      13.729  -5.318  14.121  1.00 25.17           N
ATOM    704  CA  LYS A 147      12.674  -6.305  13.899  1.00 25.56           C
ATOM    705  C   LYS A 147      12.888  -7.118  12.610  1.00 23.80           C
ATOM    706  O   LYS A 147      12.367  -8.232  12.529  1.00 24.25           O
ATOM    707  CB  LYS A 147      11.302  -5.595  13.831  1.00 26.51           C
ATOM    708  CG  LYS A 147      10.844  -5.024  15.189  1.00 27.65           C
ATOM    709  CD  LYS A 147      10.278  -6.106  16.120  1.00 29.92           C
ATOM    710  CE  LYS A 147      10.127  -5.694  17.589  1.00 29.66           C
ATOM    711  NZ  LYS A 147       9.815  -6.842  18.454  1.00 34.14           N1+
ATOM    712  H   LYS A 147      13.475  -4.343  13.992  1.00  0.00           H
ATOM    713  HA  LYS A 147      12.686  -7.014  14.727  1.00  0.00           H
ATOM    714  HB2 LYS A 147      11.340  -4.799  13.087  1.00  0.00           H
ATOM    715  HB3 LYS A 147      10.535  -6.285  13.470  1.00  0.00           H
ATOM    716  HG2 LYS A 147      11.670  -4.506  15.676  1.00  0.00           H
ATOM    717  HG3 LYS A 147      10.077  -4.272  15.011  1.00  0.00           H
ATOM    718  HD2 LYS A 147       9.312  -6.425  15.739  1.00  0.00           H
ATOM    719  HD3 LYS A 147      10.934  -6.966  16.083  1.00  0.00           H
ATOM    720  HE2 LYS A 147      11.046  -5.240  17.960  1.00  0.00           H
ATOM    721  HE3 LYS A 147       9.334  -4.955  17.700  1.00  0.00           H
ATOM    722  HZ1 LYS A 147       9.745  -6.442  19.409  1.00  0.00           H
ATOM    723  HZ2 LYS A 147       8.885  -7.197  18.265  1.00  0.00           H
ATOM    724  HZ3 LYS A 147      10.524  -7.580  18.385  1.00  0.00           H
ATOM    725  N   ILE A 148      13.679  -6.616  11.645  1.00 24.02           N
ATOM    726  CA  ILE A 148      14.106  -7.352  10.456  1.00 21.98           C
ATOM    727  C   ILE A 148      15.531  -7.024   9.972  1.00 23.64           C
ATOM    728  O   ILE A 148      16.327  -7.950   9.833  1.00 24.28           O
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ATOM    729  CB  ILE A 148      13.016  -7.403   9.352  1.00 21.36           C
ATOM    730  CG1 ILE A 148      13.453  -8.277   8.151  1.00 23.00           C
ATOM    731  CG2 ILE A 148      12.561  -6.004   8.899  1.00 19.78           C
ATOM    732  CD1 ILE A 148      12.310  -9.044   7.479  1.00 19.41           C
ATOM    733  H   ILE A 148      14.035  -5.676  11.759  1.00  0.00           H
ATOM    734  HA  ILE A 148      14.200  -8.389  10.781  1.00  0.00           H
ATOM    735  HB  ILE A 148      12.151  -7.888   9.802  1.00  0.00           H
ATOM    736 HG12 ILE A 148      13.990  -7.674   7.416  1.00  0.00           H
ATOM    737 HG13 ILE A 148      14.161  -9.031   8.492  1.00  0.00           H
ATOM    738 HG21 ILE A 148      11.808  -6.070   8.123  1.00  0.00           H
ATOM    739 HG22 ILE A 148      12.121  -5.439   9.721  1.00  0.00           H
ATOM    740 HG23 ILE A 148      13.382  -5.418   8.486  1.00  0.00           H
ATOM    741 HD11 ILE A 148      12.670  -9.584   6.603  1.00  0.00           H
ATOM    742 HD12 ILE A 148      11.890  -9.782   8.160  1.00  0.00           H
ATOM    743 HD13 ILE A 148      11.504  -8.390   7.162  1.00  0.00           H
ATOM    744  N   ASN A 149      15.847  -5.754   9.669  1.00 22.03           N
ATOM    745  CA  ASN A 149      16.964  -5.355   8.781  1.00 24.97           C
ATOM    746  C   ASN A 149      18.348  -5.908   9.173  1.00 27.08           C
ATOM    747  O   ASN A 149      19.088  -6.376   8.313  1.00 26.94           O
ATOM    748  CB  ASN A 149      17.032  -3.816   8.651  1.00 24.58           C
ATOM    749  CG  ASN A 149      17.714  -3.320   7.373  1.00 26.06           C
ATOM    750  OD1 ASN A 149      17.512  -3.882   6.297  1.00 24.50           O
ATOM    751  ND2 ASN A 149      18.505  -2.261   7.459  1.00 25.60           N
ATOM    752  H   ASN A 149      15.136  -5.053   9.852  1.00  0.00           H
ATOM    753  HA  ASN A 149      16.713  -5.783   7.809  1.00  0.00           H
ATOM    754  HB2 ASN A 149      16.030  -3.387   8.665  1.00  0.00           H
ATOM    755  HB3 ASN A 149      17.583  -3.412   9.499  1.00  0.00           H
ATOM    756 HD21 ASN A 149      18.648  -1.736   8.344  1.00  0.00           H
ATOM    757 HD22 ASN A 149      18.939  -1.868   6.622  1.00  0.00           H
ATOM    758  N   LYS A 150      18.681  -5.919  10.468  1.00 30.35           N
ATOM    759  CA  LYS A 150      19.952  -6.449  10.973  1.00 31.86           C
ATOM    760  C   LYS A 150      20.033  -7.989  10.950  1.00 30.69           C
ATOM    761  O   LYS A 150      21.118  -8.538  11.128  1.00 31.66           O
ATOM    762  CB  LYS A 150      20.145  -5.985  12.430  1.00 34.31           C
ATOM    763  CG  LYS A 150      20.521  -4.502  12.549  1.00 37.03           C
ATOM    764  CD  LYS A 150      20.848  -4.129  14.001  1.00 39.82           C
ATOM    765  CE  LYS A 150      21.173  -2.644  14.187  1.00 41.88           C
ATOM    766  NZ  LYS A 150      19.978  -1.811  14.010  1.00 43.28           N1+
ATOM    767  H   LYS A 150      18.051  -5.456  11.118  1.00  0.00           H
ATOM    768  HA  LYS A 150      20.772  -6.074  10.357  1.00  0.00           H
ATOM    769  HB2 LYS A 150      19.248  -6.199  13.014  1.00  0.00           H
ATOM    770  HB3 LYS A 150      20.947  -6.568  12.890  1.00  0.00           H
ATOM    771  HG2 LYS A 150      21.385  -4.290  11.916  1.00  0.00           H
ATOM    772  HG3 LYS A 150      19.712  -3.884  12.161  1.00  0.00           H
ATOM    773  HD2 LYS A 150      20.023  -4.417  14.655  1.00  0.00           H
ATOM    774  HD3 LYS A 150      21.707  -4.717  14.327  1.00  0.00           H
ATOM    775  HE2 LYS A 150      21.549  -2.485  15.198  1.00  0.00           H
ATOM    776  HE3 LYS A 150      21.958  -2.323  13.502  1.00  0.00           H
ATOM    777  HZ1 LYS A 150      20.151  -0.866  14.298  1.00  0.00           H
ATOM    778  HZ2 LYS A 150      19.741  -1.724  12.997  1.00  0.00           H
ATOM    779  HZ3 LYS A 150      19.192  -2.204  14.519  1.00  0.00           H
ATOM    780  N   LYS A 151      18.905  -8.683  10.760  1.00 29.61           N
ATOM    781  CA  LYS A 151      18.840 -10.133  10.604  1.00 28.95           C
ATOM    782  C   LYS A 151      18.762 -10.469   9.101  1.00 28.12           C
ATOM    783  O   LYS A 151      19.424 -11.401   8.649  1.00 26.36           O
ATOM    784  CB  LYS A 151      17.567 -10.662  11.316  1.00 30.41           C
ATOM    785  CG  LYS A 151      17.517 -10.342  12.830  1.00 32.64           C
ATOM    786  CD  LYS A 151      16.231 -10.796  13.554  1.00 35.44           C
ATOM    787  CE  LYS A 151      14.986 -10.009  13.112  1.00 35.31           C
ATOM    788  NZ  LYS A 151      13.782 -10.320  13.895  1.00 36.53           N1+
ATOM    789  H   LYS A 151      18.063  -8.156  10.555  1.00  0.00           H
ATOM    790  HA  LYS A 151      19.721 -10.619  11.027  1.00  0.00           H
ATOM    791  HB2 LYS A 151      16.681 -10.268  10.822  1.00  0.00           H
ATOM    792  HB3 LYS A 151      17.519 -11.744  11.182  1.00  0.00           H
ATOM    793  HG2 LYS A 151      18.376 -10.812  13.310  1.00  0.00           H
ATOM    794  HG3 LYS A 151      17.642  -9.270  12.992  1.00  0.00           H
ATOM    795  HD2 LYS A 151      16.075 -11.866  13.403  1.00  0.00           H
ATOM    796  HD3 LYS A 151      16.373 -10.656  14.627  1.00  0.00           H
ATOM    797  HE2 LYS A 151      15.171  -8.936  13.171  1.00  0.00           H
ATOM    798  HE3 LYS A 151      14.763 -10.237  12.070  1.00  0.00           H
ATOM    799  HZ1 LYS A 151      12.994  -9.961  13.371  1.00  0.00           H
ATOM    800  HZ2 LYS A 151      13.653 -11.320  14.042  1.00  0.00           H
ATOM    801  HZ3 LYS A 151      13.742  -9.841  14.813  1.00  0.00           H
ATOM    802  N   PHE A 152      17.972  -9.709   8.327  1.00 26.10           N
ATOM    803  CA  PHE A 152      17.694  -9.932   6.907  1.00 27.49           C
ATOM    804  C   PHE A 152      17.708  -8.575   6.174  1.00 27.68           C
ATOM    805  O   PHE A 152      16.665  -7.920   6.127  1.00 27.95           O
ATOM    806  CB  PHE A 152      16.366 -10.705   6.743  1.00 28.65           C
ATOM    807  CG  PHE A 152      16.300 -12.018   7.507  1.00 30.27           C
ATOM    808  CD1 PHE A 152      17.006 -13.149   7.046  1.00 29.39           C
ATOM    809  CD2 PHE A 152      15.588 -12.089   8.722  1.00 29.26           C
ATOM    810  CE1 PHE A 152      16.995 -14.344   7.791  1.00 29.40           C
ATOM    811  CE2 PHE A 152      15.609 -13.272   9.482  1.00 30.84           C
ATOM    812  CZ  PHE A 152      16.299 -14.405   9.013  1.00 29.38           C
ATOM    813  H   PHE A 152      17.467  -8.947   8.770  1.00  0.00           H
ATOM    814  HA  PHE A 152      18.467 -10.570   6.480  1.00  0.00           H
ATOM    815  HB2 PHE A 152      15.527 -10.081   7.047  1.00  0.00           H
ATOM    816  HB3 PHE A 152      16.204 -10.905   5.685  1.00  0.00           H
ATOM    817  HD1 PHE A 152      17.578 -13.096   6.131  1.00  0.00           H
ATOM    818  HD2 PHE A 152      15.049 -11.227   9.091  1.00  0.00           H
ATOM    819  HE1 PHE A 152      17.544 -15.205   7.439  1.00  0.00           H
ATOM    820  HE2 PHE A 152      15.097 -13.310  10.429  1.00  0.00           H
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ATOM    821  HZ  PHE A 152      16.303 -15.314   9.597  1.00  0.00           H
ATOM    822  N   PRO A 153      18.865  -8.112   5.648  1.00 27.92           N
ATOM    823  CA  PRO A 153      19.021  -6.736   5.157  1.00 26.86           C
ATOM    824  C   PRO A 153      18.455  -6.482   3.750  1.00 25.61           C
ATOM    825  O   PRO A 153      18.457  -7.376   2.892  1.00 23.81           O
ATOM    826  CB  PRO A 153      20.538  -6.492   5.180  1.00 28.24           C
ATOM    827  CG  PRO A 153      21.152  -7.870   4.984  1.00 29.29           C
ATOM    828  CD  PRO A 153      20.151  -8.817   5.650  1.00 28.25           C
ATOM    829  HA  PRO A 153      18.537  -6.057   5.853  1.00  0.00           H
ATOM    830  HB2 PRO A 153      20.881  -5.767   4.440  1.00  0.00           H
ATOM    831  HB3 PRO A 153      20.820  -6.105   6.162  1.00  0.00           H
ATOM    832  HG2 PRO A 153      21.217  -8.090   3.918  1.00  0.00           H
ATOM    833  HG3 PRO A 153      22.154  -7.951   5.406  1.00  0.00           H
ATOM    834  HD2 PRO A 153      20.100  -9.769   5.122  1.00  0.00           H
ATOM    835  HD3 PRO A 153      20.447  -9.011   6.683  1.00  0.00           H
ATOM    836  N   TYR A 154      18.041  -5.225   3.529  1.00 23.90           N
ATOM    837  CA  TYR A 154      17.614  -4.605   2.269  1.00 25.51           C
ATOM    838  C   TYR A 154      18.042  -3.121   2.228  1.00 24.53           C
ATOM    839  O   TYR A 154      18.251  -2.538   3.296  1.00 23.72           O
ATOM    840  CB  TYR A 154      16.096  -4.799   2.041  1.00 24.29           C
ATOM    841  CG  TYR A 154      15.733  -6.183   1.542  1.00 25.02           C
ATOM    842  CD1 TYR A 154      16.046  -6.551   0.217  1.00 24.50           C
ATOM    843  CD2 TYR A 154      15.139  -7.120   2.410  1.00 23.16           C
ATOM    844  CE1 TYR A 154      15.809  -7.861  -0.229  1.00 26.82           C
ATOM    845  CE2 TYR A 154      14.904  -8.433   1.965  1.00 25.35           C
ATOM    846  CZ  TYR A 154      15.259  -8.804   0.653  1.00 26.98           C
ATOM    847  OH  TYR A 154      15.195 -10.105   0.260  1.00 26.94           O
ATOM    848  H   TYR A 154      18.069  -4.585   4.319  1.00  0.00           H
ATOM    849  HA  TYR A 154      18.158  -5.108   1.470  1.00  0.00           H
ATOM    850  HB2 TYR A 154      15.548  -4.579   2.958  1.00  0.00           H
ATOM    851  HB3 TYR A 154      15.722  -4.081   1.310  1.00  0.00           H
ATOM    852  HD1 TYR A 154      16.500  -5.841  -0.456  1.00  0.00           H
ATOM    853  HD2 TYR A 154      14.905  -6.850   3.432  1.00  0.00           H
ATOM    854  HE1 TYR A 154      16.076  -8.143  -1.239  1.00  0.00           H
ATOM    855  HE2 TYR A 154      14.490  -9.154   2.655  1.00  0.00           H
ATOM    856  HH  TYR A 154      14.840 -10.699   0.956  1.00  0.00           H
ATOM    857  N   PRO A 155      18.177  -2.494   1.037  1.00 24.68           N
ATOM    858  CA  PRO A 155      18.422  -1.048   0.897  1.00 23.85           C
ATOM    859  C   PRO A 155      17.128  -0.238   1.120  1.00 24.27           C
ATOM    860  O   PRO A 155      16.028  -0.776   0.960  1.00 23.44           O
ATOM    861  CB  PRO A 155      18.921  -0.883  -0.546  1.00 23.62           C
ATOM    862  CG  PRO A 155      18.274  -2.027  -1.309  1.00 23.92           C
ATOM    863  CD  PRO A 155      18.130  -3.143  -0.276  1.00 24.00           C
ATOM    864  HA  PRO A 155      19.186  -0.723   1.603  1.00  0.00           H
ATOM    865  HB2 PRO A 155      18.698   0.093  -0.984  1.00  0.00           H
ATOM    866  HB3 PRO A 155      20.004  -0.996  -0.581  1.00  0.00           H
ATOM    867  HG2 PRO A 155      17.291  -1.717  -1.663  1.00  0.00           H
ATOM    868  HG3 PRO A 155      18.854  -2.330  -2.181  1.00  0.00           H
ATOM    869  HD2 PRO A 155      17.200  -3.683  -0.431  1.00  0.00           H
ATOM    870  HD3 PRO A 155      18.959  -3.846  -0.370  1.00  0.00           H
ATOM    871  N   TRP A 156      17.250   1.046   1.483  1.00 23.62           N
ATOM    872  CA  TRP A 156      16.127   1.935   1.787  1.00 24.34           C
ATOM    873  C   TRP A 156      16.135   3.146   0.844  1.00 24.58           C
ATOM    874  O   TRP A 156      17.031   3.987   0.904  1.00 24.78           O
ATOM    875  CB  TRP A 156      16.174   2.340   3.278  1.00 22.47           C
ATOM    876  CG  TRP A 156      14.852   2.641   3.928  1.00 23.60           C
ATOM    877  CD1 TRP A 156      13.835   3.353   3.384  1.00 23.21           C
ATOM    878  CD2 TRP A 156      14.362   2.185   5.229  1.00 24.20           C
ATOM    879  NE1 TRP A 156      12.760   3.359   4.248  1.00 23.02           N
ATOM    880  CE3 TRP A 156      14.896   1.400   6.281  1.00 22.06           C
ATOM    881  CE2 TRP A 156      13.027   2.659   5.398  1.00 24.32           C
ATOM    882  CZ3 TRP A 156      14.132   1.093   7.427  1.00 23.14           C
ATOM    883  CZ2 TRP A 156      12.264   2.380   6.541  1.00 23.17           C
ATOM    884  CH2 TRP A 156      12.815   1.577   7.554  1.00 23.12           C
ATOM    885  H   TRP A 156      18.188   1.428   1.583  1.00  0.00           H
ATOM    886  HA  TRP A 156      15.194   1.399   1.624  1.00  0.00           H
ATOM    887  HB2 TRP A 156      16.611   1.521   3.849  1.00  0.00           H
ATOM    888  HB3 TRP A 156      16.840   3.188   3.433  1.00  0.00           H
ATOM    889  HD1 TRP A 156      13.860   3.834   2.417  1.00  0.00           H
ATOM    890  HE1 TRP A 156      11.862   3.824   4.038  1.00  0.00           H
ATOM    891  HE3 TRP A 156      15.900   1.010   6.190  1.00  0.00           H
ATOM    892  HZ3 TRP A 156      14.559   0.471   8.201  1.00  0.00           H
ATOM    893  HZ2 TRP A 156      11.262   2.769   6.619  1.00  0.00           H
ATOM    894  HH2 TRP A 156      12.220   1.331   8.419  1.00  0.00           H
ATOM    895  N   VAL A 157      15.116   3.244  -0.013  1.00 24.62           N
ATOM    896  CA  VAL A 157      14.894   4.346  -0.937  1.00 22.16           C
ATOM    897  C   VAL A 157      13.937   5.338  -0.250  1.00 21.82           C
ATOM    898  O   VAL A 157      12.754   5.053  -0.040  1.00 22.52           O
ATOM    899  CB  VAL A 157      14.265   3.771  -2.236  1.00 20.88           C
ATOM    900  CG1 VAL A 157      13.833   4.873  -3.219  1.00 19.19           C
ATOM    901  CG2 VAL A 157      15.229   2.795  -2.939  1.00 20.83           C
ATOM    902  H   VAL A 157      14.383   2.537   0.024  1.00  0.00           H
ATOM    903  HA  VAL A 157      15.834   4.845  -1.183  1.00  0.00           H
ATOM    904  HB  VAL A 157      13.370   3.203  -1.976  1.00  0.00           H
ATOM    905 HG11 VAL A 157      13.603   4.467  -4.202  1.00  0.00           H
ATOM    906 HG12 VAL A 157      12.939   5.389  -2.873  1.00  0.00           H
ATOM    907 HG13 VAL A 157      14.616   5.619  -3.345  1.00  0.00           H
ATOM    908 HG21 VAL A 157      14.757   2.337  -3.808  1.00  0.00           H
ATOM    909 HG22 VAL A 157      16.131   3.301  -3.284  1.00  0.00           H
ATOM    910 HG23 VAL A 157      15.538   1.978  -2.288  1.00  0.00           H
ATOM    911  N   PHE A 158      14.451   6.514   0.098  1.00 22.60           N
ATOM    912  CA  PHE A 158      13.694   7.623   0.652  1.00 21.72           C
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ATOM    913  C   PHE A 158      13.362   8.573  -0.511  1.00 21.85           C
ATOM    914  O   PHE A 158      14.243   8.961  -1.281  1.00 21.79           O
ATOM    915  CB  PHE A 158      14.573   8.341   1.695  1.00 22.82           C
ATOM    916  CG  PHE A 158      14.962   7.461   2.870  1.00 22.97           C
ATOM    917  CD1 PHE A 158      14.015   7.146   3.868  1.00 20.44           C
ATOM    918  CD2 PHE A 158      16.256   6.906   2.937  1.00 23.38           C
ATOM    919  CE1 PHE A 158      14.362   6.271   4.916  1.00 23.63           C
ATOM    920  CE2 PHE A 158      16.597   6.038   3.989  1.00 22.41           C
ATOM    921  CZ  PHE A 158      15.654   5.726   4.984  1.00 21.10           C
ATOM    922  H   PHE A 158      15.434   6.699  -0.108  1.00  0.00           H
ATOM    923  HA  PHE A 158      12.785   7.270   1.137  1.00  0.00           H
ATOM    924  HB2 PHE A 158      15.471   8.746   1.228  1.00  0.00           H
ATOM    925  HB3 PHE A 158      14.034   9.190   2.106  1.00  0.00           H
ATOM    926  HD1 PHE A 158      13.014   7.545   3.808  1.00  0.00           H
ATOM    927  HD2 PHE A 158      16.987   7.122   2.170  1.00  0.00           H
ATOM    928  HE1 PHE A 158      13.630   5.964   5.646  1.00  0.00           H
ATOM    929  HE2 PHE A 158      17.579   5.596   4.020  1.00  0.00           H
ATOM    930  HZ  PHE A 158      15.902   5.032   5.772  1.00  0.00           H
ATOM    931  N   LEU A 159      12.082   8.928  -0.641  1.00 22.19           N
ATOM    932  CA  LEU A 159      11.499   9.781  -1.670  1.00 20.94           C
ATOM    933  C   LEU A 159      10.847  11.000  -0.994  1.00 21.28           C
ATOM    934  O   LEU A 159      10.322  10.885   0.115  1.00 22.09           O
ATOM    935  CB  LEU A 159      10.466   8.973  -2.491  1.00 22.79           C
ATOM    936  CG  LEU A 159      11.009   7.690  -3.161  1.00 22.80           C
ATOM    937  CD1 LEU A 159       9.882   6.870  -3.808  1.00 23.75           C
ATOM    938  CD2 LEU A 159      12.103   7.996  -4.193  1.00 19.61           C
ATOM    939  H   LEU A 159      11.417   8.554   0.038  1.00  0.00           H
ATOM    940  HA  LEU A 159      12.276  10.126  -2.343  1.00  0.00           H
ATOM    941  HB2 LEU A 159       9.637   8.689  -1.849  1.00  0.00           H
ATOM    942  HB3 LEU A 159      10.039   9.627  -3.249  1.00  0.00           H
ATOM    943  HG  LEU A 159      11.443   7.058  -2.386  1.00  0.00           H
ATOM    944 HD11 LEU A 159      10.263   5.925  -4.195  1.00  0.00           H
ATOM    945 HD12 LEU A 159       9.096   6.638  -3.089  1.00  0.00           H
ATOM    946 HD13 LEU A 159       9.428   7.397  -4.646  1.00  0.00           H
ATOM    947 HD21 LEU A 159      12.429   7.093  -4.709  1.00  0.00           H
ATOM    948 HD22 LEU A 159      11.742   8.693  -4.949  1.00  0.00           H
ATOM    949 HD23 LEU A 159      12.985   8.435  -3.729  1.00  0.00           H
ATOM    950  N   ASN A 160      10.879  12.169  -1.639  1.00 21.67           N
ATOM    951  CA  ASN A 160      10.416  13.457  -1.105  1.00 21.59           C
ATOM    952  C   ASN A 160       9.935  14.341  -2.266  1.00 22.22           C
ATOM    953  O   ASN A 160      10.122  13.993  -3.429  1.00 22.40           O
ATOM    954  CB  ASN A 160      11.559  14.075  -0.267  1.00 21.73           C
ATOM    955  CG  ASN A 160      11.203  15.187   0.723  1.00 20.70           C
ATOM    956  OD1 ASN A 160      10.202  15.892   0.600  1.00 17.56           O
ATOM    957  ND2 ASN A 160      12.049  15.358   1.730  1.00 20.24           N
ATOM    958  H   ASN A 160      11.345  12.209  -2.539  1.00  0.00           H
ATOM    959  HA  ASN A 160       9.553  13.276  -0.465  1.00  0.00           H
ATOM    960  HB2 ASN A 160      11.964  13.282   0.347  1.00  0.00           H
ATOM    961  HB3 ASN A 160      12.373  14.404  -0.914  1.00  0.00           H
ATOM    962 HD21 ASN A 160      12.864  14.764   1.806  1.00  0.00           H
ATOM    963 HD22 ASN A 160      11.944  16.136   2.363  1.00  0.00           H
ATOM    964  N   ASP A 161       9.328  15.491  -1.967  1.00 22.62           N
ATOM    965  CA  ASP A 161       8.873  16.498  -2.935  1.00 21.64           C
ATOM    966  C   ASP A 161       9.585  17.846  -2.692  1.00 24.09           C
ATOM    967  O   ASP A 161       9.615  18.706  -3.574  1.00 24.64           O
ATOM    968  CB  ASP A 161       7.325  16.562  -2.945  1.00 22.24           C
ATOM    969  CG  ASP A 161       6.658  17.560  -2.002  1.00 22.54           C
ATOM    970  OD1 ASP A 161       6.746  17.371  -0.769  1.00 19.79           O
ATOM    971  OD2 ASP A 161       5.993  18.483  -2.535  1.00 25.86           O1-
ATOM    972  H   ASP A 161       9.304  15.734  -0.980  1.00  0.00           H
ATOM    973  HA  ASP A 161       9.181  16.191  -3.936  1.00  0.00           H
ATOM    974  HB2 ASP A 161       7.006  16.792  -3.961  1.00  0.00           H
ATOM    975  HB3 ASP A 161       6.908  15.574  -2.746  1.00  0.00           H
ATOM    976  N   GLU A 162      10.231  18.005  -1.538  1.00 25.03           N
ATOM    977  CA  GLU A 162      11.358  18.904  -1.330  1.00 25.78           C
ATOM    978  C   GLU A 162      12.641  18.091  -1.595  1.00 26.36           C
ATOM    979  O   GLU A 162      12.582  16.858  -1.636  1.00 26.47           O
ATOM    980  CB  GLU A 162      11.359  19.276   0.164  1.00 28.39           C
ATOM    981  CG  GLU A 162      10.272  20.298   0.519  1.00 34.38           C
ATOM    982  CD  GLU A 162      10.240  20.615   1.999  1.00 38.51           C
ATOM    983  OE1 GLU A 162      10.789  19.856   2.829  1.00 40.07           O
ATOM    984  OE2 GLU A 162       9.585  21.608   2.379  1.00 39.26           O1-
ATOM    985  H   GLU A 162      10.201  17.227  -0.890  1.00  0.00           H
ATOM    986  HA  GLU A 162      11.314  19.788  -1.968  1.00  0.00           H
ATOM    987  HB2 GLU A 162      11.238  18.372   0.764  1.00  0.00           H
ATOM    988  HB3 GLU A 162      12.322  19.692   0.464  1.00  0.00           H
ATOM    989  HG2 GLU A 162      10.436  21.222  -0.037  1.00  0.00           H
ATOM    990  HG3 GLU A 162       9.291  19.925   0.226  1.00  0.00           H
ATOM    991  N   PRO A 163      13.823  18.733  -1.682  1.00 25.77           N
ATOM    992  CA  PRO A 163      15.092  18.022  -1.526  1.00 25.31           C
ATOM    993  C   PRO A 163      15.258  17.589  -0.054  1.00 24.48           C
ATOM    994  O   PRO A 163      14.689  18.202   0.855  1.00 23.95           O
ATOM    995  CB  PRO A 163      16.158  19.030  -1.978  1.00 25.46           C
ATOM    996  CG  PRO A 163      15.539  20.396  -1.713  1.00 26.93           C
ATOM    997  CD  PRO A 163      14.029  20.173  -1.844  1.00 25.47           C
ATOM    998  HA  PRO A 163      15.112  17.139  -2.169  1.00  0.00           H
ATOM    999  HB2 PRO A 163      17.116  18.903  -1.471  1.00  0.00           H
ATOM   1000  HB3 PRO A 163      16.334  18.910  -3.048  1.00  0.00           H
ATOM   1001  HG2 PRO A 163      15.773  20.701  -0.693  1.00  0.00           H
ATOM   1002  HG3 PRO A 163      15.910  21.172  -2.384  1.00  0.00           H
ATOM   1003  HD2 PRO A 163      13.486  20.773  -1.114  1.00  0.00           H
ATOM   1004  HD3 PRO A 163      13.682  20.461  -2.834  1.00  0.00           H
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ATOM   1005  N   PHE A 164      16.024  16.525   0.191  1.00 23.91           N
ATOM   1006  CA  PHE A 164      16.265  16.018   1.539  1.00 22.65           C
ATOM   1007  C   PHE A 164      17.274  16.918   2.253  1.00 22.61           C
ATOM   1008  O   PHE A 164      18.385  17.116   1.749  1.00 20.34           O
ATOM   1009  CB  PHE A 164      16.825  14.588   1.468  1.00 21.23           C
ATOM   1010  CG  PHE A 164      15.728  13.553   1.380  1.00 21.71           C
ATOM   1011  CD1 PHE A 164      14.969  13.260   2.532  1.00 21.29           C
ATOM   1012  CD2 PHE A 164      15.435  12.910   0.162  1.00 20.13           C
ATOM   1013  CE1 PHE A 164      13.930  12.318   2.472  1.00 22.86           C
ATOM   1014  CE2 PHE A 164      14.405  11.955   0.111  1.00 22.82           C
ATOM   1015  CZ  PHE A 164      13.655  11.658   1.264  1.00 20.54           C
ATOM   1016  H   PHE A 164      16.501  16.083  -0.592  1.00  0.00           H
ATOM   1017  HA  PHE A 164      15.331  16.013   2.101  1.00  0.00           H
ATOM   1018  HB2 PHE A 164      17.526  14.476   0.639  1.00  0.00           H
ATOM   1019  HB3 PHE A 164      17.395  14.358   2.371  1.00  0.00           H
ATOM   1020  HD1 PHE A 164      15.171  13.770   3.463  1.00  0.00           H
ATOM   1021  HD2 PHE A 164      15.989  13.146  -0.736  1.00  0.00           H
ATOM   1022  HE1 PHE A 164      13.340  12.108   3.349  1.00  0.00           H
ATOM   1023  HE2 PHE A 164      14.174  11.464  -0.820  1.00  0.00           H
ATOM   1024  HZ  PHE A 164      12.841  10.951   1.213  1.00  0.00           H
ATOM   1025  N   THR A 165      16.879  17.451   3.414  1.00 23.48           N
ATOM   1026  CA  THR A 165      17.692  18.271   4.302  1.00 23.94           C
ATOM   1027  C   THR A 165      18.831  17.428   4.902  1.00 26.62           C
ATOM   1028  O   THR A 165      18.670  16.231   5.155  1.00 21.92           O
ATOM   1029  CB  THR A 165      16.758  18.873   5.386  1.00 25.32           C
ATOM   1030  OG1 THR A 165      15.976  17.880   6.031  1.00 27.19           O
ATOM   1031  CG2 THR A 165      15.806  19.937   4.821  1.00 25.62           C
ATOM   1032  H   THR A 165      15.966  17.213   3.792  1.00  0.00           H
ATOM   1033  HA  THR A 165      18.136  19.083   3.726  1.00  0.00           H
ATOM   1034  HB  THR A 165      17.371  19.352   6.152  1.00  0.00           H
ATOM   1035  HG1 THR A 165      16.275  17.789   6.951  1.00  0.00           H
ATOM   1036 HG21 THR A 165      15.171  20.353   5.604  1.00  0.00           H
ATOM   1037 HG22 THR A 165      16.362  20.764   4.378  1.00  0.00           H
ATOM   1038 HG23 THR A 165      15.156  19.531   4.047  1.00  0.00           H
ATOM   1039  N   GLU A 166      20.010  18.032   5.083  1.00 27.49           N
ATOM   1040  CA  GLU A 166      21.242  17.360   5.503  1.00 30.60           C
ATOM   1041  C   GLU A 166      21.099  16.622   6.843  1.00 29.25           C
ATOM   1042  O   GLU A 166      21.572  15.495   6.973  1.00 31.53           O
ATOM   1043  CB  GLU A 166      22.440  18.341   5.480  1.00 34.11           C
ATOM   1044  CG  GLU A 166      22.512  19.306   4.266  1.00 40.02           C
ATOM   1045  CD  GLU A 166      22.138  18.660   2.935  1.00 44.19           C
ATOM   1046  OE1 GLU A 166      21.052  18.998   2.425  1.00 48.52           O
ATOM   1047  OE2 GLU A 166      22.807  17.695   2.516  1.00 46.29           O1-
ATOM   1048  H   GLU A 166      20.135  18.927   4.625  1.00  0.00           H
ATOM   1049  HA  GLU A 166      21.458  16.589   4.770  1.00  0.00           H
ATOM   1050  HB2 GLU A 166      22.442  18.940   6.391  1.00  0.00           H
ATOM   1051  HB3 GLU A 166      23.360  17.755   5.512  1.00  0.00           H
ATOM   1052  HG2 GLU A 166      21.851  20.158   4.429  1.00  0.00           H
ATOM   1053  HG3 GLU A 166      23.517  19.718   4.176  1.00  0.00           H
ATOM   1054  N   GLU A 167      20.352  17.217   7.785  1.00 29.61           N
ATOM   1055  CA  GLU A 167      19.925  16.629   9.054  1.00 30.74           C
ATOM   1056  C   GLU A 167      19.146  15.308   8.888  1.00 29.24           C
ATOM   1057  O   GLU A 167      19.365  14.385   9.669  1.00 26.20           O
ATOM   1058  CB  GLU A 167      19.230  17.725   9.916  1.00 33.76           C
ATOM   1059  CG  GLU A 167      17.899  17.395  10.635  1.00 39.85           C
ATOM   1060  CD  GLU A 167      16.655  17.527   9.760  1.00 43.67           C
ATOM   1061  OE1 GLU A 167      16.798  17.744   8.535  1.00 45.84           O
ATOM   1062  OE2 GLU A 167      15.545  17.501  10.341  1.00 45.11           O1-
ATOM   1063  H   GLU A 167      19.926  18.093   7.527  1.00  0.00           H
ATOM   1064  HA  GLU A 167      20.843  16.350   9.575  1.00  0.00           H
ATOM   1065  HB2 GLU A 167      19.943  18.030  10.682  1.00  0.00           H
ATOM   1066  HB3 GLU A 167      19.077  18.630   9.327  1.00  0.00           H
ATOM   1067  HG2 GLU A 167      17.919  16.410  11.101  1.00  0.00           H
ATOM   1068  HG3 GLU A 167      17.779  18.105  11.452  1.00  0.00           H
ATOM   1069  N   PHE A 168      18.296  15.188   7.856  1.00 26.92           N
ATOM   1070  CA  PHE A 168      17.542  13.982   7.503  1.00 25.65           C
ATOM   1071  C   PHE A 168      18.502  12.838   7.193  1.00 24.16           C
ATOM   1072  O   PHE A 168      18.421  11.763   7.784  1.00 21.85           O
ATOM   1073  CB  PHE A 168      16.608  14.254   6.295  1.00 25.88           C
ATOM   1074  CG  PHE A 168      15.438  13.295   6.129  1.00 25.83           C
ATOM   1075  CD1 PHE A 168      15.632  11.929   5.823  1.00 27.41           C
ATOM   1076  CD2 PHE A 168      14.128  13.789   6.275  1.00 26.00           C
ATOM   1077  CE1 PHE A 168      14.530  11.056   5.750  1.00 27.73           C
ATOM   1078  CE2 PHE A 168      13.024  12.920   6.188  1.00 24.69           C
ATOM   1079  CZ  PHE A 168      13.229  11.550   5.959  1.00 24.72           C
ATOM   1080  H   PHE A 168      18.150  16.007   7.280  1.00  0.00           H
ATOM   1081  HA  PHE A 168      16.948  13.686   8.360  1.00  0.00           H
ATOM   1082  HB2 PHE A 168      16.206  15.263   6.381  1.00  0.00           H
ATOM   1083  HB3 PHE A 168      17.159  14.247   5.355  1.00  0.00           H
ATOM   1084  HD1 PHE A 168      16.624  11.534   5.657  1.00  0.00           H
ATOM   1085  HD2 PHE A 168      13.981  14.840   6.478  1.00  0.00           H
ATOM   1086  HE1 PHE A 168      14.681  10.008   5.529  1.00  0.00           H
ATOM   1087  HE2 PHE A 168      12.020  13.298   6.315  1.00  0.00           H
ATOM   1088  HZ  PHE A 168      12.382  10.888   5.920  1.00  0.00           H
ATOM   1089  N   LYS A 169      19.442  13.103   6.286  1.00 24.01           N
ATOM   1090  CA  LYS A 169      20.405  12.139   5.780  1.00 26.45           C
ATOM   1091  C   LYS A 169      21.401  11.741   6.887  1.00 26.84           C
ATOM   1092  O   LYS A 169      21.675  10.552   7.053  1.00 27.09           O
ATOM   1093  CB  LYS A 169      21.084  12.753   4.540  1.00 29.03           C
ATOM   1094  CG  LYS A 169      20.061  13.028   3.410  1.00 31.88           C
ATOM   1095  CD  LYS A 169      20.602  13.757   2.171  1.00 35.09           C
ATOM   1096  CE  LYS A 169      21.035  15.193   2.492  1.00 37.28           C
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ATOM   1097  NZ  LYS A 169      21.159  16.065   1.320  1.00 38.69          N1+
ATOM   1098  H   LYS A 169      19.472  14.046   5.920  1.00  0.00           H
ATOM   1099  HA  LYS A 169      19.867  11.239   5.478  1.00  0.00           H
ATOM   1100  HB2 LYS A 169      21.613  13.664   4.821  1.00  0.00           H
ATOM   1101  HB3 LYS A 169      21.839  12.059   4.168  1.00  0.00           H
ATOM   1102  HG2 LYS A 169      19.647  12.076   3.088  1.00  0.00           H
ATOM   1103  HG3 LYS A 169      19.212  13.598   3.787  1.00  0.00           H
ATOM   1104  HD2 LYS A 169      21.430  13.194   1.736  1.00  0.00           H
ATOM   1105  HD3 LYS A 169      19.815  13.769   1.415  1.00  0.00           H
ATOM   1106  HE2 LYS A 169      20.308  15.661   3.151  1.00  0.00           H
ATOM   1107  HE3 LYS A 169      21.994  15.178   3.012  1.00  0.00           H
ATOM   1108  HZ1 LYS A 169      21.839  16.797   1.599  1.00  0.00           H
ATOM   1109  HZ2 LYS A 169      21.480  15.551   0.497  1.00  0.00           H
ATOM   1110  HZ3 LYS A 169      20.283  16.538   1.146  1.00  0.00           H
ATOM   1111  N   GLU A 170      21.836  12.697   7.725  1.00 26.50           N
ATOM   1112  CA  GLU A 170      22.670  12.474   8.912  1.00 27.91           C
ATOM   1113  C   GLU A 170      21.925  11.603   9.951  1.00 26.70           C
ATOM   1114  O   GLU A 170      22.482  10.627  10.459  1.00 25.68           O
ATOM   1115  CB  GLU A 170      23.069  13.847   9.528  1.00 30.74           C
ATOM   1116  CG  GLU A 170      24.551  13.979   9.938  1.00 38.58           C
ATOM   1117  CD  GLU A 170      24.982  12.922  10.937  1.00 44.74           C
ATOM   1118  OE1 GLU A 170      24.274  12.722  11.949  1.00 47.54           O
ATOM   1119  OE2 GLU A 170      25.923  12.155  10.637  1.00 48.23          O1-
ATOM   1120  H   GLU A 170      21.578  13.657   7.513  1.00  0.00           H
ATOM   1121  HA  GLU A 170      23.565  11.942   8.583  1.00  0.00           H
ATOM   1122  HB2 GLU A 170      22.889  14.649   8.820  1.00  0.00           H
ATOM   1123  HB3 GLU A 170      22.439  14.088  10.386  1.00  0.00           H
ATOM   1124  HG2 GLU A 170      25.189  13.911   9.056  1.00  0.00           H
ATOM   1125  HG3 GLU A 170      24.732  14.958  10.380  1.00  0.00           H
ATOM   1126  N   ALA A 171      20.650  11.913  10.231  1.00 23.76           N
ATOM   1127  CA  ALA A 171      19.825  11.225  11.221  1.00 23.64           C
ATOM   1128  C   ALA A 171      19.409   9.819  10.767  1.00 23.90           C
ATOM   1129  O   ALA A 171      19.302   8.928  11.613  1.00 22.94           O
ATOM   1130  CB  ALA A 171      18.552  12.038  11.481  1.00 23.80           C
ATOM   1131  H   ALA A 171      20.258  12.747   9.797  1.00  0.00           H
ATOM   1132  HA  ALA A 171      20.394  11.140  12.148  1.00  0.00           H
ATOM   1133  HB1 ALA A 171      17.888  11.540  12.188  1.00  0.00           H
ATOM   1134  HB2 ALA A 171      18.789  13.020  11.892  1.00  0.00           H
ATOM   1135  HB3 ALA A 171      18.001  12.191  10.554  1.00  0.00           H
ATOM   1136  N   VAL A 172      19.200   9.607   9.460  1.00 24.62           N
ATOM   1137  CA  VAL A 172      19.026   8.299   8.827  1.00 25.76           C
ATOM   1138  C   VAL A 172      20.328   7.478   8.940  1.00 26.15           C
ATOM   1139  O   VAL A 172      20.271   6.312   9.332  1.00 25.46           O
ATOM   1140  CB  VAL A 172      18.537   8.488   7.365  1.00 25.40           C
ATOM   1141  CG1 VAL A 172      18.720   7.258   6.461  1.00 25.21           C
ATOM   1142  CG2 VAL A 172      17.051   8.894   7.344  1.00 22.74           C
ATOM   1143  H   VAL A 172      19.196  10.422   8.848  1.00  0.00           H
ATOM   1144  HA  VAL A 172      18.258   7.753   9.375  1.00  0.00           H
ATOM   1145  HB  VAL A 172      19.115   9.294   6.910  1.00  0.00           H
ATOM   1146 HG11 VAL A 172      18.308   7.445   5.472  1.00  0.00           H
ATOM   1147 HG12 VAL A 172      19.769   6.999   6.314  1.00  0.00           H
ATOM   1148 HG13 VAL A 172      18.206   6.389   6.864  1.00  0.00           H
ATOM   1149 HG21 VAL A 172      16.724   9.114   6.328  1.00  0.00           H
ATOM   1150 HG22 VAL A 172      16.414   8.093   7.719  1.00  0.00           H
ATOM   1151 HG23 VAL A 172      16.852   9.777   7.949  1.00  0.00           H
ATOM   1152  N   THR A 173      21.497   8.107   8.752  1.00 26.81           N
ATOM   1153  CA  THR A 173      22.838   7.534   8.967  1.00 28.03           C
ATOM   1154  C   THR A 173      23.189   7.546  10.489  1.00 27.32           C
ATOM   1155  O   THR A 173      24.339   7.684  10.907  1.00 26.39           O
ATOM   1156  CB  THR A 173      23.869   8.346   8.122  1.00 27.81           C
ATOM   1157  OG1 THR A 173      23.383   8.534   6.801  1.00 30.64           O
ATOM   1158  CG2 THR A 173      25.226   7.647   7.929  1.00 27.52           C
ATOM   1159  H   THR A 173      21.465   9.076   8.453  1.00  0.00           H
ATOM   1160  HA  THR A 173      22.835   6.496   8.625  1.00  0.00           H
ATOM   1161  HB  THR A 173      24.030   9.330   8.565  1.00  0.00           H
ATOM   1162  HG1 THR A 173      22.688   9.197   6.840  1.00  0.00           H
ATOM   1163 HG21 THR A 173      25.878   8.236   7.283  1.00  0.00           H
ATOM   1164 HG22 THR A 173      25.760   7.502   8.866  1.00  0.00           H
ATOM   1165 HG23 THR A 173      25.103   6.668   7.464  1.00  0.00           H
ATOM   1166  N   LYS A 174      22.168   7.444  11.345  1.00 27.78           N
ATOM   1167  CA  LYS A 174      22.181   7.219  12.786  1.00 31.22           C
ATOM   1168  C   LYS A 174      20.859   6.542  13.193  1.00 30.61           C
ATOM   1169  O   LYS A 174      20.301   6.772  14.272  1.00 30.04           O
ATOM   1170  CB  LYS A 174      22.589   8.500  13.556  1.00 32.27           C
ATOM   1171  CG  LYS A 174      23.970   8.375  14.234  1.00 36.69           C
ATOM   1172  CD  LYS A 174      24.688   9.723  14.424  1.00 39.08           C
ATOM   1173  CE  LYS A 174      25.671  10.063  13.288  1.00 41.57           C
ATOM   1174  NZ  LYS A 174      25.006  10.154  11.986  1.00 43.16          N1+
ATOM   1175  H   LYS A 174      21.255   7.423  10.909  1.00  0.00           H
ATOM   1176  HA  LYS A 174      22.929   6.445  12.969  1.00  0.00           H
ATOM   1177  HB2 LYS A 174      22.571   9.350  12.874  1.00  0.00           H
ATOM   1178  HB3 LYS A 174      21.854   8.755  14.319  1.00  0.00           H
ATOM   1179  HG2 LYS A 174      23.832   7.894  15.203  1.00  0.00           H
ATOM   1180  HG3 LYS A 174      24.625   7.708  13.672  1.00  0.00           H
ATOM   1181  HD2 LYS A 174      23.967  10.532  14.559  1.00  0.00           H
ATOM   1182  HD3 LYS A 174      25.260   9.686  15.352  1.00  0.00           H
ATOM   1183  HE2 LYS A 174      26.135  11.031  13.484  1.00  0.00           H
ATOM   1184  HE3 LYS A 174      26.476   9.331  13.225  1.00  0.00           H
ATOM   1185  HZ1 LYS A 174      25.596  10.705  11.342  1.00  0.00           H
ATOM   1186  HZ2 LYS A 174      24.712   9.278  11.565  1.00  0.00           H
ATOM   1187  HZ3 LYS A 174      24.244  10.832  12.034  1.00  0.00           H
ATOM   1188  N   ALA A 175      20.325   5.731  12.276  1.00 28.23           N
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ATOM   1189  CA  ALA A 175      19.082   5.001  12.392  1.00 26.89           C
ATOM   1190  C   ALA A 175      19.206   3.689  11.627  1.00 26.79           C
ATOM   1191  O   ALA A 175      19.154   2.639  12.258  1.00 27.40           O
ATOM   1192  CB  ALA A 175      17.889   5.881  11.985  1.00 24.63           C
ATOM   1193  H   ALA A 175      20.857   5.556  11.430  1.00  0.00           H
ATOM   1194  HA  ALA A 175      18.955   4.723  13.437  1.00  0.00           H
ATOM   1195  HB1 ALA A 175      16.943   5.411  12.250  1.00  0.00           H
ATOM   1196  HB2 ALA A 175      17.926   6.853  12.471  1.00  0.00           H
ATOM   1197  HB3 ALA A 175      17.879   6.063  10.911  1.00  0.00           H
ATOM   1198  N   VAL A 176      19.399   3.768  10.304  1.00 27.12           N
ATOM   1199  CA  VAL A 176      19.555   2.632   9.395  1.00 25.91           C
ATOM   1200  C   VAL A 176      20.996   2.084   9.508  1.00 26.78           C
ATOM   1201  O   VAL A 176      21.926   2.835   9.818  1.00 26.76           O
ATOM   1202  CB  VAL A 176      19.265   3.105   7.935  1.00 24.16           C
ATOM   1203  CG1 VAL A 176      19.342   1.965   6.900  1.00 25.45           C
ATOM   1204  CG2 VAL A 176      17.892   3.784   7.789  1.00 19.93           C
ATOM   1205  H   VAL A 176      19.572   4.678   9.888  1.00  0.00           H
ATOM   1206  HA  VAL A 176      18.834   1.865   9.669  1.00  0.00           H
ATOM   1207  HB  VAL A 176      20.018   3.845   7.656  1.00  0.00           H
ATOM   1208 HG11 VAL A 176      18.898   2.243   5.944  1.00  0.00           H
ATOM   1209 HG12 VAL A 176      20.375   1.707   6.683  1.00  0.00           H
ATOM   1210 HG13 VAL A 176      18.826   1.066   7.243  1.00  0.00           H
ATOM   1211 HG21 VAL A 176      17.735   4.103   6.759  1.00  0.00           H
ATOM   1212 HG22 VAL A 176      17.084   3.097   8.035  1.00  0.00           H
ATOM   1213 HG23 VAL A 176      17.802   4.671   8.413  1.00  0.00           H
ATOM   1214  N   SER A 177      21.176   0.788   9.233  1.00 24.88           N
ATOM   1215  CA  SER A 177      22.453   0.079   9.190  1.00 26.57           C
ATOM   1216  C   SER A 177      22.613  -0.795   7.930  1.00 27.23           C
ATOM   1217  O   SER A 177      23.372  -1.763   7.914  1.00 28.95           O
ATOM   1218  CB  SER A 177      22.794  -0.530  10.569  1.00 24.99           C
ATOM   1219  OG  SER A 177      21.950  -1.593  10.983  1.00 23.21           O
ATOM   1220  H   SER A 177      20.334   0.204   9.142  1.00  0.00           H
ATOM   1221  HA  SER A 177      23.224   0.834   9.026  1.00  0.00           H
ATOM   1222  HB2 SER A 177      23.816  -0.910  10.548  1.00  0.00           H
ATOM   1223  HB3 SER A 177      22.774   0.251  11.330  1.00  0.00           H
ATOM   1224  HG  SER A 177      21.025  -1.311  10.949  1.00  0.00           H
ATOM   1225  N   SER A 178      21.950  -0.389   6.843  1.00 26.97           N
ATOM   1226  CA  SER A 178      22.091  -0.882   5.478  1.00 26.31           C
ATOM   1227  C   SER A 178      22.287   0.319   4.525  1.00 26.98           C
ATOM   1228  O   SER A 178      22.561   1.431   4.982  1.00 27.69           O
ATOM   1229  CB  SER A 178      20.921  -1.840   5.159  1.00 26.87           C
ATOM   1230  OG  SER A 178      19.667  -1.178   5.172  1.00 26.69           O
ATOM   1231  H   SER A 178      21.388   0.444   6.926  1.00  0.00           H
ATOM   1232  HA  SER A 178      23.016  -1.457   5.409  1.00  0.00           H
ATOM   1233  HB2 SER A 178      21.064  -2.284   4.173  1.00  0.00           H
ATOM   1234  HB3 SER A 178      20.902  -2.671   5.866  1.00  0.00           H
ATOM   1235  HG  SER A 178      19.104  -1.574   4.500  1.00  0.00           H
ATOM   1236  N   GLU A 179      22.208   0.094   3.206  1.00 28.23           N
ATOM   1237  CA  GLU A 179      22.388   1.112   2.170  1.00 30.32           C
ATOM   1238  C   GLU A 179      21.119   1.984   2.066  1.00 29.86           C
ATOM   1239  O   GLU A 179      20.012   1.519   2.355  1.00 29.62           O
ATOM   1240  CB  GLU A 179      22.688   0.380   0.842  1.00 30.92           C
ATOM   1241  CG  GLU A 179      23.276   1.266  -0.280  1.00 36.26           C
ATOM   1242  CD  GLU A 179      22.398   1.349  -1.521  1.00 40.60           C
ATOM   1243  OE1 GLU A 179      21.188   1.627  -1.393  1.00 42.26           O
ATOM   1244  OE2 GLU A 179      22.925   1.152  -2.637  1.00 41.15           O1-
ATOM   1245  H   GLU A 179      21.867  -0.798   2.894  1.00  0.00           H
ATOM   1246  HA  GLU A 179      23.239   1.739   2.443  1.00  0.00           H
ATOM   1247  HB2 GLU A 179      23.409  -0.416   1.029  1.00  0.00           H
ATOM   1248  HB3 GLU A 179      21.788  -0.129   0.497  1.00  0.00           H
ATOM   1249  HG2 GLU A 179      23.457   2.283   0.065  1.00  0.00           H
ATOM   1250  HG3 GLU A 179      24.248   0.876  -0.583  1.00  0.00           H
ATOM   1251  N   VAL A 180      21.295   3.260   1.711  1.00 28.50           N
ATOM   1252  CA  VAL A 180      20.271   4.295   1.711  1.00 27.87           C
ATOM   1253  C   VAL A 180      20.390   5.137   0.433  1.00 27.26           C
ATOM   1254  O   VAL A 180      21.509   5.456   0.020  1.00 25.36           O
ATOM   1255  CB  VAL A 180      20.326   5.122   3.029  1.00 28.46           C
ATOM   1256  CG1 VAL A 180      19.942   4.280   4.259  1.00 25.72           C
ATOM   1257  CG2 VAL A 180      21.680   5.816   3.283  1.00 29.12           C
ATOM   1258  H   VAL A 180      22.187   3.543   1.337  1.00  0.00           H
ATOM   1259  HA  VAL A 180      19.303   3.804   1.667  1.00  0.00           H
ATOM   1260  HB  VAL A 180      19.579   5.912   2.931  1.00  0.00           H
ATOM   1261 HG11 VAL A 180      19.813   4.899   5.144  1.00  0.00           H
ATOM   1262 HG12 VAL A 180      19.012   3.740   4.090  1.00  0.00           H
ATOM   1263 HG13 VAL A 180      20.708   3.539   4.492  1.00  0.00           H
ATOM   1264 HG21 VAL A 180      21.642   6.435   4.179  1.00  0.00           H
ATOM   1265 HG22 VAL A 180      22.482   5.090   3.420  1.00  0.00           H
ATOM   1266 HG23 VAL A 180      21.963   6.469   2.457  1.00  0.00           H
ATOM   1267  N   LYS A 181      19.257   5.536  -0.156  1.00 26.75           N
ATOM   1268  CA  LYS A 181      19.161   6.442  -1.301  1.00 27.00           C
ATOM   1269  C   LYS A 181      18.089   7.503  -1.026  1.00 26.79           C
ATOM   1270  O   LYS A 181      17.076   7.207  -0.393  1.00 26.53           O
ATOM   1271  CB  LYS A 181      18.929   5.673  -2.619  1.00 28.69           C
ATOM   1272  CG  LYS A 181      20.047   4.664  -2.937  1.00 31.19           C
ATOM   1273  CD  LYS A 181      20.052   4.181  -4.396  1.00 35.82           C
ATOM   1274  CE  LYS A 181      21.189   3.191  -4.673  1.00 35.27           C
ATOM   1275  NZ  LYS A 181      20.891   1.863  -4.136  1.00 36.42           N1+
ATOM   1276  H   LYS A 181      18.375   5.218   0.239  1.00  0.00           H
ATOM   1277  HA  LYS A 181      20.105   6.983  -1.395  1.00  0.00           H
ATOM   1278  HB2 LYS A 181      17.965   5.163  -2.598  1.00  0.00           H
ATOM   1279  HB3 LYS A 181      18.869   6.403  -3.426  1.00  0.00           H
ATOM   1280  HG2 LYS A 181      21.013   5.123  -2.720  1.00  0.00           H
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ATOM   1281  HG3 LYS A 181      19.961   3.813  -2.261  1.00  0.00           H
ATOM   1282  HD2 LYS A 181      19.092   3.739  -4.670  1.00  0.00           H
ATOM   1283  HD3 LYS A 181      20.190   5.043  -5.049  1.00  0.00           H
ATOM   1284  HE2 LYS A 181      21.349   3.087  -5.747  1.00  0.00           H
ATOM   1285  HE3 LYS A 181      22.125   3.546  -4.240  1.00  0.00           H
ATOM   1286  HZ1 LYS A 181      21.764   1.401  -3.856  1.00  0.00           H
ATOM   1287  HZ2 LYS A 181      20.415   1.899  -3.241  1.00  0.00           H
ATOM   1288  HZ3 LYS A 181      20.378   1.321  -4.849  1.00  0.00           H
ATOM   1289  N   PHE A 182      18.323   8.733  -1.488  1.00 25.47           N
ATOM   1290  CA  PHE A 182      17.568   9.939  -1.169  1.00 24.54           C
ATOM   1291  C   PHE A 182      17.224  10.660  -2.479  1.00 23.94           C
ATOM   1292  O   PHE A 182      18.088  11.327  -3.056  1.00 25.57           O
ATOM   1293  CB  PHE A 182      18.427  10.832  -0.246  1.00 24.23           C
ATOM   1294  CG  PHE A 182      18.830  10.225   1.084  1.00 25.85           C
ATOM   1295  CD1 PHE A 182      17.909  10.158   2.150  1.00 25.40           C
ATOM   1296  CD2 PHE A 182      20.145   9.743   1.260  1.00 27.19           C
ATOM   1297  CE1 PHE A 182      18.307   9.616   3.388  1.00 27.01           C
ATOM   1298  CE2 PHE A 182      20.542   9.211   2.499  1.00 25.63           C
ATOM   1299  CZ  PHE A 182      19.625   9.149   3.563  1.00 26.56           C
ATOM   1300  H   PHE A 182      19.148   8.857  -2.085  1.00  0.00           H
ATOM   1301  HA  PHE A 182      16.642   9.693  -0.650  1.00  0.00           H
ATOM   1302  HB2 PHE A 182      19.339  11.129  -0.768  1.00  0.00           H
ATOM   1303  HB3 PHE A 182      17.902  11.762  -0.038  1.00  0.00           H
ATOM   1304  HD1 PHE A 182      16.900  10.526   2.023  1.00  0.00           H
ATOM   1305  HD2 PHE A 182      20.855   9.785   0.446  1.00  0.00           H
ATOM   1306  HE1 PHE A 182      17.598   9.559   4.200  1.00  0.00           H
ATOM   1307  HE2 PHE A 182      21.553   8.854   2.632  1.00  0.00           H
ATOM   1308  HZ  PHE A 182      19.947   8.744   4.509  1.00  0.00           H
ATOM   1309  N   GLY A 183      15.985  10.540  -2.964  1.00 24.28           N
ATOM   1310  CA  GLY A 183      15.539  11.110  -4.235  1.00 21.73           C
ATOM   1311  C   GLY A 183      14.380  12.088  -4.067  1.00 22.11           C
ATOM   1312  O   GLY A 183      13.573  11.945  -3.150  1.00 22.30           O
ATOM   1313  H   GLY A 183      15.304   9.998  -2.433  1.00  0.00           H
ATOM   1314  HA2 GLY A 183      16.355  11.592  -4.772  1.00  0.00           H
ATOM   1315  HA3 GLY A 183      15.186  10.306  -4.877  1.00  0.00           H
ATOM   1316  N   ILE A 184      14.250  13.056  -4.979  1.00 24.31           N
ATOM   1317  CA  ILE A 184      13.039  13.860  -5.114  1.00 25.05           C
ATOM   1318  C   ILE A 184      12.126  13.148  -6.133  1.00 27.69           C
ATOM   1319  O   ILE A 184      12.603  12.464  -7.045  1.00 27.87           O
ATOM   1320  CB  ILE A 184      13.407  15.299  -5.585  1.00 25.38           C
ATOM   1321  CG1 ILE A 184      12.294  16.305  -5.220  1.00 25.06           C
ATOM   1322  CG2 ILE A 184      13.787  15.422  -7.079  1.00 20.90           C
ATOM   1323  CD1 ILE A 184      12.718  17.772  -5.350  1.00 26.79           C
ATOM   1324  H   ILE A 184      14.932  13.105  -5.733  1.00  0.00           H
ATOM   1325  HA  ILE A 184      12.539  13.925  -4.148  1.00  0.00           H
ATOM   1326  HB  ILE A 184      14.279  15.598  -5.003  1.00  0.00           H
ATOM   1327 HG12 ILE A 184      11.408  16.131  -5.832  1.00  0.00           H
ATOM   1328 HG13 ILE A 184      11.981  16.139  -4.189  1.00  0.00           H
ATOM   1329 HG21 ILE A 184      14.220  16.396  -7.293  1.00  0.00           H
ATOM   1330 HG22 ILE A 184      14.519  14.675  -7.378  1.00  0.00           H
ATOM   1331 HG23 ILE A 184      12.922  15.311  -7.733  1.00  0.00           H
ATOM   1332 HD11 ILE A 184      11.916  18.415  -5.000  1.00  0.00           H
ATOM   1333 HD12 ILE A 184      13.605  17.986  -4.753  1.00  0.00           H
ATOM   1334 HD13 ILE A 184      12.927  18.049  -6.383  1.00  0.00           H
ATOM   1335  N   LEU A 185      10.815  13.322  -5.997  1.00 28.44           N
ATOM   1336  CA  LEU A 185       9.823  12.950  -6.996  1.00 29.84           C
ATOM   1337  C   LEU A 185       9.650  14.124  -7.985  1.00 29.59           C
ATOM   1338  O   LEU A 185       9.566  15.265  -7.516  1.00 31.09           O
ATOM   1339  CB  LEU A 185       8.465  12.745  -6.294  1.00 30.35           C
ATOM   1340  CG  LEU A 185       8.424  11.617  -5.242  1.00 31.80           C
ATOM   1341  CD1 LEU A 185       6.981  11.430  -4.761  1.00 29.02           C
ATOM   1342  CD2 LEU A 185       9.033  10.304  -5.753  1.00 32.61           C
ATOM   1343  H   LEU A 185      10.485  13.832  -5.181  1.00  0.00           H
ATOM   1344  HA  LEU A 185      10.126  12.029  -7.490  1.00  0.00           H
ATOM   1345  HB2 LEU A 185       8.140  13.676  -5.824  1.00  0.00           H
ATOM   1346  HB3 LEU A 185       7.720  12.531  -7.063  1.00  0.00           H
ATOM   1347  HG  LEU A 185       9.011  11.913  -4.373  1.00  0.00           H
ATOM   1348 HD11 LEU A 185       6.859  10.525  -4.170  1.00  0.00           H
ATOM   1349 HD12 LEU A 185       6.673  12.279  -4.152  1.00  0.00           H
ATOM   1350 HD13 LEU A 185       6.290  11.366  -5.597  1.00  0.00           H
ATOM   1351 HD21 LEU A 185       8.719   9.456  -5.149  1.00  0.00           H
ATOM   1352 HD22 LEU A 185       8.754  10.099  -6.782  1.00  0.00           H
ATOM   1353 HD23 LEU A 185      10.122  10.343  -5.723  1.00  0.00           H
ATOM   1354  N   PRO A 186       9.571  13.872  -9.315  1.00 28.92           N
ATOM   1355  CA  PRO A 186       9.273  14.872 -10.355  1.00 29.13           C
ATOM   1356  C   PRO A 186       8.087  15.796 -10.016  1.00 28.44           C
ATOM   1357  O   PRO A 186       6.951  15.343  -9.838  1.00 28.12           O
ATOM   1358  CB  PRO A 186       9.014  14.062 -11.634  1.00 30.26           C
ATOM   1359  CG  PRO A 186       9.769  12.762 -11.436  1.00 28.14           C
ATOM   1360  CD  PRO A 186       9.814  12.562  -9.925  1.00 28.20           C
ATOM   1361  HA  PRO A 186      10.178  15.467 -10.486  1.00  0.00           H
ATOM   1362  HB2 PRO A 186       7.953  13.844 -11.761  1.00  0.00           H
ATOM   1363  HB3 PRO A 186       9.355  14.588 -12.526  1.00  0.00           H
ATOM   1364  HG2 PRO A 186       9.307  11.920 -11.952  1.00  0.00           H
ATOM   1365  HG3 PRO A 186      10.785  12.867 -11.820  1.00  0.00           H
ATOM   1366  HD2 PRO A 186       9.030  11.877  -9.613  1.00  0.00           H
ATOM   1367  HD3 PRO A 186      10.779  12.143  -9.632  1.00  0.00           H
ATOM   1368  N   LYS A 187       8.362  17.102  -9.940  1.00 28.27           N
ATOM   1369  CA  LYS A 187       7.438  18.155  -9.534  1.00 28.97           C
ATOM   1370  C   LYS A 187       6.347  18.418 -10.589  1.00 26.32           C
ATOM   1371  O   LYS A 187       5.278  18.931 -10.253  1.00 25.20           O
ATOM   1372  CB  LYS A 187       8.235  19.443  -9.276  1.00 32.18           C
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ATOM   1373  CG  LYS A 187       9.091  19.401  -7.993  1.00 34.77           C
ATOM   1374  CD  LYS A 187       8.424  20.004  -6.740  1.00 38.08           C
ATOM   1375  CE  LYS A 187       7.630  19.003  -5.883  1.00 37.86           C
ATOM   1376  NZ  LYS A 187       7.051  19.671  -4.702  1.00 39.41           N1+
ATOM   1377  H   LYS A 187       9.257  17.395 -10.317  1.00  0.00           H
ATOM   1378  HA  LYS A 187       6.967  17.848  -8.608  1.00  0.00           H
ATOM   1379  HB2 LYS A 187       8.884  19.628 -10.136  1.00  0.00           H
ATOM   1380  HB3 LYS A 187       7.571  20.308  -9.240  1.00  0.00           H
ATOM   1381  HG2 LYS A 187       9.480  18.400  -7.796  1.00  0.00           H
ATOM   1382  HG3 LYS A 187       9.972  20.002  -8.202  1.00  0.00           H
ATOM   1383  HD2 LYS A 187       9.212  20.423  -6.115  1.00  0.00           H
ATOM   1384  HD3 LYS A 187       7.798  20.853  -7.020  1.00  0.00           H
ATOM   1385  HE2 LYS A 187       6.819  18.567  -6.461  1.00  0.00           H
ATOM   1386  HE3 LYS A 187       8.269  18.174  -5.581  1.00  0.00           H
ATOM   1387  HZ1 LYS A 187       6.694  19.046  -3.974  1.00  0.00           H
ATOM   1388  HZ2 LYS A 187       7.704  20.315  -4.249  1.00  0.00           H
ATOM   1389  HZ3 LYS A 187       6.261  20.236  -5.032  1.00  0.00           H
ATOM   1390  N   GLU A 188       6.607  18.005 -11.833  1.00 26.19           N
ATOM   1391  CA  GLU A 188       5.725  17.996 -12.998  1.00 25.89           C
ATOM   1392  C   GLU A 188       4.500  17.115 -12.730  1.00 25.60           C
ATOM   1393  O   GLU A 188       3.358  17.575 -12.743  1.00 25.35           O
ATOM   1394  CB  GLU A 188       6.469  17.456 -14.256  1.00 28.34           C
ATOM   1395  CG  GLU A 188       7.785  16.682 -14.031  1.00 32.78           C
ATOM   1396  CD  GLU A 188       8.948  17.595 -13.696  1.00 33.60           C
ATOM   1397  OE1 GLU A 188       9.430  17.533 -12.551  1.00 31.32           O
ATOM   1398  OE2 GLU A 188       9.321  18.414 -14.564  1.00 35.45           O1-
ATOM   1399  H   GLU A 188       7.564  17.685 -11.981  1.00  0.00           H
ATOM   1400  HA  GLU A 188       5.377  19.014 -13.186  1.00  0.00           H
ATOM   1401  HB2 GLU A 188       5.812  16.826 -14.858  1.00  0.00           H
ATOM   1402  HB3 GLU A 188       6.681  18.297 -14.909  1.00  0.00           H
ATOM   1403  HG2 GLU A 188       7.656  15.920 -13.265  1.00  0.00           H
ATOM   1404  HG3 GLU A 188       8.047  16.143 -14.940  1.00  0.00           H
ATOM   1405  N   HIS A 189       4.765  15.834 -12.448  1.00 23.36           N
ATOM   1406  CA  HIS A 189       3.757  14.799 -12.225  1.00 23.70           C
ATOM   1407  C   HIS A 189       3.098  14.970 -10.846  1.00 22.66           C
ATOM   1408  O   HIS A 189       1.940  14.595 -10.655  1.00 23.19           O
ATOM   1409  CB  HIS A 189       4.411  13.408 -12.336  1.00 22.55           C
ATOM   1410  CG  HIS A 189       5.238  13.173 -13.585  1.00 24.25           C
ATOM   1411  ND1 HIS A 189       4.995  13.791 -14.808  1.00 24.12           N
ATOM   1412  CD2 HIS A 189       6.317  12.346 -13.808  1.00 22.85           C
ATOM   1413  CE1 HIS A 189       5.916  13.360 -15.670  1.00 22.58           C
ATOM   1414  NE2 HIS A 189       6.736  12.463 -15.136  1.00 24.93           N
ATOM   1415  H   HIS A 189       5.735  15.550 -12.467  1.00  0.00           H
ATOM   1416  HA  HIS A 189       2.993  14.894 -12.996  1.00  0.00           H
ATOM   1417  HB2 HIS A 189       5.055  13.219 -11.474  1.00  0.00           H
ATOM   1418  HB3 HIS A 189       3.633  12.644 -12.300  1.00  0.00           H
ATOM   1419  HD1 HIS A 189       4.291  14.509 -15.040  1.00  0.00           H
ATOM   1420  HD2 HIS A 189       6.821  11.676 -13.123  1.00  0.00           H
ATOM   1421  HE1 HIS A 189       5.988  13.703 -16.695  1.00  0.00           H
ATOM   1422  N   TRP A 190       3.793  15.656  -9.932  1.00 21.90           N
ATOM   1423  CA  TRP A 190       3.304  16.179  -8.661  1.00 22.07           C
ATOM   1424  C   TRP A 190       2.615  17.559  -8.857  1.00 22.09           C
ATOM   1425  O   TRP A 190       2.576  18.392  -7.950  1.00 23.25           O
ATOM   1426  CB  TRP A 190       4.534  16.321  -7.746  1.00 20.63           C
ATOM   1427  CG  TRP A 190       4.320  16.400  -6.269  1.00 20.86           C
ATOM   1428  CD1 TRP A 190       4.355  17.538  -5.545  1.00 20.30           C
ATOM   1429  CD2 TRP A 190       4.166  15.316  -5.304  1.00 20.57           C
ATOM   1430  NE1 TRP A 190       4.263  17.234  -4.205  1.00 22.97           N
ATOM   1431  CE3 TRP A 190       4.121  13.906  -5.387  1.00 20.34           C
ATOM   1432  CE2 TRP A 190       4.096  15.886  -3.999  1.00 21.62           C
ATOM   1433  CZ3 TRP A 190       4.019  13.113  -4.226  1.00 20.80           C
ATOM   1434  CZ2 TRP A 190       3.970  15.110  -2.839  1.00 20.94           C
ATOM   1435  CH2 TRP A 190       3.935  13.712  -2.953  1.00 23.55           C
ATOM   1436  H   TRP A 190       4.739  15.913 -10.190  1.00  0.00           H
ATOM   1437  HA  TRP A 190       2.600  15.462  -8.241  1.00  0.00           H
ATOM   1438  HB2 TRP A 190       5.219  15.486  -7.898  1.00  0.00           H
ATOM   1439  HB3 TRP A 190       5.075  17.214  -8.037  1.00  0.00           H
ATOM   1440  HD1 TRP A 190       4.506  18.518  -5.973  1.00  0.00           H
ATOM   1441  HE1 TRP A 190       4.634  17.854  -3.466  1.00  0.00           H
ATOM   1442  HE3 TRP A 190       4.196  13.431  -6.354  1.00  0.00           H
ATOM   1443  HZ3 TRP A 190       4.014  12.037  -4.314  1.00  0.00           H
ATOM   1444  HZ2 TRP A 190       3.934  15.582  -1.870  1.00  0.00           H
ATOM   1445  HH2 TRP A 190       3.861  13.113  -2.058  1.00  0.00           H
ATOM   1446  N   SER A 191       2.039  17.806 -10.037  1.00 23.12           N
ATOM   1447  CA  SER A 191       1.184  18.933 -10.384  1.00 23.81           C
ATOM   1448  C   SER A 191      -0.008  18.407 -11.203  1.00 24.41           C
ATOM   1449  O   SER A 191      -0.223  17.193 -11.252  1.00 24.90           O
ATOM   1450  CB  SER A 191       2.022  20.107 -10.943  1.00 25.10           C
ATOM   1451  OG  SER A 191       2.267  20.055 -12.339  1.00 24.23           O
ATOM   1452  H   SER A 191       2.088  17.082 -10.740  1.00  0.00           H
ATOM   1453  HA  SER A 191       0.736  19.295  -9.459  1.00  0.00           H
ATOM   1454  HB2 SER A 191       1.509  21.044 -10.724  1.00  0.00           H
ATOM   1455  HB3 SER A 191       2.975  20.169 -10.422  1.00  0.00           H
ATOM   1456  HG  SER A 191       2.640  19.189 -12.542  1.00  0.00           H
ATOM   1457  N   TYR A 192      -0.817  19.297 -11.782  1.00 24.18           N
ATOM   1458  CA  TYR A 192      -2.047  18.969 -12.502  1.00 22.22           C
ATOM   1459  C   TYR A 192      -1.736  19.075 -14.006  1.00 21.91           C
ATOM   1460  O   TYR A 192      -1.526  20.196 -14.466  1.00 20.67           O
ATOM   1461  CB  TYR A 192      -3.111  20.046 -12.154  1.00 22.43           C
