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An Integrated Molecular Dynamics, Principal Component Analysis and Residue Interaction Network Approach Reveals the Impact of M184V Mutation on HIV Reverse Transcriptase Resistance to Lamivudine

Soumendranath Bhakat[a], Alberto J.M. Martin [b,c] and Mahmoud E.S. Soliman[a]*

[a] School of Health Sciences, University of KwaZulu-Natal, Westville, Durban 4001, South Africa

[b] Computational Biology Lab, Fundación Ciencia & Vida, Santiago, Chile

[c] Centro Interdisciplinario de Neurociencia de Valparaíso, Facultad de Ciencias, Universidad de Valparaíso, Chile

*Corresponding author: Mahmoud E.S. Soliman, email: soliman@ukzn.ac.za

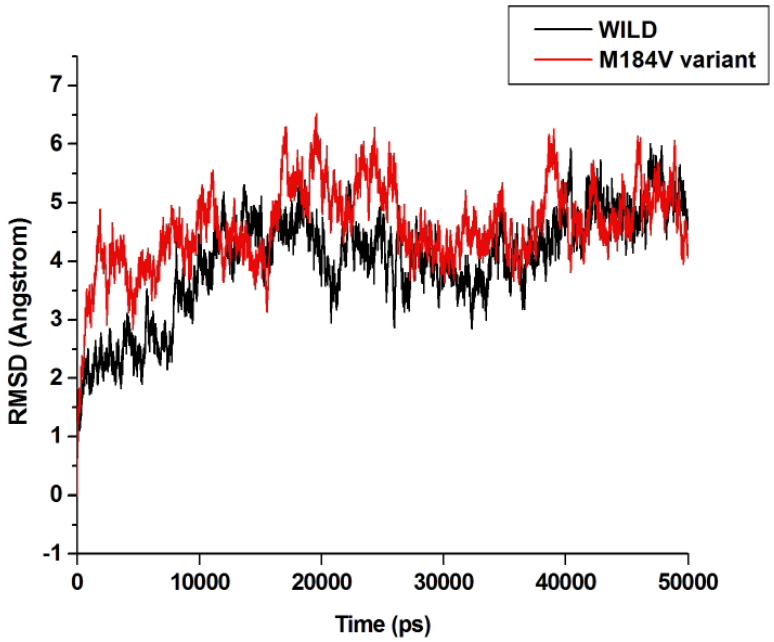

Figure S1 RMSD of backbone comparing wild and M184V variant of HIV-RT complexed with 3TC during a 50ns timescale of simulation

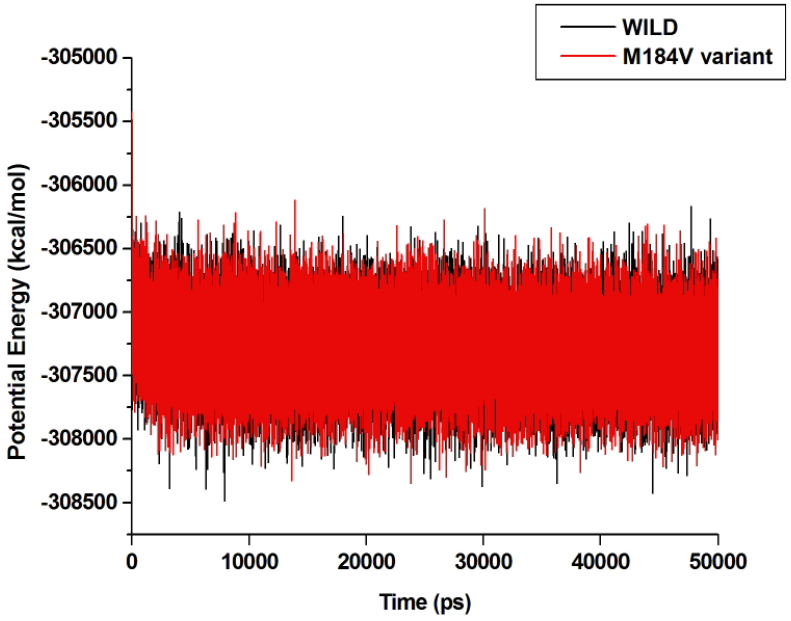

Figure S2 Potential energy (kcal/mol) of wild and M184V variant of HIV-RT complexed with 3TC during a 50ns timescale of simulation

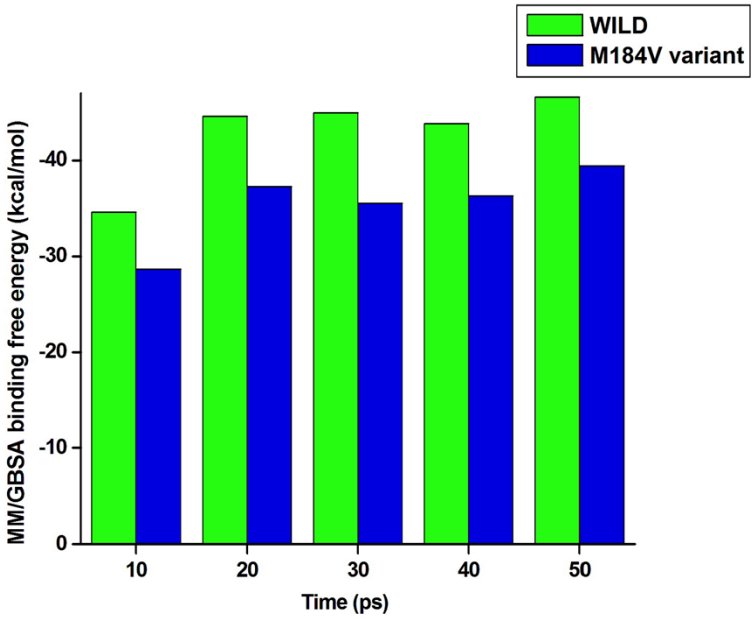

Figure S3. Trend in binding free energy over the time of simulation for wild type and m184V variant of HIV-RT complexed with 3TC. For consistency of the data the binding free energies were averaged by taking in account 1000 frames in each case.

Table 1. MM/GBSA binding free energy components averaged over different time frames, T_{10}, T_{20}, T_{30}, T_{40} and T_{50} corresponds to binding free energy calculated for 10ns, 20ns, 30ns, 40ns and 50ns timescale.

Complexes	Trajectory	ΔG_{bind}	ΔE_{ele}	ΔE_{vdW}	ΔG_{gas}	ΔG_{sol}
Wild	T_{10}	-34.6326±0.1674	-19.8451±0.1988	-38.8343±0.1559	-59.6439±0.2506	24.0468±0.1675
	T_{20}	-44.5849±0.1141	-19.4373±0.1993	-45.6609±0.0988	-67.0643±0.2396	20.5133±0.1962
	T_{30}	-44.9289±0.1226	-23.1801±0.1859	-50.8308±0.1032	-74.0287±0.2051	29.0820±0.1832
	T_{40}	-43.8115±0.1468	-23.6839±0.1854	-46.9816±0.1135	-70.6847±0.2137	26.8540±0.1615
	T_{50}	-46.5489±0.1251	-25.0332±0.1442	-48.3440±0.1012	-73.3772±0.1851	26.8283±0.1104
M184V	T_{10}	-28.6383±0.2351	-12.2658±0.2593	-34.6482±0.2314	-48.9164±0.4366	18.2757±0.2522
	T_{20}	-37.2535±0.1544	-22.1488±0.2367	-45.0854±0.1321	-71.2384±0.2780	29.9806±0.2019
	T_{30}	-35.5443±0.1570	-14.2740±0.3918	-34.0857±0.1754	-38.3547±0.4737	12.8154±0.3762
	T_{40}	-36.2910±0.1117	-18.4574±0.2255	-44.5750±0.0890	-68.03574±0.2484	26.7414±0.2070
	T_{50}	-39.4238±0.1513	-8.0217±0.1586	-43.5869±0.1322	-51.6496±0.2062	12.1847±0.1432

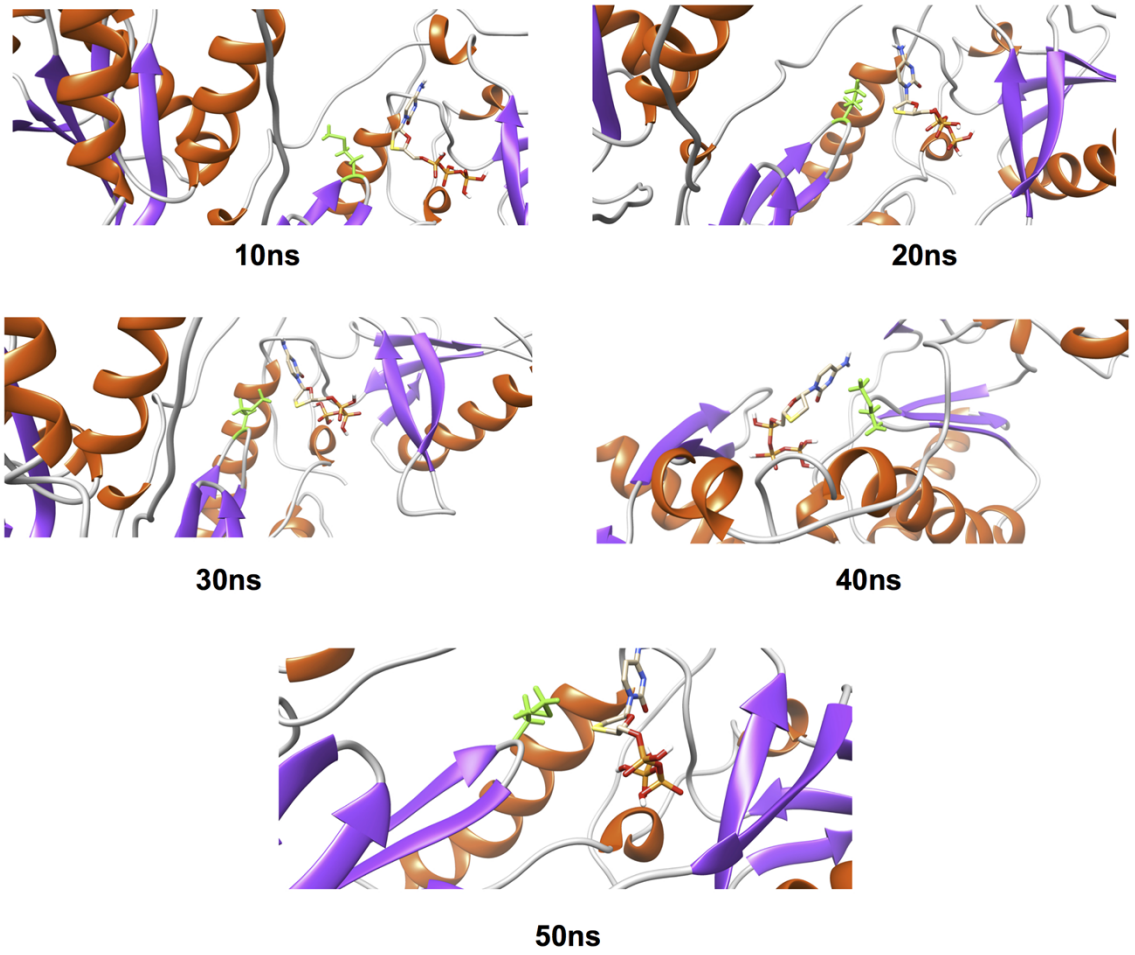

Figure S4. Time dependent snapshots showing representative structural position between oxygen atom of oxathiolane ring of 3TC and methionine 184 (green) in case of native wild type HIV-RT-3TC complex.

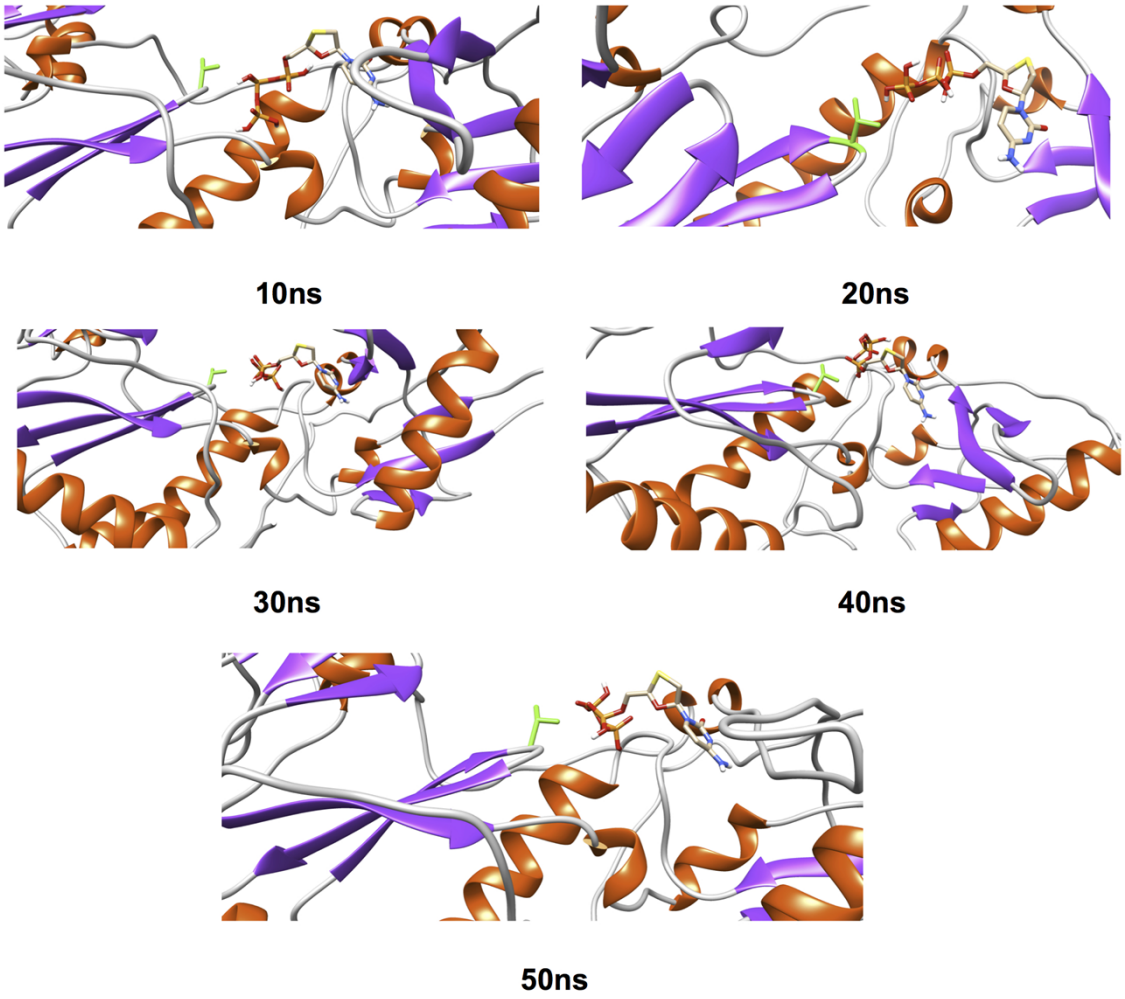

Figure S5. Time dependent snapshots showing representative structural position between oxygen atom of oxathiolane ring of 3TC and valine 184 (green) in case of M184V HIV-RT-3TC complex.