ATOM   1462  CG  TYR A 192      -3.402  20.203 -10.671  1.00 24.33           C
ATOM   1463  CD1 TYR A 192      -4.498  19.546 -10.077  1.00 24.83           C
ATOM   1464  CD2 TYR A 192      -2.563  21.010  -9.876  1.00 24.09           C
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ATOM   1465  CE1 TYR A 192      -4.710  19.649  -8.687  1.00 24.93           C
ATOM   1466  CE2 TYR A 192      -2.775  21.108  -8.493  1.00 24.35           C
ATOM   1467  CZ  TYR A 192      -3.829  20.397  -7.891  1.00 24.98           C
ATOM   1468  OH  TYR A 192      -3.981  20.403  -6.538  1.00 28.04           O
ATOM   1469  H   TYR A 192      -0.529  20.268 -11.835  1.00  0.00           H
ATOM   1470  HA  TYR A 192      -2.433  17.987 -12.228  1.00  0.00           H
ATOM   1471  HB2 TYR A 192      -2.811  21.030 -12.519  1.00  0.00           H
ATOM   1472  HB3 TYR A 192      -4.042  19.816 -12.675  1.00  0.00           H
ATOM   1473  HD1 TYR A 192      -5.158  18.939 -10.678  1.00  0.00           H
ATOM   1474  HD2 TYR A 192      -1.736  21.544 -10.323  1.00  0.00           H
ATOM   1475  HE1 TYR A 192      -5.530  19.130  -8.218  1.00  0.00           H
ATOM   1476  HE2 TYR A 192      -2.105  21.714  -7.903  1.00  0.00           H
ATOM   1477  HH  TYR A 192      -3.413  21.062  -6.111  1.00  0.00           H
ATOM   1478  N   PRO A 193      -1.677  17.974 -14.788  1.00 22.36           N
ATOM   1479  CA  PRO A 193      -1.548  18.028 -16.253  1.00 24.02           C
ATOM   1480  C   PRO A 193      -2.604  18.904 -16.950  1.00 24.39           C
ATOM   1481  O   PRO A 193      -3.712  19.103 -16.453  1.00 24.70           O
ATOM   1482  CB  PRO A 193      -1.697  16.576 -16.722  1.00 24.46           C
ATOM   1483  CG  PRO A 193      -1.335  15.722 -15.524  1.00 25.42           C
ATOM   1484  CD  PRO A 193      -1.614  16.597 -14.304  1.00 24.13           C
ATOM   1485  HA  PRO A 193      -0.549  18.402 -16.487  1.00  0.00           H
ATOM   1486  HB2 PRO A 193      -2.728  16.360 -17.003  1.00  0.00           H
ATOM   1487  HB3 PRO A 193      -1.077  16.357 -17.592  1.00  0.00           H
ATOM   1488  HG2 PRO A 193      -1.900  14.789 -15.502  1.00  0.00           H
ATOM   1489  HG3 PRO A 193      -0.274  15.479 -15.570  1.00  0.00           H
ATOM   1490  HD2 PRO A 193      -2.555  16.309 -13.845  1.00  0.00           H
ATOM   1491  HD3 PRO A 193      -0.829  16.479 -13.562  1.00  0.00           H
ATOM   1492  N   GLU A 194      -2.274  19.394 -18.140  1.00 22.73           N
ATOM   1493  CA  GLU A 194      -3.071  20.324 -18.932  1.00 23.46           C
ATOM   1494  C   GLU A 194      -4.298  19.645 -19.587  1.00 23.36           C
ATOM   1495  O   GLU A 194      -5.120  20.339 -20.180  1.00 21.68           O
ATOM   1496  CB  GLU A 194      -2.141  20.936 -20.010  1.00 25.61           C
ATOM   1497  CG  GLU A 194      -1.122  21.983 -19.478  1.00 28.09           C
ATOM   1498  CD  GLU A 194      -0.123  21.465 -18.444  1.00 32.73           C
ATOM   1499  OE1 GLU A 194       0.173  22.211 -17.486  1.00 31.59           O
ATOM   1500  OE2 GLU A 194       0.278  20.282 -18.545  1.00 33.69           O1-
ATOM   1501  H   GLU A 194      -1.278  19.375 -18.388  1.00  0.00           H
ATOM   1502  HA  GLU A 194      -3.447  21.120 -18.287  1.00  0.00           H
ATOM   1503  HB2 GLU A 194      -1.609  20.144 -20.540  1.00  0.00           H
ATOM   1504  HB3 GLU A 194      -2.747  21.434 -20.767  1.00  0.00           H
ATOM   1505  HG2 GLU A 194      -0.546  22.385 -20.310  1.00  0.00           H
ATOM   1506  HG3 GLU A 194      -1.660  22.825 -19.042  1.00  0.00           H
ATOM   1507  N   TRP A 195      -4.457  18.318 -19.448  1.00 22.03           N
ATOM   1508  CA  TRP A 195      -5.665  17.584 -19.841  1.00 22.35           C
ATOM   1509  C   TRP A 195      -6.723  17.561 -18.717  1.00 22.75           C
ATOM   1510  O   TRP A 195      -7.867  17.182 -18.965  1.00 21.13           O
ATOM   1511  CB  TRP A 195      -5.305  16.121 -20.207  1.00 22.81           C
ATOM   1512  CG  TRP A 195      -4.709  15.201 -19.172  1.00 23.84           C
ATOM   1513  CD1 TRP A 195      -5.383  14.631 -18.145  1.00 25.41           C
ATOM   1514  CD2 TRP A 195      -3.359  14.643 -19.109  1.00 23.39           C
ATOM   1515  NE1 TRP A 195      -4.544  13.793 -17.441  1.00 26.41           N
ATOM   1516  CE3 TRP A 195      -2.186  14.786 -19.888  1.00 23.41           C
ATOM   1517  CE2 TRP A 195      -3.304  13.709 -18.029  1.00 24.13           C
ATOM   1518  CZ3 TRP A 195      -1.030  14.023 -19.618  1.00 26.61           C
ATOM   1519  CZ2 TRP A 195      -2.166  12.930 -17.760  1.00 24.83           C
ATOM   1520  CH2 TRP A 195      -1.022  13.090 -18.562  1.00 23.38           C
ATOM   1521  H   TRP A 195      -3.741  17.818 -18.945  1.00  0.00           H
ATOM   1522  HA  TRP A 195      -6.120  18.056 -20.714  1.00  0.00           H
ATOM   1523  HB2 TRP A 195      -6.209  15.627 -20.568  1.00  0.00           H
ATOM   1524  HB3 TRP A 195      -4.635  16.124 -21.067  1.00  0.00           H
ATOM   1525  HD1 TRP A 195      -6.433  14.790 -17.942  1.00  0.00           H
ATOM   1526  HE1 TRP A 195      -4.869  13.187 -16.680  1.00  0.00           H
ATOM   1527  HE3 TRP A 195      -2.190  15.463 -20.728  1.00  0.00           H
ATOM   1528  HZ3 TRP A 195      -0.160  14.125 -20.249  1.00  0.00           H
ATOM   1529  HZ2 TRP A 195      -2.181  12.198 -16.965  1.00  0.00           H
ATOM   1530  HH2 TRP A 195      -0.155  12.468 -18.390  1.00  0.00           H
ATOM   1531  N   ILE A 196      -6.356  17.929 -17.481  1.00 22.64           N
ATOM   1532  CA  ILE A 196      -7.221  17.876 -16.306  1.00 24.40           C
ATOM   1533  C   ILE A 196      -8.181  19.077 -16.352  1.00 23.38           C
ATOM   1534  O   ILE A 196      -7.770  20.201 -16.652  1.00 23.92           O
ATOM   1535  CB  ILE A 196      -6.330  17.955 -15.026  1.00 23.65           C
ATOM   1536  CG1 ILE A 196      -5.267  16.834 -14.961  1.00 23.75           C
ATOM   1537  CG2 ILE A 196      -7.096  18.020 -13.689  1.00 25.15           C
ATOM   1538  CD1 ILE A 196      -5.815  15.417 -14.769  1.00 22.43           C
ATOM   1539  H   ILE A 196      -5.426  18.307 -17.352  1.00  0.00           H
ATOM   1540  HA  ILE A 196      -7.793  16.947 -16.314  1.00  0.00           H
ATOM   1541  HB  ILE A 196      -5.785  18.899 -15.082  1.00  0.00           H
ATOM   1542 HG12 ILE A 196      -4.656  16.830 -15.860  1.00  0.00           H
ATOM   1543 HG13 ILE A 196      -4.586  17.063 -14.144  1.00  0.00           H
ATOM   1544 HG21 ILE A 196      -6.406  18.062 -12.846  1.00  0.00           H
ATOM   1545 HG22 ILE A 196      -7.723  18.908 -13.618  1.00  0.00           H
ATOM   1546 HG23 ILE A 196      -7.728  17.144 -13.557  1.00  0.00           H
ATOM   1547 HD11 ILE A 196      -5.006  14.686 -14.775  1.00  0.00           H
ATOM   1548 HD12 ILE A 196      -6.329  15.323 -13.821  1.00  0.00           H
ATOM   1549 HD13 ILE A 196      -6.512  15.136 -15.558  1.00  0.00           H
ATOM   1550  N   ASN A 197      -9.450  18.866 -15.980  1.00 22.81           N
ATOM   1551  CA  ASN A 197     -10.418  19.929 -15.719  1.00 22.80           C
ATOM   1552  C   ASN A 197      -9.995  20.660 -14.426  1.00 21.04           C
ATOM   1553  O   ASN A 197     -10.409  20.330 -13.312  1.00 21.74           O
ATOM   1554  CB  ASN A 197     -11.847  19.330 -15.629  1.00  0.00           C
ATOM   1555  CG  ASN A 197     -12.909  20.311 -15.121  1.00  0.00           C
ATOM   1556  OD1 ASN A 197     -13.426  20.130 -14.029  1.00  0.00           O
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ATOM   1557  ND2 ASN A 197     -13.240  21.371 -15.846  1.00  0.00           N
ATOM   1558  H   ASN A 197      -9.719  17.910 -15.745  1.00  0.00           H
ATOM   1559  HA  ASN A 197     -10.398  20.640 -16.547  1.00  0.00           H
ATOM   1560  HB2 ASN A 197     -12.155  18.945 -16.601  1.00  0.00           H
ATOM   1561  HB3 ASN A 197     -11.851  18.475 -14.954  1.00  0.00           H
ATOM   1562 HD22 ASN A 197     -13.857  22.044 -15.385  1.00  0.00           H
ATOM   1563 HD21 ASN A 197     -12.874  21.543 -16.767  1.00  0.00           H
ATOM   1564  N   GLN A 198      -9.171  21.697 -14.587  1.00 20.33           N
ATOM   1565  CA  GLN A 198      -8.737  22.620 -13.539  1.00 20.78           C
ATOM   1566  C   GLN A 198      -9.854  23.632 -13.184  1.00 22.61           C
ATOM   1567  O   GLN A 198      -9.583  24.801 -12.923  1.00 19.79           O
ATOM   1568  CB  GLN A 198      -7.402  23.283 -13.959  1.00 22.47           C
ATOM   1569  CG  GLN A 198      -6.286  22.234 -14.213  1.00 22.31           C
ATOM   1570  CD  GLN A 198      -4.859  22.755 -14.031  1.00 23.01           C
ATOM   1571  OE1 GLN A 198      -4.544  23.399 -13.031  1.00 21.95           O
ATOM   1572  NE2 GLN A 198      -3.970  22.444 -14.967  1.00 23.94           N
ATOM   1573  H   GLN A 198      -8.772  21.815 -15.512  1.00  0.00           H
ATOM   1574  HA  GLN A 198      -8.542  22.068 -12.626  1.00  0.00           H
ATOM   1575  HB2 GLN A 198      -7.540  23.901 -14.847  1.00  0.00           H
ATOM   1576  HB3 GLN A 198      -7.092  23.967 -13.167  1.00  0.00           H
ATOM   1577  HG2 GLN A 198      -6.397  21.402 -13.516  1.00  0.00           H
ATOM   1578  HG3 GLN A 198      -6.399  21.808 -15.209  1.00  0.00           H
ATOM   1579 HE21 GLN A 198      -4.232  21.856 -15.747  1.00  0.00           H
ATOM   1580 HE22 GLN A 198      -3.006  22.774 -14.922  1.00  0.00           H
ATOM   1581  N   THR A 199     -11.106  23.151 -13.122  1.00 22.32           N
ATOM   1582  CA  THR A 199     -12.241  23.786 -12.471  1.00 22.52           C
ATOM   1583  C   THR A 199     -12.635  22.833 -11.332  1.00 21.34           C
ATOM   1584  O   THR A 199     -12.414  23.199 -10.185  1.00 21.66           O
ATOM   1585  CB  THR A 199     -13.365  24.217 -13.459  1.00 21.15           C
ATOM   1586  OG1 THR A 199     -14.301  23.205 -13.774  1.00 24.02           O
ATOM   1587  CG2 THR A 199     -12.845  24.839 -14.765  1.00 20.12           C
ATOM   1588  H   THR A 199     -11.222  22.164 -13.314  1.00  0.00           H
ATOM   1589  HA  THR A 199     -11.897  24.706 -11.994  1.00  0.00           H
ATOM   1590  HB  THR A 199     -13.948  24.987 -12.948  1.00  0.00           H
ATOM   1591  HG1 THR A 199     -14.891  23.175 -13.006  1.00  0.00           H
ATOM   1592 HG21 THR A 199     -13.666  25.239 -15.360  1.00  0.00           H
ATOM   1593 HG22 THR A 199     -12.158  25.659 -14.555  1.00  0.00           H
ATOM   1594 HG23 THR A 199     -12.314  24.110 -15.376  1.00  0.00           H
ATOM   1595  N   LYS A 200     -13.052  21.576 -11.578  1.00 21.45           N
ATOM   1596  CA  LYS A 200     -13.424  20.617 -10.522  1.00 22.36           C
ATOM   1597  C   LYS A 200     -12.214  20.272  -9.631  1.00 21.80           C
ATOM   1598  O   LYS A 200     -12.351  20.119  -8.417  1.00 21.82           O
ATOM   1599  CB  LYS A 200     -14.029  19.340 -11.150  1.00 23.43           C
ATOM   1600  CG  LYS A 200     -14.689  18.370 -10.145  1.00 27.52           C
ATOM   1601  CD  LYS A 200     -15.197  17.083 -10.818  1.00 27.63           C
ATOM   1602  CE  LYS A 200     -15.695  16.026  -9.810  1.00 27.92           C
ATOM   1603  NZ  LYS A 200     -15.722  14.677 -10.407  1.00 31.29           N1+
ATOM   1604  H   LYS A 200     -13.276  21.316 -12.537  1.00  0.00           H
ATOM   1605  HA  LYS A 200     -14.184  21.082  -9.896  1.00  0.00           H
ATOM   1606  HB2 LYS A 200     -14.792  19.641 -11.869  1.00  0.00           H
ATOM   1607  HB3 LYS A 200     -13.259  18.817 -11.720  1.00  0.00           H
ATOM   1608  HG2 LYS A 200     -13.972  18.108  -9.367  1.00  0.00           H
ATOM   1609  HG3 LYS A 200     -15.510  18.881  -9.638  1.00  0.00           H
ATOM   1610  HD2 LYS A 200     -15.987  17.330 -11.529  1.00  0.00           H
ATOM   1611  HD3 LYS A 200     -14.379  16.674 -11.413  1.00  0.00           H
ATOM   1612  HE2 LYS A 200     -15.044  15.991  -8.937  1.00  0.00           H
ATOM   1613  HE3 LYS A 200     -16.684  16.287  -9.430  1.00  0.00           H
ATOM   1614  HZ1 LYS A 200     -15.704  13.951  -9.653  1.00  0.00           H
ATOM   1615  HZ2 LYS A 200     -16.539  14.525 -10.971  1.00  0.00           H
ATOM   1616  HZ3 LYS A 200     -14.891  14.504 -10.948  1.00  0.00           H
ATOM   1617  N   ALA A 201     -11.007  20.246 -10.213  1.00 21.18           N
ATOM   1618  CA  ALA A 201      -9.748  20.135  -9.479  1.00 21.35           C
ATOM   1619  C   ALA A 201      -9.366  21.425  -8.723  1.00 21.94           C
ATOM   1620  O   ALA A 201      -8.382  21.399  -7.988  1.00 19.69           O
ATOM   1621  CB  ALA A 201      -8.615  19.787 -10.461  1.00 16.72           C
ATOM   1622  H   ALA A 201     -10.977  20.390 -11.218  1.00  0.00           H
ATOM   1623  HA  ALA A 201      -9.834  19.340  -8.738  1.00  0.00           H
ATOM   1624  HB1 ALA A 201      -7.636  19.840  -9.984  1.00  0.00           H
ATOM   1625  HB2 ALA A 201      -8.721  18.785 -10.869  1.00  0.00           H
ATOM   1626  HB3 ALA A 201      -8.589  20.471 -11.299  1.00  0.00           H
ATOM   1627  N   ALA A 202     -10.096  22.537  -8.886  1.00 20.87           N
ATOM   1628  CA  ALA A 202      -9.938  23.801  -8.165  1.00 22.47           C
ATOM   1629  C   ALA A 202     -11.090  23.990  -7.155  1.00 22.33           C
ATOM   1630  O   ALA A 202     -10.830  24.305  -5.996  1.00 22.37           O
ATOM   1631  CB  ALA A 202      -9.924  24.973  -9.162  1.00 19.99           C
ATOM   1632  H   ALA A 202     -10.922  22.477  -9.477  1.00  0.00           H
ATOM   1633  HA  ALA A 202      -8.990  23.819  -7.633  1.00  0.00           H
ATOM   1634  HB1 ALA A 202      -9.704  25.909  -8.649  1.00  0.00           H
ATOM   1635  HB2 ALA A 202      -9.157  24.833  -9.924  1.00  0.00           H
ATOM   1636  HB3 ALA A 202     -10.876  25.108  -9.674  1.00  0.00           H
ATOM   1637  N   GLU A 203     -12.345  23.743  -7.562  1.00 22.02           N
ATOM   1638  CA  GLU A 203     -13.584  23.857  -6.781  1.00 23.59           C
ATOM   1639  C   GLU A 203     -13.514  23.010  -5.495  1.00 23.77           C
ATOM   1640  O   GLU A 203     -13.722  23.495  -4.379  1.00 22.97           O
ATOM   1641  CB  GLU A 203     -14.778  23.386  -7.650  1.00 24.19           C
ATOM   1642  CG  GLU A 203     -15.121  24.253  -8.892  1.00 28.14           C
ATOM   1643  CD  GLU A 203     -15.756  23.445 -10.033  1.00 30.24           C
ATOM   1644  OE1 GLU A 203     -16.418  22.431  -9.723  1.00 31.20           O
ATOM   1645  OE2 GLU A 203     -15.517  23.805 -11.209  1.00 32.85           O1-
ATOM   1646  H   GLU A 203     -12.472  23.520  -8.551  1.00  0.00           H
ATOM   1647  HA  GLU A 203     -13.727  24.901  -6.497  1.00  0.00           H
ATOM   1648  HB2 GLU A 203     -14.583  22.362  -7.970  1.00  0.00           H
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ATOM   1649  HB3 GLU A 203     -15.679  23.318  -7.038  1.00  0.00           H
ATOM   1650  HG2 GLU A 203     -15.807  25.052  -8.615  1.00  0.00           H
ATOM   1651  HG3 GLU A 203     -14.232  24.744  -9.285  1.00  0.00           H
ATOM   1652  N   ILE A 204     -13.141  21.736  -5.656  1.00 23.93           N
ATOM   1653  CA  ILE A 204     -13.127  20.729  -4.601  1.00 24.60           C
ATOM   1654  C   ILE A 204     -11.791  20.784  -3.811  1.00 24.13           C
ATOM   1655  O   ILE A 204     -11.577  19.974  -2.910  1.00 26.89           O
ATOM   1656  CB  ILE A 204     -13.442  19.342  -5.251  1.00 24.83           C
ATOM   1657  CG1 ILE A 204     -14.695  19.388  -6.175  1.00 27.64           C
ATOM   1658  CG2 ILE A 204     -13.617  18.191  -4.236  1.00 22.97           C
ATOM   1659  CD1 ILE A 204     -16.002  19.818  -5.490  1.00 28.38           C
ATOM   1660  H   ILE A 204     -12.969  21.413  -6.603  1.00  0.00           H
ATOM   1661  HA  ILE A 204     -13.917  20.951  -3.881  1.00  0.00           H
ATOM   1662  HB  ILE A 204     -12.598  19.072  -5.888  1.00  0.00           H
ATOM   1663 HG12 ILE A 204     -14.523  20.045  -7.027  1.00  0.00           H
ATOM   1664 HG13 ILE A 204     -14.854  18.408  -6.622  1.00  0.00           H
ATOM   1665 HG21 ILE A 204     -14.020  17.302  -4.718  1.00  0.00           H
ATOM   1666 HG22 ILE A 204     -12.678  17.892  -3.779  1.00  0.00           H
ATOM   1667 HG23 ILE A 204     -14.305  18.470  -3.438  1.00  0.00           H
ATOM   1668 HD11 ILE A 204     -16.826  19.811  -6.203  1.00  0.00           H
ATOM   1669 HD12 ILE A 204     -16.268  19.151  -4.671  1.00  0.00           H
ATOM   1670 HD13 ILE A 204     -15.937  20.830  -5.091  1.00  0.00           H
ATOM   1671  N   ARG A 205     -10.920  21.786  -4.049  1.00 23.13           N
ATOM   1672  CA  ARG A 205      -9.813  22.133  -3.142  1.00 25.14           C
ATOM   1673  C   ARG A 205     -10.369  22.860  -1.901  1.00 25.07           C
ATOM   1674  O   ARG A 205      -9.766  22.787  -0.831  1.00 22.75           O
ATOM   1675  CB  ARG A 205      -8.815  23.127  -3.794  1.00 25.21           C
ATOM   1676  CG  ARG A 205      -8.219  22.728  -5.152  1.00 29.73           C
ATOM   1677  CD  ARG A 205      -6.931  21.886  -5.120  1.00 29.20           C
ATOM   1678  NE  ARG A 205      -5.749  22.656  -5.547  1.00 29.90           N
ATOM   1679  CZ  ARG A 205      -5.387  23.033  -6.782  1.00 28.96           C
ATOM   1680  NH1 ARG A 205      -6.173  22.878  -7.845  1.00 29.65           N
ATOM   1681  NH2 ARG A 205      -4.189  23.578  -6.943  1.00 28.01           N1+
ATOM   1682  H   ARG A 205     -11.158  22.447  -4.780  1.00  0.00           H
ATOM   1683  HA  ARG A 205      -9.286  21.232  -2.829  1.00  0.00           H
ATOM   1684  HB2 ARG A 205      -9.318  24.085  -3.932  1.00  0.00           H
ATOM   1685  HB3 ARG A 205      -8.000  23.344  -3.100  1.00  0.00           H
ATOM   1686  HG2 ARG A 205      -8.979  22.218  -5.738  1.00  0.00           H
ATOM   1687  HG3 ARG A 205      -8.005  23.654  -5.685  1.00  0.00           H
ATOM   1688  HD2 ARG A 205      -6.751  21.487  -4.121  1.00  0.00           H
ATOM   1689  HD3 ARG A 205      -7.024  21.020  -5.776  1.00  0.00           H
ATOM   1690  HE  ARG A 205      -5.037  22.855  -4.808  1.00  0.00           H
ATOM   1691 HH11 ARG A 205      -7.039  22.330  -7.799  1.00  0.00           H
ATOM   1692 HH12 ARG A 205      -5.846  23.143  -8.791  1.00  0.00           H
ATOM   1693 HH21 ARG A 205      -3.486  23.360  -6.218  1.00  0.00           H
ATOM   1694 HH22 ARG A 205      -3.815  23.908  -7.833  1.00  0.00           H
ATOM   1695  N   ALA A 206     -11.487  23.585  -2.064  1.00 24.01           N
ATOM   1696  CA  ALA A 206     -12.130  24.376  -1.024  1.00 24.47           C
ATOM   1697  C   ALA A 206     -13.233  23.552  -0.349  1.00 24.30           C
ATOM   1698  O   ALA A 206     -13.165  23.342   0.858  1.00 25.49           O
ATOM   1699  CB  ALA A 206     -12.763  25.622  -1.670  1.00 23.88           C
ATOM   1700  H   ALA A 206     -11.927  23.575  -2.976  1.00  0.00           H
ATOM   1701  HA  ALA A 206     -11.407  24.691  -0.268  1.00  0.00           H
ATOM   1702  HB1 ALA A 206     -13.279  26.228  -0.924  1.00  0.00           H
ATOM   1703  HB2 ALA A 206     -11.999  26.252  -2.125  1.00  0.00           H
ATOM   1704  HB3 ALA A 206     -13.486  25.372  -2.448  1.00  0.00           H
ATOM   1705  N   ASP A 207     -14.228  23.069  -1.118  1.00 23.97           N
ATOM   1706  CA  ASP A 207     -15.429  22.351  -0.637  1.00 24.82           C
ATOM   1707  C   ASP A 207     -15.091  21.189   0.321  1.00 24.07           C
ATOM   1708  O   ASP A 207     -15.691  21.027   1.386  1.00 24.77           O
ATOM   1709  CB  ASP A 207     -16.338  21.951  -1.846  1.00 25.95           C
ATOM   1710  CG  ASP A 207     -16.930  20.537  -1.844  1.00 28.75           C
ATOM   1711  OD1 ASP A 207     -18.154  20.371  -1.654  1.00 30.03           O
ATOM   1712  OD2 ASP A 207     -16.179  19.545  -1.998  1.00 31.14           O1-
ATOM   1713  H   ASP A 207     -14.189  23.287  -2.106  1.00  0.00           H
ATOM   1714  HA  ASP A 207     -15.995  23.063  -0.033  1.00  0.00           H
ATOM   1715  HB2 ASP A 207     -17.161  22.661  -1.929  1.00  0.00           H
ATOM   1716  HB3 ASP A 207     -15.786  22.040  -2.781  1.00  0.00           H
ATOM   1717  N   ALA A 208     -14.084  20.400  -0.067  1.00 23.20           N
ATOM   1718  CA  ALA A 208     -13.686  19.169   0.590  1.00 22.76           C
ATOM   1719  C   ALA A 208     -13.010  19.399   1.951  1.00 22.38           C
ATOM   1720  O   ALA A 208     -12.964  18.474   2.765  1.00 24.01           O
ATOM   1721  CB  ALA A 208     -12.738  18.426  -0.349  1.00 19.96           C
ATOM   1722  H   ALA A 208     -13.696  20.593  -0.978  1.00  0.00           H
ATOM   1723  HA  ALA A 208     -14.575  18.562   0.742  1.00  0.00           H
ATOM   1724  HB1 ALA A 208     -12.388  17.502   0.099  1.00  0.00           H
ATOM   1725  HB2 ALA A 208     -13.237  18.164  -1.281  1.00  0.00           H
ATOM   1726  HB3 ALA A 208     -11.873  19.035  -0.592  1.00  0.00           H
ATOM   1727  N   ALA A 209     -12.569  20.636   2.239  1.00 22.75           N
ATOM   1728  CA  ALA A 209     -12.053  21.074   3.540  1.00 22.99           C
ATOM   1729  C   ALA A 209     -13.144  21.062   4.624  1.00 24.29           C
ATOM   1730  O   ALA A 209     -12.836  20.986   5.813  1.00 25.18           O
ATOM   1731  CB  ALA A 209     -11.511  22.505   3.414  1.00 23.91           C
ATOM   1732  H   ALA A 209     -12.727  21.360   1.545  1.00  0.00           H
ATOM   1733  HA  ALA A 209     -11.251  20.403   3.843  1.00  0.00           H
ATOM   1734  HB1 ALA A 209     -10.934  22.784   4.297  1.00  0.00           H
ATOM   1735  HB2 ALA A 209     -10.862  22.617   2.547  1.00  0.00           H
ATOM   1736  HB3 ALA A 209     -12.314  23.236   3.309  1.00  0.00           H
ATOM   1737  N   THR A 210     -14.408  21.094   4.200  1.00 22.25           N
ATOM   1738  CA  THR A 210     -15.610  21.014   5.012  1.00 22.42           C
ATOM   1739  C   THR A 210     -16.415  19.742   4.676  1.00 21.18           C
ATOM   1740  O   THR A 210     -17.609  19.691   4.965  1.00 19.00           O
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ATOM   1741  CB  THR A 210     -16.395  22.348   4.864  1.00 24.82          C
ATOM   1742  OG1 THR A 210     -16.507  22.764   3.511  1.00 24.17          O
ATOM   1743  CG2 THR A 210     -15.733  23.507   5.623  1.00 24.26          C
ATOM   1744  H   THR A 210     -14.569  21.245   3.210  1.00  0.00          H
ATOM   1745  HA  THR A 210     -15.346  20.898   6.065  1.00  0.00          H
ATOM   1746  HB  THR A 210     -17.404  22.221   5.260  1.00  0.00          H
ATOM   1747  HG1 THR A 210     -16.727  22.022   2.955  1.00  0.00          H
ATOM   1748 HG21 THR A 210     -16.323  24.419   5.535  1.00  0.00          H
ATOM   1749 HG22 THR A 210     -15.634  23.277   6.684  1.00  0.00          H
ATOM   1750 HG23 THR A 210     -14.736  23.720   5.235  1.00  0.00          H
ATOM   1751  N   LYS A 211     -15.777  18.705   4.101  1.00 20.79          N
ATOM   1752  CA  LYS A 211     -16.399  17.402   3.847  1.00 22.47          C
ATOM   1753  C   LYS A 211     -15.612  16.237   4.462  1.00 22.13          C
ATOM   1754  O   LYS A 211     -16.239  15.328   5.005  1.00 22.26          O
ATOM   1755  CB  LYS A 211     -16.665  17.152   2.342  1.00 24.94          C
ATOM   1756  CG  LYS A 211     -17.567  18.195   1.642  1.00 30.95          C
ATOM   1757  CD  LYS A 211     -18.724  17.590   0.827  1.00 35.72          C
ATOM   1758  CE  LYS A 211     -18.312  16.850  -0.459  1.00 40.53          C
ATOM   1759  NZ  LYS A 211     -18.015  17.766  -1.570  1.00 39.99          N1+
ATOM   1760  H   LYS A 211     -14.792  18.812   3.896  1.00  0.00          H
ATOM   1761  HA  LYS A 211     -17.372  17.364   4.342  1.00  0.00          H
ATOM   1762  HB2 LYS A 211     -15.720  17.057   1.810  1.00  0.00          H
ATOM   1763  HB3 LYS A 211     -17.130  16.168   2.260  1.00  0.00          H
ATOM   1764  HG2 LYS A 211     -18.010  18.851   2.391  1.00  0.00          H
ATOM   1765  HG3 LYS A 211     -16.968  18.847   1.008  1.00  0.00          H
ATOM   1766  HD2 LYS A 211     -19.275  16.904   1.473  1.00  0.00          H
ATOM   1767  HD3 LYS A 211     -19.434  18.381   0.578  1.00  0.00          H
ATOM   1768  HE2 LYS A 211     -17.464  16.187  -0.286  1.00  0.00          H
ATOM   1769  HE3 LYS A 211     -19.143  16.218  -0.775  1.00  0.00          H
ATOM   1770  HZ1 LYS A 211     -18.084  17.365  -2.487  1.00  0.00          H
ATOM   1771  HZ2 LYS A 211     -18.554  18.639  -1.546  1.00  0.00          H
ATOM   1772  HZ3 LYS A 211     -17.095  18.232  -1.521  1.00  0.00          H
ATOM   1773  N   TYR A 212     -14.275  16.194   4.345  1.00 21.51          N
ATOM   1774  CA  TYR A 212     -13.508  14.996   4.707  1.00 22.30          C
ATOM   1775  C   TYR A 212     -12.019  15.244   4.977  1.00 19.69          C
ATOM   1776  O   TYR A 212     -11.441  16.216   4.493  1.00 19.22          O
ATOM   1777  CB  TYR A 212     -13.742  13.868   3.675  1.00 22.78          C
ATOM   1778  CG  TYR A 212     -13.577  14.269   2.216  1.00 23.36          C
ATOM   1779  CD1 TYR A 212     -12.302  14.542   1.681  1.00 23.83          C
ATOM   1780  CD2 TYR A 212     -14.710  14.356   1.384  1.00 26.25          C
ATOM   1781  CE1 TYR A 212     -12.169  14.858   0.318  1.00 23.80          C
ATOM   1782  CE2 TYR A 212     -14.573  14.669   0.019  1.00 24.56          C
ATOM   1783  CZ  TYR A 212     -13.297  14.905  -0.519  1.00 23.94          C
ATOM   1784  OH  TYR A 212     -13.148  15.181  -1.845  1.00 25.44          O
ATOM   1785  H   TYR A 212     -13.764  16.937   3.879  1.00  0.00          H
ATOM   1786  HA  TYR A 212     -13.902  14.652   5.663  1.00  0.00          H
ATOM   1787  HB2 TYR A 212     -13.068  13.031   3.872  1.00  0.00          H
ATOM   1788  HB3 TYR A 212     -14.740  13.452   3.816  1.00  0.00          H
ATOM   1789  HD1 TYR A 212     -11.419  14.487   2.302  1.00  0.00          H
ATOM   1790  HD2 TYR A 212     -15.690  14.170   1.796  1.00  0.00          H
ATOM   1791  HE1 TYR A 212     -11.194  15.065  -0.085  1.00  0.00          H
ATOM   1792  HE2 TYR A 212     -15.449  14.705  -0.610  1.00  0.00          H
ATOM   1793  HH  TYR A 212     -13.950  15.077  -2.333  1.00  0.00          H
ATOM   1794  N   ILE A 213     -11.408  14.313   5.722  1.00 19.76          N
ATOM   1795  CA  ILE A 213      -9.981  14.129   6.001  1.00 18.38          C
ATOM   1796  C   ILE A 213      -9.101  14.168   4.729  1.00 19.12          C
ATOM   1797  O   ILE A 213      -9.284  13.362   3.810  1.00 20.73          O
ATOM   1798  CB  ILE A 213      -9.815  12.852   6.884  1.00 18.18          C
ATOM   1799  CG1 ILE A 213      -8.365  12.458   7.244  1.00 16.52          C
ATOM   1800  CG2 ILE A 213     -10.525  11.612   6.310  1.00 15.90          C
ATOM   1801  CD1 ILE A 213      -7.545  13.547   7.940  1.00 15.33          C
ATOM   1802  H   ILE A 213     -12.014  13.618   6.144  1.00  0.00          H
ATOM   1803  HA  ILE A 213      -9.695  14.977   6.620  1.00  0.00          H
ATOM   1804  HB  ILE A 213     -10.309  13.074   7.832  1.00  0.00          H
ATOM   1805 HG12 ILE A 213      -8.391  11.596   7.913  1.00  0.00          H
ATOM   1806 HG13 ILE A 213      -7.841  12.115   6.355  1.00  0.00          H
ATOM   1807 HG21 ILE A 213     -10.418  10.779   7.000  1.00  0.00          H
ATOM   1808 HG22 ILE A 213     -11.594  11.758   6.162  1.00  0.00          H
ATOM   1809 HG23 ILE A 213     -10.097  11.307   5.355  1.00  0.00          H
ATOM   1810 HD11 ILE A 213      -6.601  13.143   8.306  1.00  0.00          H
ATOM   1811 HD12 ILE A 213      -7.287  14.348   7.253  1.00  0.00          H
ATOM   1812 HD13 ILE A 213      -8.075  13.970   8.793  1.00  0.00          H
ATOM   1813  N   TYR A 214      -8.170  15.133   4.678  1.00 17.70          N
ATOM   1814  CA  TYR A 214      -7.187  15.388   3.619  1.00 17.21          C
ATOM   1815  C   TYR A 214      -7.846  15.924   2.330  1.00 16.96          C
ATOM   1816  O   TYR A 214      -7.347  15.734   1.222  1.00 18.78          O
ATOM   1817  CB  TYR A 214      -6.194  14.216   3.395  1.00 16.51          C
ATOM   1818  CG  TYR A 214      -5.399  13.733   4.585  1.00 22.99          C
ATOM   1819  CD1 TYR A 214      -4.465  14.537   5.245  1.00 22.50          C
ATOM   1820  CD2 TYR A 214      -5.463  12.385   4.942  1.00 22.11          C
ATOM   1821  CE1 TYR A 214      -3.615  14.011   6.214  1.00 25.16          C
ATOM   1822  CE2 TYR A 214      -4.634  11.846   5.918  1.00 24.75          C
ATOM   1823  CZ  TYR A 214      -3.688  12.656   6.549  1.00 24.22          C
ATOM   1824  OH  TYR A 214      -2.845  12.187   7.498  1.00 26.19          O
ATOM   1825  H   TYR A 214      -8.100  15.742   5.493  1.00  0.00          H
ATOM   1826  HA  TYR A 214      -6.597  16.232   3.984  1.00  0.00          H
ATOM   1827  HB2 TYR A 214      -6.748  13.374   2.983  1.00  0.00          H
ATOM   1828  HB3 TYR A 214      -5.483  14.505   2.614  1.00  0.00          H
ATOM   1829  HD1 TYR A 214      -4.383  15.592   4.991  1.00  0.00          H
ATOM   1830  HD2 TYR A 214      -6.146  11.720   4.420  1.00  0.00          H
ATOM   1831  HE1 TYR A 214      -2.889  14.638   6.722  1.00  0.00          H
ATOM   1832  HE2 TYR A 214      -4.711  10.795   6.177  1.00  0.00          H
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ATOM   1833  HH  TYR A 214      -2.880  11.207   7.526  1.00  0.00           H
ATOM   1834  N   GLY A 215      -8.969  16.631   2.476  1.00 19.32           N
ATOM   1835  CA  GLY A 215      -9.794  17.133   1.386  1.00 20.66           C
ATOM   1836  C   GLY A 215      -9.513  18.611   1.136  1.00 20.07           C
ATOM   1837  O   GLY A 215      -9.437  19.032  -0.018  1.00 23.01           O
ATOM   1838  H   GLY A 215      -9.294  16.806   3.421  1.00  0.00           H
ATOM   1839  HA2 GLY A 215      -9.642  16.568   0.466  1.00  0.00           H
ATOM   1840  HA3 GLY A 215     -10.836  17.024   1.679  1.00  0.00           H
ATOM   1841  N   GLY A 216      -9.177  19.360   2.188  1.00 20.86           N
ATOM   1842  CA  GLY A 216      -8.682  20.731   2.116  1.00 19.87           C
ATOM   1843  C   GLY A 216      -7.155  20.714   2.065  1.00 20.78           C
ATOM   1844  O   GLY A 216      -6.480  21.537   2.684  1.00 20.29           O
ATOM   1845  H   GLY A 216      -9.271  18.948   3.119  1.00  0.00           H
ATOM   1846  HA2 GLY A 216      -9.087  21.268   1.258  1.00  0.00           H
ATOM   1847  HA3 GLY A 216      -8.991  21.268   3.013  1.00  0.00           H
ATOM   1848  N   SER A 217      -6.597  19.722   1.369  1.00 19.48           N
ATOM   1849  CA  SER A 217      -5.185  19.531   1.134  1.00 20.05           C
ATOM   1850  C   SER A 217      -4.928  19.731  -0.361  1.00 20.74           C
ATOM   1851  O   SER A 217      -5.720  19.309  -1.213  1.00 20.42           O
ATOM   1852  CB  SER A 217      -4.799  18.098   1.532  1.00 20.42           C
ATOM   1853  OG  SER A 217      -3.390  17.990   1.585  1.00 20.14           O
ATOM   1854  H   SER A 217      -7.225  19.116   0.860  1.00  0.00           H
ATOM   1855  HA  SER A 217      -4.598  20.246   1.713  1.00  0.00           H
ATOM   1856  HB2 SER A 217      -5.206  17.827   2.506  1.00  0.00           H
ATOM   1857  HB3 SER A 217      -5.201  17.378   0.819  1.00  0.00           H
ATOM   1858  HG  SER A 217      -3.116  18.258   2.463  1.00  0.00           H
ATOM   1859  N   GLU A 218      -3.791  20.353  -0.658  1.00 21.33           N
ATOM   1860  CA  GLU A 218      -3.243  20.509  -1.987  1.00 22.53           C
ATOM   1861  C   GLU A 218      -2.443  19.239  -2.329  1.00 21.12           C
ATOM   1862  O   GLU A 218      -2.847  18.453  -3.187  1.00 21.10           O
ATOM   1863  CB  GLU A 218      -2.336  21.760  -1.923  1.00 25.65           C
ATOM   1864  CG  GLU A 218      -1.659  22.182  -3.225  1.00 26.70           C
ATOM   1865  CD  GLU A 218      -2.647  22.559  -4.304  1.00 27.03           C
ATOM   1866  OE1 GLU A 218      -3.671  23.216  -4.025  1.00 26.49           O
ATOM   1867  OE2 GLU A 218      -2.398  22.212  -5.473  1.00 26.09           O1-
ATOM   1868  H   GLU A 218      -3.226  20.698   0.113  1.00  0.00           H
ATOM   1869  HA  GLU A 218      -4.042  20.649  -2.719  1.00  0.00           H
ATOM   1870  HB2 GLU A 218      -2.933  22.604  -1.581  1.00  0.00           H
ATOM   1871  HB3 GLU A 218      -1.555  21.638  -1.173  1.00  0.00           H
ATOM   1872  HG2 GLU A 218      -1.071  23.073  -3.024  1.00  0.00           H
ATOM   1873  HG3 GLU A 218      -0.973  21.416  -3.587  1.00  0.00           H
ATOM   1874  N   SER A 219      -1.335  19.012  -1.608  1.00 19.74           N
ATOM   1875  CA  SER A 219      -0.300  18.039  -1.940  1.00 18.94           C
ATOM   1876  C   SER A 219      -0.731  16.570  -1.814  1.00 18.73           C
ATOM   1877  O   SER A 219      -0.132  15.702  -2.451  1.00 18.43           O
ATOM   1878  CB  SER A 219       0.933  18.338  -1.069  1.00 17.41           C
ATOM   1879  OG  SER A 219       0.703  18.141   0.320  1.00 21.92           O
ATOM   1880  H   SER A 219      -1.108  19.649  -0.861  1.00  0.00           H
ATOM   1881  HA  SER A 219      -0.022  18.196  -2.976  1.00  0.00           H
ATOM   1882  HB2 SER A 219       1.753  17.685  -1.378  1.00  0.00           H
ATOM   1883  HB3 SER A 219       1.286  19.356  -1.236  1.00  0.00           H
ATOM   1884  HG  SER A 219       1.553  17.828   0.646  1.00  0.00           H
ATOM   1885  N   TYR A 220      -1.795  16.277  -1.055  1.00 20.35           N
ATOM   1886  CA  TYR A 220      -2.305  14.923  -0.862  1.00 20.31           C
ATOM   1887  C   TYR A 220      -2.865  14.318  -2.167  1.00 21.43           C
ATOM   1888  O   TYR A 220      -2.793  13.109  -2.385  1.00 21.25           O
ATOM   1889  CB  TYR A 220      -3.405  14.937   0.223  1.00 18.66           C
ATOM   1890  CG  TYR A 220      -3.740  13.619   0.867  1.00 19.79           C
ATOM   1891  CD1 TYR A 220      -3.015  13.238   2.002  1.00 20.92           C
ATOM   1892  CD2 TYR A 220      -4.789  12.808   0.436  1.00 19.71           C
ATOM   1893  CE1 TYR A 220      -3.293  12.055   2.667  1.00 21.76           C
ATOM   1894  CE2 TYR A 220      -5.086  11.620   1.090  1.00 20.40           C
ATOM   1895  CZ  TYR A 220      -4.319  11.236   2.190  1.00 22.36           C
ATOM   1896  OH  TYR A 220      -4.621  10.056   2.764  1.00 20.26           O
ATOM   1897  H   TYR A 220      -2.242  17.031  -0.549  1.00  0.00           H
ATOM   1898  HA  TYR A 220      -1.478  14.305  -0.507  1.00  0.00           H
ATOM   1899  HB2 TYR A 220      -3.013  15.585   1.005  1.00  0.00           H
ATOM   1900  HB3 TYR A 220      -4.300  15.414  -0.189  1.00  0.00           H
ATOM   1901  HD1 TYR A 220      -2.221  13.879   2.379  1.00  0.00           H
ATOM   1902  HD2 TYR A 220      -5.373  13.105  -0.431  1.00  0.00           H
ATOM   1903  HE1 TYR A 220      -2.743  11.770   3.561  1.00  0.00           H
ATOM   1904  HE2 TYR A 220      -5.877  10.957   0.756  1.00  0.00           H
ATOM   1905  HH  TYR A 220      -4.139   9.926   3.597  1.00  0.00           H
ATOM   1906  N   ARG A 221      -3.357  15.174  -3.070  1.00 19.98           N
ATOM   1907  CA  ARG A 221      -3.907  14.796  -4.369  1.00 19.09           C
ATOM   1908  C   ARG A 221      -2.783  14.364  -5.329  1.00 20.19           C
ATOM   1909  O   ARG A 221      -2.950  13.431  -6.114  1.00 18.27           O
ATOM   1910  CB  ARG A 221      -4.627  16.026  -4.953  1.00 19.12           C
ATOM   1911  CG  ARG A 221      -5.776  16.539  -4.067  1.00 16.39           C
ATOM   1912  CD  ARG A 221      -6.422  17.833  -4.587  1.00 17.18           C
ATOM   1913  NE  ARG A 221      -7.884  17.743  -4.480  1.00 19.14           N
ATOM   1914  CZ  ARG A 221      -8.654  18.138  -3.463  1.00 18.73           C
ATOM   1915  NH1 ARG A 221      -8.162  18.777  -2.401  1.00 18.23           N
ATOM   1916  NH2 ARG A 221      -9.949  17.866  -3.519  1.00 17.55           N1+
ATOM   1917  H   ARG A 221      -3.298  16.161  -2.852  1.00  0.00           H
ATOM   1918  HA  ARG A 221      -4.611  13.969  -4.250  1.00  0.00           H
ATOM   1919  HB2 ARG A 221      -3.915  16.833  -5.139  1.00  0.00           H
ATOM   1920  HB3 ARG A 221      -5.038  15.746  -5.922  1.00  0.00           H
ATOM   1921  HG2 ARG A 221      -6.519  15.746  -3.963  1.00  0.00           H
ATOM   1922  HG3 ARG A 221      -5.415  16.738  -3.057  1.00  0.00           H
ATOM   1923  HD2 ARG A 221      -6.033  18.706  -4.061  1.00  0.00           H
ATOM   1924  HD3 ARG A 221      -6.177  17.989  -5.638  1.00  0.00           H
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ATOM   1925  HE  ARG A 221      -8.362  17.390  -5.315  1.00  0.00           H
ATOM   1926 HH11 ARG A 221      -7.163  18.940  -2.252  1.00  0.00           H
ATOM   1927 HH12 ARG A 221      -8.755  18.977  -1.586  1.00  0.00           H
ATOM   1928 HH21 ARG A 221     -10.295  17.087  -4.092  1.00  0.00           H
ATOM   1929 HH22 ARG A 221     -10.640  18.441  -3.029  1.00  0.00           H
ATOM   1930  N   HIS A 222     -1.618  15.016  -5.220  1.00 19.92           N
ATOM   1931  CA  HIS A 222     -0.405  14.714  -5.975  1.00 20.24           C
ATOM   1932  C   HIS A 222      0.255  13.457  -5.408  1.00 19.44           C
ATOM   1933  O   HIS A 222      0.658  12.583  -6.172  1.00 21.15           O
ATOM   1934  CB  HIS A 222      0.580  15.890  -5.849  1.00 18.79           C
ATOM   1935  CG  HIS A 222      0.003  17.183  -6.333  1.00 19.64           C
ATOM   1936  ND1 HIS A 222     -0.194  18.267  -5.478  1.00 22.12           N
ATOM   1937  CD2 HIS A 222     -0.488  17.500  -7.579  1.00 20.71           C
ATOM   1938  CE1 HIS A 222     -0.857  19.154  -6.202  1.00 20.00           C
ATOM   1939  NE2 HIS A 222     -1.056  18.755  -7.456  1.00 22.40           N
ATOM   1940  H   HIS A 222     -1.554  15.725  -4.502  1.00  0.00           H
ATOM   1941  HA  HIS A 222     -0.656  14.547  -7.025  1.00  0.00           H
ATOM   1942  HB2 HIS A 222      0.916  16.022  -4.820  1.00  0.00           H
ATOM   1943  HB3 HIS A 222      1.480  15.682  -6.418  1.00  0.00           H
ATOM   1944  HD2 HIS A 222     -0.514  16.932  -8.498  1.00  0.00           H
ATOM   1945  HE1 HIS A 222     -1.216  20.090  -5.806  1.00  0.00           H
ATOM   1946  HE2 HIS A 222     -1.604  19.257  -8.147  1.00  0.00           H
ATOM   1947  N   MET A 223      0.289  13.341  -4.074  1.00 20.38           N
ATOM   1948  CA  MET A 223      0.713  12.168  -3.315  1.00 21.04           C
ATOM   1949  C   MET A 223     -0.055  10.913  -3.747  1.00 21.36           C
ATOM   1950  O   MET A 223      0.575   9.947  -4.173  1.00 20.45           O
ATOM   1951  CB  MET A 223      0.591  12.469  -1.809  1.00 20.16           C
ATOM   1952  CG  MET A 223      1.224  11.434  -0.869  1.00 21.68           C
ATOM   1953  SD  MET A 223      0.253   9.938  -0.528  1.00 24.24           S
ATOM   1954  CE  MET A 223     -1.153  10.633   0.375  1.00 23.61           C
ATOM   1955  H   MET A 223     -0.004  14.155  -3.540  1.00  0.00           H
ATOM   1956  HA  MET A 223      1.759  11.986  -3.547  1.00  0.00           H
ATOM   1957  HB2 MET A 223      1.093  13.419  -1.617  1.00  0.00           H
ATOM   1958  HB3 MET A 223     -0.446  12.624  -1.535  1.00  0.00           H
ATOM   1959  HG2 MET A 223      2.203  11.138  -1.243  1.00  0.00           H
ATOM   1960  HG3 MET A 223      1.405  11.913   0.089  1.00  0.00           H
ATOM   1961  HE1 MET A 223     -1.809   9.834   0.721  1.00  0.00           H
ATOM   1962  HE2 MET A 223     -0.806  11.197   1.241  1.00  0.00           H
ATOM   1963  HE3 MET A 223     -1.741  11.298  -0.255  1.00  0.00           H
ATOM   1964  N   CYS A 224     -1.394  10.947  -3.716  1.00 20.63           N
ATOM   1965  CA  CYS A 224     -2.236   9.801  -4.066  1.00 20.63           C
ATOM   1966  C   CYS A 224     -2.137   9.425  -5.551  1.00 19.25           C
ATOM   1967  O   CYS A 224     -2.163   8.237  -5.869  1.00 18.72           O
ATOM   1968  CB  CYS A 224     -3.706  10.077  -3.727  1.00 18.88           C
ATOM   1969  SG  CYS A 224     -3.904  10.149  -1.931  1.00 21.25           S
ATOM   1970  H   CYS A 224     -1.851  11.767  -3.326  1.00  0.00           H
ATOM   1971  HA  CYS A 224     -1.899   8.937  -3.487  1.00  0.00           H
ATOM   1972  HB2 CYS A 224     -4.072  10.997  -4.185  1.00  0.00           H
ATOM   1973  HB3 CYS A 224     -4.324   9.259  -4.096  1.00  0.00           H
ATOM   1974  HG  CYS A 224     -3.323  11.348  -1.784  1.00  0.00           H
ATOM   1975  N   ARG A 225     -1.951  10.406  -6.450  1.00 20.13           N
ATOM   1976  CA  ARG A 225     -1.662  10.164  -7.864  1.00 18.90           C
ATOM   1977  C   ARG A 225     -0.294   9.475  -8.012  1.00 18.94           C
ATOM   1978  O   ARG A 225     -0.183   8.453  -8.689  1.00 18.24           O
ATOM   1979  CB  ARG A 225     -1.685  11.498  -8.649  1.00 19.79           C
ATOM   1980  CG  ARG A 225     -1.369  11.343 -10.152  1.00 22.48           C
ATOM   1981  CD  ARG A 225     -1.346  12.672 -10.911  1.00 21.79           C
ATOM   1982  NE  ARG A 225     -1.161  12.440 -12.346  1.00 21.49           N
ATOM   1983  CZ  ARG A 225     -0.430  13.088 -13.255  1.00 23.17           C
ATOM   1984 NH1 ARG A 225      0.342  14.122 -12.919  1.00 23.34           N
ATOM   1985 NH2 ARG A 225     -0.481  12.683 -14.520  1.00 25.08           N1+
ATOM   1986  H   ARG A 225     -1.960  11.364  -6.123  1.00  0.00           H
ATOM   1987  HA  ARG A 225     -2.430   9.502  -8.270  1.00  0.00           H
ATOM   1988  HB2 ARG A 225     -2.669  11.955  -8.542  1.00  0.00           H
ATOM   1989  HB3 ARG A 225     -0.978  12.202  -8.210  1.00  0.00           H
ATOM   1990  HG2 ARG A 225     -0.401  10.864 -10.298  1.00  0.00           H
ATOM   1991  HG3 ARG A 225     -2.111  10.682 -10.601  1.00  0.00           H
ATOM   1992  HD2 ARG A 225     -2.309  13.159 -10.781  1.00  0.00           H
ATOM   1993  HD3 ARG A 225     -0.574  13.332 -10.515  1.00  0.00           H
ATOM   1994  HE  ARG A 225     -1.815  11.689 -12.727  1.00  0.00           H
ATOM   1995 HH11 ARG A 225      0.523  14.348 -11.941  1.00  0.00           H
ATOM   1996 HH12 ARG A 225      0.839  14.664 -13.609  1.00  0.00           H
ATOM   1997 HH21 ARG A 225     -0.988  11.779 -14.750  1.00  0.00           H
ATOM   1998 HH22 ARG A 225     -0.023  13.112 -15.305  1.00  0.00           H
ATOM   1999  N   TYR A 226      0.746  10.013  -7.360  1.00 16.90           N
ATOM   2000  CA  TYR A 226      2.114   9.518  -7.472  1.00 18.14           C
ATOM   2001  C   TYR A 226      2.259   8.115  -6.854  1.00 17.98           C
ATOM   2002  O   TYR A 226      2.832   7.223  -7.483  1.00 18.92           O
ATOM   2003  CB  TYR A 226      3.110  10.514  -6.835  1.00 15.96           C
ATOM   2004  CG  TYR A 226      4.508  10.373  -7.409  1.00 20.33           C
ATOM   2005  CD1 TYR A 226      4.965  11.276  -8.395  1.00 18.06           C
ATOM   2006  CD2 TYR A 226      5.319   9.282  -7.032  1.00 19.81           C
ATOM   2007  CE1 TYR A 226      6.183  11.036  -9.062  1.00 20.94           C
ATOM   2008  CE2 TYR A 226      6.524   9.038  -7.710  1.00 22.35           C
ATOM   2009  CZ  TYR A 226      6.933   9.886  -8.754  1.00 20.61           C
ATOM   2010  OH  TYR A 226      8.025   9.559  -9.497  1.00 24.39           O
ATOM   2011  H   TYR A 226      0.593  10.858  -6.812  1.00  0.00           H
ATOM   2012  HA  TYR A 226      2.325   9.453  -8.537  1.00  0.00           H
ATOM   2013  HB2 TYR A 226      2.785  11.535  -7.025  1.00  0.00           H
ATOM   2014  HB3 TYR A 226      3.138  10.403  -5.750  1.00  0.00           H
ATOM   2015  HD1 TYR A 226      4.363  12.124  -8.689  1.00  0.00           H
ATOM   2016  HD2 TYR A 226      5.003   8.594  -6.262  1.00  0.00           H
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ATOM   2017  HE1 TYR A 226       6.509  11.699  -9.851  1.00  0.00           H
ATOM   2018  HE2 TYR A 226       7.124   8.182  -7.445  1.00  0.00           H
ATOM   2019  HH  TYR A 226       8.024   8.643  -9.763  1.00  0.00           H
ATOM   2020  N   GLN A 227       1.670   7.900  -5.670  1.00 19.29           N
ATOM   2021  CA  GLN A 227       1.636   6.620  -4.964  1.00 19.24           C
ATOM   2022  C   GLN A 227       0.676   5.620  -5.622  1.00 21.01           C
ATOM   2023  O   GLN A 227       0.709   4.444  -5.276  1.00 21.37           O
ATOM   2024  CB  GLN A 227       1.172   6.836  -3.508  1.00 19.57           C
ATOM   2025  CG  GLN A 227       2.186   7.559  -2.604  1.00 16.42           C
ATOM   2026  CD  GLN A 227       3.309   6.661  -2.084  1.00 20.53           C
ATOM   2027  OE1 GLN A 227       3.890   5.868  -2.819  1.00 21.69           O
ATOM   2028  NE2 GLN A 227       3.618   6.759  -0.798  1.00 19.47           N
ATOM   2029  H   GLN A 227       1.207   8.687  -5.211  1.00  0.00           H
ATOM   2030  HA  GLN A 227       2.630   6.172  -4.988  1.00  0.00           H
ATOM   2031  HB2 GLN A 227       0.232   7.391  -3.502  1.00  0.00           H
ATOM   2032  HB3 GLN A 227       0.931   5.878  -3.045  1.00  0.00           H
ATOM   2033  HG2 GLN A 227       2.614   8.423  -3.112  1.00  0.00           H
ATOM   2034  HG3 GLN A 227       1.644   7.943  -1.744  1.00  0.00           H
ATOM   2035 HE21 GLN A 227       3.108   7.397  -0.205  1.00  0.00           H
ATOM   2036 HE22 GLN A 227       4.346   6.176  -0.413  1.00  0.00           H
ATOM   2037  N   SER A 228      -0.157   6.032  -6.581  1.00 19.57           N
ATOM   2038  CA  SER A 228      -0.865   5.104  -7.450  1.00 20.36           C
ATOM   2039  C   SER A 228       0.015   4.789  -8.671  1.00 20.27           C
ATOM   2040  O   SER A 228       0.215   3.616  -8.981  1.00 23.07           O
ATOM   2041  CB  SER A 228      -2.178   5.737  -7.937  1.00 16.62           C
ATOM   2042  OG  SER A 228      -3.066   5.887  -6.853  1.00 18.44           O
ATOM   2043  H   SER A 228      -0.201   7.019  -6.796  1.00  0.00           H
ATOM   2044  HA  SER A 228      -1.105   4.169  -6.939  1.00  0.00           H
ATOM   2045  HB2 SER A 228      -2.018   6.710  -8.397  1.00  0.00           H
ATOM   2046  HB3 SER A 228      -2.651   5.096  -8.681  1.00  0.00           H
ATOM   2047  HG  SER A 228      -2.787   6.666  -6.366  1.00  0.00           H
ATOM   2048  N   GLY A 229       0.534   5.808  -9.364  1.00 19.50           N
ATOM   2049  CA  GLY A 229       0.900   5.683 -10.769  1.00 20.20           C
ATOM   2050  C   GLY A 229       2.335   5.984 -11.172  1.00 19.94           C
ATOM   2051  O   GLY A 229       2.651   5.811 -12.350  1.00 17.43           O
ATOM   2052  H   GLY A 229       0.337   6.756  -9.045  1.00  0.00           H
ATOM   2053  HA2 GLY A 229       0.579   4.738 -11.203  1.00  0.00           H
ATOM   2054  HA3 GLY A 229       0.327   6.444 -11.277  1.00  0.00           H
ATOM   2055  N   PHE A 230       3.183   6.490 -10.268  1.00 19.02           N
ATOM   2056  CA  PHE A 230       4.470   7.083 -10.646  1.00 20.56           C
ATOM   2057  C   PHE A 230       5.662   6.575  -9.829  1.00 21.40           C
ATOM   2058  O   PHE A 230       6.804   6.875 -10.179  1.00 24.25           O
ATOM   2059  CB  PHE A 230       4.385   8.620 -10.692  1.00 21.77           C
ATOM   2060  CG  PHE A 230       3.493   9.230 -11.760  1.00 22.64           C
ATOM   2061  CD1 PHE A 230       4.073   9.711 -12.953  1.00 24.17           C
ATOM   2062  CD2 PHE A 230       2.097   9.337 -11.573  1.00 24.47           C
ATOM   2063  CE1 PHE A 230       3.265  10.285 -13.950  1.00 25.11           C
ATOM   2064  CE2 PHE A 230       1.288   9.888 -12.585  1.00 23.94           C
ATOM   2065  CZ  PHE A 230       1.872  10.355 -13.776  1.00 26.08           C
ATOM   2066  H   PHE A 230       2.854   6.638  -9.319  1.00  0.00           H
ATOM   2067  HA  PHE A 230       4.724   6.784 -11.658  1.00  0.00           H
ATOM   2068  HB2 PHE A 230       4.082   8.993  -9.721  1.00  0.00           H
ATOM   2069  HB3 PHE A 230       5.386   9.020 -10.857  1.00  0.00           H
ATOM   2070  HD1 PHE A 230       5.140   9.638 -13.116  1.00  0.00           H
ATOM   2071  HD2 PHE A 230       1.632   8.971 -10.670  1.00  0.00           H
ATOM   2072  HE1 PHE A 230       3.715  10.651 -14.862  1.00  0.00           H
ATOM   2073  HE2 PHE A 230       0.216   9.945 -12.467  1.00  0.00           H
ATOM   2074  HZ  PHE A 230       1.247  10.747 -14.564  1.00  0.00           H
ATOM   2075  N   PHE A 231       5.439   5.812  -8.750  1.00 19.26           N
ATOM   2076  CA  PHE A 231       6.525   5.258  -7.933  1.00 21.27           C
ATOM   2077  C   PHE A 231       7.189   4.046  -8.615  1.00 20.88           C
ATOM   2078  O   PHE A 231       8.388   3.855  -8.467  1.00 21.71           O
ATOM   2079  CB  PHE A 231       6.016   4.923  -6.511  1.00 18.61           C
ATOM   2080  CG  PHE A 231       5.067   3.746  -6.339  1.00 18.09           C
ATOM   2081  CD1 PHE A 231       5.536   2.554  -5.746  1.00 16.51           C
ATOM   2082  CD2 PHE A 231       3.716   3.839  -6.733  1.00 15.34           C
ATOM   2083  CE1 PHE A 231       4.663   1.471  -5.540  1.00 15.19           C
ATOM   2084  CE2 PHE A 231       2.848   2.749  -6.538  1.00 15.58           C
ATOM   2085  CZ  PHE A 231       3.315   1.574  -5.925  1.00 17.00           C
ATOM   2086  H   PHE A 231       4.486   5.612  -8.488  1.00  0.00           H
ATOM   2087  HA  PHE A 231       7.306   6.012  -7.825  1.00  0.00           H
ATOM   2088  HB2 PHE A 231       6.887   4.747  -5.878  1.00  0.00           H
ATOM   2089  HB3 PHE A 231       5.537   5.805  -6.084  1.00  0.00           H
ATOM   2090  HD1 PHE A 231       6.567   2.461  -5.440  1.00  0.00           H
ATOM   2091  HD2 PHE A 231       3.331   4.740  -7.184  1.00  0.00           H
ATOM   2092  HE1 PHE A 231       5.031   0.560  -5.091  1.00  0.00           H
ATOM   2093  HE2 PHE A 231       1.820   2.806  -6.865  1.00  0.00           H
ATOM   2094  HZ  PHE A 231       2.638   0.748  -5.764  1.00  0.00           H
ATOM   2095  N   TRP A 232       6.446   3.311  -9.453  1.00 20.84           N
ATOM   2096  CA  TRP A 232       6.923   2.245 -10.345  1.00 21.29           C
ATOM   2097  C   TRP A 232       7.351   2.820 -11.714  1.00 22.43           C
ATOM   2098  O   TRP A 232       7.280   2.143 -12.737  1.00 24.91           O
ATOM   2099  CB  TRP A 232       5.777   1.227 -10.547  1.00 20.84           C
ATOM   2100  CG  TRP A 232       4.425   1.793 -10.876  1.00 22.17           C
ATOM   2101  CD1 TRP A 232       3.514   2.154  -9.949  1.00 22.45           C
ATOM   2102  CD2 TRP A 232       3.796   2.047 -12.172  1.00 25.05           C
ATOM   2103  NE1 TRP A 232       2.376   2.619 -10.567  1.00 24.51           N
ATOM   2104  CE3 TRP A 232       4.192   1.896 -13.523  1.00 25.82           C
ATOM   2105  CE2 TRP A 232       2.475   2.539 -11.943  1.00 26.33           C
ATOM   2106  CZ3 TRP A 232       3.328   2.224 -14.586  1.00 27.28           C
ATOM   2107  CZ2 TRP A 232       1.590   2.836 -12.997  1.00 26.19           C
ATOM   2108  CH2 TRP A 232       2.025   2.689 -14.326  1.00 25.91           C
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ATOM   2109  H   TRP A 232       5.475   3.564  -9.554  1.00  0.00           H
ATOM   2110  HA  TRP A 232       7.792   1.739  -9.919  1.00  0.00           H
ATOM   2111  HB2 TRP A 232       6.037   0.480 -11.296  1.00  0.00           H
ATOM   2112  HB3 TRP A 232       5.671   0.660  -9.622  1.00  0.00           H
ATOM   2113  HD1 TRP A 232       3.675   2.054  -8.887  1.00  0.00           H
ATOM   2114  HE1 TRP A 232       1.556   2.916 -10.035  1.00  0.00           H
ATOM   2115  HE3 TRP A 232       5.174   1.513 -13.746  1.00  0.00           H
ATOM   2116  HZ3 TRP A 232       3.663   2.102 -15.605  1.00  0.00           H
ATOM   2117  HZ2 TRP A 232       0.586   3.180 -12.803  1.00  0.00           H
ATOM   2118  HH2 TRP A 232       1.360   2.929 -15.142  1.00  0.00           H
ATOM   2119  N   ARG A 233       7.769   4.088 -11.733  1.00 22.95           N
ATOM   2120  CA  ARG A 233       8.473   4.745 -12.823  1.00 23.34           C
ATOM   2121  C   ARG A 233       9.360   5.865 -12.262  1.00 23.57           C
ATOM   2122  O   ARG A 233       9.440   6.944 -12.853  1.00 24.36           O
ATOM   2123  CB  ARG A 233       7.550   5.105 -14.014  1.00 23.72           C
ATOM   2124  CG  ARG A 233       6.260   5.853 -13.647  1.00 23.64           C
ATOM   2125  CD  ARG A 233       5.468   6.282 -14.890  1.00 22.56           C
ATOM   2126  NE  ARG A 233       4.052   6.551 -14.591  1.00 23.96           N
ATOM   2127  CZ  ARG A 233       3.201   7.304 -15.303  1.00 23.37           C
ATOM   2128  NH1 ARG A 233       3.625   8.114 -16.274  1.00 24.58           N
ATOM   2129  NH2 ARG A 233       1.901   7.213 -15.036  1.00 27.02           N1+
ATOM   2130  H   ARG A 233       7.829   4.550 -10.837  1.00  0.00           H
ATOM   2131  HA  ARG A 233       9.190   4.029 -13.222  1.00  0.00           H
ATOM   2132  HB2 ARG A 233       8.117   5.689 -14.740  1.00  0.00           H
ATOM   2133  HB3 ARG A 233       7.283   4.183 -14.531  1.00  0.00           H
ATOM   2134  HG2 ARG A 233       5.647   5.210 -13.015  1.00  0.00           H
ATOM   2135  HG3 ARG A 233       6.516   6.737 -13.063  1.00  0.00           H
ATOM   2136  HD2 ARG A 233       5.948   7.142 -15.349  1.00  0.00           H
ATOM   2137  HD3 ARG A 233       5.484   5.487 -15.636  1.00  0.00           H
ATOM   2138  HE  ARG A 233       3.664   6.048 -13.785  1.00  0.00           H
ATOM   2139 HH11 ARG A 233       4.586   8.488 -16.251  1.00  0.00           H
ATOM   2140 HH12 ARG A 233       2.954   8.609 -16.846  1.00  0.00           H
ATOM   2141 HH21 ARG A 233       1.572   6.666 -14.254  1.00  0.00           H
ATOM   2142 HH22 ARG A 233       1.164   7.738 -15.562  1.00  0.00           H
ATOM   2143  N   HIS A 234       9.996   5.623 -11.106  1.00 23.15           N
ATOM   2144  CA  HIS A 234      10.981   6.505 -10.479  1.00 24.03           C
ATOM   2145  C   HIS A 234      12.336   5.791 -10.524  1.00 25.68           C
ATOM   2146  O   HIS A 234      12.413   4.590 -10.262  1.00 24.39           O
ATOM   2147  CB  HIS A 234      10.588   6.781  -9.014  1.00 21.56           C
ATOM   2148  CG  HIS A 234      11.469   7.811  -8.354  1.00 23.59           C
ATOM   2149  ND1 HIS A 234      12.671   7.487  -7.709  1.00 24.32           N
ATOM   2150  CD2 HIS A 234      11.290   9.175  -8.299  1.00 21.93           C
ATOM   2151  CE1 HIS A 234      13.174   8.656  -7.327  1.00 24.17           C
ATOM   2152  NE2 HIS A 234      12.389   9.687  -7.632  1.00 23.23           N
ATOM   2153  H   HIS A 234       9.994   4.664 -10.771  1.00  0.00           H
ATOM   2154  HA  HIS A 234      11.056   7.456 -11.012  1.00  0.00           H
ATOM   2155  HB2 HIS A 234       9.564   7.152  -8.980  1.00  0.00           H
ATOM   2156  HB3 HIS A 234      10.602   5.866  -8.420  1.00  0.00           H
ATOM   2157  HD2 HIS A 234      10.509   9.800  -8.705  1.00  0.00           H
ATOM   2158  HE1 HIS A 234      14.121   8.769  -6.821  1.00  0.00           H
ATOM   2159  HE2 HIS A 234      12.600  10.671  -7.466  1.00  0.00           H
ATOM   2160  N   GLU A 235      13.405   6.525 -10.829  1.00 26.94           N
ATOM   2161  CA  GLU A 235      14.764   6.057 -11.071  1.00 29.85           C
ATOM   2162  C   GLU A 235      15.386   5.243  -9.920  1.00 27.43           C
ATOM   2163  O   GLU A 235      16.179   4.335 -10.176  1.00 27.58           O
ATOM   2164  CB  GLU A 235      15.641   7.271 -11.443  1.00 32.61           C
ATOM   2165  CG  GLU A 235      15.785   8.383 -10.372  1.00 40.85           C
ATOM   2166  CD  GLU A 235      14.679   9.433 -10.364  1.00 45.22           C
ATOM   2167  OE1 GLU A 235      13.587   9.203 -10.922  1.00 46.95           O
ATOM   2168  OE2 GLU A 235      14.951  10.519  -9.806  1.00 48.79           O1-
ATOM   2169  H   GLU A 235      13.285   7.542 -10.932  1.00  0.00           H
ATOM   2170  HA  GLU A 235      14.720   5.393 -11.937  1.00  0.00           H
ATOM   2171  HB2 GLU A 235      16.636   6.899 -11.684  1.00  0.00           H
ATOM   2172  HB3 GLU A 235      15.276   7.711 -12.371  1.00  0.00           H
ATOM   2173  HG2 GLU A 235      15.885   7.972  -9.370  1.00  0.00           H
ATOM   2174  HG3 GLU A 235      16.716   8.916 -10.557  1.00  0.00           H
ATOM   2175  N   LEU A 236      15.011   5.527  -8.665  1.00 26.47           N
ATOM   2176  CA  LEU A 236      15.480   4.778  -7.498  1.00 26.49           C
ATOM   2177  C   LEU A 236      14.631   3.518  -7.257  1.00 26.64           C
ATOM   2178  O   LEU A 236      14.991   2.718  -6.400  1.00 25.30           O
ATOM   2179  CB  LEU A 236      15.394   5.654  -6.226  1.00 24.84           C
ATOM   2180  CG  LEU A 236      16.328   6.881  -6.176  1.00 24.56           C
ATOM   2181  CD1 LEU A 236      16.134   7.648  -4.862  1.00 23.65           C
ATOM   2182  CD2 LEU A 236      17.803   6.492  -6.313  1.00 22.45           C
ATOM   2183  H   LEU A 236      14.318   6.255  -8.524  1.00  0.00           H
ATOM   2184  HA  LEU A 236      16.507   4.440  -7.639  1.00  0.00           H
ATOM   2185  HB2 LEU A 236      14.361   5.973  -6.074  1.00  0.00           H
ATOM   2186  HB3 LEU A 236      15.643   5.028  -5.369  1.00  0.00           H
ATOM   2187  HG  LEU A 236      16.079   7.550  -7.000  1.00  0.00           H
ATOM   2188 HD11 LEU A 236      16.759   8.540  -4.843  1.00  0.00           H
ATOM   2189 HD12 LEU A 236      15.099   7.956  -4.730  1.00  0.00           H
ATOM   2190 HD13 LEU A 236      16.410   7.042  -3.998  1.00  0.00           H
ATOM   2191 HD21 LEU A 236      18.465   7.341  -6.144  1.00  0.00           H
ATOM   2192 HD22 LEU A 236      18.061   5.714  -5.598  1.00  0.00           H
ATOM   2193 HD23 LEU A 236      18.019   6.110  -7.306  1.00  0.00           H
ATOM   2194  N   LEU A 237      13.530   3.317  -7.996  1.00 25.05           N
ATOM   2195  CA  LEU A 237      12.642   2.165  -7.868  1.00 27.46           C
ATOM   2196  C   LEU A 237      12.669   1.274  -9.112  1.00 27.75           C
ATOM   2197  O   LEU A 237      12.436   0.075  -8.969  1.00 28.17           O
ATOM   2198  CB  LEU A 237      11.212   2.607  -7.482  1.00 25.77           C
ATOM   2199  CG  LEU A 237      10.779   2.066  -6.102  1.00 26.56           C
ATOM   2200  CD1 LEU A 237      11.600   2.673  -4.958  1.00 26.59           C
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ATOM   2201  CD2 LEU A 237       9.283   2.283  -5.855  1.00 27.15           C
ATOM   2202  H   LEU A 237      13.292   4.005  -8.705  1.00  0.00           H
ATOM   2203  HA  LEU A 237      13.014   1.507  -7.085  1.00  0.00           H
ATOM   2204  HB2 LEU A 237      11.119   3.693  -7.502  1.00  0.00           H
ATOM   2205  HB3 LEU A 237      10.505   2.253  -8.235  1.00  0.00           H
ATOM   2206  HG  LEU A 237      10.954   0.990  -6.098  1.00  0.00           H
ATOM   2207 HD11 LEU A 237      11.325   2.231  -4.004  1.00  0.00           H
ATOM   2208 HD12 LEU A 237      12.666   2.487  -5.079  1.00  0.00           H
ATOM   2209 HD13 LEU A 237      11.453   3.751  -4.893  1.00  0.00           H
ATOM   2210 HD21 LEU A 237       8.962   1.808  -4.928  1.00  0.00           H
ATOM   2211 HD22 LEU A 237       9.044   3.345  -5.796  1.00  0.00           H
ATOM   2212 HD23 LEU A 237       8.691   1.859  -6.666  1.00  0.00           H
ATOM   2213  N   GLU A 238      13.049   1.779 -10.297  1.00 28.09           N
ATOM   2214  CA  GLU A 238      13.319   0.959 -11.495  1.00 29.19           C
ATOM   2215  C   GLU A 238      14.619   0.143 -11.349  1.00 29.11           C
ATOM   2216  O   GLU A 238      14.839  -0.840 -12.057  1.00 28.86           O
ATOM   2217  CB  GLU A 238      13.345   1.838 -12.769  1.00 32.53           C
ATOM   2218  CG  GLU A 238      12.047   2.638 -13.062  1.00 39.05           C
ATOM   2219  CD  GLU A 238      10.771   1.868 -12.757  1.00 42.35           C
ATOM   2220  OE1 GLU A 238      10.296   1.107 -13.622  1.00 44.53           O
ATOM   2221  OE2 GLU A 238      10.312   1.932 -11.597  1.00 42.36           O1-
ATOM   2222  H   GLU A 238      13.039   2.790 -10.401  1.00  0.00           H
ATOM   2223  HA  GLU A 238      12.545   0.205 -11.610  1.00  0.00           H
ATOM   2224  HB2 GLU A 238      14.185   2.531 -12.721  1.00  0.00           H
ATOM   2225  HB3 GLU A 238      13.539   1.190 -13.625  1.00  0.00           H
ATOM   2226  HG2 GLU A 238      12.029   3.555 -12.481  1.00  0.00           H
ATOM   2227  HG3 GLU A 238      12.015   2.951 -14.104  1.00  0.00           H
ATOM   2228  N   GLU A 239      15.425   0.487 -10.339  1.00 30.17           N
ATOM   2229  CA  GLU A 239      16.488  -0.315  -9.750  1.00 30.22           C
ATOM   2230  C   GLU A 239      15.942  -1.649  -9.163  1.00 30.36           C
ATOM   2231  O   GLU A 239      16.635  -2.670  -9.178  1.00 29.89           O
ATOM   2232  CB  GLU A 239      17.176   0.600  -8.705  1.00 31.52           C
ATOM   2233  CG  GLU A 239      18.491   0.084  -8.086  1.00 34.59           C
ATOM   2234  CD  GLU A 239      19.175   1.130  -7.201  1.00 35.31           C
ATOM   2235  OE1 GLU A 239      19.235   2.315  -7.593  1.00 38.54           O
ATOM   2236  OE2 GLU A 239      19.649   0.744  -6.107  1.00 36.01           O1-
ATOM   2237  H   GLU A 239      15.172   1.334  -9.851  1.00  0.00           H
ATOM   2238  HA  GLU A 239      17.203  -0.555 -10.537  1.00  0.00           H
ATOM   2239  HB2 GLU A 239      17.388   1.560  -9.181  1.00  0.00           H
ATOM   2240  HB3 GLU A 239      16.479   0.830  -7.898  1.00  0.00           H
ATOM   2241  HG2 GLU A 239      18.307  -0.816  -7.500  1.00  0.00           H
ATOM   2242  HG3 GLU A 239      19.193  -0.187  -8.873  1.00  0.00           H
ATOM   2243  N   TYR A 240      14.667  -1.699  -8.743  1.00 29.40           N
ATOM   2244  CA  TYR A 240      14.047  -2.776  -7.968  1.00 26.76           C
ATOM   2245  C   TYR A 240      12.818  -3.375  -8.669  1.00 26.94           C
ATOM   2246  O   TYR A 240      12.157  -2.742  -9.490  1.00 26.38           O
ATOM   2247  CB  TYR A 240      13.730  -2.269  -6.547  1.00 25.17           C
ATOM   2248  CG  TYR A 240      14.974  -1.816  -5.806  1.00 22.76           C
ATOM   2249  CD1 TYR A 240      15.912  -2.760  -5.346  1.00 23.97           C
ATOM   2250  CD2 TYR A 240      15.243  -0.443  -5.649  1.00 23.51           C
ATOM   2251  CE1 TYR A 240      17.119  -2.343  -4.761  1.00 21.82           C
ATOM   2252  CE2 TYR A 240      16.458  -0.019  -5.081  1.00 21.33           C
ATOM   2253  CZ  TYR A 240      17.400  -0.972  -4.655  1.00 21.91           C
ATOM   2254  OH  TYR A 240      18.617  -0.571  -4.210  1.00 23.59           O
ATOM   2255  H   TYR A 240      14.076  -0.886  -8.895  1.00  0.00           H
ATOM   2256  HA  TYR A 240      14.760  -3.591  -7.861  1.00  0.00           H
ATOM   2257  HB2 TYR A 240      13.006  -1.453  -6.586  1.00  0.00           H
ATOM   2258  HB3 TYR A 240      13.257  -3.057  -5.960  1.00  0.00           H
ATOM   2259  HD1 TYR A 240      15.732  -3.809  -5.467  1.00  0.00           H
ATOM   2260  HD2 TYR A 240      14.537   0.296  -5.991  1.00  0.00           H
ATOM   2261  HE1 TYR A 240      17.846  -3.069  -4.432  1.00  0.00           H
ATOM   2262  HE2 TYR A 240      16.675   1.038  -5.012  1.00  0.00           H
ATOM   2263  HH  TYR A 240      19.029  -0.063  -4.934  1.00  0.00           H
ATOM   2264  N   ASP A 241      12.523  -4.636  -8.355  1.00 27.29           N
ATOM   2265  CA  ASP A 241      11.399  -5.431  -8.857  1.00 26.93           C
ATOM   2266  C   ASP A 241      10.308  -5.547  -7.789  1.00 26.42           C
ATOM   2267  O   ASP A 241       9.167  -5.859  -8.117  1.00 27.05           O
ATOM   2268  CB  ASP A 241      11.875  -6.867  -9.170  1.00 27.77           C
ATOM   2269  CG  ASP A 241      12.749  -6.931 -10.406  1.00 27.65           C
ATOM   2270  OD1 ASP A 241      12.208  -7.306 -11.464  1.00 25.77           O
ATOM   2271  OD2 ASP A 241      13.943  -6.571 -10.287  1.00 26.65           O1-
ATOM   2272  H   ASP A 241      13.090  -5.099  -7.646  1.00  0.00           H
ATOM   2273  HA  ASP A 241      10.960  -4.991  -9.754  1.00  0.00           H
ATOM   2274  HB2 ASP A 241      12.442  -7.283  -8.340  1.00  0.00           H
ATOM   2275  HB3 ASP A 241      11.023  -7.531  -9.329  1.00  0.00           H
ATOM   2276  N   TRP A 242      10.640  -5.309  -6.515  1.00 24.04           N
ATOM   2277  CA  TRP A 242       9.748  -5.349  -5.363  1.00 24.23           C
ATOM   2278  C   TRP A 242       9.997  -4.131  -4.472  1.00 23.82           C
ATOM   2279  O   TRP A 242      11.049  -3.496  -4.558  1.00 22.71           O
ATOM   2280  CB  TRP A 242       9.909  -6.655  -4.557  1.00 23.96           C
ATOM   2281  CG  TRP A 242       9.667  -7.998  -5.184  1.00 23.75           C
ATOM   2282  CD1 TRP A 242      10.369  -8.538  -6.204  1.00 26.08           C
ATOM   2283  CD2 TRP A 242       8.747  -9.045  -4.749  1.00 25.48           C
ATOM   2284  NE1 TRP A 242       9.966  -9.840  -6.419  1.00 23.93           N
ATOM   2285  CE3 TRP A 242       7.733  -9.133  -3.766  1.00 25.82           C
ATOM   2286  CE2 TRP A 242       9.038 -10.234  -5.484  1.00 25.93           C
ATOM   2287  CZ3 TRP A 242       7.102 -10.357  -3.475  1.00 26.34           C
ATOM   2288  CZ2 TRP A 242       8.434 -11.463  -5.191  1.00 26.43           C
ATOM   2289  CH2 TRP A 242       7.477 -11.525  -4.165  1.00 24.99           C
ATOM   2290  H   TRP A 242      11.592  -5.030  -6.320  1.00  0.00           H
ATOM   2291  HA  TRP A 242       8.722  -5.251  -5.705  1.00  0.00           H
ATOM   2292  HB2 TRP A 242      10.919  -6.686  -4.160  1.00  0.00           H
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ATOM   2293  HB3 TRP A 242      9.264  -6.605  -3.682  1.00  0.00           H
ATOM   2294  HD1 TRP A 242     11.171  -8.030  -6.714  1.00  0.00           H
ATOM   2295  HE1 TRP A 242     10.412 -10.452  -7.096  1.00  0.00           H
ATOM   2296  HE3 TRP A 242      7.464  -8.253  -3.202  1.00  0.00           H
ATOM   2297  HZ3 TRP A 242      6.337 -10.404  -2.714  1.00  0.00           H
ATOM   2298  HZ2 TRP A 242      8.688 -12.350  -5.754  1.00  0.00           H
ATOM   2299  HH2 TRP A 242      7.003 -12.467  -3.937  1.00  0.00           H
ATOM   2300  N   TYR A 243      9.040  -3.834  -3.594  1.00 22.84           N
ATOM   2301  CA  TYR A 243      9.058  -2.730  -2.650  1.00 21.90           C
ATOM   2302  C   TYR A 243      8.440  -3.172  -1.324  1.00 22.39           C
ATOM   2303  O   TYR A 243      7.442  -3.896  -1.314  1.00 22.11           O
ATOM   2304  CB  TYR A 243      8.370  -1.490  -3.258  1.00 22.85           C
ATOM   2305  CG  TYR A 243      6.846  -1.535  -3.368  1.00 20.92           C
ATOM   2306  CD1 TYR A 243      6.218  -2.369  -4.316  1.00 18.97           C
ATOM   2307  CD2 TYR A 243      6.042  -0.753  -2.510  1.00 20.38           C
ATOM   2308  CE1 TYR A 243      4.820  -2.382  -4.448  1.00 18.11           C
ATOM   2309  CE2 TYR A 243      4.639  -0.778  -2.627  1.00 20.28           C
ATOM   2310  CZ  TYR A 243      4.030  -1.582  -3.604  1.00 19.55           C
ATOM   2311  OH  TYR A 243      2.676  -1.584  -3.742  1.00 19.44           O
ATOM   2312  H   TYR A 243      8.204  -4.421  -3.561  1.00  0.00           H
ATOM   2313  HA  TYR A 243     10.099  -2.465  -2.457  1.00  0.00           H
ATOM   2314  HB2 TYR A 243      8.649  -0.626  -2.658  1.00  0.00           H
ATOM   2315  HB3 TYR A 243      8.787  -1.288  -4.243  1.00  0.00           H
ATOM   2316  HD1 TYR A 243      6.794  -3.021  -4.948  1.00  0.00           H
ATOM   2317  HD2 TYR A 243      6.492  -0.138  -1.750  1.00  0.00           H
ATOM   2318  HE1 TYR A 243      4.363  -3.027  -5.187  1.00  0.00           H
ATOM   2319  HE2 TYR A 243      4.026  -0.173  -1.974  1.00  0.00           H
ATOM   2320  HH  TYR A 243      2.220  -1.173  -2.978  1.00  0.00           H
ATOM   2321  N   TRP A 244      9.016  -2.723  -0.205  1.00 20.85           N
ATOM   2322  CA  TRP A 244      8.352  -2.671   1.088  1.00 20.48           C
ATOM   2323  C   TRP A 244      8.008  -1.195   1.297  1.00 21.37           C
ATOM   2324  O   TRP A 244      8.904  -0.389   1.545  1.00 18.99           O
ATOM   2325  CB  TRP A 244      9.296  -3.147   2.208  1.00 20.36           C
ATOM   2326  CG  TRP A 244      8.664  -3.529   3.510  1.00 22.78           C
ATOM   2327  CD1 TRP A 244      7.469  -3.122   4.003  1.00 24.36           C
ATOM   2328  CD2 TRP A 244      9.191  -4.474   4.481  1.00 23.95           C
ATOM   2329  NE1 TRP A 244      7.233  -3.746   5.210  1.00 23.22           N
ATOM   2330  CE3 TRP A 244     10.359  -5.265   4.540  1.00 24.80           C
ATOM   2331  CE2 TRP A 244      8.260  -4.596   5.555  1.00 24.71           C
ATOM   2332  CZ3 TRP A 244     10.584  -6.149   5.610  1.00 26.03           C
ATOM   2333  CZ2 TRP A 244      8.477  -5.468   6.634  1.00 26.18           C
ATOM   2334  CH2 TRP A 244      9.636  -6.261   6.645  1.00 24.87           C
ATOM   2335  H   TRP A 244      9.922  -2.266  -0.282  1.00  0.00           H
ATOM   2336  HA  TRP A 244      7.477  -3.309   1.101  1.00  0.00           H
ATOM   2337  HB2 TRP A 244      9.827  -4.030   1.865  1.00  0.00           H
ATOM   2338  HB3 TRP A 244     10.077  -2.431   2.438  1.00  0.00           H
ATOM   2339  HD1 TRP A 244      6.791  -2.438   3.513  1.00  0.00           H
ATOM   2340  HE1 TRP A 244      6.345  -3.664   5.693  1.00  0.00           H
ATOM   2341  HE3 TRP A 244     11.089  -5.193   3.748  1.00  0.00           H
ATOM   2342  HZ3 TRP A 244     11.487  -6.742   5.625  1.00  0.00           H
ATOM   2343  HZ2 TRP A 244      7.751  -5.558   7.428  1.00  0.00           H
ATOM   2344  HH2 TRP A 244      9.806  -6.957   7.448  1.00  0.00           H
ATOM   2345  N   ARG A 245      6.734  -0.815   1.185  1.00 21.39           N
ATOM   2346  CA  ARG A 245      6.301   0.537   1.521  1.00 21.27           C
ATOM   2347  C   ARG A 245      6.258   0.668   3.048  1.00 18.90           C
ATOM   2348  O   ARG A 245      5.445   0.017   3.705  1.00 20.72           O
ATOM   2349  CB  ARG A 245      4.925   0.843   0.903  1.00 22.80           C
ATOM   2350  CG  ARG A 245      4.396   2.250   1.254  1.00 24.05           C
ATOM   2351  CD  ARG A 245      3.440   2.785   0.198  1.00 22.81           C
ATOM   2352  NE  ARG A 245      2.673   3.879   0.778  1.00 24.70           N
ATOM   2353  CZ  ARG A 245      1.469   4.216   0.289  1.00 24.50           C
ATOM   2354  NH1 ARG A 245      1.132   3.822  -0.931  1.00 21.87           N
ATOM   2355  NH2 ARG A 245      0.643   4.953   1.027  1.00 25.57           N1+
ATOM   2356  H   ARG A 245      6.039  -1.539   1.003  1.00  0.00           H
ATOM   2357  HA  ARG A 245      7.010   1.254   1.113  1.00  0.00           H
ATOM   2358  HB2 ARG A 245      5.028   0.765  -0.177  1.00  0.00           H
ATOM   2359  HB3 ARG A 245      4.187   0.093   1.193  1.00  0.00           H
ATOM   2360  HG2 ARG A 245      3.914   2.216   2.236  1.00  0.00           H
ATOM   2361  HG3 ARG A 245      5.232   2.949   1.342  1.00  0.00           H
ATOM   2362  HD2 ARG A 245      4.025   3.117  -0.664  1.00  0.00           H
ATOM   2363  HD3 ARG A 245      2.771   1.977  -0.105  1.00  0.00           H
ATOM   2364  HE  ARG A 245      2.889   4.203   1.708  1.00  0.00           H
ATOM   2365 HH11 ARG A 245      1.821   3.507  -1.613  1.00  0.00           H
ATOM   2366 HH12 ARG A 245      0.155   4.024  -1.234  1.00  0.00           H
ATOM   2367 HH21 ARG A 245      0.812   5.076   2.023  1.00  0.00           H
ATOM   2368 HH22 ARG A 245     -0.265   5.231   0.669  1.00  0.00           H
ATOM   2369  N   VAL A 246      7.141   1.512   3.587  1.00 18.37           N
ATOM   2370  CA  VAL A 246      7.202   1.878   4.991  1.00 17.88           C
ATOM   2371  C   VAL A 246      6.905   3.384   5.043  1.00 17.66           C
ATOM   2372  O   VAL A 246      7.583   4.194   4.406  1.00 16.95           O
ATOM   2373  CB  VAL A 246      8.592   1.520   5.589  1.00 20.27           C
ATOM   2374  CG1 VAL A 246      8.652   1.825   7.099  1.00 18.44           C
ATOM   2375  CG2 VAL A 246      8.982   0.048   5.345  1.00 22.05           C
ATOM   2376  H   VAL A 246      7.783   1.991   2.957  1.00  0.00           H
ATOM   2377  HA  VAL A 246      6.435   1.343   5.555  1.00  0.00           H
ATOM   2378  HB  VAL A 246      9.350   2.131   5.095  1.00  0.00           H
ATOM   2379 HG11 VAL A 246      9.602   1.512   7.529  1.00  0.00           H
ATOM   2380 HG12 VAL A 246      8.544   2.892   7.293  1.00  0.00           H
ATOM   2381 HG13 VAL A 246      7.862   1.303   7.639  1.00  0.00           H
ATOM   2382 HG21 VAL A 246      9.943  -0.190   5.804  1.00  0.00           H
ATOM   2383 HG22 VAL A 246      8.239  -0.639   5.752  1.00  0.00           H
ATOM   2384 HG23 VAL A 246      9.083  -0.173   4.282  1.00  0.00           H
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ATOM   2385  N   GLU A 247      5.870   3.759   5.794  1.00 18.37           N
ATOM   2386  CA  GLU A 247      5.456   5.140   6.022  1.00 17.71           C
ATOM   2387  C   GLU A 247      6.078   5.666   7.336  1.00 18.77           C
ATOM   2388  O   GLU A 247      6.609   4.880   8.132  1.00 19.80           O
ATOM   2389  CB  GLU A 247      3.908   5.137   6.124  1.00 17.17           C
ATOM   2390  CG  GLU A 247      3.265   5.370   4.753  1.00 16.44           C
ATOM   2391  CD  GLU A 247      1.873   5.985   4.749  1.00 20.59           C
ATOM   2392  OE1 GLU A 247      1.629   6.868   5.623  1.00 21.32           O1-
ATOM   2393  OE2 GLU A 247      1.122   5.651   3.812  1.00 23.91           O
ATOM   2394  H   GLU A 247      5.354   3.037   6.274  1.00  0.00           H
ATOM   2395  HA  GLU A 247      5.810   5.786   5.217  1.00  0.00           H
ATOM   2396  HB2 GLU A 247      3.541   4.196   6.538  1.00  0.00           H
ATOM   2397  HB3 GLU A 247      3.582   5.890   6.843  1.00  0.00           H
ATOM   2398  HG2 GLU A 247      3.865   6.092   4.194  1.00  0.00           H
ATOM   2399  HG3 GLU A 247      3.282   4.428   4.206  1.00  0.00           H
ATOM   2400  N   PRO A 248      6.020   6.991   7.597  1.00 19.92           N
ATOM   2401  CA  PRO A 248      6.457   7.572   8.870  1.00 20.59           C
ATOM   2402  C   PRO A 248      5.470   7.265  10.012  1.00 20.76           C
ATOM   2403  O   PRO A 248      4.274   7.103   9.770  1.00 20.31           O
ATOM   2404  CB  PRO A 248      6.569   9.078   8.598  1.00 22.82           C
ATOM   2405  CG  PRO A 248      5.598   9.340   7.458  1.00 21.16           C
ATOM   2406  CD  PRO A 248      5.546   8.030   6.678  1.00 20.35           C
ATOM   2407  HA  PRO A 248      7.431   7.168   9.122  1.00  0.00           H
ATOM   2408  HB2 PRO A 248      6.365   9.701   9.471  1.00  0.00           H
ATOM   2409  HB3 PRO A 248      7.577   9.312   8.262  1.00  0.00           H
ATOM   2410  HG2 PRO A 248      4.611   9.569   7.860  1.00  0.00           H
ATOM   2411  HG3 PRO A 248      5.894  10.177   6.827  1.00  0.00           H
ATOM   2412  HD2 PRO A 248      4.533   7.850   6.318  1.00  0.00           H
ATOM   2413  HD3 PRO A 248      6.207   8.083   5.811  1.00  0.00           H
ATOM   2414  N   ASP A 249      5.983   7.169  11.247  1.00 20.20           N
ATOM   2415  CA  ASP A 249      5.245   6.966  12.504  1.00 19.81           C
ATOM   2416  C   ASP A 249      4.804   5.507  12.715  1.00 20.04           C
ATOM   2417  O   ASP A 249      3.884   5.240  13.488  1.00 20.11           O
ATOM   2418  CB  ASP A 249      4.142   8.038  12.767  1.00  0.00           C
ATOM   2419  CG  ASP A 249      4.613   9.186  13.657  1.00  0.00           C
ATOM   2420  OD1 ASP A 249      4.981   9.049  14.822  1.00  0.00           O
ATOM   2421  OD2 ASP A 249      4.583  10.386  13.021  1.00  0.00           O
ATOM   2422  H   ASP A 249      6.987   7.246  11.353  1.00  0.00           H
ATOM   2423  HA  ASP A 249      6.000   7.083  13.282  1.00  0.00           H
ATOM   2424  HB2 ASP A 249      3.711   8.435  11.849  1.00  0.00           H
ATOM   2425  HB3 ASP A 249      3.297   7.607  13.301  1.00  0.00           H
ATOM   2426  HD2 ASP A 249      4.741  11.113  13.636  1.00  0.00           H
ATOM   2427  N   ILE A 250      5.446   4.551  12.033  1.00 19.14           N
ATOM   2428  CA  ILE A 250      5.111   3.129  12.073  1.00 20.37           C
ATOM   2429  C   ILE A 250      5.789   2.451  13.278  1.00 19.83           C
ATOM   2430  O   ILE A 250      6.817   2.903  13.795  1.00 20.11           O
ATOM   2431  CB  ILE A 250      5.485   2.485  10.691  1.00 21.38           C
ATOM   2432  CG1 ILE A 250      4.247   2.410   9.775  1.00 23.63           C
ATOM   2433  CG2 ILE A 250      6.155   1.091  10.712  1.00 22.17           C
ATOM   2434  CD1 ILE A 250      3.567   3.747   9.483  1.00 20.80           C
ATOM   2435  H   ILE A 250      6.267   4.814  11.499  1.00  0.00           H
ATOM   2436  HA  ILE A 250      4.036   3.035  12.228  1.00  0.00           H
ATOM   2437  HB  ILE A 250      6.198   3.129  10.185  1.00  0.00           H
ATOM   2438 HG12 ILE A 250      4.530   1.963   8.822  1.00  0.00           H
ATOM   2439 HG13 ILE A 250      3.510   1.744  10.225  1.00  0.00           H
ATOM   2440 HG21 ILE A 250      6.399   0.759   9.703  1.00  0.00           H
ATOM   2441 HG22 ILE A 250      7.093   1.091  11.268  1.00  0.00           H
ATOM   2442 HG23 ILE A 250      5.504   0.334  11.151  1.00  0.00           H
ATOM   2443 HD11 ILE A 250      2.791   3.612   8.731  1.00  0.00           H
ATOM   2444 HD12 ILE A 250      3.102   4.170  10.372  1.00  0.00           H
ATOM   2445 HD13 ILE A 250      4.269   4.482   9.104  1.00  0.00           H
ATOM   2446  N   LYS A 251      5.176   1.342  13.700  1.00 20.52           N
ATOM   2447  CA  LYS A 251      5.655   0.383  14.681  1.00 20.36           C
ATOM   2448  C   LYS A 251      5.556  -0.998  14.012  1.00 21.67           C
ATOM   2449  O   LYS A 251      4.541  -1.281  13.370  1.00 19.23           O
ATOM   2450  CB  LYS A 251      4.771   0.452  15.952  1.00 20.47           C
ATOM   2451  CG  LYS A 251      4.560   1.870  16.539  1.00 20.09           C
ATOM   2452  CD  LYS A 251      3.395   1.950  17.539  1.00 22.23           C
ATOM   2453  CE  LYS A 251      3.752   1.570  18.979  1.00 20.07           C
ATOM   2454  NZ  LYS A 251      2.534   1.313  19.767  1.00 21.10           N1+
ATOM   2455  H   LYS A 251      4.322   1.075  13.221  1.00  0.00           H
ATOM   2456  HA  LYS A 251      6.693   0.593  14.926  1.00  0.00           H
ATOM   2457  HB2 LYS A 251      3.799   0.022  15.711  1.00  0.00           H
ATOM   2458  HB3 LYS A 251      5.190  -0.202  16.718  1.00  0.00           H
ATOM   2459  HG2 LYS A 251      5.483   2.249  16.979  1.00  0.00           H
ATOM   2460  HG3 LYS A 251      4.311   2.566  15.740  1.00  0.00           H
ATOM   2461  HD2 LYS A 251      3.011   2.970  17.552  1.00  0.00           H
ATOM   2462  HD3 LYS A 251      2.571   1.334  17.189  1.00  0.00           H
ATOM   2463  HE2 LYS A 251      4.399   0.696  18.989  1.00  0.00           H
ATOM   2464  HE3 LYS A 251      4.318   2.381  19.435  1.00  0.00           H
ATOM   2465  HZ1 LYS A 251      1.863   2.075  19.619  1.00  0.00           H
ATOM   2466  HZ2 LYS A 251      2.066   0.460  19.465  1.00  0.00           H
ATOM   2467  HZ3 LYS A 251      2.724   1.269  20.765  1.00  0.00           H
ATOM   2468  N   LEU A 252      6.576  -1.851  14.163  1.00 19.01           N
ATOM   2469  CA  LEU A 252      6.503  -3.289  13.903  1.00 20.86           C
ATOM   2470  C   LEU A 252      6.676  -3.940  15.269  1.00 19.45           C
ATOM   2471  O   LEU A 252      7.727  -3.790  15.882  1.00 21.96           O
ATOM   2472  CB  LEU A 252      7.658  -3.766  12.987  1.00 21.87           C
ATOM   2473  CG  LEU A 252      7.333  -3.810  11.481  1.00 22.64           C
ATOM   2474  CD1 LEU A 252      8.595  -4.186  10.695  1.00 23.58           C
ATOM   2475  CD2 LEU A 252      6.223  -4.824  11.160  1.00 23.00           C
ATOM   2476  H   LEU A 252      7.324  -1.586  14.792  1.00  0.00           H
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ATOM   2477  HA  LEU A 252       5.534  -3.583  13.503  1.00  0.00           H
ATOM   2478  HB2 LEU A 252       8.541  -3.150  13.162  1.00  0.00           H
ATOM   2479  HB3 LEU A 252       7.965  -4.776  13.274  1.00  0.00           H
ATOM   2480  HG  LEU A 252       7.010  -2.818  11.163  1.00  0.00           H
ATOM   2481 HD11 LEU A 252       8.428  -4.141   9.617  1.00  0.00           H
ATOM   2482 HD12 LEU A 252       9.412  -3.512  10.935  1.00  0.00           H
ATOM   2483 HD13 LEU A 252       8.931  -5.194  10.939  1.00  0.00           H
ATOM   2484 HD21 LEU A 252       6.081  -4.937  10.086  1.00  0.00           H
ATOM   2485 HD22 LEU A 252       6.466  -5.807  11.565  1.00  0.00           H
ATOM   2486 HD23 LEU A 252       5.262  -4.531  11.575  1.00  0.00           H
ATOM   2487  N   TYR A 253      5.650  -4.630  15.756  1.00 20.60           N
ATOM   2488  CA  TYR A 253      5.630  -5.186  17.100  1.00 20.37           C
ATOM   2489  C   TYR A 253      6.259  -6.580  17.109  1.00 19.45           C
ATOM   2490  O   TYR A 253      7.039  -6.895  18.003  1.00 22.46           O
ATOM   2491  CB  TYR A 253      4.163  -5.339  17.524  1.00 19.57           C
ATOM   2492  CG  TYR A 253      3.399  -4.035  17.645  1.00 20.14           C
ATOM   2493  CD1 TYR A 253      3.869  -3.029  18.509  1.00 20.07           C
ATOM   2494  CD2 TYR A 253      2.169  -3.858  16.978  1.00 19.83           C
ATOM   2495  CE1 TYR A 253      3.089  -1.888  18.747  1.00 20.33           C
ATOM   2496  CE2 TYR A 253      1.389  -2.716  17.220  1.00 19.82           C
ATOM   2497  CZ  TYR A 253      1.843  -1.730  18.115  1.00 18.82           C
ATOM   2498  OH  TYR A 253      1.069  -0.641  18.391  1.00 18.72           O
ATOM   2499  H   TYR A 253      4.851  -4.801  15.155  1.00  0.00           H
ATOM   2500  HA  TYR A 253      6.171  -4.548  17.804  1.00  0.00           H
ATOM   2501  HB2 TYR A 253      3.630  -6.012  16.850  1.00  0.00           H
ATOM   2502  HB3 TYR A 253      4.125  -5.822  18.500  1.00  0.00           H
ATOM   2503  HD1 TYR A 253      4.797  -3.149  19.053  1.00  0.00           H
ATOM   2504  HD2 TYR A 253      1.769  -4.630  16.340  1.00  0.00           H
ATOM   2505  HE1 TYR A 253      3.439  -1.182  19.477  1.00  0.00           H
ATOM   2506  HE2 TYR A 253      0.424  -2.632  16.743  1.00  0.00           H
ATOM   2507  HH  TYR A 253      0.127  -0.848  18.216  1.00  0.00           H
ATOM   2508  N   CYS A 254      5.944  -7.415  16.115  1.00 22.80           N
ATOM   2509  CA  CYS A 254      6.495  -8.762  16.008  1.00 23.68           C
ATOM   2510  C   CYS A 254      7.812  -8.681  15.240  1.00 22.63           C
ATOM   2511  O   CYS A 254      7.917  -7.978  14.231  1.00 23.04           O
ATOM   2512  CB  CYS A 254      5.533  -9.662  15.222  1.00 23.53           C
ATOM   2513  SG  CYS A 254      3.888  -9.833  15.970  1.00 25.59           S
ATOM   2514  H   CYS A 254      5.406  -7.059  15.339  1.00  0.00           H
ATOM   2515  HA  CYS A 254      6.665  -9.193  16.994  1.00  0.00           H
ATOM   2516  HB2 CYS A 254      5.405  -9.281  14.208  1.00  0.00           H
ATOM   2517  HB3 CYS A 254      5.955 -10.663  15.110  1.00  0.00           H
ATOM   2518  N   ASP A 255      8.813  -9.406  15.737  1.00 22.72           N
ATOM   2519  CA  ASP A 255     10.086  -9.668  15.089  1.00 23.70           C
ATOM   2520  C   ASP A 255      9.823 -10.618  13.931  1.00 24.37           C
ATOM   2521  O   ASP A 255      9.379 -11.744  14.135  1.00 24.71           O
ATOM   2522  CB  ASP A 255     11.053 -10.355  16.080  1.00 25.02           C
ATOM   2523  CG  ASP A 255     11.988  -9.363  16.731  1.00 25.86           C
ATOM   2524  OD1 ASP A 255     11.615  -8.805  17.791  1.00 25.31           O
ATOM   2525  OD2 ASP A 255     13.065  -9.172  16.126  1.00 30.23           O1-
ATOM   2526  H   ASP A 255      8.568 -10.045  16.497  1.00  0.00           H
ATOM   2527  HA  ASP A 255     10.513  -8.741  14.701  1.00  0.00           H
ATOM   2528  HB2 ASP A 255     10.518 -10.908  16.849  1.00  0.00           H
ATOM   2529  HB3 ASP A 255     11.676 -11.095  15.580  1.00  0.00           H
ATOM   2530  N   ILE A 256     10.101 -10.157  12.716  1.00 23.24           N
ATOM   2531  CA  ILE A 256      9.932 -10.929  11.501  1.00 25.08           C
ATOM   2532  C   ILE A 256     11.268 -11.675  11.366  1.00 24.17           C
ATOM   2533  O   ILE A 256     12.332 -11.062  11.237  1.00 23.01           O
ATOM   2534  CB  ILE A 256      9.670  -9.964  10.315  1.00 24.13           C
ATOM   2535  CG1 ILE A 256      8.527  -8.961  10.628  1.00 24.74           C
ATOM   2536  CG2 ILE A 256      9.345 -10.760   9.034  1.00 23.47           C
ATOM   2537  CD1 ILE A 256      8.382  -7.826   9.611  1.00 24.32           C
ATOM   2538  H   ILE A 256     10.524  -9.243  12.618  1.00  0.00           H
ATOM   2539  HA  ILE A 256      9.095 -11.627  11.597  1.00  0.00           H
ATOM   2540  HB  ILE A 256     10.576  -9.388  10.136  1.00  0.00           H
ATOM   2541 HG12 ILE A 256      7.589  -9.505  10.721  1.00  0.00           H
ATOM   2542 HG13 ILE A 256      8.674  -8.477  11.593  1.00  0.00           H
ATOM   2543 HG21 ILE A 256      9.231 -10.101   8.178  1.00  0.00           H
ATOM   2544 HG22 ILE A 256     10.130 -11.471   8.778  1.00  0.00           H
ATOM   2545 HG23 ILE A 256      8.415 -11.324   9.136  1.00  0.00           H
ATOM   2546 HD11 ILE A 256      7.560  -7.167   9.886  1.00  0.00           H
ATOM   2547 HD12 ILE A 256      9.291  -7.226   9.579  1.00  0.00           H
ATOM   2548 HD13 ILE A 256      8.173  -8.197   8.608  1.00  0.00           H
ATOM   2549  N   ASN A 257     11.219 -12.997  11.530  1.00 25.64           N
ATOM   2550  CA  ASN A 257     12.389 -13.861  11.707  1.00 27.73           C
ATOM   2551  C   ASN A 257     12.617 -14.725  10.463  1.00 27.85           C
ATOM   2552  O   ASN A 257     13.091 -15.856  10.540  1.00 27.48           O
ATOM   2553  CB  ASN A 257     12.268 -14.681  13.012  1.00 29.60           C
ATOM   2554  CG  ASN A 257     12.369 -13.799  14.260  1.00 31.61           C
ATOM   2555  OD1 ASN A 257     13.287 -12.985  14.381  1.00 33.94           O
ATOM   2556  ND2 ASN A 257     11.403 -13.884  15.164  1.00 33.79           N
ATOM   2557  H   ASN A 257     10.309 -13.411  11.683  1.00  0.00           H
ATOM   2558  HA  ASN A 257     13.293 -13.258  11.790  1.00  0.00           H
ATOM   2559  HB2 ASN A 257     11.338 -15.252  13.020  1.00  0.00           H
ATOM   2560  HB3 ASN A 257     13.076 -15.411  13.078  1.00  0.00           H
ATOM   2561 HD21 ASN A 257     10.556 -14.427  14.974  1.00  0.00           H
ATOM   2562 HD22 ASN A 257     11.434 -13.316  15.993  1.00  0.00           H
ATOM   2563  N   TYR A 258     12.316 -14.149   9.299  1.00 29.16           N
ATOM   2564  CA  TYR A 258     12.606 -14.646   7.967  1.00 29.16           C
ATOM   2565  C   TYR A 258     12.763 -13.432   7.044  1.00 28.34           C
ATOM   2566  O   TYR A 258     12.265 -12.346   7.347  1.00 28.39           O
ATOM   2567  CB  TYR A 258     11.549 -15.676   7.514  1.00 29.46           C
ATOM   2568  CG  TYR A 258     10.141 -15.127   7.362  1.00 30.02           C
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ATOM   2569  CD1 TYR A 258       9.286 -15.048   8.481  1.00 31.04          C
ATOM   2570  CD2 TYR A 258       9.688 -14.677   6.104  1.00 30.30          C
ATOM   2571  CE1 TYR A 258       7.993 -14.509   8.346  1.00 29.83          C
ATOM   2572  CE2 TYR A 258       8.389 -14.152   5.967  1.00 30.49          C
ATOM   2573  CZ  TYR A 258       7.547 -14.061   7.088  1.00 31.23          C
ATOM   2574  OH  TYR A 258       6.303 -13.532   6.944  1.00 30.56          O
ATOM   2575  H   TYR A 258      11.963 -13.200   9.310  1.00  0.00          H
ATOM   2576  HA  TYR A 258      13.576 -15.145   8.004  1.00  0.00          H
ATOM   2577  HB2 TYR A 258      11.853 -16.110   6.561  1.00  0.00          H
ATOM   2578  HB3 TYR A 258      11.524 -16.511   8.216  1.00  0.00          H
ATOM   2579  HD1 TYR A 258       9.618 -15.391   9.449  1.00  0.00          H
ATOM   2580  HD2 TYR A 258      10.332 -14.724   5.240  1.00  0.00          H
ATOM   2581  HE1 TYR A 258       7.342 -14.441   9.206  1.00  0.00          H
ATOM   2582  HE2 TYR A 258       8.032 -13.817   5.006  1.00  0.00          H
ATOM   2583  HH  TYR A 258       5.796 -13.495   7.785  1.00  0.00          H
ATOM   2584  N   ASP A 259      13.448 -13.610   5.912  1.00 26.74          N
ATOM   2585  CA  ASP A 259      13.588 -12.591   4.876  1.00 25.98          C
ATOM   2586  C   ASP A 259      12.323 -12.654   4.006  1.00 26.85          C
ATOM   2587  O   ASP A 259      12.091 -13.656   3.326  1.00 26.32          O
ATOM   2588  CB  ASP A 259      14.848 -12.920   4.047  1.00 24.33          C
ATOM   2589  CG  ASP A 259      15.162 -11.918   2.941  1.00 23.76          C
ATOM   2590  OD1 ASP A 259      14.315 -11.661   2.055  1.00 24.79          O
ATOM   2591  OD2 ASP A 259      16.295 -11.393   2.948  1.00 24.27          O1-
ATOM   2592  H   ASP A 259      13.809 -14.526   5.707  1.00  0.00          H
ATOM   2593  HA  ASP A 259      13.699 -11.600   5.321  1.00  0.00          H
ATOM   2594  HB2 ASP A 259      15.710 -12.959   4.706  1.00  0.00          H
ATOM   2595  HB3 ASP A 259      14.781 -13.918   3.623  1.00  0.00          H
ATOM   2596  N   VAL A 260      11.482 -11.615   4.081  1.00 27.13          N
ATOM   2597  CA  VAL A 260      10.156 -11.571   3.470  1.00 26.80          C
ATOM   2598  C   VAL A 260      10.183 -11.729   1.938  1.00 26.31          C
ATOM   2599  O   VAL A 260       9.412 -12.518   1.401  1.00 25.15          O
ATOM   2600  CB  VAL A 260       9.390 -10.299   3.923  1.00 27.92          C
ATOM   2601  CG1 VAL A 260       9.119 -10.323   5.436  1.00 27.39          C
ATOM   2602  CG2 VAL A 260      10.053  -8.965   3.525  1.00 30.01          C
ATOM   2603  H   VAL A 260      11.708 -10.880   4.732  1.00  0.00          H
ATOM   2604  HA  VAL A 260       9.609 -12.436   3.850  1.00  0.00          H
ATOM   2605  HB  VAL A 260       8.413 -10.325   3.437  1.00  0.00          H
ATOM   2606 HG11 VAL A 260       8.527  -9.463   5.749  1.00  0.00          H
ATOM   2607 HG12 VAL A 260       8.561 -11.215   5.726  1.00  0.00          H
ATOM   2608 HG13 VAL A 260      10.045 -10.315   6.011  1.00  0.00          H
ATOM   2609 HG21 VAL A 260       9.460  -8.121   3.880  1.00  0.00          H
ATOM   2610 HG22 VAL A 260      11.055  -8.859   3.940  1.00  0.00          H
ATOM   2611 HG23 VAL A 260      10.117  -8.852   2.444  1.00  0.00          H
ATOM   2612  N   PHE A 261      11.089 -11.049   1.226  1.00 25.12          N
ATOM   2613  CA  PHE A 261      11.121 -11.075  -0.240  1.00 24.42          C
ATOM   2614  C   PHE A 261      11.805 -12.344  -0.762  1.00 26.37          C
ATOM   2615  O   PHE A 261      11.424 -12.842  -1.819  1.00 26.96          O
ATOM   2616  CB  PHE A 261      11.867  -9.846  -0.777  1.00 24.90          C
ATOM   2617  CG  PHE A 261      11.140  -8.545  -0.518  1.00 24.87          C
ATOM   2618  CD1 PHE A 261       9.940  -8.278  -1.204  1.00 23.69          C
ATOM   2619  CD2 PHE A 261      11.641  -7.614   0.413  1.00 24.07          C
ATOM   2620  CE1 PHE A 261       9.226  -7.096  -0.943  1.00 23.05          C
ATOM   2621  CE2 PHE A 261      10.929  -6.432   0.675  1.00 26.09          C
ATOM   2622  CZ  PHE A 261       9.715  -6.186   0.008  1.00 24.79          C
ATOM   2623  H   PHE A 261      11.772 -10.491   1.717  1.00  0.00          H
ATOM   2624  HA  PHE A 261      10.102 -11.066  -0.632  1.00  0.00          H
ATOM   2625  HB2 PHE A 261      12.867  -9.793  -0.363  1.00  0.00          H
ATOM   2626  HB3 PHE A 261      11.993  -9.934  -1.855  1.00  0.00          H
ATOM   2627  HD1 PHE A 261       9.563  -8.991  -1.920  1.00  0.00          H
ATOM   2628  HD2 PHE A 261      12.565  -7.800   0.936  1.00  0.00          H
ATOM   2629  HE1 PHE A 261       8.295  -6.889  -1.452  1.00  0.00          H
ATOM   2630  HE2 PHE A 261      11.312  -5.722   1.393  1.00  0.00          H
ATOM   2631  HZ  PHE A 261       9.140  -5.305   0.229  1.00  0.00          H
ATOM   2632  N   LYS A 262      12.738 -12.932   0.002  1.00 25.29          N
ATOM   2633  CA  LYS A 262      13.273 -14.264  -0.266  1.00 27.76          C
ATOM   2634  C   LYS A 262      12.196 -15.346  -0.060  1.00 27.08          C
ATOM   2635  O   LYS A 262      12.303 -16.384  -0.702  1.00 27.65          O
ATOM   2636  CB  LYS A 262      14.464 -14.517   0.684  1.00 27.98          C
ATOM   2637  CG  LYS A 262      15.159 -15.898   0.655  1.00 31.68          C
ATOM   2638  CD  LYS A 262      16.024 -16.180  -0.588  1.00 35.77          C
ATOM   2639  CE  LYS A 262      15.549 -17.381  -1.429  1.00 38.98          C
ATOM   2640  NZ  LYS A 262      14.418 -17.031  -2.293  1.00 38.71          N1+
ATOM   2641  H   LYS A 262      13.060 -12.458   0.849  1.00  0.00          H
ATOM   2642  HA  LYS A 262      13.617 -14.299  -1.302  1.00  0.00          H
ATOM   2643  HB2 LYS A 262      15.213 -13.736   0.544  1.00  0.00          H
ATOM   2644  HB3 LYS A 262      14.078 -14.387   1.690  1.00  0.00          H
ATOM   2645  HG2 LYS A 262      15.817 -15.933   1.525  1.00  0.00          H
ATOM   2646  HG3 LYS A 262      14.445 -16.703   0.835  1.00  0.00          H
ATOM   2647  HD2 LYS A 262      16.127 -15.283  -1.198  1.00  0.00          H
ATOM   2648  HD3 LYS A 262      17.035 -16.404  -0.245  1.00  0.00          H
ATOM   2649  HE2 LYS A 262      16.358 -17.728  -2.070  1.00  0.00          H
ATOM   2650  HE3 LYS A 262      15.273 -18.226  -0.797  1.00  0.00          H
ATOM   2651  HZ1 LYS A 262      14.057 -17.889  -2.763  1.00  0.00          H
ATOM   2652  HZ2 LYS A 262      13.615 -16.708  -1.758  1.00  0.00          H
ATOM   2653  HZ3 LYS A 262      14.679 -16.359  -3.007  1.00  0.00          H
ATOM   2654  N   TRP A 263      11.207 -15.127   0.817  1.00 26.32          N
ATOM   2655  CA  TRP A 263      10.155 -16.082   1.170  1.00 26.06          C
ATOM   2656  C   TRP A 263       8.925 -15.933   0.252  1.00 28.00          C
ATOM   2657  O   TRP A 263       8.431 -16.938  -0.265  1.00 26.85          O
ATOM   2658  CB  TRP A 263       9.747 -15.806   2.633  1.00 25.69          C
ATOM   2659  CG  TRP A 263       8.698 -16.688   3.244  1.00 24.08          C
ATOM   2660  CD1 TRP A 263       8.930 -17.860   3.879  1.00 24.32          C
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ATOM   2661  CD2 TRP A 263       7.257 -16.464   3.329  1.00 24.24           C
ATOM   2662  NE1 TRP A 263       7.733 -18.381   4.332  1.00 24.75           N
ATOM   2663  CE3 TRP A 263       6.383 -15.441   2.893  1.00 25.60           C
ATOM   2664  CE2 TRP A 263       6.667 -17.559   4.029  1.00 24.89           C
ATOM   2665  CZ3 TRP A 263       4.995 -15.506   3.127  1.00 24.08           C
ATOM   2666  CZ2 TRP A 263       5.284 -17.639   4.270  1.00 24.80           C
ATOM   2667  CH2 TRP A 263       4.445 -16.606   3.812  1.00 25.33           C
ATOM   2668  H   TRP A 263      11.249 -14.265   1.349  1.00  0.00           H
ATOM   2669  HA  TRP A 263      10.534 -17.103   1.089  1.00  0.00           H
ATOM   2670  HB2 TRP A 263      10.637 -15.910   3.254  1.00  0.00           H
ATOM   2671  HB3 TRP A 263       9.420 -14.775   2.763  1.00  0.00           H
ATOM   2672  HD1 TRP A 263       9.909 -18.297   4.014  1.00  0.00           H
ATOM   2673  HE1 TRP A 263       7.663 -19.224   4.886  1.00  0.00           H
ATOM   2674  HE3 TRP A 263       6.792 -14.589   2.379  1.00  0.00           H
ATOM   2675  HZ3 TRP A 263       4.352 -14.705   2.790  1.00  0.00           H
ATOM   2676  HZ2 TRP A 263       4.866 -18.482   4.798  1.00  0.00           H
ATOM   2677  HH2 TRP A 263       3.381 -16.651   3.994  1.00  0.00           H
ATOM   2678  N   MET A 264       8.436 -14.702   0.026  1.00 26.69           N
ATOM   2679  CA  MET A 264       7.220 -14.372  -0.739  1.00 27.66           C
ATOM   2680  C   MET A 264       7.297 -14.866  -2.196  1.00 28.61           C
ATOM   2681  O   MET A 264       6.311 -15.332  -2.767  1.00 28.17           O
ATOM   2682  CB  MET A 264       7.013 -12.838  -0.746  1.00 26.75           C
ATOM   2683  CG  MET A 264       6.451 -12.232   0.553  1.00 27.80           C
ATOM   2684  SD  MET A 264       4.663 -12.398   0.779  1.00 32.27           S
ATOM   2685  CE  MET A 264       4.088 -11.062  -0.303  1.00 29.89           C
ATOM   2686  H   MET A 264       8.891 -13.927   0.509  1.00  0.00           H
ATOM   2687  HA  MET A 264       6.361 -14.855  -0.270  1.00  0.00           H
ATOM   2688  HB2 MET A 264       7.959 -12.352  -0.986  1.00  0.00           H
ATOM   2689  HB3 MET A 264       6.341 -12.561  -1.556  1.00  0.00           H
ATOM   2690  HG2 MET A 264       6.937 -12.665   1.423  1.00  0.00           H
ATOM   2691  HG3 MET A 264       6.691 -11.169   0.587  1.00  0.00           H
ATOM   2692  HE1 MET A 264       3.001 -11.074  -0.368  1.00  0.00           H
ATOM   2693  HE2 MET A 264       4.407 -10.096   0.088  1.00  0.00           H
ATOM   2694  HE3 MET A 264       4.485 -11.165  -1.310  1.00  0.00           H
ATOM   2695  N   GLN A 265       8.504 -14.790  -2.767  1.00 28.33           N
ATOM   2696  CA  GLN A 265       8.859 -15.174  -4.126  1.00 30.41           C
ATOM   2697  C   GLN A 265       8.697 -16.690  -4.374  1.00 30.83           C
ATOM   2698  O   GLN A 265       8.322 -17.092  -5.478  1.00 30.37           O
ATOM   2699  CB  GLN A 265      10.315 -14.714  -4.326  1.00 27.86           C
ATOM   2700  CG  GLN A 265      10.886 -14.853  -5.748  1.00 30.57           C
ATOM   2701  CD  GLN A 265      12.406 -14.761  -5.722  1.00 32.16           C
ATOM   2702  OE1 GLN A 265      13.003 -13.809  -6.214  1.00 31.72           O
ATOM   2703  NE2 GLN A 265      13.060 -15.760  -5.151  1.00 32.89           N
ATOM   2704  H   GLN A 265       9.243 -14.396  -2.202  1.00  0.00           H
ATOM   2705  HA  GLN A 265       8.210 -14.637  -4.819  1.00  0.00           H
ATOM   2706  HB2 GLN A 265      10.398 -13.661  -4.054  1.00  0.00           H
ATOM   2707  HB3 GLN A 265      10.944 -15.250  -3.612  1.00  0.00           H
ATOM   2708  HG2 GLN A 265      10.627 -15.815  -6.190  1.00  0.00           H
ATOM   2709  HG3 GLN A 265      10.476 -14.086  -6.407  1.00  0.00           H
ATOM   2710 HE21 GLN A 265      12.523 -16.573  -4.774  1.00  0.00           H
ATOM   2711 HE22 GLN A 265      14.060 -15.815  -5.278  1.00  0.00           H
ATOM   2712  N   GLU A 266       8.944 -17.532  -3.360  1.00 31.44           N
ATOM   2713  CA  GLU A 266       8.874 -18.992  -3.483  1.00 33.01           C
ATOM   2714  C   GLU A 266       7.453 -19.465  -3.164  1.00 32.66           C
ATOM   2715  O   GLU A 266       6.934 -20.359  -3.826  1.00 32.48           O
ATOM   2716  CB  GLU A 266       9.830 -19.718  -2.501  1.00 34.36           C
ATOM   2717  CG  GLU A 266      11.130 -19.000  -2.117  1.00 44.11           C
ATOM   2718  CD  GLU A 266      12.081 -18.673  -3.261  1.00 48.33           C
ATOM   2719  OE1 GLU A 266      13.251 -19.105  -3.203  1.00 49.69           O
ATOM   2720  OE2 GLU A 266      11.767 -17.782  -4.071  1.00 50.67           O1-
ATOM   2721  H   GLU A 266       9.297 -17.146  -2.497  1.00  0.00           H
ATOM   2722  HA  GLU A 266       9.132 -19.290  -4.496  1.00  0.00           H
ATOM   2723  HB2 GLU A 266       9.320 -19.937  -1.561  1.00  0.00           H
ATOM   2724  HB3 GLU A 266      10.077 -20.695  -2.920  1.00  0.00           H
ATOM   2725  HG2 GLU A 266      10.870 -18.081  -1.603  1.00  0.00           H
ATOM   2726  HG3 GLU A 266      11.671 -19.606  -1.390  1.00  0.00           H
ATOM   2727  N   ASN A 267       6.827 -18.831  -2.163  1.00 29.70           N
ATOM   2728  CA  ASN A 267       5.481 -19.136  -1.667  1.00 28.37           C
ATOM   2729  C   ASN A 267       4.381 -18.601  -2.593  1.00 26.52           C
ATOM   2730  O   ASN A 267       3.200 -18.837  -2.331  1.00 27.70           O
ATOM   2731  CB  ASN A 267       5.281 -18.509  -0.266  1.00 29.57           C
ATOM   2732  CG  ASN A 267       5.961 -19.315   0.836  1.00 30.12           C
ATOM   2733  OD1 ASN A 267       5.370 -20.221   1.411  1.00 32.14           O
ATOM   2734  ND2 ASN A 267       7.202 -18.987   1.164  1.00 27.84           N
ATOM   2735  H   ASN A 267       7.343 -18.093  -1.699  1.00  0.00           H
ATOM   2736  HA  ASN A 267       5.350 -20.219  -1.607  1.00  0.00           H
ATOM   2737  HB2 ASN A 267       5.617 -17.472  -0.245  1.00  0.00           H
ATOM   2738  HB3 ASN A 267       4.223 -18.478  -0.001  1.00  0.00           H
ATOM   2739 HD21 ASN A 267       7.668 -18.213   0.695  1.00  0.00           H
ATOM   2740 HD22 ASN A 267       7.598 -19.391   1.998  1.00  0.00           H
ATOM   2741  N   GLU A 268       4.755 -17.882  -3.663  1.00 28.56           N
ATOM   2742  CA  GLU A 268       3.912 -17.423  -4.762  1.00 29.03           C
ATOM   2743  C   GLU A 268       2.985 -16.296  -4.291  1.00 27.53           C
ATOM   2744  O   GLU A 268       1.768 -16.401  -4.415  1.00 29.81           O
ATOM   2745  CB  GLU A 268       3.181 -18.616  -5.440  1.00 31.12           C
ATOM   2746  CG  GLU A 268       4.070 -19.392  -6.429  1.00 34.99           C
ATOM   2747  CD  GLU A 268       4.345 -18.579  -7.682  1.00 36.24           C
ATOM   2748  OE1 GLU A 268       3.350 -18.063  -8.238  1.00 38.70           O
ATOM   2749  OE2 GLU A 268       5.538 -18.436  -8.025  1.00 37.35           O1-
ATOM   2750  H   GLU A 268       5.744 -17.703  -3.747  1.00  0.00           H
ATOM   2751  HA  GLU A 268       4.572 -16.952  -5.491  1.00  0.00           H
ATOM   2752  HB2 GLU A 268       2.762 -19.314  -4.718  1.00  0.00           H
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ATOM   2753  HB3 GLU A 268       2.307 -18.249  -5.968  1.00  0.00           H
ATOM   2754  HG2 GLU A 268       5.006 -19.687  -5.954  1.00  0.00           H
ATOM   2755  HG3 GLU A 268       3.571 -20.312  -6.733  1.00  0.00           H
ATOM   2756  N   LYS A 269       3.531 -15.257  -3.657  1.00 25.71           N
ATOM   2757  CA  LYS A 269       2.779 -14.150  -3.079  1.00 25.50           C
ATOM   2758  C   LYS A 269       3.380 -12.855  -3.641  1.00 24.82           C
ATOM   2759  O   LYS A 269       4.565 -12.601  -3.447  1.00 25.11           O
ATOM   2760  CB  LYS A 269       2.814 -14.269  -1.539  1.00 23.34           C
ATOM   2761  CG  LYS A 269       2.286 -15.606  -0.953  1.00 24.75           C
ATOM   2762  CD  LYS A 269       0.774 -15.856  -1.141  1.00 23.23           C
ATOM   2763  CE  LYS A 269       0.352 -17.341  -1.196  1.00 22.16           C
ATOM   2764  NZ  LYS A 269       0.643 -17.952  -2.502  1.00 22.20           N1+
ATOM   2765  H   LYS A 269       4.540 -15.230  -3.525  1.00  0.00           H
ATOM   2766  HA  LYS A 269       1.739 -14.178  -3.396  1.00  0.00           H
ATOM   2767  HB2 LYS A 269       3.851 -14.158  -1.223  1.00  0.00           H
ATOM   2768  HB3 LYS A 269       2.277 -13.428  -1.101  1.00  0.00           H
ATOM   2769  HG2 LYS A 269       2.859 -16.428  -1.375  1.00  0.00           H
ATOM   2770  HG3 LYS A 269       2.509 -15.633   0.115  1.00  0.00           H
ATOM   2771  HD2 LYS A 269       0.234 -15.399  -0.314  1.00  0.00           H
ATOM   2772  HD3 LYS A 269       0.409 -15.342  -2.028  1.00  0.00           H
ATOM   2773  HE2 LYS A 269       0.825 -17.920  -0.402  1.00  0.00           H
ATOM   2774  HE3 LYS A 269      -0.724 -17.416  -1.031  1.00  0.00           H
ATOM   2775  HZ1 LYS A 269      -0.133 -18.533  -2.879  1.00  0.00           H
ATOM   2776  HZ2 LYS A 269       0.756 -17.236  -3.212  1.00  0.00           H
ATOM   2777  HZ3 LYS A 269       1.505 -18.490  -2.486  1.00  0.00           H
ATOM   2778  N   VAL A 270       2.588 -12.082  -4.392  1.00 24.36           N
ATOM   2779  CA  VAL A 270       3.013 -10.940  -5.209  1.00 23.54           C
ATOM   2780  C   VAL A 270       2.594  -9.614  -4.542  1.00 22.50           C
ATOM   2781  O   VAL A 270       3.219  -8.582  -4.790  1.00 23.72           O
ATOM   2782  CB  VAL A 270       2.373 -11.074  -6.628  1.00 23.18           C
ATOM   2783  CG1 VAL A 270       2.852  -9.999  -7.622  1.00 22.05           C
ATOM   2784  CG2 VAL A 270       2.607 -12.447  -7.296  1.00 23.42           C
ATOM   2785  H   VAL A 270       1.597 -12.311  -4.417  1.00  0.00           H
ATOM   2786  HA  VAL A 270       4.096 -10.905  -5.297  1.00  0.00           H
ATOM   2787  HB  VAL A 270       1.295 -10.957  -6.508  1.00  0.00           H
ATOM   2788 HG11 VAL A 270       2.422 -10.148  -8.613  1.00  0.00           H
ATOM   2789 HG12 VAL A 270       2.587  -8.991  -7.307  1.00  0.00           H
ATOM   2790 HG13 VAL A 270       3.934 -10.043  -7.743  1.00  0.00           H
ATOM   2791 HG21 VAL A 270       1.887 -12.602  -8.098  1.00  0.00           H
ATOM   2792 HG22 VAL A 270       3.588 -12.506  -7.762  1.00  0.00           H
ATOM   2793 HG23 VAL A 270       2.522 -13.297  -6.621  1.00  0.00           H
ATOM   2794  N   TYR A 271       1.573  -9.637  -3.679  1.00 21.55           N
ATOM   2795  CA  TYR A 271       1.103  -8.499  -2.902  1.00 22.01           C
ATOM   2796  C   TYR A 271       0.848  -8.995  -1.480  1.00 20.85           C
ATOM   2797  O   TYR A 271      -0.041  -9.819  -1.271  1.00 21.84           O
ATOM   2798  CB  TYR A 271      -0.126  -7.861  -3.586  1.00 19.56           C
ATOM   2799  CG  TYR A 271      -0.664  -6.617  -2.901  1.00 18.54           C
ATOM   2800  CD1 TYR A 271      -0.193  -5.340  -3.273  1.00 18.88           C
ATOM   2801  CD2 TYR A 271      -1.631  -6.730  -1.879  1.00 19.17           C
ATOM   2802  CE1 TYR A 271      -0.683  -4.191  -2.624  1.00 16.85           C
ATOM   2803  CE2 TYR A 271      -2.117  -5.578  -1.233  1.00 18.66           C
ATOM   2804  CZ  TYR A 271      -1.650  -4.305  -1.608  1.00 18.55           C
ATOM   2805  OH  TYR A 271      -2.132  -3.192  -0.985  1.00 19.00           O
ATOM   2806  H   TYR A 271       1.101 -10.517  -3.505  1.00  0.00           H
ATOM   2807  HA  TYR A 271       1.886  -7.742  -2.850  1.00  0.00           H
ATOM   2808  HB2 TYR A 271       0.130  -7.596  -4.612  1.00  0.00           H
ATOM   2809  HB3 TYR A 271      -0.932  -8.593  -3.659  1.00  0.00           H
ATOM   2810  HD1 TYR A 271       0.546  -5.232  -4.054  1.00  0.00           H
ATOM   2811  HD2 TYR A 271      -1.999  -7.699  -1.576  1.00  0.00           H
ATOM   2812  HE1 TYR A 271      -0.310  -3.219  -2.907  1.00  0.00           H
ATOM   2813  HE2 TYR A 271      -2.849  -5.675  -0.445  1.00  0.00           H
ATOM   2814  HH  TYR A 271      -1.595  -2.399  -1.148  1.00  0.00           H
ATOM   2815  N   GLY A 272       1.637  -8.528  -0.513  1.00 20.02           N
ATOM   2816  CA  GLY A 272       1.531  -8.872   0.892  1.00 19.98           C
ATOM   2817  C   GLY A 272       1.255  -7.617   1.709  1.00 19.55           C
ATOM   2818  O   GLY A 272       1.995  -6.640   1.594  1.00 20.95           O
ATOM   2819  H   GLY A 272       2.393  -7.885  -0.738  1.00  0.00           H
ATOM   2820  HA2 GLY A 272       0.782  -9.632   1.068  1.00  0.00           H
ATOM   2821  HA3 GLY A 272       2.478  -9.298   1.209  1.00  0.00           H
ATOM   2822  N   PHE A 273       0.214  -7.646   2.542  1.00 19.12           N
ATOM   2823  CA  PHE A 273      -0.272  -6.520   3.336  1.00 19.96           C
ATOM   2824  C   PHE A 273      -0.578  -6.974   4.778  1.00 20.73           C
ATOM   2825  O   PHE A 273      -0.368  -8.134   5.141  1.00 21.45           O
ATOM   2826  CB  PHE A 273      -1.448  -5.827   2.597  1.00 20.09           C
ATOM   2827  CG  PHE A 273      -2.751  -6.609   2.639  1.00 21.22           C
ATOM   2828  CD1 PHE A 273      -2.955  -7.703   1.773  1.00 20.84           C
ATOM   2829  CD2 PHE A 273      -3.722  -6.305   3.615  1.00 20.08           C
ATOM   2830  CE1 PHE A 273      -4.084  -8.528   1.935  1.00 20.71           C
ATOM   2831  CE2 PHE A 273      -4.836  -7.144   3.789  1.00 20.46           C
ATOM   2832  CZ  PHE A 273      -5.013  -8.258   2.954  1.00 22.49           C
ATOM   2833  H   PHE A 273      -0.340  -8.499   2.596  1.00  0.00           H
ATOM   2834  HA  PHE A 273       0.530  -5.786   3.421  1.00  0.00           H
ATOM   2835  HB2 PHE A 273      -1.617  -4.839   3.029  1.00  0.00           H
ATOM   2836  HB3 PHE A 273      -1.176  -5.634   1.558  1.00  0.00           H
ATOM   2837  HD1 PHE A 273      -2.224  -7.945   1.015  1.00  0.00           H
ATOM   2838  HD2 PHE A 273      -3.589  -5.463   4.276  1.00  0.00           H
ATOM   2839  HE1 PHE A 273      -4.225  -9.384   1.295  1.00  0.00           H
ATOM   2840  HE2 PHE A 273      -5.543  -6.946   4.579  1.00  0.00           H
ATOM   2841  HZ  PHE A 273      -5.867  -8.898   3.090  1.00  0.00           H
ATOM   2842  N   THR A 274      -1.081  -6.053   5.604  1.00 20.67           N
ATOM   2843  CA  THR A 274      -1.560  -6.299   6.961  1.00 19.86           C
ATOM   2844  C   THR A 274      -2.977  -5.721   7.100  1.00 23.58           C
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ATOM   2845  O   THR A 274      -3.963  -6.380   6.774  1.00 27.01           O
ATOM   2846  CB  THR A 274      -0.520  -5.811   8.004  1.00 23.05           C
ATOM   2847  OG1 THR A 274      -0.082  -4.488   7.731  1.00 20.98           O
ATOM   2848  CG2 THR A 274       0.693  -6.737   8.162  1.00 20.44           C
ATOM   2849  H   THR A 274      -1.279  -5.137   5.229  1.00  0.00           H
ATOM   2850  HA  THR A 274      -1.696  -7.372   7.120  1.00  0.00           H
ATOM   2851  HB  THR A 274      -1.012  -5.762   8.970  1.00  0.00           H
ATOM   2852  HG1 THR A 274       0.591  -4.543   7.064  1.00  0.00           H
ATOM   2853 HG21 THR A 274       1.402  -6.347   8.892  1.00  0.00           H
ATOM   2854 HG22 THR A 274       0.377  -7.721   8.514  1.00  0.00           H
ATOM   2855 HG23 THR A 274       1.220  -6.884   7.222  1.00  0.00           H
ATOM   2856  N   VAL A 275      -3.096  -4.472   7.552  1.00 21.17           N
ATOM   2857  CA  VAL A 275      -4.369  -3.827   7.857  1.00 19.25           C
ATOM   2858  C   VAL A 275      -5.190  -3.604   6.560  1.00 18.02           C
ATOM   2859  O   VAL A 275      -4.638  -3.327   5.493  1.00 19.67           O
ATOM   2860  CB  VAL A 275      -4.090  -2.492   8.600  1.00 17.62           C
ATOM   2861  CG1 VAL A 275      -5.368  -1.893   9.213  1.00 17.33           C
ATOM   2862  CG2 VAL A 275      -3.033  -2.627   9.720  1.00 17.17           C
ATOM   2863  H   VAL A 275      -2.237  -3.981   7.758  1.00  0.00           H
ATOM   2864  HA  VAL A 275      -4.921  -4.499   8.519  1.00  0.00           H
ATOM   2865  HB  VAL A 275      -3.701  -1.794   7.862  1.00  0.00           H
ATOM   2866 HG11 VAL A 275      -5.166  -0.972   9.759  1.00  0.00           H
ATOM   2867 HG12 VAL A 275      -6.123  -1.655   8.462  1.00  0.00           H
ATOM   2868 HG13 VAL A 275      -5.799  -2.595   9.924  1.00  0.00           H
ATOM   2869 HG21 VAL A 275      -2.904  -1.689  10.262  1.00  0.00           H
ATOM   2870 HG22 VAL A 275      -3.332  -3.385  10.447  1.00  0.00           H
ATOM   2871 HG23 VAL A 275      -2.053  -2.905   9.334  1.00  0.00           H
ATOM   2872  N   SER A 276      -6.515  -3.722   6.656  1.00 18.71           N
ATOM   2873  CA  SER A 276      -7.480  -3.525   5.580  1.00 19.95           C
ATOM   2874  C   SER A 276      -8.763  -2.935   6.180  1.00 18.73           C
ATOM   2875  O   SER A 276      -9.125  -3.273   7.308  1.00 22.68           O
ATOM   2876  CB  SER A 276      -7.624  -4.821   4.759  1.00 18.49           C
ATOM   2877  OG  SER A 276      -7.791  -5.945   5.600  1.00 20.03           O
ATOM   2878  H   SER A 276      -6.937  -3.913   7.555  1.00  0.00           H
ATOM   2879  HA  SER A 276      -7.085  -2.754   4.915  1.00  0.00           H
ATOM   2880  HB2 SER A 276      -8.468  -4.755   4.073  1.00  0.00           H
ATOM   2881  HB3 SER A 276      -6.734  -4.979   4.154  1.00  0.00           H
ATOM   2882  HG  SER A 276      -6.996  -6.035   6.111  1.00  0.00           H
ATOM   2883  N   ILE A 277      -9.407  -1.997   5.482  1.00 19.56           N
ATOM   2884  CA  ILE A 277     -10.329  -1.026   6.063  1.00 18.81           C
ATOM   2885  C   ILE A 277     -11.403  -0.604   5.048  1.00 17.40           C
ATOM   2886  O   ILE A 277     -11.271  -0.859   3.850  1.00 17.52           O
ATOM   2887  CB  ILE A 277      -9.485   0.136   6.673  1.00 16.88           C
ATOM   2888  CG1 ILE A 277     -10.261   1.018   7.670  1.00 21.77           C
ATOM   2889  CG2 ILE A 277      -8.842   1.001   5.583  1.00 21.13           C
ATOM   2890  CD1 ILE A 277      -9.355   1.836   8.606  1.00 19.17           C
ATOM   2891  H   ILE A 277      -9.144  -1.837   4.510  1.00  0.00           H
ATOM   2892  HA  ILE A 277     -10.875  -1.519   6.862  1.00  0.00           H
ATOM   2893  HB  ILE A 277      -8.672  -0.315   7.244  1.00  0.00           H
ATOM   2894 HG12 ILE A 277     -10.940   1.688   7.144  1.00  0.00           H
ATOM   2895 HG13 ILE A 277     -10.893   0.378   8.280  1.00  0.00           H
ATOM   2896 HG21 ILE A 277      -8.238   1.789   6.016  1.00  0.00           H
ATOM   2897 HG22 ILE A 277      -8.203   0.421   4.916  1.00  0.00           H
ATOM   2898 HG23 ILE A 277      -9.598   1.494   4.976  1.00  0.00           H
ATOM   2899 HD11 ILE A 277      -9.951   2.407   9.317  1.00  0.00           H
ATOM   2900 HD12 ILE A 277      -8.685   1.194   9.178  1.00  0.00           H
ATOM   2901 HD13 ILE A 277      -8.733   2.547   8.065  1.00  0.00           H
ATOM   2902  N   HIS A 278     -12.440   0.076   5.547  1.00 17.40           N
ATOM   2903  CA  HIS A 278     -13.445   0.818   4.790  1.00 18.62           C
ATOM   2904  C   HIS A 278     -12.852   2.148   4.300  1.00 20.19           C
ATOM   2905  O   HIS A 278     -12.169   2.836   5.066  1.00 22.16           O
ATOM   2906  CB  HIS A 278     -14.592   1.193   5.757  1.00 19.60           C
ATOM   2907  CG  HIS A 278     -15.810   0.329   5.665  1.00 19.20           C
ATOM   2908  ND1 HIS A 278     -16.860   0.626   4.789  1.00 19.72           N
ATOM   2909  CD2 HIS A 278     -16.129  -0.801   6.381  1.00 19.63           C
ATOM   2910  CE1 HIS A 278     -17.769  -0.313   5.019  1.00 18.30           C
ATOM   2911  NE2 HIS A 278     -17.395  -1.172   5.966  1.00 20.42           N
ATOM   2912  H   HIS A 278     -12.482   0.181   6.553  1.00  0.00           H
ATOM   2913  HA  HIS A 278     -13.813   0.227   3.949  1.00  0.00           H
ATOM   2914  HB2 HIS A 278     -14.250   1.194   6.791  1.00  0.00           H
ATOM   2915  HB3 HIS A 278     -14.938   2.214   5.597  1.00  0.00           H
ATOM   2916  HD2 HIS A 278     -15.584  -1.337   7.143  1.00  0.00           H
ATOM   2917  HE1 HIS A 278     -18.720  -0.364   4.506  1.00  0.00           H
ATOM   2918  HE2 HIS A 278     -17.954  -1.933   6.352  1.00  0.00           H
ATOM   2919  N   GLU A 279     -13.163   2.558   3.066  1.00 18.56           N
ATOM   2920  CA  GLU A 279     -12.926   3.909   2.560  1.00 20.35           C
ATOM   2921  C   GLU A 279     -14.170   4.783   2.791  1.00 20.15           C
ATOM   2922  O   GLU A 279     -15.286   4.283   2.949  1.00 21.21           O
ATOM   2923  CB  GLU A 279     -12.592   3.872   1.043  1.00 18.12           C
ATOM   2924  CG  GLU A 279     -12.109   5.197   0.392  1.00 19.55           C
ATOM   2925  CD  GLU A 279     -10.991   5.920   1.145  1.00 21.45           C
ATOM   2926  OE1 GLU A 279     -11.237   6.366   2.286  1.00 21.73           O
ATOM   2927  OE2 GLU A 279      -9.894   6.102   0.583  1.00 20.95           O1-
ATOM   2928  H   GLU A 279     -13.688   1.919   2.475  1.00  0.00           H
ATOM   2929  HA  GLU A 279     -12.100   4.329   3.122  1.00  0.00           H
ATOM   2930  HB2 GLU A 279     -11.823   3.132   0.852  1.00  0.00           H
ATOM   2931  HB3 GLU A 279     -13.463   3.515   0.492  1.00  0.00           H
ATOM   2932  HG2 GLU A 279     -11.769   4.994  -0.622  1.00  0.00           H
ATOM   2933  HG3 GLU A 279     -12.940   5.892   0.281  1.00  0.00           H
ATOM   2934  N   TYR A 280     -13.956   6.100   2.804  1.00 20.93           N
ATOM   2935  CA  TYR A 280     -14.998   7.115   2.865  1.00 21.95           C
ATOM   2936  C   TYR A 280     -15.532   7.295   1.435  1.00 20.59           C
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ATOM   2937  O   TYR A 280     -14.835   7.837   0.571  1.00 20.61           O
ATOM   2938  CB  TYR A 280     -14.370   8.457   3.299  1.00 23.30           C
ATOM   2939  CG  TYR A 280     -13.625   8.459   4.617  1.00 26.62           C
ATOM   2940  CD1 TYR A 280     -14.322   8.407   5.839  1.00 30.13           C
ATOM   2941  CD2 TYR A 280     -12.220   8.535   4.617  1.00 30.20           C
ATOM   2942  CE1 TYR A 280     -13.615   8.436   7.054  1.00 31.13           C
ATOM   2943  CE2 TYR A 280     -11.513   8.550   5.831  1.00 32.21           C
ATOM   2944  CZ  TYR A 280     -12.210   8.506   7.051  1.00 32.49           C
ATOM   2945  OH  TYR A 280     -11.526   8.558   8.231  1.00 34.99           O
ATOM   2946  H   TYR A 280     -12.996   6.400   2.603  1.00  0.00           H
ATOM   2947  HA  TYR A 280     -15.794   6.826   3.555  1.00  0.00           H
ATOM   2948  HB2 TYR A 280     -13.668   8.799   2.541  1.00  0.00           H
ATOM   2949  HB3 TYR A 280     -15.149   9.218   3.358  1.00  0.00           H
ATOM   2950  HD1 TYR A 280     -15.399   8.339   5.857  1.00  0.00           H
ATOM   2951  HD2 TYR A 280     -11.677   8.581   3.683  1.00  0.00           H
ATOM   2952  HE1 TYR A 280     -14.169   8.390   7.981  1.00  0.00           H
ATOM   2953  HE2 TYR A 280     -10.437   8.617   5.805  1.00  0.00           H
ATOM   2954  HH  TYR A 280     -10.586   8.545   8.092  1.00  0.00           H
ATOM   2955  N   GLU A 281     -16.765   6.852   1.187  1.00 22.29           N
ATOM   2956  CA  GLU A 281     -17.563   7.014  -0.031  1.00 20.70           C
ATOM   2957  C   GLU A 281     -17.485   8.427  -0.651  1.00 20.87           C
ATOM   2958  O   GLU A 281     -17.256   8.566  -1.853  1.00 18.87           O
ATOM   2959  CB  GLU A 281     -19.004   6.507   0.250  1.00 21.60           C
ATOM   2960  CG  GLU A 281     -19.918   7.400   1.127  1.00 27.54           C
ATOM   2961  CD  GLU A 281     -19.275   7.743   2.463  1.00 30.84           C
ATOM   2962  OE1 GLU A 281     -18.922   6.802   3.201  1.00 32.62           O
ATOM   2963  OE2 GLU A 281     -18.898   8.918   2.646  1.00 35.66           O1-
ATOM   2964  H   GLU A 281     -17.295   6.522   1.994  1.00  0.00           H
ATOM   2965  HA  GLU A 281     -17.122   6.332  -0.759  1.00  0.00           H
ATOM   2966  HB2 GLU A 281     -19.504   6.358  -0.707  1.00  0.00           H
ATOM   2967  HB3 GLU A 281     -18.950   5.517   0.703  1.00  0.00           H
ATOM   2968  HG2 GLU A 281     -20.176   8.323   0.607  1.00  0.00           H
ATOM   2969  HG3 GLU A 281     -20.858   6.887   1.328  1.00  0.00           H
ATOM   2970  N   VAL A 282     -17.590   9.469   0.185  1.00 20.46           N
ATOM   2971  CA  VAL A 282     -17.528  10.884  -0.172  1.00 20.98           C
ATOM   2972  C   VAL A 282     -16.177  11.328  -0.791  1.00 20.93           C
ATOM   2973  O   VAL A 282     -16.144  12.353  -1.475  1.00 18.59           O
ATOM   2974  CB  VAL A 282     -17.924  11.712   1.086  1.00 21.34           C
ATOM   2975  CG1 VAL A 282     -16.923  11.589   2.254  1.00 22.74           C
ATOM   2976  CG2 VAL A 282     -18.258  13.183   0.773  1.00 22.47           C
ATOM   2977  H   VAL A 282     -17.885   9.257   1.145  1.00  0.00           H
ATOM   2978  HA  VAL A 282     -18.289  11.041  -0.939  1.00  0.00           H
ATOM   2979  HB  VAL A 282     -18.861  11.288   1.452  1.00  0.00           H
ATOM   2980 HG11 VAL A 282     -17.239  12.186   3.110  1.00  0.00           H
ATOM   2981 HG12 VAL A 282     -16.859  10.559   2.603  1.00  0.00           H
ATOM   2982 HG13 VAL A 282     -15.917  11.900   1.980  1.00  0.00           H
ATOM   2983 HG21 VAL A 282     -18.602  13.703   1.667  1.00  0.00           H
ATOM   2984 HG22 VAL A 282     -17.399  13.724   0.383  1.00  0.00           H
ATOM   2985 HG23 VAL A 282     -19.053  13.247   0.029  1.00  0.00           H