PDB structure of wild type HIV-RT complexed with 3TC

```
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16
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6
HELIX    3   3 PRO     97  GLY     99  1
3
HELIX    4   4 ALA    114  SER    117  1
4
HELIX    5   5 ARG    125  THR    128  1
4
HELIX    6   6 GLY    155  GLN    174  1
20
HELIX    7   7 ILE    195  ARG    211  1
17
HELIX    8   8 VAL    254  GLN    269  1
16
HELIX    9   9 LEU    279  LEU    283  1
5
HELIX   10  10 GLU    297  ILE    309  1
13
HELIX   11  11 ASP    364  TRP    383  1
20
HELIX   12  12 LYS    395  GLU    404  1
10
HELIX   13  13 ASN    474  GLN    487  1
14
HELIX   14  14 GLN    500  ALA    508  1
9
HELIX   15  15 GLU    516  ILE    526  1
11
HELIX   16  16 ASN    545  GLY    555  1
11
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SHEET    4   4 1 SER   105  LEU    109  0
SHEET    5   5 1 TYR   144  TYR    146  0
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ATOM    155  N   LYS    11      54.550  32.551  83.709  1.00  0.00
N
ATOM    156  H   LYS    11      54.489  32.756  82.715  1.00  0.00
H
ATOM    157  CA  LYS    11      55.636  33.186  84.482  1.00  0.00
C
ATOM    158  HA  LYS    11      55.452  32.996  85.541  1.00  0.00
H
ATOM    159  CB  LYS    11      56.980  32.514  84.121  1.00  0.00
C
ATOM    160  HB2 LYS    11      57.120  32.530  83.038  1.00  0.00
H
ATOM    161  HB3 LYS    11      57.796  33.076  84.581  1.00  0.00
H
ATOM    162  CG  LYS    11      57.038  31.061  84.636  1.00  0.00
C
ATOM    163  HG2 LYS    11      56.827  31.069  85.707  1.00  0.00
H
ATOM    164  HG3 LYS    11      56.268  30.470  84.139  1.00  0.00
H
ATOM    165  CD  LYS    11      58.397  30.377  84.410  1.00  0.00
C
ATOM    166  HD2 LYS    11      58.578  30.264  83.340  1.00  0.00
H
ATOM    167  HD3 LYS    11      59.184  30.993  84.849  1.00  0.00
H
ATOM    168  CE  LYS    11      58.371  29.001  85.096  1.00  0.00
C
ATOM    169  HE2 LYS    11      58.052  29.156  86.132  1.00  0.00
H
ATOM    170  HE3 LYS    11      57.619  28.373  84.611  1.00  0.00
H
ATOM    171  NZ  LYS    11      59.693  28.321  85.100  1.00  0.00
N
ATOM    172  HZ1 LYS    11      60.418  28.917  85.492  1.00  0.00
H
ATOM    173  HZ2 LYS    11      59.656  27.495  85.679  1.00  0.00
H
ATOM    174  HZ3 LYS    11      59.974  27.995  84.175  1.00  0.00
H
ATOM    175  C   LYS    11      55.690  34.716  84.337  1.00  0.00
C
ATOM    176  O   LYS    11      55.215  35.306  83.362  1.00  0.00
O
ATOM    177  N   LEU    12      56.307  35.366  85.327  1.00  0.00
N
ATOM    178  H   LEU    12      56.688  34.803  86.070  1.00  0.00
H
ATOM    179  CA  LEU    12      56.766  36.758  85.238  1.00  0.00
C
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ATOM    180  HA  LEU    12      55.994  37.365  84.770  1.00  0.00
H
ATOM    181  CB  LEU    12      57.041  37.321  86.650  1.00  0.00
C
ATOM    182  HB2 LEU    12      57.797  36.696  87.127  1.00  0.00
H
ATOM    183  HB3 LEU    12      57.466  38.322  86.555  1.00  0.00
H
ATOM    184  CG  LEU    12      55.812  37.408  87.577  1.00  0.00
C
ATOM    185  HG  LEU    12      55.338  36.428  87.644  1.00  0.00
H
ATOM    186  CD1 LEU    12      56.247  37.822  88.983  1.00  0.00
C
ATOM    187 HD11 LEU    12      56.745  38.791  88.952  1.00  0.00
H
ATOM    188 HD12 LEU    12      55.379  37.875  89.640  1.00  0.00
H
ATOM    189 HD13 LEU    12      56.940  37.082  89.384  1.00  0.00
H
ATOM    190  CD2 LEU    12      54.777  38.429  87.092  1.00  0.00
C
ATOM    191 HD21 LEU    12      54.398  38.151  86.111  1.00  0.00
H
ATOM    192 HD22 LEU    12      53.938  38.453  87.788  1.00  0.00
H
ATOM    193 HD23 LEU    12      55.230  39.419  87.037  1.00  0.00
H
ATOM    194  C   LEU    12      58.019  36.849  84.345  1.00  0.00
C
ATOM    195  O   LEU    12      58.736  35.862  84.168  1.00  0.00
O
ATOM    196  N   LYS    13      58.294  38.035  83.793  1.00  0.00
N
ATOM    197  H   LYS    13      57.693  38.816  84.035  1.00  0.00
H
ATOM    198  CA  LYS    13      59.524  38.317  83.033  1.00  0.00
C
ATOM    199  HA  LYS    13      59.617  37.544  82.275  1.00  0.00
H
ATOM    200  CB  LYS    13      59.434  39.681  82.324  1.00  0.00
C
ATOM    201  HB2 LYS    13      59.160  40.451  83.048  1.00  0.00
H
ATOM    202  HB3 LYS    13      60.417  39.930  81.918  1.00  0.00
H
ATOM    203  CG  LYS    13      58.420  39.673  81.166  1.00  0.00
C
ATOM    204  HG2 LYS    13      58.693  38.895  80.451  1.00  0.00
H
ATOM    205  HG3 LYS    13      57.429  39.457  81.562  1.00  0.00
H
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ATOM    206  CD  LYS    13      58.383  41.030  80.451  1.00  0.00
C
ATOM    207  HD2 LYS    13      58.090  41.792  81.176  1.00  0.00
H
ATOM    208  HD3 LYS    13      59.375  41.274  80.066  1.00  0.00
H
ATOM    209  CE  LYS    13      57.377  41.016  79.292  1.00  0.00
C
ATOM    210  HE2 LYS    13      57.760  40.401  78.468  1.00  0.00
H
ATOM    211  HE3 LYS    13      56.450  40.566  79.644  1.00  0.00
H
ATOM    212  NZ  LYS    13      57.096  42.390  78.822  1.00  0.00
N
ATOM    213  HZ1 LYS    13      57.918  42.816  78.392  1.00  0.00
H
ATOM    214  HZ2 LYS    13      56.356  42.400  78.125  1.00  0.00
H
ATOM    215  HZ3 LYS    13      56.801  42.979  79.591  1.00  0.00
H
ATOM    216  C   LYS    13      60.756  38.242  83.960  1.00  0.00
C
ATOM    217  O   LYS    13      60.653  38.647  85.122  1.00  0.00
O
ATOM    218  N   PRO    14      61.918  37.742  83.488  1.00  0.00
N
ATOM    219  CD  PRO    14      62.162  37.176  82.166  1.00  0.00
C
ATOM    220  HD2 PRO    14      62.336  37.981  81.451  1.00  0.00
H
ATOM    221  HD3 PRO    14      61.342  36.540  81.834  1.00  0.00
H
ATOM    222  CG  PRO    14      63.422  36.324  82.307  1.00  0.00
C
ATOM    223  HG2 PRO    14      63.979  36.265  81.370  1.00  0.00
H
ATOM    224  HG3 PRO    14      63.152  35.327  82.659  1.00  0.00
H
ATOM    225  CB  PRO    14      64.205  37.059  83.392  1.00  0.00
C
ATOM    226  HB2 PRO    14      64.731  37.906  82.948  1.00  0.00
H
ATOM    227  HB3 PRO    14      64.905  36.397  83.903  1.00  0.00
H
ATOM    228  CA  PRO    14      63.099  37.551  84.331  1.00  0.00
C
ATOM    229  HA  PRO    14      62.869  36.759  85.045  1.00  0.00
H
ATOM    230  C   PRO    14      63.521  38.812  85.102  1.00  0.00
C
ATOM    231  O   PRO    14      63.509  39.919  84.570  1.00  0.00
O
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ATOM    232  N   GLY    15      63.888  38.635  86.374  1.00  0.00
N
ATOM    233  H   GLY    15      63.851  37.702  86.754  1.00  0.00
H
ATOM    234  CA  GLY    15      64.307  39.721  87.270  1.00  0.00
C
ATOM    235  HA2 GLY    15      64.862  39.293  88.104  1.00  0.00
H
ATOM    236  HA3 GLY    15      64.981  40.383  86.726  1.00  0.00
H
ATOM    237  C   GLY    15      63.175  40.587  87.850  1.00  0.00
C
ATOM    238  O   GLY    15      63.454  41.395  88.740  1.00  0.00
O
ATOM    239  N   MET    16      61.921  40.423  87.404  1.00  0.00
N
ATOM    240  H   MET    16      61.742  39.733  86.684  1.00  0.00
H
ATOM    241  CA  MET    16      60.768  41.200  87.881  1.00  0.00
C
ATOM    242  HA  MET    16      61.139  42.104  88.364  1.00  0.00
H
ATOM    243  CB  MET    16      59.883  41.650  86.706  1.00  0.00
C
ATOM    244  HB2 MET    16      59.438  40.776  86.229  1.00  0.00
H
ATOM    245  HB3 MET    16      59.074  42.267  87.100  1.00  0.00
H
ATOM    246  CG  MET    16      60.646  42.459  85.649  1.00  0.00
C
ATOM    247  HG2 MET    16      61.213  43.253  86.137  1.00  0.00
H
ATOM    248  HG3 MET    16      61.356  41.797  85.151  1.00  0.00
H
ATOM    249  SD  MET    16      59.577  43.200  84.381  1.00  0.00
S
ATOM    250  CE  MET    16      59.289  44.832  85.116  1.00  0.00
C
ATOM    251  HE1 MET    16      60.212  45.410  85.105  1.00  0.00
H
ATOM    252  HE2 MET    16      58.531  45.362  84.539  1.00  0.00
H
ATOM    253  HE3 MET    16      58.949  44.723  86.145  1.00  0.00
H
ATOM    254  C   MET    16      59.930  40.433  88.916  1.00  0.00
C
ATOM    255  O   MET    16      59.563  39.279  88.710  1.00  0.00
O
ATOM    256  N   ASP    17      59.576  41.114  90.009  1.00  0.00
N
ATOM    257  H   ASP    17      59.928  42.049  90.107  1.00  0.00
H
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ATOM    258  CA  ASP    17      58.661  40.638  91.057  1.00  0.00
C
ATOM    259  HA  ASP    17      58.580  39.549  90.995  1.00  0.00
H
ATOM    260  CB  ASP    17      59.282  40.987  92.422  1.00  0.00
C
ATOM    261  HB2 ASP    17      60.309  40.620  92.446  1.00  0.00
H
ATOM    262  HB3 ASP    17      59.305  42.073  92.532  1.00  0.00
H
ATOM    263  CG  ASP    17      58.528  40.367  93.599  1.00  0.00
C
ATOM    264  OD1 ASP    17      58.261  39.145  93.553  1.00  0.00
O
ATOM    265  OD2 ASP    17      58.165  41.108  94.534  1.00  0.00
O
ATOM    266  C   ASP    17      57.237  41.216  90.875  1.00  0.00
C
ATOM    267  O   ASP    17      57.032  42.118  90.057  1.00  0.00
O
ATOM    268  N   GLY    18      56.254  40.697  91.617  1.00  0.00
N
ATOM    269  H   GLY    18      56.512  39.986  92.291  1.00  0.00
H
ATOM    270  CA  GLY    18      54.824  41.022  91.484  1.00  0.00
C
ATOM    271  HA2 GLY    18      54.512  40.777  90.468  1.00  0.00
H
ATOM    272  HA3 GLY    18      54.270  40.378  92.160  1.00  0.00
H
ATOM    273  C   GLY    18      54.393  42.474  91.786  1.00  0.00
C
ATOM    274  O   GLY    18      55.194  43.312  92.209  1.00  0.00
O
ATOM    275  N   PRO    19      53.102  42.804  91.566  1.00  0.00
N
ATOM    276  CD  PRO    19      52.057  41.906  91.088  1.00  0.00
C
ATOM    277  HD2 PRO    19      51.917  41.066  91.770  1.00  0.00
H
ATOM    278  HD3 PRO    19      52.315  41.548  90.091  1.00  0.00
H
ATOM    279  CG  PRO    19      50.773  42.737  91.015  1.00  0.00
C
ATOM    280  HG2 PRO    19      50.214  42.643  91.947  1.00  0.00
H
ATOM    281  HG3 PRO    19      50.146  42.440  90.178  1.00  0.00
H
ATOM    282  CB  PRO    19      51.293  44.167  90.861  1.00  0.00
C
ATOM    283  HB2 PRO    19      50.567  44.903  91.208  1.00  0.00
H
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ATOM    284  HB3 PRO    19      51.551  44.348  89.815  1.00  0.00
H
ATOM    285  CA  PRO    19      52.566  44.156  91.714  1.00  0.00
C
ATOM    286  HA  PRO    19      53.273  44.880  91.306  1.00  0.00
H
ATOM    287  C   PRO    19      52.269  44.508  93.184  1.00  0.00
C
ATOM    288  O   PRO    19      51.641  43.735  93.904  1.00  0.00
O
ATOM    289  N   LYS    20      52.679  45.706  93.618  1.00  0.00
N
ATOM    290  H   LYS    20      53.205  46.271  92.969  1.00  0.00
H
ATOM    291  CA  LYS    20      52.502  46.225  94.994  1.00  0.00
C
ATOM    292  HA  LYS    20      51.860  45.539  95.551  1.00  0.00
H
ATOM    293  CB  LYS    20      53.858  46.275  95.730  1.00  0.00
C
ATOM    294  HB2 LYS    20      54.506  46.996  95.227  1.00  0.00
H
ATOM    295  HB3 LYS    20      53.677  46.636  96.745  1.00  0.00
H
ATOM    296  CG  LYS    20      54.595  44.926  95.834  1.00  0.00
C
ATOM    297  HG2 LYS    20      53.949  44.192  96.317  1.00  0.00
H
ATOM    298  HG3 LYS    20      54.860  44.569  94.838  1.00  0.00
H
ATOM    299  CD  LYS    20      55.875  45.114  96.661  1.00  0.00
C
ATOM    300  HD2 LYS    20      56.492  45.876  96.182  1.00  0.00
H
ATOM    301  HD3 LYS    20      55.602  45.465  97.658  1.00  0.00
H
ATOM    302  CE  LYS    20      56.697  43.825  96.796  1.00  0.00
C
ATOM    303  HE2 LYS    20      56.085  43.059  97.282  1.00  0.00
H
ATOM    304  HE3 LYS    20      56.966  43.456  95.800  1.00  0.00
H
ATOM    305  NZ  LYS    20      57.924  44.075  97.591  1.00  0.00
N
ATOM    306  HZ1 LYS    20      57.698  44.393  98.521  1.00  0.00
H
ATOM    307  HZ2 LYS    20      58.466  43.219  97.723  1.00  0.00
H
ATOM    308  HZ3 LYS    20      58.509  44.791  97.159  1.00  0.00
H
ATOM    309  C   LYS    20      51.772  47.582  95.020  1.00  0.00
C
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ATOM    310  O   LYS    20      52.163  48.506  95.735  1.00  0.00
O
ATOM    311  N   VAL    21      50.749  47.737  94.179  1.00  0.00
N
ATOM    312  H   VAL    21      50.377  46.907  93.730  1.00  0.00
H
ATOM    313  CA  VAL    21      50.017  49.004  93.982  1.00  0.00
C
ATOM    314  HA  VAL    21      50.657  49.822  94.313  1.00  0.00
H
ATOM    315  CB  VAL    21      49.747  49.266  92.482  1.00  0.00
C
ATOM    316  HB  VAL    21      50.707  49.485  92.012  1.00  0.00
H
ATOM    317  CG1 VAL    21      49.160  48.061  91.741  1.00  0.00
C
ATOM    318 HG11 VAL    21      48.293  47.698  92.279  1.00  0.00
H
ATOM    319 HG12 VAL    21      48.871  48.343  90.728  1.00  0.00
H
ATOM    320 HG13 VAL    21      49.894  47.259  91.677  1.00  0.00
H
ATOM    321  CG2 VAL    21      48.845  50.486  92.262  1.00  0.00
C
ATOM    322 HG21 VAL    21      49.276  51.360  92.748  1.00  0.00
H
ATOM    323 HG22 VAL    21      48.761  50.689  91.194  1.00  0.00
H
ATOM    324 HG23 VAL    21      47.847  50.305  92.661  1.00  0.00
H
ATOM    325  C   VAL    21      48.764  49.034  94.864  1.00  0.00
C
ATOM    326  O   VAL    21      47.969  48.095  94.852  1.00  0.00
O
ATOM    327  N   LYS    22      48.580  50.093  95.664  1.00  0.00
N
ATOM    328  H   LYS    22      49.257  50.841  95.625  1.00  0.00
H
ATOM    329  CA  LYS    22      47.482  50.204  96.643  1.00  0.00
C
ATOM    330  HA  LYS    22      47.499  49.302  97.258  1.00  0.00
H
ATOM    331  CB  LYS    22      47.732  51.424  97.559  1.00  0.00
C
ATOM    332  HB2 LYS    22      48.790  51.453  97.828  1.00  0.00
H
ATOM    333  HB3 LYS    22      47.496  52.335  97.005  1.00  0.00
H
ATOM    334  CG  LYS    22      46.916  51.391  98.867  1.00  0.00
C
ATOM    335  HG2 LYS    22      45.859  51.290  98.636  1.00  0.00
H
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ATOM    336  HG3 LYS    22      47.218  50.524  99.456  1.00  0.00
H
ATOM    337  CD  LYS    22      47.086  52.663  99.714  1.00  0.00
C
ATOM    338  HD2 LYS    22      48.115  52.732 100.073  1.00  0.00
H
ATOM    339  HD3 LYS    22      46.858  53.535  99.099  1.00  0.00
H
ATOM    340  CE  LYS    22      46.119  52.617 100.906  1.00  0.00
C
ATOM    341  HE2 LYS    22      45.111  52.439 100.517  1.00  0.00
H
ATOM    342  HE3 LYS    22      46.387  51.774 101.550  1.00  0.00
H
ATOM    343  NZ  LYS    22      46.123  53.879 101.688  1.00  0.00
N
ATOM    344  HZ1 LYS    22      45.896  54.676 101.112  1.00  0.00
H
ATOM    345  HZ2 LYS    22      45.434  53.850 102.441  1.00  0.00
H
ATOM    346  HZ3 LYS    22      47.019  54.072 102.132  1.00  0.00
H
ATOM    347  C   LYS    22      46.101  50.272  95.959  1.00  0.00
C
ATOM    348  O   LYS    22      45.974  50.752  94.836  1.00  0.00
O
ATOM    349  N   GLN    23      45.062  49.828  96.667  1.00  0.00
N
ATOM    350  H   GLN    23      45.247  49.451  97.578  1.00  0.00
H
ATOM    351  CA  GLN    23      43.671  50.171  96.347  1.00  0.00
C
ATOM    352  HA  GLN    23      43.470  49.837  95.330  1.00  0.00
H
ATOM    353  CB  GLN    23      42.709  49.452  97.320  1.00  0.00
C
ATOM    354  HB2 GLN    23      43.279  48.979  98.121  1.00  0.00
H
ATOM    355  HB3 GLN    23      42.040  50.179  97.782  1.00  0.00
H
ATOM    356  CG  GLN    23      41.848  48.367  96.648  1.00  0.00
C
ATOM    357  HG2 GLN    23      42.497  47.596  96.226  1.00  0.00
H
ATOM    358  HG3 GLN    23      41.237  47.898  97.421  1.00  0.00
H
ATOM    359  CD  GLN    23      40.922  48.873  95.552  1.00  0.00
C
ATOM    360  OE1 GLN    23      40.955  50.002  95.099  1.00  0.00
O
ATOM    361  NE2 GLN    23      40.084  48.026  95.003  1.00  0.00
N
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ATOM    362 HE21 GLN    23      39.452  48.404  94.316  1.00  0.00
H
ATOM    363 HE22 GLN    23      40.023  47.090  95.377  1.00  0.00
H
ATOM    364  C   GLN    23      43.462  51.702  96.373  1.00  0.00
C
ATOM    365  O   GLN    23      44.029  52.398  97.221  1.00  0.00
O
ATOM    366  N   TRP    24      42.635  52.210  95.460  1.00  0.00
N
ATOM    367  H   TRP    24      42.083  51.549  94.921  1.00  0.00
H
ATOM    368  CA  TRP    24      42.263  53.619  95.306  1.00  0.00
C
ATOM    369  HA  TRP    24      42.971  54.229  95.867  1.00  0.00
H
ATOM    370  CB  TRP    24      42.424  53.985  93.812  1.00  0.00
C
ATOM    371  HB2 TRP    24      42.241  55.046  93.676  1.00  0.00
H
ATOM    372  HB3 TRP    24      43.471  53.826  93.552  1.00  0.00
H
ATOM    373  CG  TRP    24      41.593  53.273  92.783  1.00  0.00
C
ATOM    374  CD1 TRP    24      40.257  53.086  92.839  1.00  0.00
C
ATOM    375  HD1 TRP    24      39.622  53.398  93.660  1.00  0.00
H
ATOM    376  NE1 TRP    24      39.811  52.469  91.694  1.00  0.00
N
ATOM    377  HE1 TRP    24      38.840  52.251  91.538  1.00  0.00
H
ATOM    378  CE2 TRP    24      40.840  52.241  90.808  1.00  0.00
C
ATOM    379  CZ2 TRP    24      40.884  51.692  89.518  1.00  0.00
C
ATOM    380  HZ2 TRP    24      39.982  51.343  89.039  1.00  0.00
H
ATOM    381  CH2 TRP    24      42.118  51.609  88.857  1.00  0.00
C
ATOM    382  HH2 TRP    24      42.180  51.195  87.861  1.00  0.00
H
ATOM    383  CZ3 TRP    24      43.286  52.070  89.492  1.00  0.00
C
ATOM    384  HZ3 TRP    24      44.235  51.983  88.979  1.00  0.00
H
ATOM    385  CE3 TRP    24      43.225  52.631  90.782  1.00  0.00
C
ATOM    386  HE3 TRP    24      44.130  52.983  91.254  1.00  0.00
H
ATOM    387  CD2 TRP    24      41.999  52.734  91.479  1.00  0.00
C
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ATOM    388  C   TRP    24      40.862  53.888  95.908  1.00  0.00
C
ATOM    389  O   TRP    24      40.136  52.934  96.198  1.00  0.00
O
ATOM    390  N   PRO    25      40.435  55.148  96.130  1.00  0.00
N
ATOM    391  CD  PRO    25      41.190  56.386  96.007  1.00  0.00
C
ATOM    392  HD2 PRO    25      41.904  56.385  95.189  1.00  0.00
H
ATOM    393  HD3 PRO    25      41.712  56.579  96.945  1.00  0.00
H
ATOM    394  CG  PRO    25      40.136  57.465  95.776  1.00  0.00
C
ATOM    395  HG2 PRO    25      39.832  57.463  94.726  1.00  0.00
H
ATOM    396  HG3 PRO    25      40.496  58.453  96.074  1.00  0.00
H
ATOM    397  CB  PRO    25      38.982  56.982  96.657  1.00  0.00
C
ATOM    398  HB2 PRO    25      38.025  57.358  96.295  1.00  0.00
H
ATOM    399  HB3 PRO    25      39.149  57.307  97.684  1.00  0.00
H
ATOM    400  CA  PRO    25      39.071  55.448  96.584  1.00  0.00
C
ATOM    401  HA  PRO    25      38.939  55.043  97.588  1.00  0.00
H
ATOM    402  C   PRO    25      37.990  54.853  95.664  1.00  0.00
C
ATOM    403  O   PRO    25      38.010  55.063  94.452  1.00  0.00
O
ATOM    404  N   LEU    26      37.019  54.140  96.247  1.00  0.00
N
ATOM    405  H   LEU    26      37.049  54.041  97.249  1.00  0.00
H
ATOM    406  CA  LEU    26      35.851  53.575  95.560  1.00  0.00
C
ATOM    407  HA  LEU    26      35.892  53.833  94.501  1.00  0.00
H
ATOM    408  CB  LEU    26      35.818  52.035  95.690  1.00  0.00
C
ATOM    409  HB2 LEU    26      35.717  51.793  96.749  1.00  0.00
H
ATOM    410  HB3 LEU    26      34.921  51.673  95.184  1.00  0.00
H
ATOM    411  CG  LEU    26      37.023  51.244  95.149  1.00  0.00
C
ATOM    412  HG  LEU    26      37.910  51.503  95.727  1.00  0.00
H
ATOM    413  CD1 LEU    26      36.753  49.743  95.305  1.00  0.00
C
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ATOM    414 HD11 LEU    26      35.920  49.440  94.674  1.00  0.00
H
ATOM    415 HD12 LEU    26      37.641  49.188  95.013  1.00  0.00
H
ATOM    416 HD13 LEU    26      36.521  49.509  96.339  1.00  0.00
H
ATOM    417  CD2 LEU    26      37.293  51.499  93.668  1.00  0.00
C
ATOM    418 HD21 LEU    26      37.476  52.560  93.509  1.00  0.00
H
ATOM    419 HD22 LEU    26      38.189  50.947  93.384  1.00  0.00
H
ATOM    420 HD23 LEU    26      36.451  51.175  93.061  1.00  0.00
H
ATOM    421  C   LEU    26      34.547  54.163  96.133  1.00  0.00
C
ATOM    422  O   LEU    26      34.442  54.396  97.335  1.00  0.00
O
ATOM    423  N   THR    27      33.531  54.348  95.283  1.00  0.00
N
ATOM    424  H   THR    27      33.698  54.232  94.294  1.00  0.00
H
ATOM    425  CA  THR    27      32.158  54.750  95.674  1.00  0.00
C
ATOM    426  HA  THR    27      32.194  55.738  96.131  1.00  0.00
H
ATOM    427  CB  THR    27      31.275  54.800  94.407  1.00  0.00
C
ATOM    428  HB  THR    27      31.104  53.782  94.071  1.00  0.00
H
ATOM    429  CG2 THR    27      29.918  55.453  94.621  1.00  0.00
C
ATOM    430 HG21 THR    27      30.037  56.502  94.881  1.00  0.00
H
ATOM    431 HG22 THR    27      29.328  55.356  93.710  1.00  0.00
H
ATOM    432 HG23 THR    27      29.391  54.934  95.416  1.00  0.00
H
ATOM    433  OG1 THR    27      31.908  55.485  93.342  1.00  0.00
O
ATOM    434  HG1 THR    27      31.221  55.991  92.901  1.00  0.00
H
ATOM    435  C   THR    27      31.535  53.761  96.666  1.00  0.00
C
ATOM    436  O   THR    27      31.473  52.578  96.344  1.00  0.00
O
ATOM    437  N   GLU    28      31.002  54.223  97.806  1.00  0.00
N
ATOM    438  H   GLU    28      31.134  55.198  98.028  1.00  0.00
H
ATOM    439  CA  GLU    28      30.345  53.379  98.832  1.00  0.00
C
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ATOM    440  HA  GLU    28      31.091  52.752  99.311  1.00  0.00
H
ATOM    441  CB  GLU    28      29.760  54.294  99.929  1.00  0.00
C
ATOM    442  HB2 GLU    28      30.612  54.766 100.433  1.00  0.00
H
ATOM    443  HB3 GLU    28      29.142  55.072  99.459  1.00  0.00
H
ATOM    444  CG  GLU    28      28.922  53.565 100.992  1.00  0.00
C
ATOM    445  HG2 GLU    28      28.029  53.160 100.536  1.00  0.00
H
ATOM    446  HG3 GLU    28      29.489  52.731 101.376  1.00  0.00
H
ATOM    447  CD  GLU    28      28.531  54.488 102.145  1.00  0.00
C
ATOM    448  OE1 GLU    28      28.879  55.685 102.115  1.00  0.00
O
ATOM    449  OE2 GLU    28      27.846  54.051 103.092  1.00  0.00
O
ATOM    450  C   GLU    28      29.280  52.431  98.242  1.00  0.00
C
ATOM    451  O   GLU    28      29.283  51.228  98.505  1.00  0.00
O
ATOM    452  N   GLU    29      28.411  52.952  97.373  1.00  0.00
N
ATOM    453  H   GLU    29      28.447  53.942  97.208  1.00  0.00
H
ATOM    454  CA  GLU    29      27.417  52.175  96.612  1.00  0.00
C
ATOM    455  HA  GLU    29      26.762  51.656  97.310  1.00  0.00
H
ATOM    456  CB  GLU    29      26.559  53.171  95.802  1.00  0.00
C
ATOM    457  HB2 GLU    29      25.828  53.590  96.492  1.00  0.00
H
ATOM    458  HB3 GLU    29      27.178  54.008  95.486  1.00  0.00
H
ATOM    459  CG  GLU    29      25.800  52.624  94.576  1.00  0.00
C
ATOM    460  HG2 GLU    29      25.351  51.665  94.843  1.00  0.00
H
ATOM    461  HG3 GLU    29      24.982  53.316  94.364  1.00  0.00
H
ATOM    462  CD  GLU    29      26.668  52.496  93.302  1.00  0.00
C
ATOM    463  OE1 GLU    29      27.656  53.259  93.160  1.00  0.00
O
ATOM    464  OE2 GLU    29      26.349  51.636  92.454  1.00  0.00
O
ATOM    465  C   GLU    29      28.072  51.080  95.751  1.00  0.00
C
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ATOM    466  O   GLU    29      27.699  49.909  95.832  1.00  0.00
O
ATOM    467  N   LYS    30      29.107  51.431  94.982  1.00  0.00
N
ATOM    468  H   LYS    30      29.303  52.419  94.901  1.00  0.00
H
ATOM    469  CA  LYS    30      29.810  50.501  94.091  1.00  0.00
C
ATOM    470  HA  LYS    30      29.053  49.981  93.500  1.00  0.00
H
ATOM    471  CB  LYS    30      30.706  51.318  93.155  1.00  0.00
C
ATOM    472  HB2 LYS    30      30.123  52.164  92.787  1.00  0.00
H
ATOM    473  HB3 LYS    30      31.555  51.692  93.729  1.00  0.00
H
ATOM    474  CG  LYS    30      31.238  50.535  91.948  1.00  0.00
C
ATOM    475  HG2 LYS    30      31.757  49.645  92.301  1.00  0.00
H
ATOM    476  HG3 LYS    30      30.404  50.221  91.319  1.00  0.00
H
ATOM    477  CD  LYS    30      32.225  51.389  91.131  1.00  0.00
C
ATOM    478  HD2 LYS    30      33.074  51.636  91.771  1.00  0.00
H
ATOM    479  HD3 LYS    30      32.610  50.796  90.306  1.00  0.00
H
ATOM    480  CE  LYS    30      31.630  52.701  90.587  1.00  0.00
C
ATOM    481  HE2 LYS    30      31.257  53.296  91.425  1.00  0.00
H
ATOM    482  HE3 LYS    30      32.430  53.275  90.108  1.00  0.00
H
ATOM    483  NZ  LYS    30      30.542  52.470  89.606  1.00  0.00
N
ATOM    484  HZ1 LYS    30      29.823  51.867  89.986  1.00  0.00
H
ATOM    485  HZ2 LYS    30      30.119  53.350  89.337  1.00  0.00
H
ATOM    486  HZ3 LYS    30      30.926  52.085  88.746  1.00  0.00
H
ATOM    487  C   LYS    30      30.597  49.441  94.863  1.00  0.00
C
ATOM    488  O   LYS    30      30.670  48.307  94.397  1.00  0.00
O
ATOM    489  N   ILE    31      31.150  49.764  96.040  1.00  0.00
N
ATOM    490  H   ILE    31      31.055  50.727  96.351  1.00  0.00
H
ATOM    491  CA  ILE    31      31.808  48.788  96.932  1.00  0.00
C
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ATOM    492  HA  ILE    31      32.671  48.367  96.413  1.00  0.00
H
ATOM    493  CB  ILE    31      32.307  49.435  98.253  1.00  0.00
C
ATOM    494  HB  ILE    31      31.485  49.987  98.710  1.00  0.00
H
ATOM    495  CG2 ILE    31      32.762  48.353  99.255  1.00  0.00
C
ATOM    496 HG21 ILE    31      33.528  47.716  98.811  1.00  0.00
H
ATOM    497 HG22 ILE    31      33.160  48.803 100.163  1.00  0.00
H
ATOM    498 HG23 ILE    31      31.920  47.737  99.564  1.00  0.00
H
ATOM    499  CG1 ILE    31      33.472  50.413  97.982  1.00  0.00
C
ATOM    500 HG12 ILE    31      34.341  49.854  97.643  1.00  0.00
H
ATOM    501 HG13 ILE    31      33.207  51.086  97.175  1.00  0.00
H
ATOM    502  CD1 ILE    31      33.860  51.271  99.197  1.00  0.00
C
ATOM    503 HD11 ILE    31      34.330  50.663  99.967  1.00  0.00
H
ATOM    504 HD12 ILE    31      34.564  52.045  98.891  1.00  0.00
H
ATOM    505 HD13 ILE    31      32.976  51.745  99.621  1.00  0.00
H
ATOM    506  C   ILE    31      30.851  47.628  97.215  1.00  0.00
C
ATOM    507  O   ILE    31      31.262  46.474  97.104  1.00  0.00
O
ATOM    508  N   LYS    32      29.570  47.918  97.491  1.00  0.00
N
ATOM    509  H   LYS    32      29.302  48.898  97.498  1.00  0.00
H
ATOM    510  CA  LYS    32      28.524  46.921  97.774  1.00  0.00
C
ATOM    511  HA  LYS    32      28.751  46.452  98.729  1.00  0.00
H
ATOM    512  CB  LYS    32      27.164  47.645  97.863  1.00  0.00
C
ATOM    513  HB2 LYS    32      27.315  48.685  98.155  1.00  0.00
H
ATOM    514  HB3 LYS    32      26.702  47.660  96.874  1.00  0.00
H
ATOM    515  CG  LYS    32      26.169  47.020  98.854  1.00  0.00
C
ATOM    516  HG2 LYS    32      25.179  47.425  98.632  1.00  0.00
H
ATOM    517  HG3 LYS    32      26.138  45.938  98.713  1.00  0.00
H
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ATOM    518  CD  LYS    32      26.520  47.355 100.313  1.00  0.00
C
ATOM    519  HD2 LYS    32      27.425  46.819 100.602  1.00  0.00
H
ATOM    520  HD3 LYS    32      26.696  48.429 100.405  1.00  0.00
H
ATOM    521  CE  LYS    32      25.359  46.961 101.233  1.00  0.00
C
ATOM    522  HE2 LYS    32      24.486  47.568 100.976  1.00  0.00
H
ATOM    523  HE3 LYS    32      25.110  45.911 101.053  1.00  0.00
H
ATOM    524  NZ  LYS    32      25.709  47.140 102.661  1.00  0.00
N
ATOM    525  HZ1 LYS    32      26.101  48.048 102.872  1.00  0.00
H
ATOM    526  HZ2 LYS    32      24.907  47.048 103.272  1.00  0.00
H
ATOM    527  HZ3 LYS    32      26.356  46.407 102.951  1.00  0.00
H
ATOM    528  C   LYS    32      28.493  45.797  96.726  1.00  0.00
C
ATOM    529  O   LYS    32      28.511  44.628  97.103  1.00  0.00
O
ATOM    530  N   ALA    33      28.570  46.148  95.439  1.00  0.00
N
ATOM    531  H   ALA    33      28.595  47.134  95.222  1.00  0.00
H
ATOM    532  CA  ALA    33      28.622  45.193  94.328  1.00  0.00
C
ATOM    533  HA  ALA    33      27.772  44.512  94.412  1.00  0.00
H
ATOM    534  CB  ALA    33      28.477  45.969  93.014  1.00  0.00
C
ATOM    535  HB1 ALA    33      29.328  46.633  92.866  1.00  0.00
H
ATOM    536  HB2 ALA    33      28.436  45.257  92.190  1.00  0.00
H
ATOM    537  HB3 ALA    33      27.557  46.554  93.022  1.00  0.00
H
ATOM    538  C   ALA    33      29.906  44.338  94.312  1.00  0.00
C
ATOM    539  O   ALA    33      29.865  43.163  93.959  1.00  0.00
O
ATOM    540  N   LEU    34      31.066  44.878  94.709  1.00  0.00
N
ATOM    541  H   LEU    34      31.070  45.831  95.051  1.00  0.00
H
ATOM    542  CA  LEU    34      32.283  44.064  94.820  1.00  0.00
C
ATOM    543  HA  LEU    34      32.329  43.403  93.953  1.00  0.00
H
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ATOM    544  CB  LEU    34      33.567  44.909  94.816  1.00  0.00
C
ATOM    545  HB2 LEU    34      33.548  45.622  95.639  1.00  0.00
H
ATOM    546  HB3 LEU    34      34.366  44.200  95.020  1.00  0.00
H
ATOM    547  CG  LEU    34      33.933  45.622  93.500  1.00  0.00
C
ATOM    548  HG  LEU    34      33.702  44.974  92.653  1.00  0.00
H
ATOM    549  CD1 LEU    34      33.219  46.959  93.331  1.00  0.00
C
ATOM    550 HD11 LEU    34      33.323  47.559  94.235  1.00  0.00
H
ATOM    551 HD12 LEU    34      33.627  47.512  92.489  1.00  0.00
H
ATOM    552 HD13 LEU    34      32.163  46.776  93.142  1.00  0.00
H
ATOM    553  CD2 LEU    34      35.435  45.914  93.476  1.00  0.00
C
ATOM    554 HD21 LEU    34      35.989  44.979  93.524  1.00  0.00
H
ATOM    555 HD22 LEU    34      35.700  46.426  92.552  1.00  0.00
H
ATOM    556 HD23 LEU    34      35.704  46.543  94.326  1.00  0.00
H
ATOM    557  C   LEU    34      32.260  43.138  96.049  1.00  0.00
C
ATOM    558  O   LEU    34      32.844  42.060  95.977  1.00  0.00
O
ATOM    559  N   VAL    35      31.609  43.517  97.156  1.00  0.00
N
ATOM    560  H   VAL    35      31.178  44.437  97.167  1.00  0.00
H
ATOM    561  CA  VAL    35      31.472  42.646  98.345  1.00  0.00
C
ATOM    562  HA  VAL    35      32.438  42.179  98.535  1.00  0.00
H
ATOM    563  CB  VAL    35      31.074  43.435  99.614  1.00  0.00
C
ATOM    564  HB  VAL    35      30.050  43.795  99.502  1.00  0.00
H
ATOM    565  CG1 VAL    35      31.164  42.549 100.864  1.00  0.00
C
ATOM    566 HG11 VAL    35      32.183  42.179 100.989  1.00  0.00
H
ATOM    567 HG12 VAL    35      30.881  43.123 101.747  1.00  0.00
H
ATOM    568 HG13 VAL    35      30.489  41.697 100.782  1.00  0.00
H
ATOM    569  CG2 VAL    35      31.984  44.637  99.905  1.00  0.00
C
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ATOM    570 HG21 VAL    35      32.042  45.297  99.050  1.00  0.00
H
ATOM    571 HG22 VAL    35      31.583  45.206 100.743  1.00  0.00
H
ATOM    572 HG23 VAL    35      32.987  44.303 100.155  1.00  0.00
H
ATOM    573  C   VAL    35      30.468  41.512  98.078  1.00  0.00
C
ATOM    574  O   VAL    35      30.748  40.358  98.406  1.00  0.00
O
ATOM    575  N   GLU    36      29.349  41.825  97.417  1.00  0.00
N
ATOM    576  H   GLU    36      29.175  42.805  97.218  1.00  0.00
H
ATOM    577  CA  GLU    36      28.381  40.867  96.856  1.00  0.00
C
ATOM    578  HA  GLU    36      27.879  40.332  97.661  1.00  0.00
H
ATOM    579  CB  GLU    36      27.326  41.675  96.066  1.00  0.00
C
ATOM    580  HB2 GLU    36      26.731  42.251  96.776  1.00  0.00
H
ATOM    581  HB3 GLU    36      27.855  42.386  95.436  1.00  0.00
H
ATOM    582  CG  GLU    36      26.371  40.880  95.163  1.00  0.00
C
ATOM    583  HG2 GLU    36      26.939  40.216  94.511  1.00  0.00
H
ATOM    584  HG3 GLU    36      25.720  40.262  95.787  1.00  0.00
H
ATOM    585  CD  GLU    36      25.546  41.843  94.290  1.00  0.00
C
ATOM    586  OE1 GLU    36      26.127  42.431  93.344  1.00  0.00
O
ATOM    587  OE2 GLU    36      24.344  42.016  94.587  1.00  0.00
O
ATOM    588  C   GLU    36      29.091  39.820  95.983  1.00  0.00
C
ATOM    589  O   GLU    36      29.136  38.640  96.340  1.00  0.00
O
ATOM    590  N   ILE    37      29.728  40.264  94.892  1.00  0.00
N
ATOM    591  H   ILE    37      29.628  41.245  94.648  1.00  0.00
H
ATOM    592  CA  ILE    37      30.407  39.378  93.941  1.00  0.00
C
ATOM    593  HA  ILE    37      29.686  38.639  93.585  1.00  0.00
H
ATOM    594  CB  ILE    37      30.907  40.199  92.727  1.00  0.00
C
ATOM    595  HB  ILE    37      31.477  41.044  93.121  1.00  0.00
H
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ATOM    596  CG2 ILE    37      31.868  39.396  91.831  1.00  0.00
C
ATOM    597 HG21 ILE    37      31.405  38.447  91.550  1.00  0.00
H
ATOM    598 HG22 ILE    37      32.102  39.962  90.932  1.00  0.00
H
ATOM    599 HG23 ILE    37      32.794  39.187  92.366  1.00  0.00
H
ATOM    600  CG1 ILE    37      29.748  40.781  91.876  1.00  0.00
C
ATOM    601 HG12 ILE    37      29.064  41.329  92.521  1.00  0.00
H
ATOM    602 HG13 ILE    37      30.166  41.498  91.169  1.00  0.00
H
ATOM    603  CD1 ILE    37      28.898  39.771  91.093  1.00  0.00
C
ATOM    604 HD11 ILE    37      28.416  39.078  91.782  1.00  0.00
H
ATOM    605 HD12 ILE    37      28.124  40.309  90.546  1.00  0.00
H
ATOM    606 HD13 ILE    37      29.509  39.218  90.381  1.00  0.00
H
ATOM    607  C   ILE    37      31.533  38.586  94.621  1.00  0.00
C
ATOM    608  O   ILE    37      31.650  37.388  94.397  1.00  0.00
O
ATOM    609  N   CYS    38      32.361  39.177  95.486  1.00  0.00
N
ATOM    610  H   CYS    38      32.261  40.163  95.698  1.00  0.00
H
ATOM    611  CA  CYS    38      33.426  38.400  96.132  1.00  0.00
C
ATOM    612  HA  CYS    38      33.942  37.822  95.365  1.00  0.00
H
ATOM    613  CB  CYS    38      34.458  39.340  96.744  1.00  0.00
C
ATOM    614  HB2 CYS    38      33.957  40.075  97.375  1.00  0.00
H
ATOM    615  HB3 CYS    38      35.143  38.754  97.355  1.00  0.00
H
ATOM    616  SG  CYS    38      35.399  40.157  95.419  1.00  0.00
S
ATOM    617  HG  CYS    38      35.867  41.091  96.245  1.00  0.00
H
ATOM    618  C   CYS    38      32.896  37.356  97.134  1.00  0.00
C
ATOM    619  O   CYS    38      33.527  36.315  97.288  1.00  0.00
O
ATOM    620  N   THR    39      31.728  37.570  97.753  1.00  0.00
N
ATOM    621  H   THR    39      31.239  38.443  97.584  1.00  0.00
H
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ATOM    622  CA  THR    39      31.051  36.534  98.564  1.00  0.00
C
ATOM    623  HA  THR    39      31.780  36.097  99.247  1.00  0.00
H
ATOM    624  CB  THR    39      29.912  37.134  99.409  1.00  0.00
C
ATOM    625  HB  THR    39      29.104  37.461  98.753  1.00  0.00
H
ATOM    626  CG2 THR    39      29.360  36.147 100.445  1.00  0.00
C
ATOM    627 HG21 THR    39      30.171  35.799 101.085  1.00  0.00
H
ATOM    628 HG22 THR    39      28.609  36.647 101.054  1.00  0.00
H
ATOM    629 HG23 THR    39      28.899  35.292  99.951  1.00  0.00
H
ATOM    630  OG1 THR    39      30.380  38.246 100.139  1.00  0.00
O
ATOM    631  HG1 THR    39      30.519  38.973  99.517  1.00  0.00
H
ATOM    632  C   THR    39      30.507  35.399  97.685  1.00  0.00
C
ATOM    633  O   THR    39      30.557  34.229  98.066  1.00  0.00
O
ATOM    634  N   GLU    40      30.033  35.720  96.478  1.00  0.00
N
ATOM    635  H   GLU    40      29.980  36.704  96.228  1.00  0.00
H
ATOM    636  CA  GLU    40      29.618  34.736  95.472  1.00  0.00
C
ATOM    637  HA  GLU    40      28.908  34.063  95.940  1.00  0.00
H
ATOM    638  CB  GLU    40      28.913  35.465  94.306  1.00  0.00
C
ATOM    639  HB2 GLU    40      28.133  36.105  94.720  1.00  0.00
H
ATOM    640  HB3 GLU    40      29.632  36.092  93.786  1.00  0.00
H
ATOM    641  CG  GLU    40      28.275  34.511  93.286  1.00  0.00
C
ATOM    642  HG2 GLU    40      29.017  33.775  92.985  1.00  0.00
H
ATOM    643  HG3 GLU    40      27.463  33.976  93.780  1.00  0.00
H
ATOM    644  CD  GLU    40      27.736  35.211  92.024  1.00  0.00
C
ATOM    645  OE1 GLU    40      27.566  36.448  92.026  1.00  0.00
O
ATOM    646  OE2 GLU    40      27.447  34.488  91.039  1.00  0.00
O
ATOM    647  C   GLU    40      30.805  33.881  95.002  1.00  0.00
C
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ATOM    648  O   GLU    40      30.759  32.654  95.104  1.00  0.00
O
ATOM    649  N   LEU    41      31.892  34.519  94.560  1.00  0.00
N
ATOM    650  H   LEU    41      31.847  35.533  94.514  1.00  0.00
H
ATOM    651  CA  LEU    41      33.065  33.846  93.996  1.00  0.00
C
ATOM    652  HA  LEU    41      32.715  33.132  93.249  1.00  0.00
H
ATOM    653  CB  LEU    41      33.951  34.896  93.299  1.00  0.00
C
ATOM    654  HB2 LEU    41      34.289  35.598  94.060  1.00  0.00
H
ATOM    655  HB3 LEU    41      34.831  34.390  92.908  1.00  0.00
H
ATOM    656  CG  LEU    41      33.312  35.710  92.152  1.00  0.00
C
ATOM    657  HG  LEU    41      32.462  36.267  92.514  1.00  0.00
H
ATOM    658  CD1 LEU    41      34.349  36.707  91.633  1.00  0.00
C
ATOM    659 HD11 LEU    41      35.222  36.161  91.283  1.00  0.00
H
ATOM    660 HD12 LEU    41      33.919  37.280  90.813  1.00  0.00
H
ATOM    661 HD13 LEU    41      34.638  37.383  92.437  1.00  0.00
H
ATOM    662  CD2 LEU    41      32.820  34.883  90.972  1.00  0.00
C
ATOM    663 HD21 LEU    41      32.068  34.171  91.314  1.00  0.00
H
ATOM    664 HD22 LEU    41      32.337  35.537  90.245  1.00  0.00
H
ATOM    665 HD23 LEU    41      33.658  34.377  90.504  1.00  0.00
H
ATOM    666  C   LEU    41      33.866  33.033  95.044  1.00  0.00
C
ATOM    667  O   LEU    41      34.513  32.053  94.674  1.00  0.00
O
ATOM    668  N   GLU    42      33.809  33.409  96.328  1.00  0.00
N
ATOM    669  H   GLU    42      33.309  34.264  96.540  1.00  0.00
H
ATOM    670  CA  GLU    42      34.389  32.678  97.473  1.00  0.00
C
ATOM    671  HA  GLU    42      35.443  32.468  97.282  1.00  0.00
H
ATOM    672  CB  GLU    42      34.288  33.577  98.727  1.00  0.00
C
ATOM    673  HB2 GLU    42      34.952  34.433  98.602  1.00  0.00
H
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ATOM    674  HB3 GLU    42      33.268  33.960  98.763  1.00  0.00
H
ATOM    675  CG  GLU    42      34.560  32.948 100.107  1.00  0.00
C
ATOM    676  HG2 GLU    42      34.057  33.569 100.850  1.00  0.00
H
ATOM    677  HG3 GLU    42      34.097  31.962 100.174  1.00  0.00
H
ATOM    678  CD  GLU    42      36.047  32.868 100.481  1.00  0.00
C
ATOM    679  OE1 GLU    42      36.720  31.914 100.032  1.00  0.00
O
ATOM    680  OE2 GLU    42      36.505  33.731 101.267  1.00  0.00
O
ATOM    681  C   GLU    42      33.690  31.323  97.685  1.00  0.00
C
ATOM    682  O   GLU    42      34.360  30.286  97.723  1.00  0.00
O
ATOM    683  N   LYS    43      32.347  31.285  97.774  1.00  0.00
N
ATOM    684  H   LYS    43      31.829  32.157  97.728  1.00  0.00
H
ATOM    685  CA  LYS    43      31.617  30.006  97.944  1.00  0.00
C
ATOM    686  HA  LYS    43      32.117  29.448  98.737  1.00  0.00
H
ATOM    687  CB  LYS    43      30.157  30.225  98.392  1.00  0.00
C
ATOM    688  HB2 LYS    43      29.786  29.274  98.780  1.00  0.00
H
ATOM    689  HB3 LYS    43      30.132  30.950  99.208  1.00  0.00
H
ATOM    690  CG  LYS    43      29.216  30.688  97.266  1.00  0.00
C
ATOM    691  HG2 LYS    43      29.497  31.695  96.972  1.00  0.00
H
ATOM    692  HG3 LYS    43      29.311  30.018  96.411  1.00  0.00
H
ATOM    693  CD  LYS    43      27.742  30.691  97.687  1.00  0.00
C
ATOM    694  HD2 LYS    43      27.512  29.743  98.177  1.00  0.00
H
ATOM    695  HD3 LYS    43      27.565  31.494  98.404  1.00  0.00
H
ATOM    696  CE  LYS    43      26.803  30.834  96.478  1.00  0.00
C
ATOM    697  HE2 LYS    43      26.947  29.970  95.823  1.00  0.00
H
ATOM    698  HE3 LYS    43      25.772  30.807  96.840  1.00  0.00
H
ATOM    699  NZ  LYS    43      27.035  32.079  95.705  1.00  0.00
N
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ATOM    700  HZ1 LYS    43      27.968  32.093  95.309  1.00  0.00
H
ATOM    701  HZ2 LYS    43      26.373  32.147  94.928  1.00  0.00
H
ATOM    702  HZ3 LYS    43      26.901  32.894  96.284  1.00  0.00
H
ATOM    703  C   LYS    43      31.710  29.104  96.711  1.00  0.00
C
ATOM    704  O   LYS    43      31.593  27.888  96.813  1.00  0.00
O
ATOM    705  N   GLU    44      31.934  29.696  95.540  1.00  0.00
N
ATOM    706  H   GLU    44      31.946  30.709  95.520  1.00  0.00
H
ATOM    707  CA  GLU    44      32.143  28.973  94.289  1.00  0.00
C
ATOM    708  HA  GLU    44      31.525  28.076  94.298  1.00  0.00
H
ATOM    709  CB  GLU    44      31.679  29.856  93.127  1.00  0.00
C
ATOM    710  HB2 GLU    44      32.233  30.795  93.158  1.00  0.00
H
ATOM    711  HB3 GLU    44      31.918  29.354  92.192  1.00  0.00
H
ATOM    712  CG  GLU    44      30.159  30.102  93.121  1.00  0.00
C
ATOM    713  HG2 GLU    44      29.660  29.134  93.054  1.00  0.00
H
ATOM    714  HG3 GLU    44      29.815  30.590  94.033  1.00  0.00
H
ATOM    715  CD  GLU    44      29.771  30.955  91.916  1.00  0.00
C
ATOM    716  OE1 GLU    44      30.446  31.972  91.664  1.00  0.00
O
ATOM    717  OE2 GLU    44      28.863  30.555  91.158  1.00  0.00
O
ATOM    718  C   GLU    44      33.597  28.495  94.093  1.00  0.00
C
ATOM    719  O   GLU    44      33.861  27.781  93.121  1.00  0.00
O
ATOM    720  N   GLY    45      34.529  28.878  94.979  1.00  0.00
N
ATOM    721  H   GLY    45      34.233  29.462  95.755  1.00  0.00
H
ATOM    722  CA  GLY    45      35.962  28.541  94.938  1.00  0.00
C
ATOM    723  HA2 GLY    45      36.392  28.737  95.921  1.00  0.00
H
ATOM    724  HA3 GLY    45      36.072  27.479  94.722  1.00  0.00
H
ATOM    725  C   GLY    45      36.785  29.320  93.903  1.00  0.00
C
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ATOM    726  O   GLY    45      38.009  29.168  93.837  1.00  0.00
O
ATOM    727  N   LYS    46      36.124  30.160  93.096  1.00  0.00
N
ATOM    728  H   LYS    46      35.141  30.283  93.303  1.00  0.00
H
ATOM    729  CA  LYS    46      36.697  30.954  91.996  1.00  0.00
C
ATOM    730  HA  LYS    46      37.194  30.282  91.297  1.00  0.00
H
ATOM    731  CB  LYS    46      35.546  31.685  91.266  1.00  0.00
C
ATOM    732  HB2 LYS    46      35.031  32.314  91.992  1.00  0.00
H
ATOM    733  HB3 LYS    46      35.974  32.343  90.510  1.00  0.00
H
ATOM    734  CG  LYS    46      34.502  30.769  90.579  1.00  0.00
C
ATOM    735  HG2 LYS    46      34.956  30.275  89.723  1.00  0.00
H
ATOM    736  HG3 LYS    46      34.162  30.008  91.281  1.00  0.00
H
ATOM    737  CD  LYS    46      33.278  31.587  90.124  1.00  0.00
C
ATOM    738  HD2 LYS    46      32.818  31.987  91.024  1.00  0.00
H
ATOM    739  HD3 LYS    46      33.612  32.424  89.525  1.00  0.00
H
ATOM    740  CE  LYS    46      32.225  30.828  89.295  1.00  0.00
C
ATOM    741  HE2 LYS    46      32.665  30.536  88.337  1.00  0.00
H
ATOM    742  HE3 LYS    46      31.957  29.914  89.832  1.00  0.00
H
ATOM    743  NZ  LYS    46      31.001  31.654  89.067  1.00  0.00
N
ATOM    744  HZ1 LYS    46      31.152  32.507  88.547  1.00  0.00
H
ATOM    745  HZ2 LYS    46      30.251  31.135  88.636  1.00  0.00
H
ATOM    746  HZ3 LYS    46      30.622  31.944  89.973  1.00  0.00
H
ATOM    747  C   LYS    46      37.762  31.942  92.512  1.00  0.00
C
ATOM    748  O   LYS    46      38.753  32.213  91.832  1.00  0.00
O
ATOM    749  N   ILE    47      37.595  32.439  93.737  1.00  0.00
N
ATOM    750  H   ILE    47      36.776  32.133  94.251  1.00  0.00
H
ATOM    751  CA  ILE    47      38.612  33.182  94.498  1.00  0.00
C
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ATOM    752  HA  ILE    47      39.572  33.077  93.994  1.00  0.00
H
ATOM    753  CB  ILE    47      38.281  34.697  94.562  1.00  0.00
C
ATOM    754  HB  ILE    47      39.137  35.202  95.009  1.00  0.00
H
ATOM    755  CG2 ILE    47      38.095  35.289  93.147  1.00  0.00
C
ATOM    756 HG21 ILE    47      37.139  34.979  92.730  1.00  0.00
H
ATOM    757 HG22 ILE    47      38.135  36.376  93.184  1.00  0.00
H
ATOM    758 HG23 ILE    47      38.885  34.943  92.486  1.00  0.00
H
ATOM    759  CG1 ILE    47      37.064  34.995  95.466  1.00  0.00
C
ATOM    760 HG12 ILE    47      36.197  34.455  95.094  1.00  0.00
H
ATOM    761 HG13 ILE    47      37.272  34.643  96.478  1.00  0.00
H
ATOM    762  CD1 ILE    47      36.710  36.482  95.571  1.00  0.00
C
ATOM    763 HD11 ILE    47      36.324  36.854  94.623  1.00  0.00
H
ATOM    764 HD12 ILE    47      35.948  36.612  96.337  1.00  0.00
H
ATOM    765 HD13 ILE    47      37.591  37.053  95.857  1.00  0.00
H
ATOM    766  C   ILE    47      38.788  32.561  95.893  1.00  0.00
C
ATOM    767  O   ILE    47      37.865  31.920  96.390  1.00  0.00
O
ATOM    768  N   SER    48      39.936  32.795  96.532  1.00  0.00
N
ATOM    769  H   SER    48      40.651  33.323  96.045  1.00  0.00
H
ATOM    770  CA  SER    48      40.179  32.474  97.949  1.00  0.00
C
ATOM    771  HA  SER    48      39.308  31.976  98.382  1.00  0.00
H
ATOM    772  CB  SER    48      41.394  31.552  98.123  1.00  0.00
C
ATOM    773  HB2 SER    48      42.272  32.020  97.671  1.00  0.00
H
ATOM    774  HB3 SER    48      41.586  31.425  99.189  1.00  0.00
H
ATOM    775  OG  SER    48      41.192  30.278  97.547  1.00  0.00
O
ATOM    776  HG  SER    48      41.825  29.668  97.933  1.00  0.00
H
ATOM    777  C   SER    48      40.464  33.744  98.748  1.00  0.00
C
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ATOM    778  O   SER    48      41.122  34.653  98.235  1.00  0.00
O
ATOM    779  N   LYS    49      40.072  33.791 100.025  1.00  0.00
N
ATOM    780  H   LYS    49      39.433  33.076 100.359  1.00  0.00
H
ATOM    781  CA  LYS    49      40.685  34.700 101.014  1.00  0.00
C
ATOM    782  HA  LYS    49      40.642  35.715 100.619  1.00  0.00
H
ATOM    783  CB  LYS    49      39.858  34.650 102.312  1.00  0.00
C
ATOM    784  HB2 LYS    49      38.809  34.801 102.053  1.00  0.00
H
ATOM    785  HB3 LYS    49      39.958  33.662 102.764  1.00  0.00
H
ATOM    786  CG  LYS    49      40.261  35.726 103.333  1.00  0.00
C
ATOM    787  HG2 LYS    49      41.280  35.543 103.677  1.00  0.00
H
ATOM    788  HG3 LYS    49      40.223  36.701 102.849  1.00  0.00
H
ATOM    789  CD  LYS    49      39.319  35.731 104.546  1.00  0.00
C
ATOM    790  HD2 LYS    49      38.296  35.907 104.206  1.00  0.00
H
ATOM    791  HD3 LYS    49      39.367  34.760 105.044  1.00  0.00
H
ATOM    792  CE  LYS    49      39.733  36.832 105.529  1.00  0.00
C
ATOM    793  HE2 LYS    49      40.763  36.652 105.848  1.00  0.00
H
ATOM    794  HE3 LYS    49      39.707  37.794 105.013  1.00  0.00
H
ATOM    795  NZ  LYS    49      38.843  36.879 106.711  1.00  0.00
N
ATOM    796  HZ1 LYS    49      38.900  36.010 107.242  1.00  0.00
H
ATOM    797  HZ2 LYS    49      39.114  37.635 107.340  1.00  0.00
H
ATOM    798  HZ3 LYS    49      37.876  37.002 106.451  1.00  0.00
H
ATOM    799  C   LYS    49      42.169  34.342 101.235  1.00  0.00
C
ATOM    800  O   LYS    49      42.540  33.173 101.115  1.00  0.00
O
ATOM    801  N   ILE    50      43.015  35.329 101.552  1.00  0.00
N
ATOM    802  H   ILE    50      42.634  36.260 101.658  1.00  0.00
H
ATOM    803  CA  ILE    50      44.468  35.144 101.789  1.00  0.00
C
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ATOM    804  HA  ILE    50      44.654  34.077 101.911  1.00  0.00
H
ATOM    805  CB  ILE    50      45.317  35.609 100.583  1.00  0.00
C
ATOM    806  HB  ILE    50      46.369  35.486 100.849  1.00  0.00
H
ATOM    807  CG2 ILE    50      45.054  34.697  99.378  1.00  0.00
C
ATOM    808 HG21 ILE    50      44.065  34.896  98.964  1.00  0.00
H
ATOM    809 HG22 ILE    50      45.819  34.862  98.621  1.00  0.00
H
ATOM    810 HG23 ILE    50      45.106  33.651  99.679  1.00  0.00
H
ATOM    811  CG1 ILE    50      45.080  37.099 100.262  1.00  0.00
C
ATOM    812 HG12 ILE    50      44.039  37.252  99.979  1.00  0.00
H
ATOM    813 HG13 ILE    50      45.287  37.675 101.164  1.00  0.00
H
ATOM    814  CD1 ILE    50      45.963  37.666  99.148  1.00  0.00
C
ATOM    815 HD11 ILE    50      45.690  37.235  98.187  1.00  0.00
H
ATOM    816 HD12 ILE    50      45.825  38.745  99.096  1.00  0.00
H
ATOM    817 HD13 ILE    50      47.008  37.451  99.360  1.00  0.00
H
ATOM    818  C   ILE    50      44.966  35.789 103.094  1.00  0.00
C
ATOM    819  O   ILE    50      44.308  36.670 103.651  1.00  0.00
O
ATOM    820  N   GLY    51      46.132  35.332 103.567  1.00  0.00
N
ATOM    821  H   GLY    51      46.678  34.699 103.000  1.00  0.00
H
ATOM    822  CA  GLY    51      46.725  35.694 104.854  1.00  0.00
C
ATOM    823  HA2 GLY    51      45.935  35.790 105.599  1.00  0.00
H
ATOM    824  HA3 GLY    51      47.381  34.881 105.165  1.00  0.00
H
ATOM    825  C   GLY    51      47.560  36.983 104.858  1.00  0.00
C
ATOM    826  O   GLY    51      47.540  37.766 103.901  1.00  0.00
O
ATOM    827  N   PRO    52      48.280  37.258 105.967  1.00  0.00
N
ATOM    828  CD  PRO    52      48.205  36.568 107.244  1.00  0.00
C
ATOM    829  HD2 PRO    52      48.986  35.808 107.293  1.00  0.00
H
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ATOM    830  HD3 PRO    52      47.226  36.121 107.413  1.00  0.00
H
ATOM    831  CG  PRO    52      48.471  37.655 108.283  1.00  0.00
C
ATOM    832  HG2 PRO    52      48.842  37.241 109.220  1.00  0.00
H
ATOM    833  HG3 PRO    52      47.564  38.241 108.443  1.00  0.00
H
ATOM    834  CB  PRO    52      49.524  38.514 107.585  1.00  0.00
C
ATOM    835  HB2 PRO    52      50.509  38.062 107.716  1.00  0.00
H
ATOM    836  HB3 PRO    52      49.526  39.539 107.961  1.00  0.00
H
ATOM    837  CA  PRO    52      49.100  38.456 106.114  1.00  0.00
C
ATOM    838  HA  PRO    52      48.475  39.310 105.913  1.00  0.00
H
ATOM    839  C   PRO    52      50.304  38.510 105.173  1.00  0.00
C
ATOM    840  O   PRO    52      50.610  39.591 104.671  1.00  0.00
O
ATOM    841  N   GLU    53      50.940  37.362 104.941  1.00  0.00
N
ATOM    842  H   GLU    53      50.530  36.519 105.346  1.00  0.00
H
ATOM    843  CA  GLU    53      52.229  37.179 104.262  1.00  0.00
C
ATOM    844  HA  GLU    53      52.977  37.766 104.798  1.00  0.00
H
ATOM    845  CB  GLU    53      52.652  35.696 104.360  1.00  0.00
C
ATOM    846  HB2 GLU    53      53.658  35.608 103.947  1.00  0.00
H
ATOM    847  HB3 GLU    53      52.717  35.420 105.413  1.00  0.00
H
ATOM    848  CG  GLU    53      51.755  34.671 103.628  1.00  0.00
C
ATOM    849  HG2 GLU    53      51.779  34.881 102.556  1.00  0.00
H
ATOM    850  HG3 GLU    53      52.192  33.680 103.769  1.00  0.00
H
ATOM    851  CD  GLU    53      50.300  34.652 104.127  1.00  0.00
C
ATOM    852  OE1 GLU    53      50.104  34.636 105.365  1.00  0.00
O
ATOM    853  OE2 GLU    53      49.377  34.768 103.290  1.00  0.00
O
ATOM    854  C   GLU    53      52.289  37.647 102.806  1.00  0.00
C
ATOM    855  O   GLU    53      53.359  38.068 102.366  1.00  0.00
O
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ATOM    856  N   ASN    54      51.182  37.591 102.053  1.00  0.00
N
ATOM    857  H   ASN    54      50.334  37.227 102.470  1.00  0.00
H
ATOM    858  CA  ASN    54      51.171  37.998 100.649  1.00  0.00
C
ATOM    859  HA  ASN    54      52.014  37.507 100.162  1.00  0.00
H
ATOM    860  CB  ASN    54      49.897  37.459  99.969  1.00  0.00
C
ATOM    861  HB2 ASN    54      49.818  36.389 100.166  1.00  0.00
H
ATOM    862  HB3 ASN    54      49.025  37.958 100.390  1.00  0.00
H
ATOM    863  CG  ASN    54      49.906  37.679  98.462  1.00  0.00
C
ATOM    864  OD1 ASN    54      50.502  38.609  97.951  1.00  0.00
O
ATOM    865  ND2 ASN    54      49.275  36.832  97.685  1.00  0.00
N
ATOM    866 HD21 ASN    54      49.297  37.034  96.691  1.00  0.00
H
ATOM    867 HD22 ASN    54      48.783  36.043  98.063  1.00  0.00
H
ATOM    868  C   ASN    54      51.341  39.538 100.529  1.00  0.00
C
ATOM    869  O   ASN    54      50.456  40.277 100.982  1.00  0.00
O
ATOM    870  N   PRO    55      52.440  40.034  99.913  1.00  0.00
N
ATOM    871  CD  PRO    55      53.541  39.270  99.327  1.00  0.00
C
ATOM    872  HD2 PRO    55      53.200  38.695  98.468  1.00  0.00
H
ATOM    873  HD3 PRO    55      53.970  38.598 100.065  1.00  0.00
H
ATOM    874  CG  PRO    55      54.607  40.280  98.897  1.00  0.00
C
ATOM    875  HG2 PRO    55      54.479  40.531  97.843  1.00  0.00
H
ATOM    876  HG3 PRO    55      55.617  39.911  99.082  1.00  0.00
H
ATOM    877  CB  PRO    55      54.284  41.498  99.759  1.00  0.00
C
ATOM    878  HB2 PRO    55      54.664  42.421  99.320  1.00  0.00
H
ATOM    879  HB3 PRO    55      54.692  41.356 100.761  1.00  0.00
H
ATOM    880  CA  PRO    55      52.752  41.460  99.813  1.00  0.00
C
ATOM    881  HA  PRO    55      52.401  41.992 100.697  1.00  0.00
H
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ATOM    882  C   PRO    55      52.145  42.126  98.567  1.00  0.00
C
ATOM    883  O   PRO    55      52.327  43.330  98.374  1.00  0.00
O
ATOM    884  N   TYR    56      51.493  41.360  97.688  1.00  0.00
N
ATOM    885  H   TYR    56      51.322  40.384  97.913  1.00  0.00
H
ATOM    886  CA  TYR    56      51.003  41.838  96.402  1.00  0.00
C
ATOM    887  HA  TYR    56      51.652  42.652  96.085  1.00  0.00
H
ATOM    888  CB  TYR    56      51.121  40.724  95.345  1.00  0.00
C
ATOM    889  HB2 TYR    56      50.386  39.951  95.572  1.00  0.00
H
ATOM    890  HB3 TYR    56      50.873  41.135  94.366  1.00  0.00
H
ATOM    891  CG  TYR    56      52.505  40.097  95.274  1.00  0.00
C
ATOM    892  CD1 TYR    56      53.620  40.880  94.917  1.00  0.00
C
ATOM    893  HD1 TYR    56      53.481  41.919  94.649  1.00  0.00
H
ATOM    894  CE1 TYR    56      54.915  40.324  94.945  1.00  0.00
C
ATOM    895  HE1 TYR    56      55.767  40.931  94.686  1.00  0.00
H
ATOM    896  CZ  TYR    56      55.103  38.983  95.351  1.00  0.00
C
ATOM    897  OH  TYR    56      56.341  38.421  95.401  1.00  0.00
O
ATOM    898  HH  TYR    56      57.029  38.968  94.973  1.00  0.00
H
ATOM    899  CE2 TYR    56      53.982  38.196  95.685  1.00  0.00
C
ATOM    900  HE2 TYR    56      54.125  37.168  95.979  1.00  0.00
H
ATOM    901  CD2 TYR    56      52.688  38.748  95.634  1.00  0.00
C
ATOM    902  HD2 TYR    56      51.833  38.143  95.904  1.00  0.00
H
ATOM    903  C   TYR    56      49.583  42.401  96.519  1.00  0.00
C
ATOM    904  O   TYR    56      48.756  41.912  97.288  1.00  0.00
O
ATOM    905  N   ASN    57      49.288  43.436  95.734  1.00  0.00
N
ATOM    906  H   ASN    57      50.004  43.757  95.090  1.00  0.00
H
ATOM    907  CA  ASN    57      47.939  43.975  95.584  1.00  0.00
C
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ATOM    908  HA  ASN    57      47.232  43.143  95.617  1.00  0.00
H
ATOM    909  CB  ASN    57      47.607  44.942  96.742  1.00  0.00
C
ATOM    910  HB2 ASN    57      47.717  44.422  97.695  1.00  0.00
H
ATOM    911  HB3 ASN    57      48.302  45.782  96.721  1.00  0.00
H
ATOM    912  CG  ASN    57      46.182  45.472  96.649  1.00  0.00
C
ATOM    913  OD1 ASN    57      45.209  44.819  96.972  1.00  0.00
O
ATOM    914  ND2 ASN    57      45.977  46.650  96.123  1.00  0.00
N
ATOM    915 HD21 ASN    57      45.021  46.903  95.960  1.00  0.00
H
ATOM    916 HD22 ASN    57      46.757  47.147  95.704  1.00  0.00
H
ATOM    917  C   ASN    57      47.800  44.665  94.224  1.00  0.00
C
ATOM    918  O   ASN    57      48.733  45.317  93.745  1.00  0.00
O
ATOM    919  N   THR    58      46.602  44.572  93.650  1.00  0.00
N
ATOM    920  H   THR    58      45.932  43.931  94.058  1.00  0.00
H
ATOM    921  CA  THR    58      46.167  45.371  92.500  1.00  0.00
C
ATOM    922  HA  THR    58      46.910  46.139  92.322  1.00  0.00
H
ATOM    923  CB  THR    58      46.103  44.508  91.236  1.00  0.00
C
ATOM    924  HB  THR    58      45.275  43.798  91.305  1.00  0.00
H
ATOM    925  CG2 THR    58      45.982  45.362  89.982  1.00  0.00
C
ATOM    926 HG21 THR    58      46.836  46.036  89.915  1.00  0.00
H
ATOM    927 HG22 THR    58      45.986  44.712  89.115  1.00  0.00
H
ATOM    928 HG23 THR    58      45.055  45.935  89.984  1.00  0.00
H
ATOM    929  OG1 THR    58      47.309  43.798  91.083  1.00  0.00
O
ATOM    930  HG1 THR    58      47.366  43.182  91.815  1.00  0.00
H
ATOM    931  C   THR    58      44.811  46.040  92.776  1.00  0.00
C
ATOM    932  O   THR    58      43.924  45.384  93.331  1.00  0.00
O
ATOM    933  N   PRO    59      44.605  47.326  92.422  1.00  0.00
N
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ATOM    934  CD  PRO    59      45.598  48.276  91.940  1.00  0.00
C
ATOM    935  HD2 PRO    59      46.223  47.858  91.152  1.00  0.00
H
ATOM    936  HD3 PRO    59      46.208  48.603  92.783  1.00  0.00
H
ATOM    937  CG  PRO    59      44.819  49.463  91.388  1.00  0.00
C
ATOM    938  HG2 PRO    59      44.591  49.289  90.342  1.00  0.00
H
ATOM    939  HG3 PRO    59      45.370  50.396  91.503  1.00  0.00
H
ATOM    940  CB  PRO    59      43.527  49.458  92.200  1.00  0.00
C
ATOM    941  HB2 PRO    59      42.695  49.870  91.626  1.00  0.00
H
ATOM    942  HB3 PRO    59      43.675  50.035  93.112  1.00  0.00
H
ATOM    943  CA  PRO    59      43.306  47.981  92.546  1.00  0.00
C
ATOM    944  HA  PRO    59      42.982  47.915  93.584  1.00  0.00
H
ATOM    945  C   PRO    59      42.233  47.331  91.662  1.00  0.00
C
ATOM    946  O   PRO    59      42.488  46.866  90.547  1.00  0.00
O
ATOM    947  N   VAL    60      41.002  47.316  92.178  1.00  0.00
N
ATOM    948  H   VAL    60      40.868  47.797  93.057  1.00  0.00
H
ATOM    949  CA  VAL    60      39.823  46.696  91.551  1.00  0.00
C
ATOM    950  HA  VAL    60      40.066  46.503  90.507  1.00  0.00
H
ATOM    951  CB  VAL    60      39.437  45.340  92.175  1.00  0.00
C
ATOM    952  HB  VAL    60      38.612  44.925  91.595  1.00  0.00
H
ATOM    953  CG1 VAL    60      40.595  44.353  92.108  1.00  0.00
C
ATOM    954 HG11 VAL    60      41.427  44.721  92.707  1.00  0.00
H
ATOM    955 HG12 VAL    60      40.299  43.372  92.471  1.00  0.00
H
ATOM    956 HG13 VAL    60      40.926  44.287  91.082  1.00  0.00
H
ATOM    957  CG2 VAL    60      38.985  45.383  93.634  1.00  0.00
C
ATOM    958 HG21 VAL    60      38.265  46.185  93.795  1.00  0.00
H
ATOM    959 HG22 VAL    60      38.514  44.437  93.885  1.00  0.00
H
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ATOM    960 HG23 VAL    60      39.846  45.526  94.283  1.00  0.00
H
ATOM    961  C   VAL    60      38.617  47.627  91.567  1.00  0.00
C
ATOM    962  O   VAL    60      38.477  48.451  92.469  1.00  0.00
O
ATOM    963  N   PHE    61      37.725  47.462  90.593  1.00  0.00
N
ATOM    964  H   PHE    61      37.884  46.726  89.911  1.00  0.00
H
ATOM    965  CA  PHE    61      36.537  48.292  90.391  1.00  0.00
C
ATOM    966  HA  PHE    61      36.183  48.651  91.358  1.00  0.00
H
ATOM    967  CB  PHE    61      36.923  49.522  89.542  1.00  0.00
C
ATOM    968  HB2 PHE    61      36.043  50.155  89.419  1.00  0.00
H
ATOM    969  HB3 PHE    61      37.640  50.111  90.115  1.00  0.00
H
ATOM    970  CG  PHE    61      37.531  49.243  88.172  1.00  0.00
C
ATOM    971  CD1 PHE    61      38.875  48.825  88.055  1.00  0.00
C
ATOM    972  HD1 PHE    61      39.485  48.692  88.936  1.00  0.00
H
ATOM    973  CE1 PHE    61      39.446  48.604  86.790  1.00  0.00
C
ATOM    974  HE1 PHE    61      40.476  48.284  86.706  1.00  0.00
H
ATOM    975  CZ  PHE    61      38.689  48.833  85.629  1.00  0.00
C
ATOM    976  HZ  PHE    61      39.138  48.689  84.654  1.00  0.00
H
ATOM    977  CE2 PHE    61      37.359  49.272  85.736  1.00  0.00
C
ATOM    978  HE2 PHE    61      36.790  49.474  84.839  1.00  0.00
H
ATOM    979  CD2 PHE    61      36.777  49.466  87.003  1.00  0.00
C
ATOM    980  HD2 PHE    61      35.758  49.816  87.070  1.00  0.00
H
ATOM    981  C   PHE    61      35.392  47.472  89.774  1.00  0.00
C
ATOM    982  O   PHE    61      35.578  46.308  89.408  1.00  0.00
O
ATOM    983  N   ALA    62      34.199  48.062  89.677  1.00  0.00
N
ATOM    984  H   ALA    62      34.106  49.019  89.982  1.00  0.00
H
ATOM    985  CA  ALA    62      33.042  47.450  89.023  1.00  0.00
C
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ATOM    986  HA  ALA    62      33.370  46.543  88.520  1.00  0.00
H
ATOM    987  CB  ALA    62      31.999  47.034  90.065  1.00  0.00
C
ATOM    988  HB1 ALA    62      31.669  47.897  90.644  1.00  0.00
H
ATOM    989  HB2 ALA    62      31.137  46.600  89.562  1.00  0.00
H
ATOM    990  HB3 ALA    62      32.424  46.282  90.727  1.00  0.00
H
ATOM    991  C   ALA    62      32.439  48.364  87.948  1.00  0.00
C
ATOM    992  O   ALA    62      32.272  49.568  88.153  1.00  0.00
O
ATOM    993  N   ILE    63      32.076  47.765  86.817  1.00  0.00
N
ATOM    994  H   ILE    63      32.256  46.768  86.740  1.00  0.00
H
ATOM    995  CA  ILE    63      31.402  48.420  85.689  1.00  0.00
C
ATOM    996  HA  ILE    63      31.206  49.455  85.969  1.00  0.00
H
ATOM    997  CB  ILE    63      32.349  48.451  84.465  1.00  0.00
C
ATOM    998  HB  ILE    63      33.316  48.822  84.814  1.00  0.00
H
ATOM    999  CG2 ILE    63      32.568  47.039  83.897  1.00  0.00
C
ATOM   1000 HG21 ILE    63      31.627  46.635  83.528  1.00  0.00
H
ATOM   1001 HG22 ILE    63      33.280  47.067  83.074  1.00  0.00
H
ATOM   1002 HG23 ILE    63      32.969  46.383  84.668  1.00  0.00
H
ATOM   1003  CG1 ILE    63      31.846  49.437  83.388  1.00  0.00
C
ATOM   1004 HG12 ILE    63      30.947  49.043  82.914  1.00  0.00
H
ATOM   1005 HG13 ILE    63      31.597  50.384  83.869  1.00  0.00
H
ATOM   1006  CD1 ILE    63      32.882  49.730  82.295  1.00  0.00
C
ATOM   1007 HD11 ILE    63      33.058  48.842  81.688  1.00  0.00
H
ATOM   1008 HD12 ILE    63      32.508  50.523  81.647  1.00  0.00
H
ATOM   1009 HD13 ILE    63      33.821  50.058  82.745  1.00  0.00
H
ATOM   1010  C   ILE    63      30.036  47.763  85.428  1.00  0.00
C
ATOM   1011  O   ILE    63      29.815  46.605  85.793  1.00  0.00
O
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ATOM   1012  N   LYS    64      29.097  48.497  84.829  1.00  0.00
N
ATOM   1013  H   LYS    64      29.347  49.430  84.535  1.00  0.00
H
ATOM   1014  CA  LYS    64      27.762  47.997  84.457  1.00  0.00
C
ATOM   1015  HA  LYS    64      27.292  47.542  85.332  1.00  0.00
H
ATOM   1016  CB  LYS    64      26.898  49.184  83.968  1.00  0.00
C
ATOM   1017  HB2 LYS    64      27.348  49.553  83.042  1.00  0.00
H
ATOM   1018  HB3 LYS    64      25.903  48.829  83.704  1.00  0.00
H
ATOM   1019  CG  LYS    64      26.775  50.394  84.929  1.00  0.00
C
ATOM   1020  HG2 LYS    64      27.595  50.409  85.646  1.00  0.00
H
ATOM   1021  HG3 LYS    64      26.877  51.296  84.323  1.00  0.00
H
ATOM   1022  CD  LYS    64      25.448  50.521  85.696  1.00  0.00
C
ATOM   1023  HD2 LYS    64      25.431  51.504  86.170  1.00  0.00
H
ATOM   1024  HD3 LYS    64      24.620  50.484  84.990  1.00  0.00
H
ATOM   1025  CE  LYS    64      25.264  49.459  86.785  1.00  0.00
C
ATOM   1026  HE2 LYS    64      25.265  48.465  86.331  1.00  0.00
H
ATOM   1027  HE3 LYS    64      26.110  49.518  87.473  1.00  0.00
H
ATOM   1028  NZ  LYS    64      23.994  49.659  87.525  1.00  0.00
N
ATOM   1029  HZ1 LYS    64      23.235  49.159  87.070  1.00  0.00
H
ATOM   1030  HZ2 LYS    64      24.021  49.290  88.467  1.00  0.00
H
ATOM   1031  HZ3 LYS    64      23.705  50.633  87.580  1.00  0.00
H
ATOM   1032  C   LYS    64      27.889  46.922  83.356  1.00  0.00
C
ATOM   1033  O   LYS    64      28.755  47.039  82.484  1.00  0.00
O
ATOM   1034  N   LYS    65      27.042  45.883  83.365  1.00  0.00
N
ATOM   1035  H   LYS    65      26.406  45.801  84.149  1.00  0.00
H
ATOM   1036  CA  LYS    65      26.858  44.950  82.225  1.00  0.00
C
ATOM   1037  HA  LYS    65      27.808  44.832  81.703  1.00  0.00
H
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ATOM   1038  CB  LYS    65      26.412  43.560  82.731  1.00  0.00
C
ATOM   1039  HB2 LYS    65      25.505  43.667  83.330  1.00  0.00
H
ATOM   1040  HB3 LYS    65      26.159  42.946  81.866  1.00  0.00
H
ATOM   1041  CG  LYS    65      27.469  42.786  83.547  1.00  0.00
C
ATOM   1042  HG2 LYS    65      28.412  42.758  83.000  1.00  0.00
H
ATOM   1043  HG3 LYS    65      27.626  43.275  84.510  1.00  0.00
H
ATOM   1044  CD  LYS    65      26.951  41.353  83.764  1.00  0.00
C
ATOM   1045  HD2 LYS    65      25.999  41.418  84.291  1.00  0.00
H
ATOM   1046  HD3 LYS    65      26.779  40.892  82.788  1.00  0.00
H
ATOM   1047  CE  LYS    65      27.884  40.444  84.573  1.00  0.00
C
ATOM   1048  HE2 LYS    65      28.872  40.437  84.104  1.00  0.00
H
ATOM   1049  HE3 LYS    65      27.989  40.861  85.577  1.00  0.00
H
ATOM   1050  NZ  LYS    65      27.347  39.057  84.656  1.00  0.00
N
ATOM   1051  HZ1 LYS    65      27.325  38.618  83.744  1.00  0.00
H
ATOM   1052  HZ2 LYS    65      27.922  38.472  85.259  1.00  0.00
H
ATOM   1053  HZ3 LYS    65      26.398  39.056  85.010  1.00  0.00
H
ATOM   1054  C   LYS    65      25.873  45.522  81.181  1.00  0.00
C
ATOM   1055  O   LYS    65      25.264  46.562  81.429  1.00  0.00
O
ATOM   1056  N   LYS    66      25.671  44.807  80.060  1.00  0.00
N
ATOM   1057  H   LYS    66      26.199  43.954  79.961  1.00  0.00
H
ATOM   1058  CA  LYS    66      24.751  45.143  78.941  1.00  0.00
C
ATOM   1059  HA  LYS    66      25.188  45.956  78.358  1.00  0.00
H
ATOM   1060  CB  LYS    66      24.600  43.898  78.026  1.00  0.00
C
ATOM   1061  HB2 LYS    66      24.614  42.996  78.643  1.00  0.00
H
ATOM   1062  HB3 LYS    66      23.626  43.923  77.532  1.00  0.00
H
ATOM   1063  CG  LYS    66      25.682  43.772  76.933  1.00  0.00
C
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ATOM   1064  HG2 LYS    66      26.661  43.974  77.372  1.00  0.00
H
ATOM   1065  HG3 LYS    66      25.683  42.747  76.558  1.00  0.00
H
ATOM   1066  CD  LYS    66      25.427  44.726  75.750  1.00  0.00
C
ATOM   1067  HD2 LYS    66      24.491  44.459  75.255  1.00  0.00
H
ATOM   1068  HD3 LYS    66      25.319  45.740  76.135  1.00  0.00
H
ATOM   1069  CE  LYS    66      26.575  44.741  74.730  1.00  0.00
C
ATOM   1070  HE2 LYS    66      26.576  45.723  74.249  1.00  0.00
H
ATOM   1071  HE3 LYS    66      27.527  44.630  75.254  1.00  0.00
H
ATOM   1072  NZ  LYS    66      26.457  43.715  73.665  1.00  0.00
N
ATOM   1073  HZ1 LYS    66      25.570  43.785  73.167  1.00  0.00
H
ATOM   1074  HZ2 LYS    66      27.194  43.866  72.986  1.00  0.00
H
ATOM   1075  HZ3 LYS    66      26.591  42.761  73.999  1.00  0.00
H
ATOM   1076  C   LYS    66      23.356  45.649  79.370  1.00  0.00
C
ATOM   1077  O   LYS    66      22.827  46.545  78.724  1.00  0.00
O
ATOM   1078  N   ASN    67      22.795  45.126  80.466  1.00  0.00
N
ATOM   1079  H   ASN    67      23.261  44.340  80.881  1.00  0.00
H
ATOM   1080  CA  ASN    67      21.472  45.510  80.996  1.00  0.00
C
ATOM   1081  HA  ASN    67      20.911  46.002  80.201  1.00  0.00
H
ATOM   1082  CB  ASN    67      20.708  44.226  81.381  1.00  0.00
C
ATOM   1083  HB2 ASN    67      21.369  43.508  81.865  1.00  0.00
H
ATOM   1084  HB3 ASN    67      19.920  44.472  82.092  1.00  0.00
H
ATOM   1085  CG  ASN    67      20.055  43.575  80.180  1.00  0.00
C
ATOM   1086  OD1 ASN    67      20.714  43.081  79.279  1.00  0.00
O
ATOM   1087  ND2 ASN    67      18.743  43.577  80.116  1.00  0.00
N
ATOM   1088 HD21 ASN    67      18.327  43.152  79.295  1.00  0.00
H
ATOM   1089 HD22 ASN    67      18.182  44.007  80.832  1.00  0.00
H
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ATOM   1090  C   ASN    67      21.493  46.512  82.164  1.00  0.00
C
ATOM   1091  O   ASN    67      20.433  46.873  82.672  1.00  0.00
O
ATOM   1092  N   SER    68      22.666  46.911  82.662  1.00  0.00
N
ATOM   1093  H   SER    68      23.491  46.688  82.118  1.00  0.00
H
ATOM   1094  CA  SER    68      22.877  47.690  83.899  1.00  0.00
C
ATOM   1095  HA  SER    68      23.952  47.751  84.038  1.00  0.00
H
ATOM   1096  CB  SER    68      22.385  49.131  83.720  1.00  0.00
C
ATOM   1097  HB2 SER    68      21.342  49.122  83.410  1.00  0.00
H
ATOM   1098  HB3 SER    68      22.449  49.673  84.659  1.00  0.00
H
ATOM   1099  OG  SER    68      23.171  49.799  82.750  1.00  0.00
O
ATOM   1100  HG  SER    68      22.659  50.559  82.443  1.00  0.00
H
ATOM   1101  C   SER    68      22.353  47.072  85.214  1.00  0.00
C
ATOM   1102  O   SER    68      22.804  47.508  86.274  1.00  0.00
O
ATOM   1103  N   THR    69      21.506  46.045  85.187  1.00  0.00
N
ATOM   1104  H   THR    69      21.023  45.859  84.316  1.00  0.00
H
ATOM   1105  CA  THR    69      20.962  45.339  86.371  1.00  0.00
C
ATOM   1106  HA  THR    69      20.421  46.055  86.986  1.00  0.00
H
ATOM   1107  CB  THR    69      19.979  44.232  85.939  1.00  0.00
C
ATOM   1108  HB  THR    69      20.545  43.385  85.546  1.00  0.00
H
ATOM   1109  CG2 THR    69      19.078  43.731  87.068  1.00  0.00
C