ATOM   2986  N   THR A 283     -15.080  10.575  -0.603  1.00 19.91           N
ATOM   2987  CA  THR A 283     -13.773  10.891  -1.197  1.00 18.39           C
ATOM   2988  C   THR A 283     -13.620  10.285  -2.609  1.00 19.45           C
ATOM   2989  O   THR A 283     -12.733  10.709  -3.351  1.00 20.36           O
ATOM   2990  CB  THR A 283     -12.627  10.380  -0.275  1.00 20.55           C
ATOM   2991  OG1 THR A 283     -12.526   8.972  -0.168  1.00 18.62           O
ATOM   2992  CG2 THR A 283     -12.645  10.979   1.133  1.00 17.56           C
ATOM   2993  H   THR A 283     -15.174   9.708  -0.087  1.00  0.00           H
ATOM   2994  HA  THR A 283     -13.662  11.973  -1.293  1.00  0.00           H
ATOM   2995  HB  THR A 283     -11.690  10.697  -0.731  1.00  0.00           H
ATOM   2996  HG1 THR A 283     -13.349   8.602   0.162  1.00  0.00           H
ATOM   2997 HG21 THR A 283     -11.858  10.556   1.758  1.00  0.00           H
ATOM   2998 HG22 THR A 283     -12.461  12.044   1.068  1.00  0.00           H
ATOM   2999 HG23 THR A 283     -13.599  10.841   1.638  1.00  0.00           H
ATOM   3000  N   ILE A 284     -14.487   9.333  -2.993  1.00 16.54           N
ATOM   3001  CA  ILE A 284     -14.383   8.499  -4.191  1.00 16.06           C
ATOM   3002  C   ILE A 284     -15.594   8.493  -5.179  1.00 16.32           C
ATOM   3003  O   ILE A 284     -15.695   7.491  -5.897  1.00 18.94           O
ATOM   3004  CB  ILE A 284     -13.942   7.067  -3.746  1.00 14.12           C
ATOM   3005  CG1 ILE A 284     -14.999   6.342  -2.883  1.00 16.19           C
ATOM   3006  CG2 ILE A 284     -12.582   7.063  -3.031  1.00 14.01           C
ATOM   3007  CD1 ILE A 284     -14.700   4.854  -2.667  1.00 12.12           C
ATOM   3008  H   ILE A 284     -15.241   9.100  -2.358  1.00  0.00           H
ATOM   3009  HA  ILE A 284     -13.578   8.892  -4.814  1.00  0.00           H
ATOM   3010  HB  ILE A 284     -13.803   6.477  -4.646  1.00  0.00           H
ATOM   3011 HG12 ILE A 284     -15.079   6.831  -1.913  1.00  0.00           H
ATOM   3012 HG13 ILE A 284     -15.984   6.424  -3.343  1.00  0.00           H
ATOM   3013 HG21 ILE A 284     -12.122   6.076  -3.033  1.00  0.00           H
ATOM   3014 HG22 ILE A 284     -11.882   7.759  -3.490  1.00  0.00           H
ATOM   3015 HG23 ILE A 284     -12.695   7.344  -1.990  1.00  0.00           H
ATOM   3016 HD11 ILE A 284     -15.505   4.383  -2.108  1.00  0.00           H
ATOM   3017 HD12 ILE A 284     -14.596   4.328  -3.616  1.00  0.00           H
ATOM   3018 HD13 ILE A 284     -13.783   4.706  -2.096  1.00  0.00           H
ATOM   3019  N   PRO A 285     -16.496   9.513  -5.284  1.00 17.10           N
ATOM   3020  CA  PRO A 285     -17.679   9.522  -6.178  1.00 18.10           C
ATOM   3021  C   PRO A 285     -17.548   8.967  -7.607  1.00 18.61           C
ATOM   3022  O   PRO A 285     -18.502   8.364  -8.104  1.00 21.16           O
ATOM   3023  CB  PRO A 285     -18.162  10.976  -6.230  1.00 19.30           C
ATOM   3024  CG  PRO A 285     -17.749  11.550  -4.893  1.00 19.72           C
ATOM   3025  CD  PRO A 285     -16.498  10.760  -4.511  1.00 17.67           C
ATOM   3026  HA  PRO A 285     -18.435   8.921  -5.668  1.00  0.00           H
ATOM   3027  HB2 PRO A 285     -17.655  11.522  -7.028  1.00  0.00           H
ATOM   3028  HB3 PRO A 285     -19.235  11.053  -6.407  1.00  0.00           H
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ATOM   3029  HG2 PRO A 285     -17.578  12.626  -4.923  1.00  0.00           H
ATOM   3030  HG3 PRO A 285     -18.534  11.360  -4.159  1.00  0.00           H
ATOM   3031  HD2 PRO A 285     -15.585  11.319  -4.714  1.00  0.00           H
ATOM   3032  HD3 PRO A 285     -16.561  10.562  -3.447  1.00  0.00           H
ATOM   3033  N   THR A 286     -16.398   9.141  -8.270  1.00 19.69           N
ATOM   3034  CA  THR A 286     -16.178   8.654  -9.625  1.00 19.30           C
ATOM   3035  C   THR A 286     -15.022   7.638  -9.737  1.00 20.60           C
ATOM   3036  O   THR A 286     -14.786   7.147 -10.840  1.00 18.78           O
ATOM   3037  CB  THR A 286     -16.224   9.821 -10.657  1.00 21.39           C
ATOM   3038  OG1 THR A 286     -15.181  10.769 -10.524  1.00 21.34           O
ATOM   3039  CG2 THR A 286     -17.547  10.601 -10.655  1.00 19.97           C
ATOM   3040  H   THR A 286     -15.695   9.783  -7.883  1.00  0.00           H
ATOM   3041  HA  THR A 286     -17.020   8.024  -9.910  1.00  0.00           H
ATOM   3042  HB  THR A 286     -16.110   9.381 -11.650  1.00  0.00           H
ATOM   3043  HG1 THR A 286     -15.244  11.198  -9.659  1.00  0.00           H
ATOM   3044 HG21 THR A 286     -17.582  11.315 -11.478  1.00  0.00           H
ATOM   3045 HG22 THR A 286     -18.399   9.931 -10.768  1.00  0.00           H
ATOM   3046 HG23 THR A 286     -17.684  11.156  -9.727  1.00  0.00           H
ATOM   3047  N   LEU A 287     -14.365   7.230  -8.633  1.00 19.85           N
ATOM   3048  CA  LEU A 287     -13.209   6.308  -8.622  1.00 20.60           C
ATOM   3049  C   LEU A 287     -13.633   4.919  -9.111  1.00 20.95           C
ATOM   3050  O   LEU A 287     -13.121   4.418 -10.116  1.00 18.74           O
ATOM   3051  CB  LEU A 287     -12.618   6.203  -7.191  1.00 19.84           C
ATOM   3052  CG  LEU A 287     -11.180   5.629  -7.054  1.00 24.19           C
ATOM   3053  CD1 LEU A 287     -10.684   5.796  -5.612  1.00 17.69           C
ATOM   3054  CD2 LEU A 287     -11.020   4.153  -7.459  1.00 20.76           C
ATOM   3055  H   LEU A 287     -14.657   7.632  -7.748  1.00  0.00           H
ATOM   3056  HA  LEU A 287     -12.444   6.688  -9.297  1.00  0.00           H
ATOM   3057  HB2 LEU A 287     -12.610   7.207  -6.765  1.00  0.00           H
ATOM   3058  HB3 LEU A 287     -13.286   5.626  -6.554  1.00  0.00           H
ATOM   3059  HG  LEU A 287     -10.517   6.216  -7.689  1.00  0.00           H
ATOM   3060 HD11 LEU A 287      -9.629   5.541  -5.519  1.00  0.00           H
ATOM   3061 HD12 LEU A 287     -10.794   6.823  -5.272  1.00  0.00           H
ATOM   3062 HD13 LEU A 287     -11.236   5.151  -4.928  1.00  0.00           H
ATOM   3063 HD21 LEU A 287     -10.054   3.757  -7.143  1.00  0.00           H
ATOM   3064 HD22 LEU A 287     -11.789   3.524  -7.009  1.00  0.00           H
ATOM   3065 HD23 LEU A 287     -11.054   4.024  -8.539  1.00  0.00           H
ATOM   3066  N   TRP A 288     -14.615   4.318  -8.425  1.00 18.96           N
ATOM   3067  CA  TRP A 288     -15.140   2.995  -8.754  1.00 20.78           C
ATOM   3068  C   TRP A 288     -15.845   3.012 -10.118  1.00 21.73           C
ATOM   3069  O   TRP A 288     -15.749   2.048 -10.867  1.00 21.01           O
ATOM   3070  CB  TRP A 288     -16.119   2.528  -7.663  1.00 16.55           C
ATOM   3071  CG  TRP A 288     -16.781   1.215  -7.959  1.00 19.20           C
ATOM   3072  CD1 TRP A 288     -18.065   1.064  -8.355  1.00 17.19           C
ATOM   3073  CD2 TRP A 288     -16.209  -0.129  -7.924  1.00 18.61           C
ATOM   3074  NE1 TRP A 288     -18.318  -0.269  -8.590  1.00 18.83           N
ATOM   3075  CE3 TRP A 288     -14.942  -0.664  -7.586  1.00 16.92           C
ATOM   3076  CE2 TRP A 288     -17.218  -1.058  -8.320  1.00 18.36           C
ATOM   3077  CZ3 TRP A 288     -14.698  -2.052  -7.633  1.00 21.22           C
ATOM   3078  CZ2 TRP A 288     -16.987  -2.443  -8.369  1.00 20.24           C
ATOM   3079  CH2 TRP A 288     -15.719  -2.942  -8.020  1.00 22.41           C
ATOM   3080  H   TRP A 288     -14.973   4.799  -7.613  1.00  0.00           H
ATOM   3081  HA  TRP A 288     -14.307   2.291  -8.800  1.00  0.00           H
ATOM   3082  HB2 TRP A 288     -15.599   2.429  -6.710  1.00  0.00           H
ATOM   3083  HB3 TRP A 288     -16.898   3.277  -7.514  1.00  0.00           H
ATOM   3084  HD1 TRP A 288     -18.762   1.877  -8.504  1.00  0.00           H
ATOM   3085  HE1 TRP A 288     -19.212  -0.594  -8.978  1.00  0.00           H
ATOM   3086  HE3 TRP A 288     -14.151   0.001  -7.274  1.00  0.00           H
ATOM   3087  HZ3 TRP A 288     -13.723  -2.435  -7.368  1.00  0.00           H
ATOM   3088  HZ2 TRP A 288     -17.776  -3.117  -8.663  1.00  0.00           H
ATOM   3089  HH2 TRP A 288     -15.525  -4.005  -8.052  1.00  0.00           H
ATOM   3090  N   GLN A 289     -16.500   4.128 -10.464  1.00 23.21           N
ATOM   3091  CA  GLN A 289     -17.162   4.336 -11.747  1.00 24.00           C
ATOM   3092  C   GLN A 289     -16.137   4.307 -12.897  1.00 23.78           C
ATOM   3093  O   GLN A 289     -16.307   3.546 -13.843  1.00 21.70           O
ATOM   3094  CB  GLN A 289     -17.951   5.659 -11.672  1.00 26.05           C
ATOM   3095  CG  GLN A 289     -18.877   5.920 -12.877  1.00 30.79           C
ATOM   3096  CD  GLN A 289     -19.881   7.062 -12.678  1.00 32.56           C
ATOM   3097  OE1 GLN A 289     -20.648   7.364 -13.581  1.00 33.91           O
ATOM   3098  NE2 GLN A 289     -19.926   7.713 -11.519  1.00 33.71           N
ATOM   3099  H   GLN A 289     -16.465   4.893  -9.810  1.00  0.00           H
ATOM   3100  HA  GLN A 289     -17.865   3.514 -11.899  1.00  0.00           H
ATOM   3101  HB2 GLN A 289     -18.548   5.633 -10.760  1.00  0.00           H
ATOM   3102  HB3 GLN A 289     -17.262   6.497 -11.580  1.00  0.00           H
ATOM   3103  HG2 GLN A 289     -18.289   6.130 -13.772  1.00  0.00           H
ATOM   3104  HG3 GLN A 289     -19.453   5.021 -13.101  1.00  0.00           H
ATOM   3105 HE21 GLN A 289     -19.344   7.466 -10.735  1.00  0.00           H
ATOM   3106 HE22 GLN A 289     -20.615   8.444 -11.431  1.00  0.00           H
ATOM   3107  N   THR A 290     -15.018   5.028 -12.757  1.00 23.31           N
ATOM   3108  CA  THR A 290     -13.934   5.063 -13.743  1.00 22.84           C
ATOM   3109  C   THR A 290     -13.156   3.722 -13.766  1.00 22.38           C
ATOM   3110  O   THR A 290     -12.633   3.337 -14.809  1.00 22.84           O
ATOM   3111  CB  THR A 290     -13.005   6.255 -13.399  1.00 24.30           C
ATOM   3112  OG1 THR A 290     -13.781   7.440 -13.294  1.00 25.09           O
ATOM   3113  CG2 THR A 290     -11.932   6.544 -14.452  1.00 22.40           C
ATOM   3114  H   THR A 290     -14.909   5.609 -11.935  1.00  0.00           H
ATOM   3115  HA  THR A 290     -14.368   5.221 -14.733  1.00  0.00           H
ATOM   3116  HB  THR A 290     -12.514   6.081 -12.438  1.00  0.00           H
ATOM   3117  HG1 THR A 290     -14.224   7.394 -12.445  1.00  0.00           H
ATOM   3118 HG21 THR A 290     -11.343   7.422 -14.191  1.00  0.00           H
ATOM   3119 HG22 THR A 290     -11.234   5.716 -14.539  1.00  0.00           H
ATOM   3120 HG23 THR A 290     -12.366   6.715 -15.438  1.00  0.00           H
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ATOM   3121  N   SER A 291     -13.146   2.965 -12.656  1.00 19.88           N
ATOM   3122  CA  SER A 291     -12.609   1.603 -12.601  1.00 20.14           C
ATOM   3123  C   SER A 291     -13.559   0.609 -13.303  1.00 20.06           C
ATOM   3124  O   SER A 291     -13.106  -0.340 -13.943  1.00 19.13           O
ATOM   3125  CB  SER A 291     -12.437   1.176 -11.128  1.00 19.42           C
ATOM   3126  OG  SER A 291     -11.526   2.031 -10.452  1.00 19.96           O
ATOM   3127  H   SER A 291     -13.563   3.349 -11.818  1.00  0.00           H
ATOM   3128  HA  SER A 291     -11.647   1.578 -13.115  1.00  0.00           H
ATOM   3129  HB2 SER A 291     -13.388   1.157 -10.599  1.00  0.00           H
ATOM   3130  HB3 SER A 291     -12.051   0.156 -11.083  1.00  0.00           H
ATOM   3131  HG  SER A 291     -11.900   2.911 -10.432  1.00  0.00           H
ATOM   3132  N   MET A 292     -14.878   0.852 -13.262  1.00 22.05           N
ATOM   3133  CA  MET A 292     -15.891   0.132 -14.032  1.00 23.75           C
ATOM   3134  C   MET A 292     -15.657   0.382 -15.534  1.00 23.08           C
ATOM   3135  O   MET A 292     -15.625  -0.568 -16.302  1.00 23.18           O
ATOM   3136  CB  MET A 292     -17.313   0.560 -13.589  1.00 23.46           C
ATOM   3137  CG  MET A 292     -18.244  -0.600 -13.187  1.00 23.79           C
ATOM   3138  SD  MET A 292     -19.076  -1.477 -14.544  1.00 24.01           S
ATOM   3139  CE  MET A 292     -17.927  -2.855 -14.823  1.00 23.71           C
ATOM   3140  H   MET A 292     -15.199   1.616 -12.677  1.00  0.00           H
ATOM   3141  HA  MET A 292     -15.751  -0.931 -13.834  1.00  0.00           H
ATOM   3142  HB2 MET A 292     -17.236   1.202 -12.715  1.00  0.00           H
ATOM   3143  HB3 MET A 292     -17.796   1.189 -14.339  1.00  0.00           H
ATOM   3144  HG2 MET A 292     -17.731  -1.310 -12.536  1.00  0.00           H
ATOM   3145  HG3 MET A 292     -19.043  -0.181 -12.573  1.00  0.00           H
ATOM   3146  HE1 MET A 292     -18.324  -3.531 -15.580  1.00  0.00           H
ATOM   3147  HE2 MET A 292     -16.963  -2.495 -15.175  1.00  0.00           H
ATOM   3148  HE3 MET A 292     -17.771  -3.422 -13.904  1.00  0.00           H
ATOM   3149  N   ASP A 293     -15.348   1.617 -15.948  1.00 25.20           N
ATOM   3150  CA  ASP A 293     -14.929   1.989 -17.315  1.00 24.42           C
ATOM   3151  C   ASP A 293     -13.451   1.647 -17.629  1.00 24.19           C
ATOM   3152  O   ASP A 293     -12.871   2.114 -18.618  1.00 22.66           O
ATOM   3153  CB  ASP A 293     -15.266   3.472 -17.604  1.00 25.99           C
ATOM   3154  CG  ASP A 293     -16.776   3.669 -17.681  1.00 25.87           C
ATOM   3155  OD1 ASP A 293     -17.455   3.703 -16.633  1.00 25.88           O
ATOM   3156  OD2 ASP A 293     -17.354   3.551 -18.781  1.00 26.97           O1-
ATOM   3157  H   ASP A 293     -15.482   2.378 -15.286  1.00  0.00           H
ATOM   3158  HA  ASP A 293     -15.491   1.385 -18.025  1.00  0.00           H
ATOM   3159  HB2 ASP A 293     -14.851   4.125 -16.837  1.00  0.00           H
ATOM   3160  HB3 ASP A 293     -14.843   3.795 -18.555  1.00  0.00           H
ATOM   3161  N   PHE A 294     -12.859   0.748 -16.836  1.00 22.53           N
ATOM   3162  CA  PHE A 294     -11.774  -0.138 -17.235  1.00 21.67           C
ATOM   3163  C   PHE A 294     -12.356  -1.554 -17.401  1.00 22.37           C
ATOM   3164  O   PHE A 294     -12.238  -2.123 -18.478  1.00 23.42           O
ATOM   3165  CB  PHE A 294     -10.640  -0.109 -16.194  1.00 21.57           C
ATOM   3166  CG  PHE A 294      -9.478  -1.022 -16.527  1.00 21.32           C
ATOM   3167  CD1 PHE A 294      -8.517  -0.633 -17.484  1.00 23.19           C
ATOM   3168  CD2 PHE A 294      -9.371  -2.279 -15.895  1.00 21.72           C
ATOM   3169  CE1 PHE A 294      -7.431  -1.481 -17.771  1.00 21.37           C
ATOM   3170  CE2 PHE A 294      -8.295  -3.129 -16.200  1.00 24.26           C
ATOM   3171  CZ  PHE A 294      -7.310  -2.716 -17.111  1.00 21.92           C
ATOM   3172  H   PHE A 294     -13.393   0.463 -16.026  1.00  0.00           H
ATOM   3173  HA  PHE A 294     -11.359   0.162 -18.196  1.00  0.00           H
ATOM   3174  HB2 PHE A 294     -10.256   0.907 -16.098  1.00  0.00           H
ATOM   3175  HB3 PHE A 294     -11.005  -0.376 -15.205  1.00  0.00           H
ATOM   3176  HD1 PHE A 294      -8.588   0.318 -17.990  1.00  0.00           H
ATOM   3177  HD2 PHE A 294     -10.112  -2.602 -15.178  1.00  0.00           H
ATOM   3178  HE1 PHE A 294      -6.683  -1.184 -18.492  1.00  0.00           H
ATOM   3179  HE2 PHE A 294      -8.210  -4.098 -15.736  1.00  0.00           H
ATOM   3180  HZ  PHE A 294      -6.459  -3.353 -17.297  1.00  0.00           H
ATOM   3181  N   ILE A 295     -13.042  -2.114 -16.394  1.00 24.85           N
ATOM   3182  CA  ILE A 295     -13.599  -3.479 -16.409  1.00 26.88           C
ATOM   3183  C   ILE A 295     -14.689  -3.721 -17.496  1.00 27.94           C
ATOM   3184  O   ILE A 295     -14.905  -4.862 -17.897  1.00 27.36           O
ATOM   3185  CB  ILE A 295     -14.058  -3.833 -14.958  1.00 28.74           C
ATOM   3186  CG1 ILE A 295     -12.888  -3.802 -13.937  1.00 30.86           C
ATOM   3187  CG2 ILE A 295     -14.837  -5.159 -14.820  1.00 29.65           C
ATOM   3188  CD1 ILE A 295     -11.811  -4.883 -14.137  1.00 31.32           C
ATOM   3189  H   ILE A 295     -13.111  -1.600 -15.523  1.00  0.00           H
ATOM   3190  HA  ILE A 295     -12.787  -4.153 -16.687  1.00  0.00           H
ATOM   3191  HB  ILE A 295     -14.749  -3.048 -14.649  1.00  0.00           H
ATOM   3192 HG12 ILE A 295     -12.400  -2.829 -13.945  1.00  0.00           H
ATOM   3193 HG13 ILE A 295     -13.293  -3.902 -12.929  1.00  0.00           H
ATOM   3194 HG21 ILE A 295     -15.045  -5.391 -13.775  1.00  0.00           H
ATOM   3195 HG22 ILE A 295     -15.798  -5.120 -15.334  1.00  0.00           H
ATOM   3196 HG23 ILE A 295     -14.277  -5.994 -15.243  1.00  0.00           H
ATOM   3197 HD11 ILE A 295     -11.029  -4.791 -13.383  1.00  0.00           H
ATOM   3198 HD12 ILE A 295     -12.223  -5.888 -14.055  1.00  0.00           H
ATOM   3199 HD13 ILE A 295     -11.322  -4.803 -15.109  1.00  0.00           H
ATOM   3200  N   LYS A 296     -15.336  -2.672 -18.027  1.00 27.30           N
ATOM   3201  CA  LYS A 296     -16.235  -2.730 -19.192  1.00 29.16           C
ATOM   3202  C   LYS A 296     -15.455  -2.816 -20.522  1.00 29.60           C
ATOM   3203  O   LYS A 296     -16.037  -3.161 -21.548  1.00 30.49           O
ATOM   3204  CB  LYS A 296     -16.999  -1.385 -19.311  1.00 30.80           C
ATOM   3205  CG  LYS A 296     -18.104  -1.069 -18.287  1.00 35.46           C
ATOM   3206  CD  LYS A 296     -18.514   0.409 -18.440  1.00 37.53           C
ATOM   3207  CE  LYS A 296     -19.408   0.986 -17.335  1.00 39.57           C
ATOM   3208  NZ  LYS A 296     -19.519   2.450 -17.469  1.00 42.84           N1+
ATOM   3209  H   LYS A 296     -15.213  -1.777 -17.562  1.00  0.00           H
ATOM   3210  HA  LYS A 296     -16.924  -3.573 -19.118  1.00  0.00           H
ATOM   3211  HB2 LYS A 296     -16.258  -0.583 -19.301  1.00  0.00           H
ATOM   3212  HB3 LYS A 296     -17.470  -1.320 -20.295  1.00  0.00           H
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ATOM   3213  HG2 LYS A 296     -18.960  -1.728 -18.437  1.00  0.00          H
ATOM   3214  HG3 LYS A 296     -17.751  -1.261 -17.277  1.00  0.00          H
ATOM   3215  HD2 LYS A 296     -17.605   1.005 -18.469  1.00  0.00          H
ATOM   3216  HD3 LYS A 296     -18.985   0.554 -19.413  1.00  0.00          H
ATOM   3217  HE2 LYS A 296     -20.398   0.531 -17.377  1.00  0.00          H
ATOM   3218  HE3 LYS A 296     -18.989   0.771 -16.354  1.00  0.00          H
ATOM   3219  HZ1 LYS A 296     -20.284   2.870 -16.977  1.00  0.00          H
ATOM   3220  HZ2 LYS A 296     -18.651   2.900 -17.098  1.00  0.00          H
ATOM   3221  HZ3 LYS A 296     -19.457   2.756 -18.431  1.00  0.00          H
ATOM   3222  N   LYS A 297     -14.195  -2.375 -20.517  1.00 28.79          N
ATOM   3223  CA  LYS A 297     -13.400  -2.002 -21.683  1.00 30.07          C
ATOM   3224  C   LYS A 297     -12.233  -2.976 -21.888  1.00 29.13          C
ATOM   3225  O   LYS A 297     -11.867  -3.240 -23.028  1.00 30.10          O
ATOM   3226  CB  LYS A 297     -12.883  -0.572 -21.394  1.00 31.69          C
ATOM   3227  CG  LYS A 297     -11.962   0.076 -22.446  1.00 36.08          C
ATOM   3228  CD  LYS A 297     -11.504   1.476 -21.999  1.00 40.63          C
ATOM   3229  CE  LYS A 297     -10.401   1.452 -20.918  1.00 42.81          C
ATOM   3230  NZ  LYS A 297     -10.490   2.636 -20.048  1.00 42.47          N1+
ATOM   3231  H   LYS A 297     -13.756  -2.240 -19.614  1.00  0.00          H
ATOM   3232  HA  LYS A 297     -14.008  -1.999 -22.590  1.00  0.00          H
ATOM   3233  HB2 LYS A 297     -13.748   0.077 -21.248  1.00  0.00          H
ATOM   3234  HB3 LYS A 297     -12.361  -0.580 -20.441  1.00  0.00          H
ATOM   3235  HG2 LYS A 297     -11.088  -0.547 -22.646  1.00  0.00          H
ATOM   3236  HG3 LYS A 297     -12.502   0.149 -23.390  1.00  0.00          H
ATOM   3237  HD2 LYS A 297     -11.135   2.025 -22.866  1.00  0.00          H
ATOM   3238  HD3 LYS A 297     -12.380   2.025 -21.649  1.00  0.00          H
ATOM   3239  HE2 LYS A 297     -10.478   0.572 -20.282  1.00  0.00          H
ATOM   3240  HE3 LYS A 297      -9.415   1.401 -21.384  1.00  0.00          H
ATOM   3241  HZ1 LYS A 297      -9.674   2.708 -19.428  1.00  0.00          H
ATOM   3242  HZ2 LYS A 297     -10.517   3.480 -20.594  1.00  0.00          H
ATOM   3243  HZ3 LYS A 297     -11.331   2.567 -19.476  1.00  0.00          H
ATOM   3244  N   ASN A 298     -11.666  -3.489 -20.791  1.00 28.47          N
ATOM   3245  CA  ASN A 298     -10.478  -4.338 -20.740  1.00 26.71          C
ATOM   3246  C   ASN A 298     -10.760  -5.620 -19.933  1.00 25.72          C
ATOM   3247  O   ASN A 298     -10.257  -5.753 -18.811  1.00 23.38          O
ATOM   3248  CB  ASN A 298      -9.283  -3.536 -20.164  1.00 27.91          C
ATOM   3249  CG  ASN A 298      -8.681  -2.533 -21.144  1.00 28.07          C
ATOM   3250  OD1 ASN A 298      -8.943  -1.331 -21.072  1.00 30.60          O
ATOM   3251  ND2 ASN A 298      -7.834  -3.023 -22.037  1.00 28.22          N
ATOM   3252  H   ASN A 298     -12.003  -3.165 -19.891  1.00  0.00          H
ATOM   3253  HA  ASN A 298     -10.205  -4.661 -21.746  1.00  0.00          H
ATOM   3254  HB2 ASN A 298      -9.572  -3.022 -19.247  1.00  0.00          H
ATOM   3255  HB3 ASN A 298      -8.484  -4.220 -19.881  1.00  0.00          H
ATOM   3256 HD21 ASN A 298      -7.685  -4.059 -22.047  1.00  0.00          H
ATOM   3257 HD22 ASN A 298      -7.371  -2.449 -22.715  1.00  0.00          H
ATOM   3258  N   PRO A 299     -11.584  -6.567 -20.441  1.00 25.00          N
ATOM   3259  CA  PRO A 299     -11.853  -7.837 -19.754  1.00 25.78          C
ATOM   3260  C   PRO A 299     -10.694  -8.852 -19.829  1.00 25.64          C
ATOM   3261  O   PRO A 299     -10.658  -9.770 -19.013  1.00 25.28          O
ATOM   3262  CB  PRO A 299     -13.112  -8.386 -20.441  1.00 26.77          C
ATOM   3263  CG  PRO A 299     -13.043  -7.830 -21.855  1.00 25.54          C
ATOM   3264  CD  PRO A 299     -12.355  -6.475 -21.686  1.00 25.40          C
ATOM   3265  HA  PRO A 299     -12.065  -7.654 -18.699  1.00  0.00          H
ATOM   3266  HB2 PRO A 299     -13.179  -9.475 -20.420  1.00  0.00          H
ATOM   3267  HB3 PRO A 299     -13.996  -7.994 -19.936  1.00  0.00          H
ATOM   3268  HG2 PRO A 299     -12.414  -8.475 -22.471  1.00  0.00          H
ATOM   3269  HG3 PRO A 299     -14.017  -7.754 -22.338  1.00  0.00          H
ATOM   3270  HD2 PRO A 299     -11.742  -6.224 -22.553  1.00  0.00          H
ATOM   3271  HD3 PRO A 299     -13.111  -5.698 -21.577  1.00  0.00          H
ATOM   3272  N   GLU A 300      -9.748  -8.711 -20.765  1.00 27.36          N
ATOM   3273  CA  GLU A 300      -8.555  -9.543 -20.908  1.00 30.62          C
ATOM   3274  C   GLU A 300      -7.543  -9.277 -19.778  1.00 31.01          C
ATOM   3275  O   GLU A 300      -6.900 -10.210 -19.297  1.00 30.85          O
ATOM   3276  CB  GLU A 300      -7.927  -9.282 -22.308  1.00 33.91          C
ATOM   3277  CG  GLU A 300      -7.205  -7.928 -22.563  1.00 38.15          C
ATOM   3278  CD  GLU A 300      -8.113  -6.711 -22.425  1.00 41.20          C
ATOM   3279  OE1 GLU A 300      -9.325  -6.868 -22.671  1.00 42.55          O
ATOM   3280  OE2 GLU A 300      -7.633  -5.665 -21.953  1.00 42.55          O1-
ATOM   3281  H   GLU A 300      -9.813  -7.939 -21.446  1.00  0.00          H
ATOM   3282  HA  GLU A 300      -8.862 -10.589 -20.851  1.00  0.00          H
ATOM   3283  HB2 GLU A 300      -7.202 -10.074 -22.496  1.00  0.00          H
ATOM   3284  HB3 GLU A 300      -8.696  -9.419 -23.070  1.00  0.00          H
ATOM   3285  HG2 GLU A 300      -6.345  -7.806 -21.905  1.00  0.00          H
ATOM   3286  HG3 GLU A 300      -6.808  -7.914 -23.577  1.00  0.00          H
ATOM   3287  N   TYR A 301      -7.416  -8.022 -19.328  1.00 29.28          N
ATOM   3288  CA  TYR A 301      -6.497  -7.599 -18.271  1.00 27.29          C
ATOM   3289  C   TYR A 301      -7.010  -7.948 -16.858  1.00 26.08          C
ATOM   3290  O   TYR A 301      -6.230  -7.947 -15.905  1.00 25.20          O
ATOM   3291  CB  TYR A 301      -6.294  -6.071 -18.376  1.00 25.45          C
ATOM   3292  CG  TYR A 301      -5.382  -5.539 -19.485  1.00 24.93          C
ATOM   3293  CD1 TYR A 301      -4.409  -6.341 -20.126  1.00 25.31          C
ATOM   3294  CD2 TYR A 301      -5.481  -4.179 -19.854  1.00 23.92          C
ATOM   3295  CE1 TYR A 301      -3.549  -5.785 -21.094  1.00 25.27          C
ATOM   3296  CE2 TYR A 301      -4.601  -3.617 -20.795  1.00 26.82          C
ATOM   3297  CZ  TYR A 301      -3.626  -4.416 -21.410  1.00 25.82          C
ATOM   3298  OH  TYR A 301      -2.742  -3.860 -22.286  1.00 26.18          O
ATOM   3299  H   TYR A 301      -7.917  -7.299 -19.835  1.00  0.00          H
ATOM   3300  HA  TYR A 301      -5.546  -8.123 -18.367  1.00  0.00          H
ATOM   3301  HB2 TYR A 301      -7.267  -5.587 -18.462  1.00  0.00          H
ATOM   3302  HB3 TYR A 301      -5.878  -5.701 -17.440  1.00  0.00          H
ATOM   3303  HD1 TYR A 301      -4.296  -7.388 -19.898  1.00  0.00          H
ATOM   3304  HD2 TYR A 301      -6.235  -3.545 -19.424  1.00  0.00          H
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ATOM   3305  HE1 TYR A 301      -2.807  -6.403 -21.575  1.00  0.00           H
ATOM   3306  HE2 TYR A 301      -4.676  -2.571 -21.050  1.00  0.00           H
ATOM   3307  HH  TYR A 301      -2.452  -2.973 -21.989  1.00  0.00           H
ATOM   3308  N   LEU A 302      -8.285  -8.325 -16.717  1.00 26.08           N
ATOM   3309  CA  LEU A 302      -8.850  -8.934 -15.514  1.00 25.64           C
ATOM   3310  C   LEU A 302      -8.344 -10.389 -15.419  1.00 26.50           C
ATOM   3311  O   LEU A 302      -8.171 -11.062 -16.438  1.00 26.41           O
ATOM   3312  CB  LEU A 302     -10.393  -8.875 -15.650  1.00 26.41           C
ATOM   3313  CG  LEU A 302     -11.249  -9.551 -14.554  1.00 28.11           C
ATOM   3314  CD1 LEU A 302     -10.992  -8.988 -13.151  1.00 26.19           C
ATOM   3315  CD2 LEU A 302     -12.741  -9.446 -14.902  1.00 28.85           C
ATOM   3316  H   LEU A 302      -8.823  -8.416 -17.569  1.00  0.00           H
ATOM   3317  HA  LEU A 302      -8.528  -8.372 -14.635  1.00  0.00           H
ATOM   3318  HB2 LEU A 302     -10.693  -7.830 -15.740  1.00  0.00           H
ATOM   3319  HB3 LEU A 302     -10.667  -9.339 -16.595  1.00  0.00           H
ATOM   3320  HG  LEU A 302     -11.008 -10.614 -14.540  1.00  0.00           H
ATOM   3321 HD11 LEU A 302     -11.622  -9.485 -12.414  1.00  0.00           H
ATOM   3322 HD12 LEU A 302      -9.961  -9.153 -12.843  1.00  0.00           H
ATOM   3323 HD13 LEU A 302     -11.194  -7.919 -13.103  1.00  0.00           H
ATOM   3324 HD21 LEU A 302     -13.355  -9.969 -14.169  1.00  0.00           H
ATOM   3325 HD22 LEU A 302     -13.070  -8.407 -14.939  1.00  0.00           H
ATOM   3326 HD23 LEU A 302     -12.946  -9.892 -15.877  1.00  0.00           H
ATOM   3327  N   ASP A 303      -8.070 -10.867 -14.201  1.00 26.14           N
ATOM   3328  CA  ASP A 303      -7.757 -12.269 -13.927  1.00 26.40           C
ATOM   3329  C   ASP A 303      -9.071 -13.025 -13.692  1.00 26.12           C
ATOM   3330  O   ASP A 303      -9.989 -12.502 -13.053  1.00 26.00           O
ATOM   3331  CB  ASP A 303      -6.912 -12.372 -12.641  1.00 24.91           C
ATOM   3332  CG  ASP A 303      -6.114 -13.666 -12.608  1.00 24.80           C
ATOM   3333  OD1 ASP A 303      -6.720 -14.747 -12.431  1.00 24.92           O
ATOM   3334  OD2 ASP A 303      -4.886 -13.557 -12.797  1.00 22.64           O1-
ATOM   3335  H   ASP A 303      -8.172 -10.265 -13.391  1.00  0.00           H
ATOM   3336  HA  ASP A 303      -7.209 -12.702 -14.768  1.00  0.00           H
ATOM   3337  HB2 ASP A 303      -6.201 -11.547 -12.593  1.00  0.00           H
ATOM   3338  HB3 ASP A 303      -7.517 -12.299 -11.736  1.00  0.00           H
ATOM   3339  N   GLU A 304      -9.164 -14.261 -14.178  1.00 27.08           N
ATOM   3340  CA  GLU A 304     -10.307 -15.150 -14.000  1.00 27.05           C
ATOM   3341  C   GLU A 304     -10.381 -15.713 -12.562  1.00 26.35           C
ATOM   3342  O   GLU A 304     -11.470 -16.043 -12.092  1.00 25.01           O
ATOM   3343  CB  GLU A 304     -10.176 -16.285 -15.040  1.00 29.55           C
ATOM   3344  CG  GLU A 304      -8.896 -17.144 -14.932  1.00 34.94           C
ATOM   3345  CD  GLU A 304      -8.436 -17.709 -16.268  1.00 38.80           C
ATOM   3346  OE1 GLU A 304      -9.307 -18.122 -17.061  1.00 40.86           O
ATOM   3347  OE2 GLU A 304      -7.205 -17.703 -16.487  1.00 37.70           O1-
ATOM   3348  H   GLU A 304      -8.350 -14.660 -14.629  1.00  0.00           H
ATOM   3349  HA  GLU A 304     -11.227 -14.597 -14.197  1.00  0.00           H
ATOM   3350  HB2 GLU A 304     -11.042 -16.945 -14.980  1.00  0.00           H
ATOM   3351  HB3 GLU A 304     -10.231 -15.840 -16.036  1.00  0.00           H
ATOM   3352  HG2 GLU A 304      -8.065 -16.551 -14.555  1.00  0.00           H
ATOM   3353  HG3 GLU A 304      -9.040 -17.966 -14.232  1.00  0.00           H
ATOM   3354  N   ASN A 305      -9.258 -15.765 -11.832  1.00 25.29           N
ATOM   3355  CA  ASN A 305      -9.123 -16.373 -10.500  1.00 24.94           C
ATOM   3356  C   ASN A 305      -9.145 -15.271  -9.414  1.00 25.14           C
ATOM   3357  O   ASN A 305      -8.560 -15.433  -8.340  1.00 24.32           O
ATOM   3358  CB  ASN A 305      -7.758 -17.100 -10.379  1.00 26.38           C
ATOM   3359  CG  ASN A 305      -7.388 -18.040 -11.520  1.00 26.41           C
ATOM   3360  OD1 ASN A 305      -7.688 -19.229 -11.469  1.00 28.64           O
ATOM   3361  ND2 ASN A 305      -6.703 -17.516 -12.531  1.00 27.76           N
ATOM   3362  H   ASN A 305      -8.395 -15.394 -12.246  1.00  0.00           H
ATOM   3363  HA  ASN A 305      -9.930 -17.083 -10.316  1.00  0.00           H
ATOM   3364  HB2 ASN A 305      -6.968 -16.366 -10.308  1.00  0.00           H
ATOM   3365  HB3 ASN A 305      -7.722 -17.671  -9.451  1.00  0.00           H
ATOM   3366 HD21 ASN A 305      -6.556 -16.493 -12.558  1.00  0.00           H
ATOM   3367 HD22 ASN A 305      -6.529 -18.061 -13.364  1.00  0.00           H
ATOM   3368  N   ASN A 306      -9.759 -14.123  -9.721  1.00 24.92           N
ATOM   3369  CA  ASN A 306      -9.777 -12.880  -8.943  1.00 24.17           C
ATOM   3370  C   ASN A 306     -10.458 -12.973  -7.557  1.00 23.07           C
ATOM   3371  O   ASN A 306     -11.084 -13.969  -7.188  1.00 22.07           O
ATOM   3372  CB  ASN A 306     -10.426 -11.745  -9.780  1.00 24.78           C
ATOM   3373  CG  ASN A 306     -11.890 -11.975 -10.161  1.00 23.30           C
ATOM   3374  OD1 ASN A 306     -12.780 -11.845  -9.325  1.00 23.64           O
ATOM   3375  ND2 ASN A 306     -12.157 -12.310 -11.416  1.00 30.14           N
ATOM   3376  H   ASN A 306     -10.200 -14.116 -10.629  1.00  0.00           H
ATOM   3377  HA  ASN A 306      -8.734 -12.609  -8.764  1.00  0.00           H
ATOM   3378  HB2 ASN A 306     -10.394 -10.811  -9.226  1.00  0.00           H
ATOM   3379  HB3 ASN A 306      -9.827 -11.560 -10.672  1.00  0.00           H
ATOM   3380 HD21 ASN A 306     -11.390 -12.388 -12.095  1.00  0.00           H
ATOM   3381 HD22 ASN A 306     -13.098 -12.533 -11.690  1.00  0.00           H
ATOM   3382  N   LEU A 307     -10.358 -11.877  -6.799  1.00 22.52           N
ATOM   3383  CA  LEU A 307     -10.938 -11.646  -5.486  1.00 20.85           C
ATOM   3384  C   LEU A 307     -11.928 -10.461  -5.570  1.00 21.65           C
ATOM   3385  O   LEU A 307     -11.970  -9.612  -4.679  1.00 22.08           O
ATOM   3386  CB  LEU A 307      -9.774 -11.401  -4.491  1.00 21.68           C
ATOM   3387  CG  LEU A 307     -10.143 -11.446  -2.992  1.00 24.57           C
ATOM   3388  CD1 LEU A 307     -10.310 -12.873  -2.467  1.00 25.54           C
ATOM   3389  CD2 LEU A 307      -9.103 -10.694  -2.154  1.00 24.54           C
ATOM   3390  H   LEU A 307      -9.830 -11.088  -7.180  1.00  0.00           H
ATOM   3391  HA  LEU A 307     -11.504 -12.522  -5.168  1.00  0.00           H
ATOM   3392  HB2 LEU A 307      -8.974 -12.119  -4.673  1.00  0.00           H
ATOM   3393  HB3 LEU A 307      -9.332 -10.432  -4.723  1.00  0.00           H
ATOM   3394  HG  LEU A 307     -11.097 -10.950  -2.840  1.00  0.00           H
ATOM   3395 HD11 LEU A 307     -10.539 -12.863  -1.403  1.00  0.00           H
ATOM   3396 HD12 LEU A 307     -11.122 -13.391  -2.975  1.00  0.00           H
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ATOM   3397 HD13 LEU A 307      -9.393 -13.445  -2.597  1.00  0.00           H
ATOM   3398 HD21 LEU A 307      -9.378 -10.701  -1.101  1.00  0.00           H
ATOM   3399 HD22 LEU A 307      -8.120 -11.153  -2.246  1.00  0.00           H
ATOM   3400 HD23 LEU A 307      -9.017  -9.651  -2.464  1.00  0.00           H
ATOM   3401  N   MET A 308     -12.767 -10.390  -6.619  1.00 20.81           N
ATOM   3402  CA  MET A 308     -13.823  -9.372  -6.782  1.00 22.78           C
ATOM   3403  C   MET A 308     -14.807  -9.330  -5.590  1.00 22.78           C
ATOM   3404  O   MET A 308     -15.337  -8.272  -5.251  1.00 22.72           O
ATOM   3405  CB  MET A 308     -14.561  -9.608  -8.121  1.00 21.26           C
ATOM   3406  CG  MET A 308     -15.699  -8.623  -8.446  1.00 20.59           C
ATOM   3407  SD  MET A 308     -15.205  -6.893  -8.685  1.00 23.31           S
ATOM   3408  CE  MET A 308     -14.778  -6.917 -10.450  1.00 20.96           C
ATOM   3409  H   MET A 308     -12.666 -11.082  -7.358  1.00  0.00           H
ATOM   3410  HA  MET A 308     -13.330  -8.398  -6.821  1.00  0.00           H
ATOM   3411  HB2 MET A 308     -13.843  -9.573  -8.939  1.00  0.00           H
ATOM   3412  HB3 MET A 308     -14.972 -10.619  -8.126  1.00  0.00           H
ATOM   3413  HG2 MET A 308     -16.220  -8.956  -9.344  1.00  0.00           H
ATOM   3414  HG3 MET A 308     -16.443  -8.651  -7.655  1.00  0.00           H
ATOM   3415  HE1 MET A 308     -14.381  -5.949 -10.756  1.00  0.00           H
ATOM   3416  HE2 MET A 308     -14.028  -7.678 -10.664  1.00  0.00           H
ATOM   3417  HE3 MET A 308     -15.658  -7.132 -11.056  1.00  0.00           H
ATOM   3418  N   SER A 309     -14.989 -10.463  -4.906  1.00 22.41           N
ATOM   3419  CA  SER A 309     -15.792 -10.639  -3.703  1.00 23.60           C
ATOM   3420  C   SER A 309     -15.242  -9.902  -2.462  1.00 22.97           C
ATOM   3421  O   SER A 309     -15.970  -9.751  -1.483  1.00 22.64           O
ATOM   3422  CB  SER A 309     -15.882 -12.159  -3.454  1.00 24.95           C
ATOM   3423  OG  SER A 309     -14.593 -12.770  -3.438  1.00 30.97           O
ATOM   3424  H   SER A 309     -14.479 -11.284  -5.198  1.00  0.00           H
ATOM   3425  HA  SER A 309     -16.795 -10.249  -3.891  1.00  0.00           H
ATOM   3426  HB2 SER A 309     -16.388 -12.353  -2.507  1.00  0.00           H
ATOM   3427  HB3 SER A 309     -16.488 -12.627  -4.232  1.00  0.00           H
ATOM   3428  HG  SER A 309     -14.687 -13.659  -3.128  1.00  0.00           H
ATOM   3429  N   PHE A 310     -13.991  -9.416  -2.491  1.00 22.04           N
ATOM   3430  CA  PHE A 310     -13.454  -8.524  -1.462  1.00 21.22           C
ATOM   3431  C   PHE A 310     -13.887  -7.076  -1.740  1.00 21.27           C
ATOM   3432  O   PHE A 310     -14.099  -6.327  -0.791  1.00 20.91           O
ATOM   3433  CB  PHE A 310     -11.910  -8.595  -1.467  1.00 20.01           C
ATOM   3434  CG  PHE A 310     -11.185  -7.601  -0.572  1.00 20.57           C
ATOM   3435  CD1 PHE A 310     -11.364  -7.643   0.825  1.00 21.24           C
ATOM   3436  CD2 PHE A 310     -10.357  -6.609  -1.141  1.00 21.25           C
ATOM   3437  CE1 PHE A 310     -10.712  -6.705   1.647  1.00 21.69           C
ATOM   3438  CE2 PHE A 310      -9.719  -5.663  -0.316  1.00 21.89           C
ATOM   3439  CZ  PHE A 310      -9.892  -5.714   1.079  1.00 21.34           C
ATOM   3440  H   PHE A 310     -13.426  -9.585  -3.317  1.00  0.00           H
ATOM   3441  HA  PHE A 310     -13.821  -8.814  -0.475  1.00  0.00           H
ATOM   3442  HB2 PHE A 310     -11.609  -9.589  -1.141  1.00  0.00           H
ATOM   3443  HB3 PHE A 310     -11.530  -8.473  -2.481  1.00  0.00           H
ATOM   3444  HD1 PHE A 310     -12.010  -8.385   1.269  1.00  0.00           H
ATOM   3445  HD2 PHE A 310     -10.210  -6.561  -2.211  1.00  0.00           H
ATOM   3446  HE1 PHE A 310     -10.839  -6.746   2.716  1.00  0.00           H
ATOM   3447  HE2 PHE A 310      -9.071  -4.917  -0.753  1.00  0.00           H
ATOM   3448  HZ  PHE A 310      -9.385  -5.002   1.713  1.00  0.00           H
ATOM   3449  N   LEU A 311     -14.037  -6.681  -3.011  1.00 20.63           N
ATOM   3450  CA  LEU A 311     -14.288  -5.298  -3.413  1.00 22.79           C
ATOM   3451  C   LEU A 311     -15.782  -4.987  -3.543  1.00 24.02           C
ATOM   3452  O   LEU A 311     -16.166  -3.821  -3.496  1.00 26.14           O
ATOM   3453  CB  LEU A 311     -13.736  -5.082  -4.841  1.00 23.27           C
ATOM   3454  CG  LEU A 311     -12.240  -5.369  -5.046  1.00 24.44           C
ATOM   3455  CD1 LEU A 311     -11.918  -5.233  -6.539  1.00 21.83           C
ATOM   3456  CD2 LEU A 311     -11.346  -4.453  -4.196  1.00 24.33           C
ATOM   3457  H   LEU A 311     -13.936  -7.370  -3.744  1.00  0.00           H
ATOM   3458  HA  LEU A 311     -13.839  -4.592  -2.710  1.00  0.00           H
ATOM   3459  HB2 LEU A 311     -14.298  -5.704  -5.543  1.00  0.00           H
ATOM   3460  HB3 LEU A 311     -13.932  -4.052  -5.147  1.00  0.00           H
ATOM   3461  HG  LEU A 311     -12.031  -6.402  -4.761  1.00  0.00           H
ATOM   3462 HD11 LEU A 311     -10.867  -5.419  -6.739  1.00  0.00           H
ATOM   3463 HD12 LEU A 311     -12.491  -5.945  -7.134  1.00  0.00           H
ATOM   3464 HD13 LEU A 311     -12.146  -4.235  -6.913  1.00  0.00           H
ATOM   3465 HD21 LEU A 311     -10.295  -4.703  -4.336  1.00  0.00           H
ATOM   3466 HD22 LEU A 311     -11.474  -3.403  -4.461  1.00  0.00           H
ATOM   3467 HD23 LEU A 311     -11.553  -4.556  -3.131  1.00  0.00           H
ATOM   3468  N   SER A 312     -16.627  -5.991  -3.782  1.00 24.95           N
ATOM   3469  CA  SER A 312     -17.951  -5.796  -4.344  1.00 24.03           C
ATOM   3470  C   SER A 312     -19.013  -6.586  -3.581  1.00 25.46           C
ATOM   3471  O   SER A 312     -18.748  -7.666  -3.058  1.00 23.59           O
ATOM   3472  CB  SER A 312     -17.876  -6.091  -5.854  1.00 22.48           C
ATOM   3473  OG  SER A 312     -19.110  -5.856  -6.508  1.00 23.27           O
ATOM   3474  H   SER A 312     -16.263  -6.937  -3.790  1.00  0.00           H
ATOM   3475  HA  SER A 312     -18.239  -4.750  -4.231  1.00  0.00           H
ATOM   3476  HB2 SER A 312     -17.115  -5.465  -6.324  1.00  0.00           H
ATOM   3477  HB3 SER A 312     -17.573  -7.125  -6.012  1.00  0.00           H
ATOM   3478  HG  SER A 312     -19.298  -4.913  -6.416  1.00  0.00           H
ATOM   3479  N   ASN A 313     -20.227  -6.024  -3.537  1.00 27.59           N
ATOM   3480  CA  ASN A 313     -21.395  -6.593  -2.859  1.00 30.50           C
ATOM   3481  C   ASN A 313     -22.100  -7.569  -3.815  1.00 30.83           C
ATOM   3482  O   ASN A 313     -22.603  -8.604  -3.388  1.00 32.14           O
ATOM   3483  CB  ASN A 313     -22.436  -5.483  -2.535  1.00 29.50           C
ATOM   3484  CG  ASN A 313     -21.855  -4.225  -1.888  1.00 31.80           C
ATOM   3485  OD1 ASN A 313     -21.528  -4.211  -0.708  1.00 30.49           O
ATOM   3486  ND2 ASN A 313     -21.694  -3.164  -2.672  1.00 31.11           N
ATOM   3487  H   ASN A 313     -20.343  -5.133  -3.997  1.00  0.00           H
ATOM   3488  HA  ASN A 313     -21.091  -7.107  -1.944  1.00  0.00           H
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ATOM   3489  HB2 ASN A 313     -22.992  -5.185  -3.425  1.00  0.00          H
ATOM   3490  HB3 ASN A 313     -23.183  -5.890  -1.853  1.00  0.00          H
ATOM   3491 HD21 ASN A 313     -21.992  -3.209  -3.651  1.00  0.00          H
ATOM   3492 HD22 ASN A 313     -21.270  -2.319  -2.307  1.00  0.00          H
ATOM   3493  N   ASP A 314     -22.162  -7.217  -5.108  1.00 32.03          N
ATOM   3494  CA  ASP A 314     -22.865  -7.955  -6.160  1.00 31.57          C
ATOM   3495  C   ASP A 314     -21.878  -8.788  -7.002  1.00 32.42          C
ATOM   3496  O   ASP A 314     -22.292  -9.764  -7.624  1.00 29.58          O
ATOM   3497  CB  ASP A 314     -23.564  -6.931  -7.097  1.00 33.24          C
ATOM   3498  CG  ASP A 314     -22.617  -6.062  -7.916  1.00 33.93          C
ATOM   3499  OD1 ASP A 314     -22.044  -5.112  -7.348  1.00 33.28          O
ATOM   3500  OD2 ASP A 314     -22.386  -6.381  -9.099  1.00 35.28          O1-
ATOM   3501  H   ASP A 314     -21.726  -6.347  -5.386  1.00  0.00          H
ATOM   3502  HA  ASP A 314     -23.615  -8.621  -5.730  1.00  0.00          H
ATOM   3503  HB2 ASP A 314     -24.216  -7.465  -7.789  1.00  0.00          H
ATOM   3504  HB3 ASP A 314     -24.217  -6.279  -6.516  1.00  0.00          H
ATOM   3505  N   ASN A 315     -20.599  -8.390  -7.044  1.00 31.75          N
ATOM   3506  CA  ASN A 315     -19.508  -8.905  -7.874  1.00 32.79          C
ATOM   3507  C   ASN A 315     -19.368  -8.110  -9.179  1.00 31.79          C
ATOM   3508  O   ASN A 315     -19.569  -8.636 -10.276  1.00 30.01          O
ATOM   3509  CB  ASN A 315     -19.395 -10.444  -8.018  1.00 34.98          C
ATOM   3510  CG  ASN A 315     -19.148 -11.151  -6.687  1.00 39.86          C
ATOM   3511  OD1 ASN A 315     -18.014 -11.278  -6.241  1.00 41.48          O
ATOM   3512  ND2 ASN A 315     -20.209 -11.610  -6.035  1.00 39.98          N
ATOM   3513  H   ASN A 315     -20.383  -7.537  -6.539  1.00  0.00          H
ATOM   3514  HA  ASN A 315     -18.624  -8.627  -7.305  1.00  0.00          H
ATOM   3515  HB2 ASN A 315     -20.258 -10.871  -8.527  1.00  0.00          H
ATOM   3516  HB3 ASN A 315     -18.545 -10.678  -8.661  1.00  0.00          H
ATOM   3517 HD21 ASN A 315     -21.133 -11.418  -6.401  1.00  0.00          H
ATOM   3518 HD22 ASN A 315     -20.082 -12.035  -5.131  1.00  0.00          H
ATOM   3519  N   GLY A 316     -19.051  -6.819  -9.066  1.00 29.91          N
ATOM   3520  CA  GLY A 316     -18.432  -6.011 -10.109  1.00 28.90          C
ATOM   3521  C   GLY A 316     -19.181  -4.754 -10.543  1.00 29.49          C
ATOM   3522  O   GLY A 316     -18.619  -4.011 -11.342  1.00 31.30          O
ATOM   3523  H   GLY A 316     -19.041  -6.429  -8.118  1.00  0.00          H
ATOM   3524  HA2 GLY A 316     -17.473  -5.667  -9.727  1.00  0.00          H
ATOM   3525  HA3 GLY A 316     -18.205  -6.602 -10.997  1.00  0.00          H
ATOM   3526  N   LYS A 317     -20.413  -4.493 -10.079  1.00 28.46          N
ATOM   3527  CA  LYS A 317     -21.121  -3.255 -10.419  1.00 29.26          C
ATOM   3528  C   LYS A 317     -21.032  -2.247  -9.258  1.00 28.45          C
ATOM   3529  O   LYS A 317     -20.794  -1.066  -9.507  1.00 29.61          O
ATOM   3530  CB  LYS A 317     -22.601  -3.537 -10.769  1.00 30.65          C
ATOM   3531  CG  LYS A 317     -22.836  -4.151 -12.174  1.00 32.56          C
ATOM   3532  CD  LYS A 317     -23.140  -5.665 -12.208  1.00 33.46          C
ATOM   3533  CE  LYS A 317     -21.898  -6.579 -12.295  1.00 35.75          C
ATOM   3534  NZ  LYS A 317     -21.902  -7.600 -11.235  1.00 33.98          N1+
ATOM   3535  H   LYS A 317     -20.865  -5.124  -9.414  1.00  0.00          H
ATOM   3536  HA  LYS A 317     -20.673  -2.759 -11.283  1.00  0.00          H
ATOM   3537  HB2 LYS A 317     -23.098  -4.110  -9.988  1.00  0.00          H
ATOM   3538  HB3 LYS A 317     -23.118  -2.575 -10.764  1.00  0.00          H
ATOM   3539  HG2 LYS A 317     -23.713  -3.650 -12.588  1.00  0.00          H
ATOM   3540  HG3 LYS A 317     -22.025  -3.895 -12.857  1.00  0.00          H
ATOM   3541  HD2 LYS A 317     -23.774  -5.924 -11.358  1.00  0.00          H
ATOM   3542  HD3 LYS A 317     -23.756  -5.865 -13.086  1.00  0.00          H
ATOM   3543  HE2 LYS A 317     -21.855  -7.075 -13.265  1.00  0.00          H
ATOM   3544  HE3 LYS A 317     -20.983  -5.998 -12.221  1.00  0.00          H
ATOM   3545  HZ1 LYS A 317     -20.994  -8.046 -11.111  1.00  0.00          H
ATOM   3546  HZ2 LYS A 317     -22.091  -7.105 -10.332  1.00  0.00          H
ATOM   3547  HZ3 LYS A 317     -22.620  -8.293 -11.347  1.00  0.00          H
ATOM   3548  N   THR A 318     -21.180  -2.679  -8.002  1.00 28.25          N
ATOM   3549  CA  THR A 318     -21.121  -1.839  -6.806  1.00 25.97          C
ATOM   3550  C   THR A 318     -19.822  -2.126  -6.030  1.00 24.96          C
ATOM   3551  O   THR A 318     -19.359  -3.267  -5.996  1.00 24.07          O
ATOM   3552  CB  THR A 318     -22.373  -2.130  -5.931  1.00 27.38          C
ATOM   3553  OG1 THR A 318     -22.386  -3.445  -5.394  1.00 30.36          O
ATOM   3554  CG2 THR A 318     -23.703  -1.897  -6.663  1.00 28.55          C
ATOM   3555  H   THR A 318     -21.397  -3.672  -7.841  1.00  0.00          H
ATOM   3556  HA  THR A 318     -21.131  -0.782  -7.078  1.00  0.00          H
ATOM   3557  HB  THR A 318     -22.345  -1.447  -5.080  1.00  0.00          H
ATOM   3558  HG1 THR A 318     -22.309  -4.066  -6.142  1.00  0.00          H
ATOM   3559 HG21 THR A 318     -24.548  -2.009  -5.982  1.00  0.00          H
ATOM   3560 HG22 THR A 318     -23.748  -0.892  -7.082  1.00  0.00          H
ATOM   3561 HG23 THR A 318     -23.845  -2.605  -7.480  1.00  0.00          H
ATOM   3562  N   TYR A 319     -19.251  -1.105  -5.382  1.00 22.19          N
ATOM   3563  CA  TYR A 319     -18.124  -1.224  -4.457  1.00 21.55          C
ATOM   3564  C   TYR A 319     -18.713  -1.392  -3.045  1.00 20.73          C
ATOM   3565  O   TYR A 319     -19.750  -0.792  -2.747  1.00 22.78          O
ATOM   3566  CB  TYR A 319     -17.321   0.102  -4.510  1.00 17.02          C
ATOM   3567  CG  TYR A 319     -15.912   0.116  -3.927  1.00 18.70          C
ATOM   3568  CD1 TYR A 319     -15.053  -0.997  -4.058  1.00 15.33          C
ATOM   3569  CD2 TYR A 319     -15.428   1.276  -3.288  1.00 16.65          C
ATOM   3570  CE1 TYR A 319     -13.783  -0.998  -3.455  1.00 16.26          C
ATOM   3571  CE2 TYR A 319     -14.137   1.295  -2.723  1.00 16.78          C
ATOM   3572  CZ  TYR A 319     -13.332   0.144  -2.771  1.00 15.64          C
ATOM   3573  OH  TYR A 319     -12.127   0.130  -2.140  1.00 14.07          O
ATOM   3574  H   TYR A 319     -19.702  -0.205  -5.412  1.00  0.00          H
ATOM   3575  HA  TYR A 319     -17.510  -2.076  -4.743  1.00  0.00          H
ATOM   3576  HB2 TYR A 319     -17.217   0.407  -5.543  1.00  0.00          H
ATOM   3577  HB3 TYR A 319     -17.900   0.900  -4.040  1.00  0.00          H
ATOM   3578  HD1 TYR A 319     -15.353  -1.865  -4.622  1.00  0.00          H
ATOM   3579  HD2 TYR A 319     -16.046   2.159  -3.223  1.00  0.00          H
ATOM   3580  HE1 TYR A 319     -13.159  -1.878  -3.522  1.00  0.00          H
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ATOM   3581  HE2 TYR A 319     -13.777   2.176  -2.212  1.00  0.00           H
ATOM   3582  HH  TYR A 319     -11.958  -0.728  -1.744  1.00  0.00           H
ATOM   3583  N   ASN A 320     -18.090  -2.201  -2.182  1.00 18.73           N
ATOM   3584  CA  ASN A 320     -18.500  -2.374  -0.777  1.00 19.06           C
ATOM   3585  C   ASN A 320     -17.741  -1.426   0.178  1.00 16.51           C
ATOM   3586  O   ASN A 320     -18.065  -1.384   1.363  1.00 16.08           O
ATOM   3587  CB  ASN A 320     -18.303  -3.842  -0.305  1.00 19.10           C
ATOM   3588  CG  ASN A 320     -16.874  -4.384  -0.323  1.00 19.82           C
ATOM   3589  OD1 ASN A 320     -15.910  -3.641  -0.473  1.00 21.01           O
ATOM   3590  ND2 ASN A 320     -16.708  -5.694  -0.225  1.00 17.92           N
ATOM   3591  H   ASN A 320     -17.264  -2.712  -2.499  1.00  0.00           H
ATOM   3592  HA  ASN A 320     -19.561  -2.145  -0.665  1.00  0.00           H
ATOM   3593  HB2 ASN A 320     -18.692  -3.958   0.707  1.00  0.00           H
ATOM   3594  HB3 ASN A 320     -18.912  -4.493  -0.932  1.00  0.00           H
ATOM   3595 HD21 ASN A 320     -17.477  -6.340  -0.151  1.00  0.00           H
ATOM   3596 HD22 ASN A 320     -15.745  -6.033  -0.292  1.00  0.00           H
ATOM   3597  N   LEU A 321     -16.737  -0.700  -0.340  1.00 16.54           N
ATOM   3598  CA  LEU A 321     -15.857   0.274   0.315  1.00 16.81           C
ATOM   3599  C   LEU A 321     -14.532  -0.304   0.846  1.00 19.47           C
ATOM   3600  O   LEU A 321     -13.694   0.466   1.316  1.00 17.04           O
ATOM   3601  CB  LEU A 321     -16.566   1.252   1.291  1.00 17.52           C
ATOM   3602  CG  LEU A 321     -17.754   2.056   0.711  1.00 19.03           C
ATOM   3603  CD1 LEU A 321     -18.557   2.731   1.832  1.00 18.92           C
ATOM   3604  CD2 LEU A 321     -17.301   3.108  -0.310  1.00 19.85           C
ATOM   3605  H   LEU A 321     -16.524  -0.895  -1.307  1.00  0.00           H
ATOM   3606  HA  LEU A 321     -15.516   0.898  -0.505  1.00  0.00           H
ATOM   3607  HB2 LEU A 321     -16.904   0.684   2.155  1.00  0.00           H
ATOM   3608  HB3 LEU A 321     -15.838   1.955   1.695  1.00  0.00           H
ATOM   3609  HG  LEU A 321     -18.433   1.366   0.210  1.00  0.00           H
ATOM   3610 HD11 LEU A 321     -19.461   3.201   1.445  1.00  0.00           H
ATOM   3611 HD12 LEU A 321     -18.864   2.012   2.592  1.00  0.00           H
ATOM   3612 HD13 LEU A 321     -17.973   3.508   2.325  1.00  0.00           H
ATOM   3613 HD21 LEU A 321     -18.151   3.668  -0.701  1.00  0.00           H
ATOM   3614 HD22 LEU A 321     -16.609   3.823   0.139  1.00  0.00           H
ATOM   3615 HD23 LEU A 321     -16.805   2.646  -1.158  1.00  0.00           H
ATOM   3616  N   CYS A 322     -14.308  -1.623   0.775  1.00 19.78           N
ATOM   3617  CA  CYS A 322     -13.144  -2.278   1.376  1.00 21.80           C
ATOM   3618  C   CYS A 322     -11.865  -2.098   0.544  1.00 21.81           C
ATOM   3619  O   CYS A 322     -11.897  -2.139  -0.690  1.00 21.18           O
ATOM   3620  CB  CYS A 322     -13.396  -3.791   1.499  1.00 20.40           C
ATOM   3621  SG  CYS A 322     -14.566  -4.282   2.800  1.00 21.81           S
ATOM   3622  H   CYS A 322     -14.997  -2.225   0.330  1.00  0.00           H
ATOM   3623  HA  CYS A 322     -12.985  -1.859   2.367  1.00  0.00           H
ATOM   3624  HB2 CYS A 322     -13.713  -4.203   0.544  1.00  0.00           H
ATOM   3625  HB3 CYS A 322     -12.460  -4.304   1.726  1.00  0.00           H
ATOM   3626  N   HIS A 323     -10.728  -1.921   1.223  1.00 21.47           N
ATOM   3627  CA  HIS A 323      -9.397  -1.825   0.634  1.00 21.03           C
ATOM   3628  C   HIS A 323      -8.312  -2.301   1.612  1.00 21.77           C
ATOM   3629  O   HIS A 323      -8.556  -2.429   2.813  1.00 21.97           O
ATOM   3630  CB  HIS A 323      -9.152  -0.410   0.082  1.00 19.56           C
ATOM   3631  CG  HIS A 323      -9.068   0.684   1.105  1.00 20.31           C
ATOM   3632  ND1 HIS A 323     -10.169   1.348   1.603  1.00 18.55           N
ATOM   3633  CD2 HIS A 323      -7.986   1.220   1.758  1.00 19.48           C
ATOM   3634  CE1 HIS A 323      -9.711   2.295   2.421  1.00 19.82           C
ATOM   3635  NE2 HIS A 323      -8.394   2.272   2.571  1.00 17.55           N
ATOM   3636  H   HIS A 323     -10.774  -1.774   2.230  1.00  0.00           H
ATOM   3637  HA  HIS A 323      -9.363  -2.519  -0.206  1.00  0.00           H
ATOM   3638  HB2 HIS A 323      -8.203  -0.381  -0.444  1.00  0.00           H
ATOM   3639  HB3 HIS A 323      -9.907  -0.147  -0.656  1.00  0.00           H
ATOM   3640  HD1 HIS A 323     -11.144   1.156   1.400  1.00  0.00           H
ATOM   3641  HD2 HIS A 323      -6.950   0.940   1.688  1.00  0.00           H
ATOM   3642  HE1 HIS A 323     -10.344   2.994   2.941  1.00  0.00           H
ATOM   3643  N   PHE A 324      -7.112  -2.558   1.089  1.00 20.35           N
ATOM   3644  CA  PHE A 324      -5.872  -2.864   1.794  1.00 21.54           C
ATOM   3645  C   PHE A 324      -5.205  -1.521   2.139  1.00 21.67           C
ATOM   3646  O   PHE A 324      -5.121  -0.636   1.285  1.00 19.86           O
ATOM   3647  CB  PHE A 324      -4.943  -3.632   0.822  1.00 21.99           C
ATOM   3648  CG  PHE A 324      -5.546  -4.867   0.159  1.00 23.32           C
ATOM   3649  CD1 PHE A 324      -6.247  -5.825   0.918  1.00 23.40           C
ATOM   3650  CD2 PHE A 324      -5.396  -5.067  -1.229  1.00 21.47           C
ATOM   3651  CE1 PHE A 324      -6.787  -6.966   0.298  1.00 23.76           C
ATOM   3652  CE2 PHE A 324      -5.947  -6.204  -1.854  1.00 21.69           C
ATOM   3653  CZ  PHE A 324      -6.642  -7.158  -1.089  1.00 21.06           C
ATOM   3654  H   PHE A 324      -6.985  -2.396   0.085  1.00  0.00           H
ATOM   3655  HA  PHE A 324      -6.062  -3.445   2.693  1.00  0.00           H
ATOM   3656  HB2 PHE A 324      -4.597  -2.961   0.034  1.00  0.00           H
ATOM   3657  HB3 PHE A 324      -4.040  -3.946   1.350  1.00  0.00           H
ATOM   3658  HD1 PHE A 324      -6.365  -5.701   1.981  1.00  0.00           H
ATOM   3659  HD2 PHE A 324      -4.837  -4.350  -1.814  1.00  0.00           H
ATOM   3660  HE1 PHE A 324      -7.320  -7.688   0.895  1.00  0.00           H
ATOM   3661  HE2 PHE A 324      -5.830  -6.354  -2.917  1.00  0.00           H
ATOM   3662  HZ  PHE A 324      -7.063  -8.032  -1.563  1.00  0.00           H
ATOM   3663  N   TRP A 325      -4.766  -1.343   3.392  1.00 22.91           N
ATOM   3664  CA  TRP A 325      -4.223  -0.085   3.907  1.00 25.28           C
ATOM   3665  C   TRP A 325      -2.745  -0.006   3.463  1.00 26.42           C
ATOM   3666  O   TRP A 325      -1.856  -0.597   4.078  1.00 30.29           O
ATOM   3667  CB  TRP A 325      -4.380  -0.095   5.457  1.00 24.63           C
ATOM   3668  CG  TRP A 325      -4.859   1.150   6.150  1.00 24.92           C
ATOM   3669  CD1 TRP A 325      -5.687   2.083   5.629  1.00 22.73           C
ATOM   3670  CD2 TRP A 325      -4.582   1.597   7.518  1.00 22.74           C
ATOM   3671  NE1 TRP A 325      -5.963   3.043   6.578  1.00 25.68           N
ATOM   3672  CE3 TRP A 325      -3.798   1.109   8.588  1.00 22.84           C
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ATOM   3673  CE2 TRP A 325      -5.291   2.814   7.753  1.00 24.25           C
ATOM   3674  CZ3 TRP A 325      -3.731   1.783   9.821  1.00 20.89           C
ATOM   3675  CZ2 TRP A 325      -5.218   3.506   8.973  1.00 22.79           C
ATOM   3676  CH2 TRP A 325      -4.426   2.990  10.010  1.00 24.61           C
ATOM   3677  H   TRP A 325      -4.755  -2.134   4.030  1.00  0.00           H
ATOM   3678  HA  TRP A 325      -4.779   0.745   3.470  1.00  0.00           H
ATOM   3679  HB2 TRP A 325      -5.128  -0.831   5.744  1.00  0.00           H
ATOM   3680  HB3 TRP A 325      -3.462  -0.418   5.945  1.00  0.00           H
ATOM   3681  HD1 TRP A 325      -6.109   2.054   4.633  1.00  0.00           H
ATOM   3682  HE1 TRP A 325      -6.631   3.795   6.402  1.00  0.00           H
ATOM   3683  HE3 TRP A 325      -3.238   0.199   8.461  1.00  0.00           H
ATOM   3684  HZ3 TRP A 325      -3.143   1.371  10.629  1.00  0.00           H
ATOM   3685  HZ2 TRP A 325      -5.766   4.421   9.120  1.00  0.00           H
ATOM   3686  HH2 TRP A 325      -4.361   3.511  10.952  1.00  0.00           H
ATOM   3687  N   SER A 326      -2.503   0.688   2.343  1.00 24.03           N
ATOM   3688  CA  SER A 326      -1.278   0.706   1.535  1.00 22.71           C
ATOM   3689  C   SER A 326       0.001   1.226   2.229  1.00 21.08           C
ATOM   3690  O   SER A 326       1.100   1.109   1.698  1.00 19.92           O
ATOM   3691  CB  SER A 326      -1.581   1.497   0.248  1.00 22.45           C
ATOM   3692  OG  SER A 326      -2.108   2.781   0.548  1.00 23.98           O
ATOM   3693  H   SER A 326      -3.294   1.127   1.891  1.00  0.00           H
ATOM   3694  HA  SER A 326      -1.085  -0.328   1.254  1.00  0.00           H
ATOM   3695  HB2 SER A 326      -0.675   1.607  -0.348  1.00  0.00           H
ATOM   3696  HB3 SER A 326      -2.283   0.945  -0.377  1.00  0.00           H
ATOM   3697  HG  SER A 326      -1.952   3.354  -0.218  1.00  0.00           H
ATOM   3698  N   ASN A 327      -0.114   1.740   3.453  1.00 18.51           N
ATOM   3699  CA  ASN A 327       0.961   2.124   4.368  1.00 18.42           C
ATOM   3700  C   ASN A 327       1.854   0.937   4.828  1.00 19.32           C
ATOM   3701  O   ASN A 327       2.874   1.153   5.490  1.00 18.72           O
ATOM   3702  CB  ASN A 327       0.323   2.850   5.584  1.00 18.64           C
ATOM   3703  CG  ASN A 327      -0.891   2.173   6.195  1.00 18.91           C
ATOM   3704  OD1 ASN A 327      -2.024   2.487   5.872  1.00 17.18           O
ATOM   3705  ND2 ASN A 327      -0.661   1.240   7.163  1.00 16.88           N
ATOM   3706  H   ASN A 327      -1.062   1.781   3.800  1.00  0.00           H
ATOM   3707  HA  ASN A 327       1.613   2.816   3.834  1.00  0.00           H
ATOM   3708  HB2 ASN A 327       1.077   3.049   6.353  1.00  0.00           H
ATOM   3709  HB3 ASN A 327      -0.040   3.803   5.190  1.00  0.00           H
ATOM   3710 HD21 ASN A 327       0.278   0.904   7.358  1.00  0.00           H
ATOM   3711 HD22 ASN A 327      -1.438   0.628   7.366  1.00  0.00           H
ATOM   3712  N   PHE A 328       1.468  -0.304   4.499  1.00 18.00           N
ATOM   3713  CA  PHE A 328       2.260  -1.522   4.610  1.00 19.94           C
ATOM   3714  C   PHE A 328       1.947  -2.399   3.402  1.00 20.27           C
ATOM   3715  O   PHE A 328       0.903  -3.053   3.374  1.00 20.85           O
ATOM   3716  CB  PHE A 328       1.993  -2.246   5.939  1.00 20.17           C
ATOM   3717  CG  PHE A 328       2.930  -3.405   6.243  1.00 21.71           C
ATOM   3718  CD1 PHE A 328       2.647  -4.703   5.769  1.00 20.89           C
ATOM   3719  CD2 PHE A 328       4.097  -3.184   7.003  1.00 21.40           C
ATOM   3720  CE1 PHE A 328       3.513  -5.771   6.068  1.00 23.81           C
ATOM   3721  CE2 PHE A 328       4.948  -4.255   7.328  1.00 23.59           C
ATOM   3722  CZ  PHE A 328       4.657  -5.549   6.857  1.00 20.62           C
ATOM   3723  H   PHE A 328       0.603  -0.402   3.978  1.00  0.00           H
ATOM   3724  HA  PHE A 328       3.318  -1.256   4.577  1.00  0.00           H
ATOM   3725  HB2 PHE A 328       2.081  -1.532   6.743  1.00  0.00           H
ATOM   3726  HB3 PHE A 328       0.960  -2.595   5.976  1.00  0.00           H
ATOM   3727  HD1 PHE A 328       1.773  -4.884   5.161  1.00  0.00           H
ATOM   3728  HD2 PHE A 328       4.340  -2.190   7.346  1.00  0.00           H
ATOM   3729  HE1 PHE A 328       3.300  -6.764   5.696  1.00  0.00           H
ATOM   3730  HE2 PHE A 328       5.831  -4.082   7.925  1.00  0.00           H
ATOM   3731  HZ  PHE A 328       5.315  -6.373   7.088  1.00  0.00           H
ATOM   3732  N   GLU A 329       2.856  -2.422   2.429  1.00 21.96           N
ATOM   3733  CA  GLU A 329       2.824  -3.301   1.271  1.00 21.09           C
ATOM   3734  C   GLU A 329       4.228  -3.873   1.132  1.00 20.76           C
ATOM   3735  O   GLU A 329       5.156  -3.098   0.920  1.00 20.35           O
ATOM   3736  CB  GLU A 329       2.411  -2.515   0.014  1.00 20.27           C
ATOM   3737  CG  GLU A 329       0.972  -1.992   0.096  1.00 21.97           C
ATOM   3738  CD  GLU A 329       0.568  -1.157  -1.101  1.00 23.07           C
ATOM   3739  OE1 GLU A 329       1.430  -0.559  -1.776  1.00 20.27           O
ATOM   3740  OE2 GLU A 329      -0.645  -1.101  -1.397  1.00 25.60           O1-
ATOM   3741  H   GLU A 329       3.691  -1.863   2.532  1.00  0.00           H
ATOM   3742  HA  GLU A 329       2.116  -4.117   1.423  1.00  0.00           H
ATOM   3743  HB2 GLU A 329       3.099  -1.683  -0.146  1.00  0.00           H
ATOM   3744  HB3 GLU A 329       2.505  -3.154  -0.866  1.00  0.00           H
ATOM   3745  HG2 GLU A 329       0.281  -2.827   0.210  1.00  0.00           H
ATOM   3746  HG3 GLU A 329       0.858  -1.372   0.978  1.00  0.00           H
ATOM   3747  N   ILE A 330       4.378  -5.193   1.254  1.00 20.01           N
ATOM   3748  CA  ILE A 330       5.533  -5.965   0.813  1.00 21.19           C
ATOM   3749  C   ILE A 330       5.028  -6.556  -0.510  1.00 21.93           C
ATOM   3750  O   ILE A 330       4.271  -7.529  -0.509  1.00 20.27           O
ATOM   3751  CB  ILE A 330       5.839  -7.080   1.861  1.00 20.93           C
ATOM   3752  CG1 ILE A 330       6.308  -6.470   3.201  1.00 21.73           C
ATOM   3753  CG2 ILE A 330       6.873  -8.126   1.381  1.00 18.92           C
ATOM   3754  CD1 ILE A 330       6.346  -7.457   4.376  1.00 23.49           C
ATOM   3755  H   ILE A 330       3.526  -5.733   1.408  1.00  0.00           H
ATOM   3756  HA  ILE A 330       6.415  -5.345   0.645  1.00  0.00           H
ATOM   3757  HB  ILE A 330       4.906  -7.609   2.038  1.00  0.00           H
ATOM   3758 HG12 ILE A 330       7.298  -6.037   3.063  1.00  0.00           H
ATOM   3759 HG13 ILE A 330       5.662  -5.640   3.488  1.00  0.00           H
ATOM   3760 HG21 ILE A 330       6.906  -8.985   2.048  1.00  0.00           H
ATOM   3761 HG22 ILE A 330       6.652  -8.524   0.391  1.00  0.00           H
ATOM   3762 HG23 ILE A 330       7.875  -7.705   1.357  1.00  0.00           H
ATOM   3763 HD11 ILE A 330       6.760  -6.985   5.262  1.00  0.00           H
ATOM   3764 HD12 ILE A 330       5.347  -7.791   4.642  1.00  0.00           H
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ATOM   3765 HD13 ILE A 330      6.957  -8.333   4.173  1.00  0.00           H
ATOM   3766  N   ALA A 331      5.355  -5.920  -1.635  1.00 21.39           N
ATOM   3767  CA  ALA A 331      4.750  -6.212  -2.926  1.00 22.41           C
ATOM   3768  C   ALA A 331      5.761  -6.096  -4.062  1.00 21.44           C
ATOM   3769  O   ALA A 331      6.834  -5.512  -3.909  1.00 20.66           O
ATOM   3770  CB  ALA A 331      3.475  -5.376  -3.115  1.00 21.06           C
ATOM   3771  H   ALA A 331      6.006  -5.135  -1.596  1.00  0.00           H
ATOM   3772  HA  ALA A 331      4.454  -7.262  -2.936  1.00  0.00           H
ATOM   3773  HB1 ALA A 331      3.034  -5.530  -4.101  1.00  0.00           H
ATOM   3774  HB2 ALA A 331      2.721  -5.628  -2.370  1.00  0.00           H
ATOM   3775  HB3 ALA A 331      3.680  -4.314  -3.004  1.00  0.00           H
ATOM   3776  N   ASN A 332      5.423  -6.699  -5.199  1.00 22.89           N
ATOM   3777  CA  ASN A 332      6.187  -6.670  -6.438  1.00 20.34           C
ATOM   3778  C   ASN A 332      5.789  -5.392  -7.207  1.00 21.01           C
ATOM   3779  O   ASN A 332      4.604  -5.089  -7.331  1.00 20.20           O
ATOM   3780  CB  ASN A 332      5.785  -7.928  -7.229  1.00 21.25           C
ATOM   3781  CG  ASN A 332      6.607  -8.139  -8.495  1.00 19.39           C
ATOM   3782  OD1 ASN A 332      6.265  -7.583  -9.528  1.00 19.86           O
ATOM   3783  ND2 ASN A 332      7.664  -8.941  -8.457  1.00 20.38           N
ATOM   3784  H   ASN A 332      4.517  -7.159  -5.226  1.00  0.00           H
ATOM   3785  HA  ASN A 332      7.254  -6.706  -6.233  1.00  0.00           H
ATOM   3786  HB2 ASN A 332      5.877  -8.814  -6.600  1.00  0.00           H
ATOM   3787  HB3 ASN A 332      4.734  -7.861  -7.515  1.00  0.00           H
ATOM   3788 HD21 ASN A 332      8.020  -9.311  -7.583  1.00  0.00           H
ATOM   3789 HD22 ASN A 332      8.148  -9.151  -9.321  1.00  0.00           H
ATOM   3790  N   LEU A 333      6.772  -4.650  -7.731  1.00 20.23           N
ATOM   3791  CA  LEU A 333      6.582  -3.416  -8.499  1.00 22.19           C
ATOM   3792  C   LEU A 333      6.226  -3.724  -9.958  1.00 22.56           C
ATOM   3793  O   LEU A 333      5.555  -2.920 -10.603  1.00 23.16           O
ATOM   3794  CB  LEU A 333      7.906  -2.610  -8.547  1.00 20.41           C
ATOM   3795  CG  LEU A 333      8.294  -1.916  -7.231  1.00 19.24           C
ATOM   3796 CD1 LEU A 333      9.767  -1.490  -7.227  1.00 21.42           C
ATOM   3797 CD2 LEU A 333      7.386  -0.707  -6.946  1.00 20.07           C
ATOM   3798  H   LEU A 333      7.714  -5.038  -7.712  1.00  0.00           H
ATOM   3799  HA  LEU A 333      5.775  -2.821  -8.069  1.00  0.00           H
ATOM   3800  HB2 LEU A 333      8.711  -3.275  -8.860  1.00  0.00           H
ATOM   3801  HB3 LEU A 333      7.854  -1.845  -9.325  1.00  0.00           H
ATOM   3802  HG  LEU A 333      8.196  -2.645  -6.432  1.00  0.00           H
ATOM   3803 HD11 LEU A 333     10.060  -1.104  -6.252  1.00  0.00           H
ATOM   3804 HD12 LEU A 333     10.421  -2.334  -7.438  1.00  0.00           H
ATOM   3805 HD13 LEU A 333      9.963  -0.713  -7.965  1.00  0.00           H
ATOM   3806 HD21 LEU A 333      7.656  -0.219  -6.011  1.00  0.00           H
ATOM   3807 HD22 LEU A 333      7.458   0.040  -7.738  1.00  0.00           H
ATOM   3808 HD23 LEU A 333      6.339  -0.993  -6.860  1.00  0.00           H
ATOM   3809  N   ASN A 334      6.644  -4.883 -10.489  1.00 22.33           N
ATOM   3810  CA  ASN A 334      6.400  -5.273 -11.883  1.00 23.39           C
ATOM   3811  C   ASN A 334      4.913  -5.589 -12.127  1.00 23.98           C
ATOM   3812  O   ASN A 334      4.454  -5.501 -13.262  1.00 23.96           O
ATOM   3813  CB  ASN A 334      7.280  -6.462 -12.344  1.00 25.18           C
ATOM   3814  CG  ASN A 334      8.787  -6.228 -12.187  1.00 27.49           C
ATOM   3815  OD1 ASN A 334      9.265  -5.103 -12.330  1.00 28.65           O
ATOM   3816  ND2 ASN A 334      9.539  -7.271 -11.852  1.00 26.16           N
ATOM   3817  H   ASN A 334      7.109  -5.552  -9.888  1.00  0.00           H
ATOM   3818  HA  ASN A 334      6.659  -4.416 -12.501  1.00  0.00           H
ATOM   3819  HB2 ASN A 334      6.992  -7.383 -11.842  1.00  0.00           H
ATOM   3820  HB3 ASN A 334      7.096  -6.647 -13.404  1.00  0.00           H
ATOM   3821 HD21 ASN A 334      9.128  -8.180 -11.712  1.00  0.00           H
ATOM   3822 HD22 ASN A 334     10.571  -7.179 -11.772  1.00  0.00           H
ATOM   3823  N   LEU A 335      4.139  -5.842 -11.058  1.00 23.74           N
ATOM   3824  CA  LEU A 335      2.674  -5.873 -11.044  1.00 22.83           C
ATOM   3825  C   LEU A 335      2.080  -4.511 -11.431  1.00 23.38           C
ATOM   3826  O   LEU A 335      1.105  -4.451 -12.177  1.00 20.24           O
ATOM   3827  CB  LEU A 335      2.189  -6.308  -9.639  1.00 22.39           C
ATOM   3828  CG  LEU A 335      0.654  -6.370  -9.429  1.00 22.32           C
ATOM   3829 CD1 LEU A 335     -0.029  -7.373 -10.373  1.00 21.69           C
ATOM   3830 CD2 LEU A 335      0.320  -6.673  -7.962  1.00 20.81           C
ATOM   3831  H   LEU A 335      4.620  -5.949 -10.175  1.00  0.00           H
ATOM   3832  HA  LEU A 335      2.337  -6.591 -11.788  1.00  0.00           H
ATOM   3833  HB2 LEU A 335      2.618  -7.283  -9.403  1.00  0.00           H
ATOM   3834  HB3 LEU A 335      2.600  -5.617  -8.902  1.00  0.00           H
ATOM   3835  HG  LEU A 335      0.226  -5.388  -9.635  1.00  0.00           H
ATOM   3836 HD11 LEU A 335     -1.091  -7.474 -10.147  1.00  0.00           H
ATOM   3837 HD12 LEU A 335      0.040  -7.059 -11.414  1.00  0.00           H
ATOM   3838 HD13 LEU A 335      0.419  -8.363 -10.300  1.00  0.00           H
ATOM   3839 HD21 LEU A 335     -0.758  -6.691  -7.796  1.00  0.00           H
ATOM   3840 HD22 LEU A 335      0.723  -7.636  -7.653  1.00  0.00           H
ATOM   3841 HD23 LEU A 335      0.736  -5.912  -7.300  1.00  0.00           H
ATOM   3842  N   TRP A 336      2.684  -3.412 -10.974  1.00 20.71           N
ATOM   3843  CA  TRP A 336      2.228  -2.064 -11.290  1.00 21.14           C
ATOM   3844  C   TRP A 336      2.802  -1.590 -12.637  1.00 20.82           C
ATOM   3845  O   TRP A 336      2.158  -0.820 -13.341  1.00 21.72           O
ATOM   3846  CB  TRP A 336      2.649  -1.110 -10.167  1.00 19.56           C
ATOM   3847  CG  TRP A 336      2.274  -1.484  -8.759  1.00 21.10           C
ATOM   3848  CD1 TRP A 336      3.071  -1.295  -7.682  1.00 20.91           C
ATOM   3849  CD2 TRP A 336      1.041  -2.086  -8.236  1.00 20.60           C
ATOM   3850  NE1 TRP A 336      2.401  -1.682  -6.539  1.00 21.76           N
ATOM   3851  CE3 TRP A 336     -0.158  -2.589  -8.796  1.00 21.74           C
ATOM   3852  CE2 TRP A 336      1.142  -2.148  -6.815  1.00 18.03           C
ATOM   3853  CZ3 TRP A 336     -1.204  -3.078  -7.986  1.00 18.29           C
ATOM   3854  CZ2 TRP A 336      0.102  -2.608  -5.994  1.00 20.48           C
ATOM   3855  CH2 TRP A 336     -1.086  -3.067  -6.584  1.00 21.36           C
ATOM   3856  H   TRP A 336      3.512  -3.507 -10.402  1.00  0.00           H
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ATOM   3857  HA  TRP A 336       1.145  -2.049 -11.370  1.00  0.00           H
ATOM   3858  HB2 TRP A 336       3.725  -0.936 -10.203  1.00  0.00           H
ATOM   3859  HB3 TRP A 336       2.176  -0.149 -10.364  1.00  0.00           H
ATOM   3860  HD1 TRP A 336       4.060  -0.862  -7.723  1.00  0.00           H
ATOM   3861  HE1 TRP A 336       2.766  -1.619  -5.582  1.00  0.00           H
ATOM   3862  HE3 TRP A 336      -0.284  -2.602  -9.865  1.00  0.00           H
ATOM   3863  HZ3 TRP A 336      -2.102  -3.460  -8.445  1.00  0.00           H
ATOM   3864  HZ2 TRP A 336       0.227  -2.609  -4.924  1.00  0.00           H
ATOM   3865  HH2 TRP A 336      -1.894  -3.421  -5.965  1.00  0.00           H
ATOM   3866  N   ARG A 337       3.956  -2.122 -13.064  1.00 21.65           N
ATOM   3867  CA  ARG A 337       4.496  -1.887 -14.406  1.00 20.04           C
ATOM   3868  C   ARG A 337       3.787  -2.738 -15.482  1.00 18.23           C
ATOM   3869  O   ARG A 337       4.085  -2.552 -16.666  1.00 17.77           O
ATOM   3870  CB  ARG A 337       5.999  -2.242 -14.451  1.00 21.14           C
ATOM   3871  CG  ARG A 337       6.873  -1.409 -13.501  1.00 20.85           C
ATOM   3872  CD  ARG A 337       8.350  -1.824 -13.532  1.00 23.87           C
ATOM   3873  NE  ARG A 337       9.115  -1.019 -12.582  1.00 23.95           N
ATOM   3874  CZ  ARG A 337       9.812  -1.409 -11.514  1.00 25.49           C
ATOM   3875  NH1 ARG A 337      10.035  -2.689 -11.220  1.00 26.97           N
ATOM   3876  NH2 ARG A 337      10.296  -0.474 -10.710  1.00 26.66           N1+
ATOM   3877  H   ARG A 337       4.458  -2.721 -12.421  1.00  0.00           H
ATOM   3878  HA  ARG A 337       4.369  -0.835 -14.671  1.00  0.00           H
ATOM   3879  HB2 ARG A 337       6.129  -3.305 -14.259  1.00  0.00           H
ATOM   3880  HB3 ARG A 337       6.376  -2.088 -15.464  1.00  0.00           H
ATOM   3881  HG2 ARG A 337       6.788  -0.352 -13.756  1.00  0.00           H
ATOM   3882  HG3 ARG A 337       6.508  -1.500 -12.480  1.00  0.00           H
ATOM   3883  HD2 ARG A 337       8.452  -2.883 -13.308  1.00  0.00           H
ATOM   3884  HD3 ARG A 337       8.771  -1.665 -14.525  1.00  0.00           H
ATOM   3885  HE  ARG A 337       9.372  -0.065 -12.948  1.00  0.00           H
ATOM   3886 HH11 ARG A 337       9.707  -3.476 -11.790  1.00  0.00           H
ATOM   3887 HH12 ARG A 337      10.756  -2.886 -10.522  1.00  0.00           H
ATOM   3888 HH21 ARG A 337      10.229   0.535 -11.024  1.00  0.00           H
ATOM   3889 HH22 ARG A 337      10.966  -0.638  -9.961  1.00  0.00           H
ATOM   3890  N   SER A 338       2.882  -3.657 -15.103  1.00 17.15           N
ATOM   3891  CA  SER A 338       2.155  -4.539 -16.017  1.00 19.46           C
ATOM   3892  C   SER A 338       1.110  -3.744 -16.833  1.00 20.12           C
ATOM   3893  O   SER A 338       0.547  -2.787 -16.292  1.00 21.09           O
ATOM   3894  CB  SER A 338       1.458  -5.678 -15.227  1.00 20.32           C
ATOM   3895  OG  SER A 338       0.277  -5.298 -14.538  1.00 21.76           O
ATOM   3896  H   SER A 338       2.677  -3.737 -14.119  1.00  0.00           H
ATOM   3897  HA  SER A 338       2.910  -4.988 -16.660  1.00  0.00           H
ATOM   3898  HB2 SER A 338       1.152  -6.446 -15.935  1.00  0.00           H
ATOM   3899  HB3 SER A 338       2.150  -6.161 -14.537  1.00  0.00           H
ATOM   3900  HG  SER A 338       0.528  -4.927 -13.687  1.00  0.00           H
ATOM   3901  N   PRO A 339       0.829  -4.123 -18.104  1.00 22.35           N
ATOM   3902  CA  PRO A 339      -0.217  -3.517 -18.953  1.00 21.08           C
ATOM   3903  C   PRO A 339      -1.575  -3.323 -18.248  1.00 19.47           C
ATOM   3904  O   PRO A 339      -2.134  -2.228 -18.248  1.00 20.76           O
ATOM   3905  CB  PRO A 339      -0.329  -4.452 -20.163  1.00 20.47           C
ATOM   3906  CG  PRO A 339       1.006  -5.163 -20.257  1.00 21.32           C
ATOM   3907  CD  PRO A 339       1.541  -5.180 -18.829  1.00 19.67           C
ATOM   3908  HA  PRO A 339       0.129  -2.543 -19.299  1.00  0.00           H
ATOM   3909  HB2 PRO A 339      -1.119  -5.189 -20.022  1.00  0.00           H
ATOM   3910  HB3 PRO A 339      -0.548  -3.897 -21.074  1.00  0.00           H
ATOM   3911  HG2 PRO A 339       0.923  -6.160 -20.693  1.00  0.00           H
ATOM   3912  HG3 PRO A 339       1.674  -4.579 -20.892  1.00  0.00           H
ATOM   3913  HD2 PRO A 339       1.332  -6.143 -18.364  1.00  0.00           H
ATOM   3914  HD3 PRO A 339       2.621  -5.025 -18.836  1.00  0.00           H
ATOM   3915  N   ALA A 340      -2.030  -4.365 -17.534  1.00 19.58           N
ATOM   3916  CA  ALA A 340      -3.252  -4.379 -16.736  1.00 19.57           C
ATOM   3917  C   ALA A 340      -3.355  -3.235 -15.719  1.00 19.42           C
ATOM   3918  O   ALA A 340      -4.405  -2.605 -15.626  1.00 17.04           O
ATOM   3919  CB  ALA A 340      -3.394  -5.742 -16.044  1.00 20.76           C
ATOM   3920  H   ALA A 340      -1.512  -5.225 -17.594  1.00  0.00           H
ATOM   3921  HA  ALA A 340      -4.079  -4.246 -17.430  1.00  0.00           H
ATOM   3922  HB1 ALA A 340      -4.300  -5.778 -15.437  1.00  0.00           H
ATOM   3923  HB2 ALA A 340      -3.464  -6.546 -16.777  1.00  0.00           H
ATOM   3924  HB3 ALA A 340      -2.549  -5.951 -15.387  1.00  0.00           H
ATOM   3925  N   TYR A 341      -2.271  -2.925 -14.991  1.00 18.41           N
ATOM   3926  CA  TYR A 341      -2.280  -1.808 -14.050  1.00 20.02           C
ATOM   3927  C   TYR A 341      -1.969  -0.474 -14.748  1.00 20.29           C
ATOM   3928  O   TYR A 341      -2.500   0.552 -14.326  1.00 20.54           O
ATOM   3929  CB  TYR A 341      -1.253  -2.020 -12.930  1.00 19.15           C
ATOM   3930  CG  TYR A 341      -1.405  -1.000 -11.807  1.00 19.29           C
ATOM   3931  CD1 TYR A 341      -2.436  -1.137 -10.858  1.00 18.41           C
ATOM   3932  CD2 TYR A 341      -0.563   0.125 -11.746  1.00 17.75           C
ATOM   3933  CE1 TYR A 341      -2.582  -0.200  -9.813  1.00 19.60           C
ATOM   3934  CE2 TYR A 341      -0.716   1.065 -10.717  1.00 19.82           C
ATOM   3935  CZ  TYR A 341      -1.703   0.894  -9.731  1.00 19.34           C
ATOM   3936  OH  TYR A 341      -1.794   1.792  -8.710  1.00 19.62           O
ATOM   3937  H   TYR A 341      -1.410  -3.430 -15.161  1.00  0.00           H
ATOM   3938  HA  TYR A 341      -3.260  -1.741 -13.581  1.00  0.00           H
ATOM   3939  HB2 TYR A 341      -1.372  -3.015 -12.501  1.00  0.00           H
ATOM   3940  HB3 TYR A 341      -0.240  -1.989 -13.334  1.00  0.00           H
ATOM   3941  HD1 TYR A 341      -3.112  -1.968 -10.945  1.00  0.00           H
ATOM   3942  HD2 TYR A 341       0.193   0.289 -12.498  1.00  0.00           H
ATOM   3943  HE1 TYR A 341      -3.361  -0.317  -9.073  1.00  0.00           H
ATOM   3944  HE2 TYR A 341      -0.066   1.917 -10.708  1.00  0.00           H
ATOM   3945  HH  TYR A 341      -1.064   2.405  -8.779  1.00  0.00           H
ATOM   3946  N   ARG A 342      -1.156  -0.462 -15.813  1.00 20.95           N
ATOM   3947  CA  ARG A 342      -0.796   0.740 -16.569  1.00 21.79           C
ATOM   3948  C   ARG A 342      -2.032   1.405 -17.180  1.00 22.81           C
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ATOM   3949  O   ARG A 342      -2.335   2.559 -16.872  1.00 22.78           O
ATOM   3950  CB  ARG A 342       0.159   0.383 -17.714  1.00 23.26           C
ATOM   3951  CG  ARG A 342       1.598   0.070 -17.325  1.00 23.00           C
ATOM   3952  CD  ARG A 342       2.294  -0.644 -18.491  1.00 25.52           C
ATOM   3953  NE  ARG A 342       3.739  -0.414 -18.461  1.00 27.12           N
ATOM   3954  CZ  ARG A 342       4.397   0.526 -19.148  1.00 24.20           C
ATOM   3955  NH1 ARG A 342       3.758   1.361 -19.976  1.00 21.44           N
ATOM   3956  NH2 ARG A 342       5.717   0.632 -18.987  1.00 25.12           N1+
ATOM   3957  H   ARG A 342      -0.770  -1.349 -16.124  1.00  0.00           H
ATOM   3958  HA  ARG A 342      -0.321   1.454 -15.896  1.00  0.00           H
ATOM   3959  HB2 ARG A 342      -0.254  -0.460 -18.266  1.00  0.00           H
ATOM   3960  HB3 ARG A 342       0.185   1.208 -18.426  1.00  0.00           H
ATOM   3961  HG2 ARG A 342       2.107   0.999 -17.072  1.00  0.00           H
ATOM   3962  HG3 ARG A 342       1.633  -0.546 -16.427  1.00  0.00           H
ATOM   3963  HD2 ARG A 342       2.124  -1.714 -18.428  1.00  0.00           H
ATOM   3964  HD3 ARG A 342       1.884  -0.355 -19.456  1.00  0.00           H
ATOM   3965  HE  ARG A 342       4.187  -1.104 -17.851  1.00  0.00           H
ATOM   3966 HH11 ARG A 342       2.733   1.301 -20.154  1.00  0.00           H
ATOM   3967 HH12 ARG A 342       4.206   2.085 -20.511  1.00  0.00           H
ATOM   3968 HH21 ARG A 342       6.207   0.017 -18.352  1.00  0.00           H
ATOM   3969 HH22 ARG A 342       6.264   1.332 -19.463  1.00  0.00           H
ATOM   3970  N   GLU A 343      -2.764   0.649 -18.003  1.00 24.14           N
ATOM   3971  CA  GLU A 343      -3.932   1.120 -18.727  1.00 24.75           C
ATOM   3972  C   GLU A 343      -5.126   1.301 -17.764  1.00 24.10           C
ATOM   3973  O   GLU A 343      -6.004   2.124 -18.036  1.00 24.31           O
ATOM   3974  CB  GLU A 343      -4.261   0.107 -19.846  1.00 25.68           C
ATOM   3975  CG  GLU A 343      -3.372   0.247 -21.110  1.00 30.62           C
ATOM   3976  CD  GLU A 343      -1.990  -0.401 -21.020  1.00 30.71           C
ATOM   3977  OE1 GLU A 343      -1.898  -1.592 -21.383  1.00 32.63           O
ATOM   3978  OE2 GLU A 343      -1.027   0.299 -20.628  1.00 29.45           O1-
ATOM   3979  H   GLU A 343      -2.420  -0.282 -18.237  1.00  0.00           H
ATOM   3980  HA  GLU A 343      -3.715   2.095 -19.169  1.00  0.00           H
ATOM   3981  HB2 GLU A 343      -4.213  -0.914 -19.463  1.00  0.00           H
ATOM   3982  HB3 GLU A 343      -5.295   0.249 -20.165  1.00  0.00           H
ATOM   3983  HG2 GLU A 343      -3.881  -0.224 -21.951  1.00  0.00           H
ATOM   3984  HG3 GLU A 343      -3.253   1.295 -21.383  1.00  0.00           H
ATOM   3985  N   TYR A 344      -5.134   0.614 -16.607  1.00 22.33           N
ATOM   3986  CA  TYR A 344      -6.045   0.886 -15.490  1.00 19.95           C
ATOM   3987  C   TYR A 344      -5.711   2.241 -14.858  1.00 21.16           C
ATOM   3988  O   TYR A 344      -6.596   3.088 -14.759  1.00 19.78           O
ATOM   3989  CB  TYR A 344      -5.977  -0.224 -14.417  1.00 17.99           C
ATOM   3990  CG  TYR A 344      -6.762   0.056 -13.140  1.00 21.67           C
ATOM   3991  CD1 TYR A 344      -8.166   0.139 -13.190  1.00 21.18           C
ATOM   3992  CD2 TYR A 344      -6.097   0.276 -11.913  1.00 21.43           C
ATOM   3993  CE1 TYR A 344      -8.896   0.479 -12.039  1.00 20.99           C
ATOM   3994  CE2 TYR A 344      -6.834   0.599 -10.755  1.00 21.57           C
ATOM   3995  CZ  TYR A 344      -8.234   0.733 -10.824  1.00 21.53           C
ATOM   3996  OH  TYR A 344      -8.947   1.133  -9.730  1.00 19.87           O
ATOM   3997  H   TYR A 344      -4.399  -0.066 -16.471  1.00  0.00           H
ATOM   3998  HA  TYR A 344      -7.065   0.943 -15.868  1.00  0.00           H
ATOM   3999  HB2 TYR A 344      -6.356  -1.152 -14.843  1.00  0.00           H
ATOM   4000  HB3 TYR A 344      -4.943  -0.414 -14.149  1.00  0.00           H
ATOM   4001  HD1 TYR A 344      -8.682  -0.034 -14.120  1.00  0.00           H
ATOM   4002  HD2 TYR A 344      -5.019   0.216 -11.856  1.00  0.00           H
ATOM   4003  HE1 TYR A 344      -9.966   0.552 -12.101  1.00  0.00           H
ATOM   4004  HE2 TYR A 344      -6.320   0.767  -9.821  1.00  0.00           H
ATOM   4005  HH  TYR A 344      -9.842   1.393  -9.948  1.00  0.00           H
ATOM   4006  N   PHE A 345      -4.448   2.473 -14.471  1.00 20.71           N
ATOM   4007  CA  PHE A 345      -4.007   3.725 -13.869  1.00 20.36           C
ATOM   4008  C   PHE A 345      -4.236   4.910 -14.817  1.00 21.44           C
ATOM   4009  O   PHE A 345      -4.796   5.916 -14.391  1.00 22.30           O
ATOM   4010  CB  PHE A 345      -2.532   3.669 -13.403  1.00 18.78           C
ATOM   4011  CG  PHE A 345      -2.088   5.011 -12.835  1.00 18.84           C
ATOM   4012  CD1 PHE A 345      -2.641   5.465 -11.619  1.00 19.24           C
ATOM   4013  CD2 PHE A 345      -1.310   5.886 -13.624  1.00 17.98           C
ATOM   4014  CE1 PHE A 345      -2.478   6.809 -11.234  1.00 17.82           C
ATOM   4015  CE2 PHE A 345      -1.149   7.228 -13.230  1.00 18.95           C
ATOM   4016  CZ  PHE A 345      -1.749   7.694 -12.046  1.00 18.47           C
ATOM   4017  H   PHE A 345      -3.750   1.738 -14.584  1.00  0.00           H
ATOM   4018  HA  PHE A 345      -4.632   3.890 -12.991  1.00  0.00           H
ATOM   4019  HB2 PHE A 345      -2.407   2.899 -12.641  1.00  0.00           H
ATOM   4020  HB3 PHE A 345      -1.882   3.388 -14.233  1.00  0.00           H
ATOM   4021  HD1 PHE A 345      -3.265   4.810 -11.029  1.00  0.00           H
ATOM   4022  HD2 PHE A 345      -0.924   5.567 -14.583  1.00  0.00           H
ATOM   4023  HE1 PHE A 345      -2.950   7.186 -10.342  1.00  0.00           H
ATOM   4024  HE2 PHE A 345      -0.613   7.923 -13.859  1.00  0.00           H
ATOM   4025  HZ  PHE A 345      -1.663   8.735 -11.774  1.00  0.00           H
ATOM   4026  N   ASP A 346      -3.870   4.799 -16.099  1.00 21.25           N
ATOM   4027  CA  ASP A 346      -4.041   5.907 -17.040  1.00 20.54           C
ATOM   4028  C   ASP A 346      -5.526   6.183 -17.355  1.00 20.57           C
ATOM   4029  O   ASP A 346      -5.897   7.337 -17.551  1.00 18.80           O
ATOM   4030  CB  ASP A 346      -3.203   5.697 -18.316  1.00 21.13           C
ATOM   4031  CG  ASP A 346      -2.616   7.028 -18.775  1.00 21.90           C
ATOM   4032  OD1 ASP A 346      -1.575   7.444 -18.215  1.00 20.23           O
ATOM   4033  OD2 ASP A 346      -3.240   7.675 -19.637  1.00 24.56           O1-
ATOM   4034  H   ASP A 346      -3.376   3.961 -16.408  1.00  0.00           H
ATOM   4035  HA  ASP A 346      -3.657   6.790 -16.527  1.00  0.00           H
ATOM   4036  HB2 ASP A 346      -2.365   5.026 -18.129  1.00  0.00           H
ATOM   4037  HB3 ASP A 346      -3.787   5.251 -19.122  1.00  0.00           H
ATOM   4038  N   THR A 347      -6.415   5.176 -17.237  1.00 20.11           N
ATOM   4039  CA  THR A 347      -7.874   5.368 -17.221  1.00 20.50           C
ATOM   4040  C   THR A 347      -8.334   6.242 -16.021  1.00 19.74           C
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ATOM   4041  O   THR A 347      -9.344   6.932 -16.137  1.00 19.02           O
ATOM   4042  CB  THR A 347      -8.611   3.988 -17.257  1.00 17.98           C
ATOM   4043  OG1 THR A 347      -8.369   3.315 -18.487  1.00 21.15           O
ATOM   4044  CG2 THR A 347     -10.143   4.052 -17.135  1.00 18.73           C
ATOM   4045  H   THR A 347      -6.050   4.260 -17.014  1.00  0.00           H
ATOM   4046  HA  THR A 347      -8.142   5.924 -18.122  1.00  0.00           H
ATOM   4047  HB  THR A 347      -8.254   3.348 -16.455  1.00  0.00           H
ATOM   4048  HG1 THR A 347      -7.448   3.020 -18.450  1.00  0.00           H
ATOM   4049 HG21 THR A 347     -10.598   3.067 -17.233  1.00  0.00           H
ATOM   4050 HG22 THR A 347     -10.440   4.413 -16.152  1.00  0.00           H
ATOM   4051 HG23 THR A 347     -10.585   4.720 -17.874  1.00  0.00           H
ATOM   4052  N   LEU A 348      -7.602   6.259 -14.896  1.00 20.95           N
ATOM   4053  CA  LEU A 348      -7.854   7.141 -13.753  1.00 20.70           C
ATOM   4054  C   LEU A 348      -7.158   8.504 -13.960  1.00 20.77           C
ATOM   4055  O   LEU A 348      -7.714   9.542 -13.594  1.00 22.33           O
ATOM   4056  CB  LEU A 348      -7.276   6.506 -12.455  1.00 19.16           C
ATOM   4057  CG  LEU A 348      -7.773   5.082 -12.104  1.00 19.34           C
ATOM   4058  CD1 LEU A 348      -7.004   4.532 -10.897  1.00 18.78           C
ATOM   4059  CD2 LEU A 348      -9.286   4.973 -11.853  1.00 16.55           C
ATOM   4060  H   LEU A 348      -6.751   5.707 -14.870  1.00  0.00           H
ATOM   4061  HA  LEU A 348      -8.925   7.312 -13.640  1.00  0.00           H
ATOM   4062  HB2 LEU A 348      -6.190   6.472 -12.519  1.00  0.00           H
ATOM   4063  HB3 LEU A 348      -7.444   7.168 -11.608  1.00  0.00           H
ATOM   4064  HG  LEU A 348      -7.545   4.432 -12.944  1.00  0.00           H
ATOM   4065 HD11 LEU A 348      -7.318   3.513 -10.668  1.00  0.00           H
ATOM   4066 HD12 LEU A 348      -5.931   4.506 -11.085  1.00  0.00           H
ATOM   4067 HD13 LEU A 348      -7.171   5.140 -10.008  1.00  0.00           H
ATOM   4068 HD21 LEU A 348      -9.580   3.927 -11.754  1.00  0.00           H
ATOM   4069 HD22 LEU A 348      -9.583   5.475 -10.933  1.00  0.00           H
ATOM   4070 HD23 LEU A 348      -9.863   5.388 -12.676  1.00  0.00           H
ATOM   4071  N   ASP A 349      -5.949   8.509 -14.537  1.00 21.51           N
ATOM   4072  CA  ASP A 349      -5.065   9.677 -14.647  1.00 21.24           C
ATOM   4073  C   ASP A 349      -5.486  10.640 -15.768  1.00 21.96           C
ATOM   4074  O   ASP A 349      -5.500  11.856 -15.565  1.00 19.94           O
ATOM   4075  CB  ASP A 349      -3.620   9.202 -14.920  1.00 18.89           C
ATOM   4076  CG  ASP A 349      -2.575  10.184 -14.413  1.00 19.84           C
ATOM   4077  OD1 ASP A 349      -2.713  10.682 -13.276  1.00 20.50           O
ATOM   4078  OD2 ASP A 349      -1.573  10.443 -15.113  1.00 19.99           O1-
ATOM   4079  H   ASP A 349      -5.542   7.604 -14.757  1.00  0.00           H
ATOM   4080  HA  ASP A 349      -5.116  10.210 -13.695  1.00  0.00           H
ATOM   4081  HB2 ASP A 349      -3.432   8.260 -14.407  1.00  0.00           H
ATOM   4082  HB3 ASP A 349      -3.447   9.012 -15.981  1.00  0.00           H
ATOM   4083  N   HIS A 350      -5.905  10.105 -16.925  1.00 22.62           N
ATOM   4084  CA  HIS A 350      -6.500  10.874 -18.026  1.00 23.51           C
ATOM   4085  C   HIS A 350      -7.985  11.198 -17.766  1.00 22.85           C
ATOM   4086  O   HIS A 350      -8.596  11.921 -18.551  1.00 22.01           O
ATOM   4087  CB  HIS A 350      -6.341  10.140 -19.382  1.00  0.00           C
ATOM   4088  CG  HIS A 350      -5.209  10.668 -20.231  1.00  0.00           C
ATOM   4089  ND1 HIS A 350      -4.024   9.984 -20.446  1.00  0.00           N
ATOM   4090  CD2 HIS A 350      -5.077  11.849 -20.929  1.00  0.00           C
ATOM   4091  CE1 HIS A 350      -3.270  10.730 -21.253  1.00  0.00           C
ATOM   4092  NE2 HIS A 350      -3.845  11.879 -21.587  1.00  0.00           N
ATOM   4093  H   HIS A 350      -5.822   9.098 -17.060  1.00  0.00           H
ATOM   4094  HA  HIS A 350      -6.003  11.836 -18.113  1.00  0.00           H
ATOM   4095  HB2 HIS A 350      -6.230   9.065 -19.261  1.00  0.00           H
ATOM   4096  HB3 HIS A 350      -7.234  10.260 -19.996  1.00  0.00           H
ATOM   4097  HD1 HIS A 350      -3.747   9.025 -20.097  1.00  0.00           H
ATOM   4098  HD2 HIS A 350      -5.773  12.671 -21.009  1.00  0.00           H
ATOM   4099  HE1 HIS A 350      -2.291  10.423 -21.596  1.00  0.00           H
ATOM   4100  N   GLN A 351      -8.565  10.719 -16.653  1.00 22.30           N
ATOM   4101  CA  GLN A 351      -9.828  11.224 -16.121  1.00 23.00           C
ATOM   4102  C   GLN A 351      -9.477  12.444 -15.250  1.00 22.67           C
ATOM   4103  O   GLN A 351      -9.843  13.563 -15.607  1.00 19.82           O
ATOM   4104  CB  GLN A 351     -10.549  10.105 -15.323  1.00 23.52           C
ATOM   4105  CG  GLN A 351     -12.069  10.300 -15.117  1.00 26.12           C
ATOM   4106  CD  GLN A 351     -12.469  10.848 -13.746  1.00 28.38           C
ATOM   4107  OE1 GLN A 351     -11.841  11.752 -13.212  1.00 27.29           O
ATOM   4108  NE2 GLN A 351     -13.515  10.295 -13.146  1.00 27.43           N
ATOM   4109  H   GLN A 351      -7.981  10.156 -16.053  1.00  0.00           H
ATOM   4110  HA  GLN A 351     -10.471  11.545 -16.943  1.00  0.00           H
ATOM   4111  HB2 GLN A 351     -10.438   9.185 -15.894  1.00  0.00           H
ATOM   4112  HB3 GLN A 351     -10.065   9.902 -14.369  1.00  0.00           H
ATOM   4113  HG2 GLN A 351     -12.480  10.952 -15.889  1.00  0.00           H
ATOM   4114  HG3 GLN A 351     -12.561   9.337 -15.257  1.00  0.00           H
ATOM   4115 HE21 GLN A 351     -13.870   9.415 -13.514  1.00  0.00           H
ATOM   4116 HE22 GLN A 351     -13.829  10.630 -12.242  1.00  0.00           H
ATOM   4117  N   GLY A 352      -8.704  12.249 -14.171  1.00 21.90           N
ATOM   4118  CA  GLY A 352      -8.145  13.310 -13.328  1.00 22.88           C
ATOM   4119  C   GLY A 352      -8.584  13.248 -11.859  1.00 23.50           C
ATOM   4120  O   GLY A 352      -8.042  13.965 -11.016  1.00 20.98           O
ATOM   4121  H   GLY A 352      -8.380  11.302 -13.987  1.00  0.00           H
ATOM   4122  HA2 GLY A 352      -7.060  13.207 -13.359  1.00  0.00           H
ATOM   4123  HA3 GLY A 352      -8.384  14.302 -13.714  1.00  0.00           H
ATOM   4124  N   GLY A 353      -9.557  12.383 -11.561  1.00 21.49           N
ATOM   4125  CA  GLY A 353     -10.100  11.907 -10.289  1.00 20.56           C
ATOM   4126  C   GLY A 353      -9.432  12.307  -8.970  1.00 21.34           C
ATOM   4127  O   GLY A 353     -10.074  12.920  -8.115  1.00 20.96           O
ATOM   4128  H   GLY A 353     -10.012  11.983 -12.378  1.00  0.00           H
ATOM   4129  HA2 GLY A 353     -11.166  12.129 -10.247  1.00  0.00           H
ATOM   4130  HA3 GLY A 353     -10.009  10.833 -10.352  1.00  0.00           H
ATOM   4131  N   PHE A 354      -8.136  11.986  -8.825  1.00 21.51           N
ATOM   4132  CA  PHE A 354      -7.255  12.284  -7.686  1.00 21.68           C
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ATOM   4133  C   PHE A 354      -7.307  13.752  -7.243  1.00 22.65           C
ATOM   4134  O   PHE A 354      -7.219  14.059  -6.054  1.00 23.57           O
ATOM   4135  CB  PHE A 354      -5.803  11.899  -8.042  1.00 20.06           C
ATOM   4136  CG  PHE A 354      -5.612  10.454  -8.462  1.00 22.30           C
ATOM   4137  CD1 PHE A 354      -5.546   9.444  -7.481  1.00 22.41           C
ATOM   4138  CD2 PHE A 354      -5.504  10.112  -9.828  1.00 19.69           C
ATOM   4139  CE1 PHE A 354      -5.405   8.097  -7.860  1.00 22.82           C
ATOM   4140  CE2 PHE A 354      -5.359   8.764 -10.206  1.00 19.35           C
ATOM   4141  CZ  PHE A 354      -5.324   7.755  -9.223  1.00 19.73           C
ATOM   4142  H   PHE A 354      -7.711  11.481  -9.589  1.00  0.00           H
ATOM   4143  HA  PHE A 354      -7.583  11.681  -6.839  1.00  0.00           H
ATOM   4144  HB2 PHE A 354      -5.426  12.549  -8.835  1.00  0.00           H
ATOM   4145  HB3 PHE A 354      -5.156  12.087  -7.183  1.00  0.00           H
ATOM   4146  HD1 PHE A 354      -5.606   9.696  -6.433  1.00  0.00           H
ATOM   4147  HD2 PHE A 354      -5.527  10.873 -10.596  1.00  0.00           H
ATOM   4148  HE1 PHE A 354      -5.352   7.329  -7.101  1.00  0.00           H
ATOM   4149  HE2 PHE A 354      -5.267   8.507 -11.253  1.00  0.00           H
ATOM   4150  HZ  PHE A 354      -5.214   6.719  -9.512  1.00  0.00           H
ATOM   4151  N   PHE A 355      -7.474  14.652  -8.215  1.00 22.12           N
ATOM   4152  CA  PHE A 355      -7.569  16.085  -8.016  1.00 21.19           C
ATOM   4153  C   PHE A 355      -9.029  16.513  -7.815  1.00 20.42           C
ATOM   4154  O   PHE A 355      -9.292  17.384  -6.987  1.00 20.48           O
ATOM   4155  CB  PHE A 355      -7.066  16.763  -9.301  1.00 22.36           C
ATOM   4156  CG  PHE A 355      -5.669  16.356  -9.732  1.00 24.02           C
ATOM   4157  CD1 PHE A 355      -4.589  16.416  -8.829  1.00 22.48           C
ATOM   4158  CD2 PHE A 355      -5.447  15.910 -11.049  1.00 24.49           C
ATOM   4159  CE1 PHE A 355      -3.298  16.054  -9.247  1.00 22.98           C
ATOM   4160  CE2 PHE A 355      -4.153  15.561 -11.473  1.00 25.14           C
ATOM   4161  CZ  PHE A 355      -3.073  15.658 -10.577  1.00 26.02           C
ATOM   4162  H   PHE A 355      -7.533  14.306  -9.171  1.00  0.00           H
ATOM   4163  HA  PHE A 355      -6.974  16.398  -7.160  1.00  0.00           H
ATOM   4164  HB2 PHE A 355      -7.754  16.576 -10.128  1.00  0.00           H
ATOM   4165  HB3 PHE A 355      -7.067  17.839  -9.153  1.00  0.00           H
ATOM   4166  HD1 PHE A 355      -4.734  16.764  -7.820  1.00  0.00           H
ATOM   4167  HD2 PHE A 355      -6.275  15.835 -11.736  1.00  0.00           H
ATOM   4168  HE1 PHE A 355      -2.487  16.086  -8.541  1.00  0.00           H
ATOM   4169  HE2 PHE A 355      -3.992  15.212 -12.483  1.00  0.00           H
ATOM   4170  HZ  PHE A 355      -2.075  15.415 -10.910  1.00  0.00           H
ATOM   4171  N   TYR A 356      -9.955  15.902  -8.567  1.00 19.12           N
ATOM   4172  CA  TYR A 356     -11.362  16.283  -8.701  1.00 18.71           C
ATOM   4173  C   TYR A 356     -12.205  15.934  -7.478  1.00 20.13           C
ATOM   4174  O   TYR A 356     -13.191  16.608  -7.196  1.00 17.47           O
ATOM   4175  CB  TYR A 356     -11.983  15.449  -9.837  1.00 17.74           C
ATOM   4176  CG  TYR A 356     -11.565  15.723 -11.261  1.00 21.18           C
ATOM   4177  CD1 TYR A 356     -10.842  16.876 -11.624  1.00 20.84           C
ATOM   4178  CD2 TYR A 356     -11.934  14.793 -12.249  1.00 21.61           C
ATOM   4179  CE1 TYR A 356     -10.431  17.055 -12.955  1.00 22.87           C
ATOM   4180  CE2 TYR A 356     -11.540  14.986 -13.582  1.00 22.71           C
ATOM   4181  CZ  TYR A 356     -10.750  16.095 -13.930  1.00 24.04           C
ATOM   4182  OH  TYR A 356     -10.263  16.220 -15.196  1.00 25.85           O
ATOM   4183  H   TYR A 356      -9.634  15.139  -9.149  1.00  0.00           H
ATOM   4184  HA  TYR A 356     -11.460  17.355  -8.882  1.00  0.00           H
ATOM   4185  HB2 TYR A 356     -11.820  14.387  -9.640  1.00  0.00           H
ATOM   4186  HB3 TYR A 356     -13.059  15.574  -9.826  1.00  0.00           H
ATOM   4187  HD1 TYR A 356     -10.580  17.622 -10.894  1.00  0.00           H
ATOM   4188  HD2 TYR A 356     -12.490  13.903 -11.993  1.00  0.00           H
ATOM   4189  HE1 TYR A 356      -9.850  17.922 -13.220  1.00  0.00           H
ATOM   4190  HE2 TYR A 356     -11.818  14.248 -14.320  1.00  0.00           H
ATOM   4191  HH  TYR A 356     -10.166  15.348 -15.593  1.00  0.00           H
ATOM   4192  N   GLU A 357     -11.861  14.842  -6.806  1.00 19.72           N
ATOM   4193  CA  GLU A 357     -12.448  14.400  -5.559  1.00 19.69           C
ATOM   4194  C   GLU A 357     -11.245  14.339  -4.614  1.00 21.19           C
ATOM   4195  O   GLU A 357     -10.537  15.343  -4.480  1.00 22.16           O
ATOM   4196  CB  GLU A 357     -13.241  13.093  -5.807  1.00 19.32           C
ATOM   4197  CG  GLU A 357     -14.589  13.340  -6.530  1.00 20.09           C
ATOM   4198  CD  GLU A 357     -14.912  12.372  -7.664  1.00 23.06           C
ATOM   4199  OE1 GLU A 357     -14.651  11.154  -7.551  1.00 20.05           O
ATOM   4200  OE2 GLU A 357     -15.463  12.846  -8.681  1.00 23.66           O1-
ATOM   4201  H   GLU A 357     -11.051  14.323  -7.135  1.00  0.00           H
ATOM   4202  HA  GLU A 357     -13.119  15.150  -5.140  1.00  0.00           H
ATOM   4203  HB2 GLU A 357     -12.619  12.393  -6.365  1.00  0.00           H
ATOM   4204  HB3 GLU A 357     -13.468  12.608  -4.859  1.00  0.00           H
ATOM   4205  HG2 GLU A 357     -15.408  13.325  -5.814  1.00  0.00           H
ATOM   4206  HG3 GLU A 357     -14.606  14.342  -6.955  1.00  0.00           H
ATOM   4207  N   ARG A 358     -10.981  13.197  -3.985  1.00 19.68           N
ATOM   4208  CA  ARG A 358      -9.762  12.942  -3.236  1.00 19.97           C
ATOM   4209  C   ARG A 358      -9.547  11.435  -3.254  1.00 20.10           C
ATOM   4210  O   ARG A 358      -9.594  10.800  -2.202  1.00 19.00           O
ATOM   4211  CB  ARG A 358      -9.831  13.580  -1.832  1.00 19.86           C
ATOM   4212  CG  ARG A 358      -8.549  13.439  -0.981  1.00 19.86           C
ATOM   4213  CD  ARG A 358      -8.804  12.858   0.420  1.00 19.26           C
ATOM   4214  NE  ARG A 358      -9.091  11.420   0.345  1.00 20.24           N
ATOM   4215  CZ  ARG A 358      -9.026  10.522   1.333  1.00 19.04           C
ATOM   4216  NH1 ARG A 358      -8.764  10.892   2.586  1.00 17.28           N
ATOM   4217  NH2 ARG A 358      -9.228   9.238   1.059  1.00 18.85           N1+
ATOM   4218  H   ARG A 358     -11.606  12.405  -4.101  1.00  0.00           H
ATOM   4219  HA  ARG A 358      -8.919  13.383  -3.772  1.00  0.00           H
ATOM   4220  HB2 ARG A 358     -10.055  14.642  -1.935  1.00  0.00           H
ATOM   4221  HB3 ARG A 358     -10.679  13.143  -1.304  1.00  0.00           H
ATOM   4222  HG2 ARG A 358      -7.804  12.828  -1.493  1.00  0.00           H
ATOM   4223  HG3 ARG A 358      -8.079  14.418  -0.886  1.00  0.00           H
ATOM   4224  HD2 ARG A 358      -7.903  12.989   1.015  1.00  0.00           H
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ATOM   4225  HD3 ARG A 358      -9.606  13.383   0.938  1.00  0.00           H
ATOM   4226  HE  ARG A 358      -9.289  11.077  -0.610  1.00  0.00           H
ATOM   4227 HH11 ARG A 358      -8.822  11.863   2.901  1.00  0.00           H
ATOM   4228 HH12 ARG A 358      -8.441  10.196   3.253  1.00  0.00           H
ATOM   4229 HH21 ARG A 358      -9.444   8.885   0.114  1.00  0.00           H
ATOM   4230 HH22 ARG A 358      -9.233   8.520   1.780  1.00  0.00           H
ATOM   4231  N   TRP A 359      -9.368  10.856  -4.446  1.00 19.26           N
ATOM   4232  CA  TRP A 359      -9.151   9.422  -4.611  1.00 19.61           C
ATOM   4233  C   TRP A 359      -7.813   9.040  -3.979  1.00 18.49           C
ATOM   4234  O   TRP A 359      -6.801   9.690  -4.246  1.00 21.29           O
ATOM   4235  CB  TRP A 359      -9.102   9.036  -6.102  1.00 19.93           C
ATOM   4236  CG  TRP A 359     -10.307   9.276  -6.956  1.00 23.18           C
ATOM   4237  CD1 TRP A 359     -11.475   9.850  -6.584  1.00 23.43           C
ATOM   4238  CD2 TRP A 359     -10.458   8.949  -8.366  1.00 22.00           C
ATOM   4239  NE1 TRP A 359     -12.319   9.934  -7.672  1.00 26.12           N
ATOM   4240  CE3 TRP A 359      -9.630   8.330  -9.333  1.00 22.65           C
ATOM   4241  CE2 TRP A 359     -11.739   9.401  -8.801  1.00 24.16           C
ATOM   4242  CZ3 TRP A 359     -10.064   8.177 -10.665  1.00 21.38           C
ATOM   4243  CZ2 TRP A 359     -12.161   9.268 -10.133  1.00 24.29           C
ATOM   4244  CH2 TRP A 359     -11.325   8.641 -11.068  1.00 23.99           C
ATOM   4245  H   TRP A 359      -9.339  11.437  -5.269  1.00  0.00           H
ATOM   4246  HA  TRP A 359      -9.961   8.883  -4.116  1.00  0.00           H
ATOM   4247  HB2 TRP A 359      -8.267   9.539  -6.587  1.00  0.00           H
ATOM   4248  HB3 TRP A 359      -8.870   7.973  -6.183  1.00  0.00           H
ATOM   4249  HD1 TRP A 359     -11.697  10.211  -5.592  1.00  0.00           H
ATOM   4250  HE1 TRP A 359     -13.250  10.412  -7.629  1.00  0.00           H
ATOM   4251  HE3 TRP A 359      -8.647   7.980  -9.048  1.00  0.00           H
ATOM   4252  HZ3 TRP A 359      -9.431   7.723 -11.402  1.00  0.00           H
ATOM   4253  HZ2 TRP A 359     -13.117   9.637 -10.442  1.00  0.00           H
ATOM   4254  HH2 TRP A 359     -11.637   8.534 -12.095  1.00  0.00           H
ATOM   4255  N   GLY A 360      -7.819   7.988  -3.167  1.00 20.56           N
ATOM   4256  CA  GLY A 360      -6.656   7.518  -2.445  1.00 19.56           C
ATOM   4257  C   GLY A 360      -5.982   6.390  -3.216  1.00 19.97           C
ATOM   4258  O   GLY A 360      -6.625   5.665  -3.977  1.00 19.92           O
ATOM   4259  H   GLY A 360      -8.713   7.599  -2.892  1.00  0.00           H
ATOM   4260  HA2 GLY A 360      -5.962   8.326  -2.225  1.00  0.00           H
ATOM   4261  HA3 GLY A 360      -6.999   7.123  -1.490  1.00  0.00           H
ATOM   4262  N   ASP A 361      -4.679   6.212  -2.991  1.00 18.87           N
ATOM   4263  CA  ASP A 361      -3.870   5.157  -3.603  1.00 20.81           C
ATOM   4264  C   ASP A 361      -4.255   3.770  -3.046  1.00 20.03           C
ATOM   4265  O   ASP A 361      -4.184   2.776  -3.767  1.00 22.19           O
ATOM   4266  CB  ASP A 361      -2.376   5.450  -3.328  1.00 21.93           C
ATOM   4267  CG  ASP A 361      -1.997   5.424  -1.852  1.00 21.87           C
ATOM   4268  OD1 ASP A 361      -2.345   6.376  -1.127  1.00 25.70           O
ATOM   4269  OD2 ASP A 361      -1.416   4.412  -1.414  1.00 23.34           O1-
ATOM   4270  H   ASP A 361      -4.195   6.813  -2.332  1.00  0.00           H
ATOM   4271  HA  ASP A 361      -4.054   5.151  -4.675  1.00  0.00           H
ATOM   4272  HB2 ASP A 361      -1.763   4.719  -3.855  1.00  0.00           H
ATOM   4273  HB3 ASP A 361      -2.102   6.420  -3.740  1.00  0.00           H
ATOM   4274  N   ALA A 362      -4.686   3.710  -1.780  1.00 20.12           N
ATOM   4275  CA  ALA A 362      -5.115   2.517  -1.056  1.00 19.36           C
ATOM   4276  C   ALA A 362      -6.264   1.740  -1.747  1.00 19.28           C
ATOM   4277  O   ALA A 362      -6.040   0.576  -2.098  1.00 17.72           O
ATOM   4278  CB  ALA A 362      -5.391   2.887   0.408  1.00 20.36           C
ATOM   4279  H   ALA A 362      -4.643   4.576  -1.265  1.00  0.00           H
ATOM   4280  HA  ALA A 362      -4.252   1.851  -1.058  1.00  0.00           H
ATOM   4281  HB1 ALA A 362      -5.258   2.019   1.049  1.00  0.00           H
ATOM   4282  HB2 ALA A 362      -4.677   3.624   0.765  1.00  0.00           H
ATOM   4283  HB3 ALA A 362      -6.381   3.298   0.589  1.00  0.00           H
ATOM   4284  N   PRO A 363      -7.439   2.344  -2.063  1.00 17.22           N
ATOM   4285  CA  PRO A 363      -8.452   1.704  -2.914  1.00 17.69           C
ATOM   4286  C   PRO A 363      -7.982   1.387  -4.344  1.00 17.56           C
ATOM   4287  O   PRO A 363      -8.235   0.276  -4.801  1.00 18.84           O
ATOM   4288  CB  PRO A 363      -9.694   2.605  -2.858  1.00 18.18           C
ATOM   4289  CG  PRO A 363      -9.166   3.967  -2.446  1.00 20.02           C
ATOM   4290  CD  PRO A 363      -7.906   3.666  -1.632  1.00 17.04           C
ATOM   4291  HA  PRO A 363      -8.720   0.749  -2.465  1.00  0.00           H
ATOM   4292  HB2 PRO A 363     -10.255   2.635  -3.794  1.00  0.00           H
ATOM   4293  HB3 PRO A 363     -10.373   2.236  -2.089  1.00  0.00           H
ATOM   4294  HG2 PRO A 363      -8.898   4.534  -3.338  1.00  0.00           H
ATOM   4295  HG3 PRO A 363      -9.891   4.562  -1.890  1.00  0.00           H
ATOM   4296  HD2 PRO A 363      -7.166   4.453  -1.715  1.00  0.00           H
ATOM   4297  HD3 PRO A 363      -8.195   3.602  -0.582  1.00  0.00           H
ATOM   4298  N   VAL A 364      -7.247   2.283  -5.023  1.00 15.81           N
ATOM   4299  CA  VAL A 364      -6.687   2.061  -6.367  1.00 13.67           C
ATOM   4300  C   VAL A 364      -5.750   0.829  -6.416  1.00 15.13           C
ATOM   4301  O   VAL A 364      -5.859   0.001  -7.320  1.00 12.77           O
ATOM   4302  CB  VAL A 364      -6.012   3.372  -6.862  1.00 16.16           C
ATOM   4303  CG1 VAL A 364      -5.194   3.220  -8.158  1.00 13.85           C
ATOM   4304  CG2 VAL A 364      -7.061   4.481  -7.059  1.00 15.04           C
ATOM   4305  H   VAL A 364      -7.066   3.182  -4.595  1.00  0.00           H
ATOM   4306  HA  VAL A 364      -7.519   1.832  -7.037  1.00  0.00           H
ATOM   4307  HB  VAL A 364      -5.316   3.711  -6.094  1.00  0.00           H
ATOM   4308 HG11 VAL A 364      -4.825   4.186  -8.503  1.00  0.00           H
ATOM   4309 HG12 VAL A 364      -4.323   2.579  -8.023  1.00  0.00           H
ATOM   4310 HG13 VAL A 364      -5.798   2.795  -8.958  1.00  0.00           H
ATOM   4311 HG21 VAL A 364      -6.593   5.418  -7.358  1.00  0.00           H
ATOM   4312 HG22 VAL A 364      -7.780   4.210  -7.832  1.00  0.00           H
ATOM   4313 HG23 VAL A 364      -7.617   4.680  -6.146  1.00  0.00           H
ATOM   4314  N   HIS A 365      -4.889   0.653  -5.403  1.00 14.05           N
ATOM   4315  CA  HIS A 365      -4.032  -0.529  -5.259  1.00 17.18           C
ATOM   4316  C   HIS A 365      -4.855  -1.793  -4.989  1.00 16.98           C
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ATOM   4317  O   HIS A 365     -4.483  -2.865  -5.453  1.00 19.79          O
ATOM   4318  CB  HIS A 365     -3.059  -0.385  -4.072  1.00 16.11          C
ATOM   4319  CG  HIS A 365     -1.906   0.568  -4.231  1.00 19.71          C
ATOM   4320  ND1 HIS A 365     -0.839   0.512  -3.360  1.00 19.57          N1+
ATOM   4321  CD2 HIS A 365     -1.648   1.606  -5.110  1.00 18.63          C
ATOM   4322  CE1 HIS A 365      0.022   1.455  -3.697  1.00 21.02          C
ATOM   4323  NE2 HIS A 365     -0.430   2.153  -4.731  1.00 20.54          N
ATOM   4324  H   HIS A 365     -4.827   1.390  -4.702  1.00  0.00          H
ATOM   4325  HA  HIS A 365     -3.466  -0.682  -6.181  1.00  0.00          H
ATOM   4326  HB2 HIS A 365     -3.601  -0.111  -3.165  1.00  0.00          H
ATOM   4327  HB3 HIS A 365     -2.608  -1.357  -3.861  1.00  0.00          H
ATOM   4328  HD1 HIS A 365     -0.692  -0.162  -2.556  1.00  0.00          H
ATOM   4329  HD2 HIS A 365     -2.224   2.009  -5.932  1.00  0.00          H
ATOM   4330  HE1 HIS A 365      0.949   1.641  -3.171  1.00  0.00          H
ATOM   4331  HE2 HIS A 365      0.027   3.012  -5.077  1.00  0.00          H
ATOM   4332  N   SER A 366     -5.962  -1.681  -4.247  1.00 18.87          N
ATOM   4333  CA  SER A 366     -6.756  -2.825  -3.813  1.00 18.88          C
ATOM   4334  C   SER A 366     -7.694  -3.308  -4.920  1.00 19.48          C
ATOM   4335  O   SER A 366     -7.795  -4.514  -5.135  1.00 17.62          O
ATOM   4336  CB  SER A 366     -7.613  -2.405  -2.617  1.00 18.94          C
ATOM   4337  OG  SER A 366     -6.763  -2.012  -1.560  1.00 19.20          O
ATOM   4338  H   SER A 366     -6.247  -0.758  -3.947  1.00  0.00          H
ATOM   4339  HA  SER A 366     -6.102  -3.652  -3.535  1.00  0.00          H
ATOM   4340  HB2 SER A 366     -8.299  -1.594  -2.866  1.00  0.00          H
ATOM   4341  HB3 SER A 366     -8.221  -3.247  -2.282  1.00  0.00          H
ATOM   4342  HG  SER A 366     -6.302  -1.208  -1.810  1.00  0.00          H
ATOM   4343  N   ILE A 367     -8.336  -2.382  -5.651  1.00 19.28          N
ATOM   4344  CA  ILE A 367     -9.155  -2.668  -6.829  1.00 18.73          C
ATOM   4345  C   ILE A 367     -8.298  -3.344  -7.918  1.00 19.02          C
ATOM   4346  O   ILE A 367     -8.772  -4.255  -8.588  1.00 20.14          O
ATOM   4347  CB  ILE A 367     -9.884  -1.375  -7.307  1.00 16.72          C
ATOM   4348  CG1 ILE A 367    -10.891  -0.871  -6.239  1.00 15.35          C
ATOM   4349  CG2 ILE A 367    -10.614  -1.555  -8.657  1.00 14.85          C
ATOM   4350  CD1 ILE A 367    -11.295   0.602  -6.410  1.00 15.61          C
ATOM   4351  H   ILE A 367     -8.203  -1.399  -5.417  1.00  0.00          H
ATOM   4352  HA  ILE A 367     -9.910  -3.391  -6.531  1.00  0.00          H
ATOM   4353  HB  ILE A 367     -9.121  -0.606  -7.450  1.00  0.00          H
ATOM   4354 HG12 ILE A 367    -11.780  -1.501  -6.239  1.00  0.00          H
ATOM   4355 HG13 ILE A 367    -10.472  -0.974  -5.238  1.00  0.00          H
ATOM   4356 HG21 ILE A 367    -11.155  -0.655  -8.946  1.00  0.00          H
ATOM   4357 HG22 ILE A 367     -9.916  -1.759  -9.470  1.00  0.00          H
ATOM   4358 HG23 ILE A 367    -11.328  -2.378  -8.619  1.00  0.00          H
ATOM   4359 HD11 ILE A 367    -11.953   0.916  -5.599  1.00  0.00          H
ATOM   4360 HD12 ILE A 367    -10.418   1.249  -6.390  1.00  0.00          H
ATOM   4361 HD13 ILE A 367    -11.818   0.781  -7.348  1.00  0.00          H
ATOM   4362  N   ALA A 368     -7.019  -2.965  -8.024  1.00 17.53          N
ATOM   4363  CA  ALA A 368     -6.048  -3.630  -8.873  1.00 16.44          C
ATOM   4364  C   ALA A 368     -5.602  -4.986  -8.298  1.00 18.86          C
ATOM   4365  O   ALA A 368     -5.772  -6.004  -8.959  1.00 20.08          O
ATOM   4366  CB  ALA A 368     -4.830  -2.721  -9.010  1.00 16.29          C
ATOM   4367  H   ALA A 368     -6.713  -2.168  -7.482  1.00  0.00          H
ATOM   4368  HA  ALA A 368     -6.485  -3.799  -9.859  1.00  0.00          H
ATOM   4369  HB1 ALA A 368     -4.040  -3.247  -9.541  1.00  0.00          H
ATOM   4370  HB2 ALA A 368     -5.090  -1.827  -9.577  1.00  0.00          H
ATOM   4371  HB3 ALA A 368     -4.429  -2.405  -8.048  1.00  0.00          H
ATOM   4372  N   ALA A 369     -5.044  -5.036  -7.079  1.00 18.52          N
ATOM   4373  CA  ALA A 369     -4.443  -6.241  -6.487  1.00 20.68          C
ATOM   4374  C   ALA A 369     -5.435  -7.391  -6.255  1.00 20.05          C
ATOM   4375  O   ALA A 369     -5.022  -8.544  -6.203  1.00 18.61          O
ATOM   4376  CB  ALA A 369     -3.765  -5.892  -5.152  1.00 20.85          C
ATOM   4377  H   ALA A 369     -4.938  -4.167  -6.558  1.00  0.00          H
ATOM   4378  HA  ALA A 369     -3.681  -6.612  -7.176  1.00  0.00          H
ATOM   4379  HB1 ALA A 369     -3.384  -6.785  -4.653  1.00  0.00          H
ATOM   4380  HB2 ALA A 369     -2.914  -5.232  -5.300  1.00  0.00          H
ATOM   4381  HB3 ALA A 369     -4.452  -5.399  -4.466  1.00  0.00          H
ATOM   4382  N   ALA A 370     -6.734  -7.095  -6.137  1.00 20.81          N
ATOM   4383  CA  ALA A 370     -7.784  -8.099  -6.025  1.00 23.03          C
ATOM   4384  C   ALA A 370     -8.286  -8.590  -7.397  1.00 24.19          C
ATOM   4385  O   ALA A 370     -9.001  -9.590  -7.430  1.00 25.96          O
ATOM   4386  CB  ALA A 370     -8.967  -7.464  -5.281  1.00 24.55          C
ATOM   4387  H   ALA A 370     -7.004  -6.116  -6.130  1.00  0.00          H
ATOM   4388  HA  ALA A 370     -7.431  -8.961  -5.460  1.00  0.00          H
ATOM   4389  HB1 ALA A 370     -9.811  -8.148  -5.200  1.00  0.00          H
ATOM   4390  HB2 ALA A 370     -8.683  -7.173  -4.269  1.00  0.00          H
ATOM   4391  HB3 ALA A 370     -9.314  -6.572  -5.794  1.00  0.00          H
ATOM   4392  N   LEU A 371     -7.950  -7.920  -8.511  1.00 24.56          N
ATOM   4393  CA  LEU A 371     -8.451  -8.233  -9.856  1.00 24.21          C
ATOM   4394  C   LEU A 371     -7.345  -8.590 -10.853  1.00 24.41          C
ATOM   4395  O   LEU A 371     -7.602  -9.336 -11.796  1.00 21.31          O
ATOM   4396  CB  LEU A 371     -9.286  -7.058 -10.409  1.00 24.83          C
ATOM   4397  CG  LEU A 371    -10.556  -6.708  -9.606  1.00 27.38          C
ATOM   4398  CD1 LEU A 371    -11.319  -5.550 -10.270  1.00 25.79          C
ATOM   4399  CD2 LEU A 371    -11.491  -7.904  -9.384  1.00 27.66          C
ATOM   4400  H   LEU A 371     -7.334  -7.120  -8.418  1.00  0.00          H
ATOM   4401  HA  LEU A 371     -9.084  -9.117  -9.832  1.00  0.00          H
ATOM   4402  HB2 LEU A 371     -8.650  -6.173 -10.472  1.00  0.00          H
ATOM   4403  HB3 LEU A 371     -9.570  -7.273 -11.439  1.00  0.00          H
ATOM   4404  HG  LEU A 371    -10.231  -6.369  -8.626  1.00  0.00          H
ATOM   4405 HD11 LEU A 371    -12.151  -5.219  -9.649  1.00  0.00          H
ATOM   4406 HD12 LEU A 371    -10.668  -4.688 -10.425  1.00  0.00          H
ATOM   4407 HD13 LEU A 371    -11.718  -5.844 -11.240  1.00  0.00          H
ATOM   4408 HD21 LEU A 371    -12.404  -7.584  -8.889  1.00  0.00          H
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ATOM   4409 HD22 LEU A 371     -11.763  -8.387 -10.321  1.00  0.00           H
ATOM   4410 HD23 LEU A 371     -11.045  -8.653  -8.734  1.00  0.00           H
ATOM   4411  N   PHE A 372      -6.136  -8.050 -10.678  1.00 22.29           N
ATOM   4412  CA  PHE A 372      -4.992  -8.219 -11.577  1.00 20.76           C
ATOM   4413  C   PHE A 372      -3.981  -9.210 -10.983  1.00 22.10           C
ATOM   4414  O   PHE A 372      -2.860  -9.325 -11.471  1.00 20.77           O
ATOM   4415  CB  PHE A 372      -4.296  -6.853 -11.794  1.00 20.58           C
ATOM   4416  CG  PHE A 372      -5.162  -5.716 -12.320  1.00 20.46           C
ATOM   4417  CD1 PHE A 372      -6.402  -5.952 -12.958  1.00 19.24           C
ATOM   4418  CD2 PHE A 372      -4.724  -4.390 -12.135  1.00 17.33           C
ATOM   4419  CE1 PHE A 372      -7.234  -4.877 -13.310  1.00 21.85           C
ATOM   4420  CE2 PHE A 372      -5.546  -3.313 -12.513  1.00 20.11           C
ATOM   4421  CZ  PHE A 372      -6.810  -3.556 -13.082  1.00 20.51           C
ATOM   4422  H   PHE A 372      -6.021  -7.358  -9.938  1.00  0.00           H
ATOM   4423  HA  PHE A 372      -5.315  -8.621 -12.537  1.00  0.00           H
ATOM   4424  HB2 PHE A 372      -3.848  -6.528 -10.854  1.00  0.00           H
ATOM   4425  HB3 PHE A 372      -3.460  -6.966 -12.486  1.00  0.00           H
ATOM   4426  HD1 PHE A 372      -6.750  -6.954 -13.158  1.00  0.00           H
ATOM   4427  HD2 PHE A 372      -3.762  -4.198 -11.685  1.00  0.00           H
ATOM   4428  HE1 PHE A 372      -8.198  -5.072 -13.754  1.00  0.00           H
ATOM   4429  HE2 PHE A 372      -5.215  -2.299 -12.356  1.00  0.00           H
ATOM   4430  HZ  PHE A 372      -7.447  -2.729 -13.358  1.00  0.00           H
ATOM   4431  N   LEU A 373      -4.379  -9.943  -9.943  1.00 21.49           N
ATOM   4432  CA  LEU A 373      -3.700 -11.125  -9.449  1.00 22.37           C
ATOM   4433  C   LEU A 373      -4.723 -12.263  -9.392  1.00 22.61           C
ATOM   4434  O   LEU A 373      -5.875 -12.004  -9.024  1.00 21.20           O
ATOM   4435  CB  LEU A 373      -3.143 -10.877  -8.030  1.00 21.57           C
ATOM   4436  CG  LEU A 373      -1.922  -9.943  -7.940  1.00 21.65           C
ATOM   4437  CD1 LEU A 373      -1.570  -9.666  -6.469  1.00 25.02           C
ATOM   4438  CD2 LEU A 373      -0.703 -10.511  -8.682  1.00 24.25           C
ATOM   4439  H   LEU A 373      -5.337  -9.836  -9.639  1.00  0.00           H
ATOM   4440  HA  LEU A 373      -2.900 -11.398 -10.134  1.00  0.00           H
ATOM   4441  HB2 LEU A 373      -3.947 -10.490  -7.404  1.00  0.00           H
ATOM   4442  HB3 LEU A 373      -2.887 -11.835  -7.583  1.00  0.00           H
ATOM   4443  HG  LEU A 373      -2.184  -8.989  -8.400  1.00  0.00           H
ATOM   4444 HD11 LEU A 373      -0.701  -9.016  -6.386  1.00  0.00           H
ATOM   4445 HD12 LEU A 373      -2.395  -9.171  -5.956  1.00  0.00           H
ATOM   4446 HD13 LEU A 373      -1.348 -10.585  -5.927  1.00  0.00           H
ATOM   4447 HD21 LEU A 373       0.162  -9.868  -8.537  1.00  0.00           H
ATOM   4448 HD22 LEU A 373      -0.441 -11.508  -8.331  1.00  0.00           H
ATOM   4449 HD23 LEU A 373      -0.870 -10.564  -9.759  1.00  0.00           H
ATOM   4450  N   PRO A 374      -4.300 -13.523  -9.628  1.00 23.37           N
ATOM   4451  CA  PRO A 374      -5.086 -14.690  -9.240  1.00 23.61           C
ATOM   4452  C   PRO A 374      -4.993 -14.807  -7.708  1.00 24.19           C
ATOM   4453  O   PRO A 374      -3.909 -14.630  -7.149  1.00 25.28           O
ATOM   4454  CB  PRO A 374      -4.424 -15.861  -9.984  1.00 21.86           C
ATOM   4455  CG  PRO A 374      -2.981 -15.445 -10.207  1.00 25.99           C
ATOM   4456  CD  PRO A 374      -3.019 -13.915 -10.225  1.00 23.76           C
ATOM   4457  HA  PRO A 374      -6.123 -14.551  -9.548  1.00  0.00           H
ATOM   4458  HB2 PRO A 374      -4.520 -16.818  -9.471  1.00  0.00           H
ATOM   4459  HB3 PRO A 374      -4.884 -15.970 -10.966  1.00  0.00           H
ATOM   4460  HG2 PRO A 374      -2.381 -15.809  -9.385  1.00  0.00           H
ATOM   4461  HG3 PRO A 374      -2.558 -15.867 -11.118  1.00  0.00           H
ATOM   4462  HD2 PRO A 374      -2.177 -13.497  -9.675  1.00  0.00           H
ATOM   4463  HD3 PRO A 374      -2.965 -13.541 -11.247  1.00  0.00           H
ATOM   4464  N   LYS A 375      -6.113 -15.019  -7.004  1.00 23.78           N
ATOM   4465  CA  LYS A 375      -6.240 -14.707  -5.574  1.00 23.97           C
ATOM   4466  C   LYS A 375      -5.305 -15.471  -4.608  1.00 22.75           C
ATOM   4467  O   LYS A 375      -5.185 -15.073  -3.451  1.00 21.14           O
ATOM   4468  CB  LYS A 375      -7.718 -14.778  -5.139  1.00 23.67           C
ATOM   4469  CG  LYS A 375      -8.340 -16.179  -4.983  1.00 25.99           C
ATOM   4470  CD  LYS A 375      -9.813 -16.086  -4.542  1.00 27.02           C
ATOM   4471  CE  LYS A 375     -10.257 -17.249  -3.644  1.00 27.83           C
ATOM   4472  NZ  LYS A 375     -11.574 -16.995  -3.030  1.00 29.10           N1+
ATOM   4473  H   LYS A 375      -6.982 -15.152  -7.524  1.00  0.00           H
ATOM   4474  HA  LYS A 375      -5.943 -13.660  -5.486  1.00  0.00           H
ATOM   4475  HB2 LYS A 375      -7.794 -14.264  -4.180  1.00  0.00           H
ATOM   4476  HB3 LYS A 375      -8.319 -14.190  -5.833  1.00  0.00           H
ATOM   4477  HG2 LYS A 375      -8.261 -16.740  -5.916  1.00  0.00           H
ATOM   4478  HG3 LYS A 375      -7.767 -16.735  -4.239  1.00  0.00           H
ATOM   4479  HD2 LYS A 375      -9.947 -15.161  -3.987  1.00  0.00           H
ATOM   4480  HD3 LYS A 375     -10.451 -15.996  -5.423  1.00  0.00           H
ATOM   4481  HE2 LYS A 375     -10.285 -18.182  -4.209  1.00  0.00           H
ATOM   4482  HE3 LYS A 375      -9.540 -17.400  -2.837  1.00  0.00           H
ATOM   4483  HZ1 LYS A 375     -11.705 -17.636  -2.251  1.00  0.00           H
ATOM   4484  HZ2 LYS A 375     -11.625 -16.063  -2.631  1.00  0.00           H
ATOM   4485  HZ3 LYS A 375     -12.315 -17.098  -3.704  1.00  0.00           H
ATOM   4486  N   ASP A 376      -4.597 -16.508  -5.084  1.00 22.97           N
ATOM   4487  CA  ASP A 376      -3.453 -17.152  -4.415  1.00 23.49           C
ATOM   4488  C   ASP A 376      -2.336 -16.138  -4.091  1.00 24.05           C
ATOM   4489  O   ASP A 376      -1.699 -16.226  -3.048  1.00 23.37           O
ATOM   4490  CB  ASP A 376      -2.932 -18.350  -5.274  1.00 26.21           C
ATOM   4491  CG  ASP A 376      -1.490 -18.816  -5.007  1.00 25.03           C
ATOM   4492  OD1 ASP A 376      -0.674 -18.802  -5.957  1.00 24.00           O
ATOM   4493  OD2 ASP A 376      -1.182 -19.151  -3.841  1.00 25.73           O1-
ATOM   4494  H   ASP A 376      -4.727 -16.698  -6.066  1.00  0.00           H
ATOM   4495  HA  ASP A 376      -3.795 -17.548  -3.457  1.00  0.00           H
ATOM   4496  HB2 ASP A 376      -3.589 -19.209  -5.143  1.00  0.00           H
ATOM   4497  HB3 ASP A 376      -2.984 -18.086  -6.330  1.00  0.00           H
ATOM   4498  N   LYS A 377      -2.098 -15.163  -4.975  1.00 23.50           N
ATOM   4499  CA  LYS A 377      -0.916 -14.304  -4.935  1.00 22.56           C
ATOM   4500  C   LYS A 377      -1.063 -13.097  -3.994  1.00 21.29           C
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ATOM   4501  O   LYS A 377      -0.139 -12.285  -3.899  1.00 20.97          O
ATOM   4502  CB  LYS A 377      -0.635 -13.769  -6.349  1.00 21.84          C
ATOM   4503  CG  LYS A 377      -0.627 -14.820  -7.471  1.00 23.25          C
ATOM   4504  CD  LYS A 377       0.367 -15.979  -7.329  1.00 21.18          C
ATOM   4505  CE  LYS A 377       0.157 -17.058  -8.410  1.00 22.85          C
ATOM   4506  NZ  LYS A 377       0.798 -18.323  -8.045  1.00 23.32          N1+
ATOM   4507  H   LYS A 377      -2.720 -15.077  -5.775  1.00  0.00          H
ATOM   4508  HA  LYS A 377      -0.066 -14.882  -4.592  1.00  0.00          H
ATOM   4509  HB2 LYS A 377      -1.388 -13.025  -6.598  1.00  0.00          H