ATOM   1110 HG21 THR    69      18.517  44.560  87.499  1.00  0.00
H
ATOM   1111 HG22 THR    69      18.386  42.982  86.685  1.00  0.00
H
ATOM   1112 HG23 THR    69      19.684  43.269  87.849  1.00  0.00
H
ATOM   1113  OG1 THR    69      19.135  44.700  84.915  1.00  0.00
O
ATOM   1114  HG1 THR    69      18.359  44.132  84.879  1.00  0.00
H
ATOM   1115  C   THR    69      22.036  44.696  87.250  1.00  0.00
C
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ATOM   1116  O   THR    69      21.902  44.682  88.470  1.00  0.00
O
ATOM   1117  N   ARG    70      23.125  44.183  86.654  1.00  0.00
N
ATOM   1118  H   ARG    70      23.199  44.294  85.654  1.00  0.00
H
ATOM   1119  CA  ARG    70      24.245  43.548  87.375  1.00  0.00
C
ATOM   1120  HA  ARG    70      24.162  43.861  88.418  1.00  0.00
H
ATOM   1121  CB  ARG    70      24.098  41.999  87.348  1.00  0.00
C
ATOM   1122  HB2 ARG    70      23.034  41.763  87.443  1.00  0.00
H
ATOM   1123  HB3 ARG    70      24.449  41.605  86.391  1.00  0.00
H
ATOM   1124  CG  ARG    70      24.843  41.299  88.511  1.00  0.00
C
ATOM   1125  HG2 ARG    70      25.908  41.252  88.290  1.00  0.00
H
ATOM   1126  HG3 ARG    70      24.713  41.905  89.412  1.00  0.00
H
ATOM   1127  CD  ARG    70      24.341  39.882  88.851  1.00  0.00
C
ATOM   1128  HD2 ARG    70      24.675  39.661  89.866  1.00  0.00
H
ATOM   1129  HD3 ARG    70      23.249  39.871  88.870  1.00  0.00
H
ATOM   1130  NE  ARG    70      24.886  38.818  87.977  1.00  0.00
N
ATOM   1131  HE  ARG    70      25.744  38.396  88.291  1.00  0.00
H
ATOM   1132  CZ  ARG    70      24.271  38.191  86.992  1.00  0.00
C
ATOM   1133  NH1 ARG    70      23.083  38.522  86.578  1.00  0.00
N
ATOM   1134 HH11 ARG    70      22.470  39.068  87.177  1.00  0.00
H
ATOM   1135 HH12 ARG    70      22.656  37.947  85.857  1.00  0.00
H
ATOM   1136  NH2 ARG    70      24.821  37.186  86.380  1.00  0.00
N
ATOM   1137 HH21 ARG    70      25.563  36.677  86.833  1.00  0.00
H
ATOM   1138 HH22 ARG    70      24.221  36.682  85.738  1.00  0.00
H
ATOM   1139  C   ARG    70      25.608  44.071  86.903  1.00  0.00
C
ATOM   1140  O   ARG    70      25.727  44.742  85.872  1.00  0.00
O
ATOM   1141  N   TRP    71      26.629  43.775  87.698  1.00  0.00
N
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ATOM   1142  H   TRP    71      26.430  43.197  88.499  1.00  0.00
H
ATOM   1143  CA  TRP    71      27.968  44.358  87.639  1.00  0.00
C
ATOM   1144  HA  TRP    71      27.954  45.228  86.980  1.00  0.00
H
ATOM   1145  CB  TRP    71      28.312  44.849  89.050  1.00  0.00
C
ATOM   1146  HB2 TRP    71      28.260  44.006  89.746  1.00  0.00
H
ATOM   1147  HB3 TRP    71      29.337  45.216  89.056  1.00  0.00
H
ATOM   1148  CG  TRP    71      27.424  45.951  89.547  1.00  0.00
C
ATOM   1149  CD1 TRP    71      26.332  45.803  90.335  1.00  0.00
C
ATOM   1150  HD1 TRP    71      25.967  44.858  90.735  1.00  0.00
H
ATOM   1151  NE1 TRP    71      25.786  47.040  90.617  1.00  0.00
N
ATOM   1152  HE1 TRP    71      25.004  47.167  91.248  1.00  0.00
H
ATOM   1153  CE2 TRP    71      26.517  48.059  90.042  1.00  0.00
C
ATOM   1154  CZ2 TRP    71      26.414  49.458  90.077  1.00  0.00
C
ATOM   1155  HZ2 TRP    71      25.654  49.938  90.683  1.00  0.00
H
ATOM   1156  CH2 TRP    71      27.357  50.238  89.390  1.00  0.00
C
ATOM   1157  HH2 TRP    71      27.292  51.318  89.451  1.00  0.00
H
ATOM   1158  CZ3 TRP    71      28.383  49.611  88.653  1.00  0.00
C
ATOM   1159  HZ3 TRP    71      29.108  50.207  88.119  1.00  0.00
H
ATOM   1160  CE3 TRP    71      28.480  48.206  88.635  1.00  0.00
C
ATOM   1161  HE3 TRP    71      29.291  47.730  88.111  1.00  0.00
H
ATOM   1162  CD2 TRP    71      27.557  47.393  89.332  1.00  0.00
C
ATOM   1163  C   TRP    71      29.021  43.384  87.097  1.00  0.00
C
ATOM   1164  O   TRP    71      28.843  42.166  87.100  1.00  0.00
O
ATOM   1165  N   ARG    72      30.146  43.934  86.637  1.00  0.00
N
ATOM   1166  H   ARG    72      30.166  44.949  86.588  1.00  0.00
H
ATOM   1167  CA  ARG    72      31.342  43.223  86.171  1.00  0.00
C
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ATOM   1168  HA  ARG    72      31.217  42.152  86.335  1.00  0.00
H
ATOM   1169  CB  ARG    72      31.486  43.466  84.652  1.00  0.00
C
ATOM   1170  HB2 ARG    72      30.783  42.811  84.138  1.00  0.00
H
ATOM   1171  HB3 ARG    72      31.197  44.493  84.430  1.00  0.00
H
ATOM   1172  CG  ARG    72      32.898  43.245  84.079  1.00  0.00
C
ATOM   1173  HG2 ARG    72      33.566  43.991  84.498  1.00  0.00
H
ATOM   1174  HG3 ARG    72      33.276  42.264  84.359  1.00  0.00
H
ATOM   1175  CD  ARG    72      32.939  43.402  82.554  1.00  0.00
C
ATOM   1176  HD2 ARG    72      32.408  44.310  82.268  1.00  0.00
H
ATOM   1177  HD3 ARG    72      33.981  43.520  82.258  1.00  0.00
H
ATOM   1178  NE  ARG    72      32.416  42.215  81.857  1.00  0.00
N
ATOM   1179  HE  ARG    72      32.959  41.368  81.991  1.00  0.00
H
ATOM   1180  CZ  ARG    72      31.449  42.179  80.954  1.00  0.00
C
ATOM   1181  NH1 ARG    72      30.747  43.216  80.594  1.00  0.00
N
ATOM   1182 HH11 ARG    72      30.975  44.146  80.942  1.00  0.00
H
ATOM   1183 HH12 ARG    72      30.120  43.145  79.817  1.00  0.00
H
ATOM   1184  NH2 ARG    72      31.155  41.065  80.357  1.00  0.00
N
ATOM   1185 HH21 ARG    72      31.701  40.237  80.528  1.00  0.00
H
ATOM   1186 HH22 ARG    72      30.443  41.031  79.647  1.00  0.00
H
ATOM   1187  C   ARG    72      32.546  43.682  86.996  1.00  0.00
C
ATOM   1188  O   ARG    72      32.917  44.853  86.936  1.00  0.00
O
ATOM   1189  N   LYS    73      33.147  42.757  87.754  1.00  0.00
N
ATOM   1190  H   LYS    73      32.738  41.835  87.768  1.00  0.00
H
ATOM   1191  CA  LYS    73      34.400  42.960  88.503  1.00  0.00
C
ATOM   1192  HA  LYS    73      34.336  43.897  89.061  1.00  0.00
H
ATOM   1193  CB  LYS    73      34.584  41.798  89.503  1.00  0.00
C
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ATOM   1194  HB2 LYS    73      33.771  41.835  90.232  1.00  0.00
H
ATOM   1195  HB3 LYS    73      34.512  40.851  88.963  1.00  0.00
H
ATOM   1196  CG  LYS    73      35.928  41.819  90.255  1.00  0.00
C
ATOM   1197  HG2 LYS    73      36.746  41.683  89.546  1.00  0.00
H
ATOM   1198  HG3 LYS    73      36.049  42.783  90.753  1.00  0.00
H
ATOM   1199  CD  LYS    73      35.983  40.682  91.292  1.00  0.00
C
ATOM   1200  HD2 LYS    73      35.245  40.861  92.077  1.00  0.00
H
ATOM   1201  HD3 LYS    73      35.727  39.742  90.799  1.00  0.00
H
ATOM   1202  CE  LYS    73      37.366  40.499  91.929  1.00  0.00
C
ATOM   1203  HE2 LYS    73      37.288  39.707  92.680  1.00  0.00
H
ATOM   1204  HE3 LYS    73      38.060  40.144  91.165  1.00  0.00
H
ATOM   1205  NZ  LYS    73      37.878  41.736  92.566  1.00  0.00
N
ATOM   1206  HZ1 LYS    73      37.205  42.066  93.244  1.00  0.00
H
ATOM   1207  HZ2 LYS    73      38.735  41.529  93.076  1.00  0.00
H
ATOM   1208  HZ3 LYS    73      38.058  42.461  91.884  1.00  0.00
H
ATOM   1209  C   LYS    73      35.579  43.068  87.534  1.00  0.00
C
ATOM   1210  O   LYS    73      35.815  42.136  86.772  1.00  0.00
O
ATOM   1211  N   LEU    74      36.333  44.161  87.605  1.00  0.00
N
ATOM   1212  H   LEU    74      36.071  44.882  88.271  1.00  0.00
H
ATOM   1213  CA  LEU    74      37.569  44.376  86.848  1.00  0.00
C
ATOM   1214  HA  LEU    74      37.826  43.469  86.293  1.00  0.00
H
ATOM   1215  CB  LEU    74      37.375  45.528  85.842  1.00  0.00
C
ATOM   1216  HB2 LEU    74      37.062  46.419  86.392  1.00  0.00
H
ATOM   1217  HB3 LEU    74      38.334  45.744  85.367  1.00  0.00
H
ATOM   1218  CG  LEU    74      36.342  45.243  84.735  1.00  0.00
C
ATOM   1219  HG  LEU    74      35.372  45.055  85.192  1.00  0.00
H
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ATOM   1220  CD1 LEU    74      36.199  46.450  83.811  1.00  0.00
C
ATOM   1221 HD11 LEU    74      37.164  46.707  83.370  1.00  0.00
H
ATOM   1222 HD12 LEU    74      35.493  46.226  83.011  1.00  0.00
H
ATOM   1223 HD13 LEU    74      35.822  47.298  84.381  1.00  0.00
H
ATOM   1224  CD2 LEU    74      36.726  44.041  83.871  1.00  0.00
C
ATOM   1225 HD21 LEU    74      36.659  43.128  84.457  1.00  0.00
H
ATOM   1226 HD22 LEU    74      36.045  43.944  83.029  1.00  0.00
H
ATOM   1227 HD23 LEU    74      37.741  44.159  83.489  1.00  0.00
H
ATOM   1228  C   LEU    74      38.744  44.646  87.793  1.00  0.00
C
ATOM   1229  O   LEU    74      38.560  45.038  88.950  1.00  0.00
O
ATOM   1230  N   VAL    75      39.955  44.422  87.296  1.00  0.00
N
ATOM   1231  H   VAL    75      40.035  44.094  86.341  1.00  0.00
H
ATOM   1232  CA  VAL    75      41.220  44.647  88.002  1.00  0.00
C
ATOM   1233  HA  VAL    75      41.042  45.209  88.919  1.00  0.00
H
ATOM   1234  CB  VAL    75      41.900  43.306  88.352  1.00  0.00
C
ATOM   1235  HB  VAL    75      42.294  42.865  87.436  1.00  0.00
H
ATOM   1236  CG1 VAL    75      43.074  43.553  89.305  1.00  0.00
C
ATOM   1237 HG11 VAL    75      42.821  44.259  90.091  1.00  0.00
H
ATOM   1238 HG12 VAL    75      43.402  42.625  89.769  1.00  0.00
H
ATOM   1239 HG13 VAL    75      43.904  43.956  88.731  1.00  0.00
H
ATOM   1240  CG2 VAL    75      40.945  42.259  88.951  1.00  0.00
C
ATOM   1241 HG21 VAL    75      40.253  41.933  88.176  1.00  0.00
H
ATOM   1242 HG22 VAL    75      41.524  41.395  89.277  1.00  0.00
H
ATOM   1243 HG23 VAL    75      40.389  42.670  89.787  1.00  0.00
H
ATOM   1244  C   VAL    75      42.135  45.463  87.094  1.00  0.00
C
ATOM   1245  O   VAL    75      42.281  45.119  85.921  1.00  0.00
O
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ATOM   1246  N   ASP    76      42.768  46.521  87.604  1.00  0.00
N
ATOM   1247  H   ASP    76      42.660  46.735  88.591  1.00  0.00
H
ATOM   1248  CA  ASP    76      43.761  47.287  86.836  1.00  0.00
C
ATOM   1249  HA  ASP    76      43.453  47.284  85.789  1.00  0.00
H
ATOM   1250  CB  ASP    76      43.779  48.762  87.260  1.00  0.00
C
ATOM   1251  HB2 ASP    76      42.767  49.151  87.161  1.00  0.00
H
ATOM   1252  HB3 ASP    76      44.067  48.829  88.305  1.00  0.00
H
ATOM   1253  CG  ASP    76      44.714  49.635  86.404  1.00  0.00
C
ATOM   1254  OD1 ASP    76      44.997  49.271  85.243  1.00  0.00
O
ATOM   1255  OD2 ASP    76      45.123  50.724  86.866  1.00  0.00
O
ATOM   1256  C   ASP    76      45.127  46.587  86.879  1.00  0.00
C
ATOM   1257  O   ASP    76      46.128  47.111  87.368  1.00  0.00
O
ATOM   1258  N   PHE    77      45.172  45.365  86.339  1.00  0.00
N
ATOM   1259  H   PHE    77      44.314  44.988  85.951  1.00  0.00
H
ATOM   1260  CA  PHE    77      46.393  44.573  86.188  1.00  0.00
C
ATOM   1261  HA  PHE    77      46.923  44.602  87.136  1.00  0.00
H
ATOM   1262  CB  PHE    77      46.046  43.100  85.879  1.00  0.00
C
ATOM   1263  HB2 PHE    77      45.237  43.081  85.157  1.00  0.00
H
ATOM   1264  HB3 PHE    77      46.887  42.608  85.399  1.00  0.00
H
ATOM   1265  CG  PHE    77      45.668  42.225  87.059  1.00  0.00
C
ATOM   1266  CD1 PHE    77      46.478  42.191  88.211  1.00  0.00
C
ATOM   1267  HD1 PHE    77      47.363  42.804  88.281  1.00  0.00
H
ATOM   1268  CE1 PHE    77      46.137  41.368  89.296  1.00  0.00
C
ATOM   1269  HE1 PHE    77      46.759  41.360  90.181  1.00  0.00
H
ATOM   1270  CZ  PHE    77      44.982  40.576  89.237  1.00  0.00
C
ATOM   1271  HZ  PHE    77      44.683  39.978  90.083  1.00  0.00
H
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ATOM   1272  CE2 PHE    77      44.191  40.586  88.082  1.00  0.00
C
ATOM   1273  HE2 PHE    77      43.297  39.995  88.068  1.00  0.00
H
ATOM   1274  CD2 PHE    77      44.535  41.394  86.985  1.00  0.00
C
ATOM   1275  HD2 PHE    77      43.910  41.398  86.101  1.00  0.00
H
ATOM   1276  C   PHE    77      47.393  45.182  85.190  1.00  0.00
C
ATOM   1277  O   PHE    77      48.369  44.526  84.857  1.00  0.00
O
ATOM   1278  N   ARG    78      47.246  46.446  84.770  1.00  0.00
N
ATOM   1279  H   ARG    78      46.456  46.962  85.144  1.00  0.00
H
ATOM   1280  CA  ARG    78      48.231  47.220  83.996  1.00  0.00
C
ATOM   1281  HA  ARG    78      48.260  46.856  82.970  1.00  0.00
H
ATOM   1282  CB  ARG    78      47.715  48.665  84.001  1.00  0.00
C
ATOM   1283  HB2 ARG    78      46.755  48.682  83.481  1.00  0.00
H
ATOM   1284  HB3 ARG    78      47.555  48.956  85.040  1.00  0.00
H
ATOM   1285  CG  ARG    78      48.631  49.714  83.365  1.00  0.00
C
ATOM   1286  HG2 ARG    78      49.501  49.860  84.008  1.00  0.00
H
ATOM   1287  HG3 ARG    78      48.970  49.357  82.390  1.00  0.00
H
ATOM   1288  CD  ARG    78      47.908  51.061  83.179  1.00  0.00
C
ATOM   1289  HD2 ARG    78      48.667  51.802  82.928  1.00  0.00
H
ATOM   1290  HD3 ARG    78      47.231  50.978  82.327  1.00  0.00
H
ATOM   1291  NE  ARG    78      47.133  51.502  84.365  1.00  0.00
N
ATOM   1292  HE  ARG    78      46.584  50.797  84.857  1.00  0.00
H
ATOM   1293  CZ  ARG    78      46.943  52.748  84.763  1.00  0.00
C
ATOM   1294  NH1 ARG    78      47.469  53.770  84.143  1.00  0.00
N
ATOM   1295 HH11 ARG    78      48.030  53.595  83.330  1.00  0.00
H
ATOM   1296 HH12 ARG    78      47.258  54.728  84.412  1.00  0.00
H
ATOM   1297  NH2 ARG    78      46.200  52.993  85.799  1.00  0.00
N
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ATOM   1298 HH21 ARG    78      45.777  52.191  86.284  1.00  0.00
H
ATOM   1299 HH22 ARG    78      46.036  53.930  86.100  1.00  0.00
H
ATOM   1300  C   ARG    78      49.658  47.109  84.548  1.00  0.00
C
ATOM   1301  O   ARG    78      50.587  46.916  83.769  1.00  0.00
O
ATOM   1302  N   GLU    79      49.837  47.144  85.871  1.00  0.00
N
ATOM   1303  H   GLU    79      49.035  47.333  86.456  1.00  0.00
H
ATOM   1304  CA  GLU    79      51.157  46.937  86.493  1.00  0.00
C
ATOM   1305  HA  GLU    79      51.888  47.534  85.944  1.00  0.00
H
ATOM   1306  CB  GLU    79      51.123  47.453  87.944  1.00  0.00
C
ATOM   1307  HB2 GLU    79      50.675  48.447  87.951  1.00  0.00
H
ATOM   1308  HB3 GLU    79      50.481  46.800  88.536  1.00  0.00
H
ATOM   1309  CG  GLU    79      52.499  47.538  88.626  1.00  0.00
C
ATOM   1310  HG2 GLU    79      52.348  47.883  89.652  1.00  0.00
H
ATOM   1311  HG3 GLU    79      52.935  46.539  88.684  1.00  0.00
H
ATOM   1312  CD  GLU    79      53.468  48.504  87.924  1.00  0.00
C
ATOM   1313  OE1 GLU    79      53.135  49.705  87.805  1.00  0.00
O
ATOM   1314  OE2 GLU    79      54.568  48.054  87.527  1.00  0.00
O
ATOM   1315  C   GLU    79      51.622  45.468  86.392  1.00  0.00
C
ATOM   1316  O   GLU    79      52.779  45.214  86.076  1.00  0.00
O
ATOM   1317  N   LEU    80      50.731  44.482  86.566  1.00  0.00
N
ATOM   1318  H   LEU    80      49.767  44.738  86.717  1.00  0.00
H
ATOM   1319  CA  LEU    80      51.046  43.054  86.375  1.00  0.00
C
ATOM   1320  HA  LEU    80      51.935  42.819  86.961  1.00  0.00
H
ATOM   1321  CB  LEU    80      49.867  42.206  86.904  1.00  0.00
C
ATOM   1322  HB2 LEU    80      49.696  42.446  87.952  1.00  0.00
H
ATOM   1323  HB3 LEU    80      48.973  42.491  86.355  1.00  0.00
H
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ATOM   1324  CG  LEU    80      50.034  40.678  86.763  1.00  0.00
C
ATOM   1325  HG  LEU    80      50.258  40.436  85.727  1.00  0.00
H
ATOM   1326  CD1 LEU    80      51.147  40.140  87.662  1.00  0.00
C
ATOM   1327 HD11 LEU    80      50.914  40.358  88.703  1.00  0.00
H
ATOM   1328 HD12 LEU    80      51.224  39.059  87.540  1.00  0.00
H
ATOM   1329 HD13 LEU    80      52.103  40.584  87.391  1.00  0.00
H
ATOM   1330  CD2 LEU    80      48.742  39.949  87.128  1.00  0.00
C
ATOM   1331 HD21 LEU    80      47.925  40.304  86.501  1.00  0.00
H
ATOM   1332 HD22 LEU    80      48.863  38.880  86.958  1.00  0.00
H
ATOM   1333 HD23 LEU    80      48.494  40.116  88.177  1.00  0.00
H
ATOM   1334  C   LEU    80      51.357  42.714  84.902  1.00  0.00
C
ATOM   1335  O   LEU    80      52.252  41.918  84.621  1.00  0.00
O
ATOM   1336  N   ASN    81      50.635  43.314  83.956  1.00  0.00
N
ATOM   1337  H   ASN    81      49.911  43.946  84.276  1.00  0.00
H
ATOM   1338  CA  ASN    81      50.690  43.035  82.522  1.00  0.00
C
ATOM   1339  HA  ASN    81      50.518  41.970  82.363  1.00  0.00
H
ATOM   1340  CB  ASN    81      49.568  43.834  81.824  1.00  0.00
C
ATOM   1341  HB2 ASN    81      49.560  44.859  82.191  1.00  0.00
H
ATOM   1342  HB3 ASN    81      49.762  43.869  80.756  1.00  0.00
H
ATOM   1343  CG  ASN    81      48.189  43.217  82.000  1.00  0.00
C
ATOM   1344  OD1 ASN    81      48.055  42.011  82.112  1.00  0.00
O
ATOM   1345  ND2 ASN    81      47.136  44.000  81.985  1.00  0.00
N
ATOM   1346 HD21 ASN    81      46.216  43.591  82.118  1.00  0.00
H
ATOM   1347 HD22 ASN    81      47.224  44.982  81.811  1.00  0.00
H
ATOM   1348  C   ASN    81      52.077  43.346  81.942  1.00  0.00
C
ATOM   1349  O   ASN    81      52.650  42.507  81.247  1.00  0.00
O
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ATOM   1350  N   LYS    82      52.663  44.489  82.318  1.00  0.00
N
ATOM   1351  H   LYS    82      52.116  45.135  82.876  1.00  0.00
H
ATOM   1352  CA  LYS    82      54.039  44.873  81.942  1.00  0.00
C
ATOM   1353  HA  LYS    82      54.112  44.920  80.854  1.00  0.00
H
ATOM   1354  CB  LYS    82      54.347  46.268  82.527  1.00  0.00
C
ATOM   1355  HB2 LYS    82      54.173  46.260  83.607  1.00  0.00
H
ATOM   1356  HB3 LYS    82      55.398  46.504  82.350  1.00  0.00
H
ATOM   1357  CG  LYS    82      53.485  47.362  81.877  1.00  0.00
C
ATOM   1358  HG2 LYS    82      53.689  47.384  80.808  1.00  0.00
H
ATOM   1359  HG3 LYS    82      52.434  47.120  82.007  1.00  0.00
H
ATOM   1360  CD  LYS    82      53.740  48.758  82.464  1.00  0.00
C
ATOM   1361  HD2 LYS    82      53.567  48.744  83.544  1.00  0.00
H
ATOM   1362  HD3 LYS    82      54.769  49.060  82.256  1.00  0.00
H
ATOM   1363  CE  LYS    82      52.759  49.724  81.792  1.00  0.00
C
ATOM   1364  HE2 LYS    82      52.818  49.591  80.707  1.00  0.00
H
ATOM   1365  HE3 LYS    82      51.740  49.457  82.093  1.00  0.00
H
ATOM   1366  NZ  LYS    82      53.008  51.151  82.108  1.00  0.00
N
ATOM   1367  HZ1 LYS    82      53.934  51.456  81.813  1.00  0.00
H
ATOM   1368  HZ2 LYS    82      52.316  51.699  81.593  1.00  0.00
H
ATOM   1369  HZ3 LYS    82      52.893  51.345  83.089  1.00  0.00
H
ATOM   1370  C   LYS    82      55.081  43.844  82.407  1.00  0.00
C
ATOM   1371  O   LYS    82      56.048  43.577  81.690  1.00  0.00
O
ATOM   1372  N   ARG    83      54.849  43.258  83.590  1.00  0.00
N
ATOM   1373  H   ARG    83      54.000  43.543  84.062  1.00  0.00
H
ATOM   1374  CA  ARG    83      55.741  42.335  84.321  1.00  0.00
C
ATOM   1375  HA  ARG    83      56.778  42.554  84.053  1.00  0.00
H
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ATOM   1376  CB  ARG    83      55.563  42.553  85.840  1.00  0.00
C
ATOM   1377  HB2 ARG    83      54.570  42.195  86.122  1.00  0.00
H
ATOM   1378  HB3 ARG    83      56.306  41.951  86.371  1.00  0.00
H
ATOM   1379  CG  ARG    83      55.710  44.017  86.293  1.00  0.00
C
ATOM   1380  HG2 ARG    83      56.745  44.324  86.176  1.00  0.00
H
ATOM   1381  HG3 ARG    83      55.121  44.669  85.657  1.00  0.00
H
ATOM   1382  CD  ARG    83      55.238  44.235  87.742  1.00  0.00
C
ATOM   1383  HD2 ARG    83      54.599  45.118  87.779  1.00  0.00
H
ATOM   1384  HD3 ARG    83      54.641  43.381  88.071  1.00  0.00
H
ATOM   1385  NE  ARG    83      56.364  44.427  88.665  1.00  0.00
N
ATOM   1386  HE  ARG    83      56.635  43.619  89.225  1.00  0.00
H
ATOM   1387  CZ  ARG    83      57.092  45.520  88.785  1.00  0.00
C
ATOM   1388  NH1 ARG    83      56.809  46.632  88.174  1.00  0.00
N
ATOM   1389 HH11 ARG    83      55.888  46.796  87.762  1.00  0.00
H
ATOM   1390 HH12 ARG    83      57.389  47.457  88.237  1.00  0.00
H
ATOM   1391  NH2 ARG    83      58.151  45.514  89.538  1.00  0.00
N
ATOM   1392 HH21 ARG    83      58.354  44.691  90.078  1.00  0.00
H
ATOM   1393 HH22 ARG    83      58.698  46.350  89.614  1.00  0.00
H
ATOM   1394  C   ARG    83      55.514  40.857  83.980  1.00  0.00
C
ATOM   1395  O   ARG    83      56.371  40.031  84.270  1.00  0.00
O
ATOM   1396  N   THR    84      54.378  40.505  83.381  1.00  0.00
N
ATOM   1397  H   THR    84      53.722  41.242  83.165  1.00  0.00
H
ATOM   1398  CA  THR    84      54.057  39.136  82.953  1.00  0.00
C
ATOM   1399  HA  THR    84      54.456  38.427  83.676  1.00  0.00
H
ATOM   1400  CB  THR    84      52.545  38.897  82.871  1.00  0.00
C
ATOM   1401  HB  THR    84      52.118  39.508  82.071  1.00  0.00
H
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ATOM   1402  CG2 THR    84      52.193  37.425  82.662  1.00  0.00
C
ATOM   1403 HG21 THR    84      52.718  36.820  83.400  1.00  0.00
H
ATOM   1404 HG22 THR    84      51.127  37.294  82.793  1.00  0.00
H
ATOM   1405 HG23 THR    84      52.458  37.098  81.659  1.00  0.00
H
ATOM   1406  OG1 THR    84      51.918  39.235  84.083  1.00  0.00
O
ATOM   1407  HG1 THR    84      52.142  40.158  84.290  1.00  0.00
H
ATOM   1408  C   THR    84      54.669  38.852  81.590  1.00  0.00
C
ATOM   1409  O   THR    84      54.752  39.758  80.755  1.00  0.00
O
ATOM   1410  N   GLN    85      55.041  37.595  81.337  1.00  0.00
N
ATOM   1411  H   GLN    85      54.953  36.892  82.068  1.00  0.00
H
ATOM   1412  CA  GLN    85      55.464  37.117  80.018  1.00  0.00
C
ATOM   1413  HA  GLN    85      56.479  37.477  79.849  1.00  0.00
H
ATOM   1414  CB  GLN    85      55.498  35.578  80.007  1.00  0.00
C
ATOM   1415  HB2 GLN    85      55.918  35.253  79.055  1.00  0.00
H
ATOM   1416  HB3 GLN    85      56.158  35.221  80.798  1.00  0.00
H
ATOM   1417  CG  GLN    85      54.105  34.944  80.172  1.00  0.00
C
ATOM   1418  HG2 GLN    85      53.734  35.101  81.183  1.00  0.00
H
ATOM   1419  HG3 GLN    85      53.398  35.391  79.476  1.00  0.00
H
ATOM   1420  CD  GLN    85      54.145  33.457  79.892  1.00  0.00
C
ATOM   1421  OE1 GLN    85      54.365  32.651  80.782  1.00  0.00
O
ATOM   1422  NE2 GLN    85      53.960  33.052  78.655  1.00  0.00
N
ATOM   1423 HE21 GLN    85      53.975  32.063  78.494  1.00  0.00
H
ATOM   1424 HE22 GLN    85      53.802  33.734  77.917  1.00  0.00
H
ATOM   1425  C   GLN    85      54.593  37.610  78.846  1.00  0.00
C
ATOM   1426  O   GLN    85      53.431  38.003  78.999  1.00  0.00
O
ATOM   1427  N   ASP    86      55.166  37.555  77.652  1.00  0.00
N
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ATOM   1428  H   ASP    86      56.141  37.294  77.580  1.00  0.00
H
ATOM   1429  CA  ASP    86      54.434  37.694  76.403  1.00  0.00
C
ATOM   1430  HA  ASP    86      53.774  38.557  76.478  1.00  0.00
H
ATOM   1431  CB  ASP    86      55.436  37.988  75.280  1.00  0.00
C
ATOM   1432  HB2 ASP    86      56.037  37.099  75.091  1.00  0.00
H
ATOM   1433  HB3 ASP    86      54.890  38.234  74.368  1.00  0.00
H
ATOM   1434  CG  ASP    86      56.354  39.151  75.669  1.00  0.00
C
ATOM   1435  OD1 ASP    86      57.457  38.887  76.200  1.00  0.00
O
ATOM   1436  OD2 ASP    86      55.907  40.311  75.519  1.00  0.00
O
ATOM   1437  C   ASP    86      53.557  36.455  76.130  1.00  0.00
C
ATOM   1438  O   ASP    86      53.807  35.355  76.635  1.00  0.00
O
ATOM   1439  N   PHE    87      52.513  36.645  75.324  1.00  0.00
N
ATOM   1440  H   PHE    87      52.392  37.550  74.889  1.00  0.00
H
ATOM   1441  CA  PHE    87      51.614  35.596  74.836  1.00  0.00
C
ATOM   1442  HA  PHE    87      52.069  34.615  74.981  1.00  0.00
H
ATOM   1443  CB  PHE    87      50.262  35.636  75.574  1.00  0.00
C
ATOM   1444  HB2 PHE    87      49.809  36.618  75.425  1.00  0.00
H
ATOM   1445  HB3 PHE    87      49.594  34.910  75.105  1.00  0.00
H
ATOM   1446  CG  PHE    87      50.313  35.340  77.064  1.00  0.00
C
ATOM   1447  CD1 PHE    87      50.550  36.380  77.982  1.00  0.00
C
ATOM   1448  HD1 PHE    87      50.720  37.383  77.623  1.00  0.00
H
ATOM   1449  CE1 PHE    87      50.582  36.115  79.362  1.00  0.00
C
ATOM   1450  HE1 PHE    87      50.775  36.916  80.058  1.00  0.00
H
ATOM   1451  CZ  PHE    87      50.385  34.805  79.830  1.00  0.00
C
ATOM   1452  HZ  PHE    87      50.424  34.593  80.888  1.00  0.00
H
ATOM   1453  CE2 PHE    87      50.145  33.764  78.917  1.00  0.00
C
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ATOM   1454  HE2 PHE    87      50.000  32.755  79.276  1.00  0.00
H
ATOM   1455  CD2 PHE    87      50.105  34.031  77.537  1.00  0.00
C
ATOM   1456  HD2 PHE    87      49.918  33.225  76.841  1.00  0.00
H
ATOM   1457  C   PHE    87      51.383  35.820  73.342  1.00  0.00
C
ATOM   1458  O   PHE    87      51.317  36.967  72.896  1.00  0.00
O
ATOM   1459  N   TRP    88      51.218  34.744  72.573  1.00  0.00
N
ATOM   1460  H   TRP    88      51.260  33.828  72.991  1.00  0.00
H
ATOM   1461  CA  TRP    88      50.718  34.856  71.206  1.00  0.00
C
ATOM   1462  HA  TRP    88      51.022  35.819  70.793  1.00  0.00
H
ATOM   1463  CB  TRP    88      51.341  33.784  70.312  1.00  0.00
C
ATOM   1464  HB2 TRP    88      52.423  33.801  70.448  1.00  0.00
H
ATOM   1465  HB3 TRP    88      50.978  32.801  70.614  1.00  0.00
H
ATOM   1466  CG  TRP    88      51.048  34.014  68.865  1.00  0.00
C
ATOM   1467  CD1 TRP    88      50.018  33.477  68.173  1.00  0.00
C
ATOM   1468  HD1 TRP    88      49.282  32.797  68.591  1.00  0.00
H
ATOM   1469  NE1 TRP    88      50.004  33.982  66.891  1.00  0.00
N
ATOM   1470  HE1 TRP    88      49.276  33.770  66.225  1.00  0.00
H
ATOM   1471  CE2 TRP    88      51.023  34.893  66.690  1.00  0.00
C
ATOM   1472  CZ2 TRP    88      51.404  35.686  65.595  1.00  0.00
C
ATOM   1473  HZ2 TRP    88      50.863  35.628  64.662  1.00  0.00
H
ATOM   1474  CH2 TRP    88      52.494  36.561  65.731  1.00  0.00
C
ATOM   1475  HH2 TRP    88      52.801  37.182  64.900  1.00  0.00
H
ATOM   1476  CZ3 TRP    88      53.187  36.635  66.956  1.00  0.00
C
ATOM   1477  HZ3 TRP    88      54.017  37.320  67.058  1.00  0.00
H
ATOM   1478  CE3 TRP    88      52.798  35.831  68.045  1.00  0.00
C
ATOM   1479  HE3 TRP    88      53.326  35.907  68.983  1.00  0.00
H
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ATOM   1480  CD2 TRP    88      51.710  34.935  67.938  1.00  0.00
C
ATOM   1481  C   TRP    88      49.186  34.812  71.213  1.00  0.00
C
ATOM   1482  O   TRP    88      48.596  33.822  71.647  1.00  0.00
O
ATOM   1483  N   GLU    89      48.548  35.887  70.750  1.00  0.00
N
ATOM   1484  H   GLU    89      49.094  36.661  70.409  1.00  0.00
H
ATOM   1485  CA  GLU    89      47.087  36.009  70.700  1.00  0.00
C
ATOM   1486  HA  GLU    89      46.677  35.801  71.691  1.00  0.00
H
ATOM   1487  CB  GLU    89      46.684  37.442  70.296  1.00  0.00
C
ATOM   1488  HB2 GLU    89      47.130  37.651  69.323  1.00  0.00
H
ATOM   1489  HB3 GLU    89      45.601  37.486  70.174  1.00  0.00
H
ATOM   1490  CG  GLU    89      47.127  38.562  71.262  1.00  0.00
C
ATOM   1491  HG2 GLU    89      48.155  38.391  71.588  1.00  0.00
H
ATOM   1492  HG3 GLU    89      47.129  39.492  70.691  1.00  0.00
H
ATOM   1493  CD  GLU    89      46.213  38.763  72.486  1.00  0.00
C
ATOM   1494  OE1 GLU    89      45.520  37.798  72.877  1.00  0.00
O
ATOM   1495  OE2 GLU    89      46.170  39.909  73.009  1.00  0.00
O
ATOM   1496  C   GLU    89      46.506  34.993  69.697  1.00  0.00
C
ATOM   1497  O   GLU    89      46.826  35.023  68.508  1.00  0.00
O
ATOM   1498  N   VAL    90      45.620  34.099  70.154  1.00  0.00
N
ATOM   1499  H   VAL    90      45.416  34.097  71.143  1.00  0.00
H
ATOM   1500  CA  VAL    90      44.973  33.075  69.300  1.00  0.00
C
ATOM   1501  HA  VAL    90      45.685  32.816  68.516  1.00  0.00
H
ATOM   1502  CB  VAL    90      44.730  31.780  70.109  1.00  0.00
C
ATOM   1503  HB  VAL    90      45.670  31.534  70.604  1.00  0.00
H
ATOM   1504  CG1 VAL    90      43.669  31.944  71.201  1.00  0.00
C
ATOM   1505 HG11 VAL    90      42.702  32.181  70.757  1.00  0.00
H
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ATOM   1506 HG12 VAL    90      43.586  31.020  71.773  1.00  0.00
H
ATOM   1507 HG13 VAL    90      43.953  32.745  71.879  1.00  0.00
H
ATOM   1508  CG2 VAL    90      44.366  30.564  69.248  1.00  0.00
C
ATOM   1509 HG21 VAL    90      45.067  30.472  68.419  1.00  0.00
H
ATOM   1510 HG22 VAL    90      44.416  29.661  69.855  1.00  0.00
H
ATOM   1511 HG23 VAL    90      43.355  30.661  68.854  1.00  0.00
H
ATOM   1512  C   VAL    90      43.730  33.606  68.560  1.00  0.00
C
ATOM   1513  O   VAL    90      43.140  32.906  67.739  1.00  0.00
O
ATOM   1514  N   GLN    91      43.340  34.860  68.808  1.00  0.00
N
ATOM   1515  H   GLN    91      43.874  35.391  69.477  1.00  0.00
H
ATOM   1516  CA  GLN    91      42.195  35.510  68.165  1.00  0.00
C
ATOM   1517  HA  GLN    91      41.514  34.718  67.849  1.00  0.00
H
ATOM   1518  CB  GLN    91      41.453  36.394  69.193  1.00  0.00
C
ATOM   1519  HB2 GLN    91      41.889  36.271  70.183  1.00  0.00
H
ATOM   1520  HB3 GLN    91      41.555  37.449  68.944  1.00  0.00
H
ATOM   1521  CG  GLN    91      39.961  36.044  69.268  1.00  0.00
C
ATOM   1522  HG2 GLN    91      39.860  35.048  69.696  1.00  0.00
H
ATOM   1523  HG3 GLN    91      39.457  36.758  69.916  1.00  0.00
H
ATOM   1524  CD  GLN    91      39.278  36.052  67.915  1.00  0.00
C
ATOM   1525  OE1 GLN    91      38.713  35.071  67.463  1.00  0.00
O
ATOM   1526  NE2 GLN    91      39.352  37.134  67.176  1.00  0.00
N
ATOM   1527 HE21 GLN    91      38.916  37.061  66.265  1.00  0.00
H
ATOM   1528 HE22 GLN    91      39.919  37.911  67.462  1.00  0.00
H
ATOM   1529  C   GLN    91      42.618  36.277  66.896  1.00  0.00
C
ATOM   1530  O   GLN    91      43.000  37.445  66.957  1.00  0.00
O
ATOM   1531  N   LEU    92      42.525  35.628  65.732  1.00  0.00
N
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ATOM   1532  H   LEU    92      42.170  34.681  65.749  1.00  0.00
H
ATOM   1533  CA  LEU    92      43.069  36.134  64.461  1.00  0.00
C
ATOM   1534  HA  LEU    92      43.981  36.698  64.668  1.00  0.00
H
ATOM   1535  CB  LEU    92      43.426  34.925  63.572  1.00  0.00
C
ATOM   1536  HB2 LEU    92      42.713  34.120  63.756  1.00  0.00
H
ATOM   1537  HB3 LEU    92      43.313  35.221  62.528  1.00  0.00
H
ATOM   1538  CG  LEU    92      44.864  34.396  63.736  1.00  0.00
C
ATOM   1539  HG  LEU    92      45.556  35.158  63.378  1.00  0.00
H
ATOM   1540  CD1 LEU    92      45.242  34.037  65.173  1.00  0.00
C
ATOM   1541 HD11 LEU    92      44.542  33.302  65.570  1.00  0.00
H
ATOM   1542 HD12 LEU    92      46.249  33.624  65.199  1.00  0.00
H
ATOM   1543 HD13 LEU    92      45.229  34.927  65.802  1.00  0.00
H
ATOM   1544  CD2 LEU    92      45.035  33.141  62.878  1.00  0.00
C
ATOM   1545 HD21 LEU    92      44.799  33.366  61.838  1.00  0.00
H
ATOM   1546 HD22 LEU    92      46.066  32.793  62.934  1.00  0.00
H
ATOM   1547 HD23 LEU    92      44.372  32.351  63.233  1.00  0.00
H
ATOM   1548  C   LEU    92      42.138  37.104  63.708  1.00  0.00
C
ATOM   1549  O   LEU    92      42.615  37.930  62.929  1.00  0.00
O
ATOM   1550  N   GLY    93      40.823  37.014  63.908  1.00  0.00
N
ATOM   1551  H   GLY    93      40.488  36.267  64.508  1.00  0.00
H
ATOM   1552  CA  GLY    93      39.833  37.846  63.214  1.00  0.00
C
ATOM   1553  HA2 GLY    93      40.141  38.890  63.277  1.00  0.00
H
ATOM   1554  HA3 GLY    93      39.797  37.565  62.161  1.00  0.00
H
ATOM   1555  C   GLY    93      38.429  37.723  63.801  1.00  0.00
C
ATOM   1556  O   GLY    93      38.175  36.869  64.650  1.00  0.00
O
ATOM   1557  N   ILE    94      37.515  38.605  63.394  1.00  0.00
N
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ATOM   1558  H   ILE    94      37.749  39.237  62.643  1.00  0.00
H
ATOM   1559  CA  ILE    94      36.144  38.661  63.925  1.00  0.00
C
ATOM   1560  HA  ILE    94      36.113  38.123  64.869  1.00  0.00
H
ATOM   1561  CB  ILE    94      35.726  40.118  64.242  1.00  0.00
C
ATOM   1562  HB  ILE    94      35.684  40.678  63.305  1.00  0.00
H
ATOM   1563  CG2 ILE    94      34.333  40.136  64.895  1.00  0.00
C
ATOM   1564 HG21 ILE    94      34.364  39.618  65.853  1.00  0.00
H
ATOM   1565 HG22 ILE    94      33.992  41.158  65.049  1.00  0.00
H
ATOM   1566 HG23 ILE    94      33.596  39.657  64.254  1.00  0.00
H
ATOM   1567  CG1 ILE    94      36.738  40.805  65.195  1.00  0.00
C
ATOM   1568 HG12 ILE    94      36.724  40.296  66.159  1.00  0.00
H
ATOM   1569 HG13 ILE    94      37.744  40.718  64.787  1.00  0.00
H
ATOM   1570  CD1 ILE    94      36.487  42.303  65.421  1.00  0.00
C
ATOM   1571 HD11 ILE    94      35.547  42.467  65.947  1.00  0.00
H
ATOM   1572 HD12 ILE    94      37.293  42.714  66.030  1.00  0.00
H
ATOM   1573 HD13 ILE    94      36.467  42.825  64.464  1.00  0.00
H
ATOM   1574  C   ILE    94      35.186  37.984  62.925  1.00  0.00
C
ATOM   1575  O   ILE    94      35.235  38.327  61.742  1.00  0.00
O
ATOM   1576  N   PRO    95      34.317  37.049  63.363  1.00  0.00
N
ATOM   1577  CD  PRO    95      34.325  36.392  64.661  1.00  0.00
C
ATOM   1578  HD2 PRO    95      33.881  37.052  65.405  1.00  0.00
H
ATOM   1579  HD3 PRO    95      35.336  36.109  64.954  1.00  0.00
H
ATOM   1580  CG  PRO    95      33.466  35.140  64.501  1.00  0.00
C
ATOM   1581  HG2 PRO    95      32.990  34.852  65.440  1.00  0.00
H
ATOM   1582  HG3 PRO    95      34.070  34.323  64.105  1.00  0.00
H
ATOM   1583  CB  PRO    95      32.443  35.580  63.459  1.00  0.00
C
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ATOM   1584  HB2 PRO    95      31.655  36.150  63.956  1.00  0.00
H
ATOM   1585  HB3 PRO    95      32.022  34.736  62.915  1.00  0.00
H
ATOM   1586  CA  PRO    95      33.249  36.496  62.534  1.00  0.00
C
ATOM   1587  HA  PRO    95      33.700  35.903  61.737  1.00  0.00
H
ATOM   1588  C   PRO    95      32.349  37.578  61.929  1.00  0.00
C
ATOM   1589  O   PRO    95      32.061  38.589  62.567  1.00  0.00
O
ATOM   1590  N   HIE    96      31.856  37.344  60.714  1.00  0.00
N
ATOM   1591  H   HIE    96      32.083  36.475  60.254  1.00  0.00
H
ATOM   1592  CA  HIE    96      30.942  38.254  60.018  1.00  0.00
C
ATOM   1593  HA  HIE    96      30.623  39.030  60.715  1.00  0.00
H
ATOM   1594  CB  HIE    96      31.696  38.930  58.858  1.00  0.00
C
ATOM   1595  HB2 HIE    96      32.667  39.269  59.226  1.00  0.00
H
ATOM   1596  HB3 HIE    96      31.879  38.192  58.077  1.00  0.00
H
ATOM   1597  CG  HIE    96      30.994  40.117  58.236  1.00  0.00
C
ATOM   1598  ND1 HIE    96      29.702  40.110  57.718  1.00  0.00
N
ATOM   1599  CE1 HIE    96      29.476  41.339  57.232  1.00  0.00
C
ATOM   1600  HE1 HIE    96      28.551  41.650  56.763  1.00  0.00
H
ATOM   1601  NE2 HIE    96      30.567  42.105  57.395  1.00  0.00
N
ATOM   1602  HE2 HIE    96      30.665  43.057  57.067  1.00  0.00
H
ATOM   1603  CD2 HIE    96      31.527  41.356  58.037  1.00  0.00
C
ATOM   1604  HD2 HIE    96      32.523  41.671  58.323  1.00  0.00
H
ATOM   1605  C   HIE    96      29.713  37.465  59.545  1.00  0.00
C
ATOM   1606  O   HIE    96      29.891  36.377  58.992  1.00  0.00
O
ATOM   1607  N   PRO    97      28.477  37.963  59.730  1.00  0.00
N
ATOM   1608  CD  PRO    97      28.122  39.232  60.347  1.00  0.00
C
ATOM   1609  HD2 PRO    97      28.828  40.031  60.130  1.00  0.00
H
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ATOM   1610  HD3 PRO    97      28.042  39.087  61.424  1.00  0.00
H
ATOM   1611  CG  PRO    97      26.759  39.573  59.768  1.00  0.00
C
ATOM   1612  HG2 PRO    97      26.873  39.968  58.759  1.00  0.00
H
ATOM   1613  HG3 PRO    97      26.205  40.263  60.400  1.00  0.00
H
ATOM   1614  CB  PRO    97      26.117  38.192  59.729  1.00  0.00
C
ATOM   1615  HB2 PRO    97      25.270  38.139  59.051  1.00  0.00
H
ATOM   1616  HB3 PRO    97      25.813  37.936  60.737  1.00  0.00
H
ATOM   1617  CA  PRO    97      27.258  37.272  59.297  1.00  0.00
C
ATOM   1618  HA  PRO    97      27.168  36.317  59.814  1.00  0.00
H
ATOM   1619  C   PRO    97      27.212  37.000  57.790  1.00  0.00
C
ATOM   1620  O   PRO    97      26.669  35.983  57.373  1.00  0.00
O
ATOM   1621  N   ALA    98      27.867  37.829  56.976  1.00  0.00
N
ATOM   1622  H   ALA    98      28.306  38.652  57.372  1.00  0.00
H
ATOM   1623  CA  ALA    98      28.034  37.590  55.547  1.00  0.00
C
ATOM   1624  HA  ALA    98      27.046  37.431  55.106  1.00  0.00
H
ATOM   1625  CB  ALA    98      28.633  38.867  54.951  1.00  0.00
C
ATOM   1626  HB1 ALA    98      29.675  38.970  55.256  1.00  0.00
H
ATOM   1627  HB2 ALA    98      28.580  38.836  53.869  1.00  0.00
H
ATOM   1628  HB3 ALA    98      28.059  39.731  55.284  1.00  0.00
H
ATOM   1629  C   ALA    98      28.897  36.343  55.239  1.00  0.00
C
ATOM   1630  O   ALA    98      28.823  35.803  54.143  1.00  0.00
O
ATOM   1631  N   GLY    99      29.708  35.850  56.183  1.00  0.00
N
ATOM   1632  H   GLY    99      29.728  36.310  57.085  1.00  0.00
H
ATOM   1633  CA  GLY    99      30.428  34.572  56.066  1.00  0.00
C
ATOM   1634  HA2 GLY    99      30.747  34.416  55.037  1.00  0.00
H
ATOM   1635  HA3 GLY    99      31.323  34.617  56.684  1.00  0.00
H
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ATOM   1636  C   GLY    99      29.615  33.348  56.508  1.00  0.00
C
ATOM   1637  O   GLY    99      29.977  32.212  56.178  1.00  0.00
O
ATOM   1638  N   LEU   100      28.511  33.552  57.239  1.00  0.00
N
ATOM   1639  H   LEU   100      28.187  34.502  57.377  1.00  0.00
H
ATOM   1640  CA  LEU   100      27.652  32.463  57.700  1.00  0.00
C
ATOM   1641  HA  LEU   100      28.299  31.670  58.068  1.00  0.00
H
ATOM   1642  CB  LEU   100      26.722  32.910  58.845  1.00  0.00
C
ATOM   1643  HB2 LEU   100      26.222  33.831  58.555  1.00  0.00
H
ATOM   1644  HB3 LEU   100      25.942  32.158  58.969  1.00  0.00
H
ATOM   1645  CG  LEU   100      27.407  33.111  60.208  1.00  0.00
C
ATOM   1646  HG  LEU   100      28.204  33.850  60.117  1.00  0.00
H
ATOM   1647  CD1 LEU   100      26.378  33.606  61.223  1.00  0.00
C
ATOM   1648 HD11 LEU   100      25.555  32.896  61.307  1.00  0.00
H
ATOM   1649 HD12 LEU   100      26.846  33.716  62.202  1.00  0.00
H
ATOM   1650 HD13 LEU   100      25.986  34.574  60.914  1.00  0.00
H
ATOM   1651  CD2 LEU   100      27.986  31.798  60.742  1.00  0.00
C
ATOM   1652 HD21 LEU   100      28.800  31.464  60.106  1.00  0.00
H
ATOM   1653 HD22 LEU   100      28.388  31.955  61.743  1.00  0.00
H
ATOM   1654 HD23 LEU   100      27.210  31.035  60.787  1.00  0.00
H
ATOM   1655  C   LEU   100      26.847  31.865  56.547  1.00  0.00
C
ATOM   1656  O   LEU   100      26.385  32.563  55.646  1.00  0.00
O
ATOM   1657  N   LYS   101      26.652  30.547  56.623  1.00  0.00
N
ATOM   1658  H   LYS   101      26.973  30.088  57.461  1.00  0.00
H
ATOM   1659  CA  LYS   101      25.790  29.770  55.733  1.00  0.00
C
ATOM   1660  HA  LYS   101      25.565  30.357  54.838  1.00  0.00
H
ATOM   1661  CB  LYS   101      26.492  28.471  55.304  1.00  0.00
C
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ATOM   1662  HB2 LYS   101      26.683  27.865  56.193  1.00  0.00
H
ATOM   1663  HB3 LYS   101      25.822  27.909  54.650  1.00  0.00
H
ATOM   1664  CG  LYS   101      27.820  28.716  54.566  1.00  0.00
C
ATOM   1665  HG2 LYS   101      27.630  29.280  53.654  1.00  0.00
H
ATOM   1666  HG3 LYS   101      28.492  29.294  55.201  1.00  0.00
H
ATOM   1667  CD  LYS   101      28.492  27.383  54.210  1.00  0.00
C
ATOM   1668  HD2 LYS   101      28.671  26.808  55.120  1.00  0.00
H
ATOM   1669  HD3 LYS   101      27.809  26.809  53.581  1.00  0.00
H
ATOM   1670  CE  LYS   101      29.814  27.565  53.448  1.00  0.00
C
ATOM   1671  HE2 LYS   101      30.145  26.579  53.108  1.00  0.00
H
ATOM   1672  HE3 LYS   101      29.635  28.181  52.560  1.00  0.00
H
ATOM   1673  NZ  LYS   101      30.883  28.166  54.282  1.00  0.00
N
ATOM   1674  HZ1 LYS   101      30.972  27.681  55.162  1.00  0.00
H
ATOM   1675  HZ2 LYS   101      31.787  28.042  53.818  1.00  0.00
H
ATOM   1676  HZ3 LYS   101      30.725  29.151  54.446  1.00  0.00
H
ATOM   1677  C   LYS   101      24.476  29.479  56.461  1.00  0.00
C
ATOM   1678  O   LYS   101      24.498  29.209  57.663  1.00  0.00
O
ATOM   1679  N   LYS   102      23.366  29.491  55.722  1.00  0.00
N
ATOM   1680  H   LYS   102      23.473  29.708  54.748  1.00  0.00
H
ATOM   1681  CA  LYS   102      22.028  29.119  56.214  1.00  0.00
C
ATOM   1682  HA  LYS   102      21.776  29.798  57.033  1.00  0.00
H
ATOM   1683  CB  LYS   102      20.958  29.308  55.113  1.00  0.00
C
ATOM   1684  HB2 LYS   102      20.013  28.942  55.519  1.00  0.00
H
ATOM   1685  HB3 LYS   102      20.823  30.374  54.936  1.00  0.00
H
ATOM   1686  CG  LYS   102      21.192  28.580  53.766  1.00  0.00
C
ATOM   1687  HG2 LYS   102      21.653  27.610  53.958  1.00  0.00
H
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ATOM   1688  HG3 LYS   102      20.216  28.382  53.327  1.00  0.00
H
ATOM   1689  CD  LYS   102      22.030  29.331  52.708  1.00  0.00
C
ATOM   1690  HD2 LYS   102      23.018  29.535  53.109  1.00  0.00
H
ATOM   1691  HD3 LYS   102      22.190  28.667  51.858  1.00  0.00
H
ATOM   1692  CE  LYS   102      21.399  30.648  52.212  1.00  0.00
C
ATOM   1693  HE2 LYS   102      20.940  31.163  53.060  1.00  0.00
H
ATOM   1694  HE3 LYS   102      22.194  31.297  51.825  1.00  0.00
H
ATOM   1695  NZ  LYS   102      20.391  30.423  51.142  1.00  0.00
N
ATOM   1696  HZ1 LYS   102      19.787  29.624  51.349  1.00  0.00
H
ATOM   1697  HZ2 LYS   102      19.814  31.240  50.983  1.00  0.00
H
ATOM   1698  HZ3 LYS   102      20.844  30.174  50.274  1.00  0.00
H
ATOM   1699  C   LYS   102      22.007  27.701  56.810  1.00  0.00
C
ATOM   1700  O   LYS   102      22.746  26.826  56.352  1.00  0.00
O
ATOM   1701  N   LYS   103      21.174  27.497  57.840  1.00  0.00
N
ATOM   1702  H   LYS   103      20.599  28.275  58.137  1.00  0.00
H
ATOM   1703  CA  LYS   103      20.987  26.233  58.575  1.00  0.00
C
ATOM   1704  HA  LYS   103      21.171  25.404  57.898  1.00  0.00
H
ATOM   1705  CB  LYS   103      21.946  26.171  59.790  1.00  0.00
C
ATOM   1706  HB2 LYS   103      21.815  27.076  60.385  1.00  0.00
H
ATOM   1707  HB3 LYS   103      21.660  25.333  60.421  1.00  0.00
H
ATOM   1708  CG  LYS   103      23.442  26.025  59.450  1.00  0.00
C
ATOM   1709  HG2 LYS   103      23.765  26.876  58.851  1.00  0.00
H
ATOM   1710  HG3 LYS   103      24.021  26.028  60.374  1.00  0.00
H
ATOM   1711  CD  LYS   103      23.723  24.718  58.699  1.00  0.00
C
ATOM   1712  HD2 LYS   103      23.567  23.873  59.369  1.00  0.00
H
ATOM   1713  HD3 LYS   103      23.037  24.632  57.863  1.00  0.00
H
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ATOM   1714  CE  LYS   103      25.122  24.673  58.099  1.00  0.00
C
ATOM   1715  HE2 LYS   103      25.233  25.538  57.442  1.00  0.00
H
ATOM   1716  HE3 LYS   103      25.867  24.738  58.891  1.00  0.00
H
ATOM   1717  NZ  LYS   103      25.289  23.422  57.326  1.00  0.00
N
ATOM   1718  HZ1 LYS   103      24.445  23.210  56.787  1.00  0.00
H
ATOM   1719  HZ2 LYS   103      26.121  23.444  56.747  1.00  0.00
H
ATOM   1720  HZ3 LYS   103      25.405  22.620  57.938  1.00  0.00
H
ATOM   1721  C   LYS   103      19.535  26.069  59.029  1.00  0.00
C
ATOM   1722  O   LYS   103      18.934  27.042  59.479  1.00  0.00
O
ATOM   1723  N   LYS   104      18.976  24.854  58.922  1.00  0.00
N
ATOM   1724  H   LYS   104      19.539  24.125  58.488  1.00  0.00
H
ATOM   1725  CA  LYS   104      17.559  24.570  59.261  1.00  0.00
C
ATOM   1726  HA  LYS   104      16.940  25.255  58.682  1.00  0.00
H
ATOM   1727  CB  LYS   104      17.212  23.125  58.851  1.00  0.00
C
ATOM   1728  HB2 LYS   104      17.692  22.901  57.894  1.00  0.00
H
ATOM   1729  HB3 LYS   104      17.591  22.426  59.599  1.00  0.00
H
ATOM   1730  CG  LYS   104      15.696  22.929  58.688  1.00  0.00
C
ATOM   1731  HG2 LYS   104      15.197  23.071  59.647  1.00  0.00
H
ATOM   1732  HG3 LYS   104      15.323  23.676  57.985  1.00  0.00
H
ATOM   1733  CD  LYS   104      15.356  21.532  58.148  1.00  0.00
C
ATOM   1734  HD2 LYS   104      15.976  21.321  57.275  1.00  0.00
H
ATOM   1735  HD3 LYS   104      15.560  20.785  58.919  1.00  0.00
H
ATOM   1736  CE  LYS   104      13.876  21.483  57.746  1.00  0.00
C
ATOM   1737  HE2 LYS   104      13.261  21.614  58.642  1.00  0.00
H
ATOM   1738  HE3 LYS   104      13.663  22.312  57.063  1.00  0.00
H
ATOM   1739  NZ  LYS   104      13.527  20.200  57.097  1.00  0.00
N
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ATOM   1740  HZ1 LYS   104      13.587  19.435  57.774  1.00  0.00
H
ATOM   1741  HZ2 LYS   104      12.548  20.182  56.820  1.00  0.00
H
ATOM   1742  HZ3 LYS   104      14.092  20.007  56.283  1.00  0.00
H
ATOM   1743  C   LYS   104      17.216  24.826  60.739  1.00  0.00
C
ATOM   1744  O   LYS   104      16.101  25.246  61.052  1.00  0.00
O
ATOM   1745  N   SER   105      18.186  24.616  61.627  1.00  0.00
N
ATOM   1746  H   SER   105      19.060  24.234  61.282  1.00  0.00
H
ATOM   1747  CA  SER   105      18.092  24.898  63.062  1.00  0.00
C
ATOM   1748  HA  SER   105      17.220  25.529  63.246  1.00  0.00
H
ATOM   1749  CB  SER   105      17.896  23.605  63.852  1.00  0.00
C
ATOM   1750  HB2 SER   105      18.741  22.931  63.691  1.00  0.00
H
ATOM   1751  HB3 SER   105      17.832  23.869  64.913  1.00  0.00
H
ATOM   1752  OG  SER   105      16.700  22.950  63.479  1.00  0.00
O
ATOM   1753  HG  SER   105      16.911  22.236  62.867  1.00  0.00
H
ATOM   1754  C   SER   105      19.335  25.640  63.561  1.00  0.00
C
ATOM   1755  O   SER   105      20.466  25.293  63.219  1.00  0.00
O
ATOM   1756  N   VAL   106      19.135  26.657  64.400  1.00  0.00
N
ATOM   1757  H   VAL   106      18.188  26.887  64.668  1.00  0.00
H
ATOM   1758  CA  VAL   106      20.198  27.467  65.016  1.00  0.00
C
ATOM   1759  HA  VAL   106      21.139  26.927  64.945  1.00  0.00
H
ATOM   1760  CB  VAL   106      20.376  28.816  64.276  1.00  0.00
C
ATOM   1761  HB  VAL   106      19.431  29.357  64.301  1.00  0.00
H
ATOM   1762  CG1 VAL   106      21.460  29.716  64.886  1.00  0.00
C
ATOM   1763 HG11 VAL   106      22.413  29.186  64.951  1.00  0.00
H
ATOM   1764 HG12 VAL   106      21.585  30.604  64.269  1.00  0.00
H
ATOM   1765 HG13 VAL   106      21.159  30.063  65.874  1.00  0.00
H
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ATOM   1766  CG2 VAL   106      20.771  28.606  62.806  1.00  0.00
C
ATOM   1767 HG21 VAL   106      19.976  28.088  62.268  1.00  0.00
H
ATOM   1768 HG22 VAL   106      20.925  29.571  62.319  1.00  0.00
H
ATOM   1769 HG23 VAL   106      21.691  28.026  62.743  1.00  0.00
H
ATOM   1770  C   VAL   106      19.887  27.671  66.505  1.00  0.00
C
ATOM   1771  O   VAL   106      18.728  27.610  66.919  1.00  0.00
O
ATOM   1772  N   THR   107      20.923  27.884  67.312  1.00  0.00
N
ATOM   1773  H   THR   107      21.854  27.812  66.908  1.00  0.00
H
ATOM   1774  CA  THR   107      20.876  28.359  68.705  1.00  0.00
C
ATOM   1775  HA  THR   107      20.019  29.015  68.845  1.00  0.00
H
ATOM   1776  CB  THR   107      20.791  27.195  69.709  1.00  0.00
C
ATOM   1777  HB  THR   107      21.118  27.537  70.691  1.00  0.00
H
ATOM   1778  CG2 THR   107      19.386  26.625  69.851  1.00  0.00
C
ATOM   1779 HG21 THR   107      19.118  26.078  68.949  1.00  0.00
H
ATOM   1780 HG22 THR   107      19.346  25.956  70.704  1.00  0.00
H
ATOM   1781 HG23 THR   107      18.680  27.440  69.985  1.00  0.00
H
ATOM   1782  OG1 THR   107      21.581  26.102  69.308  1.00  0.00
O
ATOM   1783  HG1 THR   107      22.328  26.015  69.907  1.00  0.00
H
ATOM   1784  C   THR   107      22.147  29.154  69.003  1.00  0.00
C
ATOM   1785  O   THR   107      23.173  28.903  68.366  1.00  0.00
O
ATOM   1786  N   VAL   108      22.129  30.046  70.002  1.00  0.00
N
ATOM   1787  H   VAL   108      21.278  30.199  70.527  1.00  0.00
H
ATOM   1788  CA  VAL   108      23.365  30.673  70.521  1.00  0.00
C
ATOM   1789  HA  VAL   108      24.189  30.098  70.116  1.00  0.00
H
ATOM   1790  CB  VAL   108      23.622  32.120  70.029  1.00  0.00
C
ATOM   1791  HB  VAL   108      24.699  32.286  70.078  1.00  0.00
H
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ATOM   1792  CG1 VAL   108      23.200  32.330  68.569  1.00  0.00
C
ATOM   1793 HG11 VAL   108      22.119  32.251  68.468  1.00  0.00
H
ATOM   1794 HG12 VAL   108      23.514  33.319  68.239  1.00  0.00
H
ATOM   1795 HG13 VAL   108      23.680  31.583  67.938  1.00  0.00
H
ATOM   1796  CG2 VAL   108      22.974  33.203  70.895  1.00  0.00
C
ATOM   1797 HG21 VAL   108      23.498  33.275  71.848  1.00  0.00
H
ATOM   1798 HG22 VAL   108      23.046  34.172  70.400  1.00  0.00
H
ATOM   1799 HG23 VAL   108      21.933  32.967  71.072  1.00  0.00
H
ATOM   1800  C   VAL   108      23.459  30.543  72.044  1.00  0.00
C
ATOM   1801  O   VAL   108      22.421  30.561  72.713  1.00  0.00
O
ATOM   1802  N   LEU   109      24.667  30.346  72.579  1.00  0.00
N
ATOM   1803  H   LEU   109      25.463  30.369  71.948  1.00  0.00
H
ATOM   1804  CA  LEU   109      24.973  30.147  74.004  1.00  0.00
C
ATOM   1805  HA  LEU   109      24.092  30.384  74.588  1.00  0.00
H
ATOM   1806  CB  LEU   109      25.390  28.687  74.315  1.00  0.00
C
ATOM   1807  HB2 LEU   109      26.298  28.460  73.764  1.00  0.00
H
ATOM   1808  HB3 LEU   109      25.656  28.658  75.375  1.00  0.00
H
ATOM   1809  CG  LEU   109      24.383  27.540  74.081  1.00  0.00
C
ATOM   1810  HG  LEU   109      23.456  27.752  74.613  1.00  0.00
H
ATOM   1811  CD1 LEU   109      24.060  27.228  72.611  1.00  0.00
C
ATOM   1812 HD11 LEU   109      24.979  27.239  72.021  1.00  0.00
H
ATOM   1813 HD12 LEU   109      23.589  26.254  72.519  1.00  0.00
H
ATOM   1814 HD13 LEU   109      23.378  27.970  72.213  1.00  0.00
H
ATOM   1815  CD2 LEU   109      24.982  26.252  74.654  1.00  0.00
C
ATOM   1816 HD21 LEU   109      25.237  26.392  75.702  1.00  0.00
H
ATOM   1817 HD22 LEU   109      24.276  25.428  74.576  1.00  0.00
H
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ATOM   1818 HD23 LEU   109      25.896  26.004  74.118  1.00  0.00
H
ATOM   1819  C   LEU   109      26.055  31.133  74.484  1.00  0.00
C
ATOM   1820  O   LEU   109      26.827  31.651  73.681  1.00  0.00
O
ATOM   1821  N   ASP   110      26.092  31.351  75.797  1.00  0.00
N
ATOM   1822  H   ASP   110      25.469  30.819  76.384  1.00  0.00
H
ATOM   1823  CA  ASP   110      26.962  32.264  76.555  1.00  0.00
C
ATOM   1824  HA  ASP   110      27.859  32.510  75.980  1.00  0.00
H
ATOM   1825  CB  ASP   110      26.137  33.536  76.830  1.00  0.00
C
ATOM   1826  HB2 ASP   110      25.783  33.926  75.874  1.00  0.00
H
ATOM   1827  HB3 ASP   110      25.252  33.261  77.408  1.00  0.00
H
ATOM   1828  CG  ASP   110      26.862  34.669  77.559  1.00  0.00
C
ATOM   1829  OD1 ASP   110      27.360  35.577  76.855  1.00  0.00
O
ATOM   1830  OD2 ASP   110      26.769  34.730  78.805  1.00  0.00
O
ATOM   1831  C   ASP   110      27.361  31.538  77.854  1.00  0.00
C
ATOM   1832  O   ASP   110      26.568  30.720  78.346  1.00  0.00
O
ATOM   1833  N   VAL   111      28.563  31.762  78.401  1.00  0.00
N
ATOM   1834  H   VAL   111      29.165  32.501  78.031  1.00  0.00
H
ATOM   1835  CA  VAL   111      29.035  31.006  79.577  1.00  0.00
C
ATOM   1836  HA  VAL   111      28.373  30.155  79.742  1.00  0.00
H
ATOM   1837  CB  VAL   111      30.436  30.401  79.383  1.00  0.00
C
ATOM   1838  HB  VAL   111      31.147  31.202  79.206  1.00  0.00
H
ATOM   1839  CG1 VAL   111      30.893  29.616  80.627  1.00  0.00
C
ATOM   1840 HG11 VAL   111      30.263  28.739  80.772  1.00  0.00
H
ATOM   1841 HG12 VAL   111      31.928  29.314  80.499  1.00  0.00
H
ATOM   1842 HG13 VAL   111      30.847  30.238  81.520  1.00  0.00
H
ATOM   1843  CG2 VAL   111      30.474  29.429  78.194  1.00  0.00
C
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ATOM   1844 HG21 VAL   111      30.115  29.924  77.292  1.00  0.00
H
ATOM   1845 HG22 VAL   111      31.497  29.109  78.012  1.00  0.00
H
ATOM   1846 HG23 VAL   111      29.842  28.563  78.390  1.00  0.00
H
ATOM   1847  C   VAL   111      28.966  31.874  80.830  1.00  0.00
C
ATOM   1848  O   VAL   111      29.666  32.879  80.968  1.00  0.00
O
ATOM   1849  N   GLY   112      28.190  31.411  81.814  1.00  0.00
N
ATOM   1850  H   GLY   112      27.732  30.518  81.678  1.00  0.00
H
ATOM   1851  CA  GLY   112      28.051  32.082  83.104  1.00  0.00
C
ATOM   1852  HA2 GLY   112      27.583  33.052  82.942  1.00  0.00
H
ATOM   1853  HA3 GLY   112      27.408  31.500  83.760  1.00  0.00
H
ATOM   1854  C   GLY   112      29.405  32.285  83.787  1.00  0.00
C
ATOM   1855  O   GLY   112      30.045  31.323  84.216  1.00  0.00
O
ATOM   1856  N   ASP   113      29.828  33.551  83.856  1.00  0.00
N
ATOM   1857  H   ASP   113      29.252  34.243  83.400  1.00  0.00
H
ATOM   1858  CA  ASP   113      31.119  33.998  84.386  1.00  0.00
C
ATOM   1859  HA  ASP   113      31.178  35.064  84.175  1.00  0.00
H
ATOM   1860  CB  ASP   113      31.131  33.865  85.919  1.00  0.00
C
ATOM   1861  HB2 ASP   113      31.036  32.816  86.194  1.00  0.00
H
ATOM   1862  HB3 ASP   113      32.082  34.208  86.312  1.00  0.00
H
ATOM   1863  CG  ASP   113      30.034  34.673  86.615  1.00  0.00
C
ATOM   1864  OD1 ASP   113      29.674  35.769  86.118  1.00  0.00
O
ATOM   1865  OD2 ASP   113      29.580  34.200  87.679  1.00  0.00
O
ATOM   1866  C   ASP   113      32.354  33.395  83.679  1.00  0.00
C
ATOM   1867  O   ASP   113      33.402  33.287  84.310  1.00  0.00
O
ATOM   1868  N   ALA   114      32.272  33.055  82.390  1.00  0.00
N
ATOM   1869  H   ALA   114      31.365  33.180  81.947  1.00  0.00
H
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ATOM   1870  CA  ALA   114      33.263  32.360  81.539  1.00  0.00
C
ATOM   1871  HA  ALA   114      32.931  31.328  81.444  1.00  0.00
H
ATOM   1872  CB  ALA   114      33.213  32.997  80.143  1.00  0.00
C
ATOM   1873  HB1 ALA   114      33.658  33.992  80.151  1.00  0.00
H
ATOM   1874  HB2 ALA   114      33.752  32.369  79.435  1.00  0.00
H
ATOM   1875  HB3 ALA   114      32.177  33.087  79.816  1.00  0.00
H
ATOM   1876  C   ALA   114      34.725  32.284  82.037  1.00  0.00
C
ATOM   1877  O   ALA   114      35.231  31.199  82.328  1.00  0.00
O
ATOM   1878  N   TYR   115      35.415  33.425  82.162  1.00  0.00
N
ATOM   1879  H   TYR   115      34.938  34.281  81.929  1.00  0.00
H
ATOM   1880  CA  TYR   115      36.806  33.498  82.641  1.00  0.00
C
ATOM   1881  HA  TYR   115      37.468  32.959  81.962  1.00  0.00
H
ATOM   1882  CB  TYR   115      37.244  34.968  82.714  1.00  0.00
C
ATOM   1883  HB2 TYR   115      36.439  35.561  83.151  1.00  0.00
H
ATOM   1884  HB3 TYR   115      38.074  35.015  83.412  1.00  0.00
H
ATOM   1885  CG  TYR   115      37.733  35.649  81.449  1.00  0.00
C
ATOM   1886  CD1 TYR   115      37.504  35.117  80.162  1.00  0.00
C
ATOM   1887  HD1 TYR   115      36.950  34.197  80.028  1.00  0.00
H
ATOM   1888  CE1 TYR   115      38.004  35.783  79.028  1.00  0.00
C
ATOM   1889  HE1 TYR   115      37.831  35.366  78.048  1.00  0.00
H
ATOM   1890  CZ  TYR   115      38.716  36.991  79.176  1.00  0.00
C
ATOM   1891  OH  TYR   115      39.186  37.639  78.084  1.00  0.00
O
ATOM   1892  HH  TYR   115      38.950  37.157  77.289  1.00  0.00
H
ATOM   1893  CE2 TYR   115      38.942  37.525  80.458  1.00  0.00
C
ATOM   1894  HE2 TYR   115      39.505  38.437  80.558  1.00  0.00
H
ATOM   1895  CD2 TYR   115      38.464  36.844  81.592  1.00  0.00
C
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ATOM   1896  HD2 TYR   115      38.667  37.224  82.584  1.00  0.00
H
ATOM   1897  C   TYR   115      36.988  32.882  84.036  1.00  0.00
C
ATOM   1898  O   TYR   115      37.929  32.124  84.269  1.00  0.00
O
ATOM   1899  N   PHE   116      36.055  33.145  84.955  1.00  0.00
N
ATOM   1900  H   PHE   116      35.206  33.617  84.665  1.00  0.00
H
ATOM   1901  CA  PHE   116      36.079  32.581  86.298  1.00  0.00
C
ATOM   1902  HA  PHE   116      37.086  32.719  86.665  1.00  0.00
H
ATOM   1903  CB  PHE   116      35.106  33.318  87.225  1.00  0.00
C
ATOM   1904  HB2 PHE   116      34.090  33.120  86.892  1.00  0.00
H
ATOM   1905  HB3 PHE   116      35.211  32.859  88.201  1.00  0.00
H
ATOM   1906  CG  PHE   116      35.281  34.813  87.429  1.00  0.00
C
ATOM   1907  CD1 PHE   116      36.084  35.282  88.485  1.00  0.00
C
ATOM   1908  HD1 PHE   116      36.647  34.584  89.085  1.00  0.00
H
ATOM   1909  CE1 PHE   116      36.114  36.651  88.800  1.00  0.00
C
ATOM   1910  HE1 PHE   116      36.700  36.991  89.640  1.00  0.00
H
ATOM   1911  CZ  PHE   116      35.350  37.565  88.060  1.00  0.00
C
ATOM   1912  HZ  PHE   116      35.354  38.611  88.323  1.00  0.00
H
ATOM   1913  CE2 PHE   116      34.543  37.101  87.011  1.00  0.00
C
ATOM   1914  HE2 PHE   116      33.903  37.787  86.484  1.00  0.00
H
ATOM   1915  CD2 PHE   116      34.517  35.733  86.687  1.00  0.00
C
ATOM   1916  HD2 PHE   116      33.872  35.382  85.895  1.00  0.00
H
ATOM   1917  C   PHE   116      35.800  31.068  86.338  1.00  0.00
C
ATOM   1918  O   PHE   116      35.942  30.460  87.396  1.00  0.00
O
ATOM   1919  N   SER   117      35.441  30.455  85.212  1.00  0.00
N
ATOM   1920  H   SER   117      35.287  31.016  84.385  1.00  0.00
H
ATOM   1921  CA  SER   117      35.269  29.007  85.073  1.00  0.00
C
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ATOM   1922  HA  SER   117      35.124  28.582  86.063  1.00  0.00
H
ATOM   1923  CB  SER   117      33.991  28.687  84.286  1.00  0.00
C
ATOM   1924  HB2 SER   117      34.072  29.080  83.273  1.00  0.00
H
ATOM   1925  HB3 SER   117      33.852  27.605  84.232  1.00  0.00
H
ATOM   1926  OG  SER   117      32.881  29.274  84.949  1.00  0.00
O
ATOM   1927  HG  SER   117      32.144  29.366  84.338  1.00  0.00
H
ATOM   1928  C   SER   117      36.510  28.307  84.505  1.00  0.00
C
ATOM   1929  O   SER   117      36.481  27.094  84.342  1.00  0.00
O
ATOM   1930  N   VAL   118      37.631  29.002  84.252  1.00  0.00
N
ATOM   1931  H   VAL   118      37.627  30.006  84.402  1.00  0.00
H
ATOM   1932  CA  VAL   118      38.907  28.371  83.847  1.00  0.00
C
ATOM   1933  HA  VAL   118      38.737  27.307  83.696  1.00  0.00
H
ATOM   1934  CB  VAL   118      39.407  28.926  82.500  1.00  0.00
C
ATOM   1935  HB  VAL   118      39.548  30.001  82.596  1.00  0.00
H
ATOM   1936  CG1 VAL   118      40.733  28.288  82.055  1.00  0.00
C
ATOM   1937 HG11 VAL   118      40.614  27.211  81.937  1.00  0.00
H
ATOM   1938 HG12 VAL   118      41.046  28.719  81.104  1.00  0.00
H
ATOM   1939 HG13 VAL   118      41.519  28.480  82.785  1.00  0.00
H
ATOM   1940  CG2 VAL   118      38.392  28.656  81.382  1.00  0.00
C
ATOM   1941 HG21 VAL   118      37.464  29.192  81.585  1.00  0.00
H
ATOM   1942 HG22 VAL   118      38.788  28.997  80.426  1.00  0.00
H
ATOM   1943 HG23 VAL   118      38.177  27.589  81.320  1.00  0.00
H
ATOM   1944  C   VAL   118      39.963  28.563  84.947  1.00  0.00
C
ATOM   1945  O   VAL   118      40.229  29.707  85.328  1.00  0.00
O
ATOM   1946  N   PRO   119      40.588  27.487  85.467  1.00  0.00
N
ATOM   1947  CD  PRO   119      40.426  26.092  85.079  1.00  0.00
C
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ATOM   1948  HD2 PRO   119      40.486  25.974  84.000  1.00  0.00
H
ATOM   1949  HD3 PRO   119      39.472  25.721  85.449  1.00  0.00
H
ATOM   1950  CG  PRO   119      41.559  25.320  85.749  1.00  0.00
C
ATOM   1951  HG2 PRO   119      42.448  25.334  85.114  1.00  0.00
H
ATOM   1952  HG3 PRO   119      41.267  24.294  85.985  1.00  0.00
H
ATOM   1953  CB  PRO   119      41.800  26.145  87.012  1.00  0.00
C
ATOM   1954  HB2 PRO   119      42.796  25.990  87.417  1.00  0.00
H
ATOM   1955  HB3 PRO   119      41.055  25.881  87.762  1.00  0.00
H
ATOM   1956  CA  PRO   119      41.568  27.585  86.543  1.00  0.00
C
ATOM   1957  HA  PRO   119      41.143  28.154  87.368  1.00  0.00
H
ATOM   1958  C   PRO   119      42.862  28.276  86.089  1.00  0.00
C
ATOM   1959  O   PRO   119      43.332  28.096  84.965  1.00  0.00
O
ATOM   1960  N   LEU   120      43.462  29.038  87.003  1.00  0.00
N
ATOM   1961  H   LEU   120      43.020  29.114  87.913  1.00  0.00
H
ATOM   1962  CA  LEU   120      44.739  29.730  86.828  1.00  0.00
C
ATOM   1963  HA  LEU   120      44.933  29.850  85.760  1.00  0.00
H
ATOM   1964  CB  LEU   120      44.606  31.122  87.475  1.00  0.00
C
ATOM   1965  HB2 LEU   120      43.760  31.633  87.021  1.00  0.00
H
ATOM   1966  HB3 LEU   120      44.384  30.980  88.532  1.00  0.00
H
ATOM   1967  CG  LEU   120      45.829  32.045  87.367  1.00  0.00
C
ATOM   1968  HG  LEU   120      46.709  31.543  87.765  1.00  0.00
H
ATOM   1969  CD1 LEU   120      46.092  32.474  85.921  1.00  0.00
C
ATOM   1970 HD11 LEU   120      45.222  32.995  85.523  1.00  0.00
H
ATOM   1971 HD12 LEU   120      46.952  33.143  85.887  1.00  0.00
H
ATOM   1972 HD13 LEU   120      46.310  31.606  85.302  1.00  0.00
H
ATOM   1973  CD2 LEU   120      45.582  33.301  88.197  1.00  0.00
C
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ATOM   1974 HD21 LEU   120      45.376  33.029  89.233  1.00  0.00
H
ATOM   1975 HD22 LEU   120      46.472  33.928  88.171  1.00  0.00
H
ATOM   1976 HD23 LEU   120      44.727  33.851  87.803  1.00  0.00
H
ATOM   1977  C   LEU   120      45.889  28.915  87.444  1.00  0.00
C
ATOM   1978  O   LEU   120      45.692  28.270  88.481  1.00  0.00
O
ATOM   1979  N   ASP   121      47.077  28.991  86.826  1.00  0.00
N
ATOM   1980  H   ASP   121      47.136  29.555  85.994  1.00  0.00
H
ATOM   1981  CA  ASP   121      48.354  28.443  87.331  1.00  0.00
C
ATOM   1982  HA  ASP   121      48.355  27.362  87.187  1.00  0.00
H
ATOM   1983  CB  ASP   121      49.523  29.035  86.513  1.00  0.00
C
ATOM   1984  HB2 ASP   121      49.353  28.812  85.459  1.00  0.00
H
ATOM   1985  HB3 ASP   121      49.520  30.121  86.614  1.00  0.00
H
ATOM   1986  CG  ASP   121      50.913  28.498  86.909  1.00  0.00
C
ATOM   1987  OD1 ASP   121      51.184  28.293  88.116  1.00  0.00
O
ATOM   1988  OD2 ASP   121      51.722  28.223  85.994  1.00  0.00
O
ATOM   1989  C   ASP   121      48.538  28.751  88.826  1.00  0.00
C
ATOM   1990  O   ASP   121      48.524  29.917  89.223  1.00  0.00
O
ATOM   1991  N   GLU   122      48.691  27.703  89.644  1.00  0.00
N
ATOM   1992  H   GLU   122      48.794  26.791  89.226  1.00  0.00
H
ATOM   1993  CA  GLU   122      48.683  27.780  91.108  1.00  0.00
C
ATOM   1994  HA  GLU   122      47.734  28.210  91.408  1.00  0.00
H
ATOM   1995  CB  GLU   122      48.749  26.347  91.671  1.00  0.00
C
ATOM   1996  HB2 GLU   122      48.011  25.727  91.152  1.00  0.00
H
ATOM   1997  HB3 GLU   122      49.740  25.937  91.466  1.00  0.00
H
ATOM   1998  CG  GLU   122      48.467  26.314  93.184  1.00  0.00
C
ATOM   1999  HG2 GLU   122      49.220  26.918  93.690  1.00  0.00
H
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ATOM   2000  HG3 GLU   122      47.482  26.759  93.365  1.00  0.00
H
ATOM   2001  CD  GLU   122      48.524  24.913  93.801  1.00  0.00
C
ATOM   2002  OE1 GLU   122      49.368  24.087  93.392  1.00  0.00
O
ATOM   2003  OE2 GLU   122      47.813  24.687  94.807  1.00  0.00
O
ATOM   2004  C   GLU   122      49.792  28.665  91.691  1.00  0.00
C
ATOM   2005  O   GLU   122      49.533  29.398  92.647  1.00  0.00
O
ATOM   2006  N   ASP   123      50.989  28.641  91.104  1.00  0.00
N
ATOM   2007  H   ASP   123      51.080  28.137  90.228  1.00  0.00
H
ATOM   2008  CA  ASP   123      52.118  29.447  91.576  1.00  0.00
C
ATOM   2009  HA  ASP   123      52.147  29.422  92.666  1.00  0.00
H
ATOM   2010  CB  ASP   123      53.437  28.898  91.027  1.00  0.00
C
ATOM   2011  HB2 ASP   123      53.342  28.634  89.987  1.00  0.00
H
ATOM   2012  HB3 ASP   123      54.185  29.677  91.111  1.00  0.00
H
ATOM   2013  CG  ASP   123      53.952  27.687  91.772  1.00  0.00
C
ATOM   2014  OD1 ASP   123      54.189  27.806  92.984  1.00  0.00
O
ATOM   2015  OD2 ASP   123      54.213  26.613  91.203  1.00  0.00
O
ATOM   2016  C   ASP   123      51.962  30.918  91.170  1.00  0.00
C
ATOM   2017  O   ASP   123      52.411  31.825  91.875  1.00  0.00
O
ATOM   2018  N   PHE   124      51.271  31.186  90.057  1.00  0.00
N
ATOM   2019  H   PHE   124      50.906  30.411  89.514  1.00  0.00
H
ATOM   2020  CA  PHE   124      51.000  32.540  89.567  1.00  0.00
C
ATOM   2021  HA  PHE   124      51.896  33.141  89.697  1.00  0.00
H
ATOM   2022  CB  PHE   124      50.701  32.483  88.061  1.00  0.00
C
ATOM   2023  HB2 PHE   124      51.402  31.796  87.583  1.00  0.00
H
ATOM   2024  HB3 PHE   124      49.694  32.085  87.910  1.00  0.00
H
ATOM   2025  CG  PHE   124      50.831  33.833  87.373  1.00  0.00
C
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ATOM   2026  CD1 PHE   124      52.111  34.381  87.165  1.00  0.00
C
ATOM   2027  HD1 PHE   124      52.989  33.821  87.464  1.00  0.00
H
ATOM   2028  CE1 PHE   124      52.242  35.645  86.567  1.00  0.00
C
ATOM   2029  HE1 PHE   124      53.222  36.057  86.407  1.00  0.00
H
ATOM   2030  CZ  PHE   124      51.099  36.361  86.180  1.00  0.00
C
ATOM   2031  HZ  PHE   124      51.202  37.330  85.725  1.00  0.00
H
ATOM   2032  CE2 PHE   124      49.822  35.813  86.378  1.00  0.00
C
ATOM   2033  HE2 PHE   124      48.942  36.354  86.076  1.00  0.00
H
ATOM   2034  CD2 PHE   124      49.686  34.552  86.982  1.00  0.00
C
ATOM   2035  HD2 PHE   124      48.706  34.130  87.156  1.00  0.00
H
ATOM   2036  C   PHE   124      49.872  33.251  90.338  1.00  0.00
C
ATOM   2037  O   PHE   124      49.799  34.485  90.351  1.00  0.00
O
ATOM   2038  N   ARG   125      49.024  32.499  91.065  1.00  0.00
N
ATOM   2039  H   ARG   125      49.132  31.489  91.015  1.00  0.00
H
ATOM   2040  CA  ARG   125      47.894  33.054  91.846  1.00  0.00
C
ATOM   2041  HA  ARG   125      47.204  33.540  91.155  1.00  0.00
H
ATOM   2042  CB  ARG   125      47.124  31.954  92.598  1.00  0.00
C
ATOM   2043  HB2 ARG   125      47.801  31.421  93.266  1.00  0.00
H
ATOM   2044  HB3 ARG   125      46.346  32.426  93.193  1.00  0.00
H
ATOM   2045  CG  ARG   125      46.440  30.971  91.649  1.00  0.00
C
ATOM   2046  HG2 ARG   125      45.704  31.493  91.036  1.00  0.00
H
ATOM   2047  HG3 ARG   125      47.188  30.543  91.003  1.00  0.00
H
ATOM   2048  CD  ARG   125      45.764  29.820  92.384  1.00  0.00
C
ATOM   2049  HD2 ARG   125      46.505  29.315  93.009  1.00  0.00
H
ATOM   2050  HD3 ARG   125      44.978  30.216  93.027  1.00  0.00
H
ATOM   2051  NE  ARG   125      45.207  28.866  91.408  1.00  0.00
N
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ATOM   2052  HE  ARG   125      45.439  29.002  90.431  1.00  0.00
H
ATOM   2053  CZ  ARG   125      44.535  27.768  91.679  1.00  0.00
C
ATOM   2054  NH1 ARG   125      44.245  27.391  92.887  1.00  0.00
N
ATOM   2055 HH11 ARG   125      44.553  27.935  93.672  1.00  0.00
H
ATOM   2056 HH12 ARG   125      43.788  26.491  92.998  1.00  0.00
H
ATOM   2057  NH2 ARG   125      44.144  26.990  90.721  1.00  0.00
N
ATOM   2058 HH21 ARG   125      44.382  27.226  89.769  1.00  0.00
H
ATOM   2059 HH22 ARG   125      43.633  26.153  90.976  1.00  0.00
H
ATOM   2060  C   ARG   125      48.338  34.135  92.828  1.00  0.00
C
ATOM   2061  O   ARG   125      47.639  35.137  92.931  1.00  0.00
O
ATOM   2062  N   LYS   126      49.520  33.999  93.445  1.00  0.00
N
ATOM   2063  H   LYS   126      50.031  33.149  93.254  1.00  0.00
H
ATOM   2064  CA  LYS   126      50.105  34.958  94.412  1.00  0.00
C
ATOM   2065  HA  LYS   126      49.607  34.843  95.378  1.00  0.00
H
ATOM   2066  CB  LYS   126      51.616  34.693  94.573  1.00  0.00
C
ATOM   2067  HB2 LYS   126      52.103  34.920  93.622  1.00  0.00
H
ATOM   2068  HB3 LYS   126      52.013  35.383  95.323  1.00  0.00
H
ATOM   2069  CG  LYS   126      51.994  33.259  94.976  1.00  0.00
C
ATOM   2070  HG2 LYS   126      51.629  33.047  95.982  1.00  0.00
H
ATOM   2071  HG3 LYS   126      51.537  32.556  94.281  1.00  0.00
H
ATOM   2072  CD  LYS   126      53.518  33.084  94.922  1.00  0.00
C
ATOM   2073  HD2 LYS   126      53.897  33.513  93.992  1.00  0.00
H
ATOM   2074  HD3 LYS   126      53.974  33.606  95.765  1.00  0.00
H
ATOM   2075  CE  LYS   126      53.884  31.598  94.957  1.00  0.00
C
ATOM   2076  HE2 LYS   126      53.521  31.153  95.888  1.00  0.00
H
ATOM   2077  HE3 LYS   126      53.382  31.101  94.120  1.00  0.00
H