ATOM   4510  HB3 LYS A 377       0.307 -13.232  -6.345  1.00  0.00          H
ATOM   4511  HG2 LYS A 377      -1.616 -15.255  -7.520  1.00  0.00          H
ATOM   4512  HG3 LYS A 377      -0.479 -14.307  -8.415  1.00  0.00          H
ATOM   4513  HD2 LYS A 377       1.396 -15.619  -7.331  1.00  0.00          H
ATOM   4514  HD3 LYS A 377       0.203 -16.438  -6.356  1.00  0.00          H
ATOM   4515  HE2 LYS A 377      -0.904 -17.278  -8.520  1.00  0.00          H
ATOM   4516  HE3 LYS A 377       0.527 -16.732  -9.382  1.00  0.00          H
ATOM   4517  HZ1 LYS A 377       0.399 -18.602  -7.130  1.00  0.00          H
ATOM   4518  HZ2 LYS A 377       0.597 -19.042  -8.714  1.00  0.00          H
ATOM   4519  HZ3 LYS A 377       1.830 -18.204  -8.007  1.00  0.00          H
ATOM   4520  N   ILE A 378      -2.203 -12.972  -3.314  1.00 20.46          N
ATOM   4521  CA  ILE A 378      -2.502 -11.924  -2.354  1.00 19.71          C
ATOM   4522  C   ILE A 378      -2.268 -12.568  -0.971  1.00 21.20          C
ATOM   4523  O   ILE A 378      -2.799 -13.645  -0.695  1.00 23.96          O
ATOM   4524  CB  ILE A 378      -3.988 -11.479  -2.522  1.00 19.96          C
ATOM   4525  CG1 ILE A 378      -4.399 -11.239  -4.001  1.00 16.92          C
ATOM   4526  CG2 ILE A 378      -4.252 -10.205  -1.696  1.00 15.66          C
ATOM   4527  CD1 ILE A 378      -5.911 -11.072  -4.208  1.00 19.39          C
ATOM   4528  H   ILE A 378      -2.853 -13.746  -3.351  1.00  0.00          H
ATOM   4529  HA  ILE A 378      -1.847 -11.066  -2.506  1.00  0.00          H
ATOM   4530  HB  ILE A 378      -4.627 -12.275  -2.136  1.00  0.00          H
ATOM   4531 HG12 ILE A 378      -3.875 -10.369  -4.400  1.00  0.00          H
ATOM   4532 HG13 ILE A 378      -4.101 -12.075  -4.633  1.00  0.00          H
ATOM   4533 HG21 ILE A 378      -5.292  -9.890  -1.743  1.00  0.00          H
ATOM   4534 HG22 ILE A 378      -4.014 -10.361  -0.646  1.00  0.00          H
ATOM   4535 HG23 ILE A 378      -3.646  -9.370  -2.050  1.00  0.00          H
ATOM   4536 HD11 ILE A 378      -6.142 -11.013  -5.272  1.00  0.00          H
ATOM   4537 HD12 ILE A 378      -6.461 -11.918  -3.796  1.00  0.00          H
ATOM   4538 HD13 ILE A 378      -6.285 -10.160  -3.745  1.00  0.00          H
ATOM   4539  N   HIS A 379      -1.469 -11.933  -0.107  1.00 20.04          N
ATOM   4540  CA  HIS A 379      -1.102 -12.429   1.218  1.00 20.47          C
ATOM   4541  C   HIS A 379      -1.488 -11.409   2.294  1.00 21.04          C
ATOM   4542  O   HIS A 379      -1.242 -10.216   2.138  1.00 19.94          O
ATOM   4543  CB  HIS A 379       0.404 -12.747   1.254  1.00 21.51          C
ATOM   4544  CG  HIS A 379       0.886 -13.340   2.551  1.00 21.45          C
ATOM   4545  ND1 HIS A 379       0.344 -14.515   3.082  1.00 20.38          N
ATOM   4546  CD2 HIS A 379       1.872 -12.887   3.394  1.00 22.37          C
ATOM   4547  CE1 HIS A 379       0.997 -14.704   4.225  1.00 22.41          C
ATOM   4548  NE2 HIS A 379       1.922 -13.773   4.456  1.00 22.62          N
ATOM   4549  H   HIS A 379      -1.054 -11.049  -0.401  1.00  0.00          H
ATOM   4550  HA  HIS A 379      -1.637 -13.356   1.433  1.00  0.00          H
ATOM   4551  HB2 HIS A 379       0.649 -13.445   0.463  1.00  0.00          H
ATOM   4552  HB3 HIS A 379       0.991 -11.853   1.050  1.00  0.00          H
ATOM   4553  HD2 HIS A 379       2.516 -12.026   3.329  1.00  0.00          H
ATOM   4554  HE1 HIS A 379       0.796 -15.522   4.903  1.00  0.00          H
ATOM   4555  HE2 HIS A 379       2.523 -13.705   5.273  1.00  0.00          H
ATOM   4556  N   TYR A 380      -2.049 -11.887   3.404  1.00 21.37          N
ATOM   4557  CA  TYR A 380      -2.185 -11.138   4.646  1.00 21.69          C
ATOM   4558  C   TYR A 380      -1.158 -11.775   5.585  1.00 20.30          C
ATOM   4559  O   TYR A 380      -1.219 -12.985   5.818  1.00 21.92          O
ATOM   4560  CB  TYR A 380      -3.612 -11.332   5.209  1.00 19.97          C
ATOM   4561  CG  TYR A 380      -3.805 -10.894   6.653  1.00 21.86          C
ATOM   4562  CD1 TYR A 380      -3.958  -9.532   6.977  1.00 18.74          C
ATOM   4563  CD2 TYR A 380      -3.779 -11.852   7.685  1.00 19.94          C
ATOM   4564  CE1 TYR A 380      -4.049  -9.132   8.326  1.00 21.73          C
ATOM   4565  CE2 TYR A 380      -3.873 -11.449   9.029  1.00 22.01          C
ATOM   4566  CZ  TYR A 380      -3.980 -10.089   9.354  1.00 22.98          C
ATOM   4567  OH  TYR A 380      -4.026  -9.723  10.667  1.00 22.49          O
ATOM   4568  H   TYR A 380      -2.025 -12.891   3.525  1.00  0.00          H
ATOM   4569  HA  TYR A 380      -1.984 -10.073   4.521  1.00  0.00          H
ATOM   4570  HB2 TYR A 380      -4.314 -10.774   4.590  1.00  0.00          H
ATOM   4571  HB3 TYR A 380      -3.905 -12.380   5.134  1.00  0.00          H
ATOM   4572  HD1 TYR A 380      -3.983  -8.791   6.191  1.00  0.00          H
ATOM   4573  HD2 TYR A 380      -3.663 -12.899   7.449  1.00  0.00          H
ATOM   4574  HE1 TYR A 380      -4.162  -8.088   8.572  1.00  0.00          H
ATOM   4575  HE2 TYR A 380      -3.867 -12.183   9.819  1.00  0.00          H
ATOM   4576  HH  TYR A 380      -4.444  -8.870  10.829  1.00  0.00          H
ATOM   4577  N   PHE A 381      -0.230 -10.979   6.118  1.00 21.02          N
ATOM   4578  CA  PHE A 381       0.759 -11.437   7.087  1.00 22.01          C
ATOM   4579  C   PHE A 381       0.104 -11.498   8.478  1.00 21.75          C
ATOM   4580  O   PHE A 381       0.068 -10.511   9.214  1.00 21.88          O
ATOM   4581  CB  PHE A 381       1.931 -10.445   7.126  1.00 21.96          C
ATOM   4582  CG  PHE A 381       2.873 -10.500   5.939  1.00 23.44          C
ATOM   4583  CD1 PHE A 381       3.928 -11.436   5.925  1.00 24.95          C
ATOM   4584  CD2 PHE A 381       2.739  -9.586   4.878  1.00 24.30          C
ATOM   4585  CE1 PHE A 381       4.846 -11.455   4.858  1.00 24.65          C
ATOM   4586  CE2 PHE A 381       3.655  -9.609   3.813  1.00 24.16          C
ATOM   4587  CZ  PHE A 381       4.713 -10.536   3.802  1.00 22.13          C
ATOM   4588  H   PHE A 381      -0.243  -9.991   5.885  1.00  0.00          H
ATOM   4589  HA  PHE A 381       1.139 -12.426   6.827  1.00  0.00          H
ATOM   4590  HB2 PHE A 381       1.577  -9.424   7.264  1.00  0.00          H
ATOM   4591  HB3 PHE A 381       2.530 -10.676   8.003  1.00  0.00          H
ATOM   4592  HD1 PHE A 381       4.051 -12.130   6.747  1.00  0.00          H
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ATOM   4593  HD2 PHE A 381       1.949  -8.853   4.883  1.00  0.00           H
ATOM   4594  HE1 PHE A 381       5.656 -12.172   4.861  1.00  0.00           H
ATOM   4595  HE2 PHE A 381       3.556  -8.889   3.022  1.00  0.00           H
ATOM   4596  HZ  PHE A 381       5.420 -10.545   2.987  1.00  0.00           H
ATOM   4597  N   SER A 382      -0.417 -12.676   8.834  1.00 22.55           N
ATOM   4598  CA  SER A 382      -1.027 -12.986  10.125  1.00 23.85           C
ATOM   4599  C   SER A 382       0.003 -13.226  11.241  1.00 23.18           C
ATOM   4600  O   SER A 382      -0.375 -13.385  12.397  1.00 24.66           O
ATOM   4601  CB  SER A 382      -1.872 -14.262   9.924  1.00 23.74           C
ATOM   4602  OG  SER A 382      -1.133 -15.345   9.372  1.00 23.95           O
ATOM   4603  H   SER A 382      -0.371 -13.434   8.164  1.00  0.00           H
ATOM   4604  HA  SER A 382      -1.657 -12.157  10.447  1.00  0.00           H
ATOM   4605  HB2 SER A 382      -2.324 -14.573  10.867  1.00  0.00           H
ATOM   4606  HB3 SER A 382      -2.691 -14.050   9.243  1.00  0.00           H
ATOM   4607  HG  SER A 382      -0.351 -15.475   9.893  1.00  0.00           H
ATOM   4608  N   ASP A 383       1.282 -13.294  10.875  1.00 25.17           N
ATOM   4609  CA  ASP A 383       2.479 -13.459  11.687  1.00 23.87           C
ATOM   4610  C   ASP A 383       3.082 -12.086  12.044  1.00 23.92           C
ATOM   4611  O   ASP A 383       3.847 -11.994  13.005  1.00 24.24           O
ATOM   4612  CB  ASP A 383       3.527 -14.220  10.823  1.00 23.64           C
ATOM   4613  CG  ASP A 383       3.830 -13.614   9.444  1.00 23.19           C
ATOM   4614  OD1 ASP A 383       2.858 -13.320   8.709  1.00 22.50           O
ATOM   4615  OD2 ASP A 383       5.024 -13.449   9.129  1.00 22.18           O1-
ATOM   4616  H   ASP A 383       1.508 -13.194   9.879  1.00  0.00           H
ATOM   4617  HA  ASP A 383       2.258 -14.008  12.603  1.00  0.00           H
ATOM   4618  HB2 ASP A 383       4.465 -14.306  11.375  1.00  0.00           H
ATOM   4619  HB3 ASP A 383       3.188 -15.241  10.657  1.00  0.00           H
ATOM   4620  N   ILE A 384       2.744 -11.018  11.305  1.00 22.55           N
ATOM   4621  CA  ILE A 384       3.261  -9.676  11.533  1.00 22.33           C
ATOM   4622  C   ILE A 384       2.224  -8.891  12.350  1.00 23.48           C
ATOM   4623  O   ILE A 384       1.049  -8.776  11.995  1.00 25.39           O
ATOM   4624  CB  ILE A 384       3.579  -8.974  10.178  1.00 22.93           C
ATOM   4625  CG1 ILE A 384       4.700  -9.753   9.440  1.00 21.02           C
ATOM   4626  CG2 ILE A 384       3.981  -7.490  10.352  1.00 18.69           C
ATOM   4627  CD1 ILE A 384       5.217  -9.109   8.146  1.00 22.41           C
ATOM   4628  H   ILE A 384       2.072 -11.151  10.563  1.00  0.00           H
ATOM   4629  HA  ILE A 384       4.192  -9.728  12.101  1.00  0.00           H
ATOM   4630  HB  ILE A 384       2.677  -8.989   9.565  1.00  0.00           H
ATOM   4631 HG12 ILE A 384       5.539  -9.912  10.113  1.00  0.00           H
ATOM   4632 HG13 ILE A 384       4.356 -10.759   9.202  1.00  0.00           H
ATOM   4633 HG21 ILE A 384       4.166  -7.005   9.395  1.00  0.00           H
ATOM   4634 HG22 ILE A 384       3.197  -6.903  10.829  1.00  0.00           H
ATOM   4635 HG23 ILE A 384       4.883  -7.403  10.957  1.00  0.00           H
ATOM   4636 HD11 ILE A 384       5.852  -9.810   7.601  1.00  0.00           H
ATOM   4637 HD12 ILE A 384       4.401  -8.821   7.485  1.00  0.00           H
ATOM   4638 HD13 ILE A 384       5.815  -8.224   8.350  1.00  0.00           H
ATOM   4639  N   GLY A 385       2.712  -8.265  13.418  1.00 22.88           N
ATOM   4640  CA  GLY A 385       2.006  -7.315  14.252  1.00 21.82           C
ATOM   4641  C   GLY A 385       2.650  -5.962  13.982  1.00 20.82           C
ATOM   4642  O   GLY A 385       3.877  -5.846  13.961  1.00 19.73           O
ATOM   4643  H   GLY A 385       3.686  -8.410  13.627  1.00  0.00           H
ATOM   4644  HA2 GLY A 385       0.944  -7.309  14.019  1.00  0.00           H
ATOM   4645  HA3 GLY A 385       2.111  -7.575  15.305  1.00  0.00           H
ATOM   4646  N   TYR A 386       1.823  -4.955  13.724  1.00 21.09           N
ATOM   4647  CA  TYR A 386       2.179  -3.693  13.091  1.00 20.61           C
ATOM   4648  C   TYR A 386       1.209  -2.611  13.577  1.00 20.86           C
ATOM   4649  O   TYR A 386       0.104  -2.941  13.996  1.00 21.94           O
ATOM   4650  CB  TYR A 386       2.177  -3.917  11.559  1.00 21.65           C
ATOM   4651  CG  TYR A 386       2.178  -2.678  10.687  1.00 21.23           C
ATOM   4652  CD1 TYR A 386       3.386  -2.055  10.315  1.00 20.92           C
ATOM   4653  CD2 TYR A 386       0.949  -2.151  10.242  1.00 17.77           C
ATOM   4654  CE1 TYR A 386       3.361  -0.931   9.468  1.00 20.13           C
ATOM   4655  CE2 TYR A 386       0.925  -1.015   9.419  1.00 19.71           C
ATOM   4656  CZ  TYR A 386       2.132  -0.419   9.010  1.00 19.65           C
ATOM   4657  OH  TYR A 386       2.094   0.622   8.129  1.00 20.30           O
ATOM   4658  H   TYR A 386       0.833  -5.082  13.927  1.00  0.00           H
ATOM   4659  HA  TYR A 386       3.177  -3.400  13.413  1.00  0.00           H
ATOM   4660  HB2 TYR A 386       3.026  -4.537  11.276  1.00  0.00           H
ATOM   4661  HB3 TYR A 386       1.299  -4.503  11.279  1.00  0.00           H
ATOM   4662  HD1 TYR A 386       4.332  -2.447  10.658  1.00  0.00           H
ATOM   4663  HD2 TYR A 386       0.018  -2.624  10.522  1.00  0.00           H
ATOM   4664  HE1 TYR A 386       4.292  -0.483   9.157  1.00  0.00           H
ATOM   4665  HE2 TYR A 386      -0.025  -0.638   9.078  1.00  0.00           H
ATOM   4666  HH  TYR A 386       2.799   0.646   7.484  1.00  0.00           H
ATOM   4667  N   HIS A 387       1.577  -1.330  13.488  1.00 19.49           N
ATOM   4668  CA  HIS A 387       0.681  -0.194  13.704  1.00 20.54           C
ATOM   4669  C   HIS A 387       1.107   0.983  12.828  1.00 18.80           C
ATOM   4670  O   HIS A 387       2.250   1.427  12.923  1.00 18.62           O
ATOM   4671  CB  HIS A 387       0.560   0.137  15.210  1.00 20.00           C
ATOM   4672  CG  HIS A 387      -0.077   1.457  15.609  1.00 25.81           C
ATOM   4673  ND1 HIS A 387      -1.365   1.560  16.119  1.00 22.90           N1+
ATOM   4674  CD2 HIS A 387       0.453   2.738  15.630  1.00 23.86           C
ATOM   4675  CE1 HIS A 387      -1.564   2.826  16.454  1.00 24.18           C
ATOM   4676  NE2 HIS A 387      -0.519   3.581  16.138  1.00 25.10           N
ATOM   4677  H   HIS A 387       2.513  -1.126  13.146  1.00  0.00           H
ATOM   4678  HA  HIS A 387      -0.305  -0.488  13.351  1.00  0.00           H
ATOM   4679  HB2 HIS A 387       0.016  -0.664  15.702  1.00  0.00           H
ATOM   4680  HB3 HIS A 387       1.554   0.120  15.647  1.00  0.00           H
ATOM   4681  HD1 HIS A 387      -2.017   0.805  16.439  1.00  0.00           H
ATOM   4682  HD2 HIS A 387       1.431   3.115  15.361  1.00  0.00           H
ATOM   4683  HE1 HIS A 387      -2.451   3.175  16.964  1.00  0.00           H
ATOM   4684  HE2 HIS A 387      -0.411   4.586  16.405  1.00  0.00           H
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ATOM   4685  N   HIS A 388       0.168   1.524  12.046  1.00 18.98           N
ATOM   4686  CA  HIS A 388       0.208   2.855  11.449  1.00 18.64           C
ATOM   4687  C   HIS A 388      -0.911   3.640  12.161  1.00 20.19           C
ATOM   4688  O   HIS A 388      -2.009   3.095  12.271  1.00 20.72           O
ATOM   4689  CB  HIS A 388      -0.137   2.755   9.943  1.00  0.00           C
ATOM   4690  CG  HIS A 388      -0.360   3.996   9.127  1.00  0.00           C
ATOM   4691  ND1 HIS A 388      -1.434   4.096   8.268  1.00  0.00           N
ATOM   4692  CD2 HIS A 388       0.358   5.145   8.911  1.00  0.00           C
ATOM   4693  CE1 HIS A 388      -1.326   5.242   7.569  1.00  0.00           C
ATOM   4694  NE2 HIS A 388      -0.252   5.908   7.946  1.00  0.00           N
ATOM   4695  H   HIS A 388      -0.769   1.133  12.117  1.00  0.00           H
ATOM   4696  HA  HIS A 388       1.191   3.312  11.568  1.00  0.00           H
ATOM   4697  HB2 HIS A 388       0.696   2.198   9.519  1.00  0.00           H
ATOM   4698  HB3 HIS A 388      -1.005   2.106   9.843  1.00  0.00           H
ATOM   4699  HD1 HIS A 388      -2.142   3.389   8.096  1.00  0.00           H
ATOM   4700  HD2 HIS A 388       1.272   5.483   9.374  1.00  0.00           H
ATOM   4701  HE1 HIS A 388      -2.013   5.555   6.794  1.00  0.00           H
ATOM   4702  N   PRO A 389      -0.679   4.864  12.683  1.00 19.60           N
ATOM   4703  CA  PRO A 389      -1.698   5.654  13.395  1.00 19.62           C
ATOM   4704  C   PRO A 389      -3.042   5.788  12.632  1.00 19.23           C
ATOM   4705  O   PRO A 389      -3.006   6.215  11.472  1.00 20.06           O
ATOM   4706  CB  PRO A 389      -1.043   7.032  13.601  1.00 19.61           C
ATOM   4707  CG  PRO A 389       0.456   6.807  13.495  1.00 19.36           C
ATOM   4708  CD  PRO A 389       0.620   5.534  12.681  1.00 19.21           C
ATOM   4709  HA  PRO A 389      -1.832   5.171  14.358  1.00  0.00           H
ATOM   4710  HB2 PRO A 389      -1.346   7.742  12.829  1.00  0.00           H
ATOM   4711  HB3 PRO A 389      -1.303   7.475  14.561  1.00  0.00           H
ATOM   4712  HG2 PRO A 389       0.964   7.657  13.040  1.00  0.00           H
ATOM   4713  HG3 PRO A 389       0.884   6.664  14.487  1.00  0.00           H
ATOM   4714  HD2 PRO A 389       0.918   5.782  11.664  1.00  0.00           H
ATOM   4715  HD3 PRO A 389       1.392   4.902  13.121  1.00  0.00           H
ATOM   4716  N   PRO A 390      -4.220   5.497  13.232  1.00 19.23           N
ATOM   4717  CA  PRO A 390      -4.452   5.023  14.610  1.00 19.78           C
ATOM   4718  C   PRO A 390      -4.555   3.486  14.806  1.00 19.82           C
ATOM   4719  O   PRO A 390      -4.902   3.084  15.916  1.00 20.50           O
ATOM   4720  CB  PRO A 390      -5.830   5.625  14.943  1.00 16.45           C
ATOM   4721  CG  PRO A 390      -6.583   5.571  13.624  1.00 19.09           C
ATOM   4722  CD  PRO A 390      -5.493   5.868  12.597  1.00 19.54           C
ATOM   4723  HA  PRO A 390      -3.727   5.422  15.319  1.00  0.00           H
ATOM   4724  HB2 PRO A 390      -6.369   5.125  15.747  1.00  0.00           H
ATOM   4725  HB3 PRO A 390      -5.702   6.657  15.265  1.00  0.00           H
ATOM   4726  HG2 PRO A 390      -6.985   4.571  13.474  1.00  0.00           H
ATOM   4727  HG3 PRO A 390      -7.416   6.274  13.578  1.00  0.00           H
ATOM   4728  HD2 PRO A 390      -5.661   5.322  11.668  1.00  0.00           H
ATOM   4729  HD3 PRO A 390      -5.485   6.933  12.358  1.00  0.00           H
ATOM   4730  N   TYR A 391      -4.328   2.618  13.805  1.00 21.44           N
ATOM   4731  CA  TYR A 391      -4.773   1.212  13.836  1.00 22.01           C
ATOM   4732  C   TYR A 391      -3.637   0.188  13.763  1.00 21.91           C
ATOM   4733  O   TYR A 391      -2.619   0.394  13.097  1.00 21.23           O
ATOM   4734  CB  TYR A 391      -5.827   0.946  12.738  1.00 25.04           C
ATOM   4735  CG  TYR A 391      -7.151   1.655  12.947  1.00 26.98           C
ATOM   4736  CD1 TYR A 391      -7.800   1.543  14.192  1.00 27.76           C
ATOM   4737  CD2 TYR A 391      -7.751   2.406  11.913  1.00 28.12           C
ATOM   4738  CE1 TYR A 391      -9.018   2.195  14.416  1.00 29.80           C
ATOM   4739  CE2 TYR A 391      -8.983   3.057  12.137  1.00 28.51           C
ATOM   4740  CZ  TYR A 391      -9.609   2.954  13.395  1.00 30.11           C
ATOM   4741  OH  TYR A 391     -10.789   3.577  13.657  1.00 29.73           O
ATOM   4742  H   TYR A 391      -3.828   2.919  12.977  1.00  0.00           H
ATOM   4743  HA  TYR A 391      -5.243   1.008  14.797  1.00  0.00           H
ATOM   4744  HB2 TYR A 391      -5.430   1.193  11.759  1.00  0.00           H
ATOM   4745  HB3 TYR A 391      -6.049  -0.121  12.692  1.00  0.00           H
ATOM   4746  HD1 TYR A 391      -7.380   0.942  14.983  1.00  0.00           H
ATOM   4747  HD2 TYR A 391      -7.277   2.483  10.945  1.00  0.00           H
ATOM   4748  HE1 TYR A 391      -9.494   2.100  15.379  1.00  0.00           H
ATOM   4749  HE2 TYR A 391      -9.440   3.631  11.344  1.00  0.00           H
ATOM   4750  HH  TYR A 391     -11.198   3.992  12.877  1.00  0.00           H
ATOM   4751  N   ASP A 392      -3.836  -0.921  14.486  1.00 20.65           N
ATOM   4752  CA  ASP A 392      -2.877  -1.992  14.742  1.00 21.18           C
ATOM   4753  C   ASP A 392      -3.330  -3.261  14.022  1.00 20.89           C
ATOM   4754  O   ASP A 392      -4.520  -3.567  13.986  1.00 20.18           O
ATOM   4755  CB  ASP A 392      -2.764  -2.335  16.257  1.00 22.25           C
ATOM   4756  CG  ASP A 392      -2.416  -1.165  17.166  1.00 21.58           C
ATOM   4757  OD1 ASP A 392      -3.119  -0.130  17.119  1.00 20.66           O
ATOM   4758  OD2 ASP A 392      -1.379  -1.199  17.856  1.00 21.72           O1-
ATOM   4759  H   ASP A 392      -4.710  -1.003  14.997  1.00  0.00           H
ATOM   4760  HA  ASP A 392      -1.905  -1.680  14.378  1.00  0.00           H
ATOM   4761  HB2 ASP A 392      -3.695  -2.769  16.621  1.00  0.00           H
ATOM   4762  HB3 ASP A 392      -2.008  -3.109  16.397  1.00  0.00           H
ATOM   4763  N   ASN A 393      -2.367  -4.026  13.515  1.00 20.94           N
ATOM   4764  CA  ASN A 393      -2.501  -5.436  13.156  1.00 20.94           C
ATOM   4765  C   ASN A 393      -1.872  -6.195  14.330  1.00 23.33           C
ATOM   4766  O   ASN A 393      -0.800  -5.784  14.792  1.00 20.26           O
ATOM   4767  CB  ASN A 393      -1.611  -5.721  11.917  1.00 21.01           C
ATOM   4768  CG  ASN A 393      -2.148  -6.885  11.091  1.00 21.80           C
ATOM   4769  OD1 ASN A 393      -3.107  -6.694  10.356  1.00 21.19           O
ATOM   4770  ND2 ASN A 393      -1.537  -8.064  11.128  1.00 18.99           N
ATOM   4771  H   ASN A 393      -1.415  -3.713  13.703  1.00  0.00           H
ATOM   4772  HA  ASN A 393      -3.544  -5.718  12.993  1.00  0.00           H
ATOM   4773  HB2 ASN A 393      -1.611  -4.854  11.257  1.00  0.00           H
ATOM   4774  HB3 ASN A 393      -0.564  -5.895  12.168  1.00  0.00           H
ATOM   4775 HD21 ASN A 393      -0.652  -8.245  11.604  1.00  0.00           H
ATOM   4776 HD22 ASN A 393      -1.963  -8.831  10.619  1.00  0.00           H
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ATOM   4777  N   CYS A 394     -2.468  -7.292  14.804  1.00 21.34           N
ATOM   4778  CA  CYS A 394     -1.842  -8.157  15.808  1.00 23.77           C
ATOM   4779  C   CYS A 394     -2.231  -9.630  15.602  1.00 23.91           C
ATOM   4780  O   CYS A 394     -3.431  -9.904  15.577  1.00 23.61           O
ATOM   4781  CB  CYS A 394     -2.116  -7.636  17.232  1.00 24.76           C
ATOM   4782  SG  CYS A 394     -1.195  -8.469  18.554  1.00 21.89           S
ATOM   4783  H   CYS A 394     -3.399  -7.550  14.460  1.00  0.00           H
ATOM   4784  HA  CYS A 394     -0.767  -8.068  15.677  1.00  0.00           H
ATOM   4785  HB2 CYS A 394     -1.900  -6.570  17.296  1.00  0.00           H
ATOM   4786  HB3 CYS A 394     -3.171  -7.743  17.469  1.00  0.00           H
ATOM   4787  N   PRO A 395     -1.269 -10.585  15.493  1.00 24.08           N
ATOM   4788  CA  PRO A 395     -1.532 -12.035  15.490  1.00 23.62           C
ATOM   4789  C   PRO A 395     -2.374 -12.470  16.703  1.00 23.97           C
ATOM   4790  O   PRO A 395     -2.016 -12.167  17.841  1.00 22.43           O
ATOM   4791  CB  PRO A 395     -0.146 -12.698  15.549  1.00 22.83           C
ATOM   4792  CG  PRO A 395      0.815 -11.667  14.998  1.00 22.60           C
ATOM   4793  CD  PRO A 395      0.159 -10.324  15.296  1.00 24.08           C
ATOM   4794  HA  PRO A 395     -2.029 -12.289  14.553  1.00  0.00           H
ATOM   4795  HB2 PRO A 395      0.148 -12.930  16.573  1.00  0.00           H
ATOM   4796  HB3 PRO A 395     -0.107 -13.634  14.993  1.00  0.00           H
ATOM   4797  HG2 PRO A 395      1.819 -11.766  15.408  1.00  0.00           H
ATOM   4798  HG3 PRO A 395      0.896 -11.785  13.920  1.00  0.00           H
ATOM   4799  HD2 PRO A 395      0.585  -9.902  16.206  1.00  0.00           H
ATOM   4800  HD3 PRO A 395      0.328  -9.632  14.473  1.00  0.00           H
ATOM   4801  N   LEU A 396     -3.501 -13.152  16.466  1.00 23.38           N
ATOM   4802  CA  LEU A 396     -4.470 -13.532  17.500  1.00 25.21           C
ATOM   4803  C   LEU A 396     -4.381 -15.022  17.864  1.00 27.18           C
ATOM   4804  O   LEU A 396     -5.243 -15.538  18.582  1.00 29.80           O
ATOM   4805  CB  LEU A 396     -5.902 -13.210  17.025  1.00 24.81           C
ATOM   4806  CG  LEU A 396     -6.155 -11.729  16.694  1.00 23.79           C
ATOM   4807  CD1 LEU A 396     -7.603 -11.544  16.237  1.00 23.36           C
ATOM   4808  CD2 LEU A 396     -5.825 -10.802  17.875  1.00 21.88           C
ATOM   4809  H   LEU A 396     -3.733 -13.319  15.500  1.00  0.00           H
ATOM   4810  HA  LEU A 396     -4.281 -12.986  18.425  1.00  0.00           H
ATOM   4811  HB2 LEU A 396     -6.151 -13.818  16.158  1.00  0.00           H
ATOM   4812  HB3 LEU A 396     -6.609 -13.506  17.801  1.00  0.00           H
ATOM   4813  HG  LEU A 396     -5.522 -11.434  15.856  1.00  0.00           H
ATOM   4814 HD11 LEU A 396     -7.803 -10.495  16.011  1.00  0.00           H
ATOM   4815 HD12 LEU A 396     -7.801 -12.119  15.333  1.00  0.00           H
ATOM   4816 HD13 LEU A 396     -8.306 -11.864  17.002  1.00  0.00           H
ATOM   4817 HD21 LEU A 396     -6.164  -9.786  17.682  1.00  0.00           H
ATOM   4818 HD22 LEU A 396     -6.292 -11.137  18.797  1.00  0.00           H
ATOM   4819 HD23 LEU A 396     -4.749 -10.741  18.043  1.00  0.00           H
ATOM   4820  N   ASP A 397     -3.326 -15.718  17.430  1.00 26.31           N
ATOM   4821  CA  ASP A 397     -2.938 -17.071  17.840  1.00 26.97           C
ATOM   4822  C   ASP A 397     -2.394 -17.025  19.292  1.00 27.26           C
ATOM   4823  O   ASP A 397     -2.564 -16.028  20.000  1.00 24.89           O
ATOM   4824  CB  ASP A 397     -1.850 -17.568  16.859  1.00 27.87           C
ATOM   4825  CG  ASP A 397     -0.540 -16.814  17.020  1.00 31.48           C
ATOM   4826  OD1 ASP A 397     -0.514 -15.643  16.613  1.00 33.62           O
ATOM   4827  OD2 ASP A 397      0.364 -17.363  17.680  1.00 32.96           O1-
ATOM   4828  H   ASP A 397     -2.580 -15.200  16.963  1.00  0.00           H
ATOM   4829  HA  ASP A 397     -3.802 -17.732  17.794  1.00  0.00           H
ATOM   4830  HB2 ASP A 397     -1.658 -18.631  17.004  1.00  0.00           H
ATOM   4831  HB3 ASP A 397     -2.182 -17.462  15.826  1.00  0.00           H
ATOM   4832  N   LYS A 398     -1.791 -18.110  19.778  1.00 27.55           N
ATOM   4833  CA  LYS A 398     -1.157 -18.195  21.089  1.00 28.98           C
ATOM   4834  C   LYS A 398      0.192 -18.938  20.995  1.00 28.03           C
ATOM   4835  O   LYS A 398      0.618 -19.534  21.985  1.00 27.56           O
ATOM   4836  CB  LYS A 398     -2.143 -18.782  22.141  1.00 32.65           C
ATOM   4837  CG  LYS A 398     -3.545 -18.126  22.236  1.00 38.44           C
ATOM   4838  CD  LYS A 398     -3.572 -16.732  22.899  1.00 40.86           C
ATOM   4839  CE  LYS A 398     -4.865 -15.938  22.607  1.00 42.41           C
ATOM   4840  NZ  LYS A 398     -4.736 -15.081  21.418  1.00 44.87           N1+
ATOM   4841  H   LYS A 398     -1.642 -18.930  19.175  1.00  0.00           H
ATOM   4842  HA  LYS A 398     -0.877 -17.191  21.415  1.00  0.00           H
ATOM   4843  HB2 LYS A 398     -2.277 -19.839  21.907  1.00  0.00           H
ATOM   4844  HB3 LYS A 398     -1.671 -18.764  23.125  1.00  0.00           H
ATOM   4845  HG2 LYS A 398     -4.008 -18.091  21.251  1.00  0.00           H
ATOM   4846  HG3 LYS A 398     -4.190 -18.785  22.819  1.00  0.00           H
ATOM   4847  HD2 LYS A 398     -3.474 -16.871  23.977  1.00  0.00           H
ATOM   4848  HD3 LYS A 398     -2.699 -16.141  22.614  1.00  0.00           H
ATOM   4849  HE2 LYS A 398     -5.718 -16.607  22.489  1.00  0.00           H
ATOM   4850  HE3 LYS A 398     -5.092 -15.283  23.448  1.00  0.00           H
ATOM   4851  HZ1 LYS A 398     -5.620 -14.665  21.118  1.00  0.00           H
ATOM   4852  HZ2 LYS A 398     -4.099 -14.315  21.660  1.00  0.00           H
ATOM   4853  HZ3 LYS A 398     -4.310 -15.563  20.632  1.00  0.00           H
ATOM   4854  N   GLU A 399      0.869 -18.920  19.837  1.00 29.00           N
ATOM   4855  CA  GLU A 399      2.043 -19.741  19.536  1.00 29.56           C
ATOM   4856  C   GLU A 399      3.094 -18.982  18.711  1.00 27.81           C
ATOM   4857  O   GLU A 399      4.216 -18.778  19.174  1.00 26.43           O
ATOM   4858  CB  GLU A 399      1.642 -21.105  18.923  1.00 34.33           C
ATOM   4859  CG  GLU A 399      0.572 -21.063  17.803  1.00 42.27           C
ATOM   4860  CD  GLU A 399     -0.807 -21.476  18.283  1.00 46.74           C
ATOM   4861  OE1 GLU A 399     -1.609 -20.626  18.741  1.00 49.38           O
ATOM   4862  OE2 GLU A 399     -1.139 -22.680  18.230  1.00 48.28           O1-
ATOM   4863  H   GLU A 399      0.522 -18.336  19.063  1.00  0.00           H
ATOM   4864  HA  GLU A 399      2.556 -19.966  20.473  1.00  0.00           H
ATOM   4865  HB2 GLU A 399      2.536 -21.593  18.534  1.00  0.00           H
ATOM   4866  HB3 GLU A 399      1.301 -21.760  19.727  1.00  0.00           H
ATOM   4867  HG2 GLU A 399      0.504 -20.082  17.336  1.00  0.00           H
ATOM   4868  HG3 GLU A 399      0.857 -21.753  17.008  1.00  0.00           H
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ATOM   4869  N   VAL A 400      2.723 -18.529  17.510  1.00 26.01           N
ATOM   4870  CA  VAL A 400      3.527 -17.756  16.566  1.00 24.53           C
ATOM   4871  C   VAL A 400      3.760 -16.352  17.149  1.00 24.42           C
ATOM   4872  O   VAL A 400      4.884 -15.855  17.088  1.00 22.04           O
ATOM   4873  CB  VAL A 400      2.792 -17.674  15.195  1.00 24.87           C
ATOM   4874  CG1 VAL A 400      3.592 -16.909  14.119  1.00 22.22           C
ATOM   4875  CG2 VAL A 400      2.413 -19.067  14.653  1.00 22.82           C
ATOM   4876  H   VAL A 400      1.712 -18.443  17.373  1.00  0.00           H
ATOM   4877  HA  VAL A 400      4.490 -18.253  16.438  1.00  0.00           H
ATOM   4878  HB  VAL A 400      1.861 -17.122  15.338  1.00  0.00           H
ATOM   4879 HG11 VAL A 400      3.046 -16.874  13.175  1.00  0.00           H
ATOM   4880 HG12 VAL A 400      3.777 -15.872  14.403  1.00  0.00           H
ATOM   4881 HG13 VAL A 400      4.554 -17.382  13.924  1.00  0.00           H
ATOM   4882 HG21 VAL A 400      1.923 -18.990  13.682  1.00  0.00           H
ATOM   4883 HG22 VAL A 400      3.294 -19.698  14.532  1.00  0.00           H
ATOM   4884 HG23 VAL A 400      1.720 -19.586  15.314  1.00  0.00           H
ATOM   4885  N   TYR A 401      2.734 -15.784  17.800  1.00 25.28           N
ATOM   4886  CA  TYR A 401      2.759 -14.557  18.596  1.00 27.50           C
ATOM   4887  C   TYR A 401      3.880 -14.583  19.656  1.00 27.74           C
ATOM   4888  O   TYR A 401      4.700 -13.667  19.752  1.00 28.01           O
ATOM   4889  CB  TYR A 401      1.357 -14.370  19.221  1.00 26.68           C
ATOM   4890  CG  TYR A 401      1.186 -13.229  20.211  1.00 28.89           C
ATOM   4891  CD1 TYR A 401      1.332 -13.464  21.595  1.00 27.82           C
ATOM   4892  CD2 TYR A 401      0.854 -11.935  19.757  1.00 27.03           C
ATOM   4893  CE1 TYR A 401      1.137 -12.420  22.518  1.00 26.44           C
ATOM   4894  CE2 TYR A 401      0.670 -10.890  20.684  1.00 26.20           C
ATOM   4895  CZ  TYR A 401      0.796 -11.133  22.065  1.00 27.15           C
ATOM   4896  OH  TYR A 401      0.559 -10.138  22.966  1.00 23.75           O
ATOM   4897  H   TYR A 401      1.825 -16.253  17.710  1.00  0.00           H
ATOM   4898  HA  TYR A 401      2.948 -13.732  17.913  1.00  0.00           H
ATOM   4899  HB2 TYR A 401      0.629 -14.224  18.424  1.00  0.00           H
ATOM   4900  HB3 TYR A 401      1.050 -15.292  19.717  1.00  0.00           H
ATOM   4901  HD1 TYR A 401      1.597 -14.445  21.963  1.00  0.00           H
ATOM   4902  HD2 TYR A 401      0.735 -11.736  18.700  1.00  0.00           H
ATOM   4903  HE1 TYR A 401      1.248 -12.606  23.576  1.00  0.00           H
ATOM   4904  HE2 TYR A 401      0.417  -9.903  20.334  1.00  0.00           H
ATOM   4905  HH  TYR A 401      0.408  -9.282  22.562  1.00  0.00           H
ATOM   4906  N   ASN A 402      3.947 -15.687  20.412  1.00 27.33           N
ATOM   4907  CA  ASN A 402      4.899 -15.884  21.510  1.00 29.34           C
ATOM   4908  C   ASN A 402      6.305 -16.242  21.002  1.00 27.72           C
ATOM   4909  O   ASN A 402      7.276 -16.061  21.730  1.00 27.54           O
ATOM   4910  CB  ASN A 402      4.426 -17.036  22.433  1.00 30.12           C
ATOM   4911  CG  ASN A 402      3.229 -16.660  23.306  1.00 33.27           C
ATOM   4912  OD1 ASN A 402      3.249 -15.657  24.006  1.00 33.60           O
ATOM   4913  ND2 ASN A 402      2.146 -17.428  23.285  1.00 34.63           N
ATOM   4914  H   ASN A 402      3.297 -16.426  20.198  1.00  0.00           H
ATOM   4915  HA  ASN A 402      4.986 -14.961  22.088  1.00  0.00           H
ATOM   4916  HB2 ASN A 402      4.213 -17.933  21.850  1.00  0.00           H
ATOM   4917  HB3 ASN A 402      5.228 -17.308  23.122  1.00  0.00           H
ATOM   4918 HD21 ASN A 402      2.078 -18.283  22.743  1.00  0.00           H
ATOM   4919 HD22 ASN A 402      1.392 -17.158  23.893  1.00  0.00           H
ATOM   4920  N   SER A 403      6.428 -16.733  19.763  1.00 27.84           N
ATOM   4921  CA  SER A 403      7.702 -17.124  19.159  1.00 28.74           C
ATOM   4922  C   SER A 403      8.379 -15.945  18.429  1.00 28.13           C
ATOM   4923  O   SER A 403      9.505 -16.093  17.961  1.00 27.53           O
ATOM   4924  CB  SER A 403      7.419 -18.209  18.099  1.00 28.94           C
ATOM   4925  OG  SER A 403      6.850 -19.366  18.691  1.00 35.87           O
ATOM   4926  H   SER A 403      5.592 -16.841  19.206  1.00  0.00           H
ATOM   4927  HA  SER A 403      8.392 -17.513  19.911  1.00  0.00           H
ATOM   4928  HB2 SER A 403      6.760 -17.837  17.315  1.00  0.00           H
ATOM   4929  HB3 SER A 403      8.348 -18.507  17.610  1.00  0.00           H
ATOM   4930  HG  SER A 403      5.969 -19.148  18.994  1.00  0.00           H
ATOM   4931  N   ASN A 404      7.701 -14.794  18.296  1.00 25.90           N
ATOM   4932  CA  ASN A 404      8.103 -13.685  17.424  1.00 25.37           C
ATOM   4933  C   ASN A 404      8.068 -12.332  18.137  1.00 25.69           C
ATOM   4934  O   ASN A 404      7.990 -11.299  17.479  1.00 25.02           O
ATOM   4935  CB  ASN A 404      7.346 -13.705  16.072  1.00 26.10           C
ATOM   4936  CG  ASN A 404      7.741 -14.870  15.164  1.00 26.26           C
ATOM   4937  OD1 ASN A 404      8.839 -14.915  14.612  1.00 29.36           O
ATOM   4938  ND2 ASN A 404      6.863 -15.854  15.027  1.00 28.99           N
ATOM   4939  H   ASN A 404      6.779 -14.742  18.709  1.00  0.00           H
ATOM   4940  HA  ASN A 404      9.163 -13.789  17.183  1.00  0.00           H
ATOM   4941  HB2 ASN A 404      6.270 -13.699  16.245  1.00  0.00           H
ATOM   4942  HB3 ASN A 404      7.545 -12.795  15.507  1.00  0.00           H
ATOM   4943 HD21 ASN A 404      6.000 -15.813  15.564  1.00  0.00           H
ATOM   4944 HD22 ASN A 404      7.079 -16.621  14.413  1.00  0.00           H
ATOM   4945  N   ASN A 405      8.149 -12.313  19.475  1.00 25.25           N
ATOM   4946  CA  ASN A 405      8.339 -11.122  20.327  1.00 26.77           C
ATOM   4947  C   ASN A 405      7.227 -10.072  20.129  1.00 26.11           C
ATOM   4948  O   ASN A 405      7.513  -8.878  20.068  1.00 25.19           O
ATOM   4949  CB  ASN A 405      9.716 -10.432  20.101  1.00 28.88           C
ATOM   4950  CG  ASN A 405     10.959 -11.296  20.272  1.00 29.98           C
ATOM   4951  OD1 ASN A 405     10.968 -12.272  21.014  1.00 31.34           O
ATOM   4952  ND2 ASN A 405     12.024 -10.948  19.562  1.00 32.27           N
ATOM   4953  H   ASN A 405      8.241 -13.211  19.931  1.00  0.00           H
ATOM   4954  HA  ASN A 405      8.286 -11.456  21.364  1.00  0.00           H
ATOM   4955  HB2 ASN A 405      9.734  -9.991  19.105  1.00  0.00           H
ATOM   4956  HB3 ASN A 405      9.829  -9.602  20.800  1.00  0.00           H
ATOM   4957 HD21 ASN A 405     11.979 -10.116  18.957  1.00  0.00           H
ATOM   4958 HD22 ASN A 405     12.872 -11.480  19.646  1.00  0.00           H
ATOM   4959  N   CYS A 406      5.977 -10.496  19.921  1.00 25.69           N
ATOM   4960  CA  CYS A 406      4.895  -9.623  19.474  1.00 25.23           C
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ATOM   4961  C   CYS A 406      4.396  -8.682  20.584  1.00 26.10           C
ATOM   4962  O   CYS A 406      3.482  -9.014  21.337  1.00 26.16           O
ATOM   4963  CB  CYS A 406      3.751 -10.501  18.958  1.00 27.05           C
ATOM   4964  SG  CYS A 406      4.077 -11.303  17.363  1.00 25.91           S
ATOM   4965  H   CYS A 406      5.792 -11.491  19.945  1.00  0.00           H
ATOM   4966  HA  CYS A 406      5.236  -8.998  18.652  1.00  0.00           H
ATOM   4967  HB2 CYS A 406      3.517 -11.269  19.696  1.00  0.00           H
ATOM   4968  HB3 CYS A 406      2.842  -9.912  18.837  1.00  0.00           H
ATOM   4969  N   GLU A 407      4.972  -7.475  20.641  1.00 25.27           N
ATOM   4970  CA  GLU A 407      4.663  -6.365  21.550  1.00 25.75           C
ATOM   4971  C   GLU A 407      3.279  -5.726  21.258  1.00 24.42           C
ATOM   4972  O   GLU A 407      3.174  -4.502  21.160  1.00 22.09           O
ATOM   4973  CB  GLU A 407      5.761  -5.286  21.363  1.00 29.18           C
ATOM   4974  CG  GLU A 407      7.214  -5.715  21.655  1.00 35.84           C
ATOM   4975  CD  GLU A 407      8.229  -4.873  20.886  1.00 38.75           C
ATOM   4976  OE1 GLU A 407      9.291  -5.433  20.532  1.00 41.17           O
ATOM   4977  OE2 GLU A 407      7.922  -3.695  20.595  1.00 43.63           O1-
ATOM   4978  H   GLU A 407      5.811  -7.363  20.080  1.00  0.00           H
ATOM   4979  HA  GLU A 407      4.669  -6.726  22.580  1.00  0.00           H
ATOM   4980  HB2 GLU A 407      5.698  -4.918  20.337  1.00  0.00           H
ATOM   4981  HB3 GLU A 407      5.551  -4.419  21.993  1.00  0.00           H
ATOM   4982  HG2 GLU A 407      7.427  -5.637  22.721  1.00  0.00           H
ATOM   4983  HG3 GLU A 407      7.382  -6.755  21.388  1.00  0.00           H
ATOM   4984  N   CYS A 408      2.220  -6.521  21.061  1.00 23.64           N
ATOM   4985  CA  CYS A 408      0.919  -6.059  20.583  1.00 21.06           C
ATOM   4986  C   CYS A 408     -0.256  -6.632  21.363  1.00 21.00           C
ATOM   4987  O   CYS A 408     -0.207  -7.740  21.905  1.00 19.91           O
ATOM   4988  CB  CYS A 408      0.797  -6.200  19.057  1.00 20.88           C
ATOM   4989  SG  CYS A 408      0.741  -7.859  18.319  1.00 22.25           S
ATOM   4990  H   CYS A 408      2.344  -7.519  21.220  1.00  0.00           H
ATOM   4991  HA  CYS A 408      0.861  -4.984  20.776  1.00  0.00           H
ATOM   4992  HB2 CYS A 408     -0.066  -5.636  18.700  1.00  0.00           H
ATOM   4993  HB3 CYS A 408      1.663  -5.719  18.630  1.00  0.00           H
ATOM   4994  N   ASP A 409     -1.321  -5.834  21.396  1.00 17.35           N
ATOM   4995  CA  ASP A 409     -2.523  -5.996  22.191  1.00 19.95           C
ATOM   4996  C   ASP A 409     -3.499  -6.887  21.407  1.00 21.68           C
ATOM   4997  O   ASP A 409     -4.211  -6.424  20.515  1.00 21.54           O
ATOM   4998  CB  ASP A 409     -3.167  -4.595  22.410  1.00 20.43           C
ATOM   4999  CG  ASP A 409     -2.169  -3.511  22.808  1.00 23.66           C
ATOM   5000  OD1 ASP A 409     -1.907  -3.351  24.013  1.00 21.49           O
ATOM   5001  OD2 ASP A 409     -1.575  -2.901  21.886  1.00 21.32           O1-
ATOM   5002  H   ASP A 409     -1.222  -4.903  21.003  1.00  0.00           H
ATOM   5003  HA  ASP A 409     -2.271  -6.435  23.158  1.00  0.00           H
ATOM   5004  HB2 ASP A 409     -3.638  -4.234  21.497  1.00  0.00           H
ATOM   5005  HB3 ASP A 409     -3.952  -4.645  23.165  1.00  0.00           H
ATOM   5006  N   GLN A 410     -3.592  -8.175  21.766  1.00 19.59           N
ATOM   5007  CA  GLN A 410     -4.488  -9.167  21.143  1.00 20.13           C
ATOM   5008  C   GLN A 410     -5.995  -8.923  21.413  1.00 21.87           C
ATOM   5009  O   GLN A 410     -6.834  -9.748  21.042  1.00 20.41           O
ATOM   5010  CB  GLN A 410     -4.126 -10.579  21.645  1.00 20.31           C
ATOM   5011  CG  GLN A 410     -2.742 -11.068  21.188  1.00 21.69           C
ATOM   5012  CD  GLN A 410     -2.621 -12.584  21.325  1.00 20.78           C
ATOM   5013  OE1 GLN A 410     -3.100 -13.178  22.290  1.00 24.03           O
ATOM   5014  NE2 GLN A 410     -2.099 -13.259  20.317  1.00 20.56           N
ATOM   5015  H   GLN A 410     -2.916  -8.504  22.441  1.00  0.00           H
ATOM   5016  HA  GLN A 410     -4.349  -9.123  20.060  1.00  0.00           H
ATOM   5017  HB2 GLN A 410     -4.194 -10.627  22.732  1.00  0.00           H
ATOM   5018  HB3 GLN A 410     -4.866 -11.288  21.269  1.00  0.00           H
ATOM   5019  HG2 GLN A 410     -2.567 -10.784  20.149  1.00  0.00           H
ATOM   5020  HG3 GLN A 410     -1.961 -10.588  21.777  1.00  0.00           H
ATOM   5021 HE21 GLN A 410     -1.790 -12.748  19.482  1.00  0.00           H
ATOM   5022 HE22 GLN A 410     -1.943 -14.261  20.339  1.00  0.00           H
ATOM   5023  N   GLY A 411     -6.334  -7.800  22.051  1.00 24.50           N
ATOM   5024  CA  GLY A 411     -7.679  -7.298  22.291  1.00 26.96           C
ATOM   5025  C   GLY A 411     -7.934  -5.965  21.579  1.00 27.55           C
ATOM   5026  O   GLY A 411     -9.045  -5.454  21.685  1.00 30.46           O
ATOM   5027  H   GLY A 411     -5.573  -7.179  22.287  1.00  0.00           H
ATOM   5028  HA2 GLY A 411     -8.442  -8.011  21.978  1.00  0.00           H
ATOM   5029  HA3 GLY A 411     -7.810  -7.143  23.362  1.00  0.00           H
ATOM   5030  N   ASN A 412     -6.956  -5.429  20.829  1.00 27.68           N
ATOM   5031  CA  ASN A 412     -7.034  -4.165  20.080  1.00 25.90           C
ATOM   5032  C   ASN A 412     -6.406  -4.291  18.683  1.00 24.16           C
ATOM   5033  O   ASN A 412     -5.916  -3.309  18.117  1.00 24.85           O
ATOM   5034  CB  ASN A 412     -6.555  -2.933  20.893  1.00 26.56           C
ATOM   5035  CG  ASN A 412     -7.464  -2.566  22.064  1.00 27.79           C
ATOM   5036  OD1 ASN A 412     -7.202  -2.932  23.206  1.00 32.66           O
ATOM   5037  ND2 ASN A 412     -8.537  -1.828  21.810  1.00 25.88           N
ATOM   5038  H   ASN A 412     -6.065  -5.911  20.752  1.00  0.00           H
ATOM   5039  HA  ASN A 412     -8.085  -3.983  19.846  1.00  0.00           H
ATOM   5040  HB2 ASN A 412     -5.548  -3.097  21.270  1.00  0.00           H
ATOM   5041  HB3 ASN A 412     -6.486  -2.055  20.249  1.00  0.00           H
ATOM   5042 HD21 ASN A 412     -8.788  -1.594  20.840  1.00  0.00           H
ATOM   5043 HD22 ASN A 412     -9.155  -1.605  22.569  1.00  0.00           H
ATOM   5044  N   ASP A 413     -6.453  -5.502  18.107  1.00 22.31           N
ATOM   5045  CA  ASP A 413     -6.188  -5.762  16.688  1.00 22.05           C
ATOM   5046  C   ASP A 413     -7.340  -5.149  15.878  1.00 21.82           C
ATOM   5047  O   ASP A 413     -8.502  -5.288  16.258  1.00 21.38           O
ATOM   5048  CB  ASP A 413     -6.119  -7.290  16.420  1.00 20.91           C
ATOM   5049  CG  ASP A 413     -6.254  -7.678  14.946  1.00 19.89           C
ATOM   5050  OD1 ASP A 413     -5.378  -7.265  14.150  1.00 19.55           O
ATOM   5051  OD2 ASP A 413     -7.302  -8.254  14.589  1.00 19.62           O1-
ATOM   5052  H   ASP A 413     -6.965  -6.212  18.602  1.00  0.00           H
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ATOM   5053  HA  ASP A 413      -5.246  -5.298  16.390  1.00  0.00           H
ATOM   5054  HB2 ASP A 413      -5.202  -7.719  16.808  1.00  0.00           H
ATOM   5055  HB3 ASP A 413      -6.939  -7.779  16.944  1.00  0.00           H
ATOM   5056  N   PHE A 414      -7.026  -4.492  14.763  1.00 21.02           N
ATOM   5057  CA  PHE A 414      -8.031  -3.917  13.895  1.00 18.26           C
ATOM   5058  C   PHE A 414      -8.542  -4.935  12.863  1.00 19.44           C
ATOM   5059  O   PHE A 414      -9.650  -4.736  12.370  1.00 21.11           O
ATOM   5060  CB  PHE A 414      -7.425  -2.713  13.153  1.00 18.35           C
ATOM   5061  CG  PHE A 414      -8.456  -1.889  12.403  1.00 17.60           C
ATOM   5062  CD1 PHE A 414      -9.379  -1.100  13.118  1.00 19.23           C
ATOM   5063  CD2 PHE A 414      -8.537  -1.958  10.999  1.00 17.55           C
ATOM   5064  CE1 PHE A 414     -10.370  -0.375  12.432  1.00 20.54           C
ATOM   5065  CE2 PHE A 414      -9.515  -1.221  10.314  1.00 16.66           C
ATOM   5066  CZ  PHE A 414     -10.432  -0.429  11.029  1.00 18.35           C
ATOM   5067  H   PHE A 414      -6.047  -4.407  14.493  1.00  0.00           H
ATOM   5068  HA  PHE A 414      -8.874  -3.562  14.489  1.00  0.00           H
ATOM   5069  HB2 PHE A 414      -6.938  -2.054  13.873  1.00  0.00           H
ATOM   5070  HB3 PHE A 414      -6.643  -3.038  12.464  1.00  0.00           H
ATOM   5071  HD1 PHE A 414      -9.327  -1.048  14.196  1.00  0.00           H
ATOM   5072  HD2 PHE A 414      -7.878  -2.599  10.437  1.00  0.00           H
ATOM   5073  HE1 PHE A 414     -11.072   0.236  12.980  1.00  0.00           H
ATOM   5074  HE2 PHE A 414      -9.563  -1.286   9.238  1.00  0.00           H
ATOM   5075  HZ  PHE A 414     -11.182   0.138  10.503  1.00  0.00           H
ATOM   5076  N   THR A 415      -7.802  -6.008  12.522  1.00 20.19           N
ATOM   5077  CA  THR A 415      -8.062  -6.923  11.394  1.00 20.23           C
ATOM   5078  C   THR A 415      -9.517  -7.429  11.321  1.00 22.22           C
ATOM   5079  O   THR A 415     -10.086  -7.559  10.238  1.00 22.79           O
ATOM   5080  CB  THR A 415      -7.074  -8.121  11.401  1.00 21.37           C
ATOM   5081  OG1 THR A 415      -5.737  -7.684  11.561  1.00 17.64           O
ATOM   5082  CG2 THR A 415      -7.131  -8.968  10.116  1.00 20.76           C
ATOM   5083  H   THR A 415      -6.977  -6.226  13.076  1.00  0.00           H
ATOM   5084  HA  THR A 415      -7.880  -6.344  10.487  1.00  0.00           H
ATOM   5085  HB  THR A 415      -7.303  -8.781  12.233  1.00  0.00           H
ATOM   5086  HG1 THR A 415      -5.595  -7.540  12.515  1.00  0.00           H
ATOM   5087 HG21 THR A 415      -6.527  -9.866  10.217  1.00  0.00           H
ATOM   5088 HG22 THR A 415      -8.137  -9.325   9.900  1.00  0.00           H
ATOM   5089 HG23 THR A 415      -6.776  -8.410   9.250  1.00  0.00           H
ATOM   5090  N   PHE A 416     -10.144  -7.666  12.474  1.00 22.70           N
ATOM   5091  CA  PHE A 416     -11.467  -8.270  12.549  1.00 23.45           C
ATOM   5092  C   PHE A 416     -12.518  -7.323  13.139  1.00 22.80           C
ATOM   5093  O   PHE A 416     -13.608  -7.787  13.467  1.00 25.25           O
ATOM   5094  CB  PHE A 416     -11.354  -9.617  13.286  1.00 20.24           C
ATOM   5095  CG  PHE A 416     -10.389 -10.577  12.613  1.00 20.62           C
ATOM   5096  CD1 PHE A 416     -10.754 -11.242  11.426  1.00 20.38           C
ATOM   5097  CD2 PHE A 416      -9.082 -10.724  13.117  1.00 18.91           C
ATOM   5098  CE1 PHE A 416      -9.805 -12.005  10.722  1.00 19.44           C
ATOM   5099  CE2 PHE A 416      -8.137 -11.504  12.426  1.00 18.21           C
ATOM   5100  CZ  PHE A 416      -8.496 -12.133  11.221  1.00 20.50           C
ATOM   5101  H   PHE A 416      -9.590  -7.570  13.321  1.00  0.00           H
ATOM   5102  HA  PHE A 416     -11.848  -8.495  11.553  1.00  0.00           H
ATOM   5103  HB2 PHE A 416     -11.029  -9.456  14.314  1.00  0.00           H
ATOM   5104  HB3 PHE A 416     -12.334 -10.092  13.337  1.00  0.00           H
ATOM   5105  HD1 PHE A 416     -11.746 -11.128  11.029  1.00  0.00           H
ATOM   5106  HD2 PHE A 416      -8.774 -10.179  13.998  1.00  0.00           H
ATOM   5107  HE1 PHE A 416     -10.068 -12.456   9.778  1.00  0.00           H
ATOM   5108  HE2 PHE A 416      -7.122 -11.563  12.796  1.00  0.00           H
ATOM   5109  HZ  PHE A 416      -7.753 -12.686  10.668  1.00  0.00           H
ATOM   5110  N   GLN A 417     -12.236  -6.016  13.273  1.00 23.60           N
ATOM   5111  CA  GLN A 417     -13.178  -5.004  13.773  1.00 22.99           C
ATOM   5112  C   GLN A 417     -14.254  -4.628  12.728  1.00 22.57           C
ATOM   5113  O   GLN A 417     -14.347  -5.244  11.665  1.00 22.49           O
ATOM   5114  CB  GLN A 417     -12.401  -3.755  14.234  1.00 22.97           C
ATOM   5115  CG  GLN A 417     -11.634  -3.999  15.548  1.00 23.29           C
ATOM   5116  CD  GLN A 417     -11.171  -2.734  16.277  1.00 26.35           C
ATOM   5117  OE1 GLN A 417     -10.532  -2.820  17.319  1.00 25.95           O
ATOM   5118  NE2 GLN A 417     -11.503  -1.545  15.788  1.00 24.11           N
ATOM   5119  H   GLN A 417     -11.320  -5.699  12.962  1.00  0.00           H
ATOM   5120  HA  GLN A 417     -13.722  -5.410  14.624  1.00  0.00           H
ATOM   5121  HB2 GLN A 417     -11.726  -3.393  13.457  1.00  0.00           H
ATOM   5122  HB3 GLN A 417     -13.112  -2.955  14.419  1.00  0.00           H
ATOM   5123  HG2 GLN A 417     -12.280  -4.525  16.249  1.00  0.00           H
ATOM   5124  HG3 GLN A 417     -10.781  -4.653  15.372  1.00  0.00           H
ATOM   5125 HE21 GLN A 417     -12.095  -1.444  14.969  1.00  0.00           H
ATOM   5126 HE22 GLN A 417     -11.212  -0.710  16.297  1.00  0.00           H
ATOM   5127  N   GLY A 418     -15.099  -3.634  13.029  1.00 22.92           N
ATOM   5128  CA  GLY A 418     -16.351  -3.378  12.318  1.00 21.05           C
ATOM   5129  C   GLY A 418     -16.217  -2.312  11.232  1.00 21.18           C
ATOM   5130  O   GLY A 418     -16.946  -2.377  10.247  1.00 21.14           O
ATOM   5131  H   GLY A 418     -14.944  -3.103  13.877  1.00  0.00           H
ATOM   5132  HA2 GLY A 418     -16.753  -4.293  11.878  1.00  0.00           H
ATOM   5133  HA3 GLY A 418     -17.092  -3.027  13.036  1.00  0.00           H
ATOM   5134  N   TYR A 419     -15.236  -1.410  11.347  1.00 20.25           N
ATOM   5135  CA  TYR A 419     -14.835  -0.491  10.277  1.00 21.27           C
ATOM   5136  C   TYR A 419     -13.730  -1.139   9.411  1.00 20.92           C
ATOM   5137  O   TYR A 419     -13.269  -0.568   8.423  1.00 19.73           O
ATOM   5138  CB  TYR A 419     -14.282   0.787  10.943  1.00 21.11           C
ATOM   5139  CG  TYR A 419     -14.310   2.028  10.072  1.00 22.25           C
ATOM   5140  CD1 TYR A 419     -15.481   2.807  10.025  1.00 23.37           C
ATOM   5141  CD2 TYR A 419     -13.180   2.427   9.332  1.00 21.83           C
ATOM   5142  CE1 TYR A 419     -15.511   4.001   9.288  1.00 23.61           C
ATOM   5143  CE2 TYR A 419     -13.221   3.598   8.554  1.00 24.89           C
ATOM   5144  CZ  TYR A 419     -14.385   4.391   8.551  1.00 22.99           C
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ATOM   5145  OH  TYR A 419     -14.422   5.566   7.871  1.00 26.03           O
ATOM   5146  H   TYR A 419     -14.712  -1.358  12.213  1.00  0.00           H
ATOM   5147  HA  TYR A 419     -15.690  -0.237   9.647  1.00  0.00           H
ATOM   5148  HB2 TYR A 419     -14.881   1.025  11.823  1.00  0.00           H
ATOM   5149  HB3 TYR A 419     -13.273   0.631  11.324  1.00  0.00           H
ATOM   5150  HD1 TYR A 419     -16.357   2.503  10.574  1.00  0.00           H
ATOM   5151  HD2 TYR A 419     -12.277   1.841   9.365  1.00  0.00           H
ATOM   5152  HE1 TYR A 419     -16.399   4.615   9.287  1.00  0.00           H
ATOM   5153  HE2 TYR A 419     -12.347   3.901   7.995  1.00  0.00           H
ATOM   5154  HH  TYR A 419     -13.880   5.544   7.063  1.00  0.00           H
ATOM   5155  N   SER A 420     -13.289  -2.343   9.786  1.00 19.72           N
ATOM   5156  CA  SER A 420     -12.233  -3.095   9.135  1.00 19.12           C
ATOM   5157  C   SER A 420     -12.815  -3.994   8.039  1.00 19.14           C
ATOM   5158  O   SER A 420     -14.020  -4.270   8.002  1.00 18.72           O
ATOM   5159  CB  SER A 420     -11.564  -3.972  10.201  1.00 20.59           C
ATOM   5160  OG  SER A 420     -10.382  -4.589   9.741  1.00 18.07           O
ATOM   5161  H   SER A 420     -13.795  -2.801  10.526  1.00  0.00           H
ATOM   5162  HA  SER A 420     -11.498  -2.414   8.715  1.00  0.00           H
ATOM   5163  HB2 SER A 420     -11.312  -3.353  11.063  1.00  0.00           H
ATOM   5164  HB3 SER A 420     -12.225  -4.759  10.553  1.00  0.00           H
ATOM   5165  HG  SER A 420      -9.859  -4.742  10.526  1.00  0.00           H
ATOM   5166  N   CYS A 421     -11.915  -4.479   7.183  1.00 20.98           N
ATOM   5167  CA  CYS A 421     -12.182  -5.388   6.080  1.00 19.83           C
ATOM   5168  C   CYS A 421     -11.225  -6.589   6.077  1.00 21.04           C
ATOM   5169  O   CYS A 421     -11.127  -7.296   5.075  1.00 23.25           O
ATOM   5170  CB  CYS A 421     -12.250  -4.629   4.744  1.00 20.05           C
ATOM   5171  SG  CYS A 421     -13.718  -3.584   4.518  1.00 22.53           S
ATOM   5172  H   CYS A 421     -10.943  -4.232   7.361  1.00  0.00           H
ATOM   5173  HA  CYS A 421     -13.163  -5.839   6.228  1.00  0.00           H
ATOM   5174  HB2 CYS A 421     -11.359  -4.017   4.605  1.00  0.00           H
ATOM   5175  HB3 CYS A 421     -12.250  -5.341   3.920  1.00  0.00           H
ATOM   5176  N   GLY A 422     -10.559  -6.896   7.199  1.00 20.19           N
ATOM   5177  CA  GLY A 422      -9.586  -7.988   7.241  1.00 22.14           C
ATOM   5178  C   GLY A 422     -10.280  -9.334   7.451  1.00 22.26           C
ATOM   5179  O   GLY A 422      -9.861 -10.331   6.863  1.00 19.11           O
ATOM   5180  H   GLY A 422     -10.632  -6.292   8.012  1.00  0.00           H
ATOM   5181  HA2 GLY A 422      -9.007  -8.040   6.319  1.00  0.00           H
ATOM   5182  HA3 GLY A 422      -8.866  -7.810   8.037  1.00  0.00           H
ATOM   5183  N   LYS A 423     -11.427  -9.357   8.151  1.00 24.00           N
ATOM   5184  CA  LYS A 423     -12.340 -10.499   8.142  1.00 25.44           C
ATOM   5185  C   LYS A 423     -12.880 -10.723   6.718  1.00 25.53           C
ATOM   5186  O   LYS A 423     -12.859 -11.848   6.232  1.00 26.66           O
ATOM   5187  CB  LYS A 423     -13.521 -10.306   9.123  1.00 26.73           C
ATOM   5188  CG  LYS A 423     -14.245 -11.646   9.400  1.00 31.23           C
ATOM   5189  CD  LYS A 423     -15.657 -11.560  10.003  1.00 34.49           C
ATOM   5190  CE  LYS A 423     -16.660 -10.655   9.266  1.00 36.84           C
ATOM   5191  NZ  LYS A 423     -16.826 -10.971   7.836  1.00 39.84           N1+
ATOM   5192  H   LYS A 423     -11.700  -8.488   8.589  1.00  0.00           H
ATOM   5193  HA  LYS A 423     -11.768 -11.379   8.439  1.00  0.00           H
ATOM   5194  HB2 LYS A 423     -13.188  -9.861  10.059  1.00  0.00           H
ATOM   5195  HB3 LYS A 423     -14.210  -9.579   8.701  1.00  0.00           H
ATOM   5196  HG2 LYS A 423     -14.314 -12.221   8.480  1.00  0.00           H
ATOM   5197  HG3 LYS A 423     -13.618 -12.257  10.049  1.00  0.00           H
ATOM   5198  HD2 LYS A 423     -16.070 -12.569  10.033  1.00  0.00           H
ATOM   5199  HD3 LYS A 423     -15.577 -11.230  11.039  1.00  0.00           H
ATOM   5200  HE2 LYS A 423     -17.638 -10.726   9.743  1.00  0.00           H
ATOM   5201  HE3 LYS A 423     -16.363  -9.612   9.363  1.00  0.00           H
ATOM   5202  HZ1 LYS A 423     -16.564 -10.120   7.316  1.00  0.00           H
ATOM   5203  HZ2 LYS A 423     -16.302 -11.803   7.496  1.00  0.00           H
ATOM   5204  HZ3 LYS A 423     -17.786 -11.139   7.600  1.00  0.00           H
ATOM   5205  N   GLU A 424     -13.321  -9.648   6.055  1.00 23.69           N
ATOM   5206  CA  GLU A 424     -13.903  -9.622   4.716  1.00 23.47           C
ATOM   5207  C   GLU A 424     -12.909 -10.159   3.674  1.00 23.14           C
ATOM   5208  O   GLU A 424     -13.304 -10.960   2.833  1.00 18.61           O
ATOM   5209  CB  GLU A 424     -14.348  -8.180   4.370  1.00 24.63           C
ATOM   5210  CG  GLU A 424     -15.619  -7.663   5.081  1.00 25.57           C
ATOM   5211  CD  GLU A 424     -15.682  -7.897   6.583  1.00 28.25           C
ATOM   5212  OE1 GLU A 424     -14.744  -7.544   7.330  1.00 27.71           O
ATOM   5213  OE2 GLU A 424     -16.664  -8.520   7.044  1.00 33.30           O1-
ATOM   5214  H   GLU A 424     -13.387  -8.774   6.574  1.00  0.00           H
ATOM   5215  HA  GLU A 424     -14.775 -10.278   4.704  1.00  0.00           H
ATOM   5216  HB2 GLU A 424     -13.538  -7.479   4.541  1.00  0.00           H
ATOM   5217  HB3 GLU A 424     -14.539  -8.119   3.297  1.00  0.00           H
ATOM   5218  HG2 GLU A 424     -15.723  -6.594   4.902  1.00  0.00           H
ATOM   5219  HG3 GLU A 424     -16.495  -8.129   4.628  1.00  0.00           H
ATOM   5220  N   TYR A 425     -11.618  -9.809   3.786  1.00 21.56           N
ATOM   5221  CA  TYR A 425     -10.521 -10.410   3.025  1.00 21.96           C
ATOM   5222  C   TYR A 425     -10.449 -11.932   3.247  1.00 23.23           C
ATOM   5223  O   TYR A 425     -10.539 -12.707   2.293  1.00 21.80           O
ATOM   5224  CB  TYR A 425      -9.175  -9.736   3.380  1.00 21.92           C
ATOM   5225  CG  TYR A 425      -7.997 -10.416   2.707  1.00 20.41           C
ATOM   5226  CD1 TYR A 425      -7.845 -10.300   1.313  1.00 20.32           C
ATOM   5227  CD2 TYR A 425      -7.130 -11.255   3.443  1.00 20.40           C
ATOM   5228  CE1 TYR A 425      -6.860 -11.048   0.650  1.00 17.64           C
ATOM   5229  CE2 TYR A 425      -6.139 -12.001   2.775  1.00 18.10           C
ATOM   5230  CZ  TYR A 425      -6.018 -11.905   1.377  1.00 19.87           C
ATOM   5231  OH  TYR A 425      -5.126 -12.670   0.694  1.00 16.52           O
ATOM   5232  H   TYR A 425     -11.388  -9.080   4.457  1.00  0.00           H
ATOM   5233  HA  TYR A 425     -10.720 -10.250   1.964  1.00  0.00           H
ATOM   5234  HB2 TYR A 425      -9.188  -8.687   3.080  1.00  0.00           H
ATOM   5235  HB3 TYR A 425      -9.015  -9.735   4.457  1.00  0.00           H
ATOM   5236  HD1 TYR A 425      -8.507  -9.664   0.743  1.00  0.00           H
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ATOM   5237  HD2 TYR A 425      -7.243 -11.359   4.513  1.00  0.00           H
ATOM   5238  HE1 TYR A 425      -6.763 -10.983  -0.422  1.00  0.00           H
ATOM   5239  HE2 TYR A 425      -5.502 -12.667   3.337  1.00  0.00           H
ATOM   5240  HH  TYR A 425      -4.339 -12.933   1.155  1.00  0.00           H
ATOM   5241  N   TYR A 426     -10.332 -12.359   4.513  1.00 21.99           N
ATOM   5242  CA  TYR A 426     -10.271 -13.761   4.922  1.00 23.50           C
ATOM   5243  C   TYR A 426     -11.479 -14.582   4.434  1.00 23.34           C
ATOM   5244  O   TYR A 426     -11.315 -15.727   4.013  1.00 24.05           O
ATOM   5245  CB  TYR A 426     -10.146 -13.857   6.458  1.00 22.73           C
ATOM   5246  CG  TYR A 426      -8.749 -14.078   7.008  1.00 23.27           C
ATOM   5247  CD1 TYR A 426      -8.038 -13.032   7.628  1.00 22.47           C
ATOM   5248  CD2 TYR A 426      -8.186 -15.370   6.984  1.00 22.87           C
ATOM   5249  CE1 TYR A 426      -6.799 -13.285   8.242  1.00 21.19           C
ATOM   5250  CE2 TYR A 426      -6.927 -15.614   7.560  1.00 22.99           C
ATOM   5251  CZ  TYR A 426      -6.245 -14.577   8.217  1.00 22.86           C
ATOM   5252  OH  TYR A 426      -5.068 -14.825   8.855  1.00 23.29           O
ATOM   5253  H   TYR A 426     -10.278 -11.652   5.240  1.00  0.00           H
ATOM   5254  HA  TYR A 426      -9.384 -14.202   4.462  1.00  0.00           H
ATOM   5255  HB2 TYR A 426     -10.584 -12.981   6.937  1.00  0.00           H
ATOM   5256  HB3 TYR A 426     -10.741 -14.694   6.822  1.00  0.00           H
ATOM   5257  HD1 TYR A 426      -8.439 -12.035   7.682  1.00  0.00           H
ATOM   5258  HD2 TYR A 426      -8.739 -16.190   6.563  1.00  0.00           H
ATOM   5259  HE1 TYR A 426      -6.286 -12.478   8.743  1.00  0.00           H
ATOM   5260  HE2 TYR A 426      -6.510 -16.610   7.533  1.00  0.00           H
ATOM   5261  HH  TYR A 426      -4.597 -15.576   8.518  1.00  0.00           H
ATOM   5262  N   ASP A 427     -12.682 -14.000   4.483  1.00 22.93           N
ATOM   5263  CA  ASP A 427     -13.949 -14.622   4.093  1.00 24.60           C
ATOM   5264  C   ASP A 427     -14.129 -14.625   2.565  1.00 23.59           C
ATOM   5265  O   ASP A 427     -14.642 -15.607   2.032  1.00 22.45           O
ATOM   5266  CB  ASP A 427     -15.148 -13.884   4.745  1.00 25.71           C
ATOM   5267  CG  ASP A 427     -15.216 -13.967   6.271  1.00 25.52           C
ATOM   5268  OD1 ASP A 427     -14.525 -14.826   6.867  1.00 30.54           O
ATOM   5269  OD2 ASP A 427     -15.964 -13.163   6.872  1.00 26.99          O1-
ATOM   5270  H   ASP A 427     -12.730 -13.072   4.901  1.00  0.00           H
ATOM   5271  HA  ASP A 427     -13.954 -15.662   4.425  1.00  0.00           H
ATOM   5272  HB2 ASP A 427     -15.137 -12.831   4.459  1.00  0.00           H
ATOM   5273  HB3 ASP A 427     -16.084 -14.293   4.363  1.00  0.00           H
ATOM   5274  N   ALA A 428     -13.659 -13.591   1.848  1.00 23.60           N
ATOM   5275  CA  ALA A 428     -13.656 -13.520   0.380  1.00 22.71           C
ATOM   5276  C   ALA A 428     -12.631 -14.492  -0.230  1.00 22.99           C
ATOM   5277  O   ALA A 428     -12.843 -15.042  -1.318  1.00 21.89           O
ATOM   5278  CB  ALA A 428     -13.295 -12.093  -0.064  1.00 22.18           C
ATOM   5279  H   ALA A 428     -13.307 -12.776   2.346  1.00  0.00           H
ATOM   5280  HA  ALA A 428     -14.648 -13.776   0.005  1.00  0.00           H
ATOM   5281  HB1 ALA A 428     -13.239 -12.017  -1.150  1.00  0.00           H
ATOM   5282  HB2 ALA A 428     -14.047 -11.376   0.267  1.00  0.00           H
ATOM   5283  HB3 ALA A 428     -12.331 -11.773   0.334  1.00  0.00           H
ATOM   5284  N   GLN A 429     -11.522 -14.738   0.481  1.00 21.48           N
ATOM   5285  CA  GLN A 429     -10.587 -15.813   0.181  1.00 23.47           C
ATOM   5286  C   GLN A 429     -11.245 -17.172   0.488  1.00 23.16           C
ATOM   5287  O   GLN A 429     -11.348 -18.010  -0.412  1.00 24.44           O
ATOM   5288  CB  GLN A 429      -9.279 -15.641   0.988  1.00 24.04           C
ATOM   5289  CG  GLN A 429      -8.331 -14.543   0.454  1.00 23.93           C
ATOM   5290  CD  GLN A 429      -7.613 -14.930  -0.844  1.00 27.30           C
ATOM   5291  OE1 GLN A 429      -8.110 -15.739  -1.622  1.00 28.29           O
ATOM   5292  NE2 GLN A 429      -6.438 -14.376  -1.095  1.00 21.69           N
ATOM   5293  H   GLN A 429     -11.346 -14.151   1.293  1.00  0.00           H
ATOM   5294  HA  GLN A 429     -10.378 -15.785  -0.884  1.00  0.00           H
ATOM   5295  HB2 GLN A 429      -9.507 -15.437   2.033  1.00  0.00           H
ATOM   5296  HB3 GLN A 429      -8.729 -16.583   0.985  1.00  0.00           H
ATOM   5297  HG2 GLN A 429      -8.867 -13.606   0.301  1.00  0.00           H
ATOM   5298  HG3 GLN A 429      -7.575 -14.339   1.213  1.00  0.00           H
ATOM   5299 HE21 GLN A 429      -5.995 -13.718  -0.451  1.00  0.00           H
ATOM   5300 HE22 GLN A 429      -5.927 -14.652  -1.938  1.00  0.00           H
ATOM   5301  N   GLY A 430     -11.747 -17.339   1.716  1.00 24.56           N
ATOM   5302  CA  GLY A 430     -12.430 -18.531   2.223  1.00 25.89           C
ATOM   5303  C   GLY A 430     -11.662 -19.192   3.378  1.00 27.73           C
ATOM   5304  O   GLY A 430     -11.907 -20.349   3.706  1.00 27.40           O
ATOM   5305  H   GLY A 430     -11.672 -16.557   2.359  1.00  0.00           H
ATOM   5306  HA2 GLY A 430     -13.418 -18.239   2.581  1.00  0.00           H
ATOM   5307  HA3 GLY A 430     -12.587 -19.270   1.436  1.00  0.00           H
ATOM   5308  N   LEU A 431     -10.697 -18.479   3.967  1.00 26.14           N
ATOM   5309  CA  LEU A 431      -9.677 -19.000   4.866  1.00 27.26           C
ATOM   5310  C   LEU A 431     -10.101 -18.898   6.345  1.00 25.34           C
ATOM   5311  O   LEU A 431     -10.879 -18.023   6.752  1.00 25.57           O
ATOM   5312  CB  LEU A 431      -8.401 -18.153   4.653  1.00 26.32           C
ATOM   5313  CG  LEU A 431      -7.674 -18.398   3.313  1.00 26.85           C
ATOM   5314  CD1 LEU A 431      -6.663 -17.272   3.035  1.00 28.01           C
ATOM   5315  CD2 LEU A 431      -6.972 -19.765   3.268  1.00 26.82           C
ATOM   5316  H   LEU A 431     -10.664 -17.488   3.756  1.00  0.00           H
ATOM   5317  HA  LEU A 431      -9.480 -20.048   4.634  1.00  0.00           H
ATOM   5318  HB2 LEU A 431      -8.682 -17.101   4.682  1.00  0.00           H
ATOM   5319  HB3 LEU A 431      -7.693 -18.300   5.473  1.00  0.00           H
ATOM   5320  HG  LEU A 431      -8.409 -18.375   2.508  1.00  0.00           H
ATOM   5321 HD11 LEU A 431      -6.187 -17.401   2.062  1.00  0.00           H
ATOM   5322 HD12 LEU A 431      -7.142 -16.293   3.030  1.00  0.00           H
ATOM   5323 HD13 LEU A 431      -5.874 -17.248   3.787  1.00  0.00           H
ATOM   5324 HD21 LEU A 431      -6.445 -19.899   2.322  1.00  0.00           H
ATOM   5325 HD22 LEU A 431      -6.237 -19.865   4.067  1.00  0.00           H
ATOM   5326 HD23 LEU A 431      -7.679 -20.590   3.354  1.00  0.00           H
ATOM   5327  N   VAL A 432      -9.538 -19.802   7.157  1.00 24.67           N
ATOM   5328  CA  VAL A 432      -9.654 -19.884   8.613  1.00 24.91           C
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ATOM   5329  C   VAL A 432      -8.811 -18.751   9.235  1.00 24.65           C
ATOM   5330  O   VAL A 432      -7.762 -18.398   8.705  1.00 23.35           O
ATOM   5331  CB  VAL A 432      -9.142 -21.277   9.082  1.00 26.40           C
ATOM   5332  CG1 VAL A 432      -9.282 -21.495  10.603  1.00 27.65           C
ATOM   5333  CG2 VAL A 432      -9.843 -22.435   8.341  1.00 27.01           C
ATOM   5334  H   VAL A 432      -8.859 -20.420   6.739  1.00  0.00           H
ATOM   5335  HA  VAL A 432     -10.703 -19.759   8.887  1.00  0.00           H
ATOM   5336  HB  VAL A 432      -8.076 -21.343   8.848  1.00  0.00           H
ATOM   5337 HG11 VAL A 432      -8.938 -22.490  10.888  1.00  0.00           H
ATOM   5338 HG12 VAL A 432      -8.683 -20.787  11.177  1.00  0.00           H
ATOM   5339 HG13 VAL A 432     -10.318 -21.401  10.927  1.00  0.00           H
ATOM   5340 HG21 VAL A 432      -9.488 -23.403   8.698  1.00  0.00           H
ATOM   5341 HG22 VAL A 432     -10.923 -22.406   8.486  1.00  0.00           H
ATOM   5342 HG23 VAL A 432      -9.654 -22.415   7.267  1.00  0.00           H
ATOM   5343  N   LYS A 433      -9.299 -18.171  10.334  1.00 25.23           N
ATOM   5344  CA  LYS A 433      -8.802 -16.941  10.952  1.00 27.01           C
ATOM   5345  C   LYS A 433      -8.215 -17.246  12.353  1.00 28.68           C
ATOM   5346  O   LYS A 433      -8.632 -18.236  12.963  1.00 29.12           O
ATOM   5347  CB  LYS A 433     -10.015 -15.990  11.029  1.00 26.07           C
ATOM   5348  CG  LYS A 433     -10.430 -15.445   9.647  1.00 25.95           C
ATOM   5349  CD  LYS A 433     -11.890 -14.968   9.564  1.00 27.29           C
ATOM   5350  CE  LYS A 433     -12.884 -16.112   9.288  1.00 27.92           C
ATOM   5351  NZ  LYS A 433     -12.935 -16.491   7.864  1.00 27.82           N1+
ATOM   5352  H   LYS A 433     -10.044 -18.636  10.826  1.00  0.00           H
ATOM   5353  HA  LYS A 433      -8.026 -16.493  10.327  1.00  0.00           H
ATOM   5354  HB2 LYS A 433     -10.849 -16.512  11.496  1.00  0.00           H
ATOM   5355  HB3 LYS A 433      -9.795 -15.143  11.679  1.00  0.00           H
ATOM   5356  HG2 LYS A 433      -9.761 -14.618   9.421  1.00  0.00           H
ATOM   5357  HG3 LYS A 433     -10.246 -16.178   8.861  1.00  0.00           H
ATOM   5358  HD2 LYS A 433     -12.147 -14.469  10.499  1.00  0.00           H
ATOM   5359  HD3 LYS A 433     -11.998 -14.200   8.796  1.00  0.00           H
ATOM   5360  HE2 LYS A 433     -12.646 -16.985   9.897  1.00  0.00           H
ATOM   5361  HE3 LYS A 433     -13.889 -15.794   9.571  1.00  0.00           H
ATOM   5362  HZ1 LYS A 433     -13.497 -17.311   7.722  1.00  0.00           H
ATOM   5363  HZ2 LYS A 433     -13.462 -15.737   7.364  1.00  0.00           H
ATOM   5364  HZ3 LYS A 433     -12.030 -16.654   7.434  1.00  0.00           H
ATOM   5365  N   PRO A 434      -7.262 -16.434  12.873  1.00 29.99           N
ATOM   5366  CA  PRO A 434      -6.515 -16.724  14.109  1.00 31.36           C
ATOM   5367  C   PRO A 434      -7.347 -16.583  15.403  1.00 32.47           C
ATOM   5368  O   PRO A 434      -8.270 -15.774  15.485  1.00 33.32           O
ATOM   5369  CB  PRO A 434      -5.314 -15.767  14.073  1.00 31.69           C
ATOM   5370  CG  PRO A 434      -5.784 -14.583  13.241  1.00 29.64           C
ATOM   5371  CD  PRO A 434      -6.789 -15.190  12.262  1.00 30.38           C
ATOM   5372  HA  PRO A 434      -6.148 -17.751  14.051  1.00  0.00           H
ATOM   5373  HB2 PRO A 434      -4.949 -15.475  15.055  1.00  0.00           H
ATOM   5374  HB3 PRO A 434      -4.481 -16.251  13.561  1.00  0.00           H
ATOM   5375  HG2 PRO A 434      -6.293 -13.855  13.874  1.00  0.00           H
ATOM   5376  HG3 PRO A 434      -4.967 -14.062  12.738  1.00  0.00           H
ATOM   5377  HD2 PRO A 434      -7.609 -14.503  12.072  1.00  0.00           H
ATOM   5378  HD3 PRO A 434      -6.292 -15.404  11.314  1.00  0.00           H
ATOM   5379  N   LYS A 435      -6.992 -17.408  16.398  1.00 34.56           N
ATOM   5380  CA  LYS A 435      -7.689 -17.860  17.614  1.00 36.88           C
ATOM   5381  C   LYS A 435      -8.684 -16.974  18.401  1.00 37.85           C
ATOM   5382  O   LYS A 435      -9.409 -17.526  19.228  1.00 39.08           O
ATOM   5383  CB  LYS A 435      -6.706 -18.596  18.553  1.00 38.28           C
ATOM   5384  CG  LYS A 435      -6.124 -19.899  17.979  1.00 40.34           C
ATOM   5385  CD  LYS A 435      -5.133 -20.552  18.954  1.00 42.32           C
ATOM   5386  CE  LYS A 435      -4.557 -21.878  18.434  1.00 43.22           C
ATOM   5387  NZ  LYS A 435      -3.469 -22.342  19.299  1.00 42.23           N1+
ATOM   5388  H   LYS A 435      -6.139 -17.911  16.212  1.00  0.00           H
ATOM   5389  HA  LYS A 435      -8.356 -18.632  17.227  1.00  0.00           H
ATOM   5390  HB2 LYS A 435      -5.899 -17.923  18.837  1.00  0.00           H
ATOM   5391  HB3 LYS A 435      -7.210 -18.842  19.490  1.00  0.00           H
ATOM   5392  HG2 LYS A 435      -6.935 -20.593  17.755  1.00  0.00           H
ATOM   5393  HG3 LYS A 435      -5.616 -19.700  17.034  1.00  0.00           H
ATOM   5394  HD2 LYS A 435      -4.314 -19.853  19.136  1.00  0.00           H
ATOM   5395  HD3 LYS A 435      -5.617 -20.715  19.918  1.00  0.00           H
ATOM   5396  HE2 LYS A 435      -5.328 -22.646  18.358  1.00  0.00           H
ATOM   5397  HE3 LYS A 435      -4.138 -21.737  17.436  1.00  0.00           H
ATOM   5398  HZ1 LYS A 435      -2.885 -23.049  18.849  1.00  0.00           H
ATOM   5399  HZ2 LYS A 435      -2.740 -21.602  19.260  1.00  0.00           H
ATOM   5400  HZ3 LYS A 435      -3.685 -22.571  20.249  1.00  0.00           H
ATOM   5401  N   ASN A 436      -8.770 -15.657  18.185  1.00 38.38           N
ATOM   5402  CA  ASN A 436      -9.761 -14.786  18.837  1.00 38.54           C
ATOM   5403  C   ASN A 436     -10.427 -13.753  17.920  1.00 36.60           C
ATOM   5404  O   ASN A 436     -11.065 -12.825  18.418  1.00 35.38           O
ATOM   5405  CB  ASN A 436      -9.381 -14.308  20.263  1.00 41.89           C
ATOM   5406  CG  ASN A 436      -8.155 -13.399  20.374  1.00 46.16           C
ATOM   5407  OD1 ASN A 436      -7.053 -13.869  20.654  1.00 46.58           O
ATOM   5408  ND2 ASN A 436      -8.353 -12.091  20.247  1.00 48.00           N
ATOM   5409  H   ASN A 436      -8.175 -15.269  17.461  1.00  0.00           H
ATOM   5410  HA  ASN A 436     -10.628 -15.423  19.020  1.00  0.00           H
ATOM   5411  HB2 ASN A 436     -10.230 -13.798  20.720  1.00  0.00           H
ATOM   5412  HB3 ASN A 436      -9.205 -15.181  20.892  1.00  0.00           H
ATOM   5413 HD21 ASN A 436      -9.258 -11.724  19.995  1.00  0.00           H
ATOM   5414 HD22 ASN A 436      -7.601 -11.422  20.422  1.00  0.00           H
ATOM   5415  N   TRP A 437     -10.335 -13.955  16.596  1.00 33.69           N
ATOM   5416  CA  TRP A 437     -10.873 -13.121  15.511  1.00 32.40           C
ATOM   5417  C   TRP A 437     -12.321 -12.631  15.707  1.00 31.88           C
ATOM   5418  O   TRP A 437     -12.639 -11.470  15.466  1.00 31.51           O
ATOM   5419  CB  TRP A 437     -10.718 -13.870  14.167  1.00 31.53           C
ATOM   5420  CG  TRP A 437     -11.587 -15.080  13.943  1.00 29.81           C
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ATOM   5421  CD1 TRP A 437     -11.288 -16.354  14.284  1.00 30.15           C
ATOM   5422  CD2 TRP A 437     -12.910 -15.143  13.321  1.00 29.74           C
ATOM   5423  NE1 TRP A 437     -12.321 -17.192  13.920  1.00 29.97           N
ATOM   5424  CE3 TRP A 437     -13.789 -14.185  12.764  1.00 28.47           C
ATOM   5425  CE2 TRP A 437     -13.352 -16.501  13.324  1.00 28.86           C
ATOM   5426  CZ3 TRP A 437     -15.044 -14.562  12.244  1.00 29.95           C
ATOM   5427  CZ2 TRP A 437     -14.596 -16.890  12.797  1.00 30.78           C
ATOM   5428  CH2 TRP A 437     -15.447 -15.911  12.254  1.00 28.37           C
ATOM   5429  H   TRP A 437      -9.746 -14.726  16.294  1.00  0.00           H
ATOM   5430  HA  TRP A 437     -10.251 -12.226  15.467  1.00  0.00           H
ATOM   5431  HB2 TRP A 437     -10.931 -13.181  13.352  1.00  0.00           H
ATOM   5432  HB3 TRP A 437      -9.675 -14.150  14.023  1.00  0.00           H
ATOM   5433  HD1 TRP A 437     -10.372 -16.669  14.760  1.00  0.00           H
ATOM   5434  HE1 TRP A 437     -12.282 -18.190  14.085  1.00  0.00           H
ATOM   5435  HE3 TRP A 437     -13.492 -13.146  12.749  1.00  0.00           H
ATOM   5436  HZ3 TRP A 437     -15.703 -13.810  11.839  1.00  0.00           H
ATOM   5437  HZ2 TRP A 437     -14.900 -17.927  12.814  1.00  0.00           H
ATOM   5438  HH2 TRP A 437     -16.408 -16.193  11.848  1.00  0.00           H
ATOM   5439  N   LYS A 438     -13.214 -13.530  16.143  1.00 30.82           N
ATOM   5440  CA  LYS A 438     -14.659 -13.306  16.172  1.00 31.39           C
ATOM   5441  C   LYS A 438     -15.047 -12.223  17.200  1.00 29.84           C
ATOM   5442  O   LYS A 438     -16.020 -11.506  16.981  1.00 28.51           O
ATOM   5443  CB  LYS A 438     -15.362 -14.656  16.480  1.00 33.89           C
ATOM   5444  CG  LYS A 438     -16.799 -14.832  15.928  1.00 35.72           C
ATOM   5445  CD  LYS A 438     -17.836 -13.869  16.531  1.00 37.55           C
ATOM   5446  CE  LYS A 438     -19.302 -14.297  16.394  1.00 37.38           C
ATOM   5447  NZ  LYS A 438     -20.171 -13.348  17.109  1.00 33.68           N1+
ATOM   5448  H   LYS A 438     -12.865 -14.463  16.300  1.00  0.00           H
ATOM   5449  HA  LYS A 438     -14.960 -12.960  15.181  1.00  0.00           H
ATOM   5450  HB2 LYS A 438     -14.770 -15.462  16.042  1.00  0.00           H
ATOM   5451  HB3 LYS A 438     -15.352 -14.847  17.554  1.00  0.00           H
ATOM   5452  HG2 LYS A 438     -16.794 -14.740  14.841  1.00  0.00           H
ATOM   5453  HG3 LYS A 438     -17.106 -15.858  16.138  1.00  0.00           H
ATOM   5454  HD2 LYS A 438     -17.607 -13.733  17.589  1.00  0.00           H
ATOM   5455  HD3 LYS A 438     -17.735 -12.897  16.051  1.00  0.00           H
ATOM   5456  HE2 LYS A 438     -19.593 -14.345  15.344  1.00  0.00           H
ATOM   5457  HE3 LYS A 438     -19.448 -15.289  16.824  1.00  0.00           H
ATOM   5458  HZ1 LYS A 438     -21.145 -13.594  17.060  1.00  0.00           H
ATOM   5459  HZ2 LYS A 438     -19.893 -13.391  18.118  1.00  0.00           H
ATOM   5460  HZ3 LYS A 438     -20.020 -12.394  16.812  1.00  0.00           H
ATOM   5461  N   LYS A 439     -14.273 -12.052  18.283  1.00 29.46           N
ATOM   5462  CA  LYS A 439     -14.569 -11.118  19.375  1.00 32.01           C
ATOM   5463  C   LYS A 439     -14.631  -9.642  18.948  1.00 31.47           C
ATOM   5464  O   LYS A 439     -15.294  -8.840  19.604  1.00 31.96           O
ATOM   5465  CB  LYS A 439     -13.526 -11.286  20.502  1.00 33.79           C
ATOM   5466  CG  LYS A 439     -13.617 -12.613  21.286  1.00 37.29           C
ATOM   5467  CD  LYS A 439     -15.000 -12.931  21.891  1.00 37.29           C
ATOM   5468  CE  LYS A 439     -15.580 -11.822  22.791  1.00 40.03           C
ATOM   5469  NZ  LYS A 439     -16.950 -12.142  23.222  1.00 40.12           N1+
ATOM   5470  H   LYS A 439     -13.395 -12.554  18.316  1.00  0.00           H
ATOM   5471  HA  LYS A 439     -15.568 -11.349  19.747  1.00  0.00           H
ATOM   5472  HB2 LYS A 439     -12.522 -11.182  20.083  1.00  0.00           H
ATOM   5473  HB3 LYS A 439     -13.611 -10.457  21.206  1.00  0.00           H
ATOM   5474  HG2 LYS A 439     -13.321 -13.433  20.630  1.00  0.00           H
ATOM   5475  HG3 LYS A 439     -12.871 -12.595  22.082  1.00  0.00           H
ATOM   5476  HD2 LYS A 439     -15.698 -13.153  21.081  1.00  0.00           H
ATOM   5477  HD3 LYS A 439     -14.922 -13.858  22.461  1.00  0.00           H
ATOM   5478  HE2 LYS A 439     -14.945 -11.661  23.663  1.00  0.00           H
ATOM   5479  HE3 LYS A 439     -15.631 -10.875  22.251  1.00  0.00           H
ATOM   5480  HZ1 LYS A 439     -17.366 -11.389  23.744  1.00  0.00           H
ATOM   5481  HZ2 LYS A 439     -17.529 -12.255  22.350  1.00  0.00           H
ATOM   5482  HZ3 LYS A 439     -17.008 -13.012  23.723  1.00  0.00           H
ATOM   5483  N   PHE A 440     -13.986  -9.301  17.833  1.00 29.67           N
ATOM   5484  CA  PHE A 440     -13.938  -7.958  17.276  1.00 30.46           C
ATOM   5485  C   PHE A 440     -15.165  -7.662  16.384  1.00 32.12           C
ATOM   5486  O   PHE A 440     -15.450  -6.499  16.115  1.00 32.41           O
ATOM   5487  CB  PHE A 440     -12.647  -7.868  16.457  1.00 27.41           C
ATOM   5488  CG  PHE A 440     -11.386  -7.966  17.292  1.00 25.90           C
ATOM   5489  CD1 PHE A 440     -10.909  -6.818  17.954  1.00 25.42           C
ATOM   5490  CD2 PHE A 440     -10.682  -9.184  17.411  1.00 24.33           C
ATOM   5491  CE1 PHE A 440      -9.733  -6.881  18.716  1.00 23.50           C
ATOM   5492  CE2 PHE A 440      -9.510  -9.246  18.189  1.00 24.72           C
ATOM   5493  CZ  PHE A 440      -9.032  -8.094  18.838  1.00 23.12           C
ATOM   5494  H   PHE A 440     -13.449 -10.011  17.353  1.00  0.00           H
ATOM   5495  HA  PHE A 440     -13.908  -7.212  18.073  1.00  0.00           H
ATOM   5496  HB2 PHE A 440     -12.635  -8.647  15.698  1.00  0.00           H
ATOM   5497  HB3 PHE A 440     -12.608  -6.914  15.936  1.00  0.00           H
ATOM   5498  HD1 PHE A 440     -11.417  -5.870  17.866  1.00  0.00           H
ATOM   5499  HD2 PHE A 440     -11.021 -10.069  16.896  1.00  0.00           H
ATOM   5500  HE1 PHE A 440      -9.368  -5.976  19.177  1.00  0.00           H
ATOM   5501  HE2 PHE A 440      -8.954 -10.164  18.269  1.00  0.00           H
ATOM   5502  HZ  PHE A 440      -8.115  -8.136  19.404  1.00  0.00           H
ATOM   5503  N   ARG A 441     -15.967  -8.678  16.020  1.00 33.77           N
ATOM   5504  CA  ARG A 441     -17.342  -8.519  15.532  1.00 36.52           C
ATOM   5505  C   ARG A 441     -18.293  -8.991  16.655  1.00 38.32           C
ATOM   5506  O   ARG A 441     -19.223  -9.771  16.424  1.00 39.68           O
ATOM   5507  CB  ARG A 441     -17.580  -9.300  14.211  1.00 36.16           C
ATOM   5508  CG  ARG A 441     -16.685  -8.923  13.008  1.00 36.35           C
ATOM   5509  CD  ARG A 441     -16.749  -7.453  12.528  1.00 37.85           C
ATOM   5510  NE  ARG A 441     -17.364  -7.300  11.191  1.00 37.46           N
ATOM   5511  CZ  ARG A 441     -16.762  -7.098  10.006  1.00 38.15           C
ATOM   5512  NH1 ARG A 441     -15.442  -7.022   9.856  1.00 39.40           N
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ATOM   5513  NH2 ARG A 441     -17.545  -7.004   8.944  1.00 37.27          N1+
ATOM   5514  H   ARG A 441     -15.713  -9.603  16.351  1.00  0.00           H
ATOM   5515  HA  ARG A 441     -17.579  -7.468  15.365  1.00  0.00           H
ATOM   5516  HB2 ARG A 441     -17.458 -10.367  14.407  1.00  0.00           H
ATOM   5517  HB3 ARG A 441     -18.621  -9.171  13.911  1.00  0.00           H
ATOM   5518  HG2 ARG A 441     -15.655  -9.172  13.261  1.00  0.00           H
ATOM   5519  HG3 ARG A 441     -16.933  -9.583  12.178  1.00  0.00           H
ATOM   5520  HD2 ARG A 441     -17.287  -6.820  13.232  1.00  0.00           H
ATOM   5521  HD3 ARG A 441     -15.745  -7.053  12.497  1.00  0.00           H
ATOM   5522  HE  ARG A 441     -18.374  -7.235  11.174  1.00  0.00           H
ATOM   5523 HH11 ARG A 441     -14.865  -6.572  10.574  1.00  0.00           H
ATOM   5524 HH12 ARG A 441     -15.043  -7.063   8.888  1.00  0.00           H
ATOM   5525 HH21 ARG A 441     -17.454  -6.085   8.468  1.00  0.00           H
ATOM   5526 HH22 ARG A 441     -17.262  -7.636   8.154  1.00  0.00           H
ATOM   5527  N   GLU A 442     -18.016  -8.521  17.879  1.00 40.76           N
ATOM   5528  CA  GLU A 442     -18.830  -8.588  19.092  1.00 41.35           C
ATOM   5529  C   GLU A 442     -18.610  -7.312  19.912  1.00 40.88           C
ATOM   5530  O   GLU A 442     -19.572  -6.696  20.359  1.00 41.44           O
ATOM   5531  CB  GLU A 442     -18.579  -9.864  19.925  1.00 43.85           C
ATOM   5532  CG  GLU A 442     -18.904 -11.161  19.175  1.00 47.68           C
ATOM   5533  CD  GLU A 442     -18.865 -12.413  20.029  1.00 49.70           C
ATOM   5534  OE1 GLU A 442     -18.274 -12.384  21.129  1.00 49.65           O
ATOM   5535  OE2 GLU A 442     -19.398 -13.420  19.517  1.00 50.39          O1-
ATOM   5536  H   GLU A 442     -17.231  -7.887  17.931  1.00  0.00           H
ATOM   5537  HA  GLU A 442     -19.880  -8.579  18.790  1.00  0.00           H
ATOM   5538  HB2 GLU A 442     -17.547  -9.893  20.272  1.00  0.00           H
ATOM   5539  HB3 GLU A 442     -19.193  -9.815  20.825  1.00  0.00           H
ATOM   5540  HG2 GLU A 442     -19.901 -11.073  18.745  1.00  0.00           H
ATOM   5541  HG3 GLU A 442     -18.203 -11.302  18.356  1.00  0.00           H
ATOM   5542  N   NMA A 442A    -17.345  -6.910  20.089  1.00  0.00           N
ATOM   5543  CA  NMA A 442A    -16.972  -5.676  20.765  1.00  0.00           C
ATOM   5544  H   NMA A 442A    -16.591  -7.530  19.797  1.00  0.00           H
ATOM   5545 1HA  NMA A 442A    -15.887  -5.571  20.788  1.00  0.00           H
ATOM   5546 2HA  NMA A 442A    -17.386  -4.811  20.245  1.00  0.00           H
ATOM   5547 3HA  NMA A 442A    -17.341  -5.666  21.791  1.00  0.00           H
TER    5548      NMA A 442A
HETATM 5549  C1  MMA A 901      -6.655   6.476   6.725  1.00 38.63           C
HETATM 5550  C2  MMA A 901      -6.079   7.375   5.642  1.00 39.79           C
HETATM 5551  O1  MMA A 901      -7.361   7.308   7.611  1.00 38.68           O
HETATM 5552  C3  MMA A 901      -7.198   7.885   4.732  1.00 38.55           C
HETATM 5553  C7  MMA A 901      -8.040   6.588   8.636  1.00 39.29           C
HETATM 5554  O2  MMA A 901      -4.943   6.745   5.031  1.00 42.66           O
HETATM 5555  C4  MMA A 901      -8.116   6.787   4.195  1.00 38.26           C
HETATM 5556  O3  MMA A 901      -6.760   8.824   3.800  1.00 36.39           O
HETATM 5557  C5  MMA A 901      -8.580   5.977   5.416  1.00 38.04           C
HETATM 5558  O4  MMA A 901      -9.180   7.483   3.600  1.00 36.12           O
HETATM 5559  C6  MMA A 901      -9.418   4.774   5.100  1.00 39.02           C
HETATM 5560  O5  MMA A 901      -7.461   5.482   6.169  1.00 38.49           O
HETATM 5561  O6  MMA A 901      -9.941   4.310   6.322  1.00 37.72           O
HETATM 5562  H1  MMA A 901      -5.845   5.948   7.247  1.00  0.00           H
HETATM 5563  H2  MMA A 901      -5.642   8.257   6.120  1.00  0.00           H
HETATM 5564  H3  MMA A 901      -7.839   8.450   5.426  1.00  0.00           H
HETATM 5565  H71 MMA A 901      -8.615   7.319   9.205  1.00  0.00           H
HETATM 5566  H72 MMA A 901      -8.699   5.825   8.211  1.00  0.00           H
HETATM 5567  H73 MMA A 901      -7.322   6.116   9.317  1.00  0.00           H
HETATM 5568  H4  MMA A 901      -7.603   6.133   3.475  1.00  0.00           H
HETATM 5569  HO3 MMA A 901      -6.380   8.432   2.991  1.00  0.00           H
HETATM 5570  H5  MMA A 901      -9.170   6.640   6.061  1.00  0.00           H
HETATM 5571  HO4 MMA A 901      -9.831   6.903   3.126  1.00  0.00           H
HETATM 5572  H61 MMA A 901     -10.205   5.078   4.401  1.00  0.00           H
HETATM 5573  H62 MMA A 901      -8.780   4.026   4.614  1.00  0.00           H
HETATM 5574  HO6 MMA A 901     -10.610   3.641   6.120  1.00  0.00           H
HETATM 5575  C1  0MA   2      -5.034   5.650   4.089  0.00  0.00           C
HETATM 5576  C2  0MA   2      -3.688   4.926   4.155  0.00  0.00           C
HETATM 5577  O2  0MA   2      -3.843   3.726   3.443  0.00  0.00           O
HETATM 5578  C3  0MA   2      -2.573   5.757   3.512  0.00  0.00           C
HETATM 5579  O3  0MA   2      -1.426   4.945   3.530  0.00  0.00           O
HETATM 5580  C4  0MA   2      -2.994   6.123   2.092  0.00  0.00           C
HETATM 5581  O4  0MA   2      -1.982   6.893   1.484  0.00  0.00           O
HETATM 5582  C5  0MA   2      -4.304   6.906   2.198  0.00  0.00           C
HETATM 5583  O5  0MA   2      -5.331   6.114   2.819  0.00  0.00           O
HETATM 5584  C6  0MA   2      -4.899   7.350   0.878  0.00  0.00           C
HETATM 5585  O6  0MA   2      -6.189   7.905   1.086  0.00  0.00           O
HETATM 5586  H1  0MA   2      -5.845   4.983   4.383  0.00  0.00           H
HETATM 5587  H2  0MA   2      -3.446   4.718   5.207  0.00  0.00           H
HETATM 5588  H2O 0MA   2      -2.949   3.449   3.189  0.00  0.00           H
HETATM 5589  H3  0MA   2      -2.397   6.679   4.082  0.00  0.00           H
HETATM 5590  H3O 0MA   2      -0.625   5.490   3.640  0.00  0.00           H
HETATM 5591  H4  0MA   2      -3.165   5.195   1.535  0.00  0.00           H
HETATM 5592  H4O 0MA   2      -2.086   6.795   0.500  0.00  0.00           H
HETATM 5593  H5  0MA   2      -4.132   7.807   2.798  0.00  0.00           H
HETATM 5594  H61 0MA   2      -4.945   6.496   0.188  0.00  0.00           H
HETATM 5595  H62 0MA   2      -4.270   8.124   0.436  0.00  0.00           H
HETATM 5596  H6O 0MA   2      -6.807   7.171   1.210  0.00  0.00           H
HETATM 5597  O   SPC   5      -1.837  -0.716  20.454  1.00  0.00           O
HETATM 5598  H1  SPC   5      -1.804  -1.564  21.017  1.00  0.00           H
HETATM 5599  H2  SPC   5      -1.672  -0.970  19.487  1.00  0.00           H
HETATM 5600  O   SPC   9      -3.626   8.580  14.871  1.00  0.00           O
HETATM 5601  H1  SPC   9      -3.008   9.352  14.676  1.00  0.00           H
HETATM 5602  H2  SPC   9      -3.323   8.137  15.722  1.00  0.00           H
HETATM 5603  O   SPC  12      -7.892   6.525  17.714  1.00  0.00           O
HETATM 5604  H1  SPC  12      -8.553   6.014  17.149  1.00  0.00           H
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HETATM 5605  H2  SPC    12      -7.804   7.461  17.347  1.00  0.00           H
HETATM 5606  O   SPC    13      -3.093   5.254  18.235  1.00  0.00           O
HETATM 5607  H1  SPC    13      -2.769   6.164  17.946  1.00  0.00           H
HETATM 5608  H2  SPC    13      -4.074   5.326  18.475  1.00  0.00           H
HETATM 5609  O   SPC    14       4.904   2.342  21.992  1.00  0.00           O
HETATM 5610  H1  SPC    14       4.006   2.245  22.442  1.00  0.00           H
HETATM 5611  H2  SPC    14       5.257   1.415  21.791  1.00  0.00           H
HETATM 5612  O   SPC    15       2.150   7.496  17.049  1.00  0.00           O
HETATM 5613  H1  SPC    15       2.931   8.005  17.439  1.00  0.00           H
HETATM 5614  H2  SPC    15       1.750   8.071  16.314  1.00  0.00           H
HETATM 5615  O   SPC    17       4.246   9.230  17.519  1.00  0.00           O
HETATM 5616  H1  SPC    17       4.547   9.240  16.557  1.00  0.00           H
HETATM 5617  H2  SPC    17       5.005   8.876  18.086  1.00  0.00           H
HETATM 5618  O   SPC    19      -5.813   2.848  19.663  1.00  0.00           O
HETATM 5619  H1  SPC    19      -6.186   2.585  20.556  1.00  0.00           H
HETATM 5620  H2  SPC    19      -5.012   2.261  19.467  1.00  0.00           H
HETATM 5621  O   SPC    21      -5.026   8.224  18.163  1.00  0.00           O
HETATM 5622  H1  SPC    21      -5.255   7.371  18.652  1.00  0.00           H
HETATM 5623  H2  SPC    21      -5.849   8.531  17.661  1.00  0.00           H
HETATM 5624  O   SPC    22      -7.265   3.049  17.299  1.00  0.00           O
HETATM 5625  H1  SPC    22      -6.483   3.093  16.663  1.00  0.00           H
HETATM 5626  H2  SPC    22      -6.900   3.053  18.241  1.00  0.00           H
HETATM 5627  O   SPC    26       6.295   7.893  18.791  1.00  0.00           O
HETATM 5628  H1  SPC    26       6.279   7.610  19.753  1.00  0.00           H
HETATM 5629  H2  SPC    26       6.105   7.079  18.214  1.00  0.00           H
HETATM 5630  O   SPC    31      -0.304   6.134  16.819  1.00  0.00           O
HETATM 5631  H1  SPC    31       0.554   6.625  17.019  1.00  0.00           H
HETATM 5632  H2  SPC    31      -1.079   6.751  17.015  1.00  0.00           H
HETATM 5633  O   SPC    32       5.741   5.772  17.257  1.00  0.00           O
HETATM 5634  H1  SPC    32       6.499   5.345  16.748  1.00  0.00           H
HETATM 5635  H2  SPC    32       4.865   5.430  16.889  1.00  0.00           H
HETATM 5636  O   SPC    34       1.379   4.755  21.996  1.00  0.00           O
HETATM 5637  H1  SPC    34       1.275   5.318  21.168  1.00  0.00           H
HETATM 5638  H2  SPC    34       0.496   4.295  22.184  1.00  0.00           H
HETATM 5639  O   SPC    35       0.537  -1.961  23.223  1.00  0.00           O
HETATM 5640  H1  SPC    35      -0.219  -2.332  22.653  1.00  0.00           H
HETATM 5641  H2  SPC    35       0.350  -2.231  24.171  1.00  0.00           H
HETATM 5642  O   SPC    37      -1.915   3.292  19.654  1.00  0.00           O
HETATM 5643  H1  SPC    37      -2.539   2.499  19.584  1.00  0.00           H
HETATM 5644  H2  SPC    37      -2.351   4.084  19.196  1.00  0.00           H
HETATM 5645  O   SPC    38       1.941   5.698  19.320  1.00  0.00           O
HETATM 5646  H1  SPC    38       2.842   5.459  19.712  1.00  0.00           H
HETATM 5647  H2  SPC    38       2.073   6.378  18.590  1.00  0.00           H
HETATM 5648  O   SPC    39       3.959   4.719  20.942  1.00  0.00           O
HETATM 5649  H1  SPC    39       3.156   4.790  21.548  1.00  0.00           H
HETATM 5650  H2  SPC    39       4.544   3.966  21.277  1.00  0.00           H
HETATM 5651  O   SPC    41      -5.688   5.563  18.922  1.00  0.00           O
HETATM 5652  H1  SPC    41      -6.574   5.847  18.517  1.00  0.00           H
HETATM 5653  H2  SPC    41      -5.787   4.627  19.288  1.00  0.00           H
HETATM 5654  O   SPC    44       3.053  -1.888  21.990  1.00  0.00           O
HETATM 5655  H1  SPC    44       3.162  -2.832  21.650  1.00  0.00           H
HETATM 5656  H2  SPC    44       2.181  -1.837  22.498  1.00  0.00           H
HETATM 5657  O   SPC    46       3.309   5.172  16.102  1.00  0.00           O
HETATM 5658  H1  SPC    46       2.821   6.010  16.383  1.00  0.00           H
HETATM 5659  H2  SPC    46       3.456   5.199  15.103  1.00  0.00           H
HETATM 5660  O   SPC    52       2.211   2.084  22.435  1.00  0.00           O
HETATM 5661  H1  SPC    52       1.414   1.468  22.524  1.00  0.00           H
HETATM 5662  H2  SPC    52       1.887   3.037  22.496  1.00  0.00           H
HETATM 5663  O   SPC    53      -7.187   8.987  16.674  1.00  0.00           O
HETATM 5664  H1  SPC    53      -7.590   9.913  16.705  1.00  0.00           H
HETATM 5665  H2  SPC    53      -6.841   8.828  15.737  1.00  0.00           H
HETATM 5666  O   SPC    55      -2.495   7.794  17.342  1.00  0.00           O
HETATM 5667  H1  SPC    55      -1.980   8.668  17.349  1.00  0.00           H
HETATM 5668  H2  SPC    55      -3.420   7.971  17.720  1.00  0.00           H
HETATM 5669  O   SPC    57       5.203  -0.263  21.237  1.00  0.00           O
HETATM 5670  H1  SPC    57       6.004  -0.753  20.869  1.00  0.00           H
HETATM 5671  H2  SPC    57       4.549  -0.937  21.612  1.00  0.00           H
HETATM 5672  O   SPC    59      -0.007   0.462  22.103  1.00  0.00           O
HETATM 5673  H1  SPC    59      -0.711   0.157  21.442  1.00  0.00           H
HETATM 5674  H2  SPC    59       0.253  -0.341  22.662  1.00  0.00           H
HETATM 5675  O   SPC    61      -0.780   3.145  22.147  1.00  0.00           O
HETATM 5676  H1  SPC    61      -0.639   2.159  22.309  1.00  0.00           H
HETATM 5677  H2  SPC    61      -1.321   3.255  21.302  1.00  0.00           H
HETATM 5678  O   SPC    62       0.767   3.236  19.127  1.00  0.00           O
HETATM 5679  H1  SPC    62       1.098   4.192  19.145  1.00  0.00           H
HETATM 5680  H2  SPC    62      -0.224   3.234  19.332  1.00  0.00           H
HETATM 5681  O   SPC    65      -3.587   1.163  19.364  1.00  0.00           O
HETATM 5682  H1  SPC    65      -3.507   0.730  18.450  1.00  0.00           H
HETATM 5683  H2  SPC    65      -3.140   0.548  20.031  1.00  0.00           H
HETATM 5684  O   SPC   384       1.161   1.669 -20.803  1.00  0.00           O
HETATM 5685  H1  SPC   384       0.370   1.026 -20.730  1.00  0.00           H
HETATM 5686  H2  SPC   384       0.814   2.531 -21.176  1.00  0.00           H
HETATM 5687  O   SPC   406       6.001   9.607 -15.907  1.00  0.00           O
HETATM 5688  H1  SPC   406       6.082  10.609 -15.877  1.00  0.00           H
HETATM 5689  H2  SPC   406       6.762   9.219 -15.363  1.00  0.00           H
HETATM 5690  O   SPC   447      -0.087   8.496 -16.291  1.00  0.00           O
HETATM 5691  H1  SPC   447      -0.607   8.076 -17.059  1.00  0.00           H
HETATM 5692  H2  SPC   447      -0.638   9.265 -15.926  1.00  0.00           H
HETATM 5693  O   SPC   454      -7.249  22.071   5.723  1.00  0.00           O
HETATM 5694  H1  SPC   454      -7.421  21.100   5.925  1.00  0.00           H
HETATM 5695  H2  SPC   454      -7.697  22.633   6.432  1.00  0.00           H
HETATM 5696  O   SPC   455       5.615  27.045  -7.094  1.00  0.00           O
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HETATM 5697  H1  SPC   455       6.483  27.308  -7.540  1.00  0.00           H
HETATM 5698  H2  SPC   455       5.766  26.170  -6.609  1.00  0.00           H
HETATM 5699  O   SPC   457       4.511  21.834  -0.160  1.00  0.00           O
HETATM 5700  H1  SPC   457       4.139  21.168  -0.831  1.00  0.00           H
HETATM 5701  H2  SPC   457       3.762  22.431   0.161  1.00  0.00           H
HETATM 5702  O   SPC   458      -0.551  17.525   2.768  1.00  0.00           O
HETATM 5703  H1  SPC   458      -0.689  16.531   2.834  1.00  0.00           H
HETATM 5704  H2  SPC   458      -0.373  17.760   1.801  1.00  0.00           H
HETATM 5705  O   SPC   459       6.207  23.338  -8.430  1.00  0.00           O
HETATM 5706  H1  SPC   459       5.808  22.426  -8.605  1.00  0.00           H
HETATM 5707  H2  SPC   459       5.598  24.035  -8.843  1.00  0.00           H
HETATM 5708  O   SPC   460      -0.085  25.777  -5.202  1.00  0.00           O
HETATM 5709  H1  SPC   460       0.266  24.967  -4.708  1.00  0.00           H
HETATM 5710  H2  SPC   460      -1.078  25.861  -5.015  1.00  0.00           H
HETATM 5711  O   SPC   461      -3.260  18.236   6.847  1.00  0.00           O
HETATM 5712  H1  SPC   461      -3.167  18.287   5.843  1.00  0.00           H
HETATM 5713  H2  SPC   461      -3.931  18.931   7.150  1.00  0.00           H
HETATM 5714  O   SPC   462      -8.357  23.201   7.985  1.00  0.00           O
HETATM 5715  H1  SPC   462      -9.078  23.856   8.220  1.00  0.00           H
HETATM 5716  H2  SPC   462      -8.653  22.274   8.262  1.00  0.00           H
HETATM 5717  O   SPC   463       8.117  23.216   1.017  1.00  0.00           O
HETATM 5718  H1  SPC   463       8.754  22.621   1.540  1.00  0.00           H
HETATM 5719  H2  SPC   463       8.579  23.501   0.162  1.00  0.00           H
HETATM 5720  O   SPC   464       4.859  23.176  -4.241  1.00  0.00           O
HETATM 5721  H1  SPC   464       4.204  23.885  -3.936  1.00  0.00           H
HETATM 5722  H2  SPC   464       5.438  22.925  -3.451  1.00  0.00           H
HETATM 5723  O   SPC   466      -3.662  23.350   7.406  1.00  0.00           O
HETATM 5724  H1  SPC   466      -4.212  23.227   6.567  1.00  0.00           H
HETATM 5725  H2  SPC   466      -2.846  23.896   7.163  1.00  0.00           H
HETATM 5726  O   SPC   467      -0.931  19.670   7.120  1.00  0.00           O
HETATM 5727  H1  SPC   467      -1.071  20.395   7.812  1.00  0.00           H
HETATM 5728  H2  SPC   467      -1.763  19.097   7.088  1.00  0.00           H
HETATM 5729  O   SPC   468       7.798  28.445  -0.923  1.00  0.00           O
HETATM 5730  H1  SPC   468       8.493  27.776  -0.618  1.00  0.00           H
HETATM 5731  H2  SPC   468       7.743  28.416  -1.932  1.00  0.00           H
HETATM 5732  O   SPC   469       7.892  28.286  -3.636  1.00  0.00           O
HETATM 5733  H1  SPC   469       7.957  27.390  -4.104  1.00  0.00           H
HETATM 5734  H2  SPC   469       8.809  28.711  -3.639  1.00  0.00           H
HETATM 5735  O   SPC   470      -3.983  24.053   0.296  1.00  0.00           O
HETATM 5736  H1  SPC   470      -4.238  24.206  -0.663  1.00  0.00           H
HETATM 5737  H2  SPC   470      -4.814  24.133   0.871  1.00  0.00           H
HETATM 5738  O   SPC   471       3.384  26.329   0.752  1.00  0.00           O
HETATM 5739  H1  SPC   471       4.257  26.838   0.738  1.00  0.00           H
HETATM 5740  H2  SPC   471       2.840  26.586  -0.063  1.00  0.00           H
HETATM 5741  O   SPC   472      -5.432  19.529   4.543  1.00  0.00           O
HETATM 5742  H1  SPC   472      -4.468  19.279   4.398  1.00  0.00           H
HETATM 5743  H2  SPC   472      -5.643  20.343   3.989  1.00  0.00           H
HETATM 5744  O   SPC   473       5.912  27.383   0.716  1.00  0.00           O
HETATM 5745  H1  SPC   473       6.473  27.953   0.095  1.00  0.00           H
HETATM 5746  H2  SPC   473       6.530  26.763   1.224  1.00  0.00           H
HETATM 5747  O   SPC   475       3.338  25.089  -3.189  1.00  0.00           O
HETATM 5748  H1  SPC   475       2.833  25.944  -3.382  1.00  0.00           H
HETATM 5749  H2  SPC   475       4.035  25.282  -2.484  1.00  0.00           H
HETATM 5750  O   SPC   476      -3.502  26.585  -7.350  1.00  0.00           O
HETATM 5751  H1  SPC   476      -3.174  25.983  -8.089  1.00  0.00           H
HETATM 5752  H2  SPC   476      -4.002  27.353  -7.754  1.00  0.00           H
HETATM 5753  O   SPC   477      -1.960  25.310   1.648  1.00  0.00           O
HETATM 5754  H1  SPC   477      -2.684  24.938   1.049  1.00  0.00           H
HETATM 5755  H2  SPC   477      -2.305  25.298   2.602  1.00  0.00           H
HETATM 5756  O   SPC   478       6.631  24.024   7.077  1.00  0.00           O
HETATM 5757  H1  SPC   478       7.472  24.395   7.499  1.00  0.00           H
HETATM 5758  H2  SPC   478       5.838  24.368   7.594  1.00  0.00           H
HETATM 5759  O   SPC   479       6.227  24.627  -6.045  1.00  0.00           O
HETATM 5760  H1  SPC   479       6.286  24.083  -6.896  1.00  0.00           H
HETATM 5761  H2  SPC   479       5.733  24.081  -5.351  1.00  0.00           H
HETATM 5762  O   SPC   480      -4.874  23.082   4.938  1.00  0.00           O
HETATM 5763  H1  SPC   480      -4.322  22.354   4.508  1.00  0.00           H
HETATM 5764  H2  SPC   480      -5.804  22.721   5.123  1.00  0.00           H
HETATM 5765  O   SPC   481       7.622  25.709   1.989  1.00  0.00           O
HETATM 5766  H1  SPC   481       7.100  25.727   2.852  1.00  0.00           H
HETATM 5767  H2  SPC   481       7.754  24.744   1.711  1.00  0.00           H
HETATM 5768  O   SPC   483       0.897  25.221   7.086  1.00  0.00           O
HETATM 5769  H1  SPC   483       1.460  24.653   7.702  1.00  0.00           H
HETATM 5770  H2  SPC   483       1.314  25.210   6.166  1.00  0.00           H
HETATM 5771  O   SPC   484       3.981  26.396   6.081  1.00  0.00           O
HETATM 5772  H1  SPC   484       3.949  27.385   6.249  1.00  0.00           H
HETATM 5773  H2  SPC   484       4.161  25.930   6.958  1.00  0.00           H
HETATM 5774  O   SPC   485       2.897  23.691   1.168  1.00  0.00           O
HETATM 5775  H1  SPC   485       3.105  24.658   0.949  1.00  0.00           H
HETATM 5776  H2  SPC   485       1.897  23.577   1.188  1.00  0.00           H
HETATM 5777  O   SPC   486       6.328  21.315   1.711  1.00  0.00           O
HETATM 5778  H1  SPC   486       7.046  21.961   1.402  1.00  0.00           H
HETATM 5779  H2  SPC   486       5.581  21.332   1.023  1.00  0.00           H
HETATM 5780  O   SPC   487       2.088  25.072   4.616  1.00  0.00           O
HETATM 5781  H1  SPC   487       2.846  25.561   5.073  1.00  0.00           H
HETATM 5782  H2  SPC   487       1.741  25.652   3.859  1.00  0.00           H
HETATM 5783  O   SPC   488       1.338  22.573   3.802  1.00  0.00           O
HETATM 5784  H1  SPC   488       1.694  23.459   4.141  1.00  0.00           H
HETATM 5785  H2  SPC   488       0.961  22.717   2.879  1.00  0.00           H
HETATM 5786  O   SPC   490      -2.388  22.053   1.313  1.00  0.00           O
HETATM 5787  H1  SPC   490      -2.987  22.770   0.925  1.00  0.00           H
HETATM 5788  H2  SPC   490      -1.435  22.387   1.288  1.00  0.00           H
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HETATM 5789  O   SPC   491       5.065  23.504   2.837  1.00  0.00           O
HETATM 5790  H1  SPC   491       5.520  22.686   2.461  1.00  0.00           H
HETATM 5791  H2  SPC   491       4.179  23.611   2.360  1.00  0.00           H
HETATM 5792  O   SPC   492      -2.688  18.726   4.162  1.00  0.00           O
HETATM 5793  H1  SPC   492      -1.816  18.328   3.838  1.00  0.00           H
HETATM 5794  H2  SPC   492      -2.635  19.734   4.078  1.00  0.00           H
HETATM 5795  O   SPC   493      -0.253  24.732  -7.776  1.00  0.00           O
HETATM 5796  H1  SPC   493      -0.133  25.301  -6.949  1.00  0.00           H
HETATM 5797  H2  SPC   493       0.643  24.617  -8.229  1.00  0.00           H
HETATM 5798  O   SPC   494      -1.465  24.351   6.226  1.00  0.00           O
HETATM 5799  H1  SPC   494      -0.658  24.818   6.625  1.00  0.00           H
HETATM 5800  H2  SPC   494      -1.181  23.429   5.921  1.00  0.00           H
HETATM 5801  O   SPC   495      -2.758  25.734  -4.792  1.00  0.00           O
HETATM 5802  H1  SPC   495      -3.231  24.902  -4.467  1.00  0.00           H
HETATM 5803  H2  SPC   495      -3.178  26.035  -5.660  1.00  0.00           H
HETATM 5804  O   SPC   497       6.283  23.048  -1.907  1.00  0.00           O
HETATM 5805  H1  SPC   497       6.149  24.038  -1.751  1.00  0.00           H
HETATM 5806  H2  SPC   497       5.740  22.542  -1.221  1.00  0.00           H
HETATM 5807  O   SPC   498      -7.274  19.356   6.459  1.00  0.00           O
HETATM 5808  H1  SPC   498      -6.631  19.365   5.673  1.00  0.00           H
HETATM 5809  H2  SPC   498      -7.589  18.401   6.595  1.00  0.00           H
HETATM 5810  O   SPC   499      -3.055  24.975   4.092  1.00  0.00           O
HETATM 5811  H1  SPC   499      -3.850  24.404   4.340  1.00  0.00           H
HETATM 5812  H2  SPC   499      -2.403  24.960   4.864  1.00  0.00           H
HETATM 5813  O   SPC   500      -8.747  20.547   8.494  1.00  0.00           O
HETATM 5814  H1  SPC   500      -8.226  20.047   7.788  1.00  0.00           H
HETATM 5815  H2  SPC   500      -8.227  20.503   9.364  1.00  0.00           H
HETATM 5816  O   SPC   502      -2.616  24.553  -9.120  1.00  0.00           O
HETATM 5817  H1  SPC   502      -2.378  24.328 -10.082  1.00  0.00           H
HETATM 5818  H2  SPC   502      -1.751  24.622  -8.595  1.00  0.00           H
HETATM 5819  O   SPC   503       2.725  20.490   5.048  1.00  0.00           O
HETATM 5820  H1  SPC   503       2.505  19.660   4.520  1.00  0.00           H
HETATM 5821  H2  SPC   503       2.330  21.287   4.571  1.00  0.00           H
HETATM 5822  O   SPC   504      -8.878  24.078   1.434  1.00  0.00           O
HETATM 5823  H1  SPC   504      -9.195  23.646   0.581  1.00  0.00           H
HETATM 5824  H2  SPC   504      -7.879  24.186   1.400  1.00  0.00           H
HETATM 5825  O   SPC   505       0.725  24.109  -1.229  1.00  0.00           O
HETATM 5826  H1  SPC   505       1.072  25.057  -1.205  1.00  0.00           H
HETATM 5827  H2  SPC   505       0.755  23.785  -2.185  1.00  0.00           H
HETATM 5828  O   SPC   506       1.339  26.564   2.503  1.00  0.00           O
HETATM 5829  H1  SPC   506       0.599  26.967   1.951  1.00  0.00           H
HETATM 5830  H2  SPC   506       2.171  26.515   1.932  1.00  0.00           H
HETATM 5831  O   SPC   507       3.409  21.107   7.665  1.00  0.00           O
HETATM 5832  H1  SPC   507       2.794  20.527   8.223  1.00  0.00           H
HETATM 5833  H2  SPC   507       3.246  20.894   6.689  1.00  0.00           H
HETATM 5834  O   SPC   508      -5.099  23.620 -10.237  1.00  0.00           O
HETATM 5835  H1  SPC   508      -5.107  23.505 -11.238  1.00  0.00           H
HETATM 5836  H2  SPC   508      -4.203  23.992  -9.970  1.00  0.00           H
HETATM 5837  O   SPC   509      -0.773  21.838   5.349  1.00  0.00           O
HETATM 5838  H1  SPC   509       0.085  22.023   4.844  1.00  0.00           H
HETATM 5839  H2  SPC   509      -0.629  21.046   5.959  1.00  0.00           H
HETATM 5840  O   SPC   510       2.546  23.587   8.510  1.00  0.00           O
HETATM 5841  H1  SPC   510       2.886  22.703   8.155  1.00  0.00           H
HETATM 5842  H2  SPC   510       3.327  24.219   8.601  1.00  0.00           H
HETATM 5843  O   SPC   511       1.157  23.666  -3.983  1.00  0.00           O
HETATM 5844  H1  SPC   511       2.085  24.007  -3.777  1.00  0.00           H
HETATM 5845  H2  SPC   511       1.213  22.952  -4.689  1.00  0.00           H
HETATM 5846  O   SPC   512      -2.971  21.382   3.853  1.00  0.00           O
HETATM 5847  H1  SPC   512      -2.197  21.683   4.433  1.00  0.00           H
HETATM 5848  H2  SPC   512      -2.785  21.666   2.897  1.00  0.00           H
HETATM 5849  O   SPC   513       8.298  25.915  -4.868  1.00  0.00           O
HETATM 5850  H1  SPC   513       8.835  25.200  -4.397  1.00  0.00           H
HETATM 5851  H2  SPC   513       7.524  25.467  -5.344  1.00  0.00           H
HETATM 5852  O   SPC   514       7.294  23.525   4.524  1.00  0.00           O
HETATM 5853  H1  SPC   514       7.017  23.723   5.479  1.00  0.00           H
HETATM 5854  H2  SPC   514       6.482  23.616   3.933  1.00  0.00           H
HETATM 5855  O   SPC   515      -6.094  24.132   1.988  1.00  0.00           O
HETATM 5856  H1  SPC   515      -6.225  23.196   2.347  1.00  0.00           H
HETATM 5857  H2  SPC   515      -6.082  24.771   2.762  1.00  0.00           H
HETATM 5858  O   SPC   516       0.070  23.432   1.279  1.00  0.00           O
HETATM 5859  H1  SPC   516       0.275  23.569   0.293  1.00  0.00           H
HETATM 5860  H2  SPC   516      -0.512  24.200   1.586  1.00  0.00           H
HETATM 5861  O   SPC   520      -4.973  19.895  12.291  1.00  0.00           O
HETATM 5862  H1  SPC   520      -4.369  20.459  12.877  1.00  0.00           H
HETATM 5863  H2  SPC   520      -4.917  18.935  12.610  1.00  0.00           H
HETATM 5864  O   SPC   522       4.738  25.375   8.624  1.00  0.00           O
HETATM 5865  H1  SPC   522       5.306  26.206   8.488  1.00  0.00           H
HETATM 5866  H2  SPC   522       4.786  25.112   9.600  1.00  0.00           H
HETATM 5867  O   SPC   523       4.986  20.731  12.137  1.00  0.00           O
HETATM 5868  H1  SPC   523       4.014  20.839  12.385  1.00  0.00           H
HETATM 5869  H2  SPC   523       5.123  21.168  11.236  1.00  0.00           H
HETATM 5870  O   SPC   525       0.123  12.143  18.472  1.00  0.00           O
HETATM 5871  H1  SPC   525      -0.195  12.305  19.409  1.00  0.00           H
HETATM 5872  H2  SPC   525      -0.039  12.985  17.927  1.00  0.00           H
HETATM 5873  O   SPC   531       5.147  21.908   9.677  1.00  0.00           O
HETATM 5874  H1  SPC   531       6.114  21.633   9.588  1.00  0.00           H
HETATM 5875  H2  SPC   531       4.634  21.573   8.872  1.00  0.00           H
HETATM 5876  O   SPC   534      -6.575  16.362   9.521  1.00  0.00           O
HETATM 5877  H1  SPC   534      -7.511  16.598   9.820  1.00  0.00           H
HETATM 5878  H2  SPC   534      -6.110  15.914  10.301  1.00  0.00           H
HETATM 5879  O   SPC   542       3.459  23.653  13.484  1.00  0.00           O
HETATM 5880  H1  SPC   542       3.110  24.440  13.997  1.00  0.00           H
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HETATM 5881  H2  SPC   542       3.858  22.990  14.141  1.00  0.00           H
HETATM 5882  O   SPC   543       0.820  18.575  15.537  1.00  0.00           O
HETATM 5883  H1  SPC   543       0.857  17.591  15.746  1.00  0.00           H
HETATM 5884  H2  SPC   543       1.763  18.933  15.504  1.00  0.00           H
HETATM 5885  O   SPC   546       3.908  18.112  10.028  1.00  0.00           O
HETATM 5886  H1  SPC   546       3.170  18.732   9.718  1.00  0.00           H
HETATM 5887  H2  SPC   546       4.182  17.537   9.242  1.00  0.00           H
HETATM 5888  O   SPC   547       6.673  20.128  14.245  1.00  0.00           O
HETATM 5889  H1  SPC   547       6.107  20.481  13.484  1.00  0.00           H
HETATM 5890  H2  SPC   547       6.401  19.171  14.414  1.00  0.00           H
HETATM 5891  O   SPC   551       6.796  18.753  11.506  1.00  0.00           O
HETATM 5892  H1  SPC   551       6.459  17.808  11.573  1.00  0.00           H
HETATM 5893  H2  SPC   551       6.038  19.381  11.729  1.00  0.00           H
HETATM 5894  O   SPC   557       4.051  15.697  15.873  1.00  0.00           O
HETATM 5895  H1  SPC   557       4.603  16.387  15.389  1.00  0.00           H
HETATM 5896  H2  SPC   557       4.666  14.989  16.237  1.00  0.00           H
HETATM 5897  O   SPC   559      -0.344  14.332  16.980  1.00  0.00           O
HETATM 5898  H1  SPC   559       0.299  14.970  16.535  1.00  0.00           H
HETATM 5899  H2  SPC   559      -1.211  14.347  16.465  1.00  0.00           H
HETATM 5900  O   SPC   560      -6.975  20.669  10.553  1.00  0.00           O
HETATM 5901  H1  SPC   560      -6.375  20.318  11.287  1.00  0.00           H
HETATM 5902  H2  SPC   560      -6.487  21.409  10.071  1.00  0.00           H
HETATM 5903  O   SPC   562      -0.102  19.884  11.099  1.00  0.00           O
HETATM 5904  H1  SPC   562      -0.461  19.681  12.021  1.00  0.00           H
HETATM 5905  H2  SPC   562      -0.100  20.882  10.963  1.00  0.00           H
HETATM 5906  O   SPC   565      -3.017  21.132  13.718  1.00  0.00           O
HETATM 5907  H1  SPC   565      -2.703  21.936  14.223  1.00  0.00           H
HETATM 5908  H2  SPC   565      -2.276  20.443  13.708  1.00  0.00           H
HETATM 5909  O   SPC   566      -6.323  11.640  13.999  1.00  0.00           O
HETATM 5910  H1  SPC   566      -6.430  12.596  13.694  1.00  0.00           H
HETATM 5911  H2  SPC   566      -6.858  11.521  14.848  1.00  0.00           H
HETATM 5912  O   SPC   568       4.564  13.789  12.123  1.00  0.00           O
HETATM 5913  H1  SPC   568       4.622  13.358  13.034  1.00  0.00           H
HETATM 5914  H2  SPC   568       3.788  13.374  11.625  1.00  0.00           H
HETATM 5915  O   SPC   572       5.631  17.503  14.421  1.00  0.00           O
HETATM 5916  H1  SPC   572       5.325  17.264  13.484  1.00  0.00           H
HETATM 5917  H2  SPC   572       6.362  16.852  14.682  1.00  0.00           H
HETATM 5918  O   SPC   575       4.748  12.506  14.563  1.00  0.00           O
HETATM 5919  H1  SPC   575       5.286  12.851  15.345  1.00  0.00           H
HETATM 5920  H2  SPC   575       3.767  12.692  14.744  1.00  0.00           H
HETATM 5921  O   SPC   577      -3.934  11.064  12.805  1.00  0.00           O
HETATM 5922  H1  SPC   577      -4.825  11.237  13.254  1.00  0.00           H
HETATM 5923  H2  SPC   577      -3.994  10.203  12.276  1.00  0.00           H
HETATM 5924  O   SPC   583      -3.374  19.880  10.070  1.00  0.00           O
HETATM 5925  H1  SPC   583      -4.001  19.789   9.284  1.00  0.00           H
HETATM 5926  H2  SPC   583      -3.928  19.924  10.916  1.00  0.00           H
HETATM 5927  O   SPC   587      -2.315  14.213   9.589  1.00  0.00           O
HETATM 5928  H1  SPC   587      -2.282  13.569   8.814  1.00  0.00           H
HETATM 5929  H2  SPC   587      -2.838  15.031   9.304  1.00  0.00           H
HETATM 5930  O   SPC   591      -1.903  10.825  14.536  1.00  0.00           O
HETATM 5931  H1  SPC   591      -1.181  11.497  14.319  1.00  0.00           H
HETATM 5932  H2  SPC   591      -2.682  10.993  13.911  1.00  0.00           H
HETATM 5933  O   SPC   593      -4.356  12.959  10.914  1.00  0.00           O
HETATM 5934  H1  SPC   593      -3.547  13.360  10.460  1.00  0.00           H
HETATM 5935  H2  SPC   593      -4.043  12.313  11.626  1.00  0.00           H
HETATM 5936  O   SPC   596       2.529  18.807  12.407  1.00  0.00           O
HETATM 5937  H1  SPC   596       3.061  18.511  11.602  1.00  0.00           H
HETATM 5938  H2  SPC   596       2.151  19.726  12.220  1.00  0.00           H
HETATM 5939  O   SPC   597       4.422  21.769  15.169  1.00  0.00           O
HETATM 5940  H1  SPC   597       3.886  20.914  15.203  1.00  0.00           H
HETATM 5941  H2  SPC   597       5.397  21.531  15.200  1.00  0.00           H
HETATM 5942  O   SPC   598       4.822  24.187  11.117  1.00  0.00           O
HETATM 5943  H1  SPC   598       4.864  23.319  10.597  1.00  0.00           H
HETATM 5944  H2  SPC   598       4.272  24.037  11.951  1.00  0.00           H
HETATM 5945  O   SPC   599       7.362  15.482  14.843  1.00  0.00           O
HETATM 5946  H1  SPC   599       8.242  15.898  15.119  1.00  0.00           H
HETATM 5947  H2  SPC   599       7.467  15.045  13.934  1.00  0.00           H
HETATM 5948  O   SPC   600      -7.164  14.117  16.450  1.00  0.00           O
HETATM 5949  H1  SPC   600      -6.185  13.839  16.441  1.00  0.00           H
HETATM 5950  H2  SPC   600      -7.283  14.832  17.142  1.00  0.00           H
HETATM 5951  O   SPC   601      -6.399  11.205  10.246  1.00  0.00           O
HETATM 5952  H1  SPC   601      -5.715  11.932  10.397  1.00  0.00           H
HETATM 5953  H2  SPC   601      -5.964  10.453   9.731  1.00  0.00           H
HETATM 5954  O   SPC   607       7.238  14.296  12.413  1.00  0.00           O
HETATM 5955  H1  SPC   607       6.271  14.088  12.202  1.00  0.00           H
HETATM 5956  H2  SPC   607       7.594  14.930  11.713  1.00  0.00           H
HETATM 5957  O   SPC   612       2.162  13.044  15.076  1.00  0.00           O
HETATM 5958  H1  SPC   612       2.150  12.421  15.875  1.00  0.00           H
HETATM 5959  H2  SPC   612       1.861  13.960  15.371  1.00  0.00           H
HETATM 5960  O   SPC   614      -5.033  20.035   7.882  1.00  0.00           O
HETATM 5961  H1  SPC   614      -5.227  20.962   8.237  1.00  0.00           H
HETATM 5962  H2  SPC   614      -5.867  19.691   7.430  1.00  0.00           H
HETATM 5963  O   SPC   617       0.774  17.559   7.527  1.00  0.00           O
HETATM 5964  H1  SPC   617       0.144  18.293   7.228  1.00  0.00           H
HETATM 5965  H2  SPC   617       1.076  17.040   6.723  1.00  0.00           H
HETATM 5966  O   SPC   625       8.091  11.835  17.175  1.00  0.00           O
HETATM 5967  H1  SPC   625       7.272  12.388  16.981  1.00  0.00           H
HETATM 5968  H2  SPC   625       8.629  11.741  16.325  1.00  0.00           H
HETATM 5969  O   SPC   626       6.178  13.872  16.599  1.00  0.00           O
HETATM 5970  H1  SPC   626       6.640  14.405  15.870  1.00  0.00           H
HETATM 5971  H2  SPC   626       6.408  14.296  17.483  1.00  0.00           H
HETATM 5972  O   SPC   628      -1.788  16.555  13.197  1.00  0.00           O
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HETATM 5973  H1  SPC   628      -0.793  16.401  13.262  1.00  0.00          H
HETATM 5974  H2  SPC   628      -2.009  16.774  12.232  1.00  0.00          H
HETATM 5975  O   SPC   630       1.413  15.766  15.402  1.00  0.00          O
HETATM 5976  H1  SPC   630       1.276  15.970  14.420  1.00  0.00          H
HETATM 5977  H2  SPC   630       2.405  15.821  15.609  1.00  0.00          H
HETATM 5978  O   SPC   631      -9.126  16.849  10.401  1.00  0.00          O
HETATM 5979  H1  SPC   631      -9.182  17.660  10.989  1.00  0.00          H
HETATM 5980  H2  SPC   631      -9.650  17.024   9.551  1.00  0.00          H
HETATM 5981  O   SPC   633      -3.837  16.389   8.816  1.00  0.00          O
HETATM 5982  H1  SPC   633      -4.838  16.392   8.955  1.00  0.00          H
HETATM 5983  H2  SPC   633      -3.619  16.995   8.036  1.00  0.00          H
HETATM 5984  O   SPC   634       1.472   9.359  15.247  1.00  0.00          O
HETATM 5985  H1  SPC   634       1.393   9.696  14.295  1.00  0.00          H
HETATM 5986  H2  SPC   634       1.719  10.137  15.841  1.00  0.00          H
HETATM 5987  O   SPC   639       7.622  15.881  18.093  1.00  0.00          O
HETATM 5988  H1  SPC   639       7.298  16.599  18.712  1.00  0.00          H
HETATM 5989  H2  SPC   639       8.172  16.308  17.358  1.00  0.00          H
HETATM 5990  O   SPC   641      -0.325  13.109  11.134  1.00  0.00          O
HETATM 5991  H1  SPC   641      -0.636  12.158  10.996  1.00  0.00          H
HETATM 5992  H2  SPC   641      -0.936  13.721  10.609  1.00  0.00          H
HETATM 5993  O   SPC   642      -7.217  14.269  13.695  1.00  0.00          O
HETATM 5994  H1  SPC   642      -7.219  14.372  14.701  1.00  0.00          H
HETATM 5995  H2  SPC   642      -8.110  13.888  13.409  1.00  0.00          H
HETATM 5996  O   SPC   643      -2.317  14.357  15.021  1.00  0.00          O
HETATM 5997  H1  SPC   643      -2.377  15.199  14.470  1.00  0.00          H
HETATM 5998  H2  SPC   643      -1.650  13.738  14.579  1.00  0.00          H
HETATM 5999  O   SPC   646      -4.598  13.388  16.402  1.00  0.00          O
HETATM 6000  H1  SPC   646      -3.778  13.706  15.907  1.00  0.00          H
HETATM 6001  H2  SPC   646      -4.395  12.493  16.830  1.00  0.00          H
HETATM 6002  O   SPC   647      -0.306  12.925  13.847  1.00  0.00          O
HETATM 6003  H1  SPC   647       0.646  12.878  14.182  1.00  0.00          H
HETATM 6004  H2  SPC   647      -0.289  13.073  12.846  1.00  0.00          H
HETATM 6005  O   SPC   648       2.703  15.066   9.636  1.00  0.00          O
HETATM 6006  H1  SPC   648       1.831  15.540   9.826  1.00  0.00          H
HETATM 6007  H2  SPC   648       2.655  14.138  10.023  1.00  0.00          H
HETATM 6008  O   SPC   649      -4.060  10.949  17.579  1.00  0.00          O
HETATM 6009  H1  SPC   649      -3.080  10.730  17.480  1.00  0.00          H
HETATM 6010  H2  SPC   649      -4.539  10.133  17.919  1.00  0.00          H
HETATM 6011  O   SPC   651       3.455  19.182  14.909  1.00  0.00          O
HETATM 6012  H1  SPC   651       3.055  19.074  13.984  1.00  0.00          H
HETATM 6013  H2  SPC   651       4.268  18.590  14.970  1.00  0.00          H
HETATM 6014  O   SPC   658       0.562  22.449  10.129  1.00  0.00          O
HETATM 6015  H1  SPC   658      -0.286  22.323   9.593  1.00  0.00          H
HETATM 6016  H2  SPC   658       1.224  22.963   9.564  1.00  0.00          H
HETATM 6017  O   SPC   666      -7.889  16.823   7.075  1.00  0.00          O
HETATM 6018  H1  SPC   666      -8.840  16.885   7.417  1.00  0.00          H
HETATM 6019  H2  SPC   666      -7.290  16.546   7.840  1.00  0.00          H
HETATM 6020  O   SPC   670      -1.782  21.705   8.813  1.00  0.00          O
HETATM 6021  H1  SPC   670      -2.444  22.317   8.361  1.00  0.00          H
HETATM 6022  H2  SPC   670      -2.292  21.068   9.413  1.00  0.00          H
HETATM 6023  O   SPC   676      -6.223   8.939  14.127  1.00  0.00          O
HETATM 6024  H1  SPC   676      -5.257   8.696  14.313  1.00  0.00          H
HETATM 6025  H2  SPC   676      -6.267   9.927  13.916  1.00  0.00          H
HETATM 6026  O   SPC   679      -4.507  17.344  13.035  1.00  0.00          O
HETATM 6027  H1  SPC   679      -4.965  16.583  12.552  1.00  0.00          H
HETATM 6028  H2  SPC   679      -3.597  17.033  13.332  1.00  0.00          H
HETATM 6029  O   SPC   686       1.781  19.490   9.159  1.00  0.00          O
HETATM 6030  H1  SPC   686       1.433  18.767   8.543  1.00  0.00          H
HETATM 6031  H2  SPC   686       1.084  19.659   9.875  1.00  0.00          H
HETATM 6032  O   SPC   687       2.308  11.241  17.071  1.00  0.00          O
HETATM 6033  H1  SPC   687       2.990  10.617  17.479  1.00  0.00          H