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ATOM   2078  NZ  LYS   126      55.343  31.405  94.825  1.00  0.00
N
ATOM   2079  HZ1 LYS   126      55.839  31.709  95.660  1.00  0.00
H
ATOM   2080  HZ2 LYS   126      55.568  30.418  94.679  1.00  0.00
H
ATOM   2081  HZ3 LYS   126      55.693  31.915  94.030  1.00  0.00
H
ATOM   2082  C   LYS   126      49.947  36.419  93.971  1.00  0.00
C
ATOM   2083  O   LYS   126      49.591  37.276  94.778  1.00  0.00
O
ATOM   2084  N   TYR   127      50.200  36.687  92.688  1.00  0.00
N
ATOM   2085  H   TYR   127      50.445  35.906  92.092  1.00  0.00
H
ATOM   2086  CA  TYR   127      50.267  38.026  92.100  1.00  0.00
C
ATOM   2087  HA  TYR   127      50.673  38.707  92.850  1.00  0.00
H
ATOM   2088  CB  TYR   127      51.237  37.985  90.910  1.00  0.00
C
ATOM   2089  HB2 TYR   127      50.730  37.516  90.065  1.00  0.00
H
ATOM   2090  HB3 TYR   127      51.481  39.005  90.618  1.00  0.00
H
ATOM   2091  CG  TYR   127      52.529  37.237  91.186  1.00  0.00
C
ATOM   2092  CD1 TYR   127      53.426  37.715  92.159  1.00  0.00
C
ATOM   2093  HD1 TYR   127      53.195  38.612  92.714  1.00  0.00
H
ATOM   2094  CE1 TYR   127      54.609  37.005  92.440  1.00  0.00
C
ATOM   2095  HE1 TYR   127      55.306  37.378  93.174  1.00  0.00
H
ATOM   2096  CZ  TYR   127      54.873  35.785  91.784  1.00  0.00
C
ATOM   2097  OH  TYR   127      55.995  35.083  92.088  1.00  0.00
O
ATOM   2098  HH  TYR   127      56.555  35.562  92.705  1.00  0.00
H
ATOM   2099  CE2 TYR   127      53.961  35.292  90.828  1.00  0.00
C
ATOM   2100  HE2 TYR   127      54.161  34.350  90.343  1.00  0.00
H
ATOM   2101  CD2 TYR   127      52.797  36.024  90.521  1.00  0.00
C
ATOM   2102  HD2 TYR   127      52.095  35.641  89.792  1.00  0.00
H
ATOM   2103  C   TYR   127      48.903  38.585  91.673  1.00  0.00
C
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ATOM   2104  O   TYR   127      48.812  39.760  91.317  1.00  0.00
O
ATOM   2105  N   THR   128      47.837  37.774  91.722  1.00  0.00
N
ATOM   2106  H   THR   128      47.965  36.820  92.048  1.00  0.00
H
ATOM   2107  CA  THR   128      46.459  38.214  91.445  1.00  0.00
C
ATOM   2108  HA  THR   128      46.531  39.032  90.736  1.00  0.00
H
ATOM   2109  CB  THR   128      45.595  37.135  90.781  1.00  0.00
C
ATOM   2110  HB  THR   128      44.687  37.617  90.419  1.00  0.00
H
ATOM   2111  CG2 THR   128      46.271  36.479  89.585  1.00  0.00
C
ATOM   2112 HG21 THR   128      47.093  35.835  89.904  1.00  0.00
H
ATOM   2113 HG22 THR   128      45.528  35.897  89.044  1.00  0.00
H
ATOM   2114 HG23 THR   128      46.659  37.250  88.919  1.00  0.00
H
ATOM   2115  OG1 THR   128      45.214  36.143  91.703  1.00  0.00
O
ATOM   2116  HG1 THR   128      45.653  35.319  91.469  1.00  0.00
H
ATOM   2117  C   THR   128      45.739  38.778  92.673  1.00  0.00
C
ATOM   2118  O   THR   128      44.554  39.103  92.591  1.00  0.00
O
ATOM   2119  N   ALA   129      46.444  38.889  93.801  1.00  0.00
N
ATOM   2120  H   ALA   129      47.402  38.576  93.795  1.00  0.00
H
ATOM   2121  CA  ALA   129      45.928  39.411  95.056  1.00  0.00
C
ATOM   2122  HA  ALA   129      45.148  38.733  95.393  1.00  0.00
H
ATOM   2123  CB  ALA   129      47.056  39.372  96.090  1.00  0.00
C
ATOM   2124  HB1 ALA   129      47.914  39.939  95.728  1.00  0.00
H
ATOM   2125  HB2 ALA   129      46.716  39.808  97.030  1.00  0.00
H
ATOM   2126  HB3 ALA   129      47.357  38.340  96.265  1.00  0.00
H
ATOM   2127  C   ALA   129      45.316  40.817  94.917  1.00  0.00
C
ATOM   2128  O   ALA   129      45.856  41.705  94.243  1.00  0.00
O
ATOM   2129  N   PHE   130      44.174  41.021  95.573  1.00  0.00
N
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ATOM   2130  H   PHE   130      43.776  40.242  96.091  1.00  0.00
H
ATOM   2131  CA  PHE   130      43.459  42.291  95.612  1.00  0.00
C
ATOM   2132  HA  PHE   130      44.191  43.092  95.526  1.00  0.00
H
ATOM   2133  CB  PHE   130      42.492  42.401  94.422  1.00  0.00
C
ATOM   2134  HB2 PHE   130      42.101  43.417  94.422  1.00  0.00
H
ATOM   2135  HB3 PHE   130      43.054  42.271  93.495  1.00  0.00
H
ATOM   2136  CG  PHE   130      41.315  41.432  94.435  1.00  0.00
C
ATOM   2137  CD1 PHE   130      41.440  40.156  93.854  1.00  0.00
C
ATOM   2138  HD1 PHE   130      42.380  39.859  93.415  1.00  0.00
H
ATOM   2139  CE1 PHE   130      40.372  39.241  93.897  1.00  0.00
C
ATOM   2140  HE1 PHE   130      40.497  38.243  93.496  1.00  0.00
H
ATOM   2141  CZ  PHE   130      39.173  39.595  94.535  1.00  0.00
C
ATOM   2142  HZ  PHE   130      38.377  38.867  94.632  1.00  0.00
H
ATOM   2143  CE2 PHE   130      39.048  40.859  95.135  1.00  0.00
C
ATOM   2144  HE2 PHE   130      38.153  41.090  95.691  1.00  0.00
H
ATOM   2145  CD2 PHE   130      40.108  41.783  95.072  1.00  0.00
C
ATOM   2146  HD2 PHE   130      40.024  42.739  95.573  1.00  0.00
H
ATOM   2147  C   PHE   130      42.697  42.481  96.927  1.00  0.00
C
ATOM   2148  O   PHE   130      42.158  41.529  97.492  1.00  0.00
O
ATOM   2149  N   THR   131      42.565  43.726  97.368  1.00  0.00
N
ATOM   2150  H   THR   131      43.167  44.432  96.958  1.00  0.00
H
ATOM   2151  CA  THR   131      41.748  44.103  98.530  1.00  0.00
C
ATOM   2152  HA  THR   131      41.569  43.216  99.142  1.00  0.00
H
ATOM   2153  CB  THR   131      42.515  45.093  99.417  1.00  0.00
C
ATOM   2154  HB  THR   131      42.832  45.954  98.824  1.00  0.00
H
ATOM   2155  CG2 THR   131      41.739  45.567 100.645  1.00  0.00
C
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ATOM   2156 HG21 THR   131      41.359  44.707 101.200  1.00  0.00
H
ATOM   2157 HG22 THR   131      42.402  46.145 101.289  1.00  0.00
H
ATOM   2158 HG23 THR   131      40.907  46.203 100.342  1.00  0.00
H
ATOM   2159  OG1 THR   131      43.647  44.427  99.908  1.00  0.00
O
ATOM   2160  HG1 THR   131      44.221  45.066 100.372  1.00  0.00
H
ATOM   2161  C   THR   131      40.386  44.653  98.108  1.00  0.00
C
ATOM   2162  O   THR   131      40.279  45.467  97.182  1.00  0.00
O
ATOM   2163  N   ILE   132      39.339  44.239  98.818  1.00  0.00
N
ATOM   2164  H   ILE   132      39.503  43.529  99.531  1.00  0.00
H
ATOM   2165  CA  ILE   132      38.017  44.873  98.823  1.00  0.00
C
ATOM   2166  HA  ILE   132      37.928  45.513  97.948  1.00  0.00
H
ATOM   2167  CB  ILE   132      36.907  43.801  98.762  1.00  0.00
C
ATOM   2168  HB  ILE   132      37.034  43.124  99.611  1.00  0.00
H
ATOM   2169  CG2 ILE   132      35.504  44.420  98.871  1.00  0.00
C
ATOM   2170 HG21 ILE   132      35.368  45.234  98.160  1.00  0.00
H
ATOM   2171 HG22 ILE   132      34.747  43.655  98.690  1.00  0.00
H
ATOM   2172 HG23 ILE   132      35.348  44.806  99.880  1.00  0.00
H
ATOM   2173  CG1 ILE   132      36.992  42.953  97.479  1.00  0.00
C
ATOM   2174 HG12 ILE   132      37.905  42.362  97.517  1.00  0.00
H
ATOM   2175 HG13 ILE   132      36.151  42.260  97.470  1.00  0.00
H
ATOM   2176  CD1 ILE   132      36.985  43.755  96.173  1.00  0.00
C
ATOM   2177 HD11 ILE   132      37.928  44.286  96.062  1.00  0.00
H
ATOM   2178 HD12 ILE   132      36.851  43.081  95.328  1.00  0.00
H
ATOM   2179 HD13 ILE   132      36.179  44.482  96.180  1.00  0.00
H
ATOM   2180  C   ILE   132      37.900  45.728 100.091  1.00  0.00
C
ATOM   2181  O   ILE   132      38.097  45.193 101.180  1.00  0.00
O
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ATOM   2182  N   PRO   133      37.596  47.034  99.999  1.00  0.00
N
ATOM   2183  CD  PRO   133      37.411  47.813  98.782  1.00  0.00
C
ATOM   2184  HD2 PRO   133      36.738  47.318  98.080  1.00  0.00
H
ATOM   2185  HD3 PRO   133      38.381  48.004  98.320  1.00  0.00
H
ATOM   2186  CG  PRO   133      36.798  49.131  99.232  1.00  0.00
C
ATOM   2187  HG2 PRO   133      35.718  49.017  99.263  1.00  0.00
H
ATOM   2188  HG3 PRO   133      37.080  49.953  98.575  1.00  0.00
H
ATOM   2189  CB  PRO   133      37.335  49.307 100.653  1.00  0.00
C
ATOM   2190  HB2 PRO   133      36.691  49.949 101.256  1.00  0.00
H
ATOM   2191  HB3 PRO   133      38.350  49.706 100.615  1.00  0.00
H
ATOM   2192  CA  PRO   133      37.359  47.867 101.177  1.00  0.00
C
ATOM   2193  HA  PRO   133      38.178  47.749 101.888  1.00  0.00
H
ATOM   2194  C   PRO   133      36.039  47.510 101.875  1.00  0.00
C
ATOM   2195  O   PRO   133      35.076  47.090 101.232  1.00  0.00
O
ATOM   2196  N   SER   134      35.970  47.749 103.185  1.00  0.00
N
ATOM   2197  H   SER   134      36.802  48.010 103.690  1.00  0.00
H
ATOM   2198  CA  SER   134      34.715  47.733 103.945  1.00  0.00
C
ATOM   2199  HA  SER   134      34.242  46.757 103.840  1.00  0.00
H
ATOM   2200  CB  SER   134      34.987  47.990 105.424  1.00  0.00
C
ATOM   2201  HB2 SER   134      35.373  49.004 105.547  1.00  0.00
H
ATOM   2202  HB3 SER   134      34.056  47.904 105.986  1.00  0.00
H
ATOM   2203  OG  SER   134      35.930  47.094 105.955  1.00  0.00
O
ATOM   2204  HG  SER   134      36.136  47.468 106.840  1.00  0.00
H
ATOM   2205  C   SER   134      33.746  48.823 103.475  1.00  0.00
C
ATOM   2206  O   SER   134      34.184  49.890 103.041  1.00  0.00
O
ATOM   2207  N   ILE   135      32.439  48.598 103.655  1.00  0.00
N
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ATOM   2208  H   ILE   135      32.167  47.701 104.028  1.00  0.00
H
ATOM   2209  CA  ILE   135      31.361  49.483 103.174  1.00  0.00
C
ATOM   2210  HA  ILE   135      31.400  49.500 102.084  1.00  0.00
H
ATOM   2211  CB  ILE   135      29.969  48.929 103.593  1.00  0.00
C
ATOM   2212  HB  ILE   135      29.934  48.855 104.682  1.00  0.00
H
ATOM   2213  CG2 ILE   135      28.841  49.886 103.157  1.00  0.00
C
ATOM   2214 HG21 ILE   135      28.834  50.001 102.071  1.00  0.00
H
ATOM   2215 HG22 ILE   135      27.875  49.509 103.491  1.00  0.00
H
ATOM   2216 HG23 ILE   135      28.964  50.873 103.608  1.00  0.00
H
ATOM   2217  CG1 ILE   135      29.616  47.544 102.989  1.00  0.00
C
ATOM   2218 HG12 ILE   135      28.556  47.356 103.166  1.00  0.00
H
ATOM   2219 HG13 ILE   135      29.775  47.565 101.908  1.00  0.00
H
ATOM   2220  CD1 ILE   135      30.352  46.331 103.571  1.00  0.00
C
ATOM   2221 HD11 ILE   135      30.341  46.366 104.661  1.00  0.00
H
ATOM   2222 HD12 ILE   135      29.843  45.424 103.246  1.00  0.00
H
ATOM   2223 HD13 ILE   135      31.376  46.284 103.208  1.00  0.00
H
ATOM   2224  C   ILE   135      31.566  50.939 103.634  1.00  0.00
C
ATOM   2225  O   ILE   135      31.497  51.843 102.808  1.00  0.00
O
ATOM   2226  N   ASN   136      31.884  51.175 104.918  1.00  0.00
N
ATOM   2227  H   ASN   136      31.950  50.387 105.544  1.00  0.00
H
ATOM   2228  CA  ASN   136      32.146  52.521 105.458  1.00  0.00
C
ATOM   2229  HA  ASN   136      31.829  53.241 104.700  1.00  0.00
H
ATOM   2230  CB  ASN   136      31.241  52.800 106.676  1.00  0.00
C
ATOM   2231  HB2 ASN   136      31.232  53.877 106.843  1.00  0.00
H
ATOM   2232  HB3 ASN   136      30.221  52.489 106.456  1.00  0.00
H
ATOM   2233  CG  ASN   136      31.705  52.150 107.967  1.00  0.00
C
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ATOM   2234  OD1 ASN   136      32.456  52.712 108.735  1.00  0.00
O
ATOM   2235  ND2 ASN   136      31.271  50.948 108.268  1.00  0.00
N
ATOM   2236 HD21 ASN   136      31.593  50.592 109.154  1.00  0.00
H
ATOM   2237 HD22 ASN   136      30.543  50.511 107.739  1.00  0.00
H
ATOM   2238  C   ASN   136      33.647  52.853 105.670  1.00  0.00
C
ATOM   2239  O   ASN   136      33.971  53.869 106.281  1.00  0.00
O
ATOM   2240  N   ASN   137      34.560  52.041 105.123  1.00  0.00
N
ATOM   2241  H   ASN   137      34.224  51.286 104.539  1.00  0.00
H
ATOM   2242  CA  ASN   137      36.013  52.295 105.121  1.00  0.00
C
ATOM   2243  HA  ASN   137      36.474  51.394 104.716  1.00  0.00
H
ATOM   2244  CB  ASN   137      36.302  53.453 104.130  1.00  0.00
C
ATOM   2245  HB2 ASN   137      35.504  53.513 103.390  1.00  0.00
H
ATOM   2246  HB3 ASN   137      36.317  54.404 104.665  1.00  0.00
H
ATOM   2247  CG  ASN   137      37.606  53.300 103.369  1.00  0.00
C
ATOM   2248  OD1 ASN   137      38.635  53.884 103.663  1.00  0.00
O
ATOM   2249  ND2 ASN   137      37.592  52.523 102.311  1.00  0.00
N
ATOM   2250 HD21 ASN   137      38.434  52.518 101.769  1.00  0.00
H
ATOM   2251 HD22 ASN   137      36.727  52.114 102.008  1.00  0.00
H
ATOM   2252  C   ASN   137      36.644  52.475 106.531  1.00  0.00
C
ATOM   2253  O   ASN   137      37.518  53.320 106.725  1.00  0.00
O
ATOM   2254  N   GLU   138      36.187  51.718 107.539  1.00  0.00
N
ATOM   2255  H   GLU   138      35.496  51.010 107.338  1.00  0.00
H
ATOM   2256  CA  GLU   138      36.639  51.840 108.942  1.00  0.00
C
ATOM   2257  HA  GLU   138      36.829  52.891 109.155  1.00  0.00
H
ATOM   2258  CB  GLU   138      35.528  51.394 109.928  1.00  0.00
C
ATOM   2259  HB2 GLU   138      35.982  51.126 110.881  1.00  0.00
H
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ATOM   2260  HB3 GLU   138      34.902  52.265 110.119  1.00  0.00
H
ATOM   2261  CG  GLU   138      34.578  50.256 109.501  1.00  0.00
C
ATOM   2262  HG2 GLU   138      33.817  50.126 110.271  1.00  0.00
H
ATOM   2263  HG3 GLU   138      34.056  50.555 108.592  1.00  0.00
H
ATOM   2264  CD  GLU   138      35.273  48.920 109.244  1.00  0.00
C
ATOM   2265  OE1 GLU   138      35.712  48.717 108.094  1.00  0.00
O
ATOM   2266  OE2 GLU   138      35.389  48.077 110.160  1.00  0.00
O
ATOM   2267  C   GLU   138      37.974  51.128 109.230  1.00  0.00
C
ATOM   2268  O   GLU   138      38.837  51.656 109.936  1.00  0.00
O
ATOM   2269  N   THR   139      38.156  49.939 108.663  1.00  0.00
N
ATOM   2270  H   THR   139      37.379  49.544 108.134  1.00  0.00
H
ATOM   2271  CA  THR   139      39.334  49.075 108.784  1.00  0.00
C
ATOM   2272  HA  THR   139      40.187  49.680 109.086  1.00  0.00
H
ATOM   2273  CB  THR   139      39.106  47.979 109.847  1.00  0.00
C
ATOM   2274  HB  THR   139      39.998  47.355 109.875  1.00  0.00
H
ATOM   2275  CG2 THR   139      38.913  48.541 111.258  1.00  0.00
C
ATOM   2276 HG21 THR   139      37.973  49.088 111.338  1.00  0.00
H
ATOM   2277 HG22 THR   139      38.913  47.721 111.975  1.00  0.00
H
ATOM   2278 HG23 THR   139      39.739  49.211 111.500  1.00  0.00
H
ATOM   2279  OG1 THR   139      38.015  47.136 109.523  1.00  0.00
O
ATOM   2280  HG1 THR   139      37.172  47.579 109.730  1.00  0.00
H
ATOM   2281  C   THR   139      39.653  48.454 107.414  1.00  0.00
C
ATOM   2282  O   THR   139      38.860  48.583 106.474  1.00  0.00
O
ATOM   2283  N   PRO   140      40.811  47.792 107.231  1.00  0.00
N
ATOM   2284  CD  PRO   140      41.990  47.802 108.082  1.00  0.00
C
ATOM   2285  HD2 PRO   140      41.877  47.069 108.881  1.00  0.00
H
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ATOM   2286  HD3 PRO   140      42.183  48.791 108.496  1.00  0.00
H
ATOM   2287  CG  PRO   140      43.139  47.382 107.168  1.00  0.00
C
ATOM   2288  HG2 PRO   140      43.949  46.912 107.725  1.00  0.00
H
ATOM   2289  HG3 PRO   140      43.506  48.247 106.617  1.00  0.00
H
ATOM   2290  CB  PRO   140      42.464  46.405 106.207  1.00  0.00
C
ATOM   2291  HB2 PRO   140      42.407  45.422 106.677  1.00  0.00
H
ATOM   2292  HB3 PRO   140      42.991  46.339 105.255  1.00  0.00
H
ATOM   2293  CA  PRO   140      41.062  47.001 106.033  1.00  0.00
C
ATOM   2294  HA  PRO   140      41.062  47.671 105.172  1.00  0.00
H
ATOM   2295  C   PRO   140      39.992  45.916 105.850  1.00  0.00
C
ATOM   2296  O   PRO   140      39.776  45.084 106.733  1.00  0.00
O
ATOM   2297  N   GLY   141      39.340  45.926 104.688  1.00  0.00
N
ATOM   2298  H   GLY   141      39.543  46.654 104.029  1.00  0.00
H
ATOM   2299  CA  GLY   141      38.432  44.859 104.281  1.00  0.00
C
ATOM   2300  HA2 GLY   141      37.841  44.540 105.135  1.00  0.00
H
ATOM   2301  HA3 GLY   141      37.726  45.231 103.548  1.00  0.00
H
ATOM   2302  C   GLY   141      39.174  43.637 103.734  1.00  0.00
C
ATOM   2303  O   GLY   141      40.386  43.483 103.912  1.00  0.00
O
ATOM   2304  N   ILE   142      38.444  42.730 103.083  1.00  0.00
N
ATOM   2305  H   ILE   142      37.480  42.939 102.863  1.00  0.00
H
ATOM   2306  CA  ILE   142      38.963  41.395 102.771  1.00  0.00
C
ATOM   2307  HA  ILE   142      39.511  41.040 103.646  1.00  0.00
H
ATOM   2308  CB  ILE   142      37.803  40.401 102.541  1.00  0.00
C
ATOM   2309  HB  ILE   142      37.276  40.698 101.634  1.00  0.00
H
ATOM   2310  CG2 ILE   142      38.351  38.980 102.337  1.00  0.00
C
ATOM   2311 HG21 ILE   142      39.034  38.717 103.140  1.00  0.00
H
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ATOM   2312 HG22 ILE   142      37.532  38.259 102.312  1.00  0.00
H
ATOM   2313 HG23 ILE   142      38.880  38.912 101.387  1.00  0.00
H
ATOM   2314  CG1 ILE   142      36.766  40.395 103.691  1.00  0.00
C
ATOM   2315 HG12 ILE   142      36.274  41.367 103.734  1.00  0.00
H
ATOM   2316 HG13 ILE   142      35.994  39.662 103.455  1.00  0.00
H
ATOM   2317  CD1 ILE   142      37.325  40.076 105.087  1.00  0.00
C
ATOM   2318 HD11 ILE   142      38.080  40.806 105.378  1.00  0.00
H
ATOM   2319 HD12 ILE   142      36.515  40.114 105.815  1.00  0.00
H
ATOM   2320 HD13 ILE   142      37.756  39.077 105.102  1.00  0.00
H
ATOM   2321  C   ILE   142      39.965  41.424 101.605  1.00  0.00
C
ATOM   2322  O   ILE   142      39.653  41.876 100.498  1.00  0.00
O
ATOM   2323  N   ARG   143      41.163  40.877 101.849  1.00  0.00
N
ATOM   2324  H   ARG   143      41.334  40.557 102.790  1.00  0.00
H
ATOM   2325  CA  ARG   143      42.119  40.468 100.811  1.00  0.00
C
ATOM   2326  HA  ARG   143      42.109  41.201 100.003  1.00  0.00
H
ATOM   2327  CB  ARG   143      43.550  40.356 101.367  1.00  0.00
C
ATOM   2328  HB2 ARG   143      43.520  40.136 102.435  1.00  0.00
H
ATOM   2329  HB3 ARG   143      44.044  39.525 100.873  1.00  0.00
H
ATOM   2330  CG  ARG   143      44.406  41.599 101.091  1.00  0.00
C
ATOM   2331  HG2 ARG   143      44.379  41.813 100.022  1.00  0.00
H
ATOM   2332  HG3 ARG   143      43.992  42.448 101.634  1.00  0.00
H
ATOM   2333  CD  ARG   143      45.872  41.383 101.502  1.00  0.00
C
ATOM   2334  HD2 ARG   143      46.269  40.508 100.981  1.00  0.00
H
ATOM   2335  HD3 ARG   143      46.453  42.258 101.203  1.00  0.00
H
ATOM   2336  NE  ARG   143      45.984  41.196 102.957  1.00  0.00
N
ATOM   2337  HE  ARG   143      45.124  41.258 103.471  1.00  0.00
H
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ATOM   2338  CZ  ARG   143      47.068  40.957 103.671  1.00  0.00
C
ATOM   2339  NH1 ARG   143      48.265  40.805 103.167  1.00  0.00
N
ATOM   2340 HH11 ARG   143      48.403  40.779 102.169  1.00  0.00
H
ATOM   2341 HH12 ARG   143      49.041  40.470 103.727  1.00  0.00
H
ATOM   2342  NH2 ARG   143      46.933  40.900 104.964  1.00  0.00
N
ATOM   2343 HH21 ARG   143      46.020  40.846 105.374  1.00  0.00
H
ATOM   2344 HH22 ARG   143      47.753  40.746 105.517  1.00  0.00
H
ATOM   2345  C   ARG   143      41.699  39.125 100.218  1.00  0.00
C
ATOM   2346  O   ARG   143      41.497  38.153 100.947  1.00  0.00
O
ATOM   2347  N   TYR   144      41.649  39.075  98.895  1.00  0.00
N
ATOM   2348  H   TYR   144      41.875  39.919  98.381  1.00  0.00
H
ATOM   2349  CA  TYR   144      41.327  37.897  98.100  1.00  0.00
C
ATOM   2350  HA  TYR   144      41.276  37.019  98.741  1.00  0.00
H
ATOM   2351  CB  TYR   144      39.972  38.110  97.424  1.00  0.00
C
ATOM   2352  HB2 TYR   144      40.036  39.057  96.896  1.00  0.00
H
ATOM   2353  HB3 TYR   144      39.822  37.323  96.683  1.00  0.00
H
ATOM   2354  CG  TYR   144      38.745  38.139  98.311  1.00  0.00
C
ATOM   2355  CD1 TYR   144      38.179  36.933  98.767  1.00  0.00
C
ATOM   2356  HD1 TYR   144      38.662  35.990  98.553  1.00  0.00
H
ATOM   2357  CE1 TYR   144      36.964  36.945  99.477  1.00  0.00
C
ATOM   2358  HE1 TYR   144      36.535  36.015  99.826  1.00  0.00
H
ATOM   2359  CZ  TYR   144      36.308  38.170  99.720  1.00  0.00
C
ATOM   2360  OH  TYR   144      35.120  38.196 100.375  1.00  0.00
O
ATOM   2361  HH  TYR   144      34.827  37.309 100.602  1.00  0.00
H
ATOM   2362  CE2 TYR   144      36.882  39.380  99.275  1.00  0.00
C
ATOM   2363  HE2 TYR   144      36.374  40.309  99.478  1.00  0.00
H
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ATOM   2364  CD2 TYR   144      38.108  39.365  98.585  1.00  0.00
C
ATOM   2365  HD2 TYR   144      38.562  40.290  98.259  1.00  0.00
H
ATOM   2366  C   TYR   144      42.391  37.657  97.022  1.00  0.00
C
ATOM   2367  O   TYR   144      43.135  38.564  96.650  1.00  0.00
O
ATOM   2368  N   GLN   145      42.411  36.449  96.473  1.00  0.00
N
ATOM   2369  H   GLN   145      41.793  35.754  96.885  1.00  0.00
H
ATOM   2370  CA  GLN   145      43.276  35.984  95.392  1.00  0.00
C
ATOM   2371  HA  GLN   145      43.789  36.820  94.902  1.00  0.00
H
ATOM   2372  CB  GLN   145      44.307  35.054  96.043  1.00  0.00
C
ATOM   2373  HB2 GLN   145      44.879  35.646  96.752  1.00  0.00
H
ATOM   2374  HB3 GLN   145      43.787  34.254  96.580  1.00  0.00
H
ATOM   2375  CG  GLN   145      45.295  34.426  95.068  1.00  0.00
C
ATOM   2376  HG2 GLN   145      44.760  33.893  94.284  1.00  0.00
H
ATOM   2377  HG3 GLN   145      45.878  35.224  94.618  1.00  0.00
H
ATOM   2378  CD  GLN   145      46.234  33.456  95.773  1.00  0.00
C
ATOM   2379  OE1 GLN   145      47.300  33.825  96.241  1.00  0.00
O
ATOM   2380  NE2 GLN   145      45.876  32.189  95.875  1.00  0.00
N
ATOM   2381 HE21 GLN   145      46.560  31.552  96.256  1.00  0.00
H
ATOM   2382 HE22 GLN   145      45.001  31.864  95.496  1.00  0.00
H
ATOM   2383  C   GLN   145      42.425  35.248  94.352  1.00  0.00
C
ATOM   2384  O   GLN   145      41.548  34.465  94.722  1.00  0.00
O
ATOM   2385  N   TYR   146      42.669  35.455  93.061  1.00  0.00
N
ATOM   2386  H   TYR   146      43.465  36.024  92.797  1.00  0.00
H
ATOM   2387  CA  TYR   146      42.007  34.668  92.016  1.00  0.00
C
ATOM   2388  HA  TYR   146      40.953  34.542  92.274  1.00  0.00
H
ATOM   2389  CB  TYR   146      42.092  35.360  90.647  1.00  0.00
C
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ATOM   2390  HB2 TYR   146      43.102  35.723  90.468  1.00  0.00
H
ATOM   2391  HB3 TYR   146      41.923  34.594  89.899  1.00  0.00
H
ATOM   2392  CG  TYR   146      41.126  36.492  90.358  1.00  0.00
C
ATOM   2393  CD1 TYR   146      41.364  37.785  90.860  1.00  0.00
C
ATOM   2394  HD1 TYR   146      42.190  37.953  91.542  1.00  0.00
H
ATOM   2395  CE1 TYR   146      40.574  38.871  90.432  1.00  0.00
C
ATOM   2396  HE1 TYR   146      40.778  39.857  90.815  1.00  0.00
H
ATOM   2397  CZ  TYR   146      39.554  38.668  89.476  1.00  0.00
C
ATOM   2398  OH  TYR   146      38.845  39.719  88.981  1.00  0.00
O
ATOM   2399  HH  TYR   146      39.304  40.546  89.121  1.00  0.00
H
ATOM   2400  CE2 TYR   146      39.301  37.367  88.995  1.00  0.00
C
ATOM   2401  HE2 TYR   146      38.563  37.209  88.226  1.00  0.00
H
ATOM   2402  CD2 TYR   146      40.076  36.285  89.445  1.00  0.00
C
ATOM   2403  HD2 TYR   146      39.919  35.299  89.022  1.00  0.00
H
ATOM   2404  C   TYR   146      42.633  33.271  91.909  1.00  0.00
C
ATOM   2405  O   TYR   146      43.847  33.133  91.743  1.00  0.00
O
ATOM   2406  N   ASN   147      41.790  32.238  91.908  1.00  0.00
N
ATOM   2407  H   ASN   147      40.805  32.419  92.064  1.00  0.00
H
ATOM   2408  CA  ASN   147      42.171  30.864  91.558  1.00  0.00
C
ATOM   2409  HA  ASN   147      43.232  30.735  91.761  1.00  0.00
H
ATOM   2410  CB  ASN   147      41.378  29.885  92.439  1.00  0.00
C
ATOM   2411  HB2 ASN   147      40.309  30.055  92.295  1.00  0.00
H
ATOM   2412  HB3 ASN   147      41.604  28.865  92.130  1.00  0.00
H
ATOM   2413  CG  ASN   147      41.708  29.989  93.917  1.00  0.00
C
ATOM   2414  OD1 ASN   147      42.806  30.352  94.317  1.00  0.00
O
ATOM   2415  ND2 ASN   147      40.766  29.652  94.761  1.00  0.00
N
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ATOM   2416 HD21 ASN   147      40.940  29.800  95.747  1.00  0.00
H
ATOM   2417 HD22 ASN   147      39.848  29.375  94.428  1.00  0.00
H
ATOM   2418  C   ASN   147      41.968  30.563  90.060  1.00  0.00
C
ATOM   2419  O   ASN   147      42.258  29.462  89.590  1.00  0.00
O
ATOM   2420  N   VAL   148      41.446  31.540  89.319  1.00  0.00
N
ATOM   2421  H   VAL   148      41.305  32.429  89.773  1.00  0.00
H
ATOM   2422  CA  VAL   148      40.872  31.430  87.970  1.00  0.00
C
ATOM   2423  HA  VAL   148      41.245  30.532  87.480  1.00  0.00
H
ATOM   2424  CB  VAL   148      39.335  31.335  88.055  1.00  0.00
C
ATOM   2425  HB  VAL   148      38.936  31.187  87.053  1.00  0.00
H
ATOM   2426  CG1 VAL   148      38.921  30.130  88.902  1.00  0.00
C
ATOM   2427 HG11 VAL   148      39.194  30.273  89.945  1.00  0.00
H
ATOM   2428 HG12 VAL   148      37.846  29.994  88.850  1.00  0.00
H
ATOM   2429 HG13 VAL   148      39.411  29.239  88.517  1.00  0.00
H
ATOM   2430  CG2 VAL   148      38.700  32.609  88.629  1.00  0.00
C
ATOM   2431 HG21 VAL   148      38.781  33.420  87.905  1.00  0.00
H
ATOM   2432 HG22 VAL   148      37.650  32.421  88.841  1.00  0.00
H
ATOM   2433 HG23 VAL   148      39.195  32.913  89.544  1.00  0.00
H
ATOM   2434  C   VAL   148      41.282  32.629  87.116  1.00  0.00
C
ATOM   2435  O   VAL   148      41.788  33.617  87.650  1.00  0.00
O
ATOM   2436  N   LEU   149      41.075  32.567  85.801  1.00  0.00
N
ATOM   2437  H   LEU   149      40.624  31.736  85.426  1.00  0.00
H
ATOM   2438  CA  LEU   149      41.440  33.650  84.879  1.00  0.00
C
ATOM   2439  HA  LEU   149      42.521  33.765  84.905  1.00  0.00
H
ATOM   2440  CB  LEU   149      41.040  33.248  83.449  1.00  0.00
C
ATOM   2441  HB2 LEU   149      40.205  32.551  83.484  1.00  0.00
H
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ATOM   2442  HB3 LEU   149      40.699  34.139  82.919  1.00  0.00
H
ATOM   2443  CG  LEU   149      42.171  32.625  82.622  1.00  0.00
C
ATOM   2444  HG  LEU   149      42.937  33.380  82.451  1.00  0.00
H
ATOM   2445  CD1 LEU   149      42.837  31.422  83.289  1.00  0.00
C
ATOM   2446 HD11 LEU   149      42.087  30.681  83.559  1.00  0.00
H
ATOM   2447 HD12 LEU   149      43.556  30.975  82.608  1.00  0.00
H
ATOM   2448 HD13 LEU   149      43.365  31.734  84.187  1.00  0.00
H
ATOM   2449  CD2 LEU   149      41.566  32.202  81.285  1.00  0.00
C
ATOM   2450 HD21 LEU   149      41.049  33.046  80.833  1.00  0.00
H
ATOM   2451 HD22 LEU   149      42.339  31.872  80.610  1.00  0.00
H
ATOM   2452 HD23 LEU   149      40.858  31.391  81.433  1.00  0.00
H
ATOM   2453  C   LEU   149      40.786  34.995  85.277  1.00  0.00
C
ATOM   2454  O   LEU   149      39.558  35.093  85.328  1.00  0.00
O
ATOM   2455  N   PRO   150      41.566  36.064  85.536  1.00  0.00
N
ATOM   2456  CD  PRO   150      43.002  36.047  85.797  1.00  0.00
C
ATOM   2457  HD2 PRO   150      43.558  35.841  84.886  1.00  0.00
H
ATOM   2458  HD3 PRO   150      43.234  35.290  86.544  1.00  0.00
H
ATOM   2459  CG  PRO   150      43.364  37.429  86.349  1.00  0.00
C
ATOM   2460  HG2 PRO   150      43.737  38.065  85.547  1.00  0.00
H
ATOM   2461  HG3 PRO   150      44.096  37.361  87.154  1.00  0.00
H
ATOM   2462  CB  PRO   150      42.027  37.963  86.858  1.00  0.00
C
ATOM   2463  HB2 PRO   150      41.961  39.046  86.829  1.00  0.00
H
ATOM   2464  HB3 PRO   150      41.863  37.590  87.865  1.00  0.00
H
ATOM   2465  CA  PRO   150      41.006  37.357  85.907  1.00  0.00
C
ATOM   2466  HA  PRO   150      40.066  37.218  86.443  1.00  0.00
H
ATOM   2467  C   PRO   150      40.751  38.273  84.701  1.00  0.00
C
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ATOM   2468  O   PRO   150      41.536  38.329  83.754  1.00  0.00
O
ATOM   2469  N   GLN   151      39.678  39.065  84.750  1.00  0.00
N
ATOM   2470  H   GLN   151      39.082  39.014  85.561  1.00  0.00
H
ATOM   2471  CA  GLN   151      39.403  40.090  83.733  1.00  0.00
C
ATOM   2472  HA  GLN   151      39.531  39.644  82.745  1.00  0.00
H
ATOM   2473  CB  GLN   151      37.946  40.578  83.848  1.00  0.00
C
ATOM   2474  HB2 GLN   151      37.777  40.948  84.859  1.00  0.00
H
ATOM   2475  HB3 GLN   151      37.803  41.407  83.155  1.00  0.00
H
ATOM   2476  CG  GLN   151      36.898  39.497  83.526  1.00  0.00
C
ATOM   2477  HG2 GLN   151      36.984  39.187  82.487  1.00  0.00
H
ATOM   2478  HG3 GLN   151      37.083  38.619  84.148  1.00  0.00
H
ATOM   2479  CD  GLN   151      35.472  39.979  83.786  1.00  0.00
C
ATOM   2480  OE1 GLN   151      34.778  40.532  82.941  1.00  0.00
O
ATOM   2481  NE2 GLN   151      34.980  39.795  84.988  1.00  0.00
N
ATOM   2482 HE21 GLN   151      34.058  40.134  85.157  1.00  0.00
H
ATOM   2483 HE22 GLN   151      35.536  39.364  85.705  1.00  0.00
H
ATOM   2484  C   GLN   151      40.397  41.268  83.857  1.00  0.00
C
ATOM   2485  O   GLN   151      40.600  41.787  84.957  1.00  0.00
O
ATOM   2486  N   GLY   152      40.978  41.704  82.728  1.00  0.00
N
ATOM   2487  H   GLY   152      40.738  41.249  81.860  1.00  0.00
H
ATOM   2488  CA  GLY   152      41.961  42.803  82.657  1.00  0.00
C
ATOM   2489  HA2 GLY   152      41.740  43.406  81.782  1.00  0.00
H
ATOM   2490  HA3 GLY   152      41.852  43.447  83.528  1.00  0.00
H
ATOM   2491  C   GLY   152      43.432  42.385  82.552  1.00  0.00
C
ATOM   2492  O   GLY   152      44.313  43.231  82.706  1.00  0.00
O
ATOM   2493  N   TRP   153      43.731  41.114  82.289  1.00  0.00
N
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ATOM   2494  H   TRP   153      42.975  40.467  82.127  1.00  0.00
H
ATOM   2495  CA  TRP   153      45.100  40.579  82.236  1.00  0.00
C
ATOM   2496  HA  TRP   153      45.809  41.391  82.403  1.00  0.00
H
ATOM   2497  CB  TRP   153      45.254  39.574  83.388  1.00  0.00
C
ATOM   2498  HB2 TRP   153      45.158  40.108  84.334  1.00  0.00
H
ATOM   2499  HB3 TRP   153      44.432  38.855  83.331  1.00  0.00
H
ATOM   2500  CG  TRP   153      46.530  38.797  83.405  1.00  0.00
C
ATOM   2501  CD1 TRP   153      47.775  39.295  83.580  1.00  0.00
C
ATOM   2502  HD1 TRP   153      48.001  40.338  83.777  1.00  0.00
H
ATOM   2503  NE1 TRP   153      48.710  38.288  83.462  1.00  0.00
N
ATOM   2504  HE1 TRP   153      49.706  38.427  83.616  1.00  0.00
H
ATOM   2505  CE2 TRP   153      48.103  37.071  83.216  1.00  0.00
C
ATOM   2506  CZ2 TRP   153      48.588  35.773  83.020  1.00  0.00
C
ATOM   2507  HZ2 TRP   153      49.648  35.601  82.997  1.00  0.00
H
ATOM   2508  CH2 TRP   153      47.681  34.709  82.893  1.00  0.00
C
ATOM   2509  HH2 TRP   153      48.028  33.695  82.792  1.00  0.00
H
ATOM   2510  CZ3 TRP   153      46.299  34.957  82.925  1.00  0.00
C
ATOM   2511  HZ3 TRP   153      45.601  34.137  82.835  1.00  0.00
H
ATOM   2512  CE3 TRP   153      45.832  36.270  83.088  1.00  0.00
C
ATOM   2513  HE3 TRP   153      44.779  36.454  83.141  1.00  0.00
H
ATOM   2514  CD2 TRP   153      46.713  37.359  83.230  1.00  0.00
C
ATOM   2515  C   TRP   153      45.445  39.946  80.870  1.00  0.00
C
ATOM   2516  O   TRP   153      44.601  39.259  80.294  1.00  0.00
O
ATOM   2517  N   LYS   154      46.684  40.134  80.379  1.00  0.00
N
ATOM   2518  H   LYS   154      47.293  40.722  80.939  1.00  0.00
H
ATOM   2519  CA  LYS   154      47.183  39.694  79.050  1.00  0.00
C
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ATOM   2520  HA  LYS   154      46.712  40.297  78.271  1.00  0.00
H
ATOM   2521  CB  LYS   154      48.716  39.856  78.970  1.00  0.00
C
ATOM   2522  HB2 LYS   154      49.158  39.402  79.860  1.00  0.00
H
ATOM   2523  HB3 LYS   154      49.072  39.300  78.099  1.00  0.00
H
ATOM   2524  CG  LYS   154      49.216  41.302  78.824  1.00  0.00
C
ATOM   2525  HG2 LYS   154      48.992  41.669  77.821  1.00  0.00
H
ATOM   2526  HG3 LYS   154      48.694  41.934  79.539  1.00  0.00
H
ATOM   2527  CD  LYS   154      50.728  41.405  79.092  1.00  0.00
C
ATOM   2528  HD2 LYS   154      50.999  42.462  79.101  1.00  0.00
H
ATOM   2529  HD3 LYS   154      50.932  40.987  80.078  1.00  0.00
H
ATOM   2530  CE  LYS   154      51.603  40.692  78.053  1.00  0.00
C
ATOM   2531  HE2 LYS   154      51.299  39.646  77.970  1.00  0.00
H
ATOM   2532  HE3 LYS   154      51.441  41.172  77.082  1.00  0.00
H
ATOM   2533  NZ  LYS   154      53.045  40.766  78.401  1.00  0.00
N
ATOM   2534  HZ1 LYS   154      53.296  40.114  79.141  1.00  0.00
H
ATOM   2535  HZ2 LYS   154      53.605  40.545  77.586  1.00  0.00
H
ATOM   2536  HZ3 LYS   154      53.314  41.704  78.680  1.00  0.00
H
ATOM   2537  C   LYS   154      46.876  38.234  78.713  1.00  0.00
C
ATOM   2538  O   LYS   154      46.521  37.941  77.579  1.00  0.00
O
ATOM   2539  N   GLY   155      47.045  37.324  79.676  1.00  0.00
N
ATOM   2540  H   GLY   155      47.322  37.639  80.592  1.00  0.00
H
ATOM   2541  CA  GLY   155      46.853  35.893  79.440  1.00  0.00
C
ATOM   2542  HA2 GLY   155      47.411  35.591  78.551  1.00  0.00
H
ATOM   2543  HA3 GLY   155      47.256  35.333  80.280  1.00  0.00
H
ATOM   2544  C   GLY   155      45.380  35.521  79.254  1.00  0.00
C
ATOM   2545  O   GLY   155      45.051  34.826  78.296  1.00  0.00
O
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ATOM   2546  N   SER   156      44.486  36.009  80.120  1.00  0.00
N
ATOM   2547  H   SER   156      44.811  36.648  80.827  1.00  0.00
H
ATOM   2548  CA  SER   156      43.067  35.619  80.166  1.00  0.00
C
ATOM   2549  HA  SER   156      43.012  34.647  80.652  1.00  0.00
H
ATOM   2550  CB  SER   156      42.261  36.585  81.027  1.00  0.00
C
ATOM   2551  HB2 SER   156      42.508  37.616  80.771  1.00  0.00
H
ATOM   2552  HB3 SER   156      41.200  36.414  80.862  1.00  0.00
H
ATOM   2553  OG  SER   156      42.537  36.333  82.384  1.00  0.00
O
ATOM   2554  HG  SER   156      42.147  37.056  82.915  1.00  0.00
H
ATOM   2555  C   SER   156      42.362  35.463  78.809  1.00  0.00
C
ATOM   2556  O   SER   156      41.732  34.420  78.630  1.00  0.00
O
ATOM   2557  N   PRO   157      42.448  36.396  77.834  1.00  0.00
N
ATOM   2558  CD  PRO   157      43.101  37.699  77.877  1.00  0.00
C
ATOM   2559  HD2 PRO   157      44.089  37.669  78.316  1.00  0.00
H
ATOM   2560  HD3 PRO   157      42.480  38.393  78.439  1.00  0.00
H
ATOM   2561  CG  PRO   157      43.221  38.162  76.426  1.00  0.00
C
ATOM   2562  HG2 PRO   157      44.113  37.736  75.961  1.00  0.00
H
ATOM   2563  HG3 PRO   157      43.232  39.250  76.342  1.00  0.00
H
ATOM   2564  CB  PRO   157      41.974  37.555  75.792  1.00  0.00
C
ATOM   2565  HB2 PRO   157      42.095  37.420  74.714  1.00  0.00
H
ATOM   2566  HB3 PRO   157      41.125  38.210  75.998  1.00  0.00
H
ATOM   2567  CA  PRO   157      41.791  36.221  76.539  1.00  0.00
C
ATOM   2568  HA  PRO   157      40.730  36.045  76.706  1.00  0.00
H
ATOM   2569  C   PRO   157      42.327  35.003  75.774  1.00  0.00
C
ATOM   2570  O   PRO   157      41.555  34.098  75.452  1.00  0.00
O
ATOM   2571  N   ALA   158      43.639  34.939  75.540  1.00  0.00
N
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ATOM   2572  H   ALA   158      44.229  35.697  75.855  1.00  0.00
H
ATOM   2573  CA  ALA   158      44.254  33.864  74.766  1.00  0.00
C
ATOM   2574  HA  ALA   158      43.699  33.770  73.833  1.00  0.00
H
ATOM   2575  CB  ALA   158      45.696  34.282  74.446  1.00  0.00
C
ATOM   2576  HB1 ALA   158      46.269  34.397  75.369  1.00  0.00
H
ATOM   2577  HB2 ALA   158      46.171  33.527  73.820  1.00  0.00
H
ATOM   2578  HB3 ALA   158      45.692  35.234  73.914  1.00  0.00
H
ATOM   2579  C   ALA   158      44.186  32.502  75.484  1.00  0.00
C
ATOM   2580  O   ALA   158      43.921  31.476  74.852  1.00  0.00
O
ATOM   2581  N   ILE   159      44.360  32.486  76.814  1.00  0.00
N
ATOM   2582  H   ILE   159      44.560  33.370  77.272  1.00  0.00
H
ATOM   2583  CA  ILE   159      44.250  31.273  77.636  1.00  0.00
C
ATOM   2584  HA  ILE   159      44.871  30.504  77.180  1.00  0.00
H
ATOM   2585  CB  ILE   159      44.765  31.513  79.077  1.00  0.00
C
ATOM   2586  HB  ILE   159      44.174  32.317  79.514  1.00  0.00
H
ATOM   2587  CG2 ILE   159      44.568  30.242  79.937  1.00  0.00
C
ATOM   2588 HG21 ILE   159      44.992  29.374  79.438  1.00  0.00
H
ATOM   2589 HG22 ILE   159      45.048  30.360  80.909  1.00  0.00
H
ATOM   2590 HG23 ILE   159      43.511  30.043  80.108  1.00  0.00
H
ATOM   2591  CG1 ILE   159      46.246  31.952  79.176  1.00  0.00
C
ATOM   2592 HG12 ILE   159      46.379  32.939  78.757  1.00  0.00
H
ATOM   2593 HG13 ILE   159      46.520  32.022  80.231  1.00  0.00
H
ATOM   2594  CD1 ILE   159      47.246  31.045  78.464  1.00  0.00
C
ATOM   2595 HD11 ILE   159      47.175  31.181  77.385  1.00  0.00
H
ATOM   2596 HD12 ILE   159      48.256  31.288  78.791  1.00  0.00
H
ATOM   2597 HD13 ILE   159      47.029  30.015  78.710  1.00  0.00
H
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ATOM   2598  C   ILE   159      42.813  30.730  77.637  1.00  0.00
C
ATOM   2599  O   ILE   159      42.634  29.516  77.498  1.00  0.00
O
ATOM   2600  N   PHE   160      41.791  31.592  77.750  1.00  0.00
N
ATOM   2601  H   PHE   160      41.968  32.585  77.873  1.00  0.00
H
ATOM   2602  CA  PHE   160      40.394  31.151  77.680  1.00  0.00
C
ATOM   2603  HA  PHE   160      40.245  30.361  78.417  1.00  0.00
H
ATOM   2604  CB  PHE   160      39.418  32.292  78.018  1.00  0.00
C
ATOM   2605  HB2 PHE   160      39.638  32.674  79.013  1.00  0.00
H
ATOM   2606  HB3 PHE   160      39.553  33.108  77.308  1.00  0.00
H
ATOM   2607  CG  PHE   160      37.973  31.825  77.987  1.00  0.00
C
ATOM   2608  CD1 PHE   160      37.394  31.253  79.135  1.00  0.00
C
ATOM   2609  HD1 PHE   160      37.940  31.232  80.065  1.00  0.00
H
ATOM   2610  CE1 PHE   160      36.119  30.664  79.067  1.00  0.00
C
ATOM   2611  HE1 PHE   160      35.688  30.197  79.941  1.00  0.00
H
ATOM   2612  CZ  PHE   160      35.416  30.651  77.853  1.00  0.00
C
ATOM   2613  HZ  PHE   160      34.445  30.181  77.789  1.00  0.00
H
ATOM   2614  CE2 PHE   160      35.977  31.250  76.715  1.00  0.00
C
ATOM   2615  HE2 PHE   160      35.435  31.223  75.784  1.00  0.00
H
ATOM   2616  CD2 PHE   160      37.246  31.847  76.782  1.00  0.00
C
ATOM   2617  HD2 PHE   160      37.677  32.278  75.892  1.00  0.00
H
ATOM   2618  C   PHE   160      40.083  30.551  76.305  1.00  0.00
C
ATOM   2619  O   PHE   160      39.626  29.417  76.229  1.00  0.00
O
ATOM   2620  N   GLN   161      40.383  31.261  75.212  1.00  0.00
N
ATOM   2621  H   GLN   161      40.794  32.182  75.337  1.00  0.00
H
ATOM   2622  CA  GLN   161      40.053  30.828  73.844  1.00  0.00
C
ATOM   2623  HA  GLN   161      38.975  30.670  73.749  1.00  0.00
H
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ATOM   2624  CB  GLN   161      40.485  31.943  72.885  1.00  0.00
C
ATOM   2625  HB2 GLN   161      41.538  32.158  73.079  1.00  0.00
H
ATOM   2626  HB3 GLN   161      40.394  31.588  71.856  1.00  0.00
H
ATOM   2627  CG  GLN   161      39.664  33.227  73.030  1.00  0.00
C
ATOM   2628  HG2 GLN   161      38.696  33.083  72.564  1.00  0.00
H
ATOM   2629  HG3 GLN   161      39.480  33.444  74.075  1.00  0.00
H
ATOM   2630  CD  GLN   161      40.360  34.440  72.423  1.00  0.00
C
ATOM   2631  OE1 GLN   161      41.475  34.410  71.929  1.00  0.00
O
ATOM   2632  NE2 GLN   161      39.713  35.578  72.445  1.00  0.00
N
ATOM   2633 HE21 GLN   161      40.224  36.367  72.095  1.00  0.00
H
ATOM   2634 HE22 GLN   161      38.831  35.664  72.919  1.00  0.00
H
ATOM   2635  C   GLN   161      40.757  29.517  73.441  1.00  0.00
C
ATOM   2636  O   GLN   161      40.161  28.646  72.796  1.00  0.00
O
ATOM   2637  N   SER   162      42.024  29.366  73.844  1.00  0.00
N
ATOM   2638  H   SER   162      42.466  30.139  74.333  1.00  0.00
H
ATOM   2639  CA  SER   162      42.799  28.137  73.645  1.00  0.00
C
ATOM   2640  HA  SER   162      42.802  27.893  72.582  1.00  0.00
H
ATOM   2641  CB  SER   162      44.246  28.398  74.077  1.00  0.00
C
ATOM   2642  HB2 SER   162      44.651  29.217  73.480  1.00  0.00
H
ATOM   2643  HB3 SER   162      44.269  28.688  75.130  1.00  0.00
H
ATOM   2644  OG  SER   162      45.040  27.246  73.886  1.00  0.00
O
ATOM   2645  HG  SER   162      45.966  27.503  73.946  1.00  0.00
H
ATOM   2646  C   SER   162      42.176  26.955  74.405  1.00  0.00
C
ATOM   2647  O   SER   162      41.903  25.909  73.814  1.00  0.00
O
ATOM   2648  N   SER   163      41.841  27.139  75.687  1.00  0.00
N
ATOM   2649  H   SER   163      42.060  28.026  76.128  1.00  0.00
H
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ATOM   2650  CA  SER   163      41.169  26.107  76.490  1.00  0.00
C
ATOM   2651  HA  SER   163      41.739  25.191  76.398  1.00  0.00
H
ATOM   2652  CB  SER   163      41.168  26.493  77.970  1.00  0.00
C
ATOM   2653  HB2 SER   163      40.755  27.494  78.102  1.00  0.00
H
ATOM   2654  HB3 SER   163      40.562  25.784  78.535  1.00  0.00
H
ATOM   2655  OG  SER   163      42.499  26.447  78.445  1.00  0.00
O
ATOM   2656  HG  SER   163      42.736  27.336  78.721  1.00  0.00
H
ATOM   2657  C   SER   163      39.759  25.785  75.994  1.00  0.00
C
ATOM   2658  O   SER   163      39.418  24.611  75.876  1.00  0.00
O
ATOM   2659  N   MET   164      38.968  26.789  75.615  1.00  0.00
N
ATOM   2660  H   MET   164      39.310  27.736  75.726  1.00  0.00
H
ATOM   2661  CA  MET   164      37.621  26.620  75.062  1.00  0.00
C
ATOM   2662  HA  MET   164      37.023  26.084  75.795  1.00  0.00
H
ATOM   2663  CB  MET   164      36.996  28.012  74.841  1.00  0.00
C
ATOM   2664  HB2 MET   164      37.102  28.603  75.751  1.00  0.00
H
ATOM   2665  HB3 MET   164      37.521  28.527  74.037  1.00  0.00
H
ATOM   2666  CG  MET   164      35.506  27.937  74.501  1.00  0.00
C
ATOM   2667  HG2 MET   164      35.138  28.948  74.317  1.00  0.00
H
ATOM   2668  HG3 MET   164      35.381  27.363  73.584  1.00  0.00
H
ATOM   2669  SD  MET   164      34.494  27.194  75.808  1.00  0.00
S
ATOM   2670  CE  MET   164      32.920  27.164  74.930  1.00  0.00
C
ATOM   2671  HE1 MET   164      33.010  26.524  74.053  1.00  0.00
H
ATOM   2672  HE2 MET   164      32.153  26.770  75.595  1.00  0.00
H
ATOM   2673  HE3 MET   164      32.646  28.173  74.618  1.00  0.00
H
ATOM   2674  C   MET   164      37.647  25.778  73.777  1.00  0.00
C
ATOM   2675  O   MET   164      36.852  24.851  73.618  1.00  0.00
O
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ATOM   2676  N   THR   165      38.651  25.992  72.921  1.00  0.00
N
ATOM   2677  H   THR   165      39.269  26.774  73.100  1.00  0.00
H
ATOM   2678  CA  THR   165      38.885  25.149  71.738  1.00  0.00
C
ATOM   2679  HA  THR   165      37.968  25.134  71.151  1.00  0.00
H
ATOM   2680  CB  THR   165      40.002  25.730  70.857  1.00  0.00
C
ATOM   2681  HB  THR   165      40.935  25.789  71.418  1.00  0.00
H
ATOM   2682  CG2 THR   165      40.223  24.927  69.575  1.00  0.00
C
ATOM   2683 HG21 THR   165      39.276  24.800  69.051  1.00  0.00
H
ATOM   2684 HG22 THR   165      40.925  25.457  68.934  1.00  0.00
H
ATOM   2685 HG23 THR   165      40.639  23.945  69.809  1.00  0.00
H
ATOM   2686  OG1 THR   165      39.630  27.026  70.447  1.00  0.00
O
ATOM   2687  HG1 THR   165      39.713  27.613  71.211  1.00  0.00
H
ATOM   2688  C   THR   165      39.185  23.694  72.114  1.00  0.00
C
ATOM   2689  O   THR   165      38.587  22.790  71.531  1.00  0.00
O
ATOM   2690  N   LYS   166      40.031  23.452  73.128  1.00  0.00
N
ATOM   2691  H   LYS   166      40.483  24.242  73.577  1.00  0.00
H
ATOM   2692  CA  LYS   166      40.293  22.092  73.651  1.00  0.00
C
ATOM   2693  HA  LYS   166      40.622  21.456  72.825  1.00  0.00
H
ATOM   2694  CB  LYS   166      41.394  22.102  74.731  1.00  0.00
C
ATOM   2695  HB2 LYS   166      41.105  22.775  75.537  1.00  0.00
H
ATOM   2696  HB3 LYS   166      41.460  21.094  75.145  1.00  0.00
H
ATOM   2697  CG  LYS   166      42.785  22.487  74.202  1.00  0.00
C
ATOM   2698  HG2 LYS   166      43.039  21.814  73.381  1.00  0.00
H
ATOM   2699  HG3 LYS   166      42.769  23.503  73.811  1.00  0.00
H
ATOM   2700  CD  LYS   166      43.876  22.373  75.282  1.00  0.00
C
ATOM   2701  HD2 LYS   166      43.853  21.367  75.703  1.00  0.00
H
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ATOM   2702  HD3 LYS   166      44.846  22.514  74.801  1.00  0.00
H
ATOM   2703  CE  LYS   166      43.727  23.416  76.401  1.00  0.00
C
ATOM   2704  HE2 LYS   166      43.888  24.408  75.965  1.00  0.00
H
ATOM   2705  HE3 LYS   166      42.707  23.382  76.791  1.00  0.00
H
ATOM   2706  NZ  LYS   166      44.688  23.180  77.508  1.00  0.00
N
ATOM   2707  HZ1 LYS   166      45.624  22.991  77.144  1.00  0.00
H
ATOM   2708  HZ2 LYS   166      44.723  23.957  78.154  1.00  0.00
H
ATOM   2709  HZ3 LYS   166      44.454  22.345  78.024  1.00  0.00
H
ATOM   2710  C   LYS   166      39.031  21.424  74.215  1.00  0.00
C
ATOM   2711  O   LYS   166      38.843  20.228  74.015  1.00  0.00
O
ATOM   2712  N   ILE   167      38.148  22.182  74.876  1.00  0.00
N
ATOM   2713  H   ILE   167      38.390  23.152  75.045  1.00  0.00
H
ATOM   2714  CA  ILE   167      36.868  21.671  75.397  1.00  0.00
C
ATOM   2715  HA  ILE   167      37.070  20.750  75.948  1.00  0.00
H
ATOM   2716  CB  ILE   167      36.230  22.688  76.385  1.00  0.00
C
ATOM   2717  HB  ILE   167      36.507  23.701  76.092  1.00  0.00
H
ATOM   2718  CG2 ILE   167      34.689  22.619  76.430  1.00  0.00
C
ATOM   2719 HG21 ILE   167      34.362  21.608  76.680  1.00  0.00
H
ATOM   2720 HG22 ILE   167      34.306  23.309  77.183  1.00  0.00
H
ATOM   2721 HG23 ILE   167      34.266  22.916  75.471  1.00  0.00
H
ATOM   2722  CG1 ILE   167      36.697  22.440  77.834  1.00  0.00
C
ATOM   2723 HG12 ILE   167      36.180  23.133  78.499  1.00  0.00
H
ATOM   2724 HG13 ILE   167      36.408  21.429  78.110  1.00  0.00
H
ATOM   2725  CD1 ILE   167      38.195  22.571  78.103  1.00  0.00
C
ATOM   2726 HD11 ILE   167      38.519  23.597  77.956  1.00  0.00
H
ATOM   2727 HD12 ILE   167      38.375  22.299  79.138  1.00  0.00
H
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ATOM   2728 HD13 ILE   167      38.762  21.894  77.465  1.00  0.00
H
ATOM   2729  C   ILE   167      35.929  21.267  74.252  1.00  0.00
C
ATOM   2730  O   ILE   167      35.252  20.246  74.356  1.00  0.00
O
ATOM   2731  N   LEU   168      35.883  22.019  73.148  1.00  0.00
N
ATOM   2732  H   LEU   168      36.421  22.880  73.130  1.00  0.00
H
ATOM   2733  CA  LEU   168      35.006  21.699  72.015  1.00  0.00
C
ATOM   2734  HA  LEU   168      34.070  21.307  72.410  1.00  0.00
H
ATOM   2735  CB  LEU   168      34.681  22.978  71.224  1.00  0.00
C
ATOM   2736  HB2 LEU   168      35.616  23.430  70.888  1.00  0.00
H
ATOM   2737  HB3 LEU   168      34.111  22.689  70.340  1.00  0.00
H
ATOM   2738  CG  LEU   168      33.862  24.034  71.993  1.00  0.00
C
ATOM   2739  HG  LEU   168      34.437  24.416  72.834  1.00  0.00
H
ATOM   2740  CD1 LEU   168      33.567  25.190  71.042  1.00  0.00
C
ATOM   2741 HD11 LEU   168      32.952  24.854  70.209  1.00  0.00
H
ATOM   2742 HD12 LEU   168      33.046  25.971  71.589  1.00  0.00
H
ATOM   2743 HD13 LEU   168      34.505  25.605  70.675  1.00  0.00
H
ATOM   2744  CD2 LEU   168      32.526  23.498  72.519  1.00  0.00
C
ATOM   2745 HD21 LEU   168      32.704  22.779  73.317  1.00  0.00
H
ATOM   2746 HD22 LEU   168      31.940  24.318  72.935  1.00  0.00
H
ATOM   2747 HD23 LEU   168      31.966  23.025  71.714  1.00  0.00
H
ATOM   2748  C   LEU   168      35.540  20.584  71.095  1.00  0.00
C
ATOM   2749  O   LEU   168      34.736  19.993  70.371  1.00  0.00
O
ATOM   2750  N   GLU   169      36.838  20.261  71.118  1.00  0.00
N
ATOM   2751  H   GLU   169      37.456  20.795  71.717  1.00  0.00
H
ATOM   2752  CA  GLU   169      37.446  19.273  70.204  1.00  0.00
C
ATOM   2753  HA  GLU   169      37.332  19.674  69.196  1.00  0.00
H
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ATOM   2754  CB  GLU   169      38.968  19.143  70.439  1.00  0.00
C
ATOM   2755  HB2 GLU   169      39.407  20.137  70.533  1.00  0.00
H
ATOM   2756  HB3 GLU   169      39.165  18.598  71.359  1.00  0.00
H
ATOM   2757  CG  GLU   169      39.633  18.410  69.259  1.00  0.00
C
ATOM   2758  HG2 GLU   169      39.104  17.470  69.087  1.00  0.00
H
ATOM   2759  HG3 GLU   169      39.519  19.024  68.363  1.00  0.00
H
ATOM   2760  CD  GLU   169      41.124  18.088  69.451  1.00  0.00
C
ATOM   2761  OE1 GLU   169      41.866  18.916  70.015  1.00  0.00
O
ATOM   2762  OE2 GLU   169      41.546  17.015  68.947  1.00  0.00
O
ATOM   2763  C   GLU   169      36.734  17.896  70.201  1.00  0.00
C
ATOM   2764  O   GLU   169      36.375  17.430  69.114  1.00  0.00
O
ATOM   2765  N   PRO   170      36.420  17.248  71.350  1.00  0.00
N
ATOM   2766  CD  PRO   170      36.756  17.619  72.719  1.00  0.00
C
ATOM   2767  HD2 PRO   170      35.955  18.232  73.130  1.00  0.00
H
ATOM   2768  HD3 PRO   170      37.704  18.144  72.801  1.00  0.00
H
ATOM   2769  CG  PRO   170      36.823  16.300  73.482  1.00  0.00
C
ATOM   2770  HG2 PRO   170      36.641  16.443  74.549  1.00  0.00
H
ATOM   2771  HG3 PRO   170      37.788  15.817  73.310  1.00  0.00
H
ATOM   2772  CB  PRO   170      35.714  15.488  72.815  1.00  0.00
C
ATOM   2773  HB2 PRO   170      34.755  15.744  73.268  1.00  0.00
H
ATOM   2774  HB3 PRO   170      35.896  14.416  72.905  1.00  0.00
H
ATOM   2775  CA  PRO   170      35.747  15.944  71.348  1.00  0.00
C
ATOM   2776  HA  PRO   170      36.351  15.242  70.775  1.00  0.00
H
ATOM   2777  C   PRO   170      34.336  15.990  70.744  1.00  0.00
C
ATOM   2778  O   PRO   170      33.924  15.060  70.048  1.00  0.00
O
ATOM   2779  N   PHE   171      33.602  17.083  70.965  1.00  0.00
N
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ATOM   2780  H   PHE   171      34.017  17.840  71.486  1.00  0.00
H
ATOM   2781  CA  PHE   171      32.255  17.266  70.418  1.00  0.00
C
ATOM   2782  HA  PHE   171      31.686  16.343  70.568  1.00  0.00
H
ATOM   2783  CB  PHE   171      31.550  18.398  71.179  1.00  0.00
C
ATOM   2784  HB2 PHE   171      31.601  18.185  72.248  1.00  0.00
H
ATOM   2785  HB3 PHE   171      32.075  19.339  71.005  1.00  0.00
H
ATOM   2786  CG  PHE   171      30.093  18.560  70.786  1.00  0.00
C
ATOM   2787  CD1 PHE   171      29.082  17.954  71.556  1.00  0.00
C
ATOM   2788  HD1 PHE   171      29.334  17.392  72.445  1.00  0.00
H
ATOM   2789  CE1 PHE   171      27.736  18.078  71.173  1.00  0.00
C
ATOM   2790  HE1 PHE   171      26.962  17.618  71.768  1.00  0.00
H
ATOM   2791  CZ  PHE   171      27.391  18.801  70.019  1.00  0.00
C
ATOM   2792  HZ  PHE   171      26.351  18.893  69.735  1.00  0.00
H
ATOM   2793  CE2 PHE   171      28.396  19.403  69.245  1.00  0.00
C
ATOM   2794  HE2 PHE   171      28.130  19.955  68.355  1.00  0.00
H
ATOM   2795  CD2 PHE   171      29.743  19.289  69.631  1.00  0.00
C
ATOM   2796  HD2 PHE   171      30.511  19.757  69.033  1.00  0.00
H
ATOM   2797  C   PHE   171      32.294  17.536  68.907  1.00  0.00
C
ATOM   2798  O   PHE   171      31.502  16.960  68.158  1.00  0.00
O
ATOM   2799  N   LYS   172      33.249  18.363  68.445  1.00  0.00
N
ATOM   2800  H   LYS   172      33.870  18.796  69.126  1.00  0.00
H
ATOM   2801  CA  LYS   172      33.513  18.614  67.017  1.00  0.00
C
ATOM   2802  HA  LYS   172      32.621  19.028  66.547  1.00  0.00
H
ATOM   2803  CB  LYS   172      34.684  19.609  66.871  1.00  0.00
C
ATOM   2804  HB2 LYS   172      35.494  19.282  67.523  1.00  0.00
H
ATOM   2805  HB3 LYS   172      35.068  19.565  65.850  1.00  0.00
H
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ATOM   2806  CG  LYS   172      34.367  21.080  67.210  1.00  0.00
C
ATOM   2807  HG2 LYS   172      33.732  21.134  68.096  1.00  0.00
H
ATOM   2808  HG3 LYS   172      35.312  21.571  67.446  1.00  0.00
H
ATOM   2809  CD  LYS   172      33.695  21.834  66.048  1.00  0.00
C
ATOM   2810  HD2 LYS   172      34.204  21.602  65.111  1.00  0.00
H
ATOM   2811  HD3 LYS   172      32.663  21.490  65.961  1.00  0.00
H
ATOM   2812  CE  LYS   172      33.695  23.360  66.248  1.00  0.00
C
ATOM   2813  HE2 LYS   172      33.043  23.802  65.489  1.00  0.00
H
ATOM   2814  HE3 LYS   172      33.268  23.587  67.229  1.00  0.00
H
ATOM   2815  NZ  LYS   172      35.049  23.961  66.130  1.00  0.00
N
ATOM   2816  HZ1 LYS   172      35.524  23.679  65.274  1.00  0.00
H
ATOM   2817  HZ2 LYS   172      35.029  24.974  66.129  1.00  0.00
H
ATOM   2818  HZ3 LYS   172      35.667  23.658  66.870  1.00  0.00
H
ATOM   2819  C   LYS   172      33.822  17.309  66.264  1.00  0.00
C
ATOM   2820  O   LYS   172      33.284  17.107  65.180  1.00  0.00
O
ATOM   2821  N   LYS   173      34.619  16.403  66.855  1.00  0.00
N
ATOM   2822  H   LYS   173      35.066  16.668  67.726  1.00  0.00
H
ATOM   2823  CA  LYS   173      34.945  15.089  66.259  1.00  0.00
C
ATOM   2824  HA  LYS   173      35.299  15.253  65.240  1.00  0.00
H
ATOM   2825  CB  LYS   173      36.055  14.383  67.055  1.00  0.00
C
ATOM   2826  HB2 LYS   173      35.791  14.361  68.114  1.00  0.00
H
ATOM   2827  HB3 LYS   173      36.118  13.352  66.701  1.00  0.00
H
ATOM   2828  CG  LYS   173      37.437  15.022  66.881  1.00  0.00
C
ATOM   2829  HG2 LYS   173      37.665  15.105  65.818  1.00  0.00
H
ATOM   2830  HG3 LYS   173      37.447  16.018  67.317  1.00  0.00
H
ATOM   2831  CD  LYS   173      38.504  14.151  67.558  1.00  0.00
C
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ATOM   2832  HD2 LYS   173      38.277  14.041  68.621  1.00  0.00
H
ATOM   2833  HD3 LYS   173      38.504  13.166  67.086  1.00  0.00
H
ATOM   2834  CE  LYS   173      39.881  14.796  67.392  1.00  0.00
C
ATOM   2835  HE2 LYS   173      39.993  15.105  66.349  1.00  0.00
H
ATOM   2836  HE3 LYS   173      39.939  15.690  68.020  1.00  0.00
H
ATOM   2837  NZ  LYS   173      40.975  13.862  67.736  1.00  0.00
N
ATOM   2838  HZ1 LYS   173      40.970  13.041  67.142  1.00  0.00
H
ATOM   2839  HZ2 LYS   173      41.868  14.319  67.574  1.00  0.00
H
ATOM   2840  HZ3 LYS   173      40.985  13.603  68.717  1.00  0.00
H
ATOM   2841  C   LYS   173      33.741  14.152  66.128  1.00  0.00
C
ATOM   2842  O   LYS   173      33.598  13.503  65.097  1.00  0.00
O
ATOM   2843  N   GLN   174      32.879  14.062  67.146  1.00  0.00
N
ATOM   2844  H   GLN   174      33.070  14.584  67.991  1.00  0.00
H
ATOM   2845  CA  GLN   174      31.697  13.185  67.083  1.00  0.00
C
ATOM   2846  HA  GLN   174      32.003  12.219  66.676  1.00  0.00
H
ATOM   2847  CB  GLN   174      31.117  12.942  68.487  1.00  0.00
C
ATOM   2848  HB2 GLN   174      30.985  13.891  69.010  1.00  0.00
H
ATOM   2849  HB3 GLN   174      30.139  12.470  68.376  1.00  0.00
H
ATOM   2850  CG  GLN   174      32.018  12.007  69.311  1.00  0.00
C
ATOM   2851  HG2 GLN   174      32.272  11.129  68.717  1.00  0.00
H
ATOM   2852  HG3 GLN   174      32.943  12.529  69.556  1.00  0.00
H
ATOM   2853  CD  GLN   174      31.349  11.517  70.592  1.00  0.00
C
ATOM   2854  OE1 GLN   174      30.268  10.951  70.595  1.00  0.00
O
ATOM   2855  NE2 GLN   174      31.978  11.678  71.736  1.00  0.00
N
ATOM   2856 HE21 GLN   174      31.512  11.327  72.553  1.00  0.00
H
ATOM   2857 HE22 GLN   174      32.894  12.087  71.761  1.00  0.00
H
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ATOM   2858  C   GLN   174      30.611  13.719  66.135  1.00  0.00
C
ATOM   2859  O   GLN   174      29.918  12.933  65.482  1.00  0.00
O
ATOM   2860  N   ASN   175      30.502  15.046  66.009  1.00  0.00
N
ATOM   2861  H   ASN   175      31.114  15.630  66.567  1.00  0.00
H
ATOM   2862  CA  ASN   175      29.462  15.721  65.233  1.00  0.00
C
ATOM   2863  HA  ASN   175      28.828  14.972  64.754  1.00  0.00
H
ATOM   2864  CB  ASN   175      28.580  16.499  66.235  1.00  0.00
C
ATOM   2865  HB2 ASN   175      29.154  17.323  66.662  1.00  0.00
H
ATOM   2866  HB3 ASN   175      27.744  16.916  65.690  1.00  0.00
H
ATOM   2867  CG  ASN   175      27.984  15.662  67.351  1.00  0.00
C
ATOM   2868  OD1 ASN   175      27.197  14.757  67.131  1.00  0.00
O
ATOM   2869  ND2 ASN   175      28.277  15.967  68.593  1.00  0.00
N
ATOM   2870 HD21 ASN   175      27.847  15.425  69.323  1.00  0.00
H
ATOM   2871 HD22 ASN   175      28.899  16.734  68.795  1.00  0.00
H
ATOM   2872  C   ASN   175      30.016  16.619  64.091  1.00  0.00
C
ATOM   2873  O   ASN   175      29.738  17.823  64.106  1.00  0.00
O
ATOM   2874  N   PRO   176      30.746  16.095  63.072  1.00  0.00
N
ATOM   2875  CD  PRO   176      31.141  14.703  62.888  1.00  0.00
C
ATOM   2876  HD2 PRO   176      30.320  14.141  62.440  1.00  0.00
H
ATOM   2877  HD3 PRO   176      31.456  14.235  63.812  1.00  0.00
H
ATOM   2878  CG  PRO   176      32.339  14.723  61.944  1.00  0.00
C
ATOM   2879  HG2 PRO   176      32.414  13.799  61.369  1.00  0.00
H
ATOM   2880  HG3 PRO   176      33.252  14.900  62.515  1.00  0.00
H
ATOM   2881  CB  PRO   176      32.043  15.925  61.057  1.00  0.00
C
ATOM   2882  HB2 PRO   176      31.354  15.624  60.265  1.00  0.00
H
ATOM   2883  HB3 PRO   176      32.952  16.343  60.625  1.00  0.00
H
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ATOM   2884  CA  PRO   176      31.359  16.914  62.010  1.00  0.00
C
ATOM   2885  HA  PRO   176      32.117  17.555  62.463  1.00  0.00
H
ATOM   2886  C   PRO   176      30.383  17.792  61.212  1.00  0.00
C
ATOM   2887  O   PRO   176      30.776  18.827  60.678  1.00  0.00
O
ATOM   2888  N   ASP   177      29.113  17.389  61.136  1.00  0.00
N
ATOM   2889  H   ASP   177      28.875  16.506  61.558  1.00  0.00
H
ATOM   2890  CA  ASP   177      28.065  18.111  60.408  1.00  0.00
C
ATOM   2891  HA  ASP   177      28.508  18.521  59.498  1.00  0.00
H
ATOM   2892  CB  ASP   177      26.961  17.124  59.985  1.00  0.00
C
ATOM   2893  HB2 ASP   177      26.542  16.664  60.883  1.00  0.00
H
ATOM   2894  HB3 ASP   177      26.162  17.681  59.494  1.00  0.00
H
ATOM   2895  CG  ASP   177      27.416  16.022  59.016  1.00  0.00
C
ATOM   2896  OD1 ASP   177      28.307  16.258  58.172  1.00  0.00
O
ATOM   2897  OD2 ASP   177      26.824  14.919  59.072  1.00  0.00
O
ATOM   2898  C   ASP   177      27.475  19.306  61.196  1.00  0.00
C
ATOM   2899  O   ASP   177      26.650  20.046  60.653  1.00  0.00
O
ATOM   2900  N   ILE   178      27.874  19.529  62.457  1.00  0.00
N
ATOM   2901  H   ILE   178      28.610  18.940  62.837  1.00  0.00
H
ATOM   2902  CA  ILE   178      27.414  20.657  63.285  1.00  0.00
C
ATOM   2903  HA  ILE   178      26.441  20.989  62.921  1.00  0.00
H
ATOM   2904  CB  ILE   178      27.240  20.241  64.763  1.00  0.00
C
ATOM   2905  HB  ILE   178      28.216  19.930  65.144  1.00  0.00
H
ATOM   2906  CG2 ILE   178      26.768  21.435  65.612  1.00  0.00
C
ATOM   2907 HG21 ILE   178      25.869  21.880  65.182  1.00  0.00
H
ATOM   2908 HG22 ILE   178      26.560  21.112  66.632  1.00  0.00
H
ATOM   2909 HG23 ILE   178      27.546  22.195  65.651  1.00  0.00
H
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ATOM   2910  CG1 ILE   178      26.274  19.050  64.952  1.00  0.00
C
ATOM   2911 HG12 ILE   178      26.640  18.210  64.367  1.00  0.00
H
ATOM   2912 HG13 ILE   178      26.291  18.755  66.001  1.00  0.00
H
ATOM   2913  CD1 ILE   178      24.818  19.281  64.544  1.00  0.00
C
ATOM   2914 HD11 ILE   178      24.773  19.533  63.487  1.00  0.00
H
ATOM   2915 HD12 ILE   178      24.254  18.363  64.707  1.00  0.00
H
ATOM   2916 HD13 ILE   178      24.373  20.074  65.144  1.00  0.00
H
ATOM   2917  C   ILE   178      28.385  21.833  63.154  1.00  0.00
C
ATOM   2918  O   ILE   178      29.566  21.729  63.486  1.00  0.00
O
ATOM   2919  N   VAL   179      27.878  22.993  62.734  1.00  0.00
N
ATOM   2920  H   VAL   179      26.879  23.065  62.571  1.00  0.00
H
ATOM   2921  CA  VAL   179      28.689  24.209  62.606  1.00  0.00
C
ATOM   2922  HA  VAL   179      29.718  23.920  62.386  1.00  0.00
H
ATOM   2923  CB  VAL   179      28.206  25.100  61.446  1.00  0.00
C
ATOM   2924  HB  VAL   179      27.223  25.516  61.676  1.00  0.00
H
ATOM   2925  CG1 VAL   179      29.188  26.253  61.207  1.00  0.00
C
ATOM   2926 HG11 VAL   179      30.170  25.858  60.941  1.00  0.00
H
ATOM   2927 HG12 VAL   179      28.819  26.883  60.398  1.00  0.00
H
ATOM   2928 HG13 VAL   179      29.273  26.860  62.106  1.00  0.00
H
ATOM   2929  CG2 VAL   179      28.107  24.298  60.143  1.00  0.00
C
ATOM   2930 HG21 VAL   179      27.286  23.585  60.211  1.00  0.00
H
ATOM   2931 HG22 VAL   179      27.927  24.963  59.301  1.00  0.00
H
ATOM   2932 HG23 VAL   179      29.034  23.752  59.971  1.00  0.00
H
ATOM   2933  C   VAL   179      28.671  24.960  63.929  1.00  0.00
C
ATOM   2934  O   VAL   179      27.632  25.489  64.323  1.00  0.00
O
ATOM   2935  N   ILE   180      29.826  25.035  64.596  1.00  0.00
N
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ATOM   2936  H   ILE   180      30.628  24.563  64.207  1.00  0.00
H
ATOM   2937  CA  ILE   180      30.017  25.846  65.805  1.00  0.00
C
ATOM   2938  HA  ILE   180      29.064  26.292  66.066  1.00  0.00
H
ATOM   2939  CB  ILE   180      30.457  25.027  67.040  1.00  0.00
C
ATOM   2940  HB  ILE   180      31.465  24.658  66.869  1.00  0.00
H
ATOM   2941  CG2 ILE   180      30.486  25.949  68.276  1.00  0.00
C
ATOM   2942 HG21 ILE   180      29.499  26.380  68.449  1.00  0.00
H
ATOM   2943 HG22 ILE   180      30.795  25.403  69.165  1.00  0.00
H
ATOM   2944 HG23 ILE   180      31.196  26.764  68.138  1.00  0.00
H
ATOM   2945  CG1 ILE   180      29.534  23.811  67.262  1.00  0.00
C
ATOM   2946 HG12 ILE   180      28.517  24.166  67.412  1.00  0.00
H
ATOM   2947 HG13 ILE   180      29.550  23.186  66.370  1.00  0.00
H
ATOM   2948  CD1 ILE   180      29.925  22.912  68.440  1.00  0.00
C
ATOM   2949 HD11 ILE   180      29.786  23.432  69.386  1.00  0.00
H
ATOM   2950 HD12 ILE   180      29.283  22.035  68.435  1.00  0.00
H
ATOM   2951 HD13 ILE   180      30.964  22.595  68.338  1.00  0.00
H
ATOM   2952  C   ILE   180      31.005  26.969  65.504  1.00  0.00
C
ATOM   2953  O   ILE   180      32.194  26.706  65.311  1.00  0.00
O
ATOM   2954  N   TYR   181      30.512  28.206  65.512  1.00  0.00
N
ATOM   2955  H   TYR   181      29.535  28.307  65.774  1.00  0.00
H
ATOM   2956  CA  TYR   181      31.348  29.397  65.652  1.00  0.00
C
ATOM   2957  HA  TYR   181      32.337  29.219  65.224  1.00  0.00
H
ATOM   2958  CB  TYR   181      30.720  30.600  64.929  1.00  0.00
C
ATOM   2959  HB2 TYR   181      29.641  30.570  65.051  1.00  0.00
H
ATOM   2960  HB3 TYR   181      31.072  31.514  65.410  1.00  0.00
H
ATOM   2961  CG  TYR   181      31.022  30.697  63.448  1.00  0.00
C
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ATOM   2962  CD1 TYR   181      30.497  29.745  62.554  1.00  0.00
C
ATOM   2963  HD1 TYR   181      29.884  28.942  62.934  1.00  0.00
H
ATOM   2964  CE1 TYR   181      30.756  29.851  61.174  1.00  0.00
C
ATOM   2965  HE1 TYR   181      30.349  29.122  60.493  1.00  0.00
H
ATOM   2966  CZ  TYR   181      31.524  30.932  60.686  1.00  0.00
C
ATOM   2967  OH  TYR   181      31.749  31.074  59.355  1.00  0.00
O
ATOM   2968  HH  TYR   181      31.311  30.406  58.832  1.00  0.00
H
ATOM   2969  CE2 TYR   181      32.046  31.887  61.581  1.00  0.00
C
ATOM   2970  HE2 TYR   181      32.627  32.709  61.192  1.00  0.00
H
ATOM   2971  CD2 TYR   181      31.801  31.764  62.961  1.00  0.00
C
ATOM   2972  HD2 TYR   181      32.199  32.497  63.647  1.00  0.00
H
ATOM   2973  C   TYR   181      31.504  29.676  67.146  1.00  0.00
C
ATOM   2974  O   TYR   181      30.503  29.764  67.855  1.00  0.00
O
ATOM   2975  N   GLN   182      32.746  29.826  67.605  1.00  0.00
N
ATOM   2976  H   GLN   182      33.506  29.775  66.946  1.00  0.00
H
ATOM   2977  CA  GLN   182      33.073  30.331  68.939  1.00  0.00
C
ATOM   2978  HA  GLN   182      32.150  30.469  69.501  1.00  0.00
H
ATOM   2979  CB  GLN   182      33.927  29.320  69.739  1.00  0.00
C
ATOM   2980  HB2 GLN   182      34.130  29.744  70.724  1.00  0.00
H
ATOM   2981  HB3 GLN   182      33.347  28.408  69.881  1.00  0.00
H
ATOM   2982  CG  GLN   182      35.260  28.927  69.075  1.00  0.00
C
ATOM   2983  HG2 GLN   182      35.048  28.457  68.115  1.00  0.00
H
ATOM   2984  HG3 GLN   182      35.860  29.818  68.893  1.00  0.00
H
ATOM   2985  CD  GLN   182      36.117  27.973  69.906  1.00  0.00
C
ATOM   2986  OE1 GLN   182      36.178  28.009  71.122  1.00  0.00
O
ATOM   2987  NE2 GLN   182      36.866  27.098  69.270  1.00  0.00
N
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ATOM   2988 HE21 GLN   182      37.605  26.706  69.834  1.00  0.00
H
ATOM   2989 HE22 GLN   182      36.902  27.081  68.268  1.00  0.00
H
ATOM   2990  C   GLN   182      33.732  31.710  68.802  1.00  0.00
C
ATOM   2991  O   GLN   182      34.639  31.878  67.983  1.00  0.00
O
ATOM   2992  N   TYR   183      33.299  32.687  69.593  1.00  0.00
N
ATOM   2993  H   TYR   183      32.470  32.518  70.164  1.00  0.00
H
ATOM   2994  CA  TYR   183      34.007  33.955  69.776  1.00  0.00
C
ATOM   2995  HA  TYR   183      35.028  33.849  69.410  1.00  0.00
H
ATOM   2996  CB  TYR   183      33.346  35.080  68.972  1.00  0.00
C
ATOM   2997  HB2 TYR   183      33.200  34.745  67.945  1.00  0.00
H
ATOM   2998  HB3 TYR   183      32.363  35.308  69.386  1.00  0.00
H
ATOM   2999  CG  TYR   183      34.198  36.335  68.956  1.00  0.00
C
ATOM   3000  CD1 TYR   183      35.193  36.489  67.973  1.00  0.00
C
ATOM   3001  HD1 TYR   183      35.342  35.709  67.239  1.00  0.00
H
ATOM   3002  CE1 TYR   183      36.004  37.639  67.960  1.00  0.00
C
ATOM   3003  HE1 TYR   183      36.757  37.749  67.199  1.00  0.00
H
ATOM   3004  CZ  TYR   183      35.848  38.620  68.965  1.00  0.00
C
ATOM   3005  OH  TYR   183      36.650  39.717  68.976  1.00  0.00
O
ATOM   3006  HH  TYR   183      37.232  39.727  68.216  1.00  0.00
H
ATOM   3007  CE2 TYR   183      34.868  38.452  69.965  1.00  0.00
C
ATOM   3008  HE2 TYR   183      34.750  39.203  70.731  1.00  0.00
H
ATOM   3009  CD2 TYR   183      34.039  37.313  69.955  1.00  0.00
C
ATOM   3010  HD2 TYR   183      33.276  37.182  70.715  1.00  0.00
H
ATOM   3011  C   TYR   183      34.076  34.271  71.267  1.00  0.00
C
ATOM   3012  O   TYR   183      33.082  34.650  71.877  1.00  0.00
O
ATOM   3013  N   MET   184      35.255  34.080  71.870  1.00  0.00
N
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ATOM   3014  H   MET   184      36.008  33.733  71.299  1.00  0.00
H
ATOM   3015  CA  MET   184      35.352  33.858  73.318  1.00  0.00
C
ATOM   3016  HA  MET   184      36.368  33.536  73.539  1.00  0.00
H
ATOM   3017  CB  MET   184      35.100  35.160  74.119  1.00  0.00
C
ATOM   3018  HB2 MET   184      34.182  35.643  73.799  1.00  0.00
H
ATOM   3019  HB3 MET   184      34.983  34.928  75.178  1.00  0.00
H
ATOM   3020  CG  MET   184      36.239  36.159  73.976  1.00  0.00
C
ATOM   3021  HG2 MET   184      36.514  36.268  72.927  1.00  0.00
H
ATOM   3022  HG3 MET   184      35.912  37.127  74.354  1.00  0.00
H
ATOM   3023  SD  MET   184      37.682  35.639  74.915  1.00  0.00
S
ATOM   3024  CE  MET   184      38.560  37.198  74.859  1.00  0.00
C
ATOM   3025  HE1 MET   184      38.176  37.883  75.591  1.00  0.00
H
ATOM   3026  HE2 MET   184      39.597  36.972  75.075  1.00  0.00
H
ATOM   3027  HE3 MET   184      38.510  37.660  73.891  1.00  0.00
H
ATOM   3028  C   MET   184      34.461  32.674  73.734  1.00  0.00
C
ATOM   3029  O   MET   184      34.725  31.550  73.315  1.00  0.00
O
ATOM   3030  N   ASP   185      33.454  32.931  74.555  1.00  0.00
N
ATOM   3031  H   ASP   185      33.292  33.896  74.838  1.00  0.00
H
ATOM   3032  CA  ASP   185      32.466  32.006  75.104  1.00  0.00
C
ATOM   3033  HA  ASP   185      32.842  30.985  75.060  1.00  0.00
H
ATOM   3034  CB  ASP   185      32.283  32.388  76.577  1.00  0.00
C
ATOM   3035  HB2 ASP   185      31.665  31.635  77.042  1.00  0.00
H
ATOM   3036  HB3 ASP   185      33.252  32.385  77.071  1.00  0.00
H
ATOM   3037  CG  ASP   185      31.639  33.759  76.782  1.00  0.00
C
ATOM   3038  OD1 ASP   185      32.076  34.716  76.120  1.00  0.00
O
ATOM   3039  OD2 ASP   185      30.753  33.829  77.676  1.00  0.00
O
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ATOM   3040  C   ASP   185      31.123  32.048  74.360  1.00  0.00
C
ATOM   3041  O   ASP   185      30.275  31.186  74.582  1.00  0.00
O
ATOM   3042  N   ASP   186      30.942  33.027  73.467  1.00  0.00
N
ATOM   3043  H   ASP   186      31.683  33.706  73.365  1.00  0.00
H
ATOM   3044  CA  ASP   186      29.786  33.162  72.585  1.00  0.00
C
ATOM   3045  HA  ASP   186      28.882  33.082  73.190  1.00  0.00
H
ATOM   3046  CB  ASP   186      29.822  34.560  71.935  1.00  0.00
C
ATOM   3047  HB2 ASP   186      30.069  35.293  72.706  1.00  0.00
H
ATOM   3048  HB3 ASP   186      30.612  34.593  71.186  1.00  0.00
H
ATOM   3049  CG  ASP   186      28.513  34.989  71.265  1.00  0.00
C
ATOM   3050  OD1 ASP   186      27.949  36.019  71.716  1.00  0.00
O
ATOM   3051  OD2 ASP   186      28.105  34.347  70.270  1.00  0.00
O
ATOM   3052  C   ASP   186      29.805  32.024  71.547  1.00  0.00
C
ATOM   3053  O   ASP   186      30.701  31.948  70.697  1.00  0.00
O
ATOM   3054  N   LEU   187      28.853  31.096  71.665  1.00  0.00
N
ATOM   3055  H   LEU   187      28.177  31.228  72.412  1.00  0.00
H
ATOM   3056  CA  LEU   187      28.741  29.904  70.821  1.00  0.00
C
ATOM   3057  HA  LEU   187      29.614  29.829  70.176  1.00  0.00
H
ATOM   3058  CB  LEU   187      28.654  28.633  71.685  1.00  0.00
C
ATOM   3059  HB2 LEU   187      27.803  28.748  72.346  1.00  0.00
H
ATOM   3060  HB3 LEU   187      28.447  27.790  71.025  1.00  0.00
H
ATOM   3061  CG  LEU   187      29.868  28.282  72.549  1.00  0.00
C
ATOM   3062  HG  LEU   187      30.063  29.075  73.262  1.00  0.00
H
ATOM   3063  CD1 LEU   187      29.548  26.996  73.316  1.00  0.00
C
ATOM   3064 HD11 LEU   187      29.372  26.177  72.621  1.00  0.00
H
ATOM   3065 HD12 LEU   187      30.375  26.746  73.974  1.00  0.00
H
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ATOM   3066 HD13 LEU   187      28.660  27.159  73.928  1.00  0.00
H
ATOM   3067  CD2 LEU   187      31.112  28.046  71.699  1.00  0.00
C
ATOM   3068 HD21 LEU   187      31.368  28.970  71.185  1.00  0.00
H
ATOM   3069 HD22 LEU   187      31.945  27.788  72.345  1.00  0.00
H
ATOM   3070 HD23 LEU   187      30.932  27.254  70.975  1.00  0.00
H
ATOM   3071  C   LEU   187      27.504  29.978  69.931  1.00  0.00
C
ATOM   3072  O   LEU   187      26.395  29.707  70.389  1.00  0.00
O
ATOM   3073  N   TYR   188      27.690  30.217  68.637  1.00  0.00
N
ATOM   3074  H   TYR   188      28.646  30.348  68.326  1.00  0.00
H
ATOM   3075  CA  TYR   188      26.655  29.996  67.626  1.00  0.00
C
ATOM   3076  HA  TYR   188      25.670  30.181  68.058  1.00  0.00
H
ATOM   3077  CB  TYR   188      26.867  30.996  66.481  1.00  0.00
C
ATOM   3078  HB2 TYR   188      26.616  31.987  66.859  1.00  0.00
H
ATOM   3079  HB3 TYR   188      27.924  31.017  66.229  1.00  0.00
H
ATOM   3080  CG  TYR   188      26.084  30.754  65.202  1.00  0.00
C
ATOM   3081  CD1 TYR   188      26.505  29.778  64.274  1.00  0.00
C
ATOM   3082  HD1 TYR   188      27.377  29.177  64.483  1.00  0.00
H
ATOM   3083  CE1 TYR   188      25.799  29.586  63.071  1.00  0.00
C
ATOM   3084  HE1 TYR   188      26.119  28.831  62.372  1.00  0.00
H
ATOM   3085  CZ  TYR   188      24.678  30.394  62.780  1.00  0.00
C
ATOM   3086  OH  TYR   188      24.002  30.242  61.611  1.00  0.00
O
ATOM   3087  HH  TYR   188      24.387  29.581  61.038  1.00  0.00
H
ATOM   3088  CE2 TYR   188      24.264  31.374  63.704  1.00  0.00
C
ATOM   3089  HE2 TYR   188      23.406  31.985  63.474  1.00  0.00
H
ATOM   3090  CD2 TYR   188      24.963  31.553  64.911  1.00  0.00
C
ATOM   3091  HD2 TYR   188      24.650  32.321  65.606  1.00  0.00
H
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ATOM   3092  C   TYR   188      26.718  28.534  67.177  1.00  0.00
C
ATOM   3093  O   TYR   188      27.765  28.082  66.709  1.00  0.00
O
ATOM   3094  N   VAL   189      25.610  27.797  67.299  1.00  0.00
N
ATOM   3095  H   VAL   189      24.783  28.241  67.690  1.00  0.00
H
ATOM   3096  CA  VAL   189      25.499  26.383  66.903  1.00  0.00
C
ATOM   3097  HA  VAL   189      26.436  26.076  66.441  1.00  0.00
H
ATOM   3098  CB  VAL   189      25.261  25.448  68.107  1.00  0.00
C
ATOM   3099  HB  VAL   189      24.266  25.622  68.512  1.00  0.00
H
ATOM   3100  CG1 VAL   189      25.367  23.984  67.652  1.00  0.00
C
ATOM   3101 HG11 VAL   189      26.313  23.821  67.141  1.00  0.00
H
ATOM   3102 HG12 VAL   189      25.314  23.315  68.510  1.00  0.00
H
ATOM   3103 HG13 VAL   189      24.550  23.739  66.973  1.00  0.00
H
ATOM   3104  CG2 VAL   189      26.270  25.662  69.242  1.00  0.00
C
ATOM   3105 HG21 VAL   189      26.146  26.658  69.667  1.00  0.00
H
ATOM   3106 HG22 VAL   189      26.105  24.931  70.033  1.00  0.00
H
ATOM   3107 HG23 VAL   189      27.285  25.561  68.865  1.00  0.00
H
ATOM   3108  C   VAL   189      24.391  26.225  65.859  1.00  0.00
C
ATOM   3109  O   VAL   189      23.205  26.339  66.176  1.00  0.00
O
ATOM   3110  N   GLY   190      24.771  25.932  64.612  1.00  0.00
N
ATOM   3111  H   GLY   190      25.768  25.810  64.440  1.00  0.00
H
ATOM   3112  CA  GLY   190      23.856  25.749  63.479  1.00  0.00
C
ATOM   3113  HA2 GLY   190      22.830  25.933  63.796  1.00  0.00
H
ATOM   3114  HA3 GLY   190      24.093  26.481  62.709  1.00  0.00
H
ATOM   3115  C   GLY   190      23.947  24.355  62.861  1.00  0.00
C
ATOM   3116  O   GLY   190      25.041  23.828  62.657  1.00  0.00
O
ATOM   3117  N   SER   191      22.804  23.757  62.524  1.00  0.00
N
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ATOM   3118  H   SER   191      21.918  24.242  62.711  1.00  0.00
H
ATOM   3119  CA  SER   191      22.725  22.453  61.852  1.00  0.00
C
ATOM   3120  HA  SER   191      23.624  22.323  61.254  1.00  0.00
H
ATOM   3121  CB  SER   191      22.655  21.325  62.875  1.00  0.00
C
ATOM   3122  HB2 SER   191      23.000  20.396  62.390  1.00  0.00
H
ATOM   3123  HB3 SER   191      23.289  21.557  63.733  1.00  0.00
H
ATOM   3124  OG  SER   191      21.340  21.144  63.345  1.00  0.00
O
ATOM   3125  HG  SER   191      21.204  21.667  64.137  1.00  0.00
H
ATOM   3126  C   SER   191      21.525  22.356  60.910  1.00  0.00
C
ATOM   3127  O   SER   191      20.563  23.119  61.001  1.00  0.00
O
ATOM   3128  N   ASP   192      21.562  21.367  60.022  1.00  0.00
N
ATOM   3129  H   ASP   192      22.356  20.750  60.012  1.00  0.00
H
ATOM   3130  CA  ASP   192      20.462  21.060  59.107  1.00  0.00
C
ATOM   3131  HA  ASP   192      19.801  21.923  59.070  1.00  0.00
H
ATOM   3132  CB  ASP   192      21.017  20.894  57.686  1.00  0.00
C
ATOM   3133  HB2 ASP   192      21.784  20.117  57.679  1.00  0.00
H
ATOM   3134  HB3 ASP   192      20.207  20.590  57.021  1.00  0.00
H
ATOM   3135  CG  ASP   192      21.592  22.216  57.164  1.00  0.00
C
ATOM   3136  OD1 ASP   192      20.813  23.195  57.077  1.00  0.00
O
ATOM   3137  OD2 ASP   192      22.810  22.291  56.860  1.00  0.00
O
ATOM   3138  C   ASP   192      19.555  19.911  59.615  1.00  0.00
C
ATOM   3139  O   ASP   192      18.845  19.260  58.843  1.00  0.00
O
ATOM   3140  N   LEU   193      19.569  19.672  60.933  1.00  0.00
N
ATOM   3141  H   LEU   193      20.138  20.279  61.509  1.00  0.00
H
ATOM   3142  CA  LEU   193      18.643  18.781  61.642  1.00  0.00
C
ATOM   3143  HA  LEU   193      18.495  17.875  61.050  1.00  0.00
H
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ATOM   3144  CB  LEU   193      19.239  18.380  63.011  1.00  0.00
C
ATOM   3145  HB2 LEU   193      19.251  19.266  63.649  1.00  0.00
H
ATOM   3146  HB3 LEU   193      18.570  17.659  63.469  1.00  0.00
H
ATOM   3147  CG  LEU   193      20.652  17.764  63.018  1.00  0.00
C
ATOM   3148  HG  LEU   193      21.362  18.472  62.594  1.00  0.00
H
ATOM   3149  CD1 LEU   193      21.075  17.482  64.462  1.00  0.00
C
ATOM   3150 HD11 LEU   193      20.397  16.761  64.920  1.00  0.00
H
ATOM   3151 HD12 LEU   193      22.085  17.075  64.471  1.00  0.00
H
ATOM   3152 HD13 LEU   193      21.059  18.407  65.039  1.00  0.00
H
ATOM   3153  CD2 LEU   193      20.731  16.448  62.238  1.00  0.00
C
ATOM   3154 HD21 LEU   193      20.505  16.614  61.185  1.00  0.00
H
ATOM   3155 HD22 LEU   193      21.736  16.029  62.309  1.00  0.00
H
ATOM   3156 HD23 LEU   193      20.021  15.727  62.645  1.00  0.00
H
ATOM   3157  C   LEU   193      17.266  19.452  61.840  1.00  0.00
C
ATOM   3158  O   LEU   193      17.147  20.682  61.870  1.00  0.00
O
ATOM   3159  N   GLU   194      16.227  18.636  62.042  1.00  0.00
N
ATOM   3160  H   GLU   194      16.399  17.643  62.026  1.00  0.00
H
ATOM   3161  CA  GLU   194      14.909  19.108  62.502  1.00  0.00
C
ATOM   3162  HA  GLU   194      14.551  19.882  61.822  1.00  0.00
H
ATOM   3163  CB  GLU   194      13.886  17.958  62.524  1.00  0.00
C
ATOM   3164  HB2 GLU   194      14.303  17.129  63.095  1.00  0.00
H
ATOM   3165  HB3 GLU   194      12.991  18.287  63.055  1.00  0.00
H
ATOM   3166  CG  GLU   194      13.475  17.450  61.133  1.00  0.00
C
ATOM   3167  HG2 GLU   194      14.370  17.127  60.598  1.00  0.00
H
ATOM   3168  HG3 GLU   194      12.835  16.577  61.268  1.00  0.00
H
ATOM   3169  CD  GLU   194      12.712  18.488  60.294  1.00  0.00
C
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ATOM   3170  OE1 GLU   194      11.994  19.334  60.872  1.00  0.00
O
ATOM   3171  OE2 GLU   194      12.832  18.455  59.047  1.00  0.00
O
ATOM   3172  C   GLU   194      14.993  19.736  63.904  1.00  0.00
C
ATOM   3173  O   GLU   194      15.866  19.388  64.702  1.00  0.00
O
ATOM   3174  N   ILE   195      14.038  20.617  64.232  1.00  0.00
N
ATOM   3175  H   ILE   195      13.341  20.826  63.529  1.00  0.00
H
ATOM   3176  CA  ILE   195      14.062  21.455  65.447  1.00  0.00
C
ATOM   3177  HA  ILE   195      14.902  22.144  65.356  1.00  0.00
H
ATOM   3178  CB  ILE   195      12.766  22.304  65.559  1.00  0.00
C
ATOM   3179  HB  ILE   195      11.914  21.623  65.615  1.00  0.00
H
ATOM   3180  CG2 ILE   195      12.778  23.165  66.842  1.00  0.00
C
ATOM   3181 HG21 ILE   195      13.611  23.867  66.803  1.00  0.00
H
ATOM   3182 HG22 ILE   195      11.841  23.710  66.947  1.00  0.00
H
ATOM   3183 HG23 ILE   195      12.877  22.539  67.729  1.00  0.00
H
ATOM   3184  CG1 ILE   195      12.584  23.208  64.313  1.00  0.00
C
ATOM   3185 HG12 ILE   195      13.419  23.908  64.249  1.00  0.00
H
ATOM   3186 HG13 ILE   195      12.596  22.594  63.413  1.00  0.00
H
ATOM   3187  CD1 ILE   195      11.268  23.998  64.289  1.00  0.00
C
ATOM   3188 HD11 ILE   195      11.259  24.757  65.069  1.00  0.00
H
ATOM   3189 HD12 ILE   195      11.163  24.494  63.324  1.00  0.00
H
ATOM   3190 HD13 ILE   195      10.426  23.319  64.429  1.00  0.00
H
ATOM   3191  C   ILE   195      14.298  20.620  66.723  1.00  0.00
C
ATOM   3192  O   ILE   195      15.153  20.977  67.532  1.00  0.00
O
ATOM   3193  N   GLY   196      13.580  19.500  66.883  1.00  0.00
N
ATOM   3194  H   GLY   196      12.932  19.249  66.152  1.00  0.00
H
ATOM   3195  CA  GLY   196      13.715  18.593  68.036  1.00  0.00
C
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ATOM   3196  HA2 GLY   196      13.529  19.140  68.959  1.00  0.00
H
ATOM   3197  HA3 GLY   196      12.974  17.797  67.956  1.00  0.00
H
ATOM   3198  C   GLY   196      15.096  17.938  68.128  1.00  0.00
C
ATOM   3199  O   GLY   196      15.755  18.034  69.161  1.00  0.00
O
ATOM   3200  N   GLN   197      15.586  17.375  67.019  1.00  0.00
N
ATOM   3201  H   GLN   197      15.002  17.361  66.200  1.00  0.00
H
ATOM   3202  CA  GLN   197      16.917  16.766  66.925  1.00  0.00
C
ATOM   3203  HA  GLN   197      16.992  15.964  67.658  1.00  0.00
H
ATOM   3204  CB  GLN   197      17.110  16.190  65.518  1.00  0.00
C
ATOM   3205  HB2 GLN   197      16.969  16.988  64.792  1.00  0.00
H
ATOM   3206  HB3 GLN   197      18.134  15.823  65.434  1.00  0.00
H
ATOM   3207  CG  GLN   197      16.155  15.048  65.159  1.00  0.00
C
ATOM   3208  HG2 GLN   197      16.235  14.250  65.897  1.00  0.00
H
ATOM   3209  HG3 GLN   197      15.128  15.413  65.147  1.00  0.00
H
ATOM   3210  CD  GLN   197      16.514  14.488  63.788  1.00  0.00
C
ATOM   3211  OE1 GLN   197      17.505  13.801  63.619  1.00  0.00
O
ATOM   3212  NE2 GLN   197      15.762  14.795  62.754  1.00  0.00
N
ATOM   3213 HE21 GLN   197      16.007  14.309  61.892  1.00  0.00
H
ATOM   3214 HE22 GLN   197      14.896  15.283  62.862  1.00  0.00
H
ATOM   3215  C   GLN   197      18.045  17.773  67.206  1.00  0.00
C
ATOM   3216  O   GLN   197      19.057  17.428  67.823  1.00  0.00
O
ATOM   3217  N   HIE   198      17.863  19.036  66.800  1.00  0.00
N
ATOM   3218  H   HIE   198      17.045  19.251  66.237  1.00  0.00
H
ATOM   3219  CA  HIE   198      18.772  20.120  67.177  1.00  0.00
C
ATOM   3220  HA  HIE   198      19.784  19.828  66.891  1.00  0.00
H
ATOM   3221  CB  HIE   198      18.431  21.407  66.410  1.00  0.00
C
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ATOM   3222  HB2 HIE   198      18.299  21.153  65.357  1.00  0.00
H
ATOM   3223  HB3 HIE   198      17.487  21.814  66.775  1.00  0.00
H
ATOM   3224  CG  HIE   198      19.503  22.476  66.496  1.00  0.00
C
ATOM   3225  ND1 HIE   198      20.651  22.530  65.700  1.00  0.00
N
ATOM   3226  CE1 HIE   198      21.284  23.667  66.043  1.00  0.00
C
ATOM   3227  HE1 HIE   198      22.211  24.011  65.608  1.00  0.00
H
ATOM   3228  NE2 HIE   198      20.606  24.315  67.003  1.00  0.00
N
ATOM   3229  HE2 HIE   198      20.928  25.166  67.468  1.00  0.00
H
ATOM   3230  CD2 HIE   198      19.475  23.585  67.291  1.00  0.00
C
ATOM   3231  HD2 HIE   198      18.701  23.842  67.995  1.00  0.00
H
ATOM   3232  C   HIE   198      18.770  20.312  68.697  1.00  0.00
C
ATOM   3233  O   HIE   198      19.848  20.339  69.280  1.00  0.00
O
ATOM   3234  N   ARG   199      17.609  20.338  69.381  1.00  0.00
N
ATOM   3235  H   ARG   199      16.745  20.219  68.861  1.00  0.00
H
ATOM   3236  CA  ARG   199      17.567  20.388  70.866  1.00  0.00
C
ATOM   3237  HA  ARG   199      18.057  21.303  71.190  1.00  0.00
H
ATOM   3238  CB  ARG   199      16.141  20.354  71.466  1.00  0.00
C
ATOM   3239  HB2 ARG   199      15.716  19.356  71.347  1.00  0.00
H
ATOM   3240  HB3 ARG   199      16.234  20.524  72.541  1.00  0.00
H
ATOM   3241  CG  ARG   199      15.140  21.382  70.924  1.00  0.00
C
ATOM   3242  HG2 ARG   199      14.858  21.091  69.925  1.00  0.00
H
ATOM   3243  HG3 ARG   199      14.235  21.354  71.528  1.00  0.00
H
ATOM   3244  CD  ARG   199      15.705  22.805  70.909  1.00  0.00
C
ATOM   3245  HD2 ARG   199      15.842  23.137  71.939  1.00  0.00
H
ATOM   3246  HD3 ARG   199      16.673  22.790  70.404  1.00  0.00
H
ATOM   3247  NE  ARG   199      14.812  23.745  70.212  1.00  0.00
N
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ATOM   3248  HE  ARG   199      13.807  23.571  70.254  1.00  0.00
H
ATOM   3249  CZ  ARG   199      15.182  24.840  69.589  1.00  0.00
C
ATOM   3250  NH1 ARG   199      16.417  25.253  69.558  1.00  0.00
N
ATOM   3251 HH11 ARG   199      17.130  24.746  70.030  1.00  0.00
H
ATOM   3252 HH12 ARG   199      16.579  26.191  69.201  1.00  0.00
H
ATOM   3253  NH2 ARG   199      14.299  25.565  68.976  1.00  0.00
N
ATOM   3254 HH21 ARG   199      13.327  25.310  69.041  1.00  0.00
H
ATOM   3255 HH22 ARG   199      14.588  26.483  68.663  1.00  0.00
H
ATOM   3256  C   ARG   199      18.388  19.271  71.503  1.00  0.00
C
ATOM   3257  O   ARG   199      19.126  19.569  72.439  1.00  0.00
O
ATOM   3258  N   THR   200      18.338  18.047  70.974  1.00  0.00
N
ATOM   3259  H   THR   200      17.655  17.850  70.250  1.00  0.00
H
ATOM   3260  CA  THR   200      19.179  16.942  71.453  1.00  0.00
C
ATOM   3261  HA  THR   200      18.941  16.769  72.500  1.00  0.00
H
ATOM   3262  CB  THR   200      18.920  15.640  70.681  1.00  0.00
C
ATOM   3263  HB  THR   200      19.383  15.702  69.697  1.00  0.00
H
ATOM   3264  CG2 THR   200      19.467  14.426  71.430  1.00  0.00
C
ATOM   3265 HG21 THR   200      19.010  14.371  72.416  1.00  0.00
H
ATOM   3266 HG22 THR   200      19.234  13.517  70.878  1.00  0.00
H
ATOM   3267 HG23 THR   200      20.550  14.502  71.535  1.00  0.00
H
ATOM   3268  OG1 THR   200      17.543  15.420  70.504  1.00  0.00
O
ATOM   3269  HG1 THR   200      17.476  14.730  69.816  1.00  0.00
H
ATOM   3270  C   THR   200      20.666  17.291  71.377  1.00  0.00
C
ATOM   3271  O   THR   200      21.338  17.271  72.404  1.00  0.00
O
ATOM   3272  N   LYS   201      21.175  17.715  70.209  1.00  0.00
N
ATOM   3273  H   LYS   201      20.563  17.746  69.399  1.00  0.00
H
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ATOM   3274  CA  LYS   201      22.591  18.114  70.060  1.00  0.00
C
ATOM   3275  HA  LYS   201      23.204  17.297  70.439  1.00  0.00
H
ATOM   3276  CB  LYS   201      22.931  18.391  68.583  1.00  0.00
C
ATOM   3277  HB2 LYS   201      22.209  19.106  68.185  1.00  0.00
H
ATOM   3278  HB3 LYS   201      23.919  18.853  68.527  1.00  0.00
H
ATOM   3279  CG  LYS   201      22.934  17.139  67.693  1.00  0.00
C
ATOM   3280  HG2 LYS   201      21.984  16.616  67.810  1.00  0.00
H
ATOM   3281  HG3 LYS   201      23.029  17.456  66.656  1.00  0.00
H
ATOM   3282  CD  LYS   201      24.099  16.190  68.010  1.00  0.00
C
ATOM   3283  HD2 LYS   201      25.041  16.626  67.675  1.00  0.00
H
ATOM   3284  HD3 LYS   201      24.168  16.049  69.083  1.00  0.00
H
ATOM   3285  CE  LYS   201      23.888  14.828  67.344  1.00  0.00
C
ATOM   3286  HE2 LYS   201      22.834  14.551  67.423  1.00  0.00
H
ATOM   3287  HE3 LYS   201      24.149  14.897  66.284  1.00  0.00
H
ATOM   3288  NZ  LYS   201      24.704  13.785  68.003  1.00  0.00
N
ATOM   3289  HZ1 LYS   201      24.434  13.698  68.988  1.00  0.00
H
ATOM   3290  HZ2 LYS   201      24.599  12.907  67.504  1.00  0.00
H
ATOM   3291  HZ3 LYS   201      25.689  14.026  67.942  1.00  0.00
H
ATOM   3292  C   LYS   201      22.972  19.324  70.911  1.00  0.00
C
ATOM   3293  O   LYS   201      24.119  19.427  71.340  1.00  0.00
O
ATOM   3294  N   ILE   202      22.037  20.234  71.173  1.00  0.00
N
ATOM   3295  H   ILE   202      21.127  20.106  70.744  1.00  0.00
H
ATOM   3296  CA  ILE   202      22.272  21.401  72.028  1.00  0.00
C
ATOM   3297  HA  ILE   202      23.271  21.786  71.814  1.00  0.00
H
ATOM   3298  CB  ILE   202      21.247  22.508  71.704  1.00  0.00
C
ATOM   3299  HB  ILE   202      20.244  22.096  71.834  1.00  0.00
H
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ATOM   3300  CG2 ILE   202      21.377  23.709  72.655  1.00  0.00
C
ATOM   3301 HG21 ILE   202      22.409  24.066  72.666  1.00  0.00
H
ATOM   3302 HG22 ILE   202      20.714  24.499  72.312  1.00  0.00
H
ATOM   3303 HG23 ILE   202      21.096  23.405  73.666  1.00  0.00
H
ATOM   3304  CG1 ILE   202      21.379  23.023  70.254  1.00  0.00
C
ATOM   3305 HG12 ILE   202      21.004  22.288  69.564  1.00  0.00
H
ATOM   3306 HG13 ILE   202      20.734  23.888  70.126  1.00  0.00
H
ATOM   3307  CD1 ILE   202      22.799  23.341  69.778  1.00  0.00
C
ATOM   3308 HD11 ILE   202      23.386  22.426  69.733  1.00  0.00
H
ATOM   3309 HD12 ILE   202      22.746  23.744  68.769  1.00  0.00
H
ATOM   3310 HD13 ILE   202      23.281  24.060  70.438  1.00  0.00
H
ATOM   3311  C   ILE   202      22.307  21.031  73.512  1.00  0.00
C
ATOM   3312  O   ILE   202      23.121  21.602  74.234  1.00  0.00
O
ATOM   3313  N   GLU   203      21.507  20.064  73.971  1.00  0.00
N
ATOM   3314  H   GLU   203      20.828  19.634  73.348  1.00  0.00
H
ATOM   3315  CA  GLU   203      21.641  19.525  75.326  1.00  0.00
C
ATOM   3316  HA  GLU   203      21.814  20.357  76.001  1.00  0.00
H
ATOM   3317  CB  GLU   203      20.343  18.859  75.805  1.00  0.00
C
ATOM   3318  HB2 GLU   203      20.047  18.105  75.075  1.00  0.00
H
ATOM   3319  HB3 GLU   203      20.545  18.339  76.741  1.00  0.00
H
ATOM   3320  CG  GLU   203      19.175  19.847  76.033  1.00  0.00
C
ATOM   3321  HG2 GLU   203      18.918  20.319  75.083  1.00  0.00
H
ATOM   3322  HG3 GLU   203      18.304  19.261  76.337  1.00  0.00
H
ATOM   3323  CD  GLU   203      19.435  20.931  77.106  1.00  0.00
C
ATOM   3324  OE1 GLU   203      19.541  20.575  78.307  1.00  0.00
O
ATOM   3325  OE2 GLU   203      19.497  22.141  76.764  1.00  0.00
O
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ATOM   3326  C   GLU   203      22.878  18.614  75.459  1.00  0.00
C
ATOM   3327  O   GLU   203      23.584  18.744  76.453  1.00  0.00
O
ATOM   3328  N   GLU   204      23.243  17.804  74.453  1.00  0.00
N
ATOM   3329  H   GLU   204      22.601  17.670  73.679  1.00  0.00
H
ATOM   3330  CA  GLU   204      24.544  17.100  74.416  1.00  0.00
C
ATOM   3331  HA  GLU   204      24.583  16.392  75.242  1.00  0.00
H
ATOM   3332  CB  GLU   204      24.762  16.336  73.089  1.00  0.00
C
ATOM   3333  HB2 GLU   204      24.599  17.017  72.256  1.00  0.00
H
ATOM   3334  HB3 GLU   204      25.812  16.039  73.062  1.00  0.00
H
ATOM   3335  CG  GLU   204      23.932  15.062  72.858  1.00  0.00
C
ATOM   3336  HG2 GLU   204      24.128  14.369  73.678  1.00  0.00
H
ATOM   3337  HG3 GLU   204      22.869  15.300  72.866  1.00  0.00
H
ATOM   3338  CD  GLU   204      24.328  14.379  71.531  1.00  0.00
C
ATOM   3339  OE1 GLU   204      25.487  13.912  71.437  1.00  0.00
O
ATOM   3340  OE2 GLU   204      23.514  14.310  70.581  1.00  0.00
O
ATOM   3341  C   GLU   204      25.716  18.083  74.602  1.00  0.00
C
ATOM   3342  O   GLU   204      26.600  17.859  75.431  1.00  0.00
O
ATOM   3343  N   LEU   205      25.706  19.202  73.866  1.00  0.00
N
ATOM   3344  H   LEU   205      24.969  19.295  73.174  1.00  0.00
H
ATOM   3345  CA  LEU   205      26.726  20.251  73.930  1.00  0.00
C
ATOM   3346  HA  LEU   205      27.699  19.776  73.812  1.00  0.00
H
ATOM   3347  CB  LEU   205      26.488  21.202  72.736  1.00  0.00
C
ATOM   3348  HB2 LEU   205      26.449  20.589  71.839  1.00  0.00
H
ATOM   3349  HB3 LEU   205      25.504  21.661  72.835  1.00  0.00
H
ATOM   3350  CG  LEU   205      27.520  22.309  72.456  1.00  0.00
C
ATOM   3351  HG  LEU   205      27.342  22.657  71.438  1.00  0.00
H
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ATOM   3352  CD1 LEU   205      27.347  23.519  73.367  1.00  0.00
C
ATOM   3353 HD11 LEU   205      27.634  23.279  74.388  1.00  0.00
H
ATOM   3354 HD12 LEU   205      27.978  24.330  73.008  1.00  0.00
H
ATOM   3355 HD13 LEU   205      26.309  23.843  73.348  1.00  0.00
H
ATOM   3356  CD2 LEU   205      28.969  21.830  72.528  1.00  0.00
C
ATOM   3357 HD21 LEU   205      29.091  20.957  71.891  1.00  0.00
H
ATOM   3358 HD22 LEU   205      29.625  22.623  72.173  1.00  0.00
H
ATOM   3359 HD23 LEU   205      29.238  21.575  73.553  1.00  0.00
H
ATOM   3360  C   LEU   205      26.725  20.956  75.296  1.00  0.00
C
ATOM   3361  O   LEU   205      27.768  21.055  75.940  1.00  0.00
O
ATOM   3362  N   ARG   206      25.555  21.388  75.779  1.00  0.00
N
ATOM   3363  H   ARG   206      24.733  21.241  75.200  1.00  0.00
H
ATOM   3364  CA  ARG   206      25.353  22.029  77.093  1.00  0.00
C
ATOM   3365  HA  ARG   206      25.936  22.951  77.150  1.00  0.00
H
ATOM   3366  CB  ARG   206      23.857  22.375  77.190  1.00  0.00
C
ATOM   3367  HB2 ARG   206      23.607  23.048  76.367  1.00  0.00
H
ATOM   3368  HB3 ARG   206      23.277  21.461  77.080  1.00  0.00
H
ATOM   3369  CG  ARG   206      23.439  23.045  78.497  1.00  0.00
C
ATOM   3370  HG2 ARG   206      23.608  22.374  79.337  1.00  0.00
H
ATOM   3371  HG3 ARG   206      24.037  23.937  78.626  1.00  0.00
H
ATOM   3372  CD  ARG   206      21.955  23.417  78.452  1.00  0.00
C
ATOM   3373  HD2 ARG   206      21.756  23.991  77.541  1.00  0.00
H
ATOM   3374  HD3 ARG   206      21.364  22.499  78.428  1.00  0.00
H
ATOM   3375  NE  ARG   206      21.578  24.219  79.626  1.00  0.00
N
ATOM   3376  HE  ARG   206      22.290  24.421  80.307  1.00  0.00
H
ATOM   3377  CZ  ARG   206      20.391  24.741  79.853  1.00  0.00
C
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ATOM   3378  NH1 ARG   206      19.345  24.495  79.117  1.00  0.00
N
ATOM   3379 HH11 ARG   206      19.365  23.713  78.470  1.00  0.00
H
ATOM   3380 HH12 ARG   206      18.491  24.964  79.380  1.00  0.00
H
ATOM   3381  NH2 ARG   206      20.249  25.583  80.827  1.00  0.00
N
ATOM   3382 HH21 ARG   206      21.024  25.864  81.406  1.00  0.00
H
ATOM   3383 HH22 ARG   206      19.337  26.027  80.935  1.00  0.00
H
ATOM   3384  C   ARG   206      25.810  21.137  78.257  1.00  0.00
C
ATOM   3385  O   ARG   206      26.440  21.618  79.197  1.00  0.00
O
ATOM   3386  N   GLN   207      25.546  19.834  78.176  1.00  0.00
N
ATOM   3387  H   GLN   207      24.987  19.508  77.393  1.00  0.00
H
ATOM   3388  CA  GLN   207      25.904  18.857  79.206  1.00  0.00
C
ATOM   3389  HA  GLN   207      25.743  19.329  80.175  1.00  0.00
H
ATOM   3390  CB  GLN   207      24.959  17.650  79.081  1.00  0.00
C
ATOM   3391  HB2 GLN   207      23.972  17.985  78.772  1.00  0.00
H
ATOM   3392  HB3 GLN   207      25.336  16.977  78.311  1.00  0.00
H
ATOM   3393  CG  GLN   207      24.787  16.889  80.401  1.00  0.00
C
ATOM   3394  HG2 GLN   207      24.280  15.949  80.189  1.00  0.00
H
ATOM   3395  HG3 GLN   207      25.766  16.663  80.824  1.00  0.00
H
ATOM   3396  CD  GLN   207      23.944  17.653  81.419  1.00  0.00
C
ATOM   3397  OE1 GLN   207      23.145  18.522  81.107  1.00  0.00
O
ATOM   3398  NE2 GLN   207      24.090  17.356  82.692  1.00  0.00
N
ATOM   3399 HE21 GLN   207      23.472  17.832  83.324  1.00  0.00
H
ATOM   3400 HE22 GLN   207      24.715  16.627  82.970  1.00  0.00
H
ATOM   3401  C   GLN   207      27.381  18.431  79.129  1.00  0.00
C
ATOM   3402  O   GLN   207      27.988  18.094  80.148  1.00  0.00
O
ATOM   3403  N   HIE   208      27.979  18.468  77.933  1.00  0.00
N
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ATOM   3404  H   HIE   208      27.397  18.642  77.118  1.00  0.00
H
ATOM   3405  CA  HIE   208      29.423  18.324  77.716  1.00  0.00
C
ATOM   3406  HA  HIE   208      29.783  17.432  78.228  1.00  0.00
H
ATOM   3407  CB  HIE   208      29.689  18.142  76.212  1.00  0.00
C
ATOM   3408  HB2 HIE   208      29.221  17.212  75.884  1.00  0.00
H
ATOM   3409  HB3 HIE   208      29.232  18.962  75.654  1.00  0.00
H
ATOM   3410  CG  HIE   208      31.152  18.090  75.855  1.00  0.00
C
ATOM   3411  ND1 HIE   208      32.035  17.050  76.165  1.00  0.00
N
ATOM   3412  CE1 HIE   208      33.221  17.431  75.660  1.00  0.00
C
ATOM   3413  HE1 HIE   208      34.134  16.854  75.726  1.00  0.00
H
ATOM   3414  NE2 HIE   208      33.119  18.631  75.069  1.00  0.00
N
ATOM   3415  HE2 HIE   208      33.898  19.161  74.677  1.00  0.00
H
ATOM   3416  CD2 HIE   208      31.823  19.063  75.182  1.00  0.00
C
ATOM   3417  HD2 HIE   208      31.406  19.991  74.817  1.00  0.00
H
ATOM   3418  C   HIE   208      30.184  19.513  78.320  1.00  0.00
C
ATOM   3419  O   HIE   208      31.065  19.306  79.153  1.00  0.00
O
ATOM   3420  N   LEU   209      29.767  20.749  78.018  1.00  0.00
N
ATOM   3421  H   LEU   209      29.019  20.849  77.338  1.00  0.00
H
ATOM   3422  CA  LEU   209      30.273  21.971  78.661  1.00  0.00
C
ATOM   3423  HA  LEU   209      31.322  22.103  78.406  1.00  0.00
H
ATOM   3424  CB  LEU   209      29.474  23.190  78.157  1.00  0.00
C
ATOM   3425  HB2 LEU   209      28.415  22.979  78.264  1.00  0.00
H
ATOM   3426  HB3 LEU   209      29.667  24.031  78.810  1.00  0.00
H
ATOM   3427  CG  LEU   209      29.738  23.654  76.715  1.00  0.00
C
ATOM   3428  HG  LEU   209      29.465  22.864  76.025  1.00  0.00
H
ATOM   3429  CD1 LEU   209      28.872  24.881  76.428  1.00  0.00
C
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ATOM   3430 HD11 LEU   209      29.169  25.711  77.070  1.00  0.00
H
ATOM   3431 HD12 LEU   209      28.984  25.174  75.388  1.00  0.00
H
ATOM   3432 HD13 LEU   209      27.822  24.649  76.617  1.00  0.00
H
ATOM   3433  CD2 LEU   209      31.195  24.029  76.449  1.00  0.00
C
ATOM   3434 HD21 LEU   209      31.828  23.149  76.552  1.00  0.00
H
ATOM   3435 HD22 LEU   209      31.292  24.403  75.431  1.00  0.00
H
ATOM   3436 HD23 LEU   209      31.513  24.802  77.148  1.00  0.00
H
ATOM   3437  C   LEU   209      30.211  21.879  80.194  1.00  0.00
C
ATOM   3438  O   LEU   209      31.214  22.128  80.863  1.00  0.00
O
ATOM   3439  N   LEU   210      29.082  21.428  80.754  1.00  0.00
N
ATOM   3440  H   LEU   210      28.274  21.308  80.153  1.00  0.00
H
ATOM   3441  CA  LEU   210      28.903  21.292  82.202  1.00  0.00
C
ATOM   3442  HA  LEU   210      29.149  22.261  82.636  1.00  0.00
H
ATOM   3443  CB  LEU   210      27.420  20.994  82.485  1.00  0.00
C
ATOM   3444  HB2 LEU   210      26.811  21.738  81.970  1.00  0.00
H
ATOM   3445  HB3 LEU   210      27.183  20.017  82.062  1.00  0.00
H
ATOM   3446  CG  LEU   210      27.033  20.996  83.978  1.00  0.00
C
ATOM   3447  HG  LEU   210      27.621  20.248  84.510  1.00  0.00
H
ATOM   3448  CD1 LEU   210      27.246  22.362  84.640  1.00  0.00
C
ATOM   3449 HD11 LEU   210      26.705  23.134  84.093  1.00  0.00
H
ATOM   3450 HD12 LEU   210      26.886  22.334  85.668  1.00  0.00
H
ATOM   3451 HD13 LEU   210      28.307  22.609  84.660  1.00  0.00
H
ATOM   3452  CD2 LEU   210      25.557  20.625  84.115  1.00  0.00
C
ATOM   3453 HD21 LEU   210      25.378  19.645  83.676  1.00  0.00
H
ATOM   3454 HD22 LEU   210      25.277  20.591  85.167  1.00  0.00
H
ATOM   3455 HD23 LEU   210      24.934  21.358  83.601  1.00  0.00
H
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ATOM   3456  C   LEU   210      29.842  20.252  82.856  1.00  0.00
C
ATOM   3457  O   LEU   210      30.287  20.479  83.980  1.00  0.00
O
ATOM   3458  N   ARG   211      30.215  19.160  82.166  1.00  0.00
N
ATOM   3459  H   ARG   211      29.828  19.030  81.237  1.00  0.00
H
ATOM   3460  CA  ARG   211      31.267  18.226  82.646  1.00  0.00
C
ATOM   3461  HA  ARG   211      31.044  17.928  83.672  1.00  0.00
H
ATOM   3462  CB  ARG   211      31.354  16.971  81.763  1.00  0.00
C
ATOM   3463  HB2 ARG   211      31.340  17.250  80.709  1.00  0.00
H
ATOM   3464  HB3 ARG   211      32.304  16.472  81.965  1.00  0.00
H
ATOM   3465  CG  ARG   211      30.234  15.971  82.056  1.00  0.00
C
ATOM   3466  HG2 ARG   211      30.257  15.707  83.114  1.00  0.00
H
ATOM   3467  HG3 ARG   211      29.269  16.418  81.820  1.00  0.00
H
ATOM   3468  CD  ARG   211      30.452  14.707  81.214  1.00  0.00
C
ATOM   3469  HD2 ARG   211      30.363  14.948  80.152  1.00  0.00
H
ATOM   3470  HD3 ARG   211      31.466  14.340  81.393  1.00  0.00
H
ATOM   3471  NE  ARG   211      29.512  13.638  81.584  1.00  0.00
N
ATOM   3472  HE  ARG   211      29.894  12.899  82.168  1.00  0.00
H
ATOM   3473  CZ  ARG   211      28.238  13.537  81.261  1.00  0.00
C
ATOM   3474  NH1 ARG   211      27.608  14.434  80.559  1.00  0.00
N
ATOM   3475 HH11 ARG   211      28.096  15.245  80.227  1.00  0.00
H
ATOM   3476 HH12 ARG   211      26.629  14.271  80.362  1.00  0.00
H
ATOM   3477  NH2 ARG   211      27.531  12.525  81.662  1.00  0.00
N
ATOM   3478 HH21 ARG   211      27.955  11.782  82.188  1.00  0.00
H
ATOM   3479 HH22 ARG   211      26.555  12.489  81.389  1.00  0.00
H
ATOM   3480  C   ARG   211      32.648  18.873  82.704  1.00  0.00
C
ATOM   3481  O   ARG   211      33.460  18.502  83.552  1.00  0.00
O
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ATOM   3482  N   TRP   212      32.893  19.856  81.840  1.00  0.00
N
ATOM   3483  H   TRP   212      32.175  20.073  81.159  1.00  0.00
H
ATOM   3484  CA  TRP   212      34.076  20.710  81.866  1.00  0.00
C
ATOM   3485  HA  TRP   212      34.885  20.149  82.332  1.00  0.00
H
ATOM   3486  CB  TRP   212      34.529  21.001  80.430  1.00  0.00
C
ATOM   3487  HB2 TRP   212      33.705  21.439  79.865  1.00  0.00
H
ATOM   3488  HB3 TRP   212      35.342  21.726  80.455  1.00  0.00
H
ATOM   3489  CG  TRP   212      35.039  19.790  79.720  1.00  0.00
C
ATOM   3490  CD1 TRP   212      34.343  19.032  78.845  1.00  0.00
C
ATOM   3491  HD1 TRP   212      33.325  19.227  78.529  1.00  0.00
H
ATOM   3492  NE1 TRP   212      35.099  17.949  78.461  1.00  0.00
N
ATOM   3493  HE1 TRP   212      34.741  17.210  77.877  1.00  0.00
H
ATOM   3494  CE2 TRP   212      36.353  17.976  79.037  1.00  0.00
C
ATOM   3495  CZ2 TRP   212      37.462  17.120  78.964  1.00  0.00
C
ATOM   3496  HZ2 TRP   212      37.420  16.223  78.363  1.00  0.00
H
ATOM   3497  CH2 TRP   212      38.618  17.435  79.695  1.00  0.00
C
ATOM   3498  HH2 TRP   212      39.479  16.782  79.656  1.00  0.00
H
ATOM   3499  CZ3 TRP   212      38.655  18.599  80.488  1.00  0.00
C
ATOM   3500  HZ3 TRP   212      39.546  18.830  81.053  1.00  0.00
H
ATOM   3501  CE3 TRP   212      37.534  19.450  80.556  1.00  0.00
C
ATOM   3502  HE3 TRP   212      37.574  20.339  81.168  1.00  0.00
H
ATOM   3503  CD2 TRP   212      36.351  19.154  79.840  1.00  0.00
C
ATOM   3504  C   TRP   212      33.888  21.974  82.721  1.00  0.00
C
ATOM   3505  O   TRP   212      34.761  22.833  82.709  1.00  0.00
O
ATOM   3506  N   GLY   213      32.794  22.091  83.481  1.00  0.00
N
ATOM   3507  H   GLY   213      32.104  21.354  83.445  1.00  0.00
H
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ATOM   3508  CA  GLY   213      32.516  23.217  84.380  1.00  0.00
C
ATOM   3509  HA2 GLY   213      31.755  22.917  85.097  1.00  0.00
H
ATOM   3510  HA3 GLY   213      33.427  23.440  84.924  1.00  0.00
H
ATOM   3511  C   GLY   213      32.033  24.510  83.706  1.00  0.00
C
ATOM   3512  O   GLY   213      31.651  25.453  84.395  1.00  0.00
O
ATOM   3513  N   LEU   214      31.967  24.544  82.371  1.00  0.00
N
ATOM   3514  H   LEU   214      32.209  23.699  81.869  1.00  0.00
H
ATOM   3515  CA  LEU   214      31.427  25.659  81.588  1.00  0.00
C
ATOM   3516  HA  LEU   214      31.865  26.591  81.946  1.00  0.00
H
ATOM   3517  CB  LEU   214      31.798  25.483  80.097  1.00  0.00
C
ATOM   3518  HB2 LEU   214      31.575  24.459  79.812  1.00  0.00
H
ATOM   3519  HB3 LEU   214      31.138  26.127  79.512  1.00  0.00
H
ATOM   3520  CG  LEU   214      33.241  25.771  79.628  1.00  0.00
C
ATOM   3521  HG  LEU   214      33.276  25.546  78.563  1.00  0.00
H
ATOM   3522  CD1 LEU   214      33.646  27.232  79.789  1.00  0.00
C
ATOM   3523 HD11 LEU   214      33.633  27.526  80.838  1.00  0.00
H
ATOM   3524 HD12 LEU   214      34.649  27.377  79.386  1.00  0.00
H
ATOM   3525 HD13 LEU   214      32.963  27.848  79.212  1.00  0.00
H
ATOM   3526  CD2 LEU   214      34.302  24.907  80.299  1.00  0.00
C
ATOM   3527 HD21 LEU   214      34.024  23.859  80.210  1.00  0.00
H
ATOM   3528 HD22 LEU   214      35.260  25.062  79.804  1.00  0.00
H
ATOM   3529 HD23 LEU   214      34.403  25.174  81.351  1.00  0.00
H
ATOM   3530  C   LEU   214      29.899  25.741  81.806  1.00  0.00
C
ATOM   3531  O   LEU   214      29.105  25.099  81.114  1.00  0.00
O
ATOM   3532  N   TYR   215      29.483  26.504  82.818  1.00  0.00
N
ATOM   3533  H   TYR   215      30.192  26.927  83.400  1.00  0.00
H
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ATOM   3534  CA  TYR   215      28.086  26.621  83.243  1.00  0.00
C
ATOM   3535  HA  TYR   215      27.685  25.613  83.361  1.00  0.00
H
ATOM   3536  CB  TYR   215      28.033  27.311  84.618  1.00  0.00
C
ATOM   3537  HB2 TYR   215      28.884  26.975  85.213  1.00  0.00
H
ATOM   3538  HB3 TYR   215      28.147  28.389  84.489  1.00  0.00
H
ATOM   3539  CG  TYR   215      26.769  27.038  85.413  1.00  0.00
C
ATOM   3540  CD1 TYR   215      26.812  26.157  86.514  1.00  0.00
C
ATOM   3541  HD1 TYR   215      27.741  25.671  86.779  1.00  0.00
H
ATOM   3542  CE1 TYR   215      25.656  25.925  87.286  1.00  0.00
C
ATOM   3543  HE1 TYR   215      25.696  25.265  88.140  1.00  0.00
H
ATOM   3544  CZ  TYR   215      24.446  26.570  86.948  1.00  0.00
C
ATOM   3545  OH  TYR   215      23.322  26.377  87.688  1.00  0.00
O
ATOM   3546  HH  TYR   215      23.449  25.774  88.423  1.00  0.00
H
ATOM   3547  CE2 TYR   215      24.399  27.436  85.836  1.00  0.00
C
ATOM   3548  HE2 TYR   215      23.468  27.923  85.591  1.00  0.00
H
ATOM   3549  CD2 TYR   215      25.560  27.676  85.074  1.00  0.00
C
ATOM   3550  HD2 TYR   215      25.523  28.367  84.244  1.00  0.00
H
ATOM   3551  C   TYR   215      27.248  27.369  82.193  1.00  0.00
C
ATOM   3552  O   TYR   215      27.569  28.500  81.829  1.00  0.00
O
ATOM   3553  N   THR   216      26.152  26.758  81.728  1.00  0.00
N
ATOM   3554  H   THR   216      25.916  25.850  82.099  1.00  0.00
H
ATOM   3555  CA  THR   216      25.272  27.339  80.698  1.00  0.00
C
ATOM   3556  HA  THR   216      25.785  28.159  80.200  1.00  0.00
H
ATOM   3557  CB  THR   216      24.948  26.326  79.596  1.00  0.00
C
ATOM   3558  HB  THR   216      24.283  25.566  80.007  1.00  0.00
H
ATOM   3559  CG2 THR   216      24.282  26.997  78.394  1.00  0.00
C
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ATOM   3560 HG21 THR   216      24.983  27.703  77.945  1.00  0.00
H
ATOM   3561 HG22 THR   216      24.012  26.236  77.667  1.00  0.00
H
ATOM   3562 HG23 THR   216      23.383  27.532  78.700  1.00  0.00
H
ATOM   3563  OG1 THR   216      26.100  25.688  79.093  1.00  0.00
O
ATOM   3564  HG1 THR   216      26.688  25.467  79.822  1.00  0.00
H
ATOM   3565  C   THR   216      23.964  27.853  81.315  1.00  0.00
C
ATOM   3566  O   THR   216      23.050  27.049  81.547  1.00  0.00
O
ATOM   3567  N   PRO   217      23.833  29.165  81.586  1.00  0.00
N
ATOM   3568  CD  PRO   217      24.860  30.198  81.470  1.00  0.00
C
ATOM   3569  HD2 PRO   217      25.433  30.122  80.548  1.00  0.00
H
ATOM   3570  HD3 PRO   217      25.525  30.139  82.332  1.00  0.00
H
ATOM   3571  CG  PRO   217      24.121  31.533  81.486  1.00  0.00
C
ATOM   3572  HG2 PRO   217      23.815  31.797  80.473  1.00  0.00
H
ATOM   3573  HG3 PRO   217      24.731  32.325  81.921  1.00  0.00
H
ATOM   3574  CB  PRO   217      22.891  31.222  82.339  1.00  0.00
C
ATOM   3575  HB2 PRO   217      22.066  31.895  82.108  1.00  0.00
H
ATOM   3576  HB3 PRO   217      23.155  31.294  83.396  1.00  0.00
H
ATOM   3577  CA  PRO   217      22.562  29.763  81.990  1.00  0.00
C
ATOM   3578  HA  PRO   217      22.187  29.254  82.879  1.00  0.00
H
ATOM   3579  C   PRO   217      21.505  29.668  80.876  1.00  0.00
C
ATOM   3580  O   PRO   217      21.823  29.598  79.690  1.00  0.00
O
ATOM   3581  N   ASP   218      20.224  29.737  81.248  1.00  0.00
N
ATOM   3582  H   ASP   218      20.014  29.789  82.233  1.00  0.00
H
ATOM   3583  CA  ASP   218      19.099  29.757  80.298  1.00  0.00
C
ATOM   3584  HA  ASP   218      19.327  29.054  79.494  1.00  0.00
H
ATOM   3585  CB  ASP   218      17.816  29.246  80.983  1.00  0.00
C
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ATOM   3586  HB2 ASP   218      17.625  29.839  81.878  1.00  0.00
H
ATOM   3587  HB3 ASP   218      16.971  29.375  80.307  1.00  0.00
H
ATOM   3588  CG  ASP   218      17.904  27.759  81.346  1.00  0.00
C
ATOM   3589  OD1 ASP   218      17.906  26.905  80.430  1.00  0.00
O
ATOM   3590  OD2 ASP   218      18.016  27.434  82.552  1.00  0.00
O
ATOM   3591  C   ASP   218      18.909  31.128  79.597  1.00  0.00
C
ATOM   3592  O   ASP   218      17.948  31.321  78.859  1.00  0.00
O
ATOM   3593  N   GLN   219      19.838  32.076  79.767  1.00  0.00
N
ATOM   3594  H   GLN   219      20.628  31.846  80.350  1.00  0.00
H
ATOM   3595  CA  GLN   219      19.897  33.361  79.039  1.00  0.00
C
ATOM   3596  HA  GLN   219      18.878  33.708  78.866  1.00  0.00
H
ATOM   3597  CB  GLN   219      20.622  34.427  79.888  1.00  0.00
C
ATOM   3598  HB2 GLN   219      21.519  33.998  80.338  1.00  0.00
H
ATOM   3599  HB3 GLN   219      20.935  35.252  79.245  1.00  0.00
H
ATOM   3600  CG  GLN   219      19.729  35.046  80.974  1.00  0.00
C
ATOM   3601  HG2 GLN   219      20.284  35.839  81.475  1.00  0.00
H
ATOM   3602  HG3 GLN   219      18.862  35.503  80.495  1.00  0.00
H
ATOM   3603  CD  GLN   219      19.263  34.048  82.029  1.00  0.00
C
ATOM   3604  OE1 GLN   219      20.046  33.460  82.755  1.00  0.00
O
ATOM   3605  NE2 GLN   219      17.977  33.814  82.149  1.00  0.00
N
ATOM   3606 HE21 GLN   219      17.703  33.163  82.861  1.00  0.00
H
ATOM   3607 HE22 GLN   219      17.316  34.278  81.551  1.00  0.00
H
ATOM   3608  C   GLN   219      20.509  33.180  77.637  1.00  0.00
C
ATOM   3609  O   GLN   219      21.388  33.924  77.205  1.00  0.00
O
ATOM   3610  N   LYS   220      20.047  32.152  76.921  1.00  0.00
N
ATOM   3611  H   LYS   220      19.250  31.652  77.304  1.00  0.00
H
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ATOM   3612  CA  LYS   220      20.605  31.675  75.654  1.00  0.00
C
ATOM   3613  HA  LYS   220      21.254  32.451  75.236  1.00  0.00
H
ATOM   3614  CB  LYS   220      21.490  30.454  75.964  1.00  0.00
C
ATOM   3615  HB2 LYS   220      22.136  30.274  75.120  1.00  0.00
H
ATOM   3616  HB3 LYS   220      22.143  30.713  76.799  1.00  0.00
H
ATOM   3617  CG  LYS   220      20.780  29.136  76.312  1.00  0.00
C
ATOM   3618  HG2 LYS   220      21.473  28.530  76.900  1.00  0.00
H
ATOM   3619  HG3 LYS   220      19.893  29.328  76.916  1.00  0.00
H
ATOM   3620  CD  LYS   220      20.407  28.339  75.054  1.00  0.00
C
ATOM   3621  HD2 LYS   220      19.584  28.815  74.525  1.00  0.00
H
ATOM   3622  HD3 LYS   220      21.268  28.299  74.385  1.00  0.00
H
ATOM   3623  CE  LYS   220      20.000  26.923  75.449  1.00  0.00
C
ATOM   3624  HE2 LYS   220      20.785  26.496  76.082  1.00  0.00
H
ATOM   3625  HE3 LYS   220      19.078  26.974  76.039  1.00  0.00
H
ATOM   3626  NZ  LYS   220      19.815  26.095  74.240  1.00  0.00
N
ATOM   3627  HZ1 LYS   220      20.694  26.035  73.743  1.00  0.00
H
ATOM   3628  HZ2 LYS   220      19.527  25.155  74.492  1.00  0.00
H
ATOM   3629  HZ3 LYS   220      19.140  26.532  73.628  1.00  0.00
H
ATOM   3630  C   LYS   220      19.485  31.431  74.645  1.00  0.00
C
ATOM   3631  O   LYS   220      18.396  31.001  75.023  1.00  0.00
O
ATOM   3632  N   HIE   221      19.740  31.692  73.369  1.00  0.00
N
ATOM   3633  H   HIE   221      20.694  31.873  73.095  1.00  0.00
H
ATOM   3634  CA  HIE   221      18.686  31.710  72.350  1.00  0.00
C
ATOM   3635  HA  HIE   221      17.786  32.160  72.778  1.00  0.00
H
ATOM   3636  CB  HIE   221      19.088  32.607  71.168  1.00  0.00
C
ATOM   3637  HB2 HIE   221      19.970  32.187  70.691  1.00  0.00
H
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ATOM   3638  HB3 HIE   221      18.284  32.571  70.438  1.00  0.00
H
ATOM   3639  CG  HIE   221      19.317  34.080  71.479  1.00  0.00
C
ATOM   3640  ND1 HIE   221      18.710  35.132  70.794  1.00  0.00
N
ATOM   3641  CE1 HIE   221      19.164  36.261  71.354  1.00  0.00
C
ATOM   3642  HE1 HIE   221      18.871  37.250  71.046  1.00  0.00
H
ATOM   3643  NE2 HIE   221      20.050  35.987  72.322  1.00  0.00
N
ATOM   3644  HE2 HIE   221      20.581  36.668  72.853  1.00  0.00
H
ATOM   3645  CD2 HIE   221      20.157  34.620  72.413  1.00  0.00
C
ATOM   3646  HD2 HIE   221      20.805  34.082  73.083  1.00  0.00
H
ATOM   3647  C   HIE   221      18.306  30.269  71.953  1.00  0.00
C
ATOM   3648  O   HIE   221      19.171  29.388  71.822  1.00  0.00
O
ATOM   3649  N   GLN   222      17.003  30.009  71.809  1.00  0.00
N
ATOM   3650  H   GLN   222      16.381  30.823  71.823  1.00  0.00
H
ATOM   3651  CA  GLN   222      16.384  28.707  71.557  1.00  0.00
C
ATOM   3652  HA  GLN   222      17.185  27.984  71.444  1.00  0.00
H
ATOM   3653  CB  GLN   222      15.548  28.262  72.764  1.00  0.00
C
ATOM   3654  HB2 GLN   222      14.776  29.008  72.969  1.00  0.00
H
ATOM   3655  HB3 GLN   222      15.045  27.337  72.480  1.00  0.00
H
ATOM   3656  CG  GLN   222      16.357  27.982  74.041  1.00  0.00
C
ATOM   3657  HG2 GLN   222      17.191  27.337  73.780  1.00  0.00
H
ATOM   3658  HG3 GLN   222      16.747  28.916  74.444  1.00  0.00
H
ATOM   3659  CD  GLN   222      15.505  27.293  75.111  1.00  0.00
C
ATOM   3660  OE1 GLN   222      14.375  27.657  75.388  1.00  0.00
O
ATOM   3661  NE2 GLN   222      15.938  26.197  75.707  1.00  0.00
N
ATOM   3662 HE21 GLN   222      15.279  25.770  76.343  1.00  0.00
H
ATOM   3663 HE22 GLN   222      16.825  25.778  75.524  1.00  0.00
H
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ATOM   3664  C   GLN   222      15.510  28.635  70.282  1.00  0.00
C
ATOM   3665  O   GLN   222      15.823  27.860  69.379  1.00  0.00
O
ATOM   3666  N   LYS   223      14.394  29.358  70.183  1.00  0.00
N
ATOM   3667  H   LYS   223      14.202  29.992  70.957  1.00  0.00
H
ATOM   3668  CA  LYS   223      13.455  29.353  69.029  1.00  0.00
C
ATOM   3669  HA  LYS   223      14.014  29.034  68.145  1.00  0.00
H
ATOM   3670  CB  LYS   223      12.302  28.355  69.297  1.00  0.00
C
ATOM   3671  HB2 LYS   223      12.721  27.424  69.661  1.00  0.00
H
ATOM   3672  HB3 LYS   223      11.688  28.745  70.116  1.00  0.00
H
ATOM   3673  CG  LYS   223      11.379  28.039  68.093  1.00  0.00
C
ATOM   3674  HG2 LYS   223      10.730  27.209  68.369  1.00  0.00
H
ATOM   3675  HG3 LYS   223      10.721  28.888  67.938  1.00  0.00
H
ATOM   3676  CD  LYS   223      12.057  27.709  66.746  1.00  0.00
C
ATOM   3677  HD2 LYS   223      12.835  28.440  66.524  1.00  0.00
H
ATOM   3678  HD3 LYS   223      12.498  26.711  66.793  1.00  0.00
H
ATOM   3679  CE  LYS   223      11.024  27.775  65.608  1.00  0.00
C
ATOM   3680  HE2 LYS   223      10.261  27.001  65.751  1.00  0.00
H
ATOM   3681  HE3 LYS   223      10.517  28.744  65.675  1.00  0.00
H
ATOM   3682  NZ  LYS   223      11.638  27.667  64.256  1.00  0.00
N
ATOM   3683  HZ1 LYS   223      11.942  26.734  63.999  1.00  0.00
H
ATOM   3684  HZ2 LYS   223      10.969  27.994  63.558  1.00  0.00
H
ATOM   3685  HZ3 LYS   223      12.434  28.276  64.143  1.00  0.00
H
ATOM   3686  C   LYS   223      12.963  30.768  68.683  1.00  0.00
C
ATOM   3687  O   LYS   223      11.772  31.018  68.491  1.00  0.00
O
ATOM   3688  N   GLU   224      13.892  31.703  68.581  1.00  0.00
N
ATOM   3689  H   GLU   224      14.845  31.467  68.832  1.00  0.00
H
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ATOM   3690  CA  GLU   224      13.647  33.100  68.232  1.00  0.00
C
ATOM   3691  HA  GLU   224      12.577  33.306  68.235  1.00  0.00
H
ATOM   3692  CB  GLU   224      14.292  34.044  69.269  1.00  0.00
C
ATOM   3693  HB2 GLU   224      15.373  34.094  69.111  1.00  0.00
H
ATOM   3694  HB3 GLU   224      13.899  35.043  69.079  1.00  0.00
H
ATOM   3695  CG  GLU   224      14.002  33.691  70.746  1.00  0.00
C
ATOM   3696  HG2 GLU   224      14.326  34.529  71.365  1.00  0.00
H
ATOM   3697  HG3 GLU   224      12.923  33.570  70.869  1.00  0.00
H
ATOM   3698  CD  GLU   224      14.730  32.421  71.219  1.00  0.00
C
ATOM   3699  OE1 GLU   224      15.839  32.146  70.724  1.00  0.00
O
ATOM   3700  OE2 GLU   224      14.166  31.606  71.983  1.00  0.00
O
ATOM   3701  C   GLU   224      14.213  33.362  66.829  1.00  0.00
C
ATOM   3702  O   GLU   224      15.415  33.207  66.627  1.00  0.00
O
ATOM   3703  N   PRO   225      13.394  33.729  65.826  1.00  0.00
N
ATOM   3704  CD  PRO   225      11.947  33.596  65.746  1.00  0.00
C
ATOM   3705  HD2 PRO   225      11.464  34.478  66.166  1.00  0.00
H
ATOM   3706  HD3 PRO   225      11.594  32.697  66.254  1.00  0.00
H
ATOM   3707  CG  PRO   225      11.648  33.494  64.250  1.00  0.00
C
ATOM   3708  HG2 PRO   225      10.650  33.856  64.001  1.00  0.00
H
ATOM   3709  HG3 PRO   225      11.770  32.456  63.935  1.00  0.00
H
ATOM   3710  CB  PRO   225      12.746  34.338  63.603  1.00  0.00
C
ATOM   3711  HB2 PRO   225      12.472  35.391  63.575  1.00  0.00
H
ATOM   3712  HB3 PRO   225      12.952  33.993  62.594  1.00  0.00
H
ATOM   3713  CA  PRO   225      13.942  34.117  64.532  1.00  0.00
C
ATOM   3714  HA  PRO   225      14.518  33.272  64.140  1.00  0.00
H
ATOM   3715  C   PRO   225      14.891  35.326  64.618  1.00  0.00
C
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ATOM   3716  O   PRO   225      15.812  35.334  63.821  1.00  0.00
O
ATOM   3717  N   PRO   226      14.743  36.317  65.530  1.00  0.00
N
ATOM   3718  CD  PRO   226      13.464  36.773  66.049  1.00  0.00
C
ATOM   3719  HD2 PRO   226      13.379  36.517  67.105  1.00  0.00
H
ATOM   3720  HD3 PRO   226      12.625  36.352  65.506  1.00  0.00
H
ATOM   3721  CG  PRO   226      13.493  38.289  65.872  1.00  0.00
C
ATOM   3722  HG2 PRO   226      12.774  38.791  66.522  1.00  0.00
H
ATOM   3723  HG3 PRO   226      13.331  38.560  64.824  1.00  0.00
H
ATOM   3724  CB  PRO   226      14.933  38.594  66.280  1.00  0.00
C
ATOM   3725  HB2 PRO   226      14.966  38.680  67.368  1.00  0.00
H
ATOM   3726  HB3 PRO   226      15.295  39.517  65.828  1.00  0.00
H
ATOM   3727  CA  PRO   226      15.736  37.375  65.775  1.00  0.00
C
ATOM   3728  HA  PRO   226      16.192  37.657  64.828  1.00  0.00
H
ATOM   3729  C   PRO   226      16.885  36.952  66.719  1.00  0.00
C
ATOM   3730  O   PRO   226      16.933  37.357  67.882  1.00  0.00
O
ATOM   3731  N   PHE   227      17.849  36.174  66.226  1.00  0.00
N
ATOM   3732  H   PHE   227      17.795  35.877  65.255  1.00  0.00
H
ATOM   3733  CA  PHE   227      19.048  35.831  67.002  1.00  0.00
C
ATOM   3734  HA  PHE   227      18.744  35.505  67.998  1.00  0.00
H
ATOM   3735  CB  PHE   227      19.802  34.683  66.325  1.00  0.00
C
ATOM   3736  HB2 PHE   227      19.839  34.895  65.268  1.00  0.00
H
ATOM   3737  HB3 PHE   227      20.826  34.655  66.704  1.00  0.00
H
ATOM   3738  CG  PHE   227      19.197  33.310  66.492  1.00  0.00
C
ATOM   3739  CD1 PHE   227      19.305  32.651  67.726  1.00  0.00
C
ATOM   3740  HD1 PHE   227      19.805  33.146  68.544  1.00  0.00
H
ATOM   3741  CE1 PHE   227      18.732  31.380  67.901  1.00  0.00
C
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ATOM   3742  HE1 PHE   227      18.770  30.895  68.863  1.00  0.00
H
ATOM   3743  CZ  PHE   227      18.059  30.764  66.834  1.00  0.00
C
ATOM   3744  HZ  PHE   227      17.584  29.807  66.979  1.00  0.00
H
ATOM   3745  CE2 PHE   227      17.975  31.407  65.588  1.00  0.00
C
ATOM   3746  HE2 PHE   227      17.449  30.941  64.769  1.00  0.00
H
ATOM   3747  CD2 PHE   227      18.541  32.682  65.417  1.00  0.00
C
ATOM   3748  HD2 PHE   227      18.449  33.192  64.468  1.00  0.00
H
ATOM   3749  C   PHE   227      19.976  37.048  67.155  1.00  0.00
C
ATOM   3750  O   PHE   227      20.464  37.598  66.165  1.00  0.00
O
ATOM   3751  N   LEU   228      20.289  37.435  68.396  1.00  0.00
N
ATOM   3752  H   LEU   228      19.883  36.917  69.162  1.00  0.00
H
ATOM   3753  CA  LEU   228      21.303  38.457  68.687  1.00  0.00
C
ATOM   3754  HA  LEU   228      21.338  39.169  67.863  1.00  0.00
H
ATOM   3755  CB  LEU   228      20.960  39.236  69.974  1.00  0.00
C
ATOM   3756  HB2 LEU   228      20.925  38.530  70.803  1.00  0.00
H
ATOM   3757  HB3 LEU   228      21.780  39.924  70.177  1.00  0.00
H
ATOM   3758  CG  LEU   228      19.651  40.046  69.953  1.00  0.00
C
ATOM   3759  HG  LEU   228      18.815  39.378  69.750  1.00  0.00
H
ATOM   3760  CD1 LEU   228      19.439  40.693  71.324  1.00  0.00
C
ATOM   3761 HD11 LEU   228      20.266  41.367  71.550  1.00  0.00
H
ATOM   3762 HD12 LEU   228      18.507  41.259  71.316  1.00  0.00
H
ATOM   3763 HD13 LEU   228      19.378  39.925  72.094  1.00  0.00
H
ATOM   3764  CD2 LEU   228      19.668  41.165  68.913  1.00  0.00
C
ATOM   3765 HD21 LEU   228      19.844  40.747  67.923  1.00  0.00
H
ATOM   3766 HD22 LEU   228      18.701  41.668  68.895  1.00  0.00
H
ATOM   3767 HD23 LEU   228      20.442  41.890  69.150  1.00  0.00
H
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ATOM   3768  C   LEU   228      22.687  37.802  68.791  1.00  0.00
C
ATOM   3769  O   LEU   228      22.973  37.119  69.772  1.00  0.00
O
ATOM   3770  N   TRP   229      23.554  38.034  67.804  1.00  0.00
N
ATOM   3771  H   TRP   229      23.235  38.583  67.013  1.00  0.00
H
ATOM   3772  CA  TRP   229      24.903  37.452  67.730  1.00  0.00
C
ATOM   3773  HA  TRP   229      25.221  37.104  68.717  1.00  0.00
H
ATOM   3774  CB  TRP   229      24.861  36.241  66.790  1.00  0.00
C
ATOM   3775  HB2 TRP   229      24.196  35.492  67.222  1.00  0.00
H
ATOM   3776  HB3 TRP   229      24.424  36.556  65.841  1.00  0.00
H
ATOM   3777  CG  TRP   229      26.182  35.597  66.504  1.00  0.00
C
ATOM   3778  CD1 TRP   229      26.874  34.805  67.353  1.00  0.00
C
ATOM   3779  HD1 TRP   229      26.570  34.551  68.368  1.00  0.00
H
ATOM   3780  NE1 TRP   229      28.036  34.373  66.753  1.00  0.00
N
ATOM   3781  HE1 TRP   229      28.718  33.822  67.261  1.00  0.00
H
ATOM   3782  CE2 TRP   229      28.154  34.855  65.462  1.00  0.00
C
ATOM   3783  CZ2 TRP   229      29.112  34.691  64.446  1.00  0.00
C
ATOM   3784  HZ2 TRP   229      29.951  34.028  64.593  1.00  0.00
H
ATOM   3785  CH2 TRP   229      28.958  35.395  63.238  1.00  0.00
C
ATOM   3786  HH2 TRP   229      29.668  35.272  62.433  1.00  0.00
H
ATOM   3787  CZ3 TRP   229      27.869  36.271  63.072  1.00  0.00
C
ATOM   3788  HZ3 TRP   229      27.757  36.819  62.151  1.00  0.00
H
ATOM   3789  CE3 TRP   229      26.911  36.417  64.092  1.00  0.00
C
ATOM   3790  HE3 TRP   229      26.073  37.085  63.955  1.00  0.00
H
ATOM   3791  CD2 TRP   229      27.011  35.693  65.300  1.00  0.00
C
ATOM   3792  C   TRP   229      25.917  38.483  67.229  1.00  0.00
C
ATOM   3793  O   TRP   229      25.654  39.163  66.241  1.00  0.00
O
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ATOM   3794  N   MET   230      27.069  38.620  67.895  1.00  0.00
N
ATOM   3795  H   MET   230      27.228  37.984  68.667  1.00  0.00
H
ATOM   3796  CA  MET   230      28.211  39.470  67.489  1.00  0.00
C
ATOM   3797  HA  MET   230      28.859  39.530  68.363  1.00  0.00
H
ATOM   3798  CB  MET   230      29.017  38.756  66.384  1.00  0.00
C
ATOM   3799  HB2 MET   230      28.347  38.459  65.578  1.00  0.00
H
ATOM   3800  HB3 MET   230      29.758  39.429  65.957  1.00  0.00
H
ATOM   3801  CG  MET   230      29.746  37.516  66.915  1.00  0.00
C
ATOM   3802  HG2 MET   230      29.004  36.817  67.298  1.00  0.00
H
ATOM   3803  HG3 MET   230      30.259  37.035  66.082  1.00  0.00
H
ATOM   3804  SD  MET   230      30.953  37.812  68.239  1.00  0.00
S
ATOM   3805  CE  MET   230      32.111  38.912  67.394  1.00  0.00
C
ATOM   3806  HE1 MET   230      31.622  39.856  67.156  1.00  0.00
H
ATOM   3807  HE2 MET   230      32.962  39.107  68.044  1.00  0.00
H
ATOM   3808  HE3 MET   230      32.454  38.436  66.477  1.00  0.00
H
ATOM   3809  C   MET   230      27.925  40.957  67.154  1.00  0.00
C
ATOM   3810  O   MET   230      28.773  41.631  66.572  1.00  0.00
O
ATOM   3811  N   GLY   231      26.770  41.504  67.552  1.00  0.00
N
ATOM   3812  H   GLY   231      26.114  40.896  68.016  1.00  0.00
H
ATOM   3813  CA  GLY   231      26.327  42.864  67.190  1.00  0.00
C
ATOM   3814  HA2 GLY   231      25.829  43.309  68.050  1.00  0.00
H
ATOM   3815  HA3 GLY   231      27.189  43.484  66.941  1.00  0.00
H
ATOM   3816  C   GLY   231      25.347  42.927  66.009  1.00  0.00
C
ATOM   3817  O   GLY   231      25.010  44.016  65.542  1.00  0.00
O
ATOM   3818  N   TYR   232      24.853  41.775  65.561  1.00  0.00
N
ATOM   3819  H   TYR   232      25.214  40.916  65.958  1.00  0.00
H
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ATOM   3820  CA  TYR   232      23.890  41.602  64.474  1.00  0.00
C
ATOM   3821  HA  TYR   232      23.694  42.569  64.012  1.00  0.00
H
ATOM   3822  CB  TYR   232      24.498  40.674  63.407  1.00  0.00
C
ATOM   3823  HB2 TYR   232      24.554  39.658  63.801  1.00  0.00
H
ATOM   3824  HB3 TYR   232      23.858  40.651  62.523  1.00  0.00
H
ATOM   3825  CG  TYR   232      25.876  41.134  63.003  1.00  0.00
C
ATOM   3826  CD1 TYR   232      26.005  42.338  62.291  1.00  0.00
C
ATOM   3827  HD1 TYR   232      25.120  42.843  61.931  1.00  0.00
H
ATOM   3828  CE1 TYR   232      27.274  42.908  62.111  1.00  0.00
C
ATOM   3829  HE1 TYR   232      27.366  43.854  61.605  1.00  0.00
H
ATOM   3830  CZ  TYR   232      28.417  42.258  62.624  1.00  0.00
C
ATOM   3831  OH  TYR   232      29.641  42.837  62.509  1.00  0.00
O
ATOM   3832  HH  TYR   232      29.562  43.782  62.293  1.00  0.00
H
ATOM   3833  CE2 TYR   232      28.291  41.009  63.266  1.00  0.00
C
ATOM   3834  HE2 TYR   232      29.172  40.514  63.646  1.00  0.00
H
ATOM   3835  CD2 TYR   232      27.016  40.454  63.468  1.00  0.00
C
ATOM   3836  HD2 TYR   232      26.906  39.531  64.021  1.00  0.00
H
ATOM   3837  C   TYR   232      22.557  41.053  64.978  1.00  0.00
C
ATOM   3838  O   TYR   232      22.472  40.490  66.075  1.00  0.00
O
ATOM   3839  N   GLU   233      21.531  41.215  64.152  1.00  0.00
N
ATOM   3840  H   GLU   233      21.704  41.724  63.288  1.00  0.00
H
ATOM   3841  CA  GLU   233      20.289  40.453  64.208  1.00  0.00
C
ATOM   3842  HA  GLU   233      20.236  39.899  65.146  1.00  0.00
H
ATOM   3843  CB  GLU   233      19.062  41.388  64.145  1.00  0.00
C
ATOM   3844  HB2 GLU   233      18.999  41.853  63.160  1.00  0.00
H
ATOM   3845  HB3 GLU   233      18.168  40.783  64.298  1.00  0.00
H
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ATOM   3846  CG  GLU   233      19.116  42.494  65.214  1.00  0.00
C
ATOM   3847  HG2 GLU   233      19.410  42.047  66.162  1.00  0.00
H
ATOM   3848  HG3 GLU   233      19.884  43.222  64.943  1.00  0.00
H
ATOM   3849  CD  GLU   233      17.776  43.219  65.396  1.00  0.00
C
ATOM   3850  OE1 GLU   233      17.416  44.062  64.544  1.00  0.00
O
ATOM   3851  OE2 GLU   233      17.098  42.986  66.422  1.00  0.00
O
ATOM   3852  C   GLU   233      20.334  39.447  63.046  1.00  0.00
C
ATOM   3853  O   GLU   233      20.365  39.852  61.884  1.00  0.00
O
ATOM   3854  N   LEU   234      20.413  38.151  63.351  1.00  0.00
N
ATOM   3855  H   LEU   234      20.376  37.885  64.331  1.00  0.00
H
ATOM   3856  CA  LEU   234      20.391  37.060  62.370  1.00  0.00
C
ATOM   3857  HA  LEU   234      20.709  37.424  61.394  1.00  0.00
H
ATOM   3858  CB  LEU   234      21.337  35.928  62.824  1.00  0.00
C
ATOM   3859  HB2 LEU   234      20.976  35.575  63.774  1.00  0.00
H
ATOM   3860  HB3 LEU   234      21.243  35.089  62.137  1.00  0.00
H
ATOM   3861  CG  LEU   234      22.822  36.240  63.047  1.00  0.00
C
ATOM   3862  HG  LEU   234      22.928  36.995  63.826  1.00  0.00
H
ATOM   3863  CD1 LEU   234      23.523  34.954  63.493  1.00  0.00
C
ATOM   3864 HD11 LEU   234      23.419  34.188  62.725  1.00  0.00
H
ATOM   3865 HD12 LEU   234      24.582  35.136  63.661  1.00  0.00
H
ATOM   3866 HD13 LEU   234      23.082  34.599  64.424  1.00  0.00
H
ATOM   3867  CD2 LEU   234      23.541  36.720  61.796  1.00  0.00
C
ATOM   3868 HD21 LEU   234      23.115  37.665  61.467  1.00  0.00
H
ATOM   3869 HD22 LEU   234      24.583  36.871  62.058  1.00  0.00
H
ATOM   3870 HD23 LEU   234      23.482  35.973  61.010  1.00  0.00
H
ATOM   3871  C   LEU   234      18.951  36.536  62.262  1.00  0.00
C
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ATOM   3872  O   LEU   234      18.406  36.106  63.277  1.00  0.00
O
ATOM   3873  N   HIE   235      18.348  36.560  61.068  1.00  0.00
N
ATOM   3874  H   HIE   235      18.895  36.861  60.267  1.00  0.00
H
ATOM   3875  CA  HIE   235      17.018  36.018  60.738  1.00  0.00
C
ATOM   3876  HA  HIE   235      16.493  35.777  61.654  1.00  0.00
H
ATOM   3877  CB  HIE   235      16.213  37.104  59.984  1.00  0.00
C
ATOM   3878  HB2 HIE   235      16.772  37.433  59.116  1.00  0.00
H
ATOM   3879  HB3 HIE   235      15.283  36.703  59.598  1.00  0.00
H
ATOM   3880  CG  HIE   235      15.861  38.326  60.796  1.00  0.00
C
ATOM   3881  ND1 HIE   235      15.665  39.606  60.278  1.00  0.00
N
ATOM   3882  CE1 HIE   235      15.371  40.386  61.331  1.00  0.00
C
ATOM   3883  HE1 HIE   235      15.186  41.448  61.270  1.00  0.00
H
ATOM   3884  NE2 HIE   235      15.343  39.663  62.463  1.00  0.00
N
ATOM   3885  HE2 HIE   235      15.168  40.031  63.390  1.00  0.00
H
ATOM   3886  CD2 HIE   235      15.642  38.363  62.139  1.00  0.00
C
ATOM   3887  HD2 HIE   235      15.719  37.522  62.808  1.00  0.00
H
ATOM   3888  C   HIE   235      17.155  34.692  59.947  1.00  0.00
C
ATOM   3889  O   HIE   235      18.259  34.344  59.552  1.00  0.00
O
ATOM   3890  N   PRO   236      16.090  33.901  59.695  1.00  0.00
N
ATOM   3891  CD  PRO   236      14.757  34.012  60.256  1.00  0.00
C
ATOM   3892  HD2 PRO   236      14.403  35.034  60.349  1.00  0.00
H
ATOM   3893  HD3 PRO   236      14.755  33.534  61.238  1.00  0.00
H
ATOM   3894  CG  PRO   236      13.871  33.222  59.300  1.00  0.00
C
ATOM   3895  HG2 PRO   236      13.663  33.813  58.406  1.00  0.00
H
ATOM   3896  HG3 PRO   236      12.944  32.899  59.774  1.00  0.00
H
ATOM   3897  CB  PRO   236      14.770  32.040  58.935  1.00  0.00
C
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ATOM   3898  HB2 PRO   236      14.506  31.628  57.958  1.00  0.00
H
ATOM   3899  HB3 PRO   236      14.685  31.267  59.701  1.00  0.00
H
ATOM   3900  CA  PRO   236      16.194  32.624  58.958  1.00  0.00
C
ATOM   3901  HA  PRO   236      16.838  31.949  59.524  1.00  0.00
H
ATOM   3902  C   PRO   236      16.776  32.709  57.537  1.00  0.00
C
ATOM   3903  O   PRO   236      17.333  31.721  57.057  1.00  0.00
O
ATOM   3904  N   ASP   237      16.642  33.842  56.838  1.00  0.00
N
ATOM   3905  H   ASP   237      16.051  34.575  57.215  1.00  0.00
H
ATOM   3906  CA  ASP   237      17.122  34.031  55.464  1.00  0.00
C
ATOM   3907  HA  ASP   237      17.694  33.155  55.164  1.00  0.00
H
ATOM   3908  CB  ASP   237      15.910  34.112  54.514  1.00  0.00
C
ATOM   3909  HB2 ASP   237      16.292  34.159  53.494  1.00  0.00
H
ATOM   3910  HB3 ASP   237      15.329  33.194  54.601  1.00  0.00
H
ATOM   3911  CG  ASP   237      14.963  35.298  54.736  1.00  0.00
C
ATOM   3912  OD1 ASP   237      14.723  35.671  55.903  1.00  0.00
O
ATOM   3913  OD2 ASP   237      14.461  35.822  53.714  1.00  0.00
O
ATOM   3914  C   ASP   237      18.081  35.227  55.273  1.00  0.00
C
ATOM   3915  O   ASP   237      18.868  35.225  54.324  1.00  0.00
O
ATOM   3916  N   LYS   238      18.020  36.241  56.144  1.00  0.00
N
ATOM   3917  H   LYS   238      17.375  36.153  56.916  1.00  0.00
H
ATOM   3918  CA  LYS   238      18.822  37.482  56.083  1.00  0.00
C
ATOM   3919  HA  LYS   238      19.682  37.325  55.433  1.00  0.00
H
ATOM   3920  CB  LYS   238      17.969  38.649  55.526  1.00  0.00
C
ATOM   3921  HB2 LYS   238      16.957  38.609  55.944  1.00  0.00
H
ATOM   3922  HB3 LYS   238      18.404  39.588  55.863  1.00  0.00
H
ATOM   3923  CG  LYS   238      17.913  38.727  53.990  1.00  0.00
C
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ATOM   3924  HG2 LYS   238      17.738  39.756  53.693  1.00  0.00
H
ATOM   3925  HG3 LYS   238      18.861  38.411  53.562  1.00  0.00
H
ATOM   3926  CD  LYS   238      16.776  37.871  53.448  1.00  0.00
C
ATOM   3927  HD2 LYS   238      16.914  36.864  53.806  1.00  0.00
H
ATOM   3928  HD3 LYS   238      15.830  38.242  53.842  1.00  0.00
H
ATOM   3929  CE  LYS   238      16.693  37.813  51.930  1.00  0.00
C
ATOM   3930  HE2 LYS   238      16.262  38.754  51.581  1.00  0.00
H
ATOM   3931  HE3 LYS   238      17.699  37.689  51.516  1.00  0.00
H
ATOM   3932  NZ  LYS   238      15.844  36.660  51.555  1.00  0.00
N
ATOM   3933  HZ1 LYS   238      15.143  36.482  52.280  1.00  0.00
H
ATOM   3934  HZ2 LYS   238      15.365  36.781  50.675  1.00  0.00
H
ATOM   3935  HZ3 LYS   238      16.392  35.805  51.488  1.00  0.00
H
ATOM   3936  C   LYS   238      19.398  37.855  57.453  1.00  0.00
C
ATOM   3937  O   LYS   238      19.098  37.220  58.455  1.00  0.00
O
ATOM   3938  N   TRP   239      20.195  38.916  57.516  1.00  0.00
N
ATOM   3939  H   TRP   239      20.461  39.351  56.639  1.00  0.00
H
ATOM   3940  CA  TRP   239      20.681  39.529  58.752  1.00  0.00
C
ATOM   3941  HA  TRP   239      19.989  39.296  59.562  1.00  0.00
H
ATOM   3942  CB  TRP   239      22.059  38.938  59.073  1.00  0.00
C
ATOM   3943  HB2 TRP   239      22.387  39.331  60.035  1.00  0.00
H
ATOM   3944  HB3 TRP   239      21.962  37.857  59.175  1.00  0.00
H
ATOM   3945  CG  TRP   239      23.111  39.243  58.050  1.00  0.00
C
ATOM   3946  CD1 TRP   239      23.387  38.509  56.947  1.00  0.00
C
ATOM   3947  HD1 TRP   239      22.876  37.590  56.673  1.00  0.00
H
ATOM   3948  NE1 TRP   239      24.358  39.136  56.191  1.00  0.00
N
ATOM   3949  HE1 TRP   239      24.665  38.779  55.290  1.00  0.00
H
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ATOM   3950  CE2 TRP   239      24.759  40.325  56.777  1.00  0.00
C
ATOM   3951  CZ2 TRP   239      25.672  41.327  56.412  1.00  0.00
C
ATOM   3952  HZ2 TRP   239      26.207  41.254  55.479  1.00  0.00
H
ATOM   3953  CH2 TRP   239      25.862  42.432  57.257  1.00  0.00
C
ATOM   3954  HH2 TRP   239      26.549  43.218  56.980  1.00  0.00
H
ATOM   3955  CZ3 TRP   239      25.149  42.520  58.468  1.00  0.00
C
ATOM   3956  HZ3 TRP   239      25.300  43.365  59.125  1.00  0.00
H
ATOM   3957  CE3 TRP   239      24.233  41.512  58.822  1.00  0.00
C
ATOM   3958  HE3 TRP   239      23.701  41.573  59.759  1.00  0.00
H
ATOM   3959  CD2 TRP   239      23.999  40.403  57.979  1.00  0.00
C
ATOM   3960  C   TRP   239      20.766  41.057  58.627  1.00  0.00
C
ATOM   3961  O   TRP   239      20.734  41.598  57.522  1.00  0.00
O
ATOM   3962  N   THR   240      20.922  41.771  59.743  1.00  0.00
N
ATOM   3963  H   THR   240      20.884  41.282  60.635  1.00  0.00
H
ATOM   3964  CA  THR   240      21.276  43.202  59.752  1.00  0.00
C
ATOM   3965  HA  THR   240      21.933  43.393  58.904  1.00  0.00
H
ATOM   3966  CB  THR   240      20.023  44.065  59.527  1.00  0.00
C
ATOM   3967  HB  THR   240      19.503  43.681  58.649  1.00  0.00
H
ATOM   3968  CG2 THR   240      19.028  44.067  60.688  1.00  0.00
C
ATOM   3969 HG21 THR   240      19.511  44.383  61.612  1.00  0.00
H
ATOM   3970 HG22 THR   240      18.209  44.748  60.464  1.00  0.00
H
ATOM   3971 HG23 THR   240      18.621  43.065  60.823  1.00  0.00
H
ATOM   3972  OG1 THR   240      20.415  45.385  59.225  1.00  0.00
O
ATOM   3973  HG1 THR   240      19.834  45.673  58.499  1.00  0.00
H
ATOM   3974  C   THR   240      22.070  43.590  61.011  1.00  0.00
C
ATOM   3975  O   THR   240      22.327  42.748  61.871  1.00  0.00
O
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ATOM   3976  N   VAL   241      22.522  44.841  61.119  1.00  0.00
N
ATOM   3977  H   VAL   241      22.164  45.501  60.438  1.00  0.00
H
ATOM   3978  CA  VAL   241      23.173  45.387  62.330  1.00  0.00
C
ATOM   3979  HA  VAL   241      23.894  44.659  62.702  1.00  0.00
H
ATOM   3980  CB  VAL   241      23.949  46.693  62.036  1.00  0.00
C
ATOM   3981  HB  VAL   241      24.219  47.151  62.989  1.00  0.00
H
ATOM   3982  CG1 VAL   241      25.260  46.405  61.293  1.00  0.00
C
ATOM   3983 HG11 VAL   241      25.060  45.928  60.333  1.00  0.00
H
ATOM   3984 HG12 VAL   241      25.805  47.335  61.124  1.00  0.00
H
ATOM   3985 HG13 VAL   241      25.889  45.752  61.898  1.00  0.00
H
ATOM   3986  CG2 VAL   241      23.151  47.726  61.225  1.00  0.00
C
ATOM   3987 HG21 VAL   241      22.196  47.923  61.714  1.00  0.00
H
ATOM   3988 HG22 VAL   241      23.710  48.659  61.167  1.00  0.00
H
ATOM   3989 HG23 VAL   241      22.963  47.362  60.215  1.00  0.00
H
ATOM   3990  C   VAL   241      22.155  45.614  63.457  1.00  0.00
C
ATOM   3991  O   VAL   241      20.997  45.939  63.198  1.00  0.00
O
ATOM   3992  N   GLN   242      22.586  45.481  64.718  1.00  0.00
N
ATOM   3993  H   GLN   242      23.539  45.178  64.879  1.00  0.00
H
ATOM   3994  CA  GLN   242      21.779  45.863  65.890  1.00  0.00
C
ATOM   3995  HA  GLN   242      20.811  45.374  65.789  1.00  0.00
H
ATOM   3996  CB  GLN   242      22.452  45.344  67.178  1.00  0.00
C
ATOM   3997  HB2 GLN   242      23.525  45.544  67.139  1.00  0.00
H
ATOM   3998  HB3 GLN   242      22.049  45.863  68.046  1.00  0.00
H
ATOM   3999  CG  GLN   242      22.195  43.839  67.351  1.00  0.00
C
ATOM   4000  HG2 GLN   242      21.126  43.672  67.484  1.00  0.00
H
ATOM   4001  HG3 GLN   242      22.495  43.328  66.440  1.00  0.00
H
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ATOM   4002  CD  GLN   242      22.932  43.204  68.531  1.00  0.00
C
ATOM   4003  OE1 GLN   242      23.313  43.834  69.511  1.00  0.00
O
ATOM   4004  NE2 GLN   242      23.160  41.911  68.489  1.00  0.00
N
ATOM   4005 HE21 GLN   242      23.558  41.481  69.302  1.00  0.00
H
ATOM   4006 HE22 GLN   242      22.832  41.371  67.689  1.00  0.00
H
ATOM   4007  C   GLN   242      21.509  47.389  65.935  1.00  0.00
C
ATOM   4008  O   GLN   242      22.274  48.148  65.331  1.00  0.00
O
ATOM   4009  N   PRO   243      20.453  47.851  66.648  1.00  0.00
N
ATOM   4010  CD  PRO   243      19.563  47.031  67.470  1.00  0.00
C
ATOM   4011  HD2 PRO   243      20.070  46.755  68.392  1.00  0.00
H
ATOM   4012  HD3 PRO   243      19.229  46.138  66.944  1.00  0.00
H
ATOM   4013  CG  PRO   243      18.350  47.895  67.811  1.00  0.00
C
ATOM   4014  HG2 PRO   243      17.963  47.672  68.805  1.00  0.00