HETATM 6034  H2  SPC   687       1.610  11.468  17.767  1.00  0.00          H
HETATM 6035  O   SPC   688      -5.797  22.486   8.855  1.00  0.00          O
HETATM 6036  H1  SPC   688      -6.633  22.958   8.542  1.00  0.00          H
HETATM 6037  H2  SPC   688      -4.991  22.969   8.477  1.00  0.00          H
HETATM 6038  O   SPC   691       0.372  16.459  10.030  1.00  0.00          O
HETATM 6039  H1  SPC   691      -0.547  16.773  10.310  1.00  0.00          H
HETATM 6040  H2  SPC   691       0.546  16.800   9.094  1.00  0.00          H
HETATM 6041  O   SPC   692      -1.424  10.252  17.157  1.00  0.00          O
HETATM 6042  H1  SPC   692      -1.472  10.475  16.170  1.00  0.00          H
HETATM 6043  H2  SPC   692      -0.788  10.896  17.605  1.00  0.00          H
HETATM 6044  O   SPC   693      -8.114  11.528  16.118  1.00  0.00          O
HETATM 6045  H1  SPC   693      -7.915  12.485  16.374  1.00  0.00          H
HETATM 6046  H2  SPC   693      -9.062  11.470  15.775  1.00  0.00          H
HETATM 6047  O   SPC   697       7.402  24.556  12.020  1.00  0.00          O
HETATM 6048  H1  SPC   697       7.656  23.659  12.406  1.00  0.00          H
HETATM 6049  H2  SPC   697       6.440  24.516  11.713  1.00  0.00          H
HETATM 6050  O   SPC   698      -5.601  15.191  11.757  1.00  0.00          O
HETATM 6051  H1  SPC   698      -6.239  14.920  12.497  1.00  0.00          H
HETATM 6052  H2  SPC   698      -5.133  14.358  11.422  1.00  0.00          H
HETATM 6053  O   SPC   703       5.035  16.553  11.949  1.00  0.00          O
HETATM 6054  H1  SPC   703       4.755  15.582  11.933  1.00  0.00          H
HETATM 6055  H2  SPC   703       4.551  17.040  11.206  1.00  0.00          H
HETATM 6056  O   SPC   706      -2.123  17.416  10.654  1.00  0.00          O
HETATM 6057  H1  SPC   706      -2.249  18.415  10.568  1.00  0.00          H
HETATM 6058  H2  SPC   706      -2.794  16.963  10.048  1.00  0.00          H
HETATM 6059  O   SPC   707      -1.041  19.242  13.662  1.00  0.00          O
HETATM 6060  H1  SPC   707      -0.345  19.149  14.393  1.00  0.00          H
HETATM 6061  H2  SPC   707      -1.481  18.345  13.532  1.00  0.00          H
HETATM 6062  O   SPC   709       2.301  21.577  12.105  1.00  0.00          O
HETATM 6063  H1  SPC   709       2.599  22.391  12.622  1.00  0.00          H
HETATM 6064  H2  SPC   709       1.673  21.877  11.371  1.00  0.00          H
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HETATM 6065  O   SPC   712      0.983  16.547  12.781  1.00  0.00          O
HETATM 6066  H1  SPC   712      0.811  16.286  11.821  1.00  0.00          H
HETATM 6067  H2  SPC   712      1.498  17.417  12.778  1.00  0.00          H
HETATM 6068  O   SPC  1025      7.672  20.644 -14.043  1.00  0.00          O
HETATM 6069  H1  SPC  1025      8.374  19.920 -14.098  1.00  0.00          H
HETATM 6070  H2  SPC  1025      7.096  20.597 -14.867  1.00  0.00          H
HETATM 6071  O   SPC  1030      2.081  23.754  -8.926  1.00  0.00          O
HETATM 6072  H1  SPC  1030      2.209  23.684  -9.919  1.00  0.00          H
HETATM 6073  H2  SPC  1030      2.144  22.828  -8.526  1.00  0.00          H
HETATM 6074  O   SPC  1049      4.062  18.376 -16.177  1.00  0.00          O
HETATM 6075  H1  SPC  1049      4.831  19.026 -16.212  1.00  0.00          H
HETATM 6076  H2  SPC  1049      3.202  18.896 -16.315  1.00  0.00          H
HETATM 6077  O   SPC  1052      4.484  21.798 -12.277  1.00  0.00          O
HETATM 6078  H1  SPC  1052      3.701  21.166 -12.332  1.00  0.00          H
HETATM 6079  H2  SPC  1052      4.721  22.101 -13.202  1.00  0.00          H
HETATM 6080  O   SPC  1058      6.201  20.253 -16.494  1.00  0.00          O
HETATM 6081  H1  SPC  1058      5.873  20.903 -17.183  1.00  0.00          H
HETATM 6082  H2  SPC  1058      7.102  19.894 -16.785  1.00  0.00          H
HETATM 6083  O   SPC  1061      3.227  15.756 -15.728  1.00  0.00          O
HETATM 6084  H1  SPC  1061      3.548  16.717 -15.721  1.00  0.00          H
HETATM 6085  H2  SPC  1061      2.724  15.602 -16.581  1.00  0.00          H
HETATM 6086  O   SPC  1083      8.073   8.855 -14.296  1.00  0.00          O
HETATM 6087  H1  SPC  1083      8.487   8.119 -13.747  1.00  0.00          H
HETATM 6088  H2  SPC  1083      8.742   9.614 -14.355  1.00  0.00          H
HETATM 6089  O   SPC  1095      0.041  22.142 -12.686  1.00  0.00          O
HETATM 6090  H1  SPC  1095      0.883  21.603 -12.804  1.00  0.00          H
HETATM 6091  H2  SPC  1095     -0.272  22.446 -13.599  1.00  0.00          H
HETATM 6092  O   SPC  1096      9.249  15.157 -17.125  1.00  0.00          O
HETATM 6093  H1  SPC  1096      8.424  15.671 -17.398  1.00  0.00          H
HETATM 6094  H2  SPC  1096      9.975  15.816 -16.887  1.00  0.00          H
HETATM 6095  O   SPC  1097      7.137  16.894 -17.581  1.00  0.00          O
HETATM 6096  H1  SPC  1097      6.168  17.137 -17.509  1.00  0.00          H
HETATM 6097  H2  SPC  1097      7.693  17.727 -17.453  1.00  0.00          H
HETATM 6098  O   SPC  1101     -0.908   9.855 -19.147  1.00  0.00          O
HETATM 6099  H1  SPC  1101     -1.111   8.895 -18.893  1.00  0.00          H
HETATM 6100  H2  SPC  1101     -1.777  10.346 -19.231  1.00  0.00          H
HETATM 6101  O   SPC  1102      8.647  19.142 -16.971  1.00  0.00          O
HETATM 6102  H1  SPC  1102      8.836  18.843 -16.019  1.00  0.00          H
HETATM 6103  H2  SPC  1102      9.526  19.401 -17.391  1.00  0.00          H
HETATM 6104  O   SPC  1109      7.213  21.772 -11.590  1.00  0.00          O
HETATM 6105  H1  SPC  1109      7.517  21.372 -12.468  1.00  0.00          H
HETATM 6106  H2  SPC  1109      6.207  21.830 -11.603  1.00  0.00          H
HETATM 6107  O   SPC  1111      1.902  19.962 -16.518  1.00  0.00          O
HETATM 6108  H1  SPC  1111      1.740  20.857 -16.097  1.00  0.00          H
HETATM 6109  H2  SPC  1111      1.347  19.931 -17.370  1.00  0.00          H
HETATM 6110  O   SPC  1113     -2.082  23.780 -11.652  1.00  0.00          O
HETATM 6111  H1  SPC  1113     -1.282  23.291 -12.024  1.00  0.00          H
HETATM 6112  H2  SPC  1113     -2.835  23.725 -12.319  1.00  0.00          H
HETATM 6113  O   SPC  1128      4.437  25.291  -8.999  1.00  0.00          O
HETATM 6114  H1  SPC  1128      3.503  24.954  -8.830  1.00  0.00          H
HETATM 6115  H2  SPC  1128      4.617  26.084  -8.405  1.00  0.00          H
HETATM 6116  O   SPC  1147     -0.577  27.398   0.599  1.00  0.00          O
HETATM 6117  H1  SPC  1147     -1.103  26.602   0.941  1.00  0.00          H
HETATM 6118  H2  SPC  1147     -1.188  28.190   0.552  1.00  0.00          H
HETATM 6119  O   SPC  1155      5.530  25.705  -1.590  1.00  0.00          O
HETATM 6120  H1  SPC  1155      5.640  26.122  -0.681  1.00  0.00          H
HETATM 6121  H2  SPC  1155      5.491  26.450  -2.278  1.00  0.00          H
HETATM 6122  O   SPC  1178      3.747  28.352  -5.590  1.00  0.00          O
HETATM 6123  H1  SPC  1178      4.409  27.849  -6.171  1.00  0.00          H
HETATM 6124  H2  SPC  1178      3.525  29.220  -6.038  1.00  0.00          H
HETATM 6125  O   SPC  1184      5.621  25.941   3.944  1.00  0.00          O
HETATM 6126  H1  SPC  1184      5.290  25.116   3.460  1.00  0.00          H
HETATM 6127  H2  SPC  1184      5.006  26.115   4.727  1.00  0.00          H
HETATM 6128  O   SPC  1190      6.286  27.493   7.961  1.00  0.00          O
HETATM 6129  H1  SPC  1190      6.477  27.738   6.999  1.00  0.00          H
HETATM 6130  H2  SPC  1190      7.053  27.818   8.532  1.00  0.00          H
HETATM 6131  O   SPC  1196      1.809  27.278  -3.890  1.00  0.00          O
HETATM 6132  H1  SPC  1196      2.452  27.740  -4.517  1.00  0.00          H
HETATM 6133  H2  SPC  1196      1.059  26.875  -4.436  1.00  0.00          H
HETATM 6134  O   SPC  1211      9.159  30.643  -0.055  1.00  0.00          O
HETATM 6135  H1  SPC  1211      8.598  29.887  -0.423  1.00  0.00          H
HETATM 6136  H2  SPC  1211      8.663  31.062   0.716  1.00  0.00          H
HETATM 6137  O   SPC  1220      7.718  31.459   2.169  1.00  0.00          O
HETATM 6138  H1  SPC  1220      7.138  32.277   2.167  1.00  0.00          H
HETATM 6139  H2  SPC  1220      7.144  30.658   2.417  1.00  0.00          H
HETATM 6140  O   SPC  1223      5.249  27.725  -3.330  1.00  0.00          O
HETATM 6141  H1  SPC  1223      4.650  28.006  -4.092  1.00  0.00          H
HETATM 6142  H2  SPC  1223      6.173  28.101  -3.489  1.00  0.00          H
HETATM 6143  O   SPC  1228      6.235  29.337   2.862  1.00  0.00          O
HETATM 6144  H1  SPC  1228      5.907  28.637   2.216  1.00  0.00          H
HETATM 6145  H2  SPC  1228      6.310  28.926   3.779  1.00  0.00          H
HETATM 6146  O   SPC  1230      1.508  26.779  -1.166  1.00  0.00          O
HETATM 6147  H1  SPC  1230      1.511  27.145  -2.108  1.00  0.00          H
HETATM 6148  H2  SPC  1230      0.705  27.142  -0.672  1.00  0.00          H
HETATM 6149  O   SPC  1254      6.887  27.988   5.293  1.00  0.00          O
HETATM 6150  H1  SPC  1254      6.632  27.149   4.793  1.00  0.00          H
HETATM 6151  H2  SPC  1254      7.881  28.148   5.182  1.00  0.00          H
HETATM 6152  O   SPC  1358      8.482  28.271   9.468  1.00  0.00          O
HETATM 6153  H1  SPC  1358      8.756  27.468  10.026  1.00  0.00          H
HETATM 6154  H2  SPC  1358      8.535  29.092  10.040  1.00  0.00          H
HETATM 6155  O   SPC  3122     23.180   9.340  -2.724  1.00  0.00          O
HETATM 6156  H1  SPC  3122     23.855   8.963  -3.360  1.00  0.00          H
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HETATM 6157  H2  SPC  3122      23.057   8.684  -1.956  1.00  0.00          H
HETATM 6158  O   SPC  3135      23.403  11.325   0.856  1.00  0.00          O
HETATM 6159  H1  SPC  3135      23.018  11.536  -0.052  1.00  0.00          H
HETATM 6160  H2  SPC  3135      23.592  10.335   0.908  1.00  0.00          H
HETATM 6161  O   SPC  3137      20.476   8.962  -3.232  1.00  0.00          O
HETATM 6162  H1  SPC  3137      20.188   9.399  -4.096  1.00  0.00          H
HETATM 6163  H2  SPC  3137      21.461   9.126  -3.097  1.00  0.00          H
HETATM 6164  O   SPC  3144      24.176   8.673   1.458  1.00  0.00          O
HETATM 6165  H1  SPC  3144      23.988   8.741   2.453  1.00  0.00          H
HETATM 6166  H2  SPC  3144      25.107   8.325   1.335  1.00  0.00          H
HETATM 6167  O   SPC  3156      22.892   7.653  -0.707  1.00  0.00          O
HETATM 6168  H1  SPC  3156      23.288   7.987   0.161  1.00  0.00          H
HETATM 6169  H2  SPC  3156      22.381   6.802  -0.521  1.00  0.00          H
HETATM 6170  O   SPC  3162      23.929   9.038   4.104  1.00  0.00          O
HETATM 6171  H1  SPC  3162      24.065  10.038   4.045  1.00  0.00          H
HETATM 6172  H2  SPC  3162      23.819   8.777   5.072  1.00  0.00          H
HETATM 6173  O   SPC  3189      10.782   7.607  17.490  1.00  0.00          O
HETATM 6174  H1  SPC  3189      10.477   6.697  17.806  1.00  0.00          H
HETATM 6175  H2  SPC  3189       9.989   8.237  17.535  1.00  0.00          H
HETATM 6176  O   SPC  3194      13.196   8.827  17.426  1.00  0.00          O
HETATM 6177  H1  SPC  3194      12.343   8.282  17.341  1.00  0.00          H
HETATM 6178  H2  SPC  3194      13.304   9.091  18.387  1.00  0.00          H
HETATM 6179  O   SPC  3212       9.573   5.221  18.216  1.00  0.00          O
HETATM 6180  H1  SPC  3212       8.915   4.987  17.489  1.00  0.00          H
HETATM 6181  H2  SPC  3212       9.377   4.660  19.023  1.00  0.00          H
HETATM 6182  O   SPC  3266       8.528   9.129  17.661  1.00  0.00          O
HETATM 6183  H1  SPC  3266       7.723   8.686  18.081  1.00  0.00          H
HETATM 6184  H2  SPC  3266       8.349  10.120  17.589  1.00  0.00          H
HETATM 6185  O   SPC  3271      15.840   8.707  16.465  1.00  0.00          O
HETATM 6186  H1  SPC  3271      16.196   9.652  16.395  1.00  0.00          H
HETATM 6187  H2  SPC  3271      14.879   8.749  16.778  1.00  0.00          H
HETATM 6188  O   SPC  3671      16.154   8.371 -15.241  1.00  0.00          O
HETATM 6189  H1  SPC  3671      15.361   7.804 -14.972  1.00  0.00          H
HETATM 6190  H2  SPC  3671      16.456   8.913 -14.442  1.00  0.00          H
HETATM 6191  O   SPC  3690      12.464  10.315 -12.971  1.00  0.00          O
HETATM 6192  H1  SPC  3690      13.247  10.711 -13.469  1.00  0.00          H
HETATM 6193  H2  SPC  3690      12.809   9.945 -12.087  1.00  0.00          H
HETATM 6194  O   SPC  3693      18.928   8.238 -12.028  1.00  0.00          O
HETATM 6195  H1  SPC  3693      18.973   7.941 -11.065  1.00  0.00          H
HETATM 6196  H2  SPC  3693      19.041   7.425 -12.619  1.00  0.00          H
HETATM 6197  O   SPC  3704      18.955   6.023 -13.598  1.00  0.00          O
HETATM 6198  H1  SPC  3704      18.769   6.268 -14.559  1.00  0.00          H
HETATM 6199  H2  SPC  3704      18.369   5.248 -13.346  1.00  0.00          H
HETATM 6200  O   SPC  3725      16.390   4.856 -14.659  1.00  0.00          O
HETATM 6201  H1  SPC  3725      15.671   5.515 -14.401  1.00  0.00          H
HETATM 6202  H2  SPC  3725      17.031   5.314 -15.288  1.00  0.00          H
HETATM 6203  O   SPC  3734      14.183   6.537 -14.643  1.00  0.00          O
HETATM 6204  H1  SPC  3734      13.361   6.986 -14.250  1.00  0.00          H
HETATM 6205  H2  SPC  3734      13.881   5.725 -15.162  1.00  0.00          H
HETATM 6206  O   SPC  3757      18.802   4.441  -9.121  1.00  0.00          O
HETATM 6207  H1  SPC  3757      19.047   3.656  -8.521  1.00  0.00          H
HETATM 6208  H2  SPC  3757      17.918   4.239  -9.559  1.00  0.00          H
HETATM 6209  O   SPC  3761      19.258   7.183  -9.421  1.00  0.00          O
HETATM 6210  H1  SPC  3761      18.975   6.216  -9.311  1.00  0.00          H
HETATM 6211  H2  SPC  3761      20.255   7.229  -9.337  1.00  0.00          H
HETATM 6212  O   SPC  3778      13.981   3.970 -15.708  1.00  0.00          O
HETATM 6213  H1  SPC  3778      13.545   3.141 -15.354  1.00  0.00          H
HETATM 6214  H2  SPC  3778      14.940   3.997 -15.395  1.00  0.00          H
HETATM 6215  O   SPC  3781      11.966   7.721 -13.711  1.00  0.00          O
HETATM 6216  H1  SPC  3781      12.133   8.682 -13.446  1.00  0.00          H
HETATM 6217  H2  SPC  3781      11.020   7.480 -13.464  1.00  0.00          H
HETATM 6218  O   SPC  3783      17.980   6.612 -16.124  1.00  0.00          O
HETATM 6219  H1  SPC  3783      18.319   6.823 -17.042  1.00  0.00          H
HETATM 6220  H2  SPC  3783      17.319   7.333 -15.849  1.00  0.00          H
HETATM 6221  O   SPC  3785      18.611   9.598  -7.879  1.00  0.00          O
HETATM 6222  H1  SPC  3785      17.631   9.809  -7.736  1.00  0.00          H
HETATM 6223  H2  SPC  3785      18.686   8.736  -8.398  1.00  0.00          H
HETATM 6224  O   SPC  3790      17.703  22.403   1.406  1.00  0.00          O
HETATM 6225  H1  SPC  3790      18.174  21.506   1.359  1.00  0.00          H
HETATM 6226  H2  SPC  3790      17.922  22.835   2.292  1.00  0.00          H
HETATM 6227  O   SPC  3794       9.165  22.229   8.360  1.00  0.00          O
HETATM 6228  H1  SPC  3794       9.014  23.221   8.245  1.00  0.00          H
HETATM 6229  H2  SPC  3794       8.485  21.864   9.012  1.00  0.00          H
HETATM 6230  O   SPC  3796      22.428  11.817  -1.800  1.00  0.00          O
HETATM 6231  H1  SPC  3796      22.789  10.909  -2.059  1.00  0.00          H
HETATM 6232  H2  SPC  3796      21.855  12.150  -2.562  1.00  0.00          H
HETATM 6233  O   SPC  3798      18.897  19.963   1.370  1.00  0.00          O
HETATM 6234  H1  SPC  3798      19.815  19.720   1.737  1.00  0.00          H
HETATM 6235  H2  SPC  3798      18.382  19.112   1.245  1.00  0.00          H
HETATM 6236  O   SPC  3799      15.409  28.658  -0.487  1.00  0.00          O
HETATM 6237  H1  SPC  3799      14.774  29.108   0.155  1.00  0.00          H
HETATM 6238  H2  SPC  3799      15.889  27.914  -0.004  1.00  0.00          H
HETATM 6239  O   SPC  3800      13.232  22.636   8.712  1.00  0.00          O
HETATM 6240  H1  SPC  3800      12.719  22.959   7.901  1.00  0.00          H
HETATM 6241  H2  SPC  3800      14.204  22.885   8.589  1.00  0.00          H
HETATM 6242  O   SPC  3803      16.043  20.273   8.483  1.00  0.00          O
HETATM 6243  H1  SPC  3803      15.186  20.198   9.012  1.00  0.00          H
HETATM 6244  H2  SPC  3803      16.431  19.340   8.397  1.00  0.00          H
HETATM 6245  O   SPC  3808      11.209  23.581   2.679  1.00  0.00          O
HETATM 6246  H1  SPC  3808      10.540  22.830   2.534  1.00  0.00          H
HETATM 6247  H2  SPC  3808      11.668  23.765   1.797  1.00  0.00          H
HETATM 6248  O   SPC  3810      14.954  22.517   1.231  1.00  0.00          O
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HETATM 6249  H1  SPC  3810      14.669  22.781   0.302  1.00  0.00           H
HETATM 6250  H2  SPC  3810      15.952  22.364   1.235  1.00  0.00           H
HETATM 6251  O   SPC  3811       8.195  21.825  -3.480  1.00  0.00           O
HETATM 6252  H1  SPC  3811       7.550  22.229  -2.814  1.00  0.00           H
HETATM 6253  H2  SPC  3811       8.987  22.442  -3.569  1.00  0.00           H
HETATM 6254  O   SPC  3812      13.676  25.604   3.317  1.00  0.00           O
HETATM 6255  H1  SPC  3812      13.605  25.764   2.319  1.00  0.00           H
HETATM 6256  H2  SPC  3812      13.910  24.632   3.472  1.00  0.00           H
HETATM 6257  O   SPC  3813      13.920  24.327  -3.954  1.00  0.00           O
HETATM 6258  H1  SPC  3813      13.968  23.394  -4.348  1.00  0.00           H
HETATM 6259  H2  SPC  3813      13.541  24.945  -4.652  1.00  0.00           H
HETATM 6260  O   SPC  3814      14.440  23.633  -1.359  1.00  0.00           O
HETATM 6261  H1  SPC  3814      15.409  23.859  -1.190  1.00  0.00           H
HETATM 6262  H2  SPC  3814      14.214  23.898  -2.311  1.00  0.00           H
HETATM 6263  O   SPC  3815      16.110  10.650  -7.467  1.00  0.00           O
HETATM 6264  H1  SPC  3815      16.240  11.626  -7.255  1.00  0.00           H
HETATM 6265  H2  SPC  3815      15.614  10.574  -8.351  1.00  0.00           H
HETATM 6266  O   SPC  3818      19.598  10.391  -5.392  1.00  0.00           O
HETATM 6267  H1  SPC  3818      19.323  10.093  -6.320  1.00  0.00           H
HETATM 6268  H2  SPC  3818      18.796  10.792  -4.933  1.00  0.00           H
HETATM 6269  O   SPC  3822      21.514  14.372  -0.818  1.00  0.00           O
HETATM 6270  H1  SPC  3822      22.140  13.610  -1.026  1.00  0.00           H
HETATM 6271  H2  SPC  3822      20.609  14.148  -1.217  1.00  0.00           H
HETATM 6272  O   SPC  3823      13.436  26.033   0.659  1.00  0.00           O
HETATM 6273  H1  SPC  3823      13.236  26.687  -0.086  1.00  0.00           H
HETATM 6274  H2  SPC  3823      12.940  25.173   0.465  1.00  0.00           H
HETATM 6275  O   SPC  3825      10.043  27.644  -6.071  1.00  0.00           O
HETATM 6276  H1  SPC  3825      10.309  28.317  -5.370  1.00  0.00           H
HETATM 6277  H2  SPC  3825       9.435  26.958  -5.642  1.00  0.00           H
HETATM 6278  O   SPC  3826      12.197  25.747  -5.724  1.00  0.00           O
HETATM 6279  H1  SPC  3826      11.708  24.925  -6.054  1.00  0.00           H
HETATM 6280  H2  SPC  3826      11.752  26.558  -6.121  1.00  0.00           H
HETATM 6281  O   SPC  3827      11.360  20.844  -4.471  1.00  0.00           O
HETATM 6282  H1  SPC  3827      11.291  20.944  -5.473  1.00  0.00           H
HETATM 6283  H2  SPC  3827      10.695  20.153  -4.164  1.00  0.00           H
HETATM 6284  O   SPC  3829      11.485  26.246  -3.144  1.00  0.00           O
HETATM 6285  H1  SPC  3829      12.168  26.604  -2.488  1.00  0.00           H
HETATM 6286  H2  SPC  3829      11.945  26.081  -4.030  1.00  0.00           H
HETATM 6287  O   SPC  3831      16.627  13.324  -6.677  1.00  0.00           O
HETATM 6288  H1  SPC  3831      17.546  13.252  -6.256  1.00  0.00           H
HETATM 6289  H2  SPC  3831      16.727  13.741  -7.594  1.00  0.00           H
HETATM 6290  O   SPC  3832      15.083  27.291   4.829  1.00  0.00           O
HETATM 6291  H1  SPC  3832      14.535  26.693   4.220  1.00  0.00           H
HETATM 6292  H2  SPC  3832      14.906  27.008   5.778  1.00  0.00           H
HETATM 6293  O   SPC  3839      12.012  23.465   6.414  1.00  0.00           O
HETATM 6294  H1  SPC  3839      12.117  22.650   5.824  1.00  0.00           H
HETATM 6295  H2  SPC  3839      11.157  23.932   6.151  1.00  0.00           H
HETATM 6296  O   SPC  3843      11.289  26.616   4.118  1.00  0.00           O
HETATM 6297  H1  SPC  3843      12.214  26.261   3.907  1.00  0.00           H
HETATM 6298  H2  SPC  3843      10.733  25.854   4.482  1.00  0.00           H
HETATM 6299  O   SPC  3845      19.110  13.670  -1.833  1.00  0.00           O
HETATM 6300  H1  SPC  3845      18.823  12.868  -2.373  1.00  0.00           H
HETATM 6301  H2  SPC  3845      18.439  14.413  -1.970  1.00  0.00           H
HETATM 6302  O   SPC  3847      11.825  21.484  -7.170  1.00  0.00           O
HETATM 6303  H1  SPC  3847      11.712  21.255  -8.150  1.00  0.00           H
HETATM 6304  H2  SPC  3847      12.806  21.598  -6.982  1.00  0.00           H
HETATM 6305  O   SPC  3848      12.104  23.759   0.097  1.00  0.00           O
HETATM 6306  H1  SPC  3848      12.851  23.546  -0.551  1.00  0.00           H
HETATM 6307  H2  SPC  3848      11.228  23.784  -0.409  1.00  0.00           H
HETATM 6308  O   SPC  3850      16.415  17.757  -6.230  1.00  0.00           O
HETATM 6309  H1  SPC  3850      15.971  18.662  -6.202  1.00  0.00           H
HETATM 6310  H2  SPC  3850      16.434  17.444  -7.194  1.00  0.00           H
HETATM 6311  O   SPC  3851      18.315  23.863   3.747  1.00  0.00           O
HETATM 6312  H1  SPC  3851      19.303  23.971   3.869  1.00  0.00           H
HETATM 6313  H2  SPC  3851      17.912  24.774   3.546  1.00  0.00           H
HETATM 6314  O   SPC  3853       9.978  24.055  -3.750  1.00  0.00           O
HETATM 6315  H1  SPC  3853      10.625  24.781  -3.467  1.00  0.00           H
HETATM 6316  H2  SPC  3853      10.228  23.753  -4.684  1.00  0.00           H
HETATM 6317  O   SPC  3855      16.186  23.732   5.608  1.00  0.00           O
HETATM 6318  H1  SPC  3855      17.063  23.783   5.111  1.00  0.00           H
HETATM 6319  H2  SPC  3855      15.480  23.407   4.958  1.00  0.00           H
HETATM 6320  O   SPC  3858      21.250  12.300  -4.327  1.00  0.00           O
HETATM 6321  H1  SPC  3858      20.690  11.537  -4.686  1.00  0.00           H
HETATM 6322  H2  SPC  3858      21.999  12.476  -4.968  1.00  0.00           H
HETATM 6323  O   SPC  3859      17.560  15.874  -2.206  1.00  0.00           O
HETATM 6324  H1  SPC  3859      17.189  15.706  -3.136  1.00  0.00           H
HETATM 6325  H2  SPC  3859      18.156  16.679  -2.245  1.00  0.00           H
HETATM 6326  O   SPC  3860      24.305  11.683   3.411  1.00  0.00           O
HETATM 6327  H1  SPC  3860      23.919  11.604   2.478  1.00  0.00           H
HETATM 6328  H2  SPC  3860      24.928  12.466   3.435  1.00  0.00           H
HETATM 6329  O   SPC  3862       9.635  24.194  -1.014  1.00  0.00           O
HETATM 6330  H1  SPC  3862       9.632  25.175  -0.765  1.00  0.00           H
HETATM 6331  H2  SPC  3862       9.632  24.113  -2.021  1.00  0.00           H
HETATM 6332  O   SPC  3863      14.361  22.961   3.785  1.00  0.00           O
HETATM 6333  H1  SPC  3863      13.674  22.289   4.092  1.00  0.00           H
HETATM 6334  H2  SPC  3863      14.597  22.757   2.818  1.00  0.00           H
HETATM 6335  O   SPC  3864      18.904  13.532  -5.235  1.00  0.00           O
HETATM 6336  H1  SPC  3864      19.759  13.246  -4.785  1.00  0.00           H
HETATM 6337  H2  SPC  3864      18.612  14.417  -4.857  1.00  0.00           H
HETATM 6338  O   SPC  3870      12.058  21.623   4.397  1.00  0.00           O
HETATM 6339  H1  SPC  3870      11.841  22.434   3.834  1.00  0.00           H
HETATM 6340  H2  SPC  3870      11.647  20.816   3.946  1.00  0.00           H
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HETATM 6341  O   SPC  3872      15.923  22.922   8.219  1.00  0.00           O
HETATM 6342  H1  SPC  3872      16.124  23.272   7.291  1.00  0.00           H
HETATM 6343  H2  SPC  3872      16.083  21.920   8.224  1.00  0.00           H
HETATM 6344  O   SPC  3873      13.073  27.692  -1.504  1.00  0.00           O
HETATM 6345  H1  SPC  3873      14.031  27.999  -1.406  1.00  0.00           H
HETATM 6346  H2  SPC  3873      12.470  28.496  -1.392  1.00  0.00           H
HETATM 6347  O   SPC  3874      12.304  26.189   8.629  1.00  0.00           O
HETATM 6348  H1  SPC  3874      11.560  26.656   8.130  1.00  0.00           H
HETATM 6349  H2  SPC  3874      13.048  25.981   7.979  1.00  0.00           H
HETATM 6350  O   SPC  3876      14.087  25.293   6.683  1.00  0.00           O
HETATM 6351  H1  SPC  3876      13.317  24.665   6.506  1.00  0.00           H
HETATM 6352  H2  SPC  3876      14.941  24.840   6.395  1.00  0.00           H
HETATM 6353  O   SPC  3877       7.705  21.094  10.374  1.00  0.00           O
HETATM 6354  H1  SPC  3877       7.552  20.123  10.612  1.00  0.00           H
HETATM 6355  H2  SPC  3877       7.932  21.591  11.225  1.00  0.00           H
HETATM 6356  O   SPC  3879       8.877  24.958   8.300  1.00  0.00           O
HETATM 6357  H1  SPC  3879       8.923  25.289   9.253  1.00  0.00           H
HETATM 6358  H2  SPC  3879       9.364  25.623   7.717  1.00  0.00           H
HETATM 6359  O   SPC  3881       9.505  26.677   0.235  1.00  0.00           O
HETATM 6360  H1  SPC  3881       8.879  26.314   0.941  1.00  0.00           H
HETATM 6361  H2  SPC  3881      10.211  27.236   0.694  1.00  0.00           H
HETATM 6362  O   SPC  3883      16.148  26.261   0.762  1.00  0.00           O
HETATM 6363  H1  SPC  3883      16.563  25.522   0.214  1.00  0.00           H
HETATM 6364  H2  SPC  3883      15.143  26.138   0.756  1.00  0.00           H
HETATM 6365  O   SPC  3888      10.496  23.707  -6.418  1.00  0.00           O
HETATM 6366  H1  SPC  3888       9.820  23.970  -7.124  1.00  0.00           H
HETATM 6367  H2  SPC  3888      10.965  22.863  -6.724  1.00  0.00           H
HETATM 6368  O   SPC  3890      16.931  15.545  -4.794  1.00  0.00           O
HETATM 6369  H1  SPC  3890      16.602  14.791  -5.375  1.00  0.00           H
HETATM 6370  H2  SPC  3890      16.756  16.419  -5.279  1.00  0.00           H
HETATM 6371  O   SPC  3891      17.100  24.076  -0.656  1.00  0.00           O
HETATM 6372  H1  SPC  3891      17.806  24.056  -1.367  1.00  0.00           H
HETATM 6373  H2  SPC  3891      17.375  23.450   0.092  1.00  0.00           H
HETATM 6374  O   SPC  3895      13.860  21.877  -5.024  1.00  0.00           O
HETATM 6375  H1  SPC  3895      13.016  21.423  -4.702  1.00  0.00           H
HETATM 6376  H2  SPC  3895      14.453  21.191  -5.471  1.00  0.00           H
HETATM 6377  O   SPC  3898       9.870  24.413   4.854  1.00  0.00           O
HETATM 6378  H1  SPC  3898      10.357  24.124   4.015  1.00  0.00           H
HETATM 6379  H2  SPC  3898       8.902  24.132   4.772  1.00  0.00           H
HETATM 6380  O   SPC  3899      17.205  26.259   3.292  1.00  0.00           O
HETATM 6381  H1  SPC  3899      16.862  26.343   2.345  1.00  0.00           H
HETATM 6382  H2  SPC  3899      16.548  26.704   3.914  1.00  0.00           H
HETATM 6383  O   SPC  3903      13.853  20.570  12.742  1.00  0.00           O
HETATM 6384  H1  SPC  3903      13.827  21.579  12.777  1.00  0.00           H
HETATM 6385  H2  SPC  3903      13.080  20.207  13.284  1.00  0.00           H
HETATM 6386  O   SPC  3911       9.249  19.511  15.249  1.00  0.00           O
HETATM 6387  H1  SPC  3911       8.320  19.656  14.881  1.00  0.00           H
HETATM 6388  H2  SPC  3911       9.619  20.410  15.536  1.00  0.00           H
HETATM 6389  O   SPC  3923       9.330  16.897  16.152  1.00  0.00           O
HETATM 6390  H1  SPC  3923       9.397  17.865  15.866  1.00  0.00           H
HETATM 6391  H2  SPC  3923      10.256  16.556  16.373  1.00  0.00           H
HETATM 6392  O   SPC  3942       8.249  22.094  12.869  1.00  0.00           O
HETATM 6393  H1  SPC  3942       7.848  21.429  13.511  1.00  0.00           H
HETATM 6394  H2  SPC  3942       9.226  22.216  13.093  1.00  0.00           H
HETATM 6395  O   SPC  3960       9.243  26.066  10.809  1.00  0.00           O
HETATM 6396  H1  SPC  3960      10.169  25.730  11.038  1.00  0.00           H
HETATM 6397  H2  SPC  3960       8.565  25.553  11.365  1.00  0.00           H
HETATM 6398  O   SPC  3961      11.744  24.836  10.891  1.00  0.00           O
HETATM 6399  H1  SPC  3961      11.462  23.931  10.555  1.00  0.00           H
HETATM 6400  H2  SPC  3961      12.047  25.394  10.099  1.00  0.00           H
HETATM 6401  O   SPC  3963      13.769  20.270   9.990  1.00  0.00           O
HETATM 6402  H1  SPC  3963      13.545  21.137   9.522  1.00  0.00           H
HETATM 6403  H2  SPC  3963      13.864  20.449  10.979  1.00  0.00           H
HETATM 6404  O   SPC  3965      13.584  23.355  12.407  1.00  0.00           O
HETATM 6405  H1  SPC  3965      14.475  23.264  11.931  1.00  0.00           H
HETATM 6406  H2  SPC  3965      13.059  24.089  11.954  1.00  0.00           H
HETATM 6407  O   SPC  3970      18.823   9.464  14.271  1.00  0.00           O
HETATM 6408  H1  SPC  3970      19.697   9.774  14.650  1.00  0.00           H
HETATM 6409  H2  SPC  3970      18.951   9.258  13.290  1.00  0.00           H
HETATM 6410  O   SPC  3978      11.681  15.519  16.880  1.00  0.00           O
HETATM 6411  H1  SPC  3978      12.362  14.861  16.518  1.00  0.00           H
HETATM 6412  H2  SPC  3978      11.006  14.999  17.428  1.00  0.00           H
HETATM 6413  O   SPC  3991      11.101  19.482  11.241  1.00  0.00           O
HETATM 6414  H1  SPC  3991      11.054  20.411  10.850  1.00  0.00           H
HETATM 6415  H2  SPC  3991      11.184  19.554  12.243  1.00  0.00           H
HETATM 6416  O   SPC  3992      10.258  21.985  15.550  1.00  0.00           O
HETATM 6417  H1  SPC  3992      10.638  22.144  14.626  1.00  0.00           H
HETATM 6418  H2  SPC  3992      10.456  22.782  16.123  1.00  0.00           H
HETATM 6419  O   SPC  3996      11.040  22.413  12.964  1.00  0.00           O
HETATM 6420  H1  SPC  3996      11.951  22.836  13.068  1.00  0.00           H
HETATM 6421  H2  SPC  3996      10.885  22.265  11.976  1.00  0.00           H
HETATM 6422  O   SPC  4004      15.816  16.597  14.942  1.00  0.00           O
HETATM 6423  H1  SPC  4004      16.495  17.071  15.505  1.00  0.00           H
HETATM 6424  H2  SPC  4004      15.685  17.130  14.088  1.00  0.00           H
HETATM 6425  O   SPC  4008      17.078  11.091  15.907  1.00  0.00           O
HETATM 6426  H1  SPC  4008      17.675  10.734  15.181  1.00  0.00           H
HETATM 6427  H2  SPC  4008      16.781  12.023  15.662  1.00  0.00           H
HETATM 6428  O   SPC  4015      16.174  13.836  15.631  1.00  0.00           O
HETATM 6429  H1  SPC  4015      16.491  14.018  16.564  1.00  0.00           H
HETATM 6430  H2  SPC  4015      16.040  14.719  15.159  1.00  0.00           H
HETATM 6431  O   SPC  4018      13.395  13.647  15.935  1.00  0.00           O
HETATM 6432  H1  SPC  4018      14.384  13.579  15.756  1.00  0.00           H
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HETATM 6433  H2  SPC  4018      13.019  12.713  16.043  1.00  0.00          H
HETATM 6434  O   SPC  4019      12.307  11.169  16.167  1.00  0.00          O
HETATM 6435  H1  SPC  4019      12.608  10.298  16.576  1.00  0.00          H
HETATM 6436  H2  SPC  4019      11.315  11.129  16.005  1.00  0.00          H
HETATM 6437  O   SPC  4040      15.833  22.833  10.974  1.00  0.00          O
HETATM 6438  H1  SPC  4040      15.896  23.067   9.993  1.00  0.00          H
HETATM 6439  H2  SPC  4040      16.480  22.093  11.167  1.00  0.00          H
HETATM 6440  O   SPC  4047      11.750  19.290  14.033  1.00  0.00          O
HETATM 6441  H1  SPC  4047      12.317  18.694  14.624  1.00  0.00          H
HETATM 6442  H2  SPC  4047      10.835  19.373  14.450  1.00  0.00          H
HETATM 6443  O   SPC  4049      13.174  17.529  15.596  1.00  0.00          O
HETATM 6444  H1  SPC  4049      12.670  16.873  16.175  1.00  0.00          H
HETATM 6445  H2  SPC  4049      14.097  17.163  15.423  1.00  0.00          H
HETATM 6446  O   SPC  4057      11.081  22.118  10.230  1.00  0.00          O
HETATM 6447  H1  SPC  4057      10.339  22.088   9.539  1.00  0.00          H
HETATM 6448  H2  SPC  4057      11.956  22.256   9.737  1.00  0.00          H
HETATM 6449  O   SPC  4065       9.675  14.040  18.029  1.00  0.00          O
HETATM 6450  H1  SPC  4065       9.294  13.115  17.909  1.00  0.00          H
HETATM 6451  H2  SPC  4065       8.916  14.678  18.214  1.00  0.00          H
HETATM 6452  O   SPC  4072      15.481  18.285  12.861  1.00  0.00          O
HETATM 6453  H1  SPC  4072      15.029  19.187  12.864  1.00  0.00          H
HETATM 6454  H2  SPC  4072      15.608  17.992  11.897  1.00  0.00          H
HETATM 6455  O   SPC  4392       9.456  22.471 -10.138  1.00  0.00          O
HETATM 6456  H1  SPC  4392       8.644  22.222 -10.689  1.00  0.00          H
HETATM 6457  H2  SPC  4392       9.225  23.264  -9.563  1.00  0.00          H
HETATM 6458  O   SPC  4394      11.893  16.806 -12.238  1.00  0.00          O
HETATM 6459  H1  SPC  4394      12.015  16.057 -12.903  1.00  0.00          H
HETATM 6460  H2  SPC  4394      10.925  17.117 -12.293  1.00  0.00          H
HETATM 6461  O   SPC  4398      18.579  12.062  -9.324  1.00  0.00          O
HETATM 6462  H1  SPC  4398      18.779  11.215  -8.816  1.00  0.00          H
HETATM 6463  H2  SPC  4398      18.038  11.828 -10.144  1.00  0.00          H
HETATM 6464  O   SPC  4400      14.752  11.085 -14.369  1.00  0.00          O
HETATM 6465  H1  SPC  4400      14.722  10.589 -15.240  1.00  0.00          H
HETATM 6466  H2  SPC  4400      15.562  10.774 -13.854  1.00  0.00          H
HETATM 6467  O   SPC  4410      14.274  20.514  -8.986  1.00  0.00          O
HETATM 6468  H1  SPC  4410      14.729  20.011  -9.735  1.00  0.00          H
HETATM 6469  H2  SPC  4410      13.352  20.782  -9.302  1.00  0.00          H
HETATM 6470  O   SPC  4411       8.659  24.470  -8.310  1.00  0.00          O
HETATM 6471  H1  SPC  4411       8.484  25.463  -8.294  1.00  0.00          H
HETATM 6472  H2  SPC  4411       7.773  23.988  -8.398  1.00  0.00          H
HETATM 6473  O   SPC  4416      16.313  16.935  -8.823  1.00  0.00          O
HETATM 6474  H1  SPC  4416      15.462  16.932  -9.363  1.00  0.00          H
HETATM 6475  H2  SPC  4416      16.750  16.028  -8.911  1.00  0.00          H
HETATM 6476  O   SPC  4423      15.467  20.328  -6.590  1.00  0.00          O
HETATM 6477  H1  SPC  4423      16.365  20.753  -6.718  1.00  0.00          H
HETATM 6478  H2  SPC  4423      14.983  20.325  -7.483  1.00  0.00          H
HETATM 6479  O   SPC  4433      13.564  12.703  -9.564  1.00  0.00          O
HETATM 6480  H1  SPC  4433      13.159  12.699  -8.642  1.00  0.00          H
HETATM 6481  H2  SPC  4433      13.977  11.791  -9.736  1.00  0.00          H
HETATM 6482  O   SPC  4458      12.618  19.485 -12.015  1.00  0.00          O
HETATM 6483  H1  SPC  4458      13.609  19.476 -11.821  1.00  0.00          H
HETATM 6484  H2  SPC  4458      12.302  18.529 -12.109  1.00  0.00          H
HETATM 6485  O   SPC  4466      11.441  19.640 -17.191  1.00  0.00          O
HETATM 6486  H1  SPC  4466      11.479  19.832 -16.195  1.00  0.00          H
HETATM 6487  H2  SPC  4466      12.149  20.181 -17.648  1.00  0.00          H
HETATM 6488  O   SPC  4479      11.709  14.919 -14.373  1.00  0.00          O
HETATM 6489  H1  SPC  4479      11.609  15.652 -15.061  1.00  0.00          H
HETATM 6490  H2  SPC  4479      10.954  14.260 -14.497  1.00  0.00          H
HETATM 6491  O   SPC  4481      17.072   9.928 -13.161  1.00  0.00          O
HETATM 6492  H1  SPC  4481      16.983  10.681 -12.492  1.00  0.00          H
HETATM 6493  H2  SPC  4481      17.789   9.297 -12.824  1.00  0.00          H
HETATM 6494  O   SPC  4484      10.040  10.736 -14.245  1.00  0.00          O
HETATM 6495  H1  SPC  4484      10.907  10.604 -13.742  1.00  0.00          H
HETATM 6496  H2  SPC  4484      10.011  11.680 -14.596  1.00  0.00          H
HETATM 6497  O   SPC  4485      11.745  21.055  -9.903  1.00  0.00          O
HETATM 6498  H1  SPC  4485      11.928  20.508 -10.734  1.00  0.00          H
HETATM 6499  H2  SPC  4485      10.902  21.598 -10.058  1.00  0.00          H
HETATM 6500  O   SPC  4491      14.128  13.735 -13.611  1.00  0.00          O
HETATM 6501  H1  SPC  4491      14.277  12.813 -13.993  1.00  0.00          H
HETATM 6502  H2  SPC  4491      13.253  14.098 -13.960  1.00  0.00          H
HETATM 6503  O   SPC  4519      15.105  14.142 -11.167  1.00  0.00          O
HETATM 6504  H1  SPC  4519      14.779  14.057 -12.126  1.00  0.00          H
HETATM 6505  H2  SPC  4519      14.461  13.630 -10.568  1.00  0.00          H
HETATM 6506  O   SPC  4533      14.195  16.657 -10.692  1.00  0.00          O
HETATM 6507  H1  SPC  4533      13.281  16.709 -11.124  1.00  0.00          H
HETATM 6508  H2  SPC  4533      14.569  15.732 -10.859  1.00  0.00          H
HETATM 6509  O   SPC  4538      15.235  19.091 -11.138  1.00  0.00          O
HETATM 6510  H1  SPC  4538      14.876  18.159 -10.965  1.00  0.00          H
HETATM 6511  H2  SPC  4538      16.209  19.021 -11.363  1.00  0.00          H
HETATM 6512  O   SPC  4549       8.242  27.268  -8.138  1.00  0.00          O
HETATM 6513  H1  SPC  4549       8.936  27.490  -7.436  1.00  0.00          H
HETATM 6514  H2  SPC  4549       8.508  27.703  -9.001  1.00  0.00          H
HETATM 6515  O   SPC  4562      17.061  14.328  -9.180  1.00  0.00          O
HETATM 6516  H1  SPC  4562      17.761  13.600  -9.264  1.00  0.00          H
HETATM 6517  H2  SPC  4562      16.409  14.237  -9.946  1.00  0.00          H
HETATM 6518  O   SPC  4578       9.494  13.345 -15.122  1.00  0.00          O
HETATM 6519  H1  SPC  4578       9.462  13.931 -15.948  1.00  0.00          H
HETATM 6520  H2  SPC  4578       8.570  12.975 -14.966  1.00  0.00          H
HETATM 6521  O   SPC  4583      11.027  17.019 -16.118  1.00  0.00          O
HETATM 6522  H1  SPC  4583      10.428  17.475 -15.441  1.00  0.00          H
HETATM 6523  H2  SPC  4583      11.432  17.729 -16.705  1.00  0.00          H
HETATM 6524  O   SPC  4591      11.459  19.947 -14.512  1.00  0.00          O
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HETATM 6525  H1  SPC  4591      11.931  19.968 -13.622  1.00  0.00          H
HETATM 6526  H2  SPC  4591      10.614  19.396 -14.410  1.00  0.00          H
HETATM 6527  O   SPC  4593      16.654  11.830 -11.281  1.00  0.00          O
HETATM 6528  H1  SPC  4593      16.006  11.287 -10.715  1.00  0.00          H
HETATM 6529  H2  SPC  4593      16.226  12.719 -11.482  1.00  0.00          H
HETATM 6530  O   SPC  4595       9.562  28.481   4.977  1.00  0.00          O
HETATM 6531  H1  SPC  4595      10.233  27.791   4.660  1.00  0.00          H
HETATM 6532  H2  SPC  4595       9.696  29.323   4.434  1.00  0.00          H
HETATM 6533  O   SPC  4603      14.961  29.565   3.301  1.00  0.00          O
HETATM 6534  H1  SPC  4603      14.949  28.763   3.918  1.00  0.00          H
HETATM 6535  H2  SPC  4603      15.858  30.005   3.366  1.00  0.00          H
HETATM 6536  O   SPC  4655      10.068  27.323   7.422  1.00  0.00          O
HETATM 6537  H1  SPC  4655       9.924  27.807   6.547  1.00  0.00          H
HETATM 6538  H2  SPC  4655       9.521  27.782   8.136  1.00  0.00          H
HETATM 6539  O   SPC  4664      11.053  28.224   1.919  1.00  0.00          O
HETATM 6540  H1  SPC  4664      11.183  27.571   2.680  1.00  0.00          H
HETATM 6541  H2  SPC  4664      10.603  29.052   2.282  1.00  0.00          H
HETATM 6542  O   SPC  4699      13.316  29.573   1.143  1.00  0.00          O
HETATM 6543  H1  SPC  4699      13.904  29.659   1.963  1.00  0.00          H
HETATM 6544  H2  SPC  4699      12.531  28.980   1.375  1.00  0.00          H
HETATM 6545  O   SPC  4716      10.559  28.823  -3.502  1.00  0.00          O
HETATM 6546  H1  SPC  4716      10.867  27.879  -3.313  1.00  0.00          H
HETATM 6547  H2  SPC  4716      10.946  29.431  -2.796  1.00  0.00          H
HETATM 6548  O   SPC  4729      11.586  29.953  -1.078  1.00  0.00          O
HETATM 6549  H1  SPC  4729      12.278  30.096  -0.358  1.00  0.00          H
HETATM 6550  H2  SPC  4729      10.693  30.282  -0.731  1.00  0.00          H
HETATM 6551  O   SPC  4733      10.067  30.495   3.177  1.00  0.00          O
HETATM 6552  H1  SPC  4733       9.201  30.880   2.819  1.00  0.00          H
HETATM 6553  H2  SPC  4733      10.788  31.185   3.081  1.00  0.00          H
HETATM 6554  O   SPC  A25J    -18.125   6.845   8.145  1.00  0.00          O
HETATM 6555  H1  SPC  A25J    -17.831   6.489   7.245  1.00  0.00          H
HETATM 6556  H2  SPC  A25J    -19.068   7.174   8.057  1.00  0.00          H
HETATM 6557  O   SPC  A25P    -18.494  -2.804   8.086  1.00  0.00          O
HETATM 6558  H1  SPC  A25P    -17.979  -3.614   7.780  1.00  0.00          H
HETATM 6559  H2  SPC  A25P    -18.080  -2.478   8.945  1.00  0.00          H
HETATM 6560  O   SPC  A25R    -17.550   2.595   7.488  1.00  0.00          O
HETATM 6561  H1  SPC  A25R    -16.747   2.962   7.965  1.00  0.00          H
HETATM 6562  H2  SPC  A25R    -17.559   2.960   6.548  1.00  0.00          H
HETATM 6563  O   SPC  A25S    -18.937  -3.001   3.363  1.00  0.00          O
HETATM 6564  H1  SPC  A25S    -19.907  -3.101   3.134  1.00  0.00          H
HETATM 6565  H2  SPC  A25S    -18.516  -2.351   2.714  1.00  0.00          H
HETATM 6566  O   SPC  A26K    -17.095  -4.221   4.952  1.00  0.00          O
HETATM 6567  H1  SPC  A26K    -16.227  -4.092   4.464  1.00  0.00          H
HETATM 6568  H2  SPC  A26K    -17.837  -3.808   4.400  1.00  0.00          H
HETATM 6569  O   SPC  A26V    -17.872   6.118   5.454  1.00  0.00          O
HETATM 6570  H1  SPC  A26V    -18.361   6.373   4.595  1.00  0.00          H
HETATM 6571  H2  SPC  A26V    -17.593   5.152   5.375  1.00  0.00          H
HETATM 6572  O   SPC  A278    -16.722  -4.831   7.528  1.00  0.00          O
HETATM 6573  H1  SPC  A278    -15.751  -4.630   7.723  1.00  0.00          H
HETATM 6574  H2  SPC  A278    -16.883  -4.677   6.537  1.00  0.00          H
HETATM 6575  O   SPC  A27A    -17.089   3.489   4.877  1.00  0.00          O
HETATM 6576  H1  SPC  A27A    -16.484   3.876   4.168  1.00  0.00          H
HETATM 6577  H2  SPC  A27A    -17.151   2.493   4.729  1.00  0.00          H
HETATM 6578  O   SPC  A281    -14.771   4.721  12.771  1.00  0.00          O
HETATM 6579  H1  SPC  A281    -14.558   5.700  12.636  1.00  0.00          H
HETATM 6580  H2  SPC  A281    -14.462   4.448  13.695  1.00  0.00          H
HETATM 6581  O   SPC  A287     -8.931   8.919  13.533  1.00  0.00          O
HETATM 6582  H1  SPC  A287     -7.990   8.676  13.806  1.00  0.00          H
HETATM 6583  H2  SPC  A287     -8.877   9.503  12.707  1.00  0.00          H
HETATM 6584  O   SPC  A28N    -10.764   0.765  17.188  1.00  0.00          O
HETATM 6585  H1  SPC  A28N    -11.109   0.724  18.129  1.00  0.00          H
HETATM 6586  H2  SPC  A28N     -9.760   0.636  17.210  1.00  0.00          H
HETATM 6587  O   SPC  A291     -9.375   4.779  16.152  1.00  0.00          O
HETATM 6588  H1  SPC  A291     -9.682   4.389  15.277  1.00  0.00          H
HETATM 6589  H2  SPC  A291     -8.725   4.138  16.581  1.00  0.00          H
HETATM 6590  O   SPC  A298    -13.890   3.919  15.206  1.00  0.00          O
HETATM 6591  H1  SPC  A298    -13.378   3.049  15.238  1.00  0.00          H
HETATM 6592  H2  SPC  A298    -13.254   4.674  15.438  1.00  0.00          H
HETATM 6593  O   SPC  A29N    -18.289   0.646   9.252  1.00  0.00          O
HETATM 6594  H1  SPC  A29N    -18.094   1.394   8.599  1.00  0.00          H
HETATM 6595  H2  SPC  A29N    -18.526  -0.178   8.733  1.00  0.00          H
HETATM 6596  O   SPC  A2AC    -12.271   1.645  15.021  1.00  0.00          O
HETATM 6597  H1  SPC  A2AC    -11.693   2.270  14.477  1.00  0.00          H
HETATM 6598  H2  SPC  A2AC    -11.759   1.372  15.849  1.00  0.00          H
HETATM 6599  O   SPC  A2AJ    -18.022   5.952  10.838  1.00  0.00          O
HETATM 6600  H1  SPC  A2AJ    -17.570   6.741  11.258  1.00  0.00          H
HETATM 6601  H2  SPC  A2AJ    -18.083   6.107   9.843  1.00  0.00          H
HETATM 6602  O   SPC  A2AP    -11.994   5.879  15.555  1.00  0.00          O
HETATM 6603  H1  SPC  A2AP    -11.876   6.677  14.948  1.00  0.00          H
HETATM 6604  H2  SPC  A2AP    -11.101   5.640  15.953  1.00  0.00          H
HETATM 6605  O   SPC  A2BE    -17.866   0.956  11.967  1.00  0.00          O
HETATM 6606  H1  SPC  A2BE    -17.831   1.947  12.144  1.00  0.00          H
HETATM 6607  H2  SPC  A2BE    -18.076   0.809  10.988  1.00  0.00          H
HETATM 6608  O   SPC  A2BQ    -16.352   2.584  14.941  1.00  0.00          O
HETATM 6609  H1  SPC  A2BQ    -16.862   3.038  14.200  1.00  0.00          H
HETATM 6610  H2  SPC  A2BQ    -15.544   3.143  15.169  1.00  0.00          H
HETATM 6611  O   SPC  A2BS    -17.333   3.782  12.538  1.00  0.00          O
HETATM 6612  H1  SPC  A2BS    -16.358   4.055  12.540  1.00  0.00          H
HETATM 6613  H2  SPC  A2BS    -17.839   4.442  11.965  1.00  0.00          H
HETATM 6614  O   SPC  A2BV    -16.360   0.011  14.027  1.00  0.00          O
HETATM 6615  H1  SPC  A2BV    -16.960   0.169  13.227  1.00  0.00          H
HETATM 6616  H2  SPC  A2BV    -16.359   0.859  14.579  1.00  0.00          H
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HETATM 6617  O   SPC  A2OW    -17.722   8.931   5.016  1.00  0.00          O
HETATM 6618  H1  SPC  A2OW    -18.200   9.021   4.123  1.00  0.00          H
HETATM 6619  H2  SPC  A2OW    -17.727   7.955   5.269  1.00  0.00          H
HETATM 6620  O   SPC  A2QF    -17.010  10.652   6.966  1.00  0.00          O
HETATM 6621  H1  SPC  A2QF    -17.216   9.991   6.224  1.00  0.00          H
HETATM 6622  H2  SPC  A2QF    -17.536  11.486   6.802  1.00  0.00          H
HETATM 6623  O   SPC  A2QT    -10.845  19.566   6.972  1.00  0.00          O
HETATM 6624  H1  SPC  A2QT    -10.262  20.085   7.612  1.00  0.00          H
HETATM 6625  H2  SPC  A2QT    -11.618  20.150   6.684  1.00  0.00          H
HETATM 6626  O   SPC  A2R4    -11.546   8.009  13.725  1.00  0.00          O
HETATM 6627  H1  SPC  A2R4    -10.538   8.076  13.697  1.00  0.00          H
HETATM 6628  H2  SPC  A2R4    -11.926   8.874  13.366  1.00  0.00          H
HETATM 6629  O   SPC  A2RI     -8.698  10.652  11.486  1.00  0.00          O
HETATM 6630  H1  SPC  A2RI     -9.479  10.946  10.914  1.00  0.00          H
HETATM 6631  H2  SPC  A2RI     -7.835  10.850  10.990  1.00  0.00          H
HETATM 6632  O   SPC  A2RJ    -10.945  11.694  10.424  1.00  0.00          O
HETATM 6633  H1  SPC  A2RJ    -10.820  12.697  10.422  1.00  0.00          H
HETATM 6634  H2  SPC  A2RJ    -11.743  11.462   9.846  1.00  0.00          H
HETATM 6635  O   SPC  A2RY    -16.530   8.967   9.095  1.00  0.00          O
HETATM 6636  H1  SPC  A2RY    -16.651   9.663   8.370  1.00  0.00          H
HETATM 6637  H2  SPC  A2RY    -16.997   8.123   8.801  1.00  0.00          H
HETATM 6638  O   SPC  A2S2    -14.624   9.529  10.972  1.00  0.00          O
HETATM 6639  H1  SPC  A2S2    -14.472   8.687  11.509  1.00  0.00          H
HETATM 6640  H2  SPC  A2S2    -15.405   9.369  10.345  1.00  0.00          H
HETATM 6641  O   SPC  A2S9    -10.391  14.380  10.815  1.00  0.00          O
HETATM 6642  H1  SPC  A2S9    -10.087  13.948  11.677  1.00  0.00          H
HETATM 6643  H2  SPC  A2S9     -9.868  15.236  10.688  1.00  0.00          H
HETATM 6644  O   SPC  A2T8    -12.130  15.157   8.749  1.00  0.00          O
HETATM 6645  H1  SPC  A2T8    -12.706  14.415   8.379  1.00  0.00          H
HETATM 6646  H2  SPC  A2T8    -11.647  14.818   9.567  1.00  0.00          H
HETATM 6647  O   SPC  A2TA    -10.446  10.990  14.654  1.00  0.00          O
HETATM 6648  H1  SPC  A2TA     -9.898  10.177  14.411  1.00  0.00          H
HETATM 6649  H2  SPC  A2TA    -11.360  10.888  14.244  1.00  0.00          H
HETATM 6650  O   SPC  A2TV    -12.347  10.383  12.544  1.00  0.00          O
HETATM 6651  H1  SPC  A2TV    -13.255  10.225  12.133  1.00  0.00          H
HETATM 6652  H2  SPC  A2TV    -11.768  10.854  11.866  1.00  0.00          H
HETATM 6653  O   SPC  A2UG    -13.535  13.034   7.637  1.00  0.00          O
HETATM 6654  H1  SPC  A2UG    -14.508  13.061   7.396  1.00  0.00          H
HETATM 6655  H2  SPC  A2UG    -13.360  12.184   8.161  1.00  0.00          H
HETATM 6656  O   SPC  A2UN     -9.419  12.891  12.946  1.00  0.00          O
HETATM 6657  H1  SPC  A2UN     -9.008  12.157  12.385  1.00  0.00          H
HETATM 6658  H2  SPC  A2UN     -9.929  12.453  13.699  1.00  0.00          H
HETATM 6659  O   SPC  A2V9    -10.403  17.113   8.055  1.00  0.00          O
HETATM 6660  H1  SPC  A2V9    -11.166  16.460   8.196  1.00  0.00          H
HETATM 6661  H2  SPC  A2V9    -10.768  17.959   7.636  1.00  0.00          H
HETATM 6662  O   SPC  A2W8    -13.094  10.796   9.100  1.00  0.00          O
HETATM 6663  H1  SPC  A2W8    -13.756  10.442   9.780  1.00  0.00          H
HETATM 6664  H2  SPC  A2W8    -12.687  10.010   8.618  1.00  0.00          H
HETATM 6665  O   SPC  A4YB      2.333  12.604  10.904  1.00  0.00          O
HETATM 6666  H1  SPC  A4YB      1.373  12.889  11.059  1.00  0.00          H
HETATM 6667  H2  SPC  A4YB      2.347  11.946  10.139  1.00  0.00          H
HETATM 6668  O   SPC  A4YC     -9.833  18.302   4.744  1.00  0.00          O
HETATM 6669  H1  SPC  A4YC    -10.532  17.578   4.658  1.00  0.00          H
HETATM 6670  H2  SPC  A4YC    -10.049  18.853   5.562  1.00  0.00          H
HETATM 6671  O   SPC  A4YD    -10.085   7.932  -1.212  1.00  0.00          O
HETATM 6672  H1  SPC  A4YD     -9.951   7.124  -0.606  1.00  0.00          H
HETATM 6673  H2  SPC  A4YD    -11.019   8.284  -1.066  1.00  0.00          H
HETATM 6674  O   SPC  A4YE     -0.836   8.599   8.761  1.00  0.00          O
HETATM 6675  H1  SPC  A4YE     -1.677   8.930   8.341  1.00  0.00          H
HETATM 6676  H2  SPC  A4YE     -1.046   7.742   9.159  1.00  0.00          H
HETATM 6677  O   SPC  A4YF     -8.047   0.439  17.433  1.00  0.00          O
HETATM 6678  H1  SPC  A4YF     -7.227  -0.098  17.176  1.00  0.00          H
HETATM 6679  H2  SPC  A4YF     -7.805   1.421  17.397  1.00  0.00          H
HETATM 6680  O   SPC  A4YG      2.152  19.163  -4.052  1.00  0.00          O
HETATM 6681  H1  SPC  A4YG      2.789  18.448  -4.367  1.00  0.00          H
HETATM 6682  H2  SPC  A4YG      1.283  19.054  -4.548  1.00  0.00          H
HETATM 6683  O   SPC  A4YH      2.074  10.810   8.496  1.00  0.00          O
HETATM 6684  H1  SPC  A4YH      2.769  11.306   7.989  1.00  0.00          H
HETATM 6685  H2  SPC  A4YH      1.317  10.782   7.883  1.00  0.00          H
HETATM 6686  O   SPC  A4YJ      2.968   3.344  -3.217  1.00  0.00          O
HETATM 6687  H1  SPC  A4YJ      3.296   2.873  -4.042  1.00  0.00          H
HETATM 6688  H2  SPC  A4YJ      3.395   4.257  -3.176  1.00  0.00          H
HETATM 6689  O   SPC  A4YK    -13.715  -0.524  13.969  1.00  0.00          O
HETATM 6690  H1  SPC  A4YK    -13.216   0.291  14.296  1.00  0.00          H
HETATM 6691  H2  SPC  A4YK    -14.708  -0.340  14.048  1.00  0.00          H
HETATM 6692  O   SPC  A4YL      8.983  18.079   3.331  1.00  0.00          O
HETATM 6693  H1  SPC  A4YL      9.780  18.655   3.070  1.00  0.00          H
HETATM 6694  H2  SPC  A4YL      8.358  18.019   2.534  1.00  0.00          H
HETATM 6695  O   SPC  A4YM      4.239  16.411   7.917  1.00  0.00          O
HETATM 6696  H1  SPC  A4YM      4.130  16.030   6.994  1.00  0.00          H
HETATM 6697  H2  SPC  A4YM      3.691  15.851   8.562  1.00  0.00          H
HETATM 6698  O   SPC  A4YN    -12.929   5.405   5.745  1.00  0.00          O
HETATM 6699  H1  SPC  A4YN    -12.665   4.502   5.384  1.00  0.00          H
HETATM 6700  H2  SPC  A4YN    -12.820   6.096   5.025  1.00  0.00          H
HETATM 6701  O   SPC  A4YO      5.917   6.105   2.243  1.00  0.00          O
HETATM 6702  H1  SPC  A4YO      6.278   5.526   2.978  1.00  0.00          H
HETATM 6703  H2  SPC  A4YO      5.804   7.045   2.589  1.00  0.00          H
HETATM 6704  O   SPC  A4YP     -3.692   8.882  11.174  1.00  0.00          O
HETATM 6705  H1  SPC  A4YP     -3.470   7.907  11.305  1.00  0.00          H
HETATM 6706  H2  SPC  A4YP     -4.334   8.962  10.398  1.00  0.00          H
HETATM 6707  O   SPC  A4YQ      3.860  20.008  -2.011  1.00  0.00          O
HETATM 6708  H1  SPC  A4YQ      3.233  19.808  -2.777  1.00  0.00          H
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HETATM 6709  H2  SPC  A4YQ      4.701  19.452  -2.120  1.00  0.00           H
HETATM 6710  O   SPC  A4YS      1.395  10.404  12.750  1.00  0.00           O
HETATM 6711  H1  SPC  A4YS      0.544  10.278  12.224  1.00  0.00           H
HETATM 6712  H2  SPC  A4YS      1.980  11.062  12.265  1.00  0.00           H
HETATM 6713  O   SPC  A4YT      4.719  21.035  -8.555  1.00  0.00           O
HETATM 6714  H1  SPC  A4YT      4.933  20.329  -9.246  1.00  0.00           H
HETATM 6715  H2  SPC  A4YT      3.720  21.057  -8.414  1.00  0.00           H
HETATM 6716  O   SPC  A4YU     -5.724  -0.864  16.821  1.00  0.00           O
HETATM 6717  H1  SPC  A4YU     -5.818  -1.773  17.251  1.00  0.00           H
HETATM 6718  H2  SPC  A4YU     -4.788  -0.522  16.998  1.00  0.00           H
HETATM 6719  O   SPC  A4YV     -1.006  22.648 -15.201  1.00  0.00           O
HETATM 6720  H1  SPC  A4YV     -1.238  21.680 -15.025  1.00  0.00           H
HETATM 6721  H2  SPC  A4YV     -0.526  22.690 -16.099  1.00  0.00           H
HETATM 6722  O   SPC  A4YY    -12.154   4.578  11.623  1.00  0.00           O
HETATM 6723  H1  SPC  A4YY    -12.169   5.264  10.883  1.00  0.00           H
HETATM 6724  H2  SPC  A4YY    -13.106   4.339  11.851  1.00  0.00           H
HETATM 6725  O   SPC  A4YZ      1.992   8.184   8.441  1.00  0.00           O
HETATM 6726  H1  SPC  A4YZ      2.772   7.699   8.752  1.00  0.00           H
HETATM 6727  H2  SPC  A4YZ      2.166   9.154   8.559  1.00  0.00           H
HETATM 6728  O   SPC  A4Z0      2.002  18.261   3.462  1.00  0.00           O
HETATM 6729  H1  SPC  A4Z0      1.020  18.190   3.231  1.00  0.00           H
HETATM 6730  H2  SPC  A4Z0      2.538  18.162   2.614  1.00  0.00           H
HETATM 6731  O   SPC  A4Z2     -5.279   9.062   8.949  1.00  0.00           O
HETATM 6732  H1  SPC  A4Z2     -4.509   9.181   8.307  1.00  0.00           H
HETATM 6733  H2  SPC  A4Z2     -6.013   8.554   8.485  1.00  0.00           H
HETATM 6734  O   SPC  A4Z3      7.084  18.608   1.493  1.00  0.00           O
HETATM 6735  H1  SPC  A4Z3      6.733  19.544   1.371  1.00  0.00           H
HETATM 6736  H2  SPC  A4Z3      7.000  18.118   0.605  1.00  0.00           H
HETATM 6737  O   SPC  A4Z5     -0.994  10.263  10.959  1.00  0.00           O
HETATM 6738  H1  SPC  A4Z5     -1.877   9.941  11.191  1.00  0.00           H
HETATM 6739  H2  SPC  A4Z5     -0.758   9.752  10.168  1.00  0.00           H
HETATM 6740  O   SPC  A4Z6    -13.778   7.243  12.255  1.00  0.00           O
HETATM 6741  H1  SPC  A4Z6    -13.391   6.995  11.352  1.00  0.00           H
HETATM 6742  H2  SPC  A4Z6    -13.015   7.366  12.905  1.00  0.00           H
HETATM 6743  O   SPC  A4Z7     -9.235  -1.315  19.175  1.00  0.00           O
HETATM 6744  H1  SPC  A4Z7     -9.712  -1.975  18.579  1.00  0.00           H
HETATM 6745  H2  SPC  A4Z7     -8.715  -0.676  18.591  1.00  0.00           H
HETATM 6746  O   SPC  A4Z8      5.080  21.015  -5.839  1.00  0.00           O
HETATM 6747  H1  SPC  A4Z8      4.816  21.859  -5.347  1.00  0.00           H
HETATM 6748  H2  SPC  A4Z8      4.908  21.140  -6.826  1.00  0.00           H
HETATM 6749  O   SPC  A4Z9      2.045  21.122  -7.840  1.00  0.00           O
HETATM 6750  H1  SPC  A4Z9      2.143  20.129  -7.681  1.00  0.00           H
HETATM 6751  H2  SPC  A4Z9      1.320  21.475  -7.228  1.00  0.00           H
HETATM 6752  O   SPC  A4ZA     -1.034  14.636   4.382  1.00  0.00           O
HETATM 6753  H1  SPC  A4ZA     -0.823  13.731   4.693  1.00  0.00           H
HETATM 6754  H2  SPC  A4ZA     -1.965  14.723   4.626  1.00  0.00           H
HETATM 6755  O   SPC  A4ZB      0.057  22.366  -6.428  1.00  0.00           O
HETATM 6756  H1  SPC  A4ZB     -0.837  22.201  -5.977  1.00  0.00           H
HETATM 6757  H2  SPC  A4ZB     -0.024  23.213  -6.972  1.00  0.00           H
HETATM 6758  O   SPC  A4ZC    -12.746   6.649   9.829  1.00  0.00           O
HETATM 6759  H1  SPC  A4ZC    -12.261   7.351   9.291  1.00  0.00           H
HETATM 6760  H2  SPC  A4ZC    -13.432   6.210   9.230  1.00  0.00           H
HETATM 6761  HO2 MMA A 901     -4.027   7.896   4.920  1.00  0.00           H
HETATM 6762  PB  GDP A 904     -2.403   9.024   5.954  1.00 26.19           P
HETATM 6763  O1B GDP A 904     -3.623   8.831   4.976  1.00 27.84           O
HETATM 6764  O2B GDP A 904     -1.474   7.833   5.939  1.00 26.32           O1-
HETATM 6765  O3B GDP A 904     -2.859   9.473   7.343  1.00 26.19           O
HETATM 6766  O3A GDP A 904     -1.746  10.312   5.221  1.00 25.44           O
HETATM 6767  PA  GDP A 904     -0.219  10.853   5.376  1.00 25.23           P
HETATM 6768  O1A GDP A 904      0.498   9.951   6.369  1.00 25.43           O
HETATM 6769  O2A GDP A 904     -0.243  12.329   5.611  1.00 26.02           O1-
HETATM 6770  O5' GDP A 904      0.336  10.672   3.884  1.00 25.21           O
HETATM 6771  C5' GDP A 904      0.605   9.406   3.309  1.00 23.27           C
HETATM 6772  C4' GDP A 904      2.085   9.361   2.875  1.00 23.57           C
HETATM 6773  O4' GDP A 904      2.318  10.452   1.985  1.00 24.01           O
HETATM 6774  C3' GDP A 904      3.097   9.520   4.017  1.00 23.80           C
HETATM 6775  O3' GDP A 904      4.211   8.679   3.777  1.00 22.36           O
HETATM 6776  C2' GDP A 904      3.549  10.972   3.926  1.00 23.31           C
HETATM 6777  O2' GDP A 904      4.896  11.036   4.364  1.00 21.65           O
HETATM 6778  C1' GDP A 904      3.372  11.253   2.429  1.00 24.11           C
HETATM 6779  N9  GDP A 904      2.995  12.678   2.168  1.00 24.67           N
HETATM 6780  C8  GDP A 904      1.794  13.309   2.399  1.00 24.89           C
HETATM 6781  N7  GDP A 904      1.768  14.568   2.056  1.00 24.52           N
HETATM 6782  C5  GDP A 904      3.042  14.801   1.553  1.00 24.90           C
HETATM 6783  C6  GDP A 904      3.627  16.013   1.053  1.00 26.54           C
HETATM 6784  O6  GDP A 904      3.126  17.143   1.039  1.00 27.33           O
HETATM 6785  N1  GDP A 904      4.931  15.819   0.600  1.00 26.79           N
HETATM 6786  C2  GDP A 904      5.622  14.621   0.704  1.00 25.66           C
HETATM 6787  N2  GDP A 904      6.894  14.639   0.315  1.00 26.54           N
HETATM 6788  N3  GDP A 904      5.101  13.511   1.194  1.00 26.00           N
HETATM 6789  C4  GDP A 904      3.801  13.648   1.606  1.00 24.67           C
HETATM 6790 H5'1 GDP A 904      0.380   8.585   3.993  1.00  0.00           H
HETATM 6791 H5'2 GDP A 904     -0.047   9.250   2.445  1.00  0.00           H
HETATM 6792  H4' GDP A 904      2.254   8.424   2.342  1.00  0.00           H
HETATM 6793  H3' GDP A 904      2.693   9.285   5.001  1.00  0.00           H
HETATM 6794  HO3 GDP A 904      4.957   9.278   3.875  1.00  0.00           H
HETATM 6795  H2' GDP A 904      2.893  11.615   4.514  1.00  0.00           H
HETATM 6796  HO2 GDP A 904      4.998  11.854   4.874  1.00  0.00           H
HETATM 6797  H1' GDP A 904      4.269  11.051   1.844  1.00  0.00           H
HETATM 6798  H8  GDP A 904      0.929  12.811   2.814  1.00  0.00           H
HETATM 6799  HN1 GDP A 904      5.419  16.618   0.178  1.00  0.00           H
HETATM 6800  HN2 GDP A 904      7.544  13.938   0.660  1.00  0.00           H
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HETATM 6801 H1 GDP A 904   7.251 15.489 -0.120 1.00 0.00   H
HETATM 6802 MN1   MN A 909   0.428   7.835   6.979 1.00 24.77   Mn2+
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