H
ATOM   4015  HG3 PRO   243      17.573  47.757  67.060  1.00  0.00
H
ATOM   4016  CB  PRO   243      18.910  49.310  67.724  1.00  0.00
C
ATOM   4017  HB2 PRO   243      19.460  49.538  68.640  1.00  0.00
H
ATOM   4018  HB3 PRO   243      18.123  50.043  67.548  1.00  0.00
H
ATOM   4019  CA  PRO   243      19.868  49.194  66.532  1.00  0.00
C
ATOM   4020  HA  PRO   243      19.265  49.195  65.621  1.00  0.00
H
ATOM   4021  C   PRO   243      20.861  50.370  66.451  1.00  0.00
C
ATOM   4022  O   PRO   243      21.456  50.802  67.443  1.00  0.00
O
ATOM   4023  N   ILE   244      21.009  50.929  65.246  1.00  0.00
N
ATOM   4024  H   ILE   244      20.495  50.517  64.481  1.00  0.00
H
ATOM   4025  CA  ILE   244      22.046  51.916  64.908  1.00  0.00
C
ATOM   4026  HA  ILE   244      22.884  51.684  65.565  1.00  0.00
H
ATOM   4027  CB  ILE   244      22.567  51.683  63.468  1.00  0.00
C
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ATOM   4028  HB  ILE   244      22.930  50.652  63.434  1.00  0.00
H
ATOM   4029  CG2 ILE   244      21.478  51.792  62.382  1.00  0.00
C
ATOM   4030 HG21 ILE   244      21.060  52.799  62.349  1.00  0.00
H
ATOM   4031 HG22 ILE   244      21.914  51.568  61.407  1.00  0.00
H
ATOM   4032 HG23 ILE   244      20.672  51.077  62.558  1.00  0.00
H
ATOM   4033  CG1 ILE   244      23.757  52.598  63.099  1.00  0.00
C
ATOM   4034 HG12 ILE   244      24.074  52.346  62.088  1.00  0.00
H
ATOM   4035 HG13 ILE   244      23.449  53.646  63.094  1.00  0.00
H
ATOM   4036  CD1 ILE   244      24.956  52.423  64.038  1.00  0.00
C
ATOM   4037 HD11 ILE   244      25.214  51.371  64.105  1.00  0.00
H
ATOM   4038 HD12 ILE   244      25.807  52.971  63.647  1.00  0.00
H
ATOM   4039 HD13 ILE   244      24.727  52.797  65.033  1.00  0.00
H
ATOM   4040  C   ILE   244      21.639  53.359  65.254  1.00  0.00
C
ATOM   4041  O   ILE   244      21.444  54.218  64.395  1.00  0.00
O
ATOM   4042  N   VAL   245      21.545  53.659  66.552  1.00  0.00
N
ATOM   4043  H   VAL   245      21.645  52.900  67.218  1.00  0.00
H
ATOM   4044  CA  VAL   245      21.224  55.015  67.027  1.00  0.00
C
ATOM   4045  HA  VAL   245      20.339  55.356  66.483  1.00  0.00
H
ATOM   4046  CB  VAL   245      20.864  55.038  68.527  1.00  0.00
C
ATOM   4047  HB  VAL   245      21.727  54.718  69.114  1.00  0.00
H
ATOM   4048  CG1 VAL   245      20.455  56.446  68.983  1.00  0.00
C
ATOM   4049 HG11 VAL   245      19.627  56.814  68.378  1.00  0.00
H
ATOM   4050 HG12 VAL   245      20.145  56.420  70.028  1.00  0.00
H
ATOM   4051 HG13 VAL   245      21.297  57.133  68.900  1.00  0.00
H
ATOM   4052  CG2 VAL   245      19.686  54.099  68.818  1.00  0.00
C
ATOM   4053 HG21 VAL   245      19.965  53.067  68.608  1.00  0.00
H
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ATOM   4054 HG22 VAL   245      19.402  54.167  69.868  1.00  0.00
H
ATOM   4055 HG23 VAL   245      18.830  54.370  68.198  1.00  0.00
H
ATOM   4056  C   VAL   245      22.370  55.983  66.707  1.00  0.00
C
ATOM   4057  O   VAL   245      23.503  55.794  67.169  1.00  0.00
O
ATOM   4058  N   LEU   246      22.050  57.031  65.942  1.00  0.00
N
ATOM   4059  H   LEU   246      21.122  57.036  65.549  1.00  0.00
H
ATOM   4060  CA  LEU   246      22.885  58.211  65.683  1.00  0.00
C
ATOM   4061  HA  LEU   246      23.922  57.912  65.815  1.00  0.00
H
ATOM   4062  CB  LEU   246      22.673  58.690  64.220  1.00  0.00
C
ATOM   4063  HB2 LEU   246      22.010  57.999  63.695  1.00  0.00
H
ATOM   4064  HB3 LEU   246      22.171  59.659  64.236  1.00  0.00
H
ATOM   4065  CG  LEU   246      23.967  58.836  63.395  1.00  0.00
C
ATOM   4066  HG  LEU   246      24.646  59.513  63.910  1.00  0.00
H
ATOM   4067  CD1 LEU   246      24.653  57.481  63.205  1.00  0.00
C
ATOM   4068 HD11 LEU   246      23.941  56.751  62.820  1.00  0.00
H
ATOM   4069 HD12 LEU   246      25.469  57.575  62.498  1.00  0.00
H
ATOM   4070 HD13 LEU   246      25.054  57.123  64.149  1.00  0.00
H
ATOM   4071  CD2 LEU   246      23.670  59.426  62.015  1.00  0.00
C
ATOM   4072 HD21 LEU   246      23.190  60.398  62.122  1.00  0.00
H
ATOM   4073 HD22 LEU   246      24.598  59.566  61.461  1.00  0.00
H
ATOM   4074 HD23 LEU   246      23.020  58.761  61.450  1.00  0.00
H
ATOM   4075  C   LEU   246      22.563  59.327  66.705  1.00  0.00
C
ATOM   4076  O   LEU   246      21.377  59.569  66.966  1.00  0.00
O
ATOM   4077  N   PRO   247      23.574  60.013  67.282  1.00  0.00
N
ATOM   4078  CD  PRO   247      25.002  59.829  67.059  1.00  0.00
C
ATOM   4079  HD2 PRO   247      25.236  59.727  66.001  1.00  0.00
H
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ATOM   4080  HD3 PRO   247      25.342  58.957  67.618  1.00  0.00
H
ATOM   4081  CG  PRO   247      25.671  61.084  67.610  1.00  0.00
C
ATOM   4082  HG2 PRO   247      25.655  61.863  66.847  1.00  0.00
H
ATOM   4083  HG3 PRO   247      26.688  60.887  67.946  1.00  0.00
H
ATOM   4084  CB  PRO   247      24.753  61.472  68.768  1.00  0.00
C
ATOM   4085  HB2 PRO   247      24.830  62.534  69.007  1.00  0.00
H
ATOM   4086  HB3 PRO   247      24.986  60.865  69.644  1.00  0.00
H
ATOM   4087  CA  PRO   247      23.361  61.099  68.247  1.00  0.00
C
ATOM   4088  HA  PRO   247      22.753  60.736  69.076  1.00  0.00
H
ATOM   4089  C   PRO   247      22.664  62.315  67.625  1.00  0.00
C
ATOM   4090  O   PRO   247      22.816  62.580  66.435  1.00  0.00
O
ATOM   4091  N   GLU   248      21.918  63.078  68.422  1.00  0.00
N
ATOM   4092  H   GLU   248      21.852  62.793  69.399  1.00  0.00
H
ATOM   4093  CA  GLU   248      21.171  64.269  67.954  1.00  0.00
C
ATOM   4094  HA  GLU   248      21.499  64.525  66.946  1.00  0.00
H
ATOM   4095  CB  GLU   248      19.672  63.943  67.866  1.00  0.00
C
ATOM   4096  HB2 GLU   248      19.552  62.981  67.372  1.00  0.00
H
ATOM   4097  HB3 GLU   248      19.287  63.823  68.875  1.00  0.00
H
ATOM   4098  CG  GLU   248      18.836  65.010  67.137  1.00  0.00
C
ATOM   4099  HG2 GLU   248      17.775  64.781  67.317  1.00  0.00
H
ATOM   4100  HG3 GLU   248      19.025  65.971  67.605  1.00  0.00
H
ATOM   4101  CD  GLU   248      19.127  65.078  65.620  1.00  0.00
C
ATOM   4102  OE1 GLU   248      18.351  64.443  64.875  1.00  0.00
O
ATOM   4103  OE2 GLU   248      20.170  65.616  65.177  1.00  0.00
O
ATOM   4104  C   GLU   248      21.456  65.501  68.828  1.00  0.00
C
ATOM   4105  O   GLU   248      21.020  65.585  69.982  1.00  0.00
O
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ATOM   4106  N   LYS   249      22.200  66.470  68.281  1.00  0.00
N
ATOM   4107  H   LYS   249      22.468  66.386  67.308  1.00  0.00
H
ATOM   4108  CA  LYS   249      22.630  67.686  68.989  1.00  0.00
C
ATOM   4109  HA  LYS   249      21.798  68.005  69.618  1.00  0.00
H
ATOM   4110  CB  LYS   249      23.820  67.375  69.924  1.00  0.00
C
ATOM   4111  HB2 LYS   249      24.147  68.298  70.400  1.00  0.00
H
ATOM   4112  HB3 LYS   249      23.470  66.695  70.695  1.00  0.00
H
ATOM   4113  CG  LYS   249      25.048  66.734  69.241  1.00  0.00
C
ATOM   4114  HG2 LYS   249      24.761  65.836  68.694  1.00  0.00
H
ATOM   4115  HG3 LYS   249      25.443  67.446  68.505  1.00  0.00
H
ATOM   4116  CD  LYS   249      26.169  66.371  70.223  1.00  0.00
C
ATOM   4117  HD2 LYS   249      27.080  66.150  69.660  1.00  0.00
H
ATOM   4118  HD3 LYS   249      26.386  67.244  70.830  1.00  0.00
H
ATOM   4119  CE  LYS   249      25.748  65.247  71.178  1.00  0.00
C
ATOM   4120  HE2 LYS   249      24.755  65.467  71.579  1.00  0.00
H
ATOM   4121  HE3 LYS   249      25.724  64.320  70.641  1.00  0.00
H
ATOM   4122  NZ  LYS   249      26.726  65.087  72.281  1.00  0.00
N
ATOM   4123  HZ1 LYS   249      26.568  65.824  72.955  1.00  0.00
H
ATOM   4124  HZ2 LYS   249      26.554  64.266  72.861  1.00  0.00
H
ATOM   4125  HZ3 LYS   249      27.738  65.084  72.000  1.00  0.00
H
ATOM   4126  C   LYS   249      22.900  68.871  68.058  1.00  0.00
C
ATOM   4127  O   LYS   249      23.089  68.720  66.854  1.00  0.00
O
ATOM   4128  N   ASP   250      22.868  70.054  68.657  1.00  0.00
N
ATOM   4129  H   ASP   250      22.835  70.065  69.672  1.00  0.00
H
ATOM   4130  CA  ASP   250      23.013  71.369  68.030  1.00  0.00
C
ATOM   4131  HA  ASP   250      22.479  71.366  67.078  1.00  0.00
H
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ATOM   4132  CB  ASP   250      22.357  72.426  68.948  1.00  0.00
C
ATOM   4133  HB2 ASP   250      22.500  73.403  68.488  1.00  0.00
H
ATOM   4134  HB3 ASP   250      21.285  72.229  68.972  1.00  0.00
H
ATOM   4135  CG  ASP   250      22.862  72.485  70.407  1.00  0.00
C
ATOM   4136  OD1 ASP   250      22.648  73.522  71.062  1.00  0.00
O
ATOM   4137  OD2 ASP   250      23.390  71.482  70.944  1.00  0.00
O
ATOM   4138  C   ASP   250      24.478  71.718  67.726  1.00  0.00
C
ATOM   4139  O   ASP   250      24.827  72.058  66.596  1.00  0.00
O
ATOM   4140  N   SER   251      25.334  71.590  68.736  1.00  0.00
N
ATOM   4141  H   SER   251      24.957  71.303  69.633  1.00  0.00
H
ATOM   4142  CA  SER   251      26.783  71.768  68.663  1.00  0.00
C
ATOM   4143  HA  SER   251      27.060  71.986  67.632  1.00  0.00
H
ATOM   4144  CB  SER   251      27.215  72.967  69.512  1.00  0.00
C
ATOM   4145  HB2 SER   251      28.289  73.126  69.400  1.00  0.00
H
ATOM   4146  HB3 SER   251      26.693  73.859  69.159  1.00  0.00
H
ATOM   4147  OG  SER   251      26.908  72.748  70.877  1.00  0.00
O
ATOM   4148  HG  SER   251      26.999  73.579  71.352  1.00  0.00
H
ATOM   4149  C   SER   251      27.501  70.478  69.070  1.00  0.00
C
ATOM   4150  O   SER   251      26.952  69.633  69.782  1.00  0.00
O
ATOM   4151  N   TRP   252      28.727  70.306  68.575  1.00  0.00
N
ATOM   4152  H   TRP   252      29.149  71.048  68.038  1.00  0.00
H
ATOM   4153  CA  TRP   252      29.432  69.024  68.578  1.00  0.00
C
ATOM   4154  HA  TRP   252      28.923  68.318  69.239  1.00  0.00
H
ATOM   4155  CB  TRP   252      29.409  68.442  67.153  1.00  0.00
C
ATOM   4156  HB2 TRP   252      29.951  69.118  66.489  1.00  0.00
H
ATOM   4157  HB3 TRP   252      29.957  67.503  67.173  1.00  0.00
H
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ATOM   4158  CG  TRP   252      28.051  68.174  66.557  1.00  0.00
C
ATOM   4159  CD1 TRP   252      27.175  69.106  66.109  1.00  0.00
C
ATOM   4160  HD1 TRP   252      27.345  70.175  66.108  1.00  0.00
H
ATOM   4161  NE1 TRP   252      26.006  68.502  65.700  1.00  0.00
N
ATOM   4162  HE1 TRP   252      25.175  69.011  65.424  1.00  0.00
H
ATOM   4163  CE2 TRP   252      26.081  67.132  65.806  1.00  0.00
C
ATOM   4164  CZ2 TRP   252      25.176  66.099  65.521  1.00  0.00
C
ATOM   4165  HZ2 TRP   252      24.197  66.333  65.127  1.00  0.00
H
ATOM   4166  CH2 TRP   252      25.567  64.770  65.750  1.00  0.00
C
ATOM   4167  HH2 TRP   252      24.885  63.964  65.530  1.00  0.00
H
ATOM   4168  CZ3 TRP   252      26.854  64.492  66.247  1.00  0.00
C
ATOM   4169  HZ3 TRP   252      27.169  63.472  66.409  1.00  0.00
H
ATOM   4170  CE3 TRP   252      27.750  65.541  66.518  1.00  0.00
C
ATOM   4171  HE3 TRP   252      28.743  65.318  66.867  1.00  0.00
H
ATOM   4172  CD2 TRP   252      27.384  66.890  66.330  1.00  0.00
C
ATOM   4173  C   TRP   252      30.864  69.196  69.090  1.00  0.00
C
ATOM   4174  O   TRP   252      31.575  70.118  68.683  1.00  0.00
O
ATOM   4175  N   THR   253      31.307  68.305  69.977  1.00  0.00
N
ATOM   4176  H   THR   253      30.690  67.566  70.291  1.00  0.00
H
ATOM   4177  CA  THR   253      32.725  68.226  70.355  1.00  0.00
C
ATOM   4178  HA  THR   253      33.141  69.226  70.313  1.00  0.00
H
ATOM   4179  CB  THR   253      32.943  67.727  71.788  1.00  0.00
C
ATOM   4180  HB  THR   253      34.009  67.792  72.014  1.00  0.00
H
ATOM   4181  CG2 THR   253      32.189  68.560  72.825  1.00  0.00
C
ATOM   4182 HG21 THR   253      31.114  68.478  72.669  1.00  0.00
H
ATOM   4183 HG22 THR   253      32.440  68.211  73.824  1.00  0.00
H
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ATOM   4184 HG23 THR   253      32.485  69.603  72.744  1.00  0.00
H
ATOM   4185  OG1 THR   253      32.520  66.385  71.912  1.00  0.00
O
ATOM   4186  HG1 THR   253      32.296  66.253  72.837  1.00  0.00
H
ATOM   4187  C   THR   253      33.505  67.357  69.372  1.00  0.00
C
ATOM   4188  O   THR   253      32.924  66.531  68.669  1.00  0.00
O
ATOM   4189  N   VAL   254      34.833  67.473  69.359  1.00  0.00
N
ATOM   4190  H   VAL   254      35.253  68.242  69.876  1.00  0.00
H
ATOM   4191  CA  VAL   254      35.723  66.542  68.636  1.00  0.00
C
ATOM   4192  HA  VAL   254      35.559  66.650  67.565  1.00  0.00
H
ATOM   4193  CB  VAL   254      37.186  66.894  68.956  1.00  0.00
C
ATOM   4194  HB  VAL   254      37.281  66.951  70.038  1.00  0.00
H
ATOM   4195  CG1 VAL   254      38.212  65.874  68.444  1.00  0.00
C
ATOM   4196 HG11 VAL   254      38.129  65.770  67.363  1.00  0.00
H
ATOM   4197 HG12 VAL   254      39.217  66.210  68.698  1.00  0.00
H
ATOM   4198 HG13 VAL   254      38.053  64.904  68.911  1.00  0.00
H
ATOM   4199  CG2 VAL   254      37.560  68.254  68.353  1.00  0.00
C
ATOM   4200 HG21 VAL   254      36.819  69.010  68.601  1.00  0.00
H
ATOM   4201 HG22 VAL   254      38.506  68.572  68.782  1.00  0.00
H
ATOM   4202 HG23 VAL   254      37.647  68.183  67.268  1.00  0.00
H
ATOM   4203  C   VAL   254      35.425  65.077  69.004  1.00  0.00
C
ATOM   4204  O   VAL   254      35.383  64.226  68.115  1.00  0.00
O
ATOM   4205  N   ASN   255      35.144  64.780  70.281  1.00  0.00
N
ATOM   4206  H   ASN   255      35.163  65.524  70.971  1.00  0.00
H
ATOM   4207  CA  ASN   255      34.703  63.449  70.710  1.00  0.00
C
ATOM   4208  HA  ASN   255      35.455  62.726  70.390  1.00  0.00
H
ATOM   4209  CB  ASN   255      34.612  63.411  72.244  1.00  0.00
C
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ATOM   4210  HB2 ASN   255      35.525  63.808  72.669  1.00  0.00
H
ATOM   4211  HB3 ASN   255      33.789  64.041  72.585  1.00  0.00
H
ATOM   4212  CG  ASN   255      34.388  62.006  72.775  1.00  0.00
C
ATOM   4213  OD1 ASN   255      33.309  61.447  72.708  1.00  0.00
O
ATOM   4214  ND2 ASN   255      35.403  61.376  73.316  1.00  0.00
N
ATOM   4215 HD21 ASN   255      35.218  60.461  73.681  1.00  0.00
H
ATOM   4216 HD22 ASN   255      36.262  61.855  73.507  1.00  0.00
H
ATOM   4217  C   ASN   255      33.377  63.031  70.064  1.00  0.00
C
ATOM   4218  O   ASN   255      33.296  61.926  69.533  1.00  0.00
O
ATOM   4219  N   ASP   256      32.367  63.907  70.024  1.00  0.00
N
ATOM   4220  H   ASP   256      32.504  64.845  70.380  1.00  0.00
H
ATOM   4221  CA  ASP   256      31.110  63.612  69.351  1.00  0.00
C
ATOM   4222  HA  ASP   256      30.720  62.689  69.789  1.00  0.00
H
ATOM   4223  CB  ASP   256      30.082  64.739  69.587  1.00  0.00
C
ATOM   4224  HB2 ASP   256      30.565  65.697  69.376  1.00  0.00
H
ATOM   4225  HB3 ASP   256      29.273  64.607  68.883  1.00  0.00
H
ATOM   4226  CG  ASP   256      29.394  64.846  70.946  1.00  0.00
C
ATOM   4227  OD1 ASP   256      28.784  63.826  71.426  1.00  0.00
O
ATOM   4228  OD2 ASP   256      29.262  65.935  71.479  1.00  0.00
O
ATOM   4229  C   ASP   256      31.307  63.316  67.841  1.00  0.00
C
ATOM   4230  O   ASP   256      30.679  62.381  67.342  1.00  0.00
O
ATOM   4231  N   ILE   257      32.233  63.979  67.131  1.00  0.00
N
ATOM   4232  H   ILE   257      32.742  64.751  67.551  1.00  0.00
H
ATOM   4233  CA  ILE   257      32.558  63.602  65.735  1.00  0.00
C
ATOM   4234  HA  ILE   257      31.626  63.520  65.183  1.00  0.00
H
ATOM   4235  CB  ILE   257      33.407  64.678  65.019  1.00  0.00
C
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ATOM   4236  HB  ILE   257      34.435  64.581  65.367  1.00  0.00
H
ATOM   4237  CG2 ILE   257      33.378  64.393  63.508  1.00  0.00
C
ATOM   4238 HG21 ILE   257      32.355  64.446  63.135  1.00  0.00
H
ATOM   4239 HG22 ILE   257      33.988  65.126  62.975  1.00  0.00
H
ATOM   4240 HG23 ILE   257      33.768  63.398  63.297  1.00  0.00
H
ATOM   4241  CG1 ILE   257      32.992  66.150  65.234  1.00  0.00
C
ATOM   4242 HG12 ILE   257      33.198  66.422  66.264  1.00  0.00
H
ATOM   4243 HG13 ILE   257      33.634  66.789  64.622  1.00  0.00
H
ATOM   4244  CD1 ILE   257      31.532  66.504  64.921  1.00  0.00
C
ATOM   4245 HD11 ILE   257      30.855  65.914  65.535  1.00  0.00
H
ATOM   4246 HD12 ILE   257      31.378  67.561  65.139  1.00  0.00
H
ATOM   4247 HD13 ILE   257      31.311  66.337  63.867  1.00  0.00
H
ATOM   4248  C   ILE   257      33.235  62.222  65.674  1.00  0.00
C
ATOM   4249  O   ILE   257      32.904  61.422  64.798  1.00  0.00
O
ATOM   4250  N   CYS   258      34.120  61.871  66.624  1.00  0.00
N
ATOM   4251  H   CYS   258      34.392  62.570  67.307  1.00  0.00
H
ATOM   4252  CA  CYS   258      34.695  60.517  66.708  1.00  0.00
C
ATOM   4253  HA  CYS   258      35.212  60.296  65.772  1.00  0.00
H
ATOM   4254  CB  CYS   258      35.704  60.403  67.865  1.00  0.00
C
ATOM   4255  HB2 CYS   258      35.231  60.684  68.805  1.00  0.00
H
ATOM   4256  HB3 CYS   258      36.021  59.360  67.943  1.00  0.00
H
ATOM   4257  SG  CYS   258      37.176  61.424  67.596  1.00  0.00
S
ATOM   4258  HG  CYS   258      37.728  61.230  68.797  1.00  0.00
H
ATOM   4259  C   CYS   258      33.602  59.450  66.900  1.00  0.00
C
ATOM   4260  O   CYS   258      33.555  58.467  66.154  1.00  0.00
O
ATOM   4261  N   LYS   259      32.696  59.654  67.867  1.00  0.00
N
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ATOM   4262  H   LYS   259      32.797  60.496  68.432  1.00  0.00
H
ATOM   4263  CA  LYS   259      31.574  58.739  68.157  1.00  0.00
C
ATOM   4264  HA  LYS   259      31.970  57.748  68.387  1.00  0.00
H
ATOM   4265  CB  LYS   259      30.747  59.256  69.347  1.00  0.00
C
ATOM   4266  HB2 LYS   259      30.407  60.272  69.137  1.00  0.00
H
ATOM   4267  HB3 LYS   259      29.866  58.620  69.451  1.00  0.00
H
ATOM   4268  CG  LYS   259      31.521  59.249  70.674  1.00  0.00
C
ATOM   4269  HG2 LYS   259      31.893  58.244  70.878  1.00  0.00
H
ATOM   4270  HG3 LYS   259      32.380  59.906  70.594  1.00  0.00
H
ATOM   4271  CD  LYS   259      30.660  59.721  71.854  1.00  0.00
C
ATOM   4272  HD2 LYS   259      31.319  59.915  72.700  1.00  0.00
H
ATOM   4273  HD3 LYS   259      30.142  60.649  71.598  1.00  0.00
H
ATOM   4274  CE  LYS   259      29.664  58.626  72.247  1.00  0.00
C
ATOM   4275  HE2 LYS   259      28.891  58.540  71.480  1.00  0.00
H
ATOM   4276  HE3 LYS   259      30.209  57.677  72.283  1.00  0.00
H
ATOM   4277  NZ  LYS   259      29.062  58.869  73.578  1.00  0.00
N
ATOM   4278  HZ1 LYS   259      28.385  59.619  73.552  1.00  0.00
H
ATOM   4279  HZ2 LYS   259      28.637  58.004  73.907  1.00  0.00
H
ATOM   4280  HZ3 LYS   259      29.785  59.100  74.245  1.00  0.00
H
ATOM   4281  C   LYS   259      30.664  58.575  66.940  1.00  0.00
C
ATOM   4282  O   LYS   259      30.248  57.459  66.628  1.00  0.00
O
ATOM   4283  N   LEU   260      30.386  59.682  66.250  1.00  0.00
N
ATOM   4284  H   LEU   260      30.743  60.564  66.609  1.00  0.00
H
ATOM   4285  CA  LEU   260      29.609  59.735  65.018  1.00  0.00
C
ATOM   4286  HA  LEU   260      28.638  59.279  65.207  1.00  0.00
H
ATOM   4287  CB  LEU   260      29.400  61.220  64.670  1.00  0.00
C
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ATOM   4288  HB2 LEU   260      28.902  61.717  65.504  1.00  0.00
H
ATOM   4289  HB3 LEU   260      30.379  61.680  64.560  1.00  0.00
H
ATOM   4290  CG  LEU   260      28.599  61.489  63.389  1.00  0.00
C
ATOM   4291  HG  LEU   260      29.023  60.908  62.572  1.00  0.00
H
ATOM   4292  CD1 LEU   260      27.130  61.115  63.575  1.00  0.00
C
ATOM   4293 HD11 LEU   260      26.669  61.764  64.321  1.00  0.00
H
ATOM   4294 HD12 LEU   260      26.613  61.236  62.629  1.00  0.00
H
ATOM   4295 HD13 LEU   260      27.036  60.075  63.879  1.00  0.00
H
ATOM   4296  CD2 LEU   260      28.706  62.971  63.033  1.00  0.00
C
ATOM   4297 HD21 LEU   260      29.753  63.249  62.940  1.00  0.00
H
ATOM   4298 HD22 LEU   260      28.209  63.173  62.087  1.00  0.00
H
ATOM   4299 HD23 LEU   260      28.251  63.584  63.811  1.00  0.00
H
ATOM   4300  C   LEU   260      30.283  58.931  63.894  1.00  0.00
C
ATOM   4301  O   LEU   260      29.715  57.944  63.433  1.00  0.00
O
ATOM   4302  N   VAL   261      31.504  59.285  63.483  1.00  0.00
N
ATOM   4303  H   VAL   261      31.959  60.074  63.938  1.00  0.00
H
ATOM   4304  CA  VAL   261      32.204  58.620  62.366  1.00  0.00
C
ATOM   4305  HA  VAL   261      31.555  58.667  61.492  1.00  0.00
H
ATOM   4306  CB  VAL   261      33.507  59.370  62.011  1.00  0.00
C
ATOM   4307  HB  VAL   261      34.099  59.514  62.916  1.00  0.00
H
ATOM   4308  CG1 VAL   261      34.367  58.610  60.994  1.00  0.00
C
ATOM   4309 HG11 VAL   261      33.766  58.324  60.133  1.00  0.00
H
ATOM   4310 HG12 VAL   261      35.195  59.238  60.661  1.00  0.00
H
ATOM   4311 HG13 VAL   261      34.787  57.719  61.455  1.00  0.00
H
ATOM   4312  CG2 VAL   261      33.172  60.741  61.403  1.00  0.00
C
ATOM   4313 HG21 VAL   261      32.631  61.352  62.124  1.00  0.00
H
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ATOM   4314 HG22 VAL   261      34.092  61.263  61.137  1.00  0.00
H
ATOM   4315 HG23 VAL   261      32.561  60.619  60.509  1.00  0.00
H
ATOM   4316  C   VAL   261      32.436  57.127  62.641  1.00  0.00
C
ATOM   4317  O   VAL   261      32.304  56.318  61.722  1.00  0.00
O
ATOM   4318  N   GLY   262      32.678  56.726  63.896  1.00  0.00
N
ATOM   4319  H   GLY   262      32.820  57.432  64.613  1.00  0.00
H
ATOM   4320  CA  GLY   262      32.708  55.312  64.293  1.00  0.00
C
ATOM   4321  HA2 GLY   262      33.480  54.794  63.722  1.00  0.00
H
ATOM   4322  HA3 GLY   262      32.964  55.248  65.351  1.00  0.00
H
ATOM   4323  C   GLY   262      31.368  54.590  64.069  1.00  0.00
C
ATOM   4324  O   GLY   262      31.345  53.515  63.465  1.00  0.00
O
ATOM   4325  N   LYS   263      30.243  55.210  64.466  1.00  0.00
N
ATOM   4326  H   LYS   263      30.343  56.116  64.914  1.00  0.00
H
ATOM   4327  CA  LYS   263      28.872  54.718  64.208  1.00  0.00
C
ATOM   4328  HA  LYS   263      28.746  53.748  64.690  1.00  0.00
H
ATOM   4329  CB  LYS   263      27.837  55.719  64.782  1.00  0.00
C
ATOM   4330  HB2 LYS   263      28.338  56.596  65.187  1.00  0.00
H
ATOM   4331  HB3 LYS   263      27.219  56.087  63.963  1.00  0.00
H
ATOM   4332  CG  LYS   263      26.886  55.177  65.864  1.00  0.00
C
ATOM   4333  HG2 LYS   263      26.082  55.903  65.981  1.00  0.00
H
ATOM   4334  HG3 LYS   263      26.446  54.247  65.521  1.00  0.00
H
ATOM   4335  CD  LYS   263      27.528  54.952  67.243  1.00  0.00
C
ATOM   4336  HD2 LYS   263      28.107  54.026  67.241  1.00  0.00
H
ATOM   4337  HD3 LYS   263      28.214  55.775  67.449  1.00  0.00
H
ATOM   4338  CE  LYS   263      26.482  54.921  68.375  1.00  0.00
C
ATOM   4339  HE2 LYS   263      27.000  54.767  69.327  1.00  0.00
H
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ATOM   4340  HE3 LYS   263      25.983  55.894  68.418  1.00  0.00
H
ATOM   4341  NZ  LYS   263      25.456  53.863  68.207  1.00  0.00
N
ATOM   4342  HZ1 LYS   263      25.878  52.957  68.056  1.00  0.00
H
ATOM   4343  HZ2 LYS   263      24.944  53.743  69.078  1.00  0.00
H
ATOM   4344  HZ3 LYS   263      24.797  54.107  67.474  1.00  0.00
H
ATOM   4345  C   LYS   263      28.622  54.493  62.705  1.00  0.00
C
ATOM   4346  O   LYS   263      28.123  53.437  62.319  1.00  0.00
O
ATOM   4347  N   LEU   264      28.989  55.458  61.855  1.00  0.00
N
ATOM   4348  H   LEU   264      29.374  56.307  62.254  1.00  0.00
H
ATOM   4349  CA  LEU   264      28.778  55.376  60.400  1.00  0.00
C
ATOM   4350  HA  LEU   264      27.766  55.014  60.214  1.00  0.00
H
ATOM   4351  CB  LEU   264      28.938  56.764  59.748  1.00  0.00
C
ATOM   4352  HB2 LEU   264      29.867  57.216  60.101  1.00  0.00
H
ATOM   4353  HB3 LEU   264      29.045  56.597  58.673  1.00  0.00
H
ATOM   4354  CG  LEU   264      27.797  57.787  59.903  1.00  0.00
C
ATOM   4355  HG  LEU   264      27.973  58.552  59.156  1.00  0.00
H
ATOM   4356  CD1 LEU   264      26.401  57.209  59.673  1.00  0.00
C
ATOM   4357 HD11 LEU   264      26.133  56.519  60.470  1.00  0.00
H
ATOM   4358 HD12 LEU   264      25.672  58.020  59.645  1.00  0.00
H
ATOM   4359 HD13 LEU   264      26.372  56.688  58.717  1.00  0.00
H
ATOM   4360  CD2 LEU   264      27.805  58.530  61.225  1.00  0.00
C
ATOM   4361 HD21 LEU   264      28.772  59.013  61.341  1.00  0.00
H
ATOM   4362 HD22 LEU   264      27.033  59.298  61.221  1.00  0.00
H
ATOM   4363 HD23 LEU   264      27.632  57.842  62.046  1.00  0.00
H
ATOM   4364  C   LEU   264      29.717  54.365  59.711  1.00  0.00
C
ATOM   4365  O   LEU   264      29.291  53.642  58.808  1.00  0.00
O
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ATOM   4366  N   ASN   265      30.982  54.265  60.134  1.00  0.00
N
ATOM   4367  H   ASN   265      31.312  54.903  60.851  1.00  0.00
H
ATOM   4368  CA  ASN   265      31.904  53.250  59.605  1.00  0.00
C
ATOM   4369  HA  ASN   265      31.899  53.312  58.514  1.00  0.00
H
ATOM   4370  CB  ASN   265      33.338  53.530  60.097  1.00  0.00
C
ATOM   4371  HB2 ASN   265      33.318  53.912  61.116  1.00  0.00
H
ATOM   4372  HB3 ASN   265      33.900  52.596  60.108  1.00  0.00
H
ATOM   4373  CG  ASN   265      34.102  54.483  59.191  1.00  0.00
C
ATOM   4374  OD1 ASN   265      34.051  54.417  57.972  1.00  0.00
O
ATOM   4375  ND2 ASN   265      34.877  55.385  59.738  1.00  0.00
N
ATOM   4376 HD21 ASN   265      35.408  55.979  59.128  1.00  0.00
H
ATOM   4377 HD22 ASN   265      34.913  55.478  60.737  1.00  0.00
H
ATOM   4378  C   ASN   265      31.433  51.821  59.934  1.00  0.00
C
ATOM   4379  O   ASN   265      31.526  50.946  59.077  1.00  0.00
O
ATOM   4380  N   TRP   266      30.836  51.593  61.110  1.00  0.00
N
ATOM   4381  H   TRP   266      30.828  52.334  61.803  1.00  0.00
H
ATOM   4382  CA  TRP   266      30.146  50.336  61.433  1.00  0.00
C
ATOM   4383  HA  TRP   266      30.820  49.501  61.245  1.00  0.00
H
ATOM   4384  CB  TRP   266      29.812  50.341  62.930  1.00  0.00
C
ATOM   4385  HB2 TRP   266      30.747  50.277  63.487  1.00  0.00
H
ATOM   4386  HB3 TRP   266      29.353  51.296  63.186  1.00  0.00
H
ATOM   4387  CG  TRP   266      28.901  49.249  63.399  1.00  0.00
C
ATOM   4388  CD1 TRP   266      27.569  49.383  63.585  1.00  0.00
C
ATOM   4389  HD1 TRP   266      27.018  50.298  63.403  1.00  0.00
H
ATOM   4390  NE1 TRP   266      27.031  48.191  64.022  1.00  0.00
N
ATOM   4391  HE1 TRP   266      26.050  48.056  64.226  1.00  0.00
H
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ATOM   4392  CE2 TRP   266      27.999  47.212  64.134  1.00  0.00
C
ATOM   4393  CZ2 TRP   266      27.955  45.868  64.533  1.00  0.00
C
ATOM   4394  HZ2 TRP   266      27.018  45.408  64.809  1.00  0.00
H
ATOM   4395  CH2 TRP   266      29.142  45.121  64.553  1.00  0.00
C
ATOM   4396  HH2 TRP   266      29.124  44.077  64.845  1.00  0.00
H
ATOM   4397  CZ3 TRP   266      30.354  45.720  64.155  1.00  0.00
C
ATOM   4398  HZ3 TRP   266      31.255  45.124  64.128  1.00  0.00
H
ATOM   4399  CE3 TRP   266      30.386  47.072  63.754  1.00  0.00
C
ATOM   4400  HE3 TRP   266      31.315  47.511  63.425  1.00  0.00
H
ATOM   4401  CD2 TRP   266      29.209  47.856  63.740  1.00  0.00
C
ATOM   4402  C   TRP   266      28.906  50.098  60.546  1.00  0.00
C
ATOM   4403  O   TRP   266      28.746  49.014  59.987  1.00  0.00
O
ATOM   4404  N   ALA   267      28.068  51.115  60.317  1.00  0.00
N
ATOM   4405  H   ALA   267      28.218  51.990  60.802  1.00  0.00
H
ATOM   4406  CA  ALA   267      26.911  50.993  59.417  1.00  0.00
C
ATOM   4407  HA  ALA   267      26.302  50.159  59.769  1.00  0.00
H
ATOM   4408  CB  ALA   267      26.074  52.270  59.525  1.00  0.00
C
ATOM   4409  HB1 ALA   267      26.644  53.127  59.169  1.00  0.00
H
ATOM   4410  HB2 ALA   267      25.172  52.163  58.921  1.00  0.00
H
ATOM   4411  HB3 ALA   267      25.789  52.437  60.564  1.00  0.00
H
ATOM   4412  C   ALA   267      27.302  50.669  57.955  1.00  0.00
C
ATOM   4413  O   ALA   267      26.560  49.970  57.257  1.00  0.00
O
ATOM   4414  N   SER   268      28.511  51.067  57.531  1.00  0.00
N
ATOM   4415  H   SER   268      29.044  51.650  58.163  1.00  0.00
H
ATOM   4416  CA  SER   268      29.126  50.719  56.236  1.00  0.00
C
ATOM   4417  HA  SER   268      28.443  51.035  55.447  1.00  0.00
H
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ATOM   4418  CB  SER   268      30.453  51.460  56.017  1.00  0.00
C
ATOM   4419  HB2 SER   268      31.227  51.008  56.638  1.00  0.00
H
ATOM   4420  HB3 SER   268      30.738  51.330  54.967  1.00  0.00
H
ATOM   4421  OG  SER   268      30.383  52.850  56.291  1.00  0.00
O
ATOM   4422  HG  SER   268      29.948  53.010  57.142  1.00  0.00
H
ATOM   4423  C   SER   268      29.380  49.209  56.039  1.00  0.00
C
ATOM   4424  O   SER   268      29.983  48.821  55.042  1.00  0.00
O
ATOM   4425  N   GLN   269      28.986  48.338  56.971  1.00  0.00
N
ATOM   4426  H   GLN   269      28.612  48.705  57.840  1.00  0.00
H
ATOM   4427  CA  GLN   269      28.932  46.883  56.755  1.00  0.00
C
ATOM   4428  HA  GLN   269      29.880  46.536  56.342  1.00  0.00
H
ATOM   4429  CB  GLN   269      28.659  46.159  58.082  1.00  0.00
C
ATOM   4430  HB2 GLN   269      27.864  46.665  58.637  1.00  0.00
H
ATOM   4431  HB3 GLN   269      28.304  45.152  57.848  1.00  0.00
H
ATOM   4432  CG  GLN   269      29.899  46.010  58.965  1.00  0.00
C
ATOM   4433  HG2 GLN   269      30.736  45.666  58.360  1.00  0.00
H
ATOM   4434  HG3 GLN   269      30.165  46.971  59.401  1.00  0.00
H
ATOM   4435  CD  GLN   269      29.631  45.000  60.066  1.00  0.00
C
ATOM   4436  OE1 GLN   269      29.352  45.315  61.205  1.00  0.00
O
ATOM   4437  NE2 GLN   269      29.666  43.710  59.790  1.00  0.00
N
ATOM   4438 HE21 GLN   269      29.497  43.079  60.557  1.00  0.00
H
ATOM   4439 HE22 GLN   269      29.887  43.360  58.883  1.00  0.00
H
ATOM   4440  C   GLN   269      27.835  46.457  55.774  1.00  0.00
C
ATOM   4441  O   GLN   269      27.998  45.436  55.098  1.00  0.00
O
ATOM   4442  N   ILE   270      26.703  47.172  55.753  1.00  0.00
N
ATOM   4443  H   ILE   270      26.658  48.017  56.309  1.00  0.00
H
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ATOM   4444  CA  ILE   270      25.524  46.764  54.978  1.00  0.00
C
ATOM   4445  HA  ILE   270      25.892  46.202  54.122  1.00  0.00
H
ATOM   4446  CB  ILE   270      24.632  45.824  55.826  1.00  0.00
C
ATOM   4447  HB  ILE   270      25.275  45.046  56.236  1.00  0.00
H
ATOM   4448  CG2 ILE   270      24.003  46.546  57.032  1.00  0.00
C
ATOM   4449 HG21 ILE   270      23.380  47.377  56.707  1.00  0.00
H
ATOM   4450 HG22 ILE   270      23.381  45.849  57.596  1.00  0.00
H
ATOM   4451 HG23 ILE   270      24.780  46.928  57.693  1.00  0.00
H
ATOM   4452  CG1 ILE   270      23.558  45.098  54.985  1.00  0.00
C
ATOM   4453 HG12 ILE   270      22.909  44.531  55.653  1.00  0.00
H
ATOM   4454 HG13 ILE   270      22.935  45.821  54.463  1.00  0.00
H
ATOM   4455  CD1 ILE   270      24.155  44.118  53.963  1.00  0.00
C
ATOM   4456 HD11 ILE   270      24.689  43.324  54.485  1.00  0.00
H
ATOM   4457 HD12 ILE   270      23.353  43.682  53.372  1.00  0.00
H
ATOM   4458 HD13 ILE   270      24.831  44.621  53.274  1.00  0.00
H
ATOM   4459  C   ILE   270      24.735  47.930  54.373  1.00  0.00
C
ATOM   4460  O   ILE   270      24.172  47.771  53.293  1.00  0.00
O
ATOM   4461  N   TYR   271      24.735  49.115  54.991  1.00  0.00
N
ATOM   4462  H   TYR   271      25.251  49.239  55.851  1.00  0.00
H
ATOM   4463  CA  TYR   271      24.154  50.305  54.367  1.00  0.00
C
ATOM   4464  HA  TYR   271      23.176  50.048  53.968  1.00  0.00
H
ATOM   4465  CB  TYR   271      23.922  51.394  55.419  1.00  0.00
C
ATOM   4466  HB2 TYR   271      24.825  51.515  56.014  1.00  0.00
H
ATOM   4467  HB3 TYR   271      23.744  52.340  54.908  1.00  0.00
H
ATOM   4468  CG  TYR   271      22.746  51.134  56.344  1.00  0.00
C
ATOM   4469  CD1 TYR   271      21.452  51.541  55.960  1.00  0.00
C
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ATOM   4470  HD1 TYR   271      21.286  51.989  54.990  1.00  0.00
H
ATOM   4471  CE1 TYR   271      20.363  51.387  56.837  1.00  0.00
C
ATOM   4472  HE1 TYR   271      19.382  51.728  56.532  1.00  0.00
H
ATOM   4473  CZ  TYR   271      20.563  50.798  58.103  1.00  0.00
C
ATOM   4474  OH  TYR   271      19.530  50.683  58.976  1.00  0.00
O
ATOM   4475  HH  TYR   271      18.748  51.145  58.668  1.00  0.00
H
ATOM   4476  CE2 TYR   271      21.847  50.340  58.471  1.00  0.00
C
ATOM   4477  HE2 TYR   271      21.983  49.877  59.436  1.00  0.00
H
ATOM   4478  CD2 TYR   271      22.939  50.516  57.596  1.00  0.00
C
ATOM   4479  HD2 TYR   271      23.925  50.188  57.889  1.00  0.00
H
ATOM   4480  C   TYR   271      25.071  50.765  53.216  1.00  0.00
C
ATOM   4481  O   TYR   271      26.241  51.075  53.463  1.00  0.00
O
ATOM   4482  N   PRO   272      24.610  50.759  51.948  1.00  0.00
N
ATOM   4483  CD  PRO   272      23.279  50.377  51.491  1.00  0.00
C
ATOM   4484  HD2 PRO   272      22.500  50.885  52.061  1.00  0.00
H
ATOM   4485  HD3 PRO   272      23.164  49.296  51.570  1.00  0.00
H
ATOM   4486  CG  PRO   272      23.196  50.786  50.020  1.00  0.00
C
ATOM   4487  HG2 PRO   272      22.827  51.810  49.941  1.00  0.00
H
ATOM   4488  HG3 PRO   272      22.568  50.106  49.446  1.00  0.00
H
ATOM   4489  CB  PRO   272      24.654  50.728  49.568  1.00  0.00
C
ATOM   4490  HB2 PRO   272      24.836  51.359  48.696  1.00  0.00
H
ATOM   4491  HB3 PRO   272      24.930  49.695  49.349  1.00  0.00
H
ATOM   4492  CA  PRO   272      25.408  51.212  50.811  1.00  0.00
C
ATOM   4493  HA  PRO   272      26.400  50.762  50.836  1.00  0.00
H
ATOM   4494  C   PRO   272      25.552  52.737  50.822  1.00  0.00
C
ATOM   4495  O   PRO   272      24.822  53.442  51.514  1.00  0.00
O
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ATOM   4496  N   GLY   273      26.496  53.261  50.039  1.00  0.00
N
ATOM   4497  H   GLY   273      27.065  52.635  49.491  1.00  0.00
H
ATOM   4498  CA  GLY   273      26.604  54.702  49.782  1.00  0.00
C
ATOM   4499  HA2 GLY   273      27.291  54.865  48.954  1.00  0.00
H
ATOM   4500  HA3 GLY   273      25.623  55.069  49.477  1.00  0.00
H
ATOM   4501  C   GLY   273      27.067  55.566  50.959  1.00  0.00
C
ATOM   4502  O   GLY   273      27.278  56.760  50.748  1.00  0.00
O
ATOM   4503  N   ILE   274      27.258  55.000  52.161  1.00  0.00
N
ATOM   4504  H   ILE   274      26.978  54.038  52.278  1.00  0.00
H
ATOM   4505  CA  ILE   274      27.650  55.762  53.351  1.00  0.00
C
ATOM   4506  HA  ILE   274      26.901  56.541  53.436  1.00  0.00
H
ATOM   4507  CB  ILE   274      27.590  54.912  54.652  1.00  0.00
C
ATOM   4508  HB  ILE   274      27.928  53.899  54.423  1.00  0.00
H
ATOM   4509  CG2 ILE   274      28.514  55.442  55.769  1.00  0.00
C
ATOM   4510 HG21 ILE   274      28.242  56.458  56.035  1.00  0.00
H
ATOM   4511 HG22 ILE   274      28.439  54.809  56.650  1.00  0.00
H
ATOM   4512 HG23 ILE   274      29.554  55.406  55.447  1.00  0.00
H
ATOM   4513  CG1 ILE   274      26.119  54.843  55.137  1.00  0.00
C
ATOM   4514 HG12 ILE   274      25.730  55.854  55.254  1.00  0.00
H
ATOM   4515 HG13 ILE   274      25.523  54.338  54.375  1.00  0.00
H
ATOM   4516  CD1 ILE   274      25.900  54.124  56.474  1.00  0.00
C
ATOM   4517 HD11 ILE   274      26.285  54.727  57.296  1.00  0.00
H
ATOM   4518 HD12 ILE   274      24.831  53.985  56.635  1.00  0.00
H
ATOM   4519 HD13 ILE   274      26.398  53.155  56.467  1.00  0.00
H
ATOM   4520  C   ILE   274      28.998  56.475  53.149  1.00  0.00
C
ATOM   4521  O   ILE   274      29.974  55.881  52.688  1.00  0.00
O
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ATOM   4522  N   LYS   275      29.058  57.750  53.546  1.00  0.00
N
ATOM   4523  H   LYS   275      28.206  58.148  53.936  1.00  0.00
H
ATOM   4524  CA  LYS   275      30.257  58.608  53.496  1.00  0.00
C
ATOM   4525  HA  LYS   275      31.122  57.986  53.263  1.00  0.00
H
ATOM   4526  CB  LYS   275      30.117  59.659  52.379  1.00  0.00
C
ATOM   4527  HB2 LYS   275      29.216  60.245  52.569  1.00  0.00
H
ATOM   4528  HB3 LYS   275      30.977  60.330  52.408  1.00  0.00
H
ATOM   4529  CG  LYS   275      30.057  59.018  50.979  1.00  0.00
C
ATOM   4530  HG2 LYS   275      31.015  58.543  50.765  1.00  0.00
H
ATOM   4531  HG3 LYS   275      29.299  58.241  50.965  1.00  0.00
H
ATOM   4532  CD  LYS   275      29.725  60.006  49.852  1.00  0.00
C
ATOM   4533  HD2 LYS   275      30.496  60.774  49.798  1.00  0.00
H
ATOM   4534  HD3 LYS   275      29.723  59.450  48.914  1.00  0.00
H
ATOM   4535  CE  LYS   275      28.349  60.658  50.059  1.00  0.00
C
ATOM   4536  HE2 LYS   275      27.650  59.893  50.414  1.00  0.00
H
ATOM   4537  HE3 LYS   275      28.428  61.428  50.834  1.00  0.00
H
ATOM   4538  NZ  LYS   275      27.820  61.241  48.805  1.00  0.00
N
ATOM   4539  HZ1 LYS   275      27.428  60.504  48.221  1.00  0.00
H
ATOM   4540  HZ2 LYS   275      27.082  61.922  48.990  1.00  0.00
H
ATOM   4541  HZ3 LYS   275      28.511  61.764  48.292  1.00  0.00
H
ATOM   4542  C   LYS   275      30.520  59.258  54.854  1.00  0.00
C
ATOM   4543  O   LYS   275      29.615  59.416  55.671  1.00  0.00
O
ATOM   4544  N   VAL   276      31.788  59.581  55.106  1.00  0.00
N
ATOM   4545  H   VAL   276      32.437  59.419  54.352  1.00  0.00
H
ATOM   4546  CA  VAL   276      32.305  60.236  56.328  1.00  0.00
C
ATOM   4547  HA  VAL   276      31.546  60.930  56.697  1.00  0.00
H
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ATOM   4548  CB  VAL   276      32.624  59.216  57.453  1.00  0.00
C
ATOM   4549  HB  VAL   276      33.076  59.754  58.285  1.00  0.00
H
ATOM   4550  CG1 VAL   276      31.384  58.528  58.028  1.00  0.00
C
ATOM   4551 HG11 VAL   276      30.935  57.860  57.293  1.00  0.00
H
ATOM   4552 HG12 VAL   276      31.671  57.945  58.903  1.00  0.00
H
ATOM   4553 HG13 VAL   276      30.653  59.281  58.327  1.00  0.00
H
ATOM   4554  CG2 VAL   276      33.603  58.117  57.007  1.00  0.00
C
ATOM   4555 HG21 VAL   276      34.534  58.564  56.660  1.00  0.00
H
ATOM   4556 HG22 VAL   276      33.831  57.463  57.849  1.00  0.00
H
ATOM   4557 HG23 VAL   276      33.164  57.520  56.209  1.00  0.00
H
ATOM   4558  C   VAL   276      33.551  61.087  56.011  1.00  0.00
C
ATOM   4559  O   VAL   276      34.399  61.315  56.877  1.00  0.00
O
ATOM   4560  N   ARG   277      33.727  61.488  54.748  1.00  0.00
N
ATOM   4561  H   ARG   277      32.890  61.559  54.171  1.00  0.00
H
ATOM   4562  CA  ARG   277      34.957  62.115  54.233  1.00  0.00
C
ATOM   4563  HA  ARG   277      35.824  61.550  54.568  1.00  0.00
H
ATOM   4564  CB  ARG   277      34.899  62.112  52.699  1.00  0.00
C
ATOM   4565  HB2 ARG   277      34.832  61.080  52.362  1.00  0.00
H
ATOM   4566  HB3 ARG   277      33.982  62.620  52.396  1.00  0.00
H
ATOM   4567  CG  ARG   277      36.075  62.802  51.980  1.00  0.00
C
ATOM   4568  HG2 ARG   277      35.759  62.982  50.953  1.00  0.00
H
ATOM   4569  HG3 ARG   277      36.280  63.775  52.426  1.00  0.00
H
ATOM   4570  CD  ARG   277      37.362  61.959  51.969  1.00  0.00
C
ATOM   4571  HD2 ARG   277      37.751  61.889  52.987  1.00  0.00
H
ATOM   4572  HD3 ARG   277      37.130  60.946  51.632  1.00  0.00
H
ATOM   4573  NE  ARG   277      38.402  62.537  51.084  1.00  0.00
N
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ATOM   4574  HE  ARG   277      39.202  62.982  51.525  1.00  0.00
H
ATOM   4575  CZ  ARG   277      38.416  62.538  49.764  1.00  0.00
C
ATOM   4576  NH1 ARG   277      37.426  62.088  49.057  1.00  0.00
N
ATOM   4577 HH11 ARG   277      36.618  61.751  49.534  1.00  0.00
H
ATOM   4578 HH12 ARG   277      37.481  62.191  48.053  1.00  0.00
H
ATOM   4579  NH2 ARG   277      39.403  63.028  49.083  1.00  0.00
N
ATOM   4580 HH21 ARG   277      40.103  63.576  49.588  1.00  0.00
H
ATOM   4581 HH22 ARG   277      39.346  63.081  48.082  1.00  0.00
H
ATOM   4582  C   ARG   277      35.108  63.527  54.761  1.00  0.00
C
ATOM   4583  O   ARG   277      36.196  63.900  55.190  1.00  0.00
O
ATOM   4584  N   GLN   278      34.033  64.300  54.716  1.00  0.00
N
ATOM   4585  H   GLN   278      33.138  63.866  54.493  1.00  0.00
H
ATOM   4586  CA  GLN   278      34.035  65.707  55.090  1.00  0.00
C
ATOM   4587  HA  GLN   278      35.013  66.130  54.857  1.00  0.00
H
ATOM   4588  CB  GLN   278      32.983  66.471  54.267  1.00  0.00
C
ATOM   4589  HB2 GLN   278      31.989  66.175  54.609  1.00  0.00
H
ATOM   4590  HB3 GLN   278      33.093  67.540  54.450  1.00  0.00
H
ATOM   4591  CG  GLN   278      33.076  66.196  52.750  1.00  0.00
C
ATOM   4592  HG2 GLN   278      32.856  65.147  52.569  1.00  0.00
H
ATOM   4593  HG3 GLN   278      32.290  66.744  52.238  1.00  0.00
H
ATOM   4594  CD  GLN   278      34.408  66.532  52.069  1.00  0.00
C
ATOM   4595  OE1 GLN   278      35.332  67.141  52.588  1.00  0.00
O
ATOM   4596  NE2 GLN   278      34.572  66.119  50.833  1.00  0.00
N
ATOM   4597 HE21 GLN   278      35.383  66.442  50.347  1.00  0.00
H
ATOM   4598 HE22 GLN   278      33.827  65.606  50.369  1.00  0.00
H
ATOM   4599  C   GLN   278      33.860  65.840  56.606  1.00  0.00
C
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ATOM   4600  O   GLN   278      34.591  66.608  57.224  1.00  0.00
O
ATOM   4601  N   LEU   279      33.042  64.980  57.229  1.00  0.00
N
ATOM   4602  H   LEU   279      32.439  64.388  56.654  1.00  0.00
H
ATOM   4603  CA  LEU   279      33.018  64.785  58.685  1.00  0.00
C
ATOM   4604  HA  LEU   279      32.701  65.717  59.149  1.00  0.00
H
ATOM   4605  CB  LEU   279      32.011  63.669  59.030  1.00  0.00
C
ATOM   4606  HB2 LEU   279      32.106  62.869  58.293  1.00  0.00
H
ATOM   4607  HB3 LEU   279      32.263  63.247  60.006  1.00  0.00
H
ATOM   4608  CG  LEU   279      30.549  64.154  59.076  1.00  0.00
C
ATOM   4609  HG  LEU   279      30.322  64.742  58.187  1.00  0.00
H
ATOM   4610  CD1 LEU   279      29.615  62.944  59.119  1.00  0.00
C
ATOM   4611 HD11 LEU   279      29.840  62.318  59.980  1.00  0.00
H
ATOM   4612 HD12 LEU   279      28.584  63.288  59.174  1.00  0.00
H
ATOM   4613 HD13 LEU   279      29.731  62.371  58.199  1.00  0.00
H
ATOM   4614  CD2 LEU   279      30.294  65.001  60.328  1.00  0.00
C
ATOM   4615 HD21 LEU   279      30.869  65.922  60.290  1.00  0.00
H
ATOM   4616 HD22 LEU   279      29.238  65.266  60.388  1.00  0.00
H
ATOM   4617 HD23 LEU   279      30.581  64.449  61.220  1.00  0.00
H
ATOM   4618  C   LEU   279      34.413  64.475  59.259  1.00  0.00
C
ATOM   4619  O   LEU   279      34.811  65.091  60.244  1.00  0.00
O
ATOM   4620  N   SER   280      35.204  63.610  58.611  1.00  0.00
N
ATOM   4621  H   SER   280      34.819  63.091  57.832  1.00  0.00
H
ATOM   4622  CA  SER   280      36.587  63.324  59.042  1.00  0.00
C
ATOM   4623  HA  SER   280      36.554  63.017  60.084  1.00  0.00
H
ATOM   4624  CB  SER   280      37.182  62.147  58.270  1.00  0.00
C
ATOM   4625  HB2 SER   280      37.163  62.352  57.200  1.00  0.00
H
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ATOM   4626  HB3 SER   280      38.218  62.002  58.584  1.00  0.00
H
ATOM   4627  OG  SER   280      36.444  60.976  58.555  1.00  0.00
O
ATOM   4628  HG  SER   280      35.643  61.000  57.999  1.00  0.00
H
ATOM   4629  C   SER   280      37.529  64.535  58.959  1.00  0.00
C
ATOM   4630  O   SER   280      38.488  64.614  59.727  1.00  0.00
O
ATOM   4631  N   LYS   281      37.251  65.531  58.103  1.00  0.00
N
ATOM   4632  H   LYS   281      36.419  65.460  57.528  1.00  0.00
H
ATOM   4633  CA  LYS   281      38.079  66.750  58.012  1.00  0.00
C
ATOM   4634  HA  LYS   281      39.120  66.438  57.963  1.00  0.00
H
ATOM   4635  CB  LYS   281      37.772  67.567  56.751  1.00  0.00
C
ATOM   4636  HB2 LYS   281      36.712  67.811  56.696  1.00  0.00
H
ATOM   4637  HB3 LYS   281      38.329  68.504  56.806  1.00  0.00
H
ATOM   4638  CG  LYS   281      38.208  66.838  55.487  1.00  0.00
C
ATOM   4639  HG2 LYS   281      39.227  66.478  55.611  1.00  0.00
H
ATOM   4640  HG3 LYS   281      37.555  65.987  55.313  1.00  0.00
H
ATOM   4641  CD  LYS   281      38.148  67.788  54.292  1.00  0.00
C
ATOM   4642  HD2 LYS   281      37.122  68.125  54.139  1.00  0.00
H
ATOM   4643  HD3 LYS   281      38.803  68.645  54.464  1.00  0.00
H
ATOM   4644  CE  LYS   281      38.640  66.992  53.093  1.00  0.00
C
ATOM   4645  HE2 LYS   281      39.667  66.671  53.293  1.00  0.00
H
ATOM   4646  HE3 LYS   281      38.032  66.089  52.988  1.00  0.00
H
ATOM   4647  NZ  LYS   281      38.604  67.768  51.837  1.00  0.00
N
ATOM   4648  HZ1 LYS   281      39.110  68.636  51.931  1.00  0.00
H
ATOM   4649  HZ2 LYS   281      39.069  67.207  51.122  1.00  0.00
H
ATOM   4650  HZ3 LYS   281      37.645  67.956  51.578  1.00  0.00
H
ATOM   4651  C   LYS   281      37.965  67.668  59.224  1.00  0.00
C
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ATOM   4652  O   LYS   281      38.863  68.483  59.441  1.00  0.00
O
ATOM   4653  N   LEU   282      36.893  67.569  60.012  1.00  0.00
N
ATOM   4654  H   LEU   282      36.179  66.892  59.767  1.00  0.00
H
ATOM   4655  CA  LEU   282      36.676  68.413  61.196  1.00  0.00
C
ATOM   4656  HA  LEU   282      36.800  69.463  60.925  1.00  0.00
H
ATOM   4657  CB  LEU   282      35.233  68.209  61.700  1.00  0.00
C
ATOM   4658  HB2 LEU   282      34.973  67.154  61.632  1.00  0.00
H
ATOM   4659  HB3 LEU   282      35.192  68.466  62.756  1.00  0.00
H
ATOM   4660  CG  LEU   282      34.165  69.060  60.985  1.00  0.00
C
ATOM   4661  HG  LEU   282      34.358  70.115  61.181  1.00  0.00
H
ATOM   4662  CD1 LEU   282      34.098  68.863  59.472  1.00  0.00
C
ATOM   4663 HD11 LEU   282      33.844  67.828  59.253  1.00  0.00
H
ATOM   4664 HD12 LEU   282      33.337  69.517  59.050  1.00  0.00
H
ATOM   4665 HD13 LEU   282      35.042  69.122  58.998  1.00  0.00
H
ATOM   4666  CD2 LEU   282      32.798  68.685  61.552  1.00  0.00
C
ATOM   4667 HD21 LEU   282      32.728  69.028  62.584  1.00  0.00
H
ATOM   4668 HD22 LEU   282      32.016  69.158  60.966  1.00  0.00
H
ATOM   4669 HD23 LEU   282      32.651  67.606  61.512  1.00  0.00
H
ATOM   4670  C   LEU   282      37.711  68.118  62.299  1.00  0.00
C
ATOM   4671  O   LEU   282      38.064  69.011  63.067  1.00  0.00
O
ATOM   4672  N   LEU   283      38.246  66.894  62.335  1.00  0.00
N
ATOM   4673  H   LEU   283      37.931  66.221  61.648  1.00  0.00
H
ATOM   4674  CA  LEU   283      39.228  66.438  63.326  1.00  0.00
C
ATOM   4675  HA  LEU   283      39.141  67.097  64.191  1.00  0.00
H
ATOM   4676  CB  LEU   283      38.906  65.010  63.832  1.00  0.00
C
ATOM   4677  HB2 LEU   283      39.429  64.286  63.205  1.00  0.00
H
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ATOM   4678  HB3 LEU   283      39.346  64.932  64.827  1.00  0.00
H
ATOM   4679  CG  LEU   283      37.421  64.593  63.923  1.00  0.00
C
ATOM   4680  HG  LEU   283      36.800  65.447  64.200  1.00  0.00
H
ATOM   4681  CD1 LEU   283      36.931  63.986  62.605  1.00  0.00
C
ATOM   4682 HD11 LEU   283      37.612  63.200  62.276  1.00  0.00
H
ATOM   4683 HD12 LEU   283      35.942  63.556  62.726  1.00  0.00
H
ATOM   4684 HD13 LEU   283      36.865  64.746  61.834  1.00  0.00
H
ATOM   4685  CD2 LEU   283      37.250  63.507  64.981  1.00  0.00
C
ATOM   4686 HD21 LEU   283      37.463  63.917  65.966  1.00  0.00
H
ATOM   4687 HD22 LEU   283      36.226  63.139  64.986  1.00  0.00
H
ATOM   4688 HD23 LEU   283      37.924  62.675  64.780  1.00  0.00
H
ATOM   4689  C   LEU   283      40.691  66.566  62.844  1.00  0.00
C
ATOM   4690  O   LEU   283      41.594  66.029  63.491  1.00  0.00
O
ATOM   4691  N   ARG   284      40.947  67.239  61.707  1.00  0.00
N
ATOM   4692  H   ARG   284      40.165  67.683  61.243  1.00  0.00
H
ATOM   4693  CA  ARG   284      42.299  67.439  61.148  1.00  0.00
C
ATOM   4694  HA  ARG   284      42.797  66.468  61.132  1.00  0.00
H
ATOM   4695  CB  ARG   284      42.233  67.973  59.703  1.00  0.00
C
ATOM   4696  HB2 ARG   284      41.456  68.735  59.629  1.00  0.00
H
ATOM   4697  HB3 ARG   284      43.185  68.447  59.458  1.00  0.00
H
ATOM   4698  CG  ARG   284      41.997  66.863  58.666  1.00  0.00
C
ATOM   4699  HG2 ARG   284      42.835  66.166  58.704  1.00  0.00
H
ATOM   4700  HG3 ARG   284      41.086  66.316  58.905  1.00  0.00
H
ATOM   4701  CD  ARG   284      41.896  67.453  57.250  1.00  0.00
C
ATOM   4702  HD2 ARG   284      40.966  68.019  57.170  1.00  0.00
H
ATOM   4703  HD3 ARG   284      42.736  68.134  57.092  1.00  0.00
H
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ATOM   4704  NE  ARG   284      41.932  66.398  56.221  1.00  0.00
N
ATOM   4705  HE  ARG   284      41.960  65.432  56.542  1.00  0.00
H
ATOM   4706  CZ  ARG   284      41.999  66.535  54.908  1.00  0.00
C
ATOM   4707  NH1 ARG   284      41.968  67.693  54.312  1.00  0.00
N
ATOM   4708 HH11 ARG   284      41.864  68.541  54.865  1.00  0.00
H
ATOM   4709 HH12 ARG   284      42.191  67.730  53.336  1.00  0.00
H
ATOM   4710  NH2 ARG   284      42.072  65.475  54.160  1.00  0.00
N
ATOM   4711 HH21 ARG   284      42.136  64.568  54.622  1.00  0.00
H
ATOM   4712 HH22 ARG   284      42.000  65.507  53.149  1.00  0.00
H
ATOM   4713  C   ARG   284      43.167  68.357  62.021  1.00  0.00
C
ATOM   4714  O   ARG   284      42.682  69.312  62.629  1.00  0.00
O
ATOM   4715  N   GLY   285      44.473  68.083  62.011  1.00  0.00
N
ATOM   4716  H   GLY   285      44.774  67.288  61.473  1.00  0.00
H
ATOM   4717  CA  GLY   285      45.471  68.750  62.855  1.00  0.00
C
ATOM   4718  HA2 GLY   285      46.468  68.485  62.500  1.00  0.00
H
ATOM   4719  HA3 GLY   285      45.353  69.831  62.776  1.00  0.00
H
ATOM   4720  C   GLY   285      45.354  68.358  64.332  1.00  0.00
C
ATOM   4721  O   GLY   285      44.564  67.489  64.704  1.00  0.00
O
ATOM   4722  N   THR   286      46.130  68.995  65.208  1.00  0.00
N
ATOM   4723  H   THR   286      46.750  69.728  64.900  1.00  0.00
H
ATOM   4724  CA  THR   286      46.023  68.767  66.656  1.00  0.00
C
ATOM   4725  HA  THR   286      45.947  67.691  66.830  1.00  0.00
H
ATOM   4726  CB  THR   286      47.270  69.257  67.407  1.00  0.00
C
ATOM   4727  HB  THR   286      47.067  69.246  68.478  1.00  0.00
H
ATOM   4728  CG2 THR   286      48.475  68.362  67.125  1.00  0.00
C
ATOM   4729 HG21 THR   286      48.726  68.383  66.063  1.00  0.00
H
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ATOM   4730 HG22 THR   286      49.332  68.704  67.706  1.00  0.00
H
ATOM   4731 HG23 THR   286      48.245  67.335  67.413  1.00  0.00
H
ATOM   4732  OG1 THR   286      47.626  70.564  67.013  1.00  0.00
O
ATOM   4733  HG1 THR   286      48.305  70.871  67.621  1.00  0.00
H
ATOM   4734  C   THR   286      44.755  69.420  67.219  1.00  0.00
C
ATOM   4735  O   THR   286      44.545  70.627  67.072  1.00  0.00
O
ATOM   4736  N   LYS   287      43.921  68.613  67.880  1.00  0.00
N
ATOM   4737  H   LYS   287      44.174  67.638  67.957  1.00  0.00
H
ATOM   4738  CA  LYS   287      42.672  68.986  68.566  1.00  0.00
C
ATOM   4739  HA  LYS   287      42.672  70.050  68.806  1.00  0.00
H
ATOM   4740  CB  LYS   287      41.450  68.653  67.683  1.00  0.00
C
ATOM   4741  HB2 LYS   287      41.417  67.571  67.543  1.00  0.00
H
ATOM   4742  HB3 LYS   287      40.556  68.937  68.233  1.00  0.00
H
ATOM   4743  CG  LYS   287      41.363  69.304  66.292  1.00  0.00
C
ATOM   4744  HG2 LYS   287      42.260  69.072  65.719  1.00  0.00
H
ATOM   4745  HG3 LYS   287      40.517  68.852  65.771  1.00  0.00
H
ATOM   4746  CD  LYS   287      41.146  70.825  66.327  1.00  0.00
C
ATOM   4747  HD2 LYS   287      40.265  71.053  66.931  1.00  0.00
H
ATOM   4748  HD3 LYS   287      42.016  71.305  66.776  1.00  0.00
H
ATOM   4749  CE  LYS   287      40.943  71.341  64.893  1.00  0.00
C
ATOM   4750  HE2 LYS   287      41.755  70.948  64.273  1.00  0.00
H
ATOM   4751  HE3 LYS   287      40.006  70.930  64.500  1.00  0.00
H
ATOM   4752  NZ  LYS   287      40.933  72.828  64.830  1.00  0.00
N
ATOM   4753  HZ1 LYS   287      41.791  73.210  65.201  1.00  0.00
H
ATOM   4754  HZ2 LYS   287      40.842  73.162  63.880  1.00  0.00
H
ATOM   4755  HZ3 LYS   287      40.170  73.238  65.367  1.00  0.00
H
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ATOM   4756  C   LYS   287      42.560  68.202  69.879  1.00  0.00
C
ATOM   4757  O   LYS   287      43.199  67.154  70.010  1.00  0.00
O
ATOM   4758  N   ALA   288      41.728  68.655  70.815  1.00  0.00
N
ATOM   4759  H   ALA   288      41.297  69.566  70.660  1.00  0.00
H
ATOM   4760  CA  ALA   288      41.357  67.900  72.017  1.00  0.00
C
ATOM   4761  HA  ALA   288      41.976  67.004  72.081  1.00  0.00
H
ATOM   4762  CB  ALA   288      41.656  68.742  73.261  1.00  0.00
C
ATOM   4763  HB1 ALA   288      41.028  69.632  73.262  1.00  0.00
H
ATOM   4764  HB2 ALA   288      41.446  68.159  74.158  1.00  0.00
H
ATOM   4765  HB3 ALA   288      42.704  69.039  73.259  1.00  0.00
H
ATOM   4766  C   ALA   288      39.894  67.430  71.985  1.00  0.00
C
ATOM   4767  O   ALA   288      39.028  68.120  71.454  1.00  0.00
O
ATOM   4768  N   LEU   289      39.604  66.285  72.617  1.00  0.00
N
ATOM   4769  H   LEU   289      40.366  65.778  73.041  1.00  0.00
H
ATOM   4770  CA  LEU   289      38.271  65.654  72.662  1.00  0.00
C
ATOM   4771  HA  LEU   289      38.001  65.330  71.657  1.00  0.00
H
ATOM   4772  CB  LEU   289      38.353  64.423  73.592  1.00  0.00
C
ATOM   4773  HB2 LEU   289      38.777  64.744  74.545  1.00  0.00
H
ATOM   4774  HB3 LEU   289      37.346  64.070  73.809  1.00  0.00
H
ATOM   4775  CG  LEU   289      39.176  63.234  73.061  1.00  0.00
C
ATOM   4776  HG  LEU   289      40.199  63.562  72.882  1.00  0.00
H
ATOM   4777  CD1 LEU   289      39.204  62.125  74.115  1.00  0.00
C
ATOM   4778 HD11 LEU   289      38.196  61.775  74.336  1.00  0.00
H
ATOM   4779 HD12 LEU   289      39.804  61.291  73.753  1.00  0.00
H
ATOM   4780 HD13 LEU   289      39.651  62.505  75.033  1.00  0.00
H
ATOM   4781  CD2 LEU   289      38.612  62.641  71.766  1.00  0.00
C
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ATOM   4782 HD21 LEU   289      38.685  63.370  70.960  1.00  0.00
H
ATOM   4783 HD22 LEU   289      39.208  61.774  71.479  1.00  0.00
H
ATOM   4784 HD23 LEU   289      37.575  62.342  71.896  1.00  0.00
H
ATOM   4785  C   LEU   289      37.133  66.584  73.128  1.00  0.00
C
ATOM   4786  O   LEU   289      35.994  66.400  72.701  1.00  0.00
O
ATOM   4787  N   THR   290      37.431  67.570  73.979  1.00  0.00
N
ATOM   4788  H   THR   290      38.386  67.659  74.296  1.00  0.00
H
ATOM   4789  CA  THR   290      36.481  68.550  74.530  1.00  0.00
C
ATOM   4790  HA  THR   290      35.503  68.080  74.623  1.00  0.00
H
ATOM   4791  CB  THR   290      36.936  69.001  75.926  1.00  0.00
C
ATOM   4792  HB  THR   290      36.367  69.879  76.229  1.00  0.00
H
ATOM   4793  CG2 THR   290      36.739  67.915  76.979  1.00  0.00
C
ATOM   4794 HG21 THR   290      37.316  67.026  76.720  1.00  0.00
H
ATOM   4795 HG22 THR   290      37.065  68.292  77.949  1.00  0.00
H
ATOM   4796 HG23 THR   290      35.681  67.657  77.038  1.00  0.00
H
ATOM   4797  OG1 THR   290      38.311  69.322  75.915  1.00  0.00
O
ATOM   4798  HG1 THR   290      38.465  69.926  76.647  1.00  0.00
H
ATOM   4799  C   THR   290      36.282  69.809  73.677  1.00  0.00
C
ATOM   4800  O   THR   290      35.377  70.587  73.980  1.00  0.00
O
ATOM   4801  N   GLU   291      37.093  70.047  72.643  1.00  0.00
N
ATOM   4802  H   GLU   291      37.791  69.359  72.388  1.00  0.00
H
ATOM   4803  CA  GLU   291      36.936  71.234  71.789  1.00  0.00
C
ATOM   4804  HA  GLU   291      36.875  72.117  72.429  1.00  0.00
H
ATOM   4805  CB  GLU   291      38.128  71.421  70.837  1.00  0.00
C
ATOM   4806  HB2 GLU   291      38.396  70.472  70.370  1.00  0.00
H
ATOM   4807  HB3 GLU   291      37.831  72.114  70.049  1.00  0.00
H
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ATOM   4808  CG  GLU   291      39.353  72.022  71.526  1.00  0.00
C
ATOM   4809  HG2 GLU   291      39.065  72.944  72.028  1.00  0.00
H
ATOM   4810  HG3 GLU   291      39.731  71.335  72.284  1.00  0.00
H
ATOM   4811  CD  GLU   291      40.437  72.313  70.487  1.00  0.00
C
ATOM   4812  OE1 GLU   291      40.408  73.438  69.913  1.00  0.00
O
ATOM   4813  OE2 GLU   291      41.278  71.428  70.244  1.00  0.00
O
ATOM   4814  C   GLU   291      35.641  71.165  70.975  1.00  0.00
C
ATOM   4815  O   GLU   291      35.322  70.137  70.374  1.00  0.00
O
ATOM   4816  N   VAL   292      34.909  72.281  70.920  1.00  0.00
N
ATOM   4817  H   VAL   292      35.237  73.096  71.414  1.00  0.00
H
ATOM   4818  CA  VAL   292      33.667  72.409  70.150  1.00  0.00
C
ATOM   4819  HA  VAL   292      33.181  71.437  70.103  1.00  0.00
H
ATOM   4820  CB  VAL   292      32.669  73.368  70.829  1.00  0.00
C
ATOM   4821  HB  VAL   292      33.090  74.374  70.854  1.00  0.00
H
ATOM   4822  CG1 VAL   292      31.331  73.398  70.080  1.00  0.00
C
ATOM   4823 HG11 VAL   292      30.902  72.397  70.051  1.00  0.00
H
ATOM   4824 HG12 VAL   292      30.644  74.072  70.589  1.00  0.00
H
ATOM   4825 HG13 VAL   292      31.479  73.755  69.061  1.00  0.00
H
ATOM   4826  CG2 VAL   292      32.374  72.935  72.272  1.00  0.00
C
ATOM   4827 HG21 VAL   292      33.287  72.940  72.866  1.00  0.00
H
ATOM   4828 HG22 VAL   292      31.668  73.631  72.721  1.00  0.00
H
ATOM   4829 HG23 VAL   292      31.949  71.933  72.280  1.00  0.00
H
ATOM   4830  C   VAL   292      34.016  72.833  68.724  1.00  0.00
C
ATOM   4831  O   VAL   292      34.291  74.005  68.456  1.00  0.00
O
ATOM   4832  N   ILE   293      34.043  71.858  67.815  1.00  0.00
N
ATOM   4833  H   ILE   293      33.717  70.943  68.100  1.00  0.00
H
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ATOM   4834  CA  ILE   293      34.320  72.064  66.391  1.00  0.00
C
ATOM   4835  HA  ILE   293      34.937  72.957  66.314  1.00  0.00
H
ATOM   4836  CB  ILE   293      35.165  70.895  65.820  1.00  0.00
C
ATOM   4837  HB  ILE   293      36.084  70.849  66.407  1.00  0.00
H
ATOM   4838  CG2 ILE   293      34.493  69.516  65.967  1.00  0.00
C
ATOM   4839 HG21 ILE   293      33.588  69.466  65.361  1.00  0.00
H
ATOM   4840 HG22 ILE   293      35.183  68.739  65.639  1.00  0.00
H
ATOM   4841 HG23 ILE   293      34.235  69.326  67.009  1.00  0.00
H
ATOM   4842  CG1 ILE   293      35.566  71.120  64.345  1.00  0.00
C
ATOM   4843 HG12 ILE   293      35.896  70.176  63.925  1.00  0.00
H
ATOM   4844 HG13 ILE   293      34.705  71.455  63.766  1.00  0.00
H
ATOM   4845  CD1 ILE   293      36.721  72.107  64.157  1.00  0.00
C
ATOM   4846 HD11 ILE   293      37.643  71.664  64.531  1.00  0.00
H
ATOM   4847 HD12 ILE   293      36.834  72.318  63.095  1.00  0.00
H
ATOM   4848 HD13 ILE   293      36.533  73.035  64.690  1.00  0.00
H
ATOM   4849  C   ILE   293      32.990  72.315  65.650  1.00  0.00
C
ATOM   4850  O   ILE   293      32.078  71.492  65.744  1.00  0.00
O
ATOM   4851  N   PRO   294      32.823  73.434  64.921  1.00  0.00
N
ATOM   4852  CD  PRO   294      33.759  74.533  64.736  1.00  0.00
C
ATOM   4853  HD2 PRO   294      34.731  74.170  64.415  1.00  0.00
H
ATOM   4854  HD3 PRO   294      33.858  75.093  65.667  1.00  0.00
H
ATOM   4855  CG  PRO   294      33.154  75.425  63.647  1.00  0.00
C
ATOM   4856  HG2 PRO   294      33.501  75.107  62.661  1.00  0.00
H
ATOM   4857  HG3 PRO   294      33.392  76.475  63.813  1.00  0.00
H
ATOM   4858  CB  PRO   294      31.654  75.158  63.767  1.00  0.00
C
ATOM   4859  HB2 PRO   294      31.127  75.350  62.831  1.00  0.00
H
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ATOM   4860  HB3 PRO   294      31.234  75.768  64.567  1.00  0.00
H
ATOM   4861  CA  PRO   294      31.600  73.681  64.166  1.00  0.00
C
ATOM   4862  HA  PRO   294      30.728  73.517  64.799  1.00  0.00
H
ATOM   4863  C   PRO   294      31.520  72.746  62.953  1.00  0.00
C
ATOM   4864  O   PRO   294      32.530  72.478  62.297  1.00  0.00
O
ATOM   4865  N   LEU   295      30.313  72.284  62.623  1.00  0.00
N
ATOM   4866  H   LEU   295      29.517  72.551  63.179  1.00  0.00
H
ATOM   4867  CA  LEU   295      30.072  71.570  61.370  1.00  0.00
C
ATOM   4868  HA  LEU   295      30.895  70.879  61.208  1.00  0.00
H
ATOM   4869  CB  LEU   295      28.772  70.742  61.437  1.00  0.00
C
ATOM   4870  HB2 LEU   295      27.997  71.310  61.955  1.00  0.00
H
ATOM   4871  HB3 LEU   295      28.436  70.578  60.415  1.00  0.00
H
ATOM   4872  CG  LEU   295      28.908  69.341  62.063  1.00  0.00
C
ATOM   4873  HG  LEU   295      29.554  68.737  61.425  1.00  0.00
H
ATOM   4874  CD1 LEU   295      29.496  69.345  63.473  1.00  0.00
C
ATOM   4875 HD11 LEU   295      28.936  70.027  64.108  1.00  0.00
H
ATOM   4876 HD12 LEU   295      29.442  68.341  63.892  1.00  0.00
H
ATOM   4877 HD13 LEU   295      30.540  69.652  63.448  1.00  0.00
H
ATOM   4878  CD2 LEU   295      27.533  68.673  62.123  1.00  0.00
C
ATOM   4879 HD21 LEU   295      27.094  68.630  61.126  1.00  0.00
H
ATOM   4880 HD22 LEU   295      27.627  67.658  62.509  1.00  0.00
H
ATOM   4881 HD23 LEU   295      26.869  69.242  62.775  1.00  0.00
H
ATOM   4882  C   LEU   295      30.087  72.568  60.201  1.00  0.00
C
ATOM   4883  O   LEU   295      29.476  73.633  60.268  1.00  0.00
O
ATOM   4884  N   THR   296      30.817  72.222  59.143  1.00  0.00
N
ATOM   4885  H   THR   296      31.287  71.333  59.151  1.00  0.00
H
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ATOM   4886  CA  THR   296      30.949  73.019  57.913  1.00  0.00
C
ATOM   4887  HA  THR   296      30.944  74.077  58.178  1.00  0.00
H
ATOM   4888  CB  THR   296      32.285  72.718  57.214  1.00  0.00
C
ATOM   4889  HB  THR   296      32.421  73.432  56.408  1.00  0.00
H
ATOM   4890  CG2 THR   296      33.486  72.800  58.156  1.00  0.00
C
ATOM   4891 HG21 THR   296      33.440  71.998  58.894  1.00  0.00
H
ATOM   4892 HG22 THR   296      34.401  72.697  57.577  1.00  0.00
H
ATOM   4893 HG23 THR   296      33.486  73.762  58.673  1.00  0.00
H
ATOM   4894  OG1 THR   296      32.304  71.422  56.662  1.00  0.00
O
ATOM   4895  HG1 THR   296      32.605  71.525  55.756  1.00  0.00
H
ATOM   4896  C   THR   296      29.772  72.766  56.964  1.00  0.00
C
ATOM   4897  O   THR   296      28.987  71.843  57.197  1.00  0.00
O
ATOM   4898  N   GLU   297      29.661  73.523  55.861  1.00  0.00
N
ATOM   4899  H   GLU   297      30.352  74.243  55.686  1.00  0.00
H
ATOM   4900  CA  GLU   297      28.617  73.315  54.836  1.00  0.00
C
ATOM   4901  HA  GLU   297      27.644  73.575  55.251  1.00  0.00
H
ATOM   4902  CB  GLU   297      28.910  74.197  53.605  1.00  0.00
C
ATOM   4903  HB2 GLU   297      29.936  74.009  53.288  1.00  0.00
H
ATOM   4904  HB3 GLU   297      28.268  73.888  52.778  1.00  0.00
H
ATOM   4905  CG  GLU   297      28.752  75.710  53.815  1.00  0.00
C
ATOM   4906  HG2 GLU   297      29.275  76.006  54.726  1.00  0.00
H
ATOM   4907  HG3 GLU   297      29.243  76.216  52.980  1.00  0.00
H
ATOM   4908  CD  GLU   297      27.288  76.171  53.857  1.00  0.00
C
ATOM   4909  OE1 GLU   297      26.540  75.909  52.884  1.00  0.00
O
ATOM   4910  OE2 GLU   297      26.908  76.867  54.832  1.00  0.00
O
ATOM   4911  C   GLU   297      28.544  71.852  54.364  1.00  0.00
C
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ATOM   4912  O   GLU   297      27.466  71.261  54.288  1.00  0.00
O
ATOM   4913  N   GLU   298      29.700  71.252  54.093  1.00  0.00
N
ATOM   4914  H   GLU   298      30.546  71.818  54.100  1.00  0.00
H
ATOM   4915  CA  GLU   298      29.815  69.869  53.638  1.00  0.00
C
ATOM   4916  HA  GLU   298      29.049  69.687  52.883  1.00  0.00
H
ATOM   4917  CB  GLU   298      31.196  69.622  53.012  1.00  0.00
C
ATOM   4918  HB2 GLU   298      31.976  69.783  53.759  1.00  0.00
H
ATOM   4919  HB3 GLU   298      31.227  68.574  52.731  1.00  0.00
H
ATOM   4920  CG  GLU   298      31.506  70.428  51.742  1.00  0.00
C
ATOM   4921  HG2 GLU   298      32.399  69.994  51.286  1.00  0.00
H
ATOM   4922  HG3 GLU   298      30.680  70.300  51.038  1.00  0.00
H
ATOM   4923  CD  GLU   298      31.766  71.924  51.987  1.00  0.00
C
ATOM   4924  OE1 GLU   298      32.099  72.318  53.132  1.00  0.00
O
ATOM   4925  OE2 GLU   298      31.655  72.714  51.019  1.00  0.00
O
ATOM   4926  C   GLU   298      29.603  68.846  54.756  1.00  0.00
C
ATOM   4927  O   GLU   298      29.190  67.731  54.451  1.00  0.00
O
ATOM   4928  N   ALA   299      29.872  69.168  56.025  1.00  0.00
N
ATOM   4929  H   ALA   299      30.154  70.117  56.238  1.00  0.00
H
ATOM   4930  CA  ALA   299      29.669  68.242  57.136  1.00  0.00
C
ATOM   4931  HA  ALA   299      29.892  67.231  56.791  1.00  0.00
H
ATOM   4932  CB  ALA   299      30.658  68.570  58.254  1.00  0.00
C
ATOM   4933  HB1 ALA   299      30.497  69.591  58.592  1.00  0.00
H
ATOM   4934  HB2 ALA   299      30.507  67.887  59.089  1.00  0.00
H
ATOM   4935  HB3 ALA   299      31.674  68.456  57.876  1.00  0.00
H
ATOM   4936  C   ALA   299      28.212  68.222  57.627  1.00  0.00
C
ATOM   4937  O   ALA   299      27.720  67.152  57.974  1.00  0.00
O
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ATOM   4938  N   GLU   300      27.503  69.356  57.598  1.00  0.00
N
ATOM   4939  H   GLU   300      27.967  70.220  57.331  1.00  0.00
H
ATOM   4940  CA  GLU   300      26.040  69.390  57.776  1.00  0.00
C
ATOM   4941  HA  GLU   300      25.769  68.935  58.730  1.00  0.00
H
ATOM   4942  CB  GLU   300      25.530  70.845  57.748  1.00  0.00
C
ATOM   4943  HB2 GLU   300      25.953  71.333  56.870  1.00  0.00
H
ATOM   4944  HB3 GLU   300      24.446  70.839  57.619  1.00  0.00
H
ATOM   4945  CG  GLU   300      25.862  71.701  58.984  1.00  0.00
C
ATOM   4946  HG2 GLU   300      26.902  71.555  59.265  1.00  0.00
H
ATOM   4947  HG3 GLU   300      25.756  72.749  58.695  1.00  0.00
H
ATOM   4948  CD  GLU   300      24.942  71.447  60.191  1.00  0.00
C
ATOM   4949  OE1 GLU   300      24.352  70.353  60.306  1.00  0.00
O
ATOM   4950  OE2 GLU   300      24.741  72.382  61.007  1.00  0.00
O
ATOM   4951  C   GLU   300      25.340  68.590  56.662  1.00  0.00
C
ATOM   4952  O   GLU   300      24.481  67.750  56.940  1.00  0.00
O
ATOM   4953  N   LEU   301      25.739  68.806  55.396  1.00  0.00
N
ATOM   4954  H   LEU   301      26.418  69.539  55.224  1.00  0.00
H
ATOM   4955  CA  LEU   301      25.163  68.105  54.245  1.00  0.00
C
ATOM   4956  HA  LEU   301      24.079  68.166  54.339  1.00  0.00
H
ATOM   4957  CB  LEU   301      25.564  68.813  52.937  1.00  0.00
C
ATOM   4958  HB2 LEU   301      25.216  69.845  52.981  1.00  0.00
H
ATOM   4959  HB3 LEU   301      26.653  68.834  52.868  1.00  0.00
H
ATOM   4960  CG  LEU   301      24.994  68.139  51.669  1.00  0.00
C
ATOM   4961  HG  LEU   301      25.320  67.102  51.631  1.00  0.00
H
ATOM   4962  CD1 LEU   301      23.462  68.181  51.605  1.00  0.00
C
ATOM   4963 HD11 LEU   301      23.109  69.210  51.649  1.00  0.00
H
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ATOM   4964 HD12 LEU   301      23.129  67.712  50.679  1.00  0.00
H
ATOM   4965 HD13 LEU   301      23.040  67.613  52.433  1.00  0.00
H
ATOM   4966  CD2 LEU   301      25.539  68.841  50.426  1.00  0.00
C
ATOM   4967 HD21 LEU   301      26.628  68.818  50.447  1.00  0.00
H
ATOM   4968 HD22 LEU   301      25.200  68.310  49.538  1.00  0.00
H
ATOM   4969 HD23 LEU   301      25.197  69.876  50.395  1.00  0.00
H
ATOM   4970  C   LEU   301      25.513  66.612  54.228  1.00  0.00
C
ATOM   4971  O   LEU   301      24.603  65.795  54.120  1.00  0.00
O
ATOM   4972  N   GLU   302      26.795  66.249  54.370  1.00  0.00
N
ATOM   4973  H   GLU   302      27.503  66.968  54.460  1.00  0.00
H
ATOM   4974  CA  GLU   302      27.224  64.843  54.390  1.00  0.00
C
ATOM   4975  HA  GLU   302      26.892  64.377  53.458  1.00  0.00
H
ATOM   4976  CB  GLU   302      28.765  64.706  54.475  1.00  0.00
C
ATOM   4977  HB2 GLU   302      29.215  65.268  53.657  1.00  0.00
H
ATOM   4978  HB3 GLU   302      29.112  65.126  55.420  1.00  0.00
H
ATOM   4979  CG  GLU   302      29.265  63.250  54.373  1.00  0.00
C
ATOM   4980  HG2 GLU   302      28.847  62.676  55.202  1.00  0.00
H
ATOM   4981  HG3 GLU   302      28.892  62.809  53.445  1.00  0.00
H
ATOM   4982  CD  GLU   302      30.803  63.140  54.425  1.00  0.00
C
ATOM   4983  OE1 GLU   302      31.409  63.398  55.491  1.00  0.00
O
ATOM   4984  OE2 GLU   302      31.445  62.738  53.422  1.00  0.00
O
ATOM   4985  C   GLU   302      26.523  64.108  55.536  1.00  0.00
C
ATOM   4986  O   GLU   302      25.973  63.040  55.296  1.00  0.00
O
ATOM   4987  N   LEU   303      26.435  64.685  56.744  1.00  0.00
N
ATOM   4988  H   LEU   303      26.845  65.602  56.886  1.00  0.00
H
ATOM   4989  CA  LEU   303      25.679  64.086  57.848  1.00  0.00
C
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ATOM   4990  HA  LEU   303      26.094  63.093  58.023  1.00  0.00
H
ATOM   4991  CB  LEU   303      25.881  64.933  59.124  1.00  0.00
C
ATOM   4992  HB2 LEU   303      26.957  65.025  59.282  1.00  0.00
H
ATOM   4993  HB3 LEU   303      25.497  65.941  58.946  1.00  0.00
H
ATOM   4994  CG  LEU   303      25.286  64.405  60.446  1.00  0.00
C
ATOM   4995  HG  LEU   303      25.809  64.919  61.252  1.00  0.00
H
ATOM   4996  CD1 LEU   303      23.796  64.713  60.628  1.00  0.00
C
ATOM   4997 HD11 LEU   303      23.193  64.147  59.922  1.00  0.00
H
ATOM   4998 HD12 LEU   303      23.506  64.457  61.645  1.00  0.00
H
ATOM   4999 HD13 LEU   303      23.626  65.779  60.476  1.00  0.00
H
ATOM   5000  CD2 LEU   303      25.486  62.897  60.648  1.00  0.00
C
ATOM   5001 HD21 LEU   303      26.533  62.633  60.523  1.00  0.00
H
ATOM   5002 HD22 LEU   303      25.161  62.628  61.652  1.00  0.00
H
ATOM   5003 HD23 LEU   303      24.893  62.338  59.929  1.00  0.00
H
ATOM   5004  C   LEU   303      24.200  63.895  57.475  1.00  0.00
C
ATOM   5005  O   LEU   303      23.681  62.795  57.665  1.00  0.00
O
ATOM   5006  N   ALA   304      23.527  64.912  56.928  1.00  0.00
N
ATOM   5007  H   ALA   304      24.014  65.787  56.763  1.00  0.00
H
ATOM   5008  CA  ALA   304      22.109  64.838  56.572  1.00  0.00
C
ATOM   5009  HA  ALA   304      21.555  64.540  57.462  1.00  0.00
H
ATOM   5010  CB  ALA   304      21.617  66.230  56.158  1.00  0.00
C
ATOM   5011  HB1 ALA   304      22.155  66.564  55.269  1.00  0.00
H
ATOM   5012  HB2 ALA   304      20.550  66.192  55.939  1.00  0.00
H
ATOM   5013  HB3 ALA   304      21.790  66.941  56.967  1.00  0.00
H
ATOM   5014  C   ALA   304      21.819  63.777  55.493  1.00  0.00
C
ATOM   5015  O   ALA   304      20.971  62.914  55.713  1.00  0.00
O
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ATOM   5016  N   GLU   305      22.548  63.778  54.371  1.00  0.00
N
ATOM   5017  H   GLU   305      23.268  64.490  54.263  1.00  0.00
H
ATOM   5018  CA  GLU   305      22.402  62.769  53.304  1.00  0.00
C
ATOM   5019  HA  GLU   305      21.406  62.838  52.865  1.00  0.00
H
ATOM   5020  CB  GLU   305      23.464  62.988  52.210  1.00  0.00
C
ATOM   5021  HB2 GLU   305      24.445  62.984  52.686  1.00  0.00
H
ATOM   5022  HB3 GLU   305      23.427  62.141  51.522  1.00  0.00
H
ATOM   5023  CG  GLU   305      23.308  64.270  51.379  1.00  0.00
C
ATOM   5024  HG2 GLU   305      22.362  64.224  50.835  1.00  0.00
H
ATOM   5025  HG3 GLU   305      23.264  65.134  52.039  1.00  0.00
H
ATOM   5026  CD  GLU   305      24.480  64.428  50.395  1.00  0.00
C
ATOM   5027  OE1 GLU   305      25.654  64.214  50.787  1.00  0.00
O
ATOM   5028  OE2 GLU   305      24.242  64.710  49.197  1.00  0.00
O
ATOM   5029  C   GLU   305      22.577  61.348  53.855  1.00  0.00
C
ATOM   5030  O   GLU   305      21.780  60.454  53.577  1.00  0.00
O
ATOM   5031  N   ASN   306      23.599  61.151  54.689  1.00  0.00
N
ATOM   5032  H   ASN   306      24.210  61.942  54.876  1.00  0.00
H
ATOM   5033  CA  ASN   306      23.951  59.866  55.286  1.00  0.00
C
ATOM   5034  HA  ASN   306      24.008  59.117  54.497  1.00  0.00
H
ATOM   5035  CB  ASN   306      25.340  60.073  55.902  1.00  0.00
C
ATOM   5036  HB2 ASN   306      25.876  60.791  55.301  1.00  0.00
H
ATOM   5037  HB3 ASN   306      25.257  60.463  56.916  1.00  0.00
H
ATOM   5038  CG  ASN   306      26.273  58.910  55.825  1.00  0.00
C
ATOM   5039  OD1 ASN   306      26.463  58.296  54.795  1.00  0.00
O
ATOM   5040  ND2 ASN   306      27.040  58.700  56.856  1.00  0.00
N
ATOM   5041 HD21 ASN   306      27.906  58.244  56.645  1.00  0.00
H
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ATOM   5042 HD22 ASN   306      26.951  59.305  57.645  1.00  0.00
H
ATOM   5043  C   ASN   306      22.919  59.398  56.329  1.00  0.00
C
ATOM   5044  O   ASN   306      22.710  58.199  56.521  1.00  0.00
O
ATOM   5045  N   ARG   307      22.243  60.344  56.995  1.00  0.00
N
ATOM   5046  H   ARG   307      22.483  61.313  56.796  1.00  0.00
H
ATOM   5047  CA  ARG   307      21.152  60.094  57.951  1.00  0.00
C
ATOM   5048  HA  ARG   307      21.464  59.291  58.619  1.00  0.00
H
ATOM   5049  CB  ARG   307      20.911  61.373  58.771  1.00  0.00
C
ATOM   5050  HB2 ARG   307      21.871  61.855  58.930  1.00  0.00
H
ATOM   5051  HB3 ARG   307      20.265  62.063  58.221  1.00  0.00
H
ATOM   5052  CG  ARG   307      20.318  61.102  60.156  1.00  0.00
C
ATOM   5053  HG2 ARG   307      19.269  60.804  60.082  1.00  0.00
H
ATOM   5054  HG3 ARG   307      20.899  60.314  60.641  1.00  0.00
H
ATOM   5055  CD  ARG   307      20.436  62.382  60.983  1.00  0.00
C
ATOM   5056  HD2 ARG   307      21.437  62.791  60.847  1.00  0.00
H
ATOM   5057  HD3 ARG   307      19.706  63.121  60.646  1.00  0.00
H
ATOM   5058  NE  ARG   307      20.264  62.078  62.403  1.00  0.00
N
ATOM   5059  HE  ARG   307      19.807  61.216  62.622  1.00  0.00
H
ATOM   5060  CZ  ARG   307      20.710  62.820  63.402  1.00  0.00
C
ATOM   5061  NH1 ARG   307      21.223  63.995  63.222  1.00  0.00
N
ATOM   5062 HH11 ARG   307      21.199  64.384  62.304  1.00  0.00
H
ATOM   5063 HH12 ARG   307      21.202  64.654  64.007  1.00  0.00
H
ATOM   5064  NH2 ARG   307      20.706  62.376  64.609  1.00  0.00
N
ATOM   5065 HH21 ARG   307      20.234  61.537  64.855  1.00  0.00
H
ATOM   5066 HH22 ARG   307      21.241  62.905  65.285  1.00  0.00
H
ATOM   5067  C   ARG   307      19.875  59.627  57.257  1.00  0.00
C
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ATOM   5068  O   ARG   307      19.182  58.771  57.807  1.00  0.00
O
ATOM   5069  N   GLU   308      19.624  60.114  56.041  1.00  0.00
N
ATOM   5070  H   GLU   308      20.217  60.863  55.696  1.00  0.00
H
ATOM   5071  CA  GLU   308      18.528  59.642  55.190  1.00  0.00
C
ATOM   5072  HA  GLU   308      17.635  59.597  55.800  1.00  0.00
H
ATOM   5073  CB  GLU   308      18.229  60.645  54.060  1.00  0.00
C
ATOM   5074  HB2 GLU   308      19.125  60.799  53.462  1.00  0.00
H
ATOM   5075  HB3 GLU   308      17.470  60.215  53.405  1.00  0.00
H
ATOM   5076  CG  GLU   308      17.726  62.013  54.566  1.00  0.00
C
ATOM   5077  HG2 GLU   308      18.534  62.514  55.096  1.00  0.00
H
ATOM   5078  HG3 GLU   308      17.470  62.633  53.703  1.00  0.00
H
ATOM   5079  CD  GLU   308      16.503  61.904  55.486  1.00  0.00
C
ATOM   5080  OE1 GLU   308      15.451  61.404  55.022  1.00  0.00
O
ATOM   5081  OE2 GLU   308      16.611  62.258  56.684  1.00  0.00
O
ATOM   5082  C   GLU   308      18.760  58.206  54.674  1.00  0.00
C
ATOM   5083  O   GLU   308      17.798  57.457  54.522  1.00  0.00
O
ATOM   5084  N   ILE   309      20.014  57.755  54.517  1.00  0.00
N
ATOM   5085  H   ILE   309      20.775  58.413  54.622  1.00  0.00
H
ATOM   5086  CA  ILE   309      20.324  56.338  54.205  1.00  0.00
C
ATOM   5087  HA  ILE   309      19.734  56.051  53.333  1.00  0.00
H
ATOM   5088  CB  ILE   309      21.822  56.126  53.852  1.00  0.00
C
ATOM   5089  HB  ILE   309      22.420  56.332  54.741  1.00  0.00
H
ATOM   5090  CG2 ILE   309      22.070  54.663  53.438  1.00  0.00
C
ATOM   5091 HG21 ILE   309      21.488  54.419  52.548  1.00  0.00
H
ATOM   5092 HG22 ILE   309      23.125  54.494  53.234  1.00  0.00
H
ATOM   5093 HG23 ILE   309      21.792  53.990  54.243  1.00  0.00
H
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ATOM   5094  CG1 ILE   309      22.288  57.062  52.715  1.00  0.00
C
ATOM   5095 HG12 ILE   309      21.719  56.853  51.809  1.00  0.00
H
ATOM   5096 HG13 ILE   309      22.087  58.086  53.004  1.00  0.00
H
ATOM   5097  CD1 ILE   309      23.789  56.983  52.402  1.00  0.00
C
ATOM   5098 HD11 ILE   309      24.026  56.054  51.886  1.00  0.00
H
ATOM   5099 HD12 ILE   309      24.065  57.816  51.757  1.00  0.00
H
ATOM   5100 HD13 ILE   309      24.362  57.044  53.327  1.00  0.00
H
ATOM   5101  C   ILE   309      19.894  55.412  55.358  1.00  0.00
C
ATOM   5102  O   ILE   309      19.366  54.327  55.123  1.00  0.00
O
ATOM   5103  N   LEU   310      20.052  55.842  56.619  1.00  0.00
N
ATOM   5104  H   LEU   310      20.466  56.755  56.755  1.00  0.00
H
ATOM   5105  CA  LEU   310      19.648  55.060  57.797  1.00  0.00
C
ATOM   5106  HA  LEU   310      19.907  54.018  57.608  1.00  0.00
H
ATOM   5107  CB  LEU   310      20.438  55.516  59.046  1.00  0.00
C
ATOM   5108  HB2 LEU   310      20.188  56.558  59.250  1.00  0.00
H
ATOM   5109  HB3 LEU   310      20.101  54.921  59.897  1.00  0.00
H
ATOM   5110  CG  LEU   310      21.972  55.386  58.974  1.00  0.00
C
ATOM   5111  HG  LEU   310      22.358  56.051  58.202  1.00  0.00
H
ATOM   5112  CD1 LEU   310      22.573  55.798  60.319  1.00  0.00
C
ATOM   5113 HD11 LEU   310      22.262  55.103  61.100  1.00  0.00
H
ATOM   5114 HD12 LEU   310      23.660  55.801  60.246  1.00  0.00
H
ATOM   5115 HD13 LEU   310      22.231  56.798  60.574  1.00  0.00
H
ATOM   5116  CD2 LEU   310      22.447  53.963  58.685  1.00  0.00
C
ATOM   5117 HD21 LEU   310      22.158  53.682  57.674  1.00  0.00
H
ATOM   5118 HD22 LEU   310      23.531  53.916  58.753  1.00  0.00
H
ATOM   5119 HD23 LEU   310      22.007  53.263  59.395  1.00  0.00
H
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ATOM   5120  C   LEU   310      18.122  55.061  58.061  1.00  0.00
C
ATOM   5121  O   LEU   310      17.694  54.551  59.099  1.00  0.00
O
ATOM   5122  N   LYS   311      17.292  55.647  57.182  1.00  0.00
N
ATOM   5123  H   LYS   311      17.700  56.080  56.359  1.00  0.00
H
ATOM   5124  CA  LYS   311      15.820  55.692  57.339  1.00  0.00
C
ATOM   5125  HA  LYS   311      15.576  55.891  58.382  1.00  0.00
H
ATOM   5126  CB  LYS   311      15.209  56.790  56.459  1.00  0.00
C
ATOM   5127  HB2 LYS   311      15.518  56.625  55.427  1.00  0.00
H
ATOM   5128  HB3 LYS   311      14.120  56.712  56.480  1.00  0.00
H
ATOM   5129  CG  LYS   311      15.611  58.205  56.864  1.00  0.00
C
ATOM   5130  HG2 LYS   311      16.677  58.226  57.081  1.00  0.00
H
ATOM   5131  HG3 LYS   311      15.418  58.843  56.003  1.00  0.00
H
ATOM   5132  CD  LYS   311      14.851  58.764  58.073  1.00  0.00
C
ATOM   5133  HD2 LYS   311      13.779  58.598  57.946  1.00  0.00
H
ATOM   5134  HD3 LYS   311      15.203  58.295  58.994  1.00  0.00
H
ATOM   5135  CE  LYS   311      15.152  60.264  58.072  1.00  0.00
C
ATOM   5136  HE2 LYS   311      16.225  60.424  58.213  1.00  0.00
H
ATOM   5137  HE3 LYS   311      14.918  60.647  57.073  1.00  0.00
H
ATOM   5138  NZ  LYS   311      14.377  61.052  59.052  1.00  0.00
N
ATOM   5139  HZ1 LYS   311      14.623  60.819  60.013  1.00  0.00
H
ATOM   5140  HZ2 LYS   311      14.588  62.029  58.885  1.00  0.00
H
ATOM   5141  HZ3 LYS   311      13.389  60.916  58.904  1.00  0.00
H
ATOM   5142  C   LYS   311      15.145  54.379  56.970  1.00  0.00
C
ATOM   5143  O   LYS   311      14.322  53.883  57.735  1.00  0.00
O
ATOM   5144  N   GLU   312      15.463  53.835  55.803  1.00  0.00
N
ATOM   5145  H   GLU   312      16.171  54.296  55.251  1.00  0.00
H
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ATOM   5146  CA  GLU   312      14.891  52.585  55.298  1.00  0.00
C
ATOM   5147  HA  GLU   312      13.935  52.398  55.792  1.00  0.00
H
ATOM   5148  CB  GLU   312      14.595  52.691  53.785  1.00  0.00
C
ATOM   5149  HB2 GLU   312      15.522  52.867  53.235  1.00  0.00
H
ATOM   5150  HB3 GLU   312      14.175  51.740  53.458  1.00  0.00
H
ATOM   5151  CG  GLU   312      13.586  53.806  53.449  1.00  0.00
C
ATOM   5152  HG2 GLU   312      12.736  53.718  54.128  1.00  0.00
H
ATOM   5153  HG3 GLU   312      14.058  54.776  53.627  1.00  0.00
H
ATOM   5154  CD  GLU   312      13.074  53.762  51.996  1.00  0.00
C
ATOM   5155  OE1 GLU   312      13.845  53.408  51.078  1.00  0.00
O
ATOM   5156  OE2 GLU   312      11.893  54.119  51.760  1.00  0.00
O
ATOM   5157  C   GLU   312      15.868  51.443  55.636  1.00  0.00
C
ATOM   5158  O   GLU   312      16.932  51.348  55.012  1.00  0.00
O
ATOM   5159  N   PRO   313      15.582  50.594  56.644  1.00  0.00
N
ATOM   5160  CD  PRO   313      14.351  50.498  57.421  1.00  0.00
C
ATOM   5161  HD2 PRO   313      13.464  50.554  56.790  1.00  0.00
H
ATOM   5162  HD3 PRO   313      14.330  51.284  58.176  1.00  0.00
H
ATOM   5163  CG  PRO   313      14.406  49.131  58.103  1.00  0.00
C
ATOM   5164  HG2 PRO   313      14.027  48.366  57.424  1.00  0.00
H
ATOM   5165  HG3 PRO   313      13.849  49.119  59.040  1.00  0.00
H
ATOM   5166  CB  PRO   313      15.905  48.920  58.325  1.00  0.00
C
ATOM   5167  HB2 PRO   313      16.164  47.862  58.395  1.00  0.00
H
ATOM   5168  HB3 PRO   313      16.218  49.444  59.230  1.00  0.00
H
ATOM   5169  CA  PRO   313      16.537  49.591  57.103  1.00  0.00
C
ATOM   5170  HA  PRO   313      17.452  50.092  57.410  1.00  0.00
H
ATOM   5171  C   PRO   313      16.881  48.596  55.993  1.00  0.00
C
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ATOM   5172  O   PRO   313      16.029  48.214  55.189  1.00  0.00
O
ATOM   5173  N   VAL   314      18.149  48.188  55.949  1.00  0.00
N
ATOM   5174  H   VAL   314      18.785  48.521  56.657  1.00  0.00
H
ATOM   5175  CA  VAL   314      18.674  47.225  54.972  1.00  0.00
C
ATOM   5176  HA  VAL   314      17.914  47.042  54.210  1.00  0.00
H
ATOM   5177  CB  VAL   314      19.923  47.756  54.241  1.00  0.00
C
ATOM   5178  HB  VAL   314      20.249  46.999  53.526  1.00  0.00
H
ATOM   5179  CG1 VAL   314      19.629  49.026  53.440  1.00  0.00
C
ATOM   5180 HG11 VAL   314      19.329  49.838  54.103  1.00  0.00
H
ATOM   5181 HG12 VAL   314      20.518  49.324  52.886  1.00  0.00
H
ATOM   5182 HG13 VAL   314      18.826  48.830  52.729  1.00  0.00
H
ATOM   5183  CG2 VAL   314      21.079  48.016  55.206  1.00  0.00
C
ATOM   5184 HG21 VAL   314      21.321  47.108  55.754  1.00  0.00
H
ATOM   5185 HG22 VAL   314      21.952  48.323  54.639  1.00  0.00
H
ATOM   5186 HG23 VAL   314      20.819  48.799  55.913  1.00  0.00
H
ATOM   5187  C   VAL   314      18.964  45.878  55.624  1.00  0.00
C
ATOM   5188  O   VAL   314      19.040  45.751  56.849  1.00  0.00
O
ATOM   5189  N   HIE   315      19.174  44.880  54.773  1.00  0.00
N
ATOM   5190  H   HIE   315      19.164  45.087  53.786  1.00  0.00
H
ATOM   5191  CA  HIE   315      19.464  43.500  55.135  1.00  0.00
C
ATOM   5192  HA  HIE   315      19.819  43.475  56.167  1.00  0.00
H
ATOM   5193  CB  HIE   315      18.168  42.672  55.064  1.00  0.00
C
ATOM   5194  HB2 HIE   315      18.417  41.653  55.340  1.00  0.00
H
ATOM   5195  HB3 HIE   315      17.490  43.048  55.831  1.00  0.00
H
ATOM   5196  CG  HIE   315      17.391  42.626  53.754  1.00  0.00
C
ATOM   5197  ND1 HIE   315      16.176  41.954  53.596  1.00  0.00
N
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ATOM   5198  CE1 HIE   315      15.783  42.172  52.332  1.00  0.00
C
ATOM   5199  HE1 HIE   315      14.865  41.799  51.902  1.00  0.00
H
ATOM   5200  NE2 HIE   315      16.682  42.928  51.684  1.00  0.00
N
ATOM   5201  HE2 HIE   315      16.614  43.238  50.724  1.00  0.00
H
ATOM   5202  CD2 HIE   315      17.695  43.224  52.561  1.00  0.00
C
ATOM   5203  HD2 HIE   315      18.561  43.825  52.340  1.00  0.00
H
ATOM   5204  C   HIE   315      20.581  42.921  54.261  1.00  0.00
C
ATOM   5205  O   HIE   315      20.734  43.315  53.105  1.00  0.00
O
ATOM   5206  N   GLY   316      21.358  41.990  54.808  1.00  0.00
N
ATOM   5207  H   GLY   316      21.177  41.721  55.771  1.00  0.00
H
ATOM   5208  CA  GLY   316      22.308  41.166  54.063  1.00  0.00
C
ATOM   5209  HA2 GLY   316      22.459  41.582  53.070  1.00  0.00
H
ATOM   5210  HA3 GLY   316      23.269  41.155  54.572  1.00  0.00
H
ATOM   5211  C   GLY   316      21.806  39.733  53.934  1.00  0.00
C
ATOM   5212  O   GLY   316      21.141  39.229  54.837  1.00  0.00
O
ATOM   5213  N   VAL   317      22.119  39.064  52.825  1.00  0.00
N
ATOM   5214  H   VAL   317      22.661  39.550  52.118  1.00  0.00
H
ATOM   5215  CA  VAL   317      21.873  37.618  52.657  1.00  0.00
C
ATOM   5216  HA  VAL   317      20.965  37.362  53.203  1.00  0.00
H
ATOM   5217  CB  VAL   317      21.599  37.295  51.173  1.00  0.00
C
ATOM   5218  HB  VAL   317      20.818  37.980  50.841  1.00  0.00
H
ATOM   5219  CG1 VAL   317      22.821  37.512  50.275  1.00  0.00
C
ATOM   5220 HG11 VAL   317      23.656  36.901  50.616  1.00  0.00
H
ATOM   5221 HG12 VAL   317      22.583  37.235  49.248  1.00  0.00
H
ATOM   5222 HG13 VAL   317      23.107  38.561  50.288  1.00  0.00
H
ATOM   5223  CG2 VAL   317      21.057  35.881  50.938  1.00  0.00
C
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ATOM   5224 HG21 VAL   317      20.247  35.664  51.637  1.00  0.00
H
ATOM   5225 HG22 VAL   317      20.671  35.803  49.923  1.00  0.00
H
ATOM   5226 HG23 VAL   317      21.850  35.144  51.050  1.00  0.00
H
ATOM   5227  C   VAL   317      23.000  36.783  53.283  1.00  0.00
C
ATOM   5228  O   VAL   317      24.078  37.305  53.569  1.00  0.00
O
ATOM   5229  N   TYR   318      22.762  35.491  53.507  1.00  0.00
N
ATOM   5230  H   TYR   318      21.838  35.141  53.300  1.00  0.00
H
ATOM   5231  CA  TYR   318      23.800  34.522  53.886  1.00  0.00
C
ATOM   5232  HA  TYR   318      24.519  35.017  54.545  1.00  0.00
H
ATOM   5233  CB  TYR   318      23.168  33.352  54.648  1.00  0.00
C
ATOM   5234  HB2 TYR   318      22.348  32.935  54.060  1.00  0.00
H
ATOM   5235  HB3 TYR   318      23.905  32.563  54.794  1.00  0.00
H
ATOM   5236  CG  TYR   318      22.670  33.772  56.003  1.00  0.00
C
ATOM   5237  CD1 TYR   318      23.583  34.283  56.946  1.00  0.00
C
ATOM   5238  HD1 TYR   318      24.639  34.332  56.716  1.00  0.00
H
ATOM   5239  CE1 TYR   318      23.119  34.778  58.175  1.00  0.00
C
ATOM   5240  HE1 TYR   318      23.817  35.193  58.882  1.00  0.00
H
ATOM   5241  CZ  TYR   318      21.738  34.746  58.461  1.00  0.00
C
ATOM   5242  OH  TYR   318      21.285  35.247  59.632  1.00  0.00
O
ATOM   5243  HH  TYR   318      21.991  35.592  60.173  1.00  0.00
H
ATOM   5244  CE2 TYR   318      20.834  34.208  57.523  1.00  0.00
C
ATOM   5245  HE2 TYR   318      19.782  34.189  57.751  1.00  0.00
H
ATOM   5246  CD2 TYR   318      21.297  33.724  56.292  1.00  0.00
C
ATOM   5247  HD2 TYR   318      20.589  33.350  55.566  1.00  0.00
H
ATOM   5248  C   TYR   318      24.590  33.981  52.693  1.00  0.00
C
ATOM   5249  O   TYR   318      24.096  33.922  51.569  1.00  0.00
O
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ATOM   5250  N   TYR   319      25.796  33.499  52.976  1.00  0.00
N
ATOM   5251  H   TYR   319      26.098  33.506  53.943  1.00  0.00
H
ATOM   5252  CA  TYR   319      26.678  32.862  52.005  1.00  0.00
C
ATOM   5253  HA  TYR   319      26.728  33.511  51.129  1.00  0.00
H
ATOM   5254  CB  TYR   319      28.083  32.761  52.628  1.00  0.00
C
ATOM   5255  HB2 TYR   319      28.425  33.763  52.863  1.00  0.00
H
ATOM   5256  HB3 TYR   319      28.007  32.208  53.566  1.00  0.00
H
ATOM   5257  CG  TYR   319      29.150  32.112  51.768  1.00  0.00
C
ATOM   5258  CD1 TYR   319      29.244  32.437  50.404  1.00  0.00
C
ATOM   5259  HD1 TYR   319      28.577  33.167  49.971  1.00  0.00
H
ATOM   5260  CE1 TYR   319      30.191  31.805  49.586  1.00  0.00
C
ATOM   5261  HE1 TYR   319      30.199  32.019  48.529  1.00  0.00
H
ATOM   5262  CZ  TYR   319      31.108  30.897  50.150  1.00  0.00
C
ATOM   5263  OH  TYR   319      32.026  30.286  49.360  1.00  0.00
O
ATOM   5264  HH  TYR   319      31.841  30.473  48.438  1.00  0.00
H
ATOM   5265  CE2 TYR   319      31.061  30.612  51.531  1.00  0.00
C
ATOM   5266  HE2 TYR   319      31.795  29.940  51.944  1.00  0.00
H
ATOM   5267  CD2 TYR   319      30.069  31.209  52.338  1.00  0.00
C
ATOM   5268  HD2 TYR   319      30.026  31.020  53.401  1.00  0.00
H
ATOM   5269  C   TYR   319      26.156  31.486  51.555  1.00  0.00
C
ATOM   5270  O   TYR   319      25.777  30.645  52.377  1.00  0.00
O
ATOM   5271  N   ASP   320      26.205  31.233  50.247  1.00  0.00
N
ATOM   5272  H   ASP   320      26.446  32.002  49.624  1.00  0.00
H
ATOM   5273  CA  ASP   320      26.074  29.911  49.632  1.00  0.00
C
ATOM   5274  HA  ASP   320      25.834  29.179  50.399  1.00  0.00
H
ATOM   5275  CB  ASP   320      24.897  29.922  48.644  1.00  0.00
C
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ATOM   5276  HB2 ASP   320      23.971  30.074  49.203  1.00  0.00
H
ATOM   5277  HB3 ASP   320      25.020  30.766  47.962  1.00  0.00
H
ATOM   5278  CG  ASP   320      24.776  28.635  47.811  1.00  0.00
C
ATOM   5279  OD1 ASP   320      25.381  27.597  48.178  1.00  0.00
O
ATOM   5280  OD2 ASP   320      24.087  28.701  46.773  1.00  0.00
O
ATOM   5281  C   ASP   320      27.400  29.524  48.944  1.00  0.00
C
ATOM   5282  O   ASP   320      27.825  30.209  48.010  1.00  0.00
O
ATOM   5283  N   PRO   321      28.082  28.437  49.353  1.00  0.00
N
ATOM   5284  CD  PRO   321      27.716  27.524  50.426  1.00  0.00
C
ATOM   5285  HD2 PRO   321      26.689  27.170  50.328  1.00  0.00
H
ATOM   5286  HD3 PRO   321      27.847  28.033  51.380  1.00  0.00
H
ATOM   5287  CG  PRO   321      28.681  26.344  50.308  1.00  0.00
C
ATOM   5288  HG2 PRO   321      28.268  25.605  49.620  1.00  0.00
H
ATOM   5289  HG3 PRO   321      28.893  25.888  51.275  1.00  0.00
H
ATOM   5290  CB  PRO   321      29.924  26.987  49.690  1.00  0.00
C
ATOM   5291  HB2 PRO   321      30.561  26.257  49.190  1.00  0.00
H
ATOM   5292  HB3 PRO   321      30.490  27.517  50.458  1.00  0.00
H
ATOM   5293  CA  PRO   321      29.325  28.003  48.715  1.00  0.00
C
ATOM   5294  HA  PRO   321      29.999  28.851  48.618  1.00  0.00
H
ATOM   5295  C   PRO   321      29.138  27.403  47.309  1.00  0.00
C
ATOM   5296  O   PRO   321      30.127  27.175  46.616  1.00  0.00
O
ATOM   5297  N   SER   322      27.903  27.142  46.879  1.00  0.00
N
ATOM   5298  H   SER   322      27.115  27.349  47.493  1.00  0.00
H
ATOM   5299  CA  SER   322      27.585  26.470  45.608  1.00  0.00
C
ATOM   5300  HA  SER   322      28.269  25.632  45.488  1.00  0.00
H
ATOM   5301  CB  SER   322      26.162  25.907  45.646  1.00  0.00
C
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ATOM   5302  HB2 SER   322      25.440  26.723  45.603  1.00  0.00
H
ATOM   5303  HB3 SER   322      26.011  25.253  44.780  1.00  0.00
H
ATOM   5304  OG  SER   322      25.963  25.187  46.843  1.00  0.00
O
ATOM   5305  HG  SER   322      25.590  25.831  47.464  1.00  0.00
H
ATOM   5306  C   SER   322      27.753  27.358  44.372  1.00  0.00
C
ATOM   5307  O   SER   322      27.662  26.866  43.247  1.00  0.00
O
ATOM   5308  N   LYS   323      28.005  28.661  44.558  1.00  0.00
N
ATOM   5309  H   LYS   323      28.089  28.986  45.515  1.00  0.00
H
ATOM   5310  CA  LYS   323      28.205  29.653  43.494  1.00  0.00
C
ATOM   5311  HA  LYS   323      28.571  29.128  42.610  1.00  0.00
H
ATOM   5312  CB  LYS   323      26.860  30.317  43.095  1.00  0.00
C
ATOM   5313  HB2 LYS   323      27.061  31.287  42.637  1.00  0.00
H
ATOM   5314  HB3 LYS   323      26.413  29.684  42.325  1.00  0.00
H
ATOM   5315  CG  LYS   323      25.805  30.499  44.211  1.00  0.00
C
ATOM   5316  HG2 LYS   323      25.618  29.538  44.691  1.00  0.00
H
ATOM   5317  HG3 LYS   323      26.180  31.200  44.957  1.00  0.00
H
ATOM   5318  CD  LYS   323      24.469  31.004  43.637  1.00  0.00
C
ATOM   5319  HD2 LYS   323      24.572  32.048  43.330  1.00  0.00
H
ATOM   5320  HD3 LYS   323      24.206  30.400  42.768  1.00  0.00
H
ATOM   5321  CE  LYS   323      23.350  30.854  44.673  1.00  0.00
C
ATOM   5322  HE2 LYS   323      23.304  29.802  44.970  1.00  0.00
H
ATOM   5323  HE3 LYS   323      23.601  31.427  45.569  1.00  0.00
H
ATOM   5324  NZ  LYS   323      22.033  31.272  44.136  1.00  0.00
N
ATOM   5325  HZ1 LYS   323      21.810  30.826  43.265  1.00  0.00
H
ATOM   5326  HZ2 LYS   323      21.298  31.099  44.804  1.00  0.00
H
ATOM   5327  HZ3 LYS   323      21.970  32.286  43.977  1.00  0.00
H
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ATOM   5328  C   LYS   323      29.305  30.653  43.860  1.00  0.00
C
ATOM   5329  O   LYS   323      29.601  30.872  45.035  1.00  0.00
O
ATOM   5330  N   ASP   324      29.966  31.224  42.857  1.00  0.00
N
ATOM   5331  H   ASP   324      29.729  30.975  41.902  1.00  0.00
H
ATOM   5332  CA  ASP   324      30.993  32.248  43.072  1.00  0.00
C
ATOM   5333  HA  ASP   324      31.626  31.867  43.867  1.00  0.00
H
ATOM   5334  CB  ASP   324      31.917  32.401  41.842  1.00  0.00
C
ATOM   5335  HB2 ASP   324      32.457  33.351  41.896  1.00  0.00
H
ATOM   5336  HB3 ASP   324      32.662  31.610  41.911  1.00  0.00
H
ATOM   5337  CG  ASP   324      31.231  32.249  40.479  1.00  0.00
C
ATOM   5338  OD1 ASP   324      30.974  33.280  39.830  1.00  0.00
O
ATOM   5339  OD2 ASP   324      30.991  31.089  40.067  1.00  0.00
O
ATOM   5340  C   ASP   324      30.427  33.561  43.649  1.00  0.00
C
ATOM   5341  O   ASP   324      29.217  33.757  43.770  1.00  0.00
O
ATOM   5342  N   LEU   325      31.331  34.418  44.132  1.00  0.00
N
ATOM   5343  H   LEU   325      32.299  34.262  43.909  1.00  0.00
H
ATOM   5344  CA  LEU   325      31.001  35.718  44.713  1.00  0.00
C
ATOM   5345  HA  LEU   325      29.925  35.785  44.879  1.00  0.00
H
ATOM   5346  CB  LEU   325      31.708  35.973  46.059  1.00  0.00
C
ATOM   5347  HB2 LEU   325      32.790  35.966  45.907  1.00  0.00
H
ATOM   5348  HB3 LEU   325      31.430  36.985  46.364  1.00  0.00
H
ATOM   5349  CG  LEU   325      31.354  35.024  47.221  1.00  0.00
C
ATOM   5350  HG  LEU   325      30.286  34.800  47.223  1.00  0.00
H
ATOM   5351  CD1 LEU   325      32.156  33.719  47.155  1.00  0.00
C
ATOM   5352 HD11 LEU   325      33.198  33.941  46.937  1.00  0.00
H
ATOM   5353 HD12 LEU   325      32.105  33.211  48.116  1.00  0.00
H
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ATOM   5354 HD13 LEU   325      31.724  33.074  46.394  1.00  0.00
H
ATOM   5355  CD2 LEU   325      31.716  35.700  48.542  1.00  0.00
C
ATOM   5356 HD21 LEU   325      31.164  36.634  48.645  1.00  0.00
H
ATOM   5357 HD22 LEU   325      31.436  35.054  49.376  1.00  0.00
H
ATOM   5358 HD23 LEU   325      32.785  35.909  48.585  1.00  0.00
H
ATOM   5359  C   LEU   325      31.394  36.809  43.725  1.00  0.00
C
ATOM   5360  O   LEU   325      32.468  36.733  43.123  1.00  0.00
O
ATOM   5361  N   ILE   326      30.560  37.834  43.604  1.00  0.00
N
ATOM   5362  H   ILE   326      29.703  37.835  44.154  1.00  0.00
H
ATOM   5363  CA  ILE   326      30.789  38.992  42.745  1.00  0.00
C
ATOM   5364  HA  ILE   326      31.687  38.833  42.147  1.00  0.00
H
ATOM   5365  CB  ILE   326      29.600  39.191  41.780  1.00  0.00
C
ATOM   5366  HB  ILE   326      28.689  39.327  42.366  1.00  0.00
H
ATOM   5367  CG2 ILE   326      29.811  40.466  40.943  1.00  0.00
C
ATOM   5368 HG21 ILE   326      30.752  40.405  40.394  1.00  0.00
H
ATOM   5369 HG22 ILE   326      28.984  40.588  40.249  1.00  0.00
H
ATOM   5370 HG23 ILE   326      29.823  41.346  41.586  1.00  0.00
H
ATOM   5371  CG1 ILE   326      29.407  37.991  40.818  1.00  0.00
C
ATOM   5372 HG12 ILE   326      28.918  38.337  39.907  1.00  0.00
H
ATOM   5373 HG13 ILE   326      30.380  37.586  40.534  1.00  0.00
H
ATOM   5374  CD1 ILE   326      28.530  36.856  41.370  1.00  0.00
C
ATOM   5375 HD11 ILE   326      27.561  37.252  41.677  1.00  0.00
H
ATOM   5376 HD12 ILE   326      28.376  36.112  40.588  1.00  0.00
H
ATOM   5377 HD13 ILE   326      29.001  36.359  42.215  1.00  0.00
H
ATOM   5378  C   ILE   326      31.013  40.206  43.644  1.00  0.00
C
ATOM   5379  O   ILE   326      30.217  40.448  44.547  1.00  0.00
O
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ATOM   5380  N   ALA   327      32.069  40.973  43.390  1.00  0.00
N
ATOM   5381  H   ALA   327      32.684  40.700  42.629  1.00  0.00
H
ATOM   5382  CA  ALA   327      32.329  42.261  44.023  1.00  0.00
C
ATOM   5383  HA  ALA   327      31.569  42.463  44.778  1.00  0.00
H
ATOM   5384  CB  ALA   327      33.689  42.202  44.726  1.00  0.00
C
ATOM   5385  HB1 ALA   327      34.468  41.974  43.998  1.00  0.00
H
ATOM   5386  HB2 ALA   327      33.898  43.167  45.189  1.00  0.00
H
ATOM   5387  HB3 ALA   327      33.677  41.427  45.493  1.00  0.00
H
ATOM   5388  C   ALA   327      32.260  43.376  42.972  1.00  0.00
C
ATOM   5389  O   ALA   327      33.007  43.366  41.994  1.00  0.00
O
ATOM   5390  N   GLU   328      31.374  44.346  43.168  1.00  0.00
N
ATOM   5391  H   GLU   328      30.803  44.317  44.009  1.00  0.00
H
ATOM   5392  CA  GLU   328      31.195  45.494  42.273  1.00  0.00
C
ATOM   5393  HA  GLU   328      31.858  45.393  41.413  1.00  0.00
H
ATOM   5394  CB  GLU   328      29.749  45.473  41.750  1.00  0.00
C
ATOM   5395  HB2 GLU   328      29.569  44.473  41.352  1.00  0.00
H
ATOM   5396  HB3 GLU   328      29.057  45.639  42.576  1.00  0.00
H
ATOM   5397  CG  GLU   328      29.476  46.490  40.632  1.00  0.00
C
ATOM   5398  HG2 GLU   328      29.473  47.494  41.055  1.00  0.00
H
ATOM   5399  HG3 GLU   328      30.285  46.442  39.905  1.00  0.00
H
ATOM   5400  CD  GLU   328      28.150  46.231  39.900  1.00  0.00
C
ATOM   5401  OE1 GLU   328      27.439  45.240  40.214  1.00  0.00
O
ATOM   5402  OE2 GLU   328      27.810  46.996  38.973  1.00  0.00
O
ATOM   5403  C   GLU   328      31.598  46.783  43.004  1.00  0.00
C
ATOM   5404  O   GLU   328      31.338  46.910  44.202  1.00  0.00
O
ATOM   5405  N   ILE   329      32.271  47.704  42.305  1.00  0.00
N
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ATOM   5406  H   ILE   329      32.407  47.543  41.315  1.00  0.00
H
ATOM   5407  CA  ILE   329      32.852  48.940  42.864  1.00  0.00
C
ATOM   5408  HA  ILE   329      32.487  49.073  43.882  1.00  0.00
H
ATOM   5409  CB  ILE   329      34.409  48.873  42.899  1.00  0.00
C
ATOM   5410  HB  ILE   329      34.765  48.938  41.868  1.00  0.00
H
ATOM   5411  CG2 ILE   329      34.979  50.086  43.668  1.00  0.00
C
ATOM   5412 HG21 ILE   329      34.656  50.053  44.708  1.00  0.00
H
ATOM   5413 HG22 ILE   329      36.067  50.093  43.627  1.00  0.00
H
ATOM   5414 HG23 ILE   329      34.642  51.022  43.225  1.00  0.00
H
ATOM   5415  CG1 ILE   329      34.960  47.552  43.494  1.00  0.00
C
ATOM   5416 HG12 ILE   329      34.595  47.437  44.514  1.00  0.00
H
ATOM   5417 HG13 ILE   329      34.586  46.714  42.905  1.00  0.00
H
ATOM   5418  CD1 ILE   329      36.494  47.454  43.497  1.00  0.00
C
ATOM   5419 HD11 ILE   329      36.916  48.084  44.279  1.00  0.00
H
ATOM   5420 HD12 ILE   329      36.795  46.426  43.682  1.00  0.00
H
ATOM   5421 HD13 ILE   329      36.891  47.763  42.534  1.00  0.00
H
ATOM   5422  C   ILE   329      32.402  50.147  42.024  1.00  0.00
C
ATOM   5423  O   ILE   329      32.469  50.087  40.800  1.00  0.00
O
ATOM   5424  N   GLN   330      32.060  51.278  42.652  1.00  0.00
N
ATOM   5425  H   GLN   330      32.027  51.263  43.667  1.00  0.00
H
ATOM   5426  CA  GLN   330      31.841  52.561  41.967  1.00  0.00
C
ATOM   5427  HA  GLN   330      32.156  52.451  40.929  1.00  0.00
H
ATOM   5428  CB  GLN   330      30.364  53.000  41.947  1.00  0.00
C
ATOM   5429  HB2 GLN   330      30.113  53.458  42.900  1.00  0.00
H
ATOM   5430  HB3 GLN   330      30.272  53.777  41.188  1.00  0.00
H
ATOM   5431  CG  GLN   330      29.323  51.919  41.634  1.00  0.00
C
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ATOM   5432  HG2 GLN   330      28.388  52.412  41.372  1.00  0.00
H
ATOM   5433  HG3 GLN   330      29.651  51.338  40.772  1.00  0.00
H
ATOM   5434  CD  GLN   330      29.057  50.994  42.820  1.00  0.00
C
ATOM   5435  OE1 GLN   330      29.309  49.803  42.770  1.00  0.00
O
ATOM   5436  NE2 GLN   330      28.548  51.484  43.929  1.00  0.00
N
ATOM   5437 HE21 GLN   330      28.353  50.820  44.660  1.00  0.00
H
ATOM   5438 HE22 GLN   330      28.270  52.458  44.014  1.00  0.00
H
ATOM   5439  C   GLN   330      32.696  53.675  42.578  1.00  0.00
C
ATOM   5440  O   GLN   330      32.986  53.683  43.778  1.00  0.00
O
ATOM   5441  N   LYS   331      33.052  54.670  41.760  1.00  0.00
N
ATOM   5442  H   LYS   331      32.758  54.616  40.793  1.00  0.00
H
ATOM   5443  CA  LYS   331      33.692  55.913  42.207  1.00  0.00
C
ATOM   5444  HA  LYS   331      34.422  55.688  42.988  1.00  0.00
H
ATOM   5445  CB  LYS   331      34.446  56.514  41.010  1.00  0.00
C
ATOM   5446  HB2 LYS   331      35.100  55.757  40.577  1.00  0.00
H
ATOM   5447  HB3 LYS   331      33.723  56.785  40.246  1.00  0.00
H
ATOM   5448  CG  LYS   331      35.292  57.742  41.369  1.00  0.00
C
ATOM   5449  HG2 LYS   331      34.696  58.448  41.953  1.00  0.00
H
ATOM   5450  HG3 LYS   331      36.151  57.417  41.961  1.00  0.00
H
ATOM   5451  CD  LYS   331      35.768  58.426  40.077  1.00  0.00
C
ATOM   5452  HD2 LYS   331      36.331  57.710  39.467  1.00  0.00
H
ATOM   5453  HD3 LYS   331      34.898  58.769  39.520  1.00  0.00
H
ATOM   5454  CE  LYS   331      36.625  59.645  40.409  1.00  0.00
C
ATOM   5455  HE2 LYS   331      36.057  60.321  41.053  1.00  0.00
H
ATOM   5456  HE3 LYS   331      37.496  59.295  40.950  1.00  0.00
H
ATOM   5457  NZ  LYS   331      37.084  60.344  39.194  1.00  0.00
N
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ATOM   5458  HZ1 LYS   331      36.298  60.745  38.706  1.00  0.00
H
ATOM   5459  HZ2 LYS   331      37.750  61.068  39.409  1.00  0.00
H
ATOM   5460  HZ3 LYS   331      37.580  59.689  38.572  1.00  0.00
H
ATOM   5461  C   LYS   331      32.622  56.854  42.783  1.00  0.00
C
ATOM   5462  O   LYS   331      31.832  57.428  42.040  1.00  0.00
O
ATOM   5463  N   GLN   332      32.606  57.026  44.104  1.00  0.00
N
ATOM   5464  H   GLN   332      33.331  56.563  44.634  1.00  0.00
H
ATOM   5465  CA  GLN   332      31.654  57.883  44.834  1.00  0.00
C
ATOM   5466  HA  GLN   332      30.648  57.689  44.465  1.00  0.00
H
ATOM   5467  CB  GLN   332      31.741  57.563  46.338  1.00  0.00
C
ATOM   5468  HB2 GLN   332      32.768  57.324  46.592  1.00  0.00
H
ATOM   5469  HB3 GLN   332      31.448  58.432  46.929  1.00  0.00
H
ATOM   5470  CG  GLN   332      30.866  56.392  46.757  1.00  0.00
C
ATOM   5471  HG2 GLN   332      31.016  55.579  46.052  1.00  0.00
H
ATOM   5472  HG3 GLN   332      31.187  56.074  47.745  1.00  0.00
H
ATOM   5473  CD  GLN   332      29.392  56.779  46.816  1.00  0.00
C
ATOM   5474  OE1 GLN   332      28.736  56.979  45.808  1.00  0.00
O
ATOM   5475  NE2 GLN   332      28.842  56.990  47.989  1.00  0.00
N
ATOM   5476 HE21 GLN   332      27.910  57.397  47.982  1.00  0.00
H
ATOM   5477 HE22 GLN   332      29.322  56.816  48.852  1.00  0.00
H
ATOM   5478  C   GLN   332      31.902  59.385  44.668  1.00  0.00
C
ATOM   5479  O   GLN   332      31.019  60.199  44.920  1.00  0.00
O
ATOM   5480  N   GLY   333      33.133  59.763  44.337  1.00  0.00
N
ATOM   5481  H   GLY   333      33.823  59.041  44.171  1.00  0.00
H
ATOM   5482  CA  GLY   333      33.574  61.150  44.257  1.00  0.00
C
ATOM   5483  HA2 GLY   333      33.136  61.622  43.376  1.00  0.00
H
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ATOM   5484  HA3 GLY   333      33.243  61.695  45.143  1.00  0.00
H
ATOM   5485  C   GLY   333      35.093  61.217  44.168  1.00  0.00
C
ATOM   5486  O   GLY   333      35.769  60.192  44.044  1.00  0.00
O
ATOM   5487  N   GLN   334      35.665  62.415  44.274  1.00  0.00
N
ATOM   5488  H   GLN   334      35.072  63.231  44.347  1.00  0.00
H
ATOM   5489  CA  GLN   334      37.110  62.605  44.123  1.00  0.00
C
ATOM   5490  HA  GLN   334      37.412  62.092  43.210  1.00  0.00
H
ATOM   5491  CB  GLN   334      37.438  64.095  43.927  1.00  0.00
C
ATOM   5492  HB2 GLN   334      37.202  64.640  44.840  1.00  0.00
H
ATOM   5493  HB3 GLN   334      38.508  64.186  43.743  1.00  0.00
H
ATOM   5494  CG  GLN   334      36.685  64.755  42.754  1.00  0.00
C
ATOM   5495  HG2 GLN   334      35.640  64.909  43.032  1.00  0.00
H
ATOM   5496  HG3 GLN   334      37.117  65.738  42.571  1.00  0.00
H
ATOM   5497  CD  GLN   334      36.735  63.951  41.457  1.00  0.00
C
ATOM   5498  OE1 GLN   334      35.769  63.307  41.067  1.00  0.00
O
ATOM   5499  NE2 GLN   334      37.854  63.903  40.770  1.00  0.00
N
ATOM   5500 HE21 GLN   334      37.823  63.538  39.839  1.00  0.00
H
ATOM   5501 HE22 GLN   334      38.606  64.547  41.027  1.00  0.00
H
ATOM   5502  C   GLN   334      37.898  61.945  45.275  1.00  0.00
C
ATOM   5503  O   GLN   334      38.058  62.503  46.363  1.00  0.00
O
ATOM   5504  N   GLY   335      38.354  60.711  45.038  1.00  0.00
N
ATOM   5505  H   GLY   335      37.985  60.253  44.214  1.00  0.00
H
ATOM   5506  CA  GLY   335      39.082  59.878  46.005  1.00  0.00
C
ATOM   5507  HA2 GLY   335      39.797  59.260  45.468  1.00  0.00
H
ATOM   5508  HA3 GLY   335      39.653  60.518  46.677  1.00  0.00
H
ATOM   5509  C   GLY   335      38.218  58.951  46.871  1.00  0.00
C
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ATOM   5510  O   GLY   335      38.779  58.270  47.722  1.00  0.00
O
ATOM   5511  N   GLN   336      36.891  58.903  46.682  1.00  0.00
N
ATOM   5512  H   GLN   336      36.496  59.397  45.892  1.00  0.00
H
ATOM   5513  CA  GLN   336      36.010  57.958  47.388  1.00  0.00
C
ATOM   5514  HA  GLN   336      36.561  57.476  48.200  1.00  0.00
H
ATOM   5515  CB  GLN   336      34.785  58.654  48.009  1.00  0.00
C
ATOM   5516  HB2 GLN   336      34.152  59.052  47.217  1.00  0.00
H
ATOM   5517  HB3 GLN   336      34.216  57.901  48.556  1.00  0.00
H
ATOM   5518  CG  GLN   336      35.124  59.796  48.966  1.00  0.00
C
ATOM   5519  HG2 GLN   336      35.985  59.517  49.573  1.00  0.00
H
ATOM   5520  HG3 GLN   336      35.375  60.670  48.367  1.00  0.00
H
ATOM   5521  CD  GLN   336      33.969  60.137  49.905  1.00  0.00
C
ATOM   5522  OE1 GLN   336      33.638  59.389  50.806  1.00  0.00
O
ATOM   5523  NE2 GLN   336      33.348  61.293  49.784  1.00  0.00
N
ATOM   5524 HE21 GLN   336      32.644  61.490  50.478  1.00  0.00
H
ATOM   5525 HE22 GLN   336      33.539  61.948  49.047  1.00  0.00
H
ATOM   5526  C   GLN   336      35.518  56.853  46.449  1.00  0.00
C
ATOM   5527  O   GLN   336      35.144  57.131  45.309  1.00  0.00
O
ATOM   5528  N   TRP   337      35.412  55.635  46.972  1.00  0.00
N
ATOM   5529  H   TRP   337      35.811  55.461  47.889  1.00  0.00
H
ATOM   5530  CA  TRP   337      34.868  54.460  46.296  1.00  0.00
C
ATOM   5531  HA  TRP   337      34.339  54.765  45.397  1.00  0.00
H
ATOM   5532  CB  TRP   337      36.023  53.534  45.881  1.00  0.00
C
ATOM   5533  HB2 TRP   337      36.447  53.085  46.780  1.00  0.00
H
ATOM   5534  HB3 TRP   337      35.616  52.720  45.278  1.00  0.00
H
ATOM   5535  CG  TRP   337      37.134  54.191  45.114  1.00  0.00
C
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ATOM   5536  CD1 TRP   337      38.177  54.866  45.653  1.00  0.00
C
ATOM   5537  HD1 TRP   337      38.340  55.001  46.718  1.00  0.00
H
ATOM   5538  NE1 TRP   337      38.976  55.381  44.657  1.00  0.00
N
ATOM   5539  HE1 TRP   337      39.815  55.912  44.835  1.00  0.00
H
ATOM   5540  CE2 TRP   337      38.498  55.043  43.408  1.00  0.00
C
ATOM   5541  CZ2 TRP   337      38.950  55.310  42.110  1.00  0.00
C
ATOM   5542  HZ2 TRP   337      39.848  55.881  41.940  1.00  0.00
H
ATOM   5543  CH2 TRP   337      38.232  54.800  41.022  1.00  0.00
C
ATOM   5544  HH2 TRP   337      38.586  54.985  40.020  1.00  0.00
H
ATOM   5545  CZ3 TRP   337      37.073  54.030  41.237  1.00  0.00
C
ATOM   5546  HZ3 TRP   337      36.532  53.628  40.392  1.00  0.00
H
ATOM   5547  CE3 TRP   337      36.621  53.779  42.546  1.00  0.00
C
ATOM   5548  HE3 TRP   337      35.731  53.189  42.705  1.00  0.00
H
ATOM   5549  CD2 TRP   337      37.324  54.277  43.666  1.00  0.00
C
ATOM   5550  C   TRP   337      33.894  53.738  47.233  1.00  0.00
C
ATOM   5551  O   TRP   337      34.195  53.593  48.419  1.00  0.00
O
ATOM   5552  N   THR   338      32.758  53.259  46.730  1.00  0.00
N
ATOM   5553  H   THR   338      32.583  53.380  45.735  1.00  0.00
H
ATOM   5554  CA  THR   338      31.891  52.286  47.424  1.00  0.00
C
ATOM   5555  HA  THR   338      32.286  52.084  48.415  1.00  0.00
H
ATOM   5556  CB  THR   338      30.434  52.743  47.618  1.00  0.00
C
ATOM   5557  HB  THR   338      29.797  51.873  47.783  1.00  0.00
H
ATOM   5558  CG2 THR   338      30.320  53.628  48.857  1.00  0.00
C
ATOM   5559 HG21 THR   338      31.199  54.260  48.958  1.00  0.00
H
ATOM   5560 HG22 THR   338      29.430  54.245  48.800  1.00  0.00
H
ATOM   5561 HG23 THR   338      30.257  52.997  49.741  1.00  0.00
H
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ATOM   5562  OG1 THR   338      29.951  53.432  46.489  1.00  0.00
O
ATOM   5563  HG1 THR   338      28.989  53.387  46.459  1.00  0.00
H
ATOM   5564  C   THR   338      31.919  50.962  46.691  1.00  0.00
C
ATOM   5565  O   THR   338      32.208  50.908  45.496  1.00  0.00
O
ATOM   5566  N   TYR   339      31.641  49.889  47.420  1.00  0.00
N
ATOM   5567  H   TYR   339      31.415  49.992  48.405  1.00  0.00
H
ATOM   5568  CA  TYR   339      31.539  48.553  46.860  1.00  0.00
C
ATOM   5569  HA  TYR   339      31.243  48.648  45.816  1.00  0.00
H
ATOM   5570  CB  TYR   339      32.907  47.847  46.924  1.00  0.00
C
ATOM   5571  HB2 TYR   339      32.852  46.928  46.339  1.00  0.00
H
ATOM   5572  HB3 TYR   339      33.651  48.481  46.440  1.00  0.00
H
ATOM   5573  CG  TYR   339      33.387  47.484  48.319  1.00  0.00
C
ATOM   5574  CD1 TYR   339      34.325  48.294  48.989  1.00  0.00
C
ATOM   5575  HD1 TYR   339      34.702  49.188  48.512  1.00  0.00
H
ATOM   5576  CE1 TYR   339      34.768  47.941  50.280  1.00  0.00
C
ATOM   5577  HE1 TYR   339      35.495  48.551  50.790  1.00  0.00
H
ATOM   5578  CZ  TYR   339      34.217  46.810  50.921  1.00  0.00
C
ATOM   5579  OH  TYR   339      34.510  46.538  52.216  1.00  0.00
O
ATOM   5580  HH  TYR   339      35.230  47.081  52.547  1.00  0.00
H
ATOM   5581  CE2 TYR   339      33.301  45.986  50.241  1.00  0.00
C
ATOM   5582  HE2 TYR   339      32.907  45.109  50.727  1.00  0.00
H
ATOM   5583  CD2 TYR   339      32.900  46.315  48.936  1.00  0.00
C
ATOM   5584  HD2 TYR   339      32.190  45.686  48.418  1.00  0.00
H
ATOM   5585  C   TYR   339      30.451  47.737  47.553  1.00  0.00
C
ATOM   5586  O   TYR   339      30.082  47.982  48.707  1.00  0.00
O
ATOM   5587  N   GLN   340      29.990  46.703  46.861  1.00  0.00
N
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ATOM   5588  H   GLN   340      30.325  46.581  45.906  1.00  0.00
H
ATOM   5589  CA  GLN   340      29.124  45.681  47.428  1.00  0.00
C
ATOM   5590  HA  GLN   340      29.356  45.608  48.488  1.00  0.00
H
ATOM   5591  CB  GLN   340      27.636  46.066  47.326  1.00  0.00
C
ATOM   5592  HB2 GLN   340      27.054  45.239  47.731  1.00  0.00
H
ATOM   5593  HB3 GLN   340      27.459  46.931  47.964  1.00  0.00
H
ATOM   5594  CG  GLN   340      27.108  46.390  45.918  1.00  0.00
C
ATOM   5595  HG2 GLN   340      27.352  45.566  45.247  1.00  0.00
H
ATOM   5596  HG3 GLN   340      26.022  46.466  45.961  1.00  0.00
H
ATOM   5597  CD  GLN   340      27.639  47.704  45.348  1.00  0.00
C
ATOM   5598  OE1 GLN   340      27.516  48.777  45.925  1.00  0.00
O
ATOM   5599  NE2 GLN   340      28.273  47.655  44.202  1.00  0.00
N
ATOM   5600 HE21 GLN   340      28.641  48.515  43.806  1.00  0.00
H
ATOM   5601 HE22 GLN   340      28.435  46.784  43.739  1.00  0.00
H
ATOM   5602  C   GLN   340      29.456  44.312  46.841  1.00  0.00
C
ATOM   5603  O   GLN   340      29.791  44.181  45.663  1.00  0.00
O
ATOM   5604  N   ILE   341      29.401  43.303  47.706  1.00  0.00
N
ATOM   5605  H   ILE   341      29.066  43.498  48.644  1.00  0.00
H
ATOM   5606  CA  ILE   341      29.637  41.902  47.376  1.00  0.00
C
ATOM   5607  HA  ILE   341      30.042  41.849  46.371  1.00  0.00
H
ATOM   5608  CB  ILE   341      30.664  41.256  48.336  1.00  0.00
C
ATOM   5609  HB  ILE   341      30.249  41.271  49.346  1.00  0.00
H
ATOM   5610  CG2 ILE   341      30.924  39.787  47.942  1.00  0.00
C
ATOM   5611 HG21 ILE   341      31.375  39.740  46.950  1.00  0.00
H
ATOM   5612 HG22 ILE   341      31.589  39.311  48.662  1.00  0.00
H
ATOM   5613 HG23 ILE   341      29.996  39.217  47.938  1.00  0.00
H
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ATOM   5614  CG1 ILE   341      31.977  42.077  48.333  1.00  0.00
C
ATOM   5615 HG12 ILE   341      32.362  42.136  47.316  1.00  0.00
H
ATOM   5616 HG13 ILE   341      31.769  43.092  48.671  1.00  0.00
H
ATOM   5617  CD1 ILE   341      33.080  41.533  49.242  1.00  0.00
C
ATOM   5618 HD11 ILE   341      33.466  40.592  48.850  1.00  0.00
H
ATOM   5619 HD12 ILE   341      33.894  42.251  49.285  1.00  0.00
H
ATOM   5620 HD13 ILE   341      32.693  41.396  50.250  1.00  0.00
H
ATOM   5621  C   ILE   341      28.283  41.200  47.395  1.00  0.00
C
ATOM   5622  O   ILE   341      27.521  41.382  48.346  1.00  0.00
O
ATOM   5623  N   TYR   342      27.981  40.409  46.372  1.00  0.00
N
ATOM   5624  H   TYR   342      28.665  40.316  45.624  1.00  0.00
H
ATOM   5625  CA  TYR   342      26.726  39.672  46.228  1.00  0.00
C
ATOM   5626  HA  TYR   342      26.322  39.457  47.214  1.00  0.00
H
ATOM   5627  CB  TYR   342      25.678  40.548  45.518  1.00  0.00
C
ATOM   5628  HB2 TYR   342      24.752  39.984  45.410  1.00  0.00
H
ATOM   5629  HB3 TYR   342      25.445  41.385  46.171  1.00  0.00
H
ATOM   5630  CG  TYR   342      26.048  41.114  44.163  1.00  0.00
C
ATOM   5631  CD1 TYR   342      26.359  42.483  44.042  1.00  0.00
C
ATOM   5632  HD1 TYR   342      26.371  43.114  44.922  1.00  0.00
H
ATOM   5633  CE1 TYR   342      26.611  43.042  42.776  1.00  0.00
C
ATOM   5634  HE1 TYR   342      26.826  44.095  42.677  1.00  0.00
H
ATOM   5635  CZ  TYR   342      26.545  42.227  41.628  1.00  0.00
C
ATOM   5636  OH  TYR   342      26.749  42.761  40.396  1.00  0.00
O
ATOM   5637  HH  TYR   342      26.976  43.723  40.456  1.00  0.00
H
ATOM   5638  CE2 TYR   342      26.250  40.852  41.750  1.00  0.00
C
ATOM   5639  HE2 TYR   342      26.205  40.231  40.873  1.00  0.00
H
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ATOM   5640  CD2 TYR   342      26.001  40.296  43.018  1.00  0.00
C
ATOM   5641  HD2 TYR   342      25.755  39.248  43.108  1.00  0.00
H
ATOM   5642  C   TYR   342      26.923  38.313  45.547  1.00  0.00
C
ATOM   5643  O   TYR   342      27.998  37.989  45.036  1.00  0.00
O
ATOM   5644  N   GLN   343      25.857  37.512  45.563  1.00  0.00
N
ATOM   5645  H   GLN   343      25.035  37.859  46.035  1.00  0.00
H
ATOM   5646  CA  GLN   343      25.738  36.259  44.803  1.00  0.00
C
ATOM   5647  HA  GLN   343      26.592  36.162  44.127  1.00  0.00
H
ATOM   5648  CB  GLN   343      25.764  35.049  45.755  1.00  0.00
C
ATOM   5649  HB2 GLN   343      24.918  35.100  46.443  1.00  0.00
H
ATOM   5650  HB3 GLN   343      25.675  34.138  45.161  1.00  0.00
H
ATOM   5651  CG  GLN   343      27.071  34.993  46.560  1.00  0.00
C
ATOM   5652  HG2 GLN   343      27.918  35.110  45.885  1.00  0.00
H
ATOM   5653  HG3 GLN   343      27.084  35.812  47.274  1.00  0.00
H
ATOM   5654  CD  GLN   343      27.221  33.686  47.320  1.00  0.00
C
ATOM   5655  OE1 GLN   343      26.719  33.509  48.419  1.00  0.00
O
ATOM   5656  NE2 GLN   343      27.925  32.725  46.769  1.00  0.00
N
ATOM   5657 HE21 GLN   343      27.935  31.825  47.240  1.00  0.00
H
ATOM   5658 HE22 GLN   343      28.310  32.823  45.840  1.00  0.00
H
ATOM   5659  C   GLN   343      24.484  36.274  43.911  1.00  0.00
C
ATOM   5660  O   GLN   343      24.553  35.851  42.763  1.00  0.00
O
ATOM   5661  N   GLU   344      23.377  36.856  44.390  1.00  0.00
N
ATOM   5662  H   GLU   344      23.381  37.195  45.338  1.00  0.00
H
ATOM   5663  CA  GLU   344      22.188  37.184  43.592  1.00  0.00
C
ATOM   5664  HA  GLU   344      22.279  36.679  42.633  1.00  0.00
H
ATOM   5665  CB  GLU   344      20.918  36.672  44.303  1.00  0.00
C
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ATOM   5666  HB2 GLU   344      21.178  36.273  45.288  1.00  0.00
H
ATOM   5667  HB3 GLU   344      20.241  37.513  44.467  1.00  0.00
H
ATOM   5668  CG  GLU   344      20.159  35.605  43.498  1.00  0.00
C
ATOM   5669  HG2 GLU   344      19.164  35.497  43.938  1.00  0.00
H
ATOM   5670  HG3 GLU   344      20.037  35.952  42.465  1.00  0.00
H
ATOM   5671  CD  GLU   344      20.871  34.245  43.547  1.00  0.00
C
ATOM   5672  OE1 GLU   344      21.082  33.705  44.656  1.00  0.00
O
ATOM   5673  OE2 GLU   344      21.218  33.683  42.489  1.00  0.00
O
ATOM   5674  C   GLU   344      22.110  38.714  43.368  1.00  0.00
C
ATOM   5675  O   GLU   344      22.357  39.450  44.322  1.00  0.00
O
ATOM   5676  N   PRO   345      21.727  39.230  42.180  1.00  0.00
N
ATOM   5677  CD  PRO   345      21.340  38.445  41.013  1.00  0.00
C
ATOM   5678  HD2 PRO   345      20.322  38.074  41.142  1.00  0.00
H
ATOM   5679  HD3 PRO   345      22.025  37.616  40.840  1.00  0.00
H
ATOM   5680  CG  PRO   345      21.406  39.386  39.812  1.00  0.00
C
ATOM   5681  HG2 PRO   345      20.628  39.154  39.085  1.00  0.00
H
ATOM   5682  HG3 PRO   345      22.395  39.329  39.354  1.00  0.00
H
ATOM   5683  CB  PRO   345      21.200  40.762  40.437  1.00  0.00
C
ATOM   5684  HB2 PRO   345      20.131  40.928  40.584  1.00  0.00
H
ATOM   5685  HB3 PRO   345      21.628  41.555  39.823  1.00  0.00
H
ATOM   5686  CA  PRO   345      21.904  40.643  41.791  1.00  0.00
C
ATOM   5687  HA  PRO   345      22.972  40.816  41.652  1.00  0.00
H
ATOM   5688  C   PRO   345      21.380  41.736  42.740  1.00  0.00
C
ATOM   5689  O   PRO   345      21.995  42.794  42.836  1.00  0.00
O
ATOM   5690  N   PHE   346      20.248  41.517  43.416  1.00  0.00
N
ATOM   5691  H   PHE   346      19.757  40.656  43.239  1.00  0.00
H
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ATOM   5692  CA  PHE   346      19.714  42.437  44.438  1.00  0.00
C
ATOM   5693  HA  PHE   346      20.055  43.454  44.234  1.00  0.00
H
ATOM   5694  CB  PHE   346      18.174  42.422  44.356  1.00  0.00
C
ATOM   5695  HB2 PHE   346      17.866  43.060  43.526  1.00  0.00
H
ATOM   5696  HB3 PHE   346      17.841  41.408  44.126  1.00  0.00
H
ATOM   5697  CG  PHE   346      17.451  42.871  45.620  1.00  0.00
C
ATOM   5698  CD1 PHE   346      17.305  44.240  45.916  1.00  0.00
C
ATOM   5699  HD1 PHE   346      17.683  44.987  45.234  1.00  0.00
H
ATOM   5700  CE1 PHE   346      16.679  44.642  47.111  1.00  0.00
C
ATOM   5701  HE1 PHE   346      16.571  45.695  47.336  1.00  0.00
H
ATOM   5702  CZ  PHE   346      16.196  43.679  48.014  1.00  0.00
C
ATOM   5703  HZ  PHE   346      15.704  43.997  48.923  1.00  0.00
H
ATOM   5704  CE2 PHE   346      16.345  42.311  47.727  1.00  0.00
C
ATOM   5705  HE2 PHE   346      15.974  41.568  48.420  1.00  0.00
H
ATOM   5706  CD2 PHE   346      16.967  41.910  46.531  1.00  0.00
C
ATOM   5707  HD2 PHE   346      17.077  40.860  46.314  1.00  0.00
H
ATOM   5708  C   PHE   346      20.201  42.090  45.856  1.00  0.00
C
ATOM   5709  O   PHE   346      20.275  42.954  46.732  1.00  0.00
O
ATOM   5710  N   LYS   347      20.516  40.815  46.111  1.00  0.00
N
ATOM   5711  H   LYS   347      20.678  40.210  45.317  1.00  0.00
H
ATOM   5712  CA  LYS   347      20.817  40.294  47.446  1.00  0.00
C
ATOM   5713  HA  LYS   347      20.235  40.858  48.181  1.00  0.00
H
ATOM   5714  CB  LYS   347      20.401  38.814  47.564  1.00  0.00
C
ATOM   5715  HB2 LYS   347      20.931  38.223  46.816  1.00  0.00
H
ATOM   5716  HB3 LYS   347      20.697  38.461  48.549  1.00  0.00
H
ATOM   5717  CG  LYS   347      18.883  38.600  47.421  1.00  0.00
C
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ATOM   5718  HG2 LYS   347      18.365  39.221  48.153  1.00  0.00
H
ATOM   5719  HG3 LYS   347      18.569  38.902  46.421  1.00  0.00
H
ATOM   5720  CD  LYS   347      18.484  37.130  47.642  1.00  0.00
C
ATOM   5721  HD2 LYS   347      18.985  36.505  46.900  1.00  0.00
H
ATOM   5722  HD3 LYS   347      18.802  36.818  48.639  1.00  0.00
H
ATOM   5723  CE  LYS   347      16.960  36.966  47.517  1.00  0.00
C
ATOM   5724  HE2 LYS   347      16.481  37.567  48.296  1.00  0.00
H
ATOM   5725  HE3 LYS   347      16.634  37.356  46.550  1.00  0.00
H
ATOM   5726  NZ  LYS   347      16.519  35.555  47.655  1.00  0.00
N
ATOM   5727  HZ1 LYS   347      16.874  35.133  48.515  1.00  0.00
H
ATOM   5728  HZ2 LYS   347      15.505  35.508  47.704  1.00  0.00
H
ATOM   5729  HZ3 LYS   347      16.830  34.981  46.886  1.00  0.00
H
ATOM   5730  C   LYS   347      22.290  40.549  47.781  1.00  0.00
C
ATOM   5731  O   LYS   347      23.130  39.650  47.700  1.00  0.00
O
ATOM   5732  N   ASN   348      22.582  41.790  48.168  1.00  0.00
N
ATOM   5733  H   ASN   348      21.853  42.486  48.092  1.00  0.00
H
ATOM   5734  CA  ASN   348      23.863  42.169  48.761  1.00  0.00
C
ATOM   5735  HA  ASN   348      24.645  42.027  48.018  1.00  0.00
H
ATOM   5736  CB  ASN   348      23.850  43.658  49.165  1.00  0.00
C
ATOM   5737  HB2 ASN   348      22.908  43.895  49.662  1.00  0.00
H
ATOM   5738  HB3 ASN   348      24.658  43.843  49.872  1.00  0.00
H
ATOM   5739  CG  ASN   348      24.072  44.600  47.993  1.00  0.00
C
ATOM   5740  OD1 ASN   348      24.675  44.265  46.989  1.00  0.00
O
ATOM   5741  ND2 ASN   348      23.645  45.836  48.102  1.00  0.00
N
ATOM   5742 HD21 ASN   348      23.786  46.424  47.300  1.00  0.00
H
ATOM   5743 HD22 ASN   348      23.137  46.134  48.914  1.00  0.00
H
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ATOM   5744  C   ASN   348      24.192  41.244  49.943  1.00  0.00
C
ATOM   5745  O   ASN   348      23.423  41.106  50.894  1.00  0.00
O
ATOM   5746  N   LEU   349      25.358  40.607  49.867  1.00  0.00
N
ATOM   5747  H   LEU   349      25.933  40.791  49.052  1.00  0.00
H
ATOM   5748  CA  LEU   349      25.951  39.782  50.917  1.00  0.00
C
ATOM   5749  HA  LEU   349      25.176  39.152  51.359  1.00  0.00
H
ATOM   5750  CB  LEU   349      27.053  38.904  50.269  1.00  0.00
C
ATOM   5751  HB2 LEU   349      27.012  39.009  49.188  1.00  0.00
H
ATOM   5752  HB3 LEU   349      28.034  39.264  50.581  1.00  0.00
H
ATOM   5753  CG  LEU   349      26.962  37.400  50.552  1.00  0.00
C
ATOM   5754  HG  LEU   349      26.023  37.014  50.159  1.00  0.00
H
ATOM   5755  CD1 LEU   349      28.136  36.699  49.864  1.00  0.00
C
ATOM   5756 HD11 LEU   349      29.078  37.004  50.316  1.00  0.00
H
ATOM   5757 HD12 LEU   349      28.022  35.621  49.966  1.00  0.00
H
ATOM   5758 HD13 LEU   349      28.160  36.961  48.810  1.00  0.00
H
ATOM   5759  CD2 LEU   349      27.057  37.096  52.036  1.00  0.00
C
ATOM   5760 HD21 LEU   349      26.314  37.655  52.597  1.00  0.00
H
ATOM   5761 HD22 LEU   349      26.895  36.033  52.204  1.00  0.00
H
ATOM   5762 HD23 LEU   349      28.043  37.368  52.387  1.00  0.00
H
ATOM   5763  C   LEU   349      26.538  40.685  52.013  1.00  0.00
C
ATOM   5764  O   LEU   349      26.378  40.426  53.201  1.00  0.00
O
ATOM   5765  N   LYS   350      27.231  41.749  51.587  1.00  0.00
N
ATOM   5766  H   LYS   350      27.304  41.856  50.579  1.00  0.00
H
ATOM   5767  CA  LYS   350      27.925  42.753  52.411  1.00  0.00
C
ATOM   5768  HA  LYS   350      27.292  43.047  53.252  1.00  0.00
H
ATOM   5769  CB  LYS   350      29.224  42.106  52.935  1.00  0.00
C
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ATOM   5770  HB2 LYS   350      28.956  41.303  53.621  1.00  0.00
H
ATOM   5771  HB3 LYS   350      29.767  41.666  52.096  1.00  0.00
H
ATOM   5772  CG  LYS   350      30.152  43.079  53.669  1.00  0.00
C
ATOM   5773  HG2 LYS   350      30.418  43.880  52.990  1.00  0.00
H
ATOM   5774  HG3 LYS   350      29.634  43.486  54.538  1.00  0.00
H
ATOM   5775  CD  LYS   350      31.451  42.406  54.114  1.00  0.00
C
ATOM   5776  HD2 LYS   350      31.205  41.586  54.790  1.00  0.00
H
ATOM   5777  HD3 LYS   350      31.962  41.983  53.247  1.00  0.00
H
ATOM   5778  CE  LYS   350      32.381  43.398  54.831  1.00  0.00
C
ATOM   5779  HE2 LYS   350      31.845  43.865  55.661  1.00  0.00
H
ATOM   5780  HE3 LYS   350      33.223  42.839  55.255  1.00  0.00
H
ATOM   5781  NZ  LYS   350      32.908  44.465  53.941  1.00  0.00
N
ATOM   5782  HZ1 LYS   350      32.212  45.180  53.747  1.00  0.00
H
ATOM   5783  HZ2 LYS   350      33.689  44.929  54.403  1.00  0.00
H
ATOM   5784  HZ3 LYS   350      33.284  44.105  53.079  1.00  0.00
H
ATOM   5785  C   LYS   350      28.224  43.993  51.558  1.00  0.00
C
ATOM   5786  O   LYS   350      28.527  43.852  50.374  1.00  0.00
O
ATOM   5787  N   THR   351      28.231  45.188  52.146  1.00  0.00
N
ATOM   5788  H   THR   351      28.014  45.259  53.136  1.00  0.00
H
ATOM   5789  CA  THR   351      28.700  46.417  51.475  1.00  0.00
C
ATOM   5790  HA  THR   351      28.935  46.200  50.438  1.00  0.00
H
ATOM   5791  CB  THR   351      27.616  47.509  51.439  1.00  0.00
C
ATOM   5792  HB  THR   351      27.953  48.316  50.786  1.00  0.00
H
ATOM   5793  CG2 THR   351      26.274  46.993  50.918  1.00  0.00
C
ATOM   5794 HG21 THR   351      25.817  46.328  51.648  1.00  0.00
H
ATOM   5795 HG22 THR   351      25.605  47.832  50.740  1.00  0.00
H
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ATOM   5796 HG23 THR   351      26.417  46.449  49.988  1.00  0.00
H
ATOM   5797  OG1 THR   351      27.413  48.026  52.729  1.00  0.00
O
ATOM   5798  HG1 THR   351      26.842  48.799  52.655  1.00  0.00
H
ATOM   5799  C   THR   351      30.001  46.938  52.089  1.00  0.00
C
ATOM   5800  O   THR   351      30.564  46.351  53.024  1.00  0.00
O
ATOM   5801  N   GLY   352      30.529  48.023  51.532  1.00  0.00
N
ATOM   5802  H   GLY   352      30.131  48.369  50.662  1.00  0.00
H
ATOM   5803  CA  GLY   352      31.620  48.785  52.119  1.00  0.00
C
ATOM   5804  HA2 GLY   352      31.287  49.210  53.063  1.00  0.00
H
ATOM   5805  HA3 GLY   352      32.453  48.120  52.327  1.00  0.00
H
ATOM   5806  C   GLY   352      32.100  49.931  51.238  1.00  0.00
C
ATOM   5807  O   GLY   352      31.440  50.341  50.280  1.00  0.00
O
ATOM   5808  N   LYS   353      33.264  50.473  51.592  1.00  0.00
N
ATOM   5809  H   LYS   353      33.769  50.064  52.366  1.00  0.00
H
ATOM   5810  CA  LYS   353      33.885  51.611  50.915  1.00  0.00
C
ATOM   5811  HA  LYS   353      33.662  51.550  49.854  1.00  0.00
H
ATOM   5812  CB  LYS   353      33.288  52.920  51.468  1.00  0.00
C
ATOM   5813  HB2 LYS   353      33.706  53.769  50.925  1.00  0.00
H
ATOM   5814  HB3 LYS   353      32.211  52.917  51.299  1.00  0.00
H
ATOM   5815  CG  LYS   353      33.564  53.104  52.966  1.00  0.00
C
ATOM   5816  HG2 LYS   353      33.070  52.314  53.533  1.00  0.00
H
ATOM   5817  HG3 LYS   353      34.636  53.045  53.139  1.00  0.00
H
ATOM   5818  CD  LYS   353      33.047  54.461  53.448  1.00  0.00
C
ATOM   5819  HD2 LYS   353      33.538  55.268  52.900  1.00  0.00
H
ATOM   5820  HD3 LYS   353      31.976  54.506  53.257  1.00  0.00
H
ATOM   5821  CE  LYS   353      33.274  54.628  54.951  1.00  0.00
C
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ATOM   5822  HE2 LYS   353      32.802  55.558  55.279  1.00  0.00
H
ATOM   5823  HE3 LYS   353      32.767  53.808  55.471  1.00  0.00
H
ATOM   5824  NZ  LYS   353      34.714  54.632  55.310  1.00  0.00
N
ATOM   5825  HZ1 LYS   353      35.213  55.437  54.963  1.00  0.00
H
ATOM   5826  HZ2 LYS   353      34.815  54.580  56.321  1.00  0.00
H
ATOM   5827  HZ3 LYS   353      35.222  53.843  54.916  1.00  0.00
H
ATOM   5828  C   LYS   353      35.406  51.586  51.021  1.00  0.00
C
ATOM   5829  O   LYS   353      35.970  50.828  51.813  1.00  0.00
O
ATOM   5830  N   TYR   354      36.047  52.427  50.220  1.00  0.00
N
ATOM   5831  H   TYR   354      35.489  52.978  49.578  1.00  0.00
H
ATOM   5832  CA  TYR   354      37.467  52.735  50.302  1.00  0.00
C
ATOM   5833  HA  TYR   354      37.819  52.534  51.315  1.00  0.00
H
ATOM   5834  CB  TYR   354      38.231  51.823  49.328  1.00  0.00
C
ATOM   5835  HB2 TYR   354      38.046  50.782  49.599  1.00  0.00
H
ATOM   5836  HB3 TYR   354      37.841  51.970  48.319  1.00  0.00
H
ATOM   5837  CG  TYR   354      39.727  52.057  49.325  1.00  0.00
C
ATOM   5838  CD1 TYR   354      40.483  51.714  50.457  1.00  0.00
C
ATOM   5839  HD1 TYR   354      39.995  51.270  51.319  1.00  0.00
H
ATOM   5840  CE1 TYR   354      41.870  51.932  50.467  1.00  0.00
C
ATOM   5841  HE1 TYR   354      42.459  51.646  51.320  1.00  0.00
H
ATOM   5842  CZ  TYR   354      42.511  52.521  49.351  1.00  0.00
C
ATOM   5843  OH  TYR   354      43.858  52.721  49.410  1.00  0.00
O
ATOM   5844  HH  TYR   354      44.256  53.106  48.606  1.00  0.00
H
ATOM   5845  CE2 TYR   354      41.744  52.856  48.207  1.00  0.00
C
ATOM   5846  HE2 TYR   354      42.228  53.275  47.337  1.00  0.00
H
ATOM   5847  CD2 TYR   354      40.358  52.625  48.206  1.00  0.00
C
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ATOM   5848  HD2 TYR   354      39.769  52.875  47.327  1.00  0.00
H
ATOM   5849  C   TYR   354      37.682  54.224  49.995  1.00  0.00
C
ATOM   5850  O   TYR   354      37.318  54.696  48.917  1.00  0.00
O
ATOM   5851  N   ALA   355      38.246  54.975  50.942  1.00  0.00
N
ATOM   5852  H   ALA   355      38.349  54.560  51.866  1.00  0.00
H
ATOM   5853  CA  ALA   355      38.520  56.410  50.796  1.00  0.00
C
ATOM   5854  HA  ALA   355      38.404  56.688  49.748  1.00  0.00
H
ATOM   5855  CB  ALA   355      37.470  57.186  51.604  1.00  0.00
C
ATOM   5856  HB1 ALA   355      37.588  56.969  52.667  1.00  0.00
H
ATOM   5857  HB2 ALA   355      37.606  58.256  51.442  1.00  0.00
H
ATOM   5858  HB3 ALA   355      36.468  56.901  51.284  1.00  0.00
H
ATOM   5859  C   ALA   355      39.959  56.813  51.176  1.00  0.00
C
ATOM   5860  O   ALA   355      40.293  58.000  51.162  1.00  0.00
O
ATOM   5861  N   ARG   356      40.820  55.846  51.533  1.00  0.00
N
ATOM   5862  H   ARG   356      40.481  54.894  51.513  1.00  0.00
H
ATOM   5863  CA  ARG   356      42.195  56.094  51.993  1.00  0.00
C
ATOM   5864  HA  ARG   356      42.154  56.872  52.757  1.00  0.00
H
ATOM   5865  CB  ARG   356      42.764  54.821  52.649  1.00  0.00
C
ATOM   5866  HB2 ARG   356      42.029  54.424  53.351  1.00  0.00
H
ATOM   5867  HB3 ARG   356      42.946  54.065  51.884  1.00  0.00
H
ATOM   5868  CG  ARG   356      44.070  55.095  53.416  1.00  0.00
C
ATOM   5869  HG2 ARG   356      44.774  55.629  52.776  1.00  0.00
H
ATOM   5870  HG3 ARG   356      43.848  55.711  54.288  1.00  0.00
H
ATOM   5871  CD  ARG   356      44.715  53.775  53.864  1.00  0.00
C
ATOM   5872  HD2 ARG   356      43.952  53.161  54.350  1.00  0.00
H
ATOM   5873  HD3 ARG   356      45.067  53.237  52.981  1.00  0.00
H
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ATOM   5874  NE  ARG   356      45.827  53.972  54.816  1.00  0.00
N
ATOM   5875  HE  ARG   356      45.651  53.733  55.786  1.00  0.00
H
ATOM   5876  CZ  ARG   356      47.065  54.368  54.576  1.00  0.00
C
ATOM   5877  NH1 ARG   356      47.486  54.763  53.406  1.00  0.00
N
ATOM   5878 HH11 ARG   356      46.832  54.849  52.653  1.00  0.00
H
ATOM   5879 HH12 ARG   356      48.425  55.121  53.319  1.00  0.00
H
ATOM   5880  NH2 ARG   356      47.913  54.363  55.555  1.00  0.00
N
ATOM   5881 HH21 ARG   356      47.594  54.072  56.471  1.00  0.00
H
ATOM   5882 HH22 ARG   356      48.887  54.610  55.403  1.00  0.00
H
ATOM   5883  C   ARG   356      43.074  56.621  50.851  1.00  0.00
C
ATOM   5884  O   ARG   356      43.602  55.852  50.053  1.00  0.00
O
ATOM   5885  N   MET   357      43.255  57.934  50.778  1.00  0.00
N
ATOM   5886  H   MET   357      42.747  58.532  51.413  1.00  0.00
H
ATOM   5887  CA  MET   357      44.119  58.557  49.775  1.00  0.00
C
ATOM   5888  HA  MET   357      43.901  58.094  48.812  1.00  0.00
H
ATOM   5889  CB  MET   357      43.762  60.052  49.687  1.00  0.00
C
ATOM   5890  HB2 MET   357      42.723  60.183  49.996  1.00  0.00
H
ATOM   5891  HB3 MET   357      44.391  60.634  50.361  1.00  0.00
H
ATOM   5892  CG  MET   357      43.855  60.607  48.263  1.00  0.00
C
ATOM   5893  HG2 MET   357      43.218  60.005  47.620  1.00  0.00
H
ATOM   5894  HG3 MET   357      43.442  61.615  48.266  1.00  0.00
H
ATOM   5895  SD  MET   357      45.504  60.672  47.523  1.00  0.00
S
ATOM   5896  CE  MET   357      46.102  62.211  48.286  1.00  0.00
C
ATOM   5897  HE1 MET   357      46.112  62.118  49.372  1.00  0.00
H
ATOM   5898  HE2 MET   357      47.112  62.426  47.941  1.00  0.00
H
ATOM   5899  HE3 MET   357      45.454  63.042  48.002  1.00  0.00
H
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ATOM   5900  C   MET   357      45.593  58.278  50.121  1.00  0.00
C
ATOM   5901  O   MET   357      46.082  58.702  51.168  1.00  0.00
O
ATOM   5902  N   ARG   358      46.283  57.493  49.285  1.00  0.00
N
ATOM   5903  H   ARG   358      45.807  57.135  48.472  1.00  0.00
H
ATOM   5904  CA  ARG   358      47.688  57.091  49.448  1.00  0.00
C
ATOM   5905  HA  ARG   358      48.019  57.356  50.454  1.00  0.00
H
ATOM   5906  CB  ARG   358      47.775  55.559  49.284  1.00  0.00
C
ATOM   5907  HB2 ARG   358      47.154  55.098  50.054  1.00  0.00
H
ATOM   5908  HB3 ARG   358      47.371  55.285  48.306  1.00  0.00
H
ATOM   5909  CG  ARG   358      49.205  55.002  49.395  1.00  0.00
C
ATOM   5910  HG2 ARG   358      49.823  55.456  48.621  1.00  0.00
H
ATOM   5911  HG3 ARG   358      49.617  55.269  50.365  1.00  0.00
H
ATOM   5912  CD  ARG   358      49.279  53.479  49.215  1.00  0.00
C
ATOM   5913  HD2 ARG   358      48.769  53.190  48.293  1.00  0.00
H
ATOM   5914  HD3 ARG   358      50.332  53.215  49.096  1.00  0.00
H
ATOM   5915  NE  ARG   358      48.754  52.731  50.377  1.00  0.00
N
ATOM   5916  HE  ARG   358      49.413  52.503  51.115  1.00  0.00
H
ATOM   5917  CZ  ARG   358      47.562  52.190  50.515  1.00  0.00
C
ATOM   5918  NH1 ARG   358      46.607  52.365  49.659  1.00  0.00
N
ATOM   5919 HH11 ARG   358      46.732  52.942  48.830  1.00  0.00
H
ATOM   5920 HH12 ARG   358      45.671  52.026  49.805  1.00  0.00
H
ATOM   5921  NH2 ARG   358      47.320  51.434  51.543  1.00  0.00
N
ATOM   5922 HH21 ARG   358      48.119  51.198  52.132  1.00  0.00
H
ATOM   5923 HH22 ARG   358      46.488  50.884  51.577  1.00  0.00
H
ATOM   5924  C   ARG   358      48.574  57.846  48.453  1.00  0.00
C
ATOM   5925  O   ARG   358      48.250  57.900  47.271  1.00  0.00
O
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ATOM   5926  N   GLY   359      49.712  58.354  48.927  1.00  0.00
N
ATOM   5927  H   GLY   359      49.892  58.261  49.915  1.00  0.00
H
ATOM   5928  CA  GLY   359      50.685  59.104  48.123  1.00  0.00
C
ATOM   5929  HA2 GLY   359      51.640  59.105  48.647  1.00  0.00
H
ATOM   5930  HA3 GLY   359      50.827  58.601  47.166  1.00  0.00
H
ATOM   5931  C   GLY   359      50.283  60.558  47.840  1.00  0.00
C
ATOM   5932  O   GLY   359      49.133  60.944  48.009  1.00  0.00
O
ATOM   5933  N   ALA   360      51.246  61.376  47.403  1.00  0.00
N
ATOM   5934  H   ALA   360      52.178  61.009  47.305  1.00  0.00
H
ATOM   5935  CA  ALA   360      51.040  62.812  47.166  1.00  0.00
C
ATOM   5936  HA  ALA   360      50.416  63.218  47.966  1.00  0.00
H
ATOM   5937  CB  ALA   360      52.409  63.502  47.233  1.00  0.00
C
ATOM   5938  HB1 ALA   360      53.069  63.103  46.462  1.00  0.00
H
ATOM   5939  HB2 ALA   360      52.280  64.573  47.070  1.00  0.00
H
ATOM   5940  HB3 ALA   360      52.860  63.348  48.215  1.00  0.00
H
ATOM   5941  C   ALA   360      50.334  63.132  45.830  1.00  0.00
C
ATOM   5942  O   ALA   360      49.603  64.119  45.736  1.00  0.00
O
ATOM   5943  N   HIE   361      50.560  62.300  44.802  1.00  0.00
N
ATOM   5944  H   HIE   361      51.177  61.520  44.962  1.00  0.00
H
ATOM   5945  CA  HIE   361      49.980  62.423  43.454  1.00  0.00
C
ATOM   5946  HA  HIE   361      49.060  62.999  43.534  1.00  0.00
H
ATOM   5947  CB  HIE   361      50.916  63.179  42.477  1.00  0.00
C
ATOM   5948  HB2 HIE   361      51.370  62.475  41.778  1.00  0.00
H
ATOM   5949  HB3 HIE   361      50.312  63.867  41.883  1.00  0.00
H
ATOM   5950  CG  HIE   361      52.034  63.961  43.122  1.00  0.00
C
ATOM   5951  ND1 HIE   361      51.943  65.267  43.605  1.00  0.00
N
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ATOM   5952  CE1 HIE   361      53.144  65.542  44.138  1.00  0.00
C
ATOM   5953  HE1 HIE   361      53.410  66.484  44.599  1.00  0.00
H
ATOM   5954  NE2 HIE   361      53.968  64.487  44.012  1.00  0.00
N
ATOM   5955  HE2 HIE   361      54.932  64.458  44.315  1.00  0.00
H
ATOM   5956  CD2 HIE   361      53.284  63.482  43.373  1.00  0.00
C
ATOM   5957  HD2 HIE   361      53.650  62.499  43.113  1.00  0.00
H
ATOM   5958  C   HIE   361      49.633  61.029  42.919  1.00  0.00
C
ATOM   5959  O   HIE   361      50.507  60.165  42.811  1.00  0.00
O
ATOM   5960  N   THR   362      48.366  60.789  42.587  1.00  0.00
N
ATOM   5961  H   THR   362      47.695  61.551  42.635  1.00  0.00
H
ATOM   5962  CA  THR   362      47.885  59.498  42.065  1.00  0.00
C
ATOM   5963  HA  THR   362      48.698  59.017  41.525  1.00  0.00
H
ATOM   5964  CB  THR   362      47.433  58.536  43.186  1.00  0.00
C
ATOM   5965  HB  THR   362      47.108  57.602  42.726  1.00  0.00
H
ATOM   5966  CG2 THR   362      48.542  58.175  44.173  1.00  0.00
C
ATOM   5967 HG21 THR   362      48.763  59.017  44.831  1.00  0.00
H
ATOM   5968 HG22 THR   362      48.226  57.326  44.777  1.00  0.00
H
ATOM   5969 HG23 THR   362      49.451  57.895  43.647  1.00  0.00
H
ATOM   5970  OG1 THR   362      46.365  59.067  43.926  1.00  0.00
O
ATOM   5971  HG1 THR   362      46.640  59.079  44.850  1.00  0.00
H
ATOM   5972  C   THR   362      46.775  59.710  41.032  1.00  0.00
C
ATOM   5973  O   THR   362      46.453  60.842  40.675  1.00  0.00
O
ATOM   5974  N   ASN   363      46.232  58.619  40.492  1.00  0.00
N
ATOM   5975  H   ASN   363      46.454  57.713  40.875  1.00  0.00
H
ATOM   5976  CA  ASN   363      45.148  58.618  39.517  1.00  0.00
C
ATOM   5977  HA  ASN   363      44.689  59.606  39.493  1.00  0.00
H
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ATOM   5978  CB  ASN   363      45.744  58.357  38.116  1.00  0.00
C
ATOM   5979  HB2 ASN   363      44.960  58.389  37.359  1.00  0.00
H
ATOM   5980  HB3 ASN   363      46.429  59.170  37.892  1.00  0.00
H
ATOM   5981  CG  ASN   363      46.487  57.043  37.949  1.00  0.00
C
ATOM   5982  OD1 ASN   363      46.187  56.041  38.577  1.00  0.00
O
ATOM   5983  ND2 ASN   363      47.489  57.010  37.109  1.00  0.00
N
ATOM   5984 HD21 ASN   363      47.953  56.140  36.919  1.00  0.00
H
ATOM   5985 HD22 ASN   363      47.750  57.865  36.621  1.00  0.00
H
ATOM   5986  C   ASN   363      44.051  57.631  39.941  1.00  0.00
C
ATOM   5987  O   ASN   363      44.245  56.808  40.846  1.00  0.00
O
ATOM   5988  N   ASP   364      42.898  57.713  39.280  1.00  0.00
N
ATOM   5989  H   ASP   364      42.813  58.460  38.585  1.00  0.00
H
ATOM   5990  CA  ASP   364      41.760  56.813  39.490  1.00  0.00
C
ATOM   5991  HA  ASP   364      41.408  56.911  40.515  1.00  0.00
H
ATOM   5992  CB  ASP   364      40.578  57.167  38.567  1.00  0.00
C
ATOM   5993  HB2 ASP   364      40.925  57.357  37.558  1.00  0.00
H
ATOM   5994  HB3 ASP   364      39.917  56.306  38.528  1.00  0.00
H
ATOM   5995  CG  ASP   364      39.698  58.311  39.033  1.00  0.00
C
ATOM   5996  OD1 ASP   364      39.534  58.484  40.264  1.00  0.00
O
ATOM   5997  OD2 ASP   364      39.015  58.917  38.190  1.00  0.00
O
ATOM   5998  C   ASP   364      42.146  55.332  39.324  1.00  0.00
C
ATOM   5999  O   ASP   364      41.713  54.509  40.127  1.00  0.00
O
ATOM   6000  N   VAL   365      42.999  54.988  38.350  1.00  0.00
N
ATOM   6001  H   VAL   365      43.388  55.726  37.780  1.00  0.00
H
ATOM   6002  CA  VAL   365      43.391  53.593  38.067  1.00  0.00
C
ATOM   6003  HA  VAL   365      42.488  53.000  37.941  1.00  0.00
H
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ATOM   6004  CB  VAL   365      44.219  53.480  36.769  1.00  0.00
C
ATOM   6005  HB  VAL   365      45.172  53.998  36.891  1.00  0.00
H
ATOM   6006  CG1 VAL   365      44.489  52.007  36.450  1.00  0.00
C
ATOM   6007 HG11 VAL   365      43.556  51.443  36.452  1.00  0.00
H
ATOM   6008 HG12 VAL   365      44.956  51.919  35.468  1.00  0.00
H
ATOM   6009 HG13 VAL   365      45.169  51.582  37.189  1.00  0.00
H
ATOM   6010  CG2 VAL   365      43.495  54.071  35.551  1.00  0.00
C
ATOM   6011 HG21 VAL   365      43.283  55.130  35.703  1.00  0.00
H
ATOM   6012 HG22 VAL   365      44.131  53.977  34.668  1.00  0.00
H
ATOM   6013 HG23 VAL   365      42.567  53.531  35.372  1.00  0.00
H
ATOM   6014  C   VAL   365      44.153  52.978  39.246  1.00  0.00
C
ATOM   6015  O   VAL   365      43.807  51.892  39.706  1.00  0.00
O
ATOM   6016  N   LYS   366      45.147  53.687  39.800  1.00  0.00
N
ATOM   6017  H   LYS   366      45.378  54.585  39.379  1.00  0.00
H
ATOM   6018  CA  LYS   366      45.920  53.234  40.971  1.00  0.00
C
ATOM   6019  HA  LYS   366      46.327  52.243  40.759  1.00  0.00
H
ATOM   6020  CB  LYS   366      47.083  54.205  41.251  1.00  0.00
C
ATOM   6021  HB2 LYS   366      46.707  55.230  41.247  1.00  0.00
H
ATOM   6022  HB3 LYS   366      47.483  53.987  42.241  1.00  0.00
H
ATOM   6023  CG  LYS   366      48.223  54.061  40.224  1.00  0.00
C
ATOM   6024  HG2 LYS   366      48.712  53.096  40.371  1.00  0.00
H
ATOM   6025  HG3 LYS   366      47.808  54.070  39.216  1.00  0.00
H
ATOM   6026  CD  LYS   366      49.275  55.181  40.318  1.00  0.00
C
ATOM   6027  HD2 LYS   366      50.015  55.018  39.531  1.00  0.00
H
ATOM   6028  HD3 LYS   366      48.785  56.137  40.127  1.00  0.00
H
ATOM   6029  CE  LYS   366      49.984  55.209  41.682  1.00  0.00
C
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ATOM   6030  HE2 LYS   366      49.237  55.330  42.474  1.00  0.00
H
ATOM   6031  HE3 LYS   366      50.467  54.240  41.841  1.00  0.00
H
ATOM   6032  NZ  LYS   366      50.999  56.291  41.773  1.00  0.00
N
ATOM   6033  HZ1 LYS   366      50.584  57.203  41.635  1.00  0.00
H
ATOM   6034  HZ2 LYS   366      51.435  56.285  42.689  1.00  0.00
H
ATOM   6035  HZ3 LYS   366      51.722  56.157  41.080  1.00  0.00
H
ATOM   6036  C   LYS   366      45.022  53.065  42.199  1.00  0.00
C
ATOM   6037  O   LYS   366      45.134  52.058  42.891  1.00  0.00
O
ATOM   6038  N   GLN   367      44.093  53.991  42.444  1.00  0.00
N
ATOM   6039  H   GLN   367      44.019  54.783  41.817  1.00  0.00
H
ATOM   6040  CA  GLN   367      43.167  53.872  43.578  1.00  0.00
C
ATOM   6041  HA  GLN   367      43.741  53.611  44.468  1.00  0.00
H
ATOM   6042  CB  GLN   367      42.476  55.210  43.842  1.00  0.00
C
ATOM   6043  HB2 GLN   367      41.988  55.569  42.934  1.00  0.00
H
ATOM   6044  HB3 GLN   367      41.715  55.039  44.605  1.00  0.00
H
ATOM   6045  CG  GLN   367      43.444  56.273  44.373  1.00  0.00
C
ATOM   6046  HG2 GLN   367      44.118  55.815  45.098  1.00  0.00
H
ATOM   6047  HG3 GLN   367      44.044  56.687  43.563  1.00  0.00
H
ATOM   6048  CD  GLN   367      42.668  57.389  45.053  1.00  0.00
C
ATOM   6049  OE1 GLN   367      41.709  57.938  44.524  1.00  0.00
O
ATOM   6050  NE2 GLN   367      43.002  57.725  46.276  1.00  0.00
N
ATOM   6051 HE21 GLN   367      42.443  58.415  46.741  1.00  0.00
H
ATOM   6052 HE22 GLN   367      43.771  57.256  46.724  1.00  0.00
H
ATOM   6053  C   GLN   367      42.120  52.758  43.403  1.00  0.00
C
ATOM   6054  O   GLN   367      41.742  52.119  44.384  1.00  0.00
O
ATOM   6055  N   LEU   368      41.689  52.486  42.169  1.00  0.00
N
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ATOM   6056  H   LEU   368      41.980  53.092  41.408  1.00  0.00
H
ATOM   6057  CA  LEU   368      40.804  51.368  41.837  1.00  0.00
C
ATOM   6058  HA  LEU   368      39.949  51.406  42.511  1.00  0.00
H
ATOM   6059  CB  LEU   368      40.300  51.603  40.397  1.00  0.00
C
ATOM   6060  HB2 LEU   368      39.868  52.603  40.373  1.00  0.00
H
ATOM   6061  HB3 LEU   368      41.151  51.623  39.718  1.00  0.00
H
ATOM   6062  CG  LEU   368      39.229  50.663  39.818  1.00  0.00
C
ATOM   6063  HG  LEU   368      38.783  51.182  38.968  1.00  0.00
H
ATOM   6064  CD1 LEU   368      39.817  49.364  39.275  1.00  0.00
C
ATOM   6065 HD11 LEU   368      40.162  48.724  40.085  1.00  0.00
H
ATOM   6066 HD12 LEU   368      39.048  48.846  38.708  1.00  0.00
H
ATOM   6067 HD13 LEU   368      40.651  49.585  38.608  1.00  0.00
H
ATOM   6068  CD2 LEU   368      38.104  50.344  40.803  1.00  0.00
C
ATOM   6069 HD21 LEU   368      37.722  51.267  41.237  1.00  0.00
H
ATOM   6070 HD22 LEU   368      37.292  49.841  40.280  1.00  0.00
H
ATOM   6071 HD23 LEU   368      38.470  49.697  41.600  1.00  0.00
H
ATOM   6072  C   LEU   368      41.515  50.021  42.074  1.00  0.00
C
ATOM   6073  O   LEU   368      40.940  49.129  42.697  1.00  0.00
O
ATOM   6074  N   THR   369      42.795  49.907  41.700  1.00  0.00
N
ATOM   6075  H   THR   369      43.195  50.640  41.121  1.00  0.00
H
ATOM   6076  CA  THR   369      43.660  48.769  42.068  1.00  0.00
C
ATOM   6077  HA  THR   369      43.224  47.855  41.668  1.00  0.00
H
ATOM   6078  CB  THR   369      45.062  48.941  41.463  1.00  0.00
C
ATOM   6079  HB  THR   369      45.485  49.892  41.780  1.00  0.00
H
ATOM   6080  CG2 THR   369      46.045  47.829  41.825  1.00  0.00
C
ATOM   6081 HG21 THR   369      45.601  46.855  41.619  1.00  0.00
H
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ATOM   6082 HG22 THR   369      46.963  47.938  41.249  1.00  0.00
H
ATOM   6083 HG23 THR   369      46.299  47.894  42.883  1.00  0.00
H
ATOM   6084  OG1 THR   369      44.975  48.937  40.064  1.00  0.00
O
ATOM   6085  HG1 THR   369      45.862  49.049  39.725  1.00  0.00
H
ATOM   6086  C   THR   369      43.774  48.595  43.584  1.00  0.00
C
ATOM   6087  O   THR   369      43.646  47.478  44.086  1.00  0.00
O
ATOM   6088  N   GLU   370      43.973  49.680  44.338  1.00  0.00
N
ATOM   6089  H   GLU   370      44.120  50.573  43.879  1.00  0.00
H
ATOM   6090  CA  GLU   370      44.038  49.623  45.804  1.00  0.00
C
ATOM   6091  HA  GLU   370      44.791  48.890  46.097  1.00  0.00
H
ATOM   6092  CB  GLU   370      44.448  50.995  46.365  1.00  0.00
C
ATOM   6093  HB2 GLU   370      43.786  51.759  45.959  1.00  0.00
H
ATOM   6094  HB3 GLU   370      44.313  50.964  47.446  1.00  0.00
H
ATOM   6095  CG  GLU   370      45.918  51.369  46.089  1.00  0.00
C
ATOM   6096  HG2 GLU   370      46.549  50.696  46.669  1.00  0.00
H
ATOM   6097  HG3 GLU   370      46.158  51.216  45.039  1.00  0.00
H
ATOM   6098  CD  GLU   370      46.263  52.811  46.495  1.00  0.00
C
ATOM   6099  OE1 GLU   370      47.313  53.326  46.047  1.00  0.00
O
ATOM   6100  OE2 GLU   370      45.553  53.377  47.364  1.00  0.00
O
ATOM   6101  C   GLU   370      42.706  49.156  46.424  1.00  0.00
C
ATOM   6102  O   GLU   370      42.717  48.333  47.342  1.00  0.00
O
ATOM   6103  N   ALA   371      41.559  49.599  45.894  1.00  0.00
N
ATOM   6104  H   ALA   371      41.603  50.304  45.164  1.00  0.00
H
ATOM   6105  CA  ALA   371      40.240  49.128  46.326  1.00  0.00
C
ATOM   6106  HA  ALA   371      40.163  49.276  47.405  1.00  0.00
H
ATOM   6107  CB  ALA   371      39.157  49.979  45.648  1.00  0.00
C
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ATOM   6108  HB1 ALA   371      39.171  49.823  44.569  1.00  0.00
H
ATOM   6109  HB2 ALA   371      38.178  49.697  46.036  1.00  0.00
H
ATOM   6110  HB3 ALA   371      39.329  51.035  45.854  1.00  0.00
H
ATOM   6111  C   ALA   371      40.043  47.622  46.049  1.00  0.00
C
ATOM   6112  O   ALA   371      39.614  46.884  46.938  1.00  0.00
O
ATOM   6113  N   VAL   372      40.420  47.137  44.857  1.00  0.00
N
ATOM   6114  H   VAL   372      40.751  47.801  44.159  1.00  0.00
H
ATOM   6115  CA  VAL   372      40.400  45.703  44.504  1.00  0.00
C
ATOM   6116  HA  VAL   372      39.380  45.328  44.594  1.00  0.00
H
ATOM   6117  CB  VAL   372      40.863  45.497  43.046  1.00  0.00
C
ATOM   6118  HB  VAL   372      41.762  46.087  42.872  1.00  0.00
H
ATOM   6119  CG1 VAL   372      41.194  44.035  42.715  1.00  0.00
C
ATOM   6120 HG11 VAL   372      40.304  43.415  42.819  1.00  0.00
H
ATOM   6121 HG12 VAL   372      41.562  43.973  41.699  1.00  0.00
H
ATOM   6122 HG13 VAL   372      41.986  43.647  43.354  1.00  0.00
H
ATOM   6123  CG2 VAL   372      39.772  45.959  42.072  1.00  0.00
C
ATOM   6124 HG21 VAL   372      39.523  47.005  42.247  1.00  0.00
H
ATOM   6125 HG22 VAL   372      40.118  45.856  41.045  1.00  0.00
H
ATOM   6126 HG23 VAL   372      38.876  45.353  42.207  1.00  0.00
H
ATOM   6127  C   VAL   372      41.269  44.873  45.452  1.00  0.00
C
ATOM   6128  O   VAL   372      40.832  43.819  45.923  1.00  0.00
O
ATOM   6129  N   GLN   373      42.486  45.329  45.760  1.00  0.00
N
ATOM   6130  H   GLN   373      42.808  46.188  45.322  1.00  0.00
H
ATOM   6131  CA  GLN   373      43.398  44.610  46.657  1.00  0.00
C
ATOM   6132  HA  GLN   373      43.465  43.574  46.324  1.00  0.00
H
ATOM   6133  CB  GLN   373      44.806  45.223  46.573  1.00  0.00
C
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ATOM   6134  HB2 GLN   373      44.743  46.305  46.698  1.00  0.00
H
ATOM   6135  HB3 GLN   373      45.421  44.816  47.377  1.00  0.00
H
ATOM   6136  CG  GLN   373      45.480  44.890  45.228  1.00  0.00
C
ATOM   6137  HG2 GLN   373      45.620  43.811  45.159  1.00  0.00
H
ATOM   6138  HG3 GLN   373      44.834  45.192  44.405  1.00  0.00
H
ATOM   6139  CD  GLN   373      46.839  45.558  45.034  1.00  0.00
C
ATOM   6140  OE1 GLN   373      47.425  46.164  45.920  1.00  0.00
O
ATOM   6141  NE2 GLN   373      47.414  45.462  43.855  1.00  0.00
N
ATOM   6142 HE21 GLN   373      48.341  45.840  43.773  1.00  0.00
H
ATOM   6143 HE22 GLN   373      46.962  44.970  43.104  1.00  0.00
H
ATOM   6144  C   GLN   373      42.853  44.569  48.094  1.00  0.00
C
ATOM   6145  O   GLN   373      42.858  43.506  48.718  1.00  0.00
O
ATOM   6146  N   LYS   374      42.276  45.678  48.585  1.00  0.00
N
ATOM   6147  H   LYS   374      42.317  46.523  48.018  1.00  0.00
H
ATOM   6148  CA  LYS   374      41.578  45.745  49.884  1.00  0.00
C
ATOM   6149  HA  LYS   374      42.294  45.488  50.666  1.00  0.00
H
ATOM   6150  CB  LYS   374      41.093  47.200  50.103  1.00  0.00
C
ATOM   6151  HB2 LYS   374      41.903  47.867  49.804  1.00  0.00
H
ATOM   6152  HB3 LYS   374      40.244  47.413  49.451  1.00  0.00
H
ATOM   6153  CG  LYS   374      40.736  47.594  51.546  1.00  0.00
C
ATOM   6154  HG2 LYS   374      41.588  47.366  52.188  1.00  0.00
H
ATOM   6155  HG3 LYS   374      40.582  48.673  51.564  1.00  0.00
H
ATOM   6156  CD  LYS   374      39.482  46.926  52.123  1.00  0.00
C
ATOM   6157  HD2 LYS   374      38.616  47.126  51.491  1.00  0.00
H
ATOM   6158  HD3 LYS   374      39.644  45.855  52.195  1.00  0.00
H
ATOM   6159  CE  LYS   374      39.227  47.455  53.533  1.00  0.00
C
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ATOM   6160  HE2 LYS   374      40.183  47.494  54.066  1.00  0.00
H
ATOM   6161  HE3 LYS   374      38.834  48.476  53.485  1.00  0.00
H
ATOM   6162  NZ  LYS   374      38.299  46.562  54.255  1.00  0.00
N
ATOM   6163  HZ1 LYS   374      38.530  45.589  54.128  1.00  0.00
H
ATOM   6164  HZ2 LYS   374      38.330  46.731  55.255  1.00  0.00
H
ATOM   6165  HZ3 LYS   374      37.330  46.651  53.969  1.00  0.00
H
ATOM   6166  C   LYS   374      40.447  44.709  49.951  1.00  0.00
C
ATOM   6167  O   LYS   374      40.395  43.908  50.887  1.00  0.00
O
ATOM   6168  N   ILE   375      39.565  44.696  48.949  1.00  0.00
N
ATOM   6169  H   ILE   375      39.684  45.379  48.206  1.00  0.00
H
ATOM   6170  CA  ILE   375      38.396  43.801  48.904  1.00  0.00
C
ATOM   6171  HA  ILE   375      37.872  43.872  49.859  1.00  0.00
H
ATOM   6172  CB  ILE   375      37.412  44.242  47.796  1.00  0.00
C
ATOM   6173  HB  ILE   375      37.954  44.271  46.849  1.00  0.00
H
ATOM   6174  CG2 ILE   375      36.249  43.237  47.676  1.00  0.00
C
ATOM   6175 HG21 ILE   375      35.812  43.076  48.659  1.00  0.00
H
ATOM   6176 HG22 ILE   375      35.476  43.604  47.003  1.00  0.00
H
ATOM   6177 HG23 ILE   375      36.600  42.282  47.282  1.00  0.00
H
ATOM   6178  CG1 ILE   375      36.842  45.649  48.093  1.00  0.00
C
ATOM   6179 HG12 ILE   375      36.083  45.584  48.871  1.00  0.00
H
ATOM   6180 HG13 ILE   375      37.625  46.308  48.465  1.00  0.00
H
ATOM   6181  CD1 ILE   375      36.242  46.293  46.839  1.00  0.00
C
ATOM   6182 HD11 ILE   375      35.312  45.796  46.568  1.00  0.00
H
ATOM   6183 HD12 ILE   375      36.041  47.347  47.024  1.00  0.00
H
ATOM   6184 HD13 ILE   375      36.949  46.218  46.016  1.00  0.00
H
ATOM   6185  C   ILE   375      38.820  42.335  48.744  1.00  0.00
C
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ATOM   6186  O   ILE   375      38.231  41.467  49.388  1.00  0.00
O
ATOM   6187  N   THR   376      39.856  42.048  47.948  1.00  0.00
N
ATOM   6188  H   THR   376      40.277  42.805  47.418  1.00  0.00
H
ATOM   6189  CA  THR   376      40.431  40.697  47.810  1.00  0.00
C
ATOM   6190  HA  THR   376      39.673  40.029  47.404  1.00  0.00
H
ATOM   6191  CB  THR   376      41.628  40.695  46.843  1.00  0.00
C
ATOM   6192  HB  THR   376      42.383  41.396  47.194  1.00  0.00
H
ATOM   6193  CG2 THR   376      42.265  39.312  46.699  1.00  0.00
C
ATOM   6194 HG21 THR   376      41.496  38.581  46.463  1.00  0.00
H
ATOM   6195 HG22 THR   376      43.000  39.330  45.896  1.00  0.00
H
ATOM   6196 HG23 THR   376      42.766  39.027  47.624  1.00  0.00
H
ATOM   6197  OG1 THR   376      41.214  41.095  45.558  1.00  0.00
O
ATOM   6198  HG1 THR   376      41.035  42.050  45.581  1.00  0.00
H
ATOM   6199  C   THR   376      40.852  40.147  49.174  1.00  0.00
C
ATOM   6200  O   THR   376      40.422  39.057  49.551  1.00  0.00
O
ATOM   6201  N   THR   377      41.623  40.916  49.952  1.00  0.00
N
ATOM   6202  H   THR   377      41.980  41.794  49.584  1.00  0.00
H
ATOM   6203  CA  THR   377      42.053  40.516  51.304  1.00  0.00
C
ATOM   6204  HA  THR   377      42.604  39.577  51.231  1.00  0.00
H
ATOM   6205  CB  THR   377      42.996  41.568  51.908  1.00  0.00
C
ATOM   6206  HB  THR   377      42.512  42.546  51.894  1.00  0.00
H
ATOM   6207  CG2 THR   377      43.435  41.246  53.337  1.00  0.00
C
ATOM   6208 HG21 THR   377      43.868  40.246  53.376  1.00  0.00
H
ATOM   6209 HG22 THR   377      44.177  41.972  53.663  1.00  0.00
H
ATOM   6210 HG23 THR   377      42.587  41.299  54.018  1.00  0.00
H
ATOM   6211  OG1 THR   377      44.168  41.619  51.134  1.00  0.00
O
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ATOM   6212  HG1 THR   377      44.684  42.366  51.446  1.00  0.00
H
ATOM   6213  C   THR   377      40.862  40.281  52.234  1.00  0.00
C
ATOM   6214  O   THR   377      40.763  39.213  52.836  1.00  0.00
O
ATOM   6215  N   GLU   378      39.927  41.234  52.334  1.00  0.00
N
ATOM   6216  H   GLU   378      40.043  42.083  51.789  1.00  0.00
H
ATOM   6217  CA  GLU   378      38.749  41.099  53.206  1.00  0.00
C
ATOM   6218  HA  GLU   378      39.089  40.906  54.226  1.00  0.00
H
ATOM   6219  CB  GLU   378      37.970  42.426  53.180  1.00  0.00
C
ATOM   6220  HB2 GLU   378      38.623  43.216  53.562  1.00  0.00
H
ATOM   6221  HB3 GLU   378      37.686  42.658  52.151  1.00  0.00
H
ATOM   6222  CG  GLU   378      36.692  42.386  54.026  1.00  0.00
C
ATOM   6223  HG2 GLU   378      35.951  41.786  53.503  1.00  0.00
H
ATOM   6224  HG3 GLU   378      36.893  41.898  54.979  1.00  0.00
H
ATOM   6225  CD  GLU   378      36.115  43.778  54.284  1.00  0.00
C
ATOM   6226  OE1 GLU   378      36.403  44.735  53.536  1.00  0.00
O
ATOM   6227  OE2 GLU   378      35.342  43.936  55.254  1.00  0.00
O
ATOM   6228  C   GLU   378      37.872  39.895  52.811  1.00  0.00
C
ATOM   6229  O   GLU   378      37.338  39.205  53.678  1.00  0.00
O
ATOM   6230  N   SER   379      37.773  39.588  51.517  1.00  0.00
N
ATOM   6231  H   SER   379      38.221  40.193  50.837  1.00  0.00
H
ATOM   6232  CA  SER   379      37.018  38.430  51.024  1.00  0.00
C
ATOM   6233  HA  SER   379      36.029  38.465  51.472  1.00  0.00
H
ATOM   6234  CB  SER   379      36.865  38.493  49.506  1.00  0.00
C
ATOM   6235  HB2 SER   379      37.846  38.450  49.030  1.00  0.00
H
ATOM   6236  HB3 SER   379      36.266  37.639  49.172  1.00  0.00
H
ATOM   6237  OG  SER   379      36.223  39.695  49.138  1.00  0.00
O
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ATOM   6238  HG  SER   379      36.878  40.407  49.212  1.00  0.00
H
ATOM   6239  C   SER   379      37.649  37.097  51.416  1.00  0.00
C
ATOM   6240  O   SER   379      36.942  36.151  51.764  1.00  0.00
O
ATOM   6241  N   ILE   380      38.982  37.023  51.446  1.00  0.00
N
ATOM   6242  H   ILE   380      39.521  37.831  51.150  1.00  0.00
H
ATOM   6243  CA  ILE   380      39.694  35.833  51.924  1.00  0.00
C
ATOM   6244  HA  ILE   380      39.240  34.960  51.459  1.00  0.00
H
ATOM   6245  CB  ILE   380      41.175  35.875  51.477  1.00  0.00
C
ATOM   6246  HB  ILE   380      41.618  36.803  51.841  1.00  0.00
H
ATOM   6247  CG2 ILE   380      41.962  34.688  52.066  1.00  0.00
C
ATOM   6248 HG21 ILE   380      41.516  33.745  51.746  1.00  0.00
H
ATOM   6249 HG22 ILE   380      43.000  34.721  51.740  1.00  0.00
H
ATOM   6250 HG23 ILE   380      41.962  34.730  53.156  1.00  0.00
H
ATOM   6251  CG1 ILE   380      41.276  35.832  49.931  1.00  0.00
C
ATOM   6252 HG12 ILE   380      41.048  34.825  49.579  1.00  0.00
H
ATOM   6253 HG13 ILE   380      40.540  36.498  49.487  1.00  0.00
H
ATOM   6254  CD1 ILE   380      42.649  36.256  49.395  1.00  0.00
C
ATOM   6255 HD11 ILE   380      43.413  35.534  49.678  1.00  0.00
H
ATOM   6256 HD12 ILE   380      42.609  36.311  48.307  1.00  0.00
H
ATOM   6257 HD13 ILE   380      42.912  37.239  49.787  1.00  0.00
H
ATOM   6258  C   ILE   380      39.506  35.669  53.445  1.00  0.00
C
ATOM   6259  O   ILE   380      39.344  34.541  53.905  1.00  0.00
O
ATOM   6260  N   VAL   381      39.431  36.760  54.221  1.00  0.00
N
ATOM   6261  H   VAL   381      39.577  37.666  53.786  1.00  0.00
H
ATOM   6262  CA  VAL   381      39.179  36.702  55.680  1.00  0.00
C
ATOM   6263  HA  VAL   381      39.863  35.969  56.107  1.00  0.00
H
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ATOM   6264  CB  VAL   381      39.473  38.062  56.356  1.00  0.00
C
ATOM   6265  HB  VAL   381      38.848  38.831  55.903  1.00  0.00
H
ATOM   6266  CG1 VAL   381      39.209  38.052  57.869  1.00  0.00
C
ATOM   6267 HG11 VAL   381      39.779  37.252  58.343  1.00  0.00
H
ATOM   6268 HG12 VAL   381      39.498  39.008  58.305  1.00  0.00
H
ATOM   6269 HG13 VAL   381      38.149  37.899  58.069  1.00  0.00
H
ATOM   6270  CG2 VAL   381      40.947  38.463  56.193  1.00  0.00
C
ATOM   6271 HG21 VAL   381      41.217  38.512  55.143  1.00  0.00
H
ATOM   6272 HG22 VAL   381      41.114  39.448  56.630  1.00  0.00
H
ATOM   6273 HG23 VAL   381      41.593  37.734  56.682  1.00  0.00
H
ATOM   6274  C   VAL   381      37.759  36.209  56.019  1.00  0.00
C
ATOM   6275  O   VAL   381      37.590  35.517  57.024  1.00  0.00
O
ATOM   6276  N   ILE   382      36.747  36.533  55.200  1.00  0.00
N
ATOM   6277  H   ILE   382      36.946  37.155  54.425  1.00  0.00
H
ATOM   6278  CA  ILE   382      35.345  36.128  55.441  1.00  0.00
C
ATOM   6279  HA  ILE   382      35.216  35.971  56.512  1.00  0.00
H
ATOM   6280  CB  ILE   382      34.363  37.262  55.041  1.00  0.00
C
ATOM   6281  HB  ILE   382      34.491  37.476  53.979  1.00  0.00
H
ATOM   6282  CG2 ILE   382      32.905  36.824  55.281  1.00  0.00
C
ATOM   6283 HG21 ILE   382      32.743  36.617  56.339  1.00  0.00
H
ATOM   6284 HG22 ILE   382      32.208  37.588  54.944  1.00  0.00
H
ATOM   6285 HG23 ILE   382      32.678  35.927  54.708  1.00  0.00
H
ATOM   6286  CG1 ILE   382      34.647  38.553  55.851  1.00  0.00
C
ATOM   6287 HG12 ILE   382      34.528  38.343  56.916  1.00  0.00
H
ATOM   6288 HG13 ILE   382      35.679  38.860  55.688  1.00  0.00
H
ATOM   6289  CD1 ILE   382      33.757  39.749  55.484  1.00  0.00
C
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ATOM   6290 HD11 ILE   382      32.731  39.577  55.807  1.00  0.00
H
ATOM   6291 HD12 ILE   382      34.128  40.642  55.987  1.00  0.00
H
ATOM   6292 HD13 ILE   382      33.779  39.912  54.406  1.00  0.00
H
ATOM   6293  C   ILE   382      34.992  34.780  54.780  1.00  0.00
C
ATOM   6294  O   ILE   382      34.321  33.960  55.406  1.00  0.00
O
ATOM   6295  N   TRP   383      35.425  34.527  53.537  1.00  0.00
N
ATOM   6296  H   TRP   383      35.947  35.255  53.060  1.00  0.00
H
ATOM   6297  CA  TRP   383      34.989  33.367  52.736  1.00  0.00
C
ATOM   6298  HA  TRP   383      34.285  32.777  53.323  1.00  0.00
H
ATOM   6299  CB  TRP   383      34.221  33.866  51.499  1.00  0.00
C
ATOM   6300  HB2 TRP   383      34.910  34.415  50.856  1.00  0.00
H
ATOM   6301  HB3 TRP   383      33.874  33.000  50.934  1.00  0.00
H
ATOM   6302  CG  TRP   383      33.032  34.736  51.788  1.00  0.00
C
ATOM   6303  CD1 TRP   383      31.853  34.321  52.301  1.00  0.00
C
ATOM   6304  HD1 TRP   383      31.622  33.296  52.561  1.00  0.00
H
ATOM   6305  NE1 TRP   383      31.001  35.394  52.462  1.00  0.00
N
ATOM   6306  HE1 TRP   383      30.071  35.329  52.875  1.00  0.00
H
ATOM   6307  CE2 TRP   383      31.603  36.577  52.100  1.00  0.00
C
ATOM   6308  CZ2 TRP   383      31.183  37.915  52.130  1.00  0.00
C
ATOM   6309  HZ2 TRP   383      30.201  38.167  52.495  1.00  0.00
H
ATOM   6310  CH2 TRP   383      32.052  38.913  51.671  1.00  0.00
C
ATOM   6311  HH2 TRP   383      31.744  39.946  51.687  1.00  0.00
H
ATOM   6312  CZ3 TRP   383      33.316  38.556  51.161  1.00  0.00
C
ATOM   6313  HZ3 TRP   383      33.981  39.318  50.783  1.00  0.00
H
ATOM   6314  CE3 TRP   383      33.715  37.206  51.131  1.00  0.00
C
ATOM   6315  HE3 TRP   383      34.668  36.927  50.718  1.00  0.00
H
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ATOM   6316  CD2 TRP   383      32.886  36.184  51.630  1.00  0.00
C
ATOM   6317  C   TRP   383      36.113  32.395  52.331  1.00  0.00
C
ATOM   6318  O   TRP   383      35.825  31.315  51.815  1.00  0.00
O
ATOM   6319  N   GLY   384      37.388  32.743  52.544  1.00  0.00
N
ATOM   6320  H   GLY   384      37.574  33.608  53.040  1.00  0.00
H
ATOM   6321  CA  GLY   384      38.546  31.916  52.160  1.00  0.00
C
ATOM   6322  HA2 GLY   384      39.417  32.254  52.719  1.00  0.00
H
ATOM   6323  HA3 GLY   384      38.352  30.879  52.435  1.00  0.00
H
ATOM   6324  C   GLY   384      38.908  31.947  50.666  1.00  0.00
C
ATOM   6325  O   GLY   384      39.769  31.184  50.218  1.00  0.00
O
ATOM   6326  N   LYS   385      38.266  32.822  49.882  1.00  0.00
N
ATOM   6327  H   LYS   385      37.606  33.448  50.326  1.00  0.00
H
ATOM   6328  CA  LYS   385      38.452  32.957  48.428  1.00  0.00
C
ATOM   6329  HA  LYS   385      39.462  32.627  48.180  1.00  0.00
H
ATOM   6330  CB  LYS   385      37.467  32.038  47.673  1.00  0.00
C
ATOM   6331  HB2 LYS   385      37.617  32.177  46.600  1.00  0.00
H
ATOM   6332  HB3 LYS   385      37.711  31.001  47.908  1.00  0.00
H
ATOM   6333  CG  LYS   385      35.986  32.281  48.026  1.00  0.00
C
ATOM   6334  HG2 LYS   385      35.829  32.014  49.072  1.00  0.00
H
ATOM   6335  HG3 LYS   385      35.737  33.336  47.901  1.00  0.00
H
ATOM   6336  CD  LYS   385      35.028  31.437  47.174  1.00  0.00
C
ATOM   6337  HD2 LYS   385      35.324  30.388  47.228  1.00  0.00
H
ATOM   6338  HD3 LYS   385      34.029  31.531  47.600  1.00  0.00
H
ATOM   6339  CE  LYS   385      35.009  31.905  45.710  1.00  0.00
C
ATOM   6340  HE2 LYS   385      34.836  32.985  45.686  1.00  0.00
H
ATOM   6341  HE3 LYS   385      35.991  31.718  45.265  1.00  0.00
H
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ATOM   6342  NZ  LYS   385      33.964  31.201  44.928  1.00  0.00
N
ATOM   6343  HZ1 LYS   385      33.039  31.383  45.292  1.00  0.00
H
ATOM   6344  HZ2 LYS   385      34.007  31.456  43.950  1.00  0.00
H
ATOM   6345  HZ3 LYS   385      34.103  30.191  44.973  1.00  0.00
H
ATOM   6346  C   LYS   385      38.343  34.408  47.961  1.00  0.00
C
ATOM   6347  O   LYS   385      37.713  35.241  48.608  1.00  0.00
O
ATOM   6348  N   THR   386      38.939  34.686  46.805  1.00  0.00
N
ATOM   6349  H   THR   386      39.383  33.927  46.313  1.00  0.00
H
ATOM   6350  CA  THR   386      38.789  35.958  46.085  1.00  0.00
C
ATOM   6351  HA  THR   386      38.720  36.753  46.826  1.00  0.00
H
ATOM   6352  CB  THR   386      40.052  36.255  45.258  1.00  0.00
C
ATOM   6353  HB  THR   386      40.877  36.377  45.961  1.00  0.00
H
ATOM   6354  CG2 THR   386      40.460  35.170  44.259  1.00  0.00
C
ATOM   6355 HG21 THR   386      39.638  34.946  43.578  1.00  0.00
H
ATOM   6356 HG22 THR   386      41.324  35.512  43.688  1.00  0.00
H
ATOM   6357 HG23 THR   386      40.745  34.264  44.792  1.00  0.00
H
ATOM   6358  OG1 THR   386      39.919  37.460  44.555  1.00  0.00
O
ATOM   6359  HG1 THR   386      39.687  37.271  43.640  1.00  0.00
H
ATOM   6360  C   THR   386      37.491  35.956  45.249  1.00  0.00
C
ATOM   6361  O   THR   386      37.133  34.902  44.712  1.00  0.00
O
ATOM   6362  N   PRO   387      36.749  37.077  45.156  1.00  0.00
N
ATOM   6363  CD  PRO   387      36.908  38.286  45.951  1.00  0.00
C
ATOM   6364  HD2 PRO   387      37.882  38.751  45.800  1.00  0.00
H
ATOM   6365  HD3 PRO   387      36.771  38.021  46.994  1.00  0.00
H
ATOM   6366  CG  PRO   387      35.792  39.245  45.533  1.00  0.00
C
ATOM   6367  HG2 PRO   387      36.152  39.919  44.755  1.00  0.00
H
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ATOM   6368  HG3 PRO   387      35.410  39.810  46.385  1.00  0.00
H
ATOM   6369  CB  PRO   387      34.731  38.308  44.959  1.00  0.00
C
ATOM   6370  HB2 PRO   387      34.071  38.818  44.256  1.00  0.00
H
ATOM   6371  HB3 PRO   387      34.152  37.876  45.776  1.00  0.00
H
ATOM   6372  CA  PRO   387      35.576  37.214  44.294  1.00  0.00
C
ATOM   6373  HA  PRO   387      35.003  36.287  44.267  1.00  0.00
H
ATOM   6374  C   PRO   387      35.966  37.589  42.857  1.00  0.00
C
ATOM   6375  O   PRO   387      37.099  37.992  42.583  1.00  0.00
O
ATOM   6376  N   LYS   388      34.994  37.497  41.945  1.00  0.00
N
ATOM   6377  H   LYS   388      34.085  37.171  42.263  1.00  0.00
H
ATOM   6378  CA  LYS   388      35.066  38.062  40.592  1.00  0.00
C
ATOM   6379  HA  LYS   388      36.084  37.969  40.203  1.00  0.00
H
ATOM   6380  CB  LYS   388      34.099  37.318  39.663  1.00  0.00
C
ATOM   6381  HB2 LYS   388      33.081  37.449  40.039  1.00  0.00
H
ATOM   6382  HB3 LYS   388      34.160  37.763  38.669  1.00  0.00
H
ATOM   6383  CG  LYS   388      34.409  35.816  39.570  1.00  0.00
C
ATOM   6384  HG2 LYS   388      35.378  35.665  39.093  1.00  0.00
H
ATOM   6385  HG3 LYS   388      34.444  35.382  40.570  1.00  0.00
H
ATOM   6386  CD  LYS   388      33.322  35.078  38.789  1.00  0.00
C
ATOM   6387  HD2 LYS   388      33.530  34.007  38.833  1.00  0.00
H
ATOM   6388  HD3 LYS   388      32.364  35.267  39.274  1.00  0.00
H
ATOM   6389  CE  LYS   388      33.242  35.528  37.330  1.00  0.00
C
ATOM   6390  HE2 LYS   388      32.931  36.576  37.284  1.00  0.00
H
ATOM   6391  HE3 LYS   388      34.232  35.462  36.873  1.00  0.00
H
ATOM   6392  NZ  LYS   388      32.290  34.689  36.578  1.00  0.00
N
ATOM   6393  HZ1 LYS   388      31.440  34.558  37.111  1.00  0.00
H
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ATOM   6394  HZ2 LYS   388      32.076  35.160  35.698  1.00  0.00
H
ATOM   6395  HZ3 LYS   388      32.706  33.791  36.380  1.00  0.00
H
ATOM   6396  C   LYS   388      34.700  39.542  40.650  1.00  0.00
C
ATOM   6397  O   LYS   388      33.737  39.900  41.330  1.00  0.00
O
ATOM   6398  N   PHE   389      35.424  40.401  39.940  1.00  0.00
N
ATOM   6399  H   PHE   389      36.183  40.043  39.366  1.00  0.00
H
ATOM   6400  CA  PHE   389      35.220  41.850  40.033  1.00  0.00
C
ATOM   6401  HA  PHE   389      34.648  42.054  40.934  1.00  0.00
H
ATOM   6402  CB  PHE   389      36.562  42.558  40.239  1.00  0.00
C
ATOM   6403  HB2 PHE   389      37.278  42.213  39.494  1.00  0.00
H
ATOM   6404  HB3 PHE   389      36.407  43.621  40.083  1.00  0.00
H
ATOM   6405  CG  PHE   389      37.135  42.378  41.631  1.00  0.00
C
ATOM   6406  CD1 PHE   389      36.692  43.207  42.681  1.00  0.00
C
ATOM   6407  HD1 PHE   389      35.942  43.964  42.492  1.00  0.00
H
ATOM   6408  CE1 PHE   389      37.205  43.039  43.979  1.00  0.00
C
ATOM   6409  HE1 PHE   389      36.856  43.674  44.779  1.00  0.00
H
ATOM   6410  CZ  PHE   389      38.153  42.032  44.235  1.00  0.00
C
ATOM   6411  HZ  PHE   389      38.541  41.890  45.233  1.00  0.00
H
ATOM   6412  CE2 PHE   389      38.588  41.196  43.192  1.00  0.00
C
ATOM   6413  HE2 PHE   389      39.304  40.412  43.395  1.00  0.00
H
ATOM   6414  CD2 PHE   389      38.083  41.370  41.890  1.00  0.00
C
ATOM   6415  HD2 PHE   389      38.407  40.716  41.092  1.00  0.00
H
ATOM   6416  C   PHE   389      34.417  42.433  38.861  1.00  0.00
C
ATOM   6417  O   PHE   389      34.733  42.201  37.699  1.00  0.00
O
ATOM   6418  N   LYS   390      33.416  43.267  39.154  1.00  0.00
N
ATOM   6419  H   LYS   390      33.208  43.419  40.138  1.00  0.00
H
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ATOM   6420  CA  LYS   390      32.773  44.156  38.171  1.00  0.00
C
ATOM   6421  HA  LYS   390      33.014  43.841  37.153  1.00  0.00
H
ATOM   6422  CB  LYS   390      31.252  44.129  38.338  1.00  0.00
C
ATOM   6423  HB2 LYS   390      31.012  44.255  39.394  1.00  0.00
H
ATOM   6424  HB3 LYS   390      30.825  44.967  37.784  1.00  0.00
H
ATOM   6425  CG  LYS   390      30.614  42.832  37.829  1.00  0.00
C
ATOM   6426  HG2 LYS   390      30.847  42.692  36.773  1.00  0.00
H
ATOM   6427  HG3 LYS   390      30.991  41.983  38.400  1.00  0.00
H
ATOM   6428  CD  LYS   390      29.100  42.952  38.016  1.00  0.00
C
ATOM   6429  HD2 LYS   390      28.905  43.101  39.078  1.00  0.00
H
ATOM   6430  HD3 LYS   390      28.739  43.828  37.471  1.00  0.00
H
ATOM   6431  CE  LYS   390      28.354  41.707  37.530  1.00  0.00
C
ATOM   6432  HE2 LYS   390      28.594  41.536  36.476  1.00  0.00
H
ATOM   6433  HE3 LYS   390      28.704  40.845  38.105  1.00  0.00
H
ATOM   6434  NZ  LYS   390      26.892  41.883  37.708  1.00  0.00
N
ATOM   6435  HZ1 LYS   390      26.558  42.674  37.173  1.00  0.00
H
ATOM   6436  HZ2 LYS   390      26.382  41.055  37.435  1.00  0.00
H
ATOM   6437  HZ3 LYS   390      26.693  42.089  38.687  1.00  0.00
H
ATOM   6438  C   LYS   390      33.317  45.564  38.368  1.00  0.00
C
ATOM   6439  O   LYS   390      33.115  46.152  39.432  1.00  0.00
O
ATOM   6440  N   LEU   391      34.032  46.086  37.372  1.00  0.00
N
ATOM   6441  H   LEU   391      34.123  45.550  36.513  1.00  0.00
H
ATOM   6442  CA  LEU   391      34.784  47.339  37.499  1.00  0.00
C
ATOM   6443  HA  LEU   391      34.566  47.762  38.478  1.00  0.00
H
ATOM   6444  CB  LEU   391      36.298  47.046  37.473  1.00  0.00
C
ATOM   6445  HB2 LEU   391      36.557  46.687  36.476  1.00  0.00
H
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ATOM   6446  HB3 LEU   391      36.825  47.983  37.649  1.00  0.00
H
ATOM   6447  CG  LEU   391      36.799  46.021  38.509  1.00  0.00
C
ATOM   6448  HG  LEU   391      36.262  45.084  38.373  1.00  0.00
H
ATOM   6449  CD1 LEU   391      38.286  45.732  38.313  1.00  0.00
C
ATOM   6450 HD11 LEU   391      38.881  46.619  38.518  1.00  0.00
H
ATOM   6451 HD12 LEU   391      38.591  44.934  38.988  1.00  0.00
H
ATOM   6452 HD13 LEU   391      38.469  45.411  37.289  1.00  0.00
H
ATOM   6453  CD2 LEU   391      36.615  46.512  39.947  1.00  0.00
C
ATOM   6454 HD21 LEU   391      35.557  46.625  40.179  1.00  0.00
H
ATOM   6455 HD22 LEU   391      37.038  45.790  40.642  1.00  0.00
H
ATOM   6456 HD23 LEU   391      37.119  47.467  40.082  1.00  0.00
H
ATOM   6457  C   LEU   391      34.376  48.369  36.421  1.00  0.00
C
ATOM   6458  O   LEU   391      34.300  48.016  35.240  1.00  0.00
O
ATOM   6459  N   PRO   392      34.163  49.653  36.776  1.00  0.00
N
ATOM   6460  CD  PRO   392      34.095  50.149  38.142  1.00  0.00
C
ATOM   6461  HD2 PRO   392      35.029  49.983  38.681  1.00  0.00
H
ATOM   6462  HD3 PRO   392      33.273  49.635  38.636  1.00  0.00
H
ATOM   6463  CG  PRO   392      33.786  51.644  38.055  1.00  0.00
C
ATOM   6464  HG2 PRO   392      34.714  52.214  37.992  1.00  0.00
H
ATOM   6465  HG3 PRO   392      33.183  51.983  38.896  1.00  0.00
H
ATOM   6466  CB  PRO   392      33.025  51.743  36.738  1.00  0.00
C
ATOM   6467  HB2 PRO   392      33.029  52.755  36.335  1.00  0.00
H
ATOM   6468  HB3 PRO   392      31.997  51.414  36.894  1.00  0.00
H
ATOM   6469  CA  PRO   392      33.764  50.724  35.857  1.00  0.00
C
ATOM   6470  HA  PRO   392      33.063  50.332  35.122  1.00  0.00
H
ATOM   6471  C   PRO   392      34.971  51.295  35.087  1.00  0.00
C
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ATOM   6472  O   PRO   392      35.192  52.501  35.037  1.00  0.00
O
ATOM   6473  N   ILE   393      35.790  50.421  34.504  1.00  0.00
N
ATOM   6474  H   ILE   393      35.531  49.440  34.546  1.00  0.00
H
ATOM   6475  CA  ILE   393      37.014  50.743  33.759  1.00  0.00
C
ATOM   6476  HA  ILE   393      37.004  51.803  33.497  1.00  0.00
H
ATOM   6477  CB  ILE   393      38.273  50.496  34.630  1.00  0.00
C
ATOM   6478  HB  ILE   393      38.207  51.157  35.489  1.00  0.00
H
ATOM   6479  CG2 ILE   393      38.349  49.075  35.205  1.00  0.00
C
ATOM   6480 HG21 ILE   393      38.550  48.362  34.411  1.00  0.00
H
ATOM   6481 HG22 ILE   393      39.132  49.004  35.959  1.00  0.00
H
ATOM   6482 HG23 ILE   393      37.407  48.817  35.676  1.00  0.00
H
ATOM   6483  CG1 ILE   393      39.556  50.848  33.844  1.00  0.00
C
ATOM   6484 HG12 ILE   393      39.698  50.118  33.048  1.00  0.00
H
ATOM   6485 HG13 ILE   393      39.432  51.830  33.387  1.00  0.00
H
ATOM   6486  CD1 ILE   393      40.832  50.873  34.695  1.00  0.00
C
ATOM   6487 HD11 ILE   393      41.050  49.876  35.075  1.00  0.00
H
ATOM   6488 HD12 ILE   393      41.671  51.196  34.079  1.00  0.00
H
ATOM   6489 HD13 ILE   393      40.714  51.562  35.530  1.00  0.00
H
ATOM   6490  C   ILE   393      37.014  49.945  32.454  1.00  0.00
C
ATOM   6491  O   ILE   393      36.768  48.740  32.456  1.00  0.00
O
ATOM   6492  N   GLN   394      37.289  50.598  31.323  1.00  0.00
N
ATOM   6493  H   GLN   394      37.489  51.586  31.361  1.00  0.00
H
ATOM   6494  CA  GLN   394      37.404  49.888  30.046  1.00  0.00
C
ATOM   6495  HA  GLN   394      36.482  49.331  29.874  1.00  0.00
H
ATOM   6496  CB  GLN   394      37.616  50.866  28.879  1.00  0.00
C
ATOM   6497  HB2 GLN   394      38.489  51.473  29.089  1.00  0.00
H
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ATOM   6498  HB3 GLN   394      37.836  50.297  27.977  1.00  0.00
H
ATOM   6499  CG  GLN   394      36.421  51.793  28.597  1.00  0.00
C
ATOM   6500  HG2 GLN   394      36.189  52.369  29.493  1.00  0.00
H
ATOM   6501  HG3 GLN   394      36.701  52.497  27.813  1.00  0.00
H
ATOM   6502  CD  GLN   394      35.171  51.041  28.147  1.00  0.00
C
ATOM   6503  OE1 GLN   394      35.206  49.891  27.746  1.00  0.00
O
ATOM   6504  NE2 GLN   394      34.010  51.652  28.222  1.00  0.00
N
ATOM   6505 HE21 GLN   394      33.218  51.054  28.064  1.00  0.00
H
ATOM   6506 HE22 GLN   394      33.936  52.566  28.628  1.00  0.00
H
ATOM   6507  C   GLN   394      38.562  48.885  30.092  1.00  0.00
C
ATOM   6508  O   GLN   394      39.657  49.225  30.551  1.00  0.00
O
ATOM   6509  N   LYS   395      38.359  47.677  29.546  1.00  0.00
N
ATOM   6510  H   LYS   395      37.432  47.461  29.203  1.00  0.00
H
ATOM   6511  CA  LYS   395      39.433  46.673  29.378  1.00  0.00
C
ATOM   6512  HA  LYS   395      39.799  46.372  30.357  1.00  0.00
H
ATOM   6513  CB  LYS   395      38.885  45.434  28.637  1.00  0.00
C
ATOM   6514  HB2 LYS   395      38.178  45.756  27.869  1.00  0.00
H
ATOM   6515  HB3 LYS   395      39.701  44.915  28.128  1.00  0.00
H
ATOM   6516  CG  LYS   395      38.182  44.437  29.577  1.00  0.00
C
ATOM   6517  HG2 LYS   395      37.538  44.981  30.271  1.00  0.00
H
ATOM   6518  HG3 LYS   395      37.553  43.776  28.979  1.00  0.00
H
ATOM   6519  CD  LYS   395      39.177  43.566  30.363  1.00  0.00
C
ATOM   6520  HD2 LYS   395      39.739  42.942  29.666  1.00  0.00
H
ATOM   6521  HD3 LYS   395      39.878  44.199  30.902  1.00  0.00
H
ATOM   6522  CE  LYS   395      38.420  42.674  31.351  1.00  0.00
C
ATOM   6523  HE2 LYS   395      37.768  43.300  31.970  1.00  0.00
H
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ATOM   6524  HE3 LYS   395      37.789  41.977  30.792  1.00  0.00
H
ATOM   6525  NZ  LYS   395      39.332  41.915  32.237  1.00  0.00
N
ATOM   6526  HZ1 LYS   395      39.840  42.530  32.856  1.00  0.00
H
ATOM   6527  HZ2 LYS   395      38.768  41.321  32.842  1.00  0.00
H
ATOM   6528  HZ3 LYS   395      39.999  41.337  31.727  1.00  0.00
H
ATOM   6529  C   LYS   395      40.652  47.272  28.665  1.00  0.00
C
ATOM   6530  O   LYS   395      41.776  47.080  29.118  1.00  0.00
O
ATOM   6531  N   GLU   396      40.410  48.106  27.658  1.00  0.00
N
ATOM   6532  H   GLU   396      39.465  48.156  27.320  1.00  0.00
H
ATOM   6533  CA  GLU   396      41.445  48.788  26.875  1.00  0.00
C
ATOM   6534  HA  GLU   396      42.191  48.041  26.593  1.00  0.00
H
ATOM   6535  CB  GLU   396      40.776  49.336  25.598  1.00  0.00
C
ATOM   6536  HB2 GLU   396      39.831  48.822  25.414  1.00  0.00
H
ATOM   6537  HB3 GLU   396      40.538  50.390  25.741  1.00  0.00
H
ATOM   6538  CG  GLU   396      41.649  49.184  24.347  1.00  0.00
C
ATOM   6539  HG2 GLU   396      41.145  49.692  23.522  1.00  0.00
H
ATOM   6540  HG3 GLU   396      42.596  49.698  24.522  1.00  0.00
H
ATOM   6541  CD  GLU   396      41.914  47.722  23.939  1.00  0.00
C
ATOM   6542  OE1 GLU   396      41.322  46.791  24.532  1.00  0.00
O
ATOM   6543  OE2 GLU   396      42.745  47.527  23.027  1.00  0.00
O
ATOM   6544  C   GLU   396      42.192  49.897  27.651  1.00  0.00
C
ATOM   6545  O   GLU   396      43.400  50.079  27.467  1.00  0.00
O
ATOM   6546  N   THR   397      41.516  50.596  28.580  1.00  0.00
N
ATOM   6547  H   THR   397      40.539  50.390  28.724  1.00  0.00
H
ATOM   6548  CA  THR   397      42.172  51.520  29.531  1.00  0.00
C
ATOM   6549  HA  THR   397      42.740  52.264  28.978  1.00  0.00
H
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ATOM   6550  CB  THR   397      41.159  52.238  30.444  1.00  0.00
C
ATOM   6551  HB  THR   397      40.534  51.498  30.938  1.00  0.00
H
ATOM   6552  CG2 THR   397      41.789  53.124  31.522  1.00  0.00
C
ATOM   6553 HG21 THR   397      42.274  53.983  31.058  1.00  0.00
H
ATOM   6554 HG22 THR   397      41.015  53.447  32.215  1.00  0.00
H
ATOM   6555 HG23 THR   397      42.527  52.579  32.108  1.00  0.00
H
ATOM   6556  OG1 THR   397      40.333  53.098  29.701  1.00  0.00
O
ATOM   6557  HG1 THR   397      39.749  53.542  30.320  1.00  0.00
H
ATOM   6558  C   THR   397      43.139  50.752  30.420  1.00  0.00
C
ATOM   6559  O   THR   397      44.287  51.162  30.594  1.00  0.00
O
ATOM   6560  N   TRP   398      42.680  49.637  30.994  1.00  0.00
N
ATOM   6561  H   TRP   398      41.733  49.332  30.795  1.00  0.00
H
ATOM   6562  CA  TRP   398      43.513  48.831  31.877  1.00  0.00
C
ATOM   6563  HA  TRP   398      43.938  49.480  32.644  1.00  0.00
H
ATOM   6564  CB  TRP   398      42.669  47.763  32.569  1.00  0.00
C
ATOM   6565  HB2 TRP   398      41.913  48.252  33.184  1.00  0.00
H
ATOM   6566  HB3 TRP   398      42.162  47.178  31.802  1.00  0.00
H
ATOM   6567  CG  TRP   398      43.501  46.858  33.424  1.00  0.00
C
ATOM   6568  CD1 TRP   398      43.957  45.636  33.066  1.00  0.00
C
ATOM   6569  HD1 TRP   398      43.726  45.146  32.125  1.00  0.00
H
ATOM   6570  NE1 TRP   398      44.858  45.179  34.006  1.00  0.00
N
ATOM   6571  HE1 TRP   398      45.410  44.341  33.887  1.00  0.00
H
ATOM   6572  CE2 TRP   398      45.041  46.099  35.019  1.00  0.00
C
ATOM   6573  CZ2 TRP   398      45.871  46.128  36.150  1.00  0.00
C
ATOM   6574  HZ2 TRP   398      46.544  45.311  36.355  1.00  0.00
H
ATOM   6575  CH2 TRP   398      45.772  47.209  37.041  1.00  0.00
C
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ATOM   6576  HH2 TRP   398      46.341  47.214  37.958  1.00  0.00
H
ATOM   6577  CZ3 TRP   398      44.883  48.266  36.765  1.00  0.00
C
ATOM   6578  HZ3 TRP   398      44.789  49.088  37.459  1.00  0.00
H
ATOM   6579  CE3 TRP   398      44.095  48.249  35.599  1.00  0.00
C
ATOM   6580  HE3 TRP   398      43.426  49.070  35.395  1.00  0.00
H
ATOM   6581  CD2 TRP   398      44.146  47.161  34.701  1.00  0.00
C
ATOM   6582  C   TRP   398      44.693  48.194  31.137  1.00  0.00
C
ATOM   6583  O   TRP   398      45.797  48.191  31.674  1.00  0.00
O
ATOM   6584  N   GLU   399      44.492  47.693  29.912  1.00  0.00
N
ATOM   6585  H   GLU   399      43.552  47.678  29.528  1.00  0.00
H
ATOM   6586  CA  GLU   399      45.585  47.117  29.120  1.00  0.00
C
ATOM   6587  HA  GLU   399      46.059  46.354  29.724  1.00  0.00
H
ATOM   6588  CB  GLU   399      45.063  46.422  27.854  1.00  0.00
C
ATOM   6589  HB2 GLU   399      44.220  45.789  28.132  1.00  0.00
H
ATOM   6590  HB3 GLU   399      44.727  47.165  27.130  1.00  0.00
H
ATOM   6591  CG  GLU   399      46.170  45.537  27.247  1.00  0.00
C
ATOM   6592  HG2 GLU   399      47.029  46.160  26.991  1.00  0.00
H
ATOM   6593  HG3 GLU   399      46.489  44.819  28.007  1.00  0.00
H
ATOM   6594  CD  GLU   399      45.720  44.758  26.005  1.00  0.00
C
ATOM   6595  OE1 GLU   399      46.583  44.453  25.155  1.00  0.00
O
ATOM   6596  OE2 GLU   399      44.518  44.410  25.924  1.00  0.00
O
ATOM   6597  C   GLU   399      46.670  48.154  28.817  1.00  0.00
C
ATOM   6598  O   GLU   399      47.843  47.891  29.081  1.00  0.00
O
ATOM   6599  N   THR   400      46.288  49.359  28.379  1.00  0.00
N
ATOM   6600  H   THR   400      45.308  49.511  28.170  1.00  0.00
H
ATOM   6601  CA  THR   400      47.236  50.473  28.191  1.00  0.00
C
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ATOM   6602  HA  THR   400      47.968  50.184  27.438  1.00  0.00
H
ATOM   6603  CB  THR   400      46.521  51.746  27.705  1.00  0.00
C
ATOM   6604  HB  THR   400      45.897  52.142  28.508  1.00  0.00
H
ATOM   6605  CG2 THR   400      47.512  52.821  27.256  1.00  0.00
C
ATOM   6606 HG21 THR   400      48.155  52.415  26.475  1.00  0.00
H
ATOM   6607 HG22 THR   400      46.968  53.679  26.864  1.00  0.00
H
ATOM   6608 HG23 THR   400      48.130  53.148  28.094  1.00  0.00
H
ATOM   6609  OG1 THR   400      45.697  51.484  26.589  1.00  0.00
O
ATOM   6610  HG1 THR   400      44.918  50.987  26.886  1.00  0.00
H
ATOM   6611  C   THR   400      47.999  50.787  29.483  1.00  0.00
C
ATOM   6612  O   THR   400      49.211  50.985  29.457  1.00  0.00
O
ATOM   6613  N   TRP   401      47.316  50.773  30.633  1.00  0.00
N
ATOM   6614  H   TRP   401      46.320  50.594  30.603  1.00  0.00
H
ATOM   6615  CA  TRP   401      47.945  51.037  31.928  1.00  0.00
C
ATOM   6616  HA  TRP   401      48.501  51.972  31.848  1.00  0.00
H
ATOM   6617  CB  TRP   401      46.879  51.223  33.012  1.00  0.00
C
ATOM   6618  HB2 TRP   401      46.270  52.092  32.766  1.00  0.00
H
ATOM   6619  HB3 TRP   401      46.217  50.357  33.013  1.00  0.00
H
ATOM   6620  CG  TRP   401      47.453  51.400  34.383  1.00  0.00
C
ATOM   6621  CD1 TRP   401      47.392  50.490  35.382  1.00  0.00
C
ATOM   6622  HD1 TRP   401      46.889  49.529  35.304  1.00  0.00
H
ATOM   6623  NE1 TRP   401      48.080  50.958  36.482  1.00  0.00
N
ATOM   6624  HE1 TRP   401      48.183  50.437  37.336  1.00  0.00
H
ATOM   6625  CE2 TRP   401      48.649  52.194  36.239  1.00  0.00
C
ATOM   6626  CZ2 TRP   401      49.458  53.047  37.009  1.00  0.00
C
ATOM   6627  HZ2 TRP   401      49.762  52.760  38.002  1.00  0.00
H
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ATOM   6628  CH2 TRP   401      49.910  54.253  36.449  1.00  0.00
C
ATOM   6629  HH2 TRP   401      50.567  54.910  37.003  1.00  0.00
H
ATOM   6630  CZ3 TRP   401      49.546  54.592  35.133  1.00  0.00
C
ATOM   6631  HZ3 TRP   401      49.920  55.505  34.689  1.00  0.00
H
ATOM   6632  CE3 TRP   401      48.736  53.728  34.372  1.00  0.00
C
ATOM   6633  HE3 TRP   401      48.499  53.993  33.352  1.00  0.00
H
ATOM   6634  CD2 TRP   401      48.262  52.507  34.903  1.00  0.00
C
ATOM   6635  C   TRP   401      48.970  49.968  32.340  1.00  0.00
C
ATOM   6636  O   TRP   401      50.125  50.309  32.599  1.00  0.00
O
ATOM   6637  N   TRP   402      48.592  48.685  32.409  1.00  0.00
N
ATOM   6638  H   TRP   402      47.649  48.426  32.136  1.00  0.00
H
ATOM   6639  CA  TRP   402      49.514  47.656  32.923  1.00  0.00
C
ATOM   6640  HA  TRP   402      49.998  48.075  33.807  1.00  0.00
H
ATOM   6641  CB  TRP   402      48.770  46.393  33.391  1.00  0.00
C
ATOM   6642  HB2 TRP   402      49.406  45.895  34.121  1.00  0.00
H
ATOM   6643  HB3 TRP   402      47.855  46.686  33.908  1.00  0.00
H
ATOM   6644  CG  TRP   402      48.451  45.360  32.353  1.00  0.00
C
ATOM   6645  CD1 TRP   402      47.286  45.251  31.682  1.00  0.00
C
ATOM   6646  HD1 TRP   402      46.445  45.915  31.827  1.00  0.00
H
ATOM   6647  NE1 TRP   402      47.365  44.230  30.758  1.00  0.00
N
ATOM   6648  HE1 TRP   402      46.646  44.034  30.077  1.00  0.00
H
ATOM   6649  CE2 TRP   402      48.591  43.598  30.810  1.00  0.00
C
ATOM   6650  CZ2 TRP   402      49.158  42.547  30.072  1.00  0.00
C
ATOM   6651  HZ2 TRP   402      48.615  42.101  29.254  1.00  0.00
H
ATOM   6652  CH2 TRP   402      50.459  42.119  30.385  1.00  0.00
C
ATOM   6653  HH2 TRP   402      50.924  41.322  29.821  1.00  0.00
H
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ATOM   6654  CZ3 TRP   402      51.173  42.747  31.423  1.00  0.00
C
ATOM   6655  HZ3 TRP   402      52.178  42.425  31.659  1.00  0.00
H
ATOM   6656  CE3 TRP   402      50.599  43.815  32.139  1.00  0.00
C
ATOM   6657  HE3 TRP   402      51.171  44.311  32.912  1.00  0.00
H
ATOM   6658  CD2 TRP   402      49.297  44.277  31.846  1.00  0.00
C
ATOM   6659  C   TRP   402      50.662  47.330  31.961  1.00  0.00
C
ATOM   6660  O   TRP   402      51.690  46.829  32.409  1.00  0.00
O
ATOM   6661  N   THR   403      50.524  47.636  30.665  1.00  0.00
N
ATOM   6662  H   THR   403      49.646  48.028  30.341  1.00  0.00
H
ATOM   6663  CA  THR   403      51.578  47.397  29.668  1.00  0.00
C
ATOM   6664  HA  THR   403      52.184  46.560  30.016  1.00  0.00
H
ATOM   6665  CB  THR   403      50.999  46.981  28.310  1.00  0.00
C
ATOM   6666  HB  THR   403      51.829  46.834  27.619  1.00  0.00
H
ATOM   6667  CG2 THR   403      50.209  45.670  28.387  1.00  0.00
C
ATOM   6668 HG21 THR   403      49.361  45.764  29.065  1.00  0.00
H
ATOM   6669 HG22 THR   403      49.844  45.408  27.394  1.00  0.00
H
ATOM   6670 HG23 THR   403      50.860  44.874  28.748  1.00  0.00
H
ATOM   6671  OG1 THR   403      50.164  47.982  27.781  1.00  0.00
O
ATOM   6672  HG1 THR   403      49.300  47.932  28.221  1.00  0.00
H
ATOM   6673  C   THR   403      52.559  48.565  29.500  1.00  0.00
C
ATOM   6674  O   THR   403      53.640  48.344  28.955  1.00  0.00
O
ATOM   6675  N   GLU   404      52.248  49.772  29.989  1.00  0.00
N
ATOM   6676  H   GLU   404      51.305  49.923  30.326  1.00  0.00
H
ATOM   6677  CA  GLU   404      53.160  50.936  29.943  1.00  0.00
C
ATOM   6678  HA  GLU   404      54.067  50.654  29.412  1.00  0.00
H
ATOM   6679  CB  GLU   404      52.525  52.095  29.144  1.00  0.00
C
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ATOM   6680  HB2 GLU   404      51.589  52.369  29.636  1.00  0.00
H
ATOM   6681  HB3 GLU   404      53.183  52.964  29.192  1.00  0.00
H
ATOM   6682  CG  GLU   404      52.225  51.793  27.657  1.00  0.00
C
ATOM   6683  HG2 GLU   404      51.705  50.838  27.572  1.00  0.00
H
ATOM   6684  HG3 GLU   404      51.535  52.564  27.309  1.00  0.00
H
ATOM   6685  CD  GLU   404      53.444  51.792  26.712  1.00  0.00
C
ATOM   6686  OE1 GLU   404      54.575  51.462  27.141  1.00  0.00
O
ATOM   6687  OE2 GLU   404      53.267  52.098  25.507  1.00  0.00
O
ATOM   6688  C   GLU   404      53.656  51.410  31.327  1.00  0.00
C
ATOM   6689  O   GLU   404      54.671  52.110  31.397  1.00  0.00
O
ATOM   6690  N   TYR   405      53.016  51.025  32.443  1.00  0.00
N
ATOM   6691  H   TYR   405      52.166  50.478  32.359  1.00  0.00
H
ATOM   6692  CA  TYR   405      53.507  51.357  33.790  1.00  0.00
C
ATOM   6693  HA  TYR   405      53.848  52.389  33.745  1.00  0.00
H
ATOM   6694  CB  TYR   405      52.371  51.299  34.830  1.00  0.00
C
ATOM   6695  HB2 TYR   405      51.500  51.814  34.423  1.00  0.00
H
ATOM   6696  HB3 TYR   405      52.089  50.256  34.978  1.00  0.00
H
ATOM   6697  CG  TYR   405      52.681  51.943  36.178  1.00  0.00
C
ATOM   6698  CD1 TYR   405      53.213  53.248  36.237  1.00  0.00
C
ATOM   6699  HD1 TYR   405      53.409  53.799  35.326  1.00  0.00
H
ATOM   6700  CE1 TYR   405      53.464  53.866  37.475  1.00  0.00
C
ATOM   6701  HE1 TYR   405      53.883  54.860  37.498  1.00  0.00
H
ATOM   6702  CZ  TYR   405      53.133  53.202  38.672  1.00  0.00
C
ATOM   6703  OH  TYR   405      53.354  53.819  39.865  1.00  0.00
O
ATOM   6704  HH  TYR   405      53.930  54.576  39.738  1.00  0.00
H
ATOM   6705  CE2 TYR   405      52.573  51.907  38.624  1.00  0.00
C
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ATOM   6706  HE2 TYR   405      52.325  51.400  39.543  1.00  0.00
H
ATOM   6707  CD2 TYR   405      52.372  51.270  37.380  1.00  0.00
C
ATOM   6708  HD2 TYR   405      51.959  50.270  37.342  1.00  0.00
H
ATOM   6709  C   TYR   405      54.719  50.498  34.203  1.00  0.00
C
ATOM   6710  O   TYR   405      54.753  49.286  34.005  1.00  0.00
O
ATOM   6711  N   TRP   406      55.725  51.120  34.826  1.00  0.00
N
ATOM   6712  H   TRP   406      55.642  52.113  34.982  1.00  0.00
H
ATOM   6713  CA  TRP   406      57.010  50.480  35.166  1.00  0.00
C
ATOM   6714  HA  TRP   406      57.234  49.741  34.393  1.00  0.00
H
ATOM   6715  CB  TRP   406      58.116  51.541  35.134  1.00  0.00
C
ATOM   6716  HB2 TRP   406      59.084  51.048  35.233  1.00  0.00
H
ATOM   6717  HB3 TRP   406      58.110  52.037  34.162  1.00  0.00
H
ATOM   6718  CG  TRP   406      57.979  52.570  36.210  1.00  0.00
C
ATOM   6719  CD1 TRP   406      58.505  52.495  37.452  1.00  0.00
C
ATOM   6720  HD1 TRP   406      59.129  51.679  37.800  1.00  0.00
H
ATOM   6721  NE1 TRP   406      58.119  53.593  38.193  1.00  0.00
N
ATOM   6722  HE1 TRP   406      58.415  53.754  39.146  1.00  0.00
H
ATOM   6723  CE2 TRP   406      57.359  54.466  37.439  1.00  0.00
C
ATOM   6724  CZ2 TRP   406      56.796  55.726  37.697  1.00  0.00
C
ATOM   6725  HZ2 TRP   406      56.921  56.203  38.658  1.00  0.00
H
ATOM   6726  CH2 TRP   406      56.120  56.390  36.662  1.00  0.00
C
ATOM   6727  HH2 TRP   406      55.739  57.386  36.818  1.00  0.00
H
ATOM   6728  CZ3 TRP   406      55.972  55.775  35.405  1.00  0.00
C
ATOM   6729  HZ3 TRP   406      55.462  56.288  34.604  1.00  0.00
H
ATOM   6730  CE3 TRP   406      56.525  54.507  35.163  1.00  0.00
C
ATOM   6731  HE3 TRP   406      56.438  54.072  34.178  1.00  0.00
H
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ATOM   6732  CD2 TRP   406      57.248  53.832  36.168  1.00  0.00
C
ATOM   6733  C   TRP   406      57.022  49.729  36.514  1.00  0.00
C
ATOM   6734  O   TRP   406      58.082  49.308  36.981  1.00  0.00
O
ATOM   6735  N   GLN   407      55.878  49.598  37.187  1.00  0.00
N
ATOM   6736  H   GLN   407      55.036  49.934  36.739  1.00  0.00
H
ATOM   6737  CA  GLN   407      55.712  48.739  38.365  1.00  0.00
C
ATOM   6738  HA  GLN   407      56.683  48.386  38.714  1.00  0.00
H
ATOM   6739  CB  GLN   407      55.020  49.490  39.517  1.00  0.00
C
ATOM   6740  HB2 GLN   407      53.997  49.698  39.207  1.00  0.00
H
ATOM   6741  HB3 GLN   407      54.959  48.826  40.381  1.00  0.00
H
ATOM   6742  CG  GLN   407      55.660  50.815  39.964  1.00  0.00
C
ATOM   6743  HG2 GLN   407      55.851  51.451  39.101  1.00  0.00
H
ATOM   6744  HG3 GLN   407      54.948  51.340  40.599  1.00  0.00
H
ATOM   6745  CD  GLN   407      56.945  50.630  40.760  1.00  0.00
C
ATOM   6746  OE1 GLN   407      56.959  50.615  41.983  1.00  0.00
O
ATOM   6747  NE2 GLN   407      58.081  50.481  40.117  1.00  0.00
N
ATOM   6748 HE21 GLN   407      58.915  50.364  40.666  1.00  0.00
H
ATOM   6749 HE22 GLN   407      58.089  50.418  39.109  1.00  0.00
H
ATOM   6750  C   GLN   407      54.868  47.519  37.980  1.00  0.00
C
ATOM   6751  O   GLN   407      53.873  47.662  37.270  1.00  0.00
O
ATOM   6752  N   ALA   408      55.209  46.337  38.501  1.00  0.00
N
ATOM   6753  H   ALA   408      56.012  46.273  39.103  1.00  0.00
H
ATOM   6754  CA  ALA   408      54.358  45.158  38.355  1.00  0.00
C
ATOM   6755  HA  ALA   408      54.231  44.958  37.289  1.00  0.00
H
ATOM   6756  CB  ALA   408      55.057  43.950  38.992  1.00  0.00
C
ATOM   6757  HB1 ALA   408      55.207  44.126  40.059  1.00  0.00
H
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ATOM   6758  HB2 ALA   408      54.437  43.061  38.863  1.00  0.00
H
ATOM   6759  HB3 ALA   408      56.021  43.779  38.512  1.00  0.00
H
ATOM   6760  C   ALA   408      52.969  45.417  38.969  1.00  0.00
C
ATOM   6761  O   ALA   408      52.858  45.918  40.089  1.00  0.00
O
ATOM   6762  N   THR   409      51.905  45.095  38.230  1.00  0.00
N
ATOM   6763  H   THR   409      52.051  44.696  37.312  1.00  0.00
H
ATOM   6764  CA  THR   409      50.518  45.388  38.614  1.00  0.00
C
ATOM   6765  HA  THR   409      50.428  45.296  39.697  1.00  0.00
H
ATOM   6766  CB  THR   409      50.155  46.835  38.242  1.00  0.00
C
ATOM   6767  HB  THR   409      50.865  47.507  38.725  1.00  0.00
H
ATOM   6768  CG2 THR   409      50.141  47.139  36.744  1.00  0.00
C
ATOM   6769 HG21 THR   409      49.345  46.577  36.258  1.00  0.00
H
ATOM   6770 HG22 THR   409      49.984  48.205  36.580  1.00  0.00
H
ATOM   6771 HG23 THR   409      51.097  46.864  36.296  1.00  0.00
H
ATOM   6772  OG1 THR   409      48.863  47.147  38.699  1.00  0.00
O
ATOM   6773  HG1 THR   409      48.431  47.577  37.962  1.00  0.00
H
ATOM   6774  C   THR   409      49.559  44.380  37.974  1.00  0.00
C
ATOM   6775  O   THR   409      49.780  43.942  36.847  1.00  0.00
O
ATOM   6776  N   TRP   410      48.506  43.983  38.690  1.00  0.00
N
ATOM   6777  H   TRP   410      48.333  44.415  39.588  1.00  0.00
H
ATOM   6778  CA  TRP   410      47.535  42.979  38.240  1.00  0.00
C
ATOM   6779  HA  TRP   410      47.342  43.128  37.177  1.00  0.00
H
ATOM   6780  CB  TRP   410      48.138  41.574  38.431  1.00  0.00
C
ATOM   6781  HB2 TRP   410      49.064  41.512  37.858  1.00  0.00
H
ATOM   6782  HB3 TRP   410      48.401  41.451  39.481  1.00  0.00
H
ATOM   6783  CG  TRP   410      47.283  40.413  38.025  1.00  0.00
C
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ATOM   6784  CD1 TRP   410      46.961  40.069  36.757  1.00  0.00
C
ATOM   6785  HD1 TRP   410      47.282  40.609  35.869  1.00  0.00
H
ATOM   6786  NE1 TRP   410      46.148  38.954  36.767  1.00  0.00
N
ATOM   6787  HE1 TRP   410      45.671  38.602  35.947  1.00  0.00
H
ATOM   6788  CE2 TRP   410      45.921  38.502  38.054  1.00  0.00
C
ATOM   6789  CZ2 TRP   410      45.188  37.427  38.581  1.00  0.00
C
ATOM   6790  HZ2 TRP   410      44.661  36.751  37.922  1.00  0.00
H
ATOM   6791  CH2 TRP   410      45.133  37.251  39.972  1.00  0.00
C
ATOM   6792  HH2 TRP   410      44.567  36.433  40.396  1.00  0.00
H
ATOM   6793  CZ3 TRP   410      45.803  38.155  40.820  1.00  0.00
C
ATOM   6794  HZ3 TRP   410      45.752  38.022  41.892  1.00  0.00
H
ATOM   6795  CE3 TRP   410      46.534  39.230  40.280  1.00  0.00
C
ATOM   6796  HE3 TRP   410      47.035  39.922  40.940  1.00  0.00
H
ATOM   6797  CD2 TRP   410      46.619  39.427  38.883  1.00  0.00
C
ATOM   6798  C   TRP   410      46.203  43.120  38.992  1.00  0.00
C
ATOM   6799  O   TRP   410      46.164  43.640  40.110  1.00  0.00
O
ATOM   6800  N   ILE   411      45.125  42.635  38.373  1.00  0.00
N
ATOM   6801  H   ILE   411      45.279  42.132  37.509  1.00  0.00
H
ATOM   6802  CA  ILE   411      43.758  42.541  38.904  1.00  0.00
C
ATOM   6803  HA  ILE   411      43.770  42.762  39.968  1.00  0.00
H
ATOM   6804  CB  ILE   411      42.830  43.559  38.191  1.00  0.00
C
ATOM   6805  HB  ILE   411      42.879  43.344  37.122  1.00  0.00
H
ATOM   6806  CG2 ILE   411      41.351  43.438  38.597  1.00  0.00
C
ATOM   6807 HG21 ILE   411      41.219  43.624  39.654  1.00  0.00
H
ATOM   6808 HG22 ILE   411      40.758  44.162  38.037  1.00  0.00
H
ATOM   6809 HG23 ILE   411      40.964  42.446  38.372  1.00  0.00
H
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ATOM   6810  CG1 ILE   411      43.288  45.024  38.365  1.00  0.00
C
ATOM   6811 HG12 ILE   411      44.302  45.111  37.988  1.00  0.00
H
ATOM   6812 HG13 ILE   411      42.661  45.664  37.743  1.00  0.00
H
ATOM   6813  CD1 ILE   411      43.276  45.592  39.789  1.00  0.00
C
ATOM   6814 HD11 ILE   411      43.857  44.967  40.467  1.00  0.00
H
ATOM   6815 HD12 ILE   411      43.717  46.586  39.767  1.00  0.00
H
ATOM   6816 HD13 ILE   411      42.255  45.679  40.151  1.00  0.00
H
ATOM   6817  C   ILE   411      43.284  41.092  38.662  1.00  0.00
C
ATOM   6818  O   ILE   411      43.598  40.567  37.589  1.00  0.00
O
ATOM   6819  N   PRO   412      42.545  40.449  39.593  1.00  0.00
N
ATOM   6820  CD  PRO   412      42.325  40.878  40.968  1.00  0.00
C
ATOM   6821  HD2 PRO   412      41.448  41.525  41.012  1.00  0.00
H
ATOM   6822  HD3 PRO   412      43.195  41.380  41.391  1.00  0.00
H
ATOM   6823  CG  PRO   412      42.059  39.597  41.750  1.00  0.00
C
ATOM   6824  HG2 PRO   412      41.483  39.783  42.656  1.00  0.00
H
ATOM   6825  HG3 PRO   412      43.005  39.105  41.986  1.00  0.00
H
ATOM   6826  CB  PRO   412      41.283  38.766  40.734  1.00  0.00
C
ATOM   6827  HB2 PRO   412      40.239  39.090  40.729  1.00  0.00
H
ATOM   6828  HB3 PRO   412      41.350  37.700  40.951  1.00  0.00
H
ATOM   6829  CA  PRO   412      41.952  39.115  39.396  1.00  0.00
C
ATOM   6830  HA  PRO   412      42.753  38.404  39.206  1.00  0.00
H
ATOM   6831  C   PRO   412      40.954  39.037  38.227  1.00  0.00
C
ATOM   6832  O   PRO   412      40.825  39.969  37.442  1.00  0.00
O
ATOM   6833  N   GLU   413      40.216  37.930  38.097  1.00  0.00
N
ATOM   6834  H   GLU   413      40.300  37.197  38.782  1.00  0.00
H
ATOM   6835  CA  GLU   413      39.141  37.819  37.100  1.00  0.00
C
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ATOM   6836  HA  GLU   413      39.586  37.869  36.105  1.00  0.00
H
ATOM   6837  CB  GLU   413      38.447  36.460  37.247  1.00  0.00
C
ATOM   6838  HB2 GLU   413      39.215  35.687  37.289  1.00  0.00
H
ATOM   6839  HB3 GLU   413      37.878  36.443  38.179  1.00  0.00
H
ATOM   6840  CG  GLU   413      37.515  36.150  36.069  1.00  0.00
C
ATOM   6841  HG2 GLU   413      36.798  36.964  35.952  1.00  0.00
H
ATOM   6842  HG3 GLU   413      38.115  36.088  35.158  1.00  0.00
H
ATOM   6843  CD  GLU   413      36.758  34.830  36.269  1.00  0.00
C
ATOM   6844  OE1 GLU   413      37.166  33.993  37.108  1.00  0.00
O
ATOM   6845  OE2 GLU   413      35.748  34.592  35.570  1.00  0.00
O
ATOM   6846  C   GLU   413      38.143  38.983  37.246  1.00  0.00
C
ATOM   6847  O   GLU   413      37.555  39.185  38.316  1.00  0.00
O
ATOM   6848  N   TRP   414      38.000  39.782  36.184  1.00  0.00
N
ATOM   6849  H   TRP   414      38.451  39.543  35.317  1.00  0.00
H
ATOM   6850  CA  TRP   414      37.212  41.006  36.212  1.00  0.00
C
ATOM   6851  HA  TRP   414      36.405  40.832  36.917  1.00  0.00
H
ATOM   6852  CB  TRP   414      38.062  42.187  36.721  1.00  0.00
C
ATOM   6853  HB2 TRP   414      37.370  42.950  37.075  1.00  0.00
H
ATOM   6854  HB3 TRP   414      38.638  41.858  37.587  1.00  0.00
H
ATOM   6855  CG  TRP   414      38.992  42.864  35.752  1.00  0.00
C
ATOM   6856  CD1 TRP   414      40.303  42.593  35.565  1.00  0.00
C
ATOM   6857  HD1 TRP   414      40.853  41.829  36.100  1.00  0.00
H
ATOM   6858  NE1 TRP   414      40.859  43.483  34.675  1.00  0.00
N
ATOM   6859  HE1 TRP   414      41.853  43.540  34.500  1.00  0.00
H
ATOM   6860  CE2 TRP   414      39.913  44.371  34.211  1.00  0.00
C
ATOM   6861  CZ2 TRP   414      39.968  45.431  33.300  1.00  0.00
C
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ATOM   6862  HZ2 TRP   414      40.902  45.692  32.836  1.00  0.00
H
ATOM   6863  CH2 TRP   414      38.798  46.143  33.006  1.00  0.00
C
ATOM   6864  HH2 TRP   414      38.820  46.984  32.329  1.00  0.00
H
ATOM   6865  CZ3 TRP   414      37.589  45.789  33.632  1.00  0.00
C
ATOM   6866  HZ3 TRP   414      36.693  46.357  33.424  1.00  0.00
H
ATOM   6867  CE3 TRP   414      37.550  44.732  34.556  1.00  0.00
C
ATOM   6868  HE3 TRP   414      36.625  44.491  35.057  1.00  0.00
H
ATOM   6869  CD2 TRP   414      38.708  43.988  34.863  1.00  0.00
C
ATOM   6870  C   TRP   414      36.573  41.337  34.864  1.00  0.00
C
ATOM   6871  O   TRP   414      37.223  41.251  33.818  1.00  0.00
O
ATOM   6872  N   GLU   415      35.337  41.826  34.907  1.00  0.00
N
ATOM   6873  H   GLU   415      34.903  41.905  35.824  1.00  0.00
H
ATOM   6874  CA  GLU   415      34.558  42.264  33.747  1.00  0.00
C
ATOM   6875  HA  GLU   415      35.154  42.116  32.845  1.00  0.00
H
ATOM   6876  CB  GLU   415      33.284  41.412  33.601  1.00  0.00
C
ATOM   6877  HB2 GLU   415      32.775  41.321  34.562  1.00  0.00
H
ATOM   6878  HB3 GLU   415      32.610  41.934  32.921  1.00  0.00
H
ATOM   6879  CG  GLU   415      33.532  40.019  32.997  1.00  0.00
C
ATOM   6880  HG2 GLU   415      32.567  39.614  32.685  1.00  0.00
H
ATOM   6881  HG3 GLU   415      34.139  40.127  32.094  1.00  0.00
H
ATOM   6882  CD  GLU   415      34.181  39.019  33.965  1.00  0.00
C
ATOM   6883  OE1 GLU   415      33.443  38.506  34.842  1.00  0.00
O
ATOM   6884  OE2 GLU   415      35.377  38.711  33.782  1.00  0.00
O
ATOM   6885  C   GLU   415      34.227  43.766  33.824  1.00  0.00
C
ATOM   6886  O   GLU   415      34.044  44.339  34.903  1.00  0.00
O
ATOM   6887  N   PHE   416      34.147  44.419  32.661  1.00  0.00
N
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ATOM   6888  H   PHE   416      34.233  43.897  31.805  1.00  0.00
H
ATOM   6889  CA  PHE   416      33.750  45.825  32.563  1.00  0.00
C
ATOM   6890  HA  PHE   416      34.264  46.383  33.345  1.00  0.00
H
ATOM   6891  CB  PHE   416      34.185  46.407  31.205  1.00  0.00
C
ATOM   6892  HB2 PHE   416      35.271  46.503  31.193  1.00  0.00
H
ATOM   6893  HB3 PHE   416      33.901  45.702  30.421  1.00  0.00
H
ATOM   6894  CG  PHE   416      33.570  47.761  30.885  1.00  0.00
C
ATOM   6895  CD1 PHE   416      33.732  48.839  31.775  1.00  0.00
C
ATOM   6896  HD1 PHE   416      34.326  48.715  32.666  1.00  0.00
H
ATOM   6897  CE1 PHE   416      33.092  50.065  31.534  1.00  0.00
C
ATOM   6898  HE1 PHE   416      33.201  50.873  32.242  1.00  0.00
H
ATOM   6899  CZ  PHE   416      32.286  50.223  30.396  1.00  0.00
C
ATOM   6900  HZ  PHE   416      31.793  51.167  30.214  1.00  0.00
H
ATOM   6901  CE2 PHE   416      32.128  49.154  29.494  1.00  0.00
C
ATOM   6902  HE2 PHE   416      31.512  49.266  28.614  1.00  0.00
H
ATOM   6903  CD2 PHE   416      32.771  47.928  29.738  1.00  0.00
C
ATOM   6904  HD2 PHE   416      32.642  47.109  29.044  1.00  0.00
H
ATOM   6905  C   PHE   416      32.240  45.990  32.782  1.00  0.00
C
ATOM   6906  O   PHE   416      31.439  45.252  32.207  1.00  0.00
O
ATOM   6907  N   VAL   417      31.852  47.005  33.558  1.00  0.00
N
ATOM   6908  H   VAL   417      32.572  47.555  34.015  1.00  0.00
H
ATOM   6909  CA  VAL   417      30.459  47.440  33.726  1.00  0.00
C
ATOM   6910  HA  VAL   417      29.840  46.884  33.022  1.00  0.00
H
ATOM   6911  CB  VAL   417      29.938  47.085  35.135  1.00  0.00
C
ATOM   6912  HB  VAL   417      29.928  45.997  35.210  1.00  0.00
H
ATOM   6913  CG1 VAL   417      30.822  47.600  36.279  1.00  0.00
C
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ATOM   6914 HG11 VAL   417      30.960  48.676  36.214  1.00  0.00
H
ATOM   6915 HG12 VAL   417      30.361  47.365  37.239  1.00  0.00
H
ATOM   6916 HG13 VAL   417      31.793  47.115  36.233  1.00  0.00
H
ATOM   6917  CG2 VAL   417      28.496  47.560  35.335  1.00  0.00
C
ATOM   6918 HG21 VAL   417      27.851  47.133  34.567  1.00  0.00
H
ATOM   6919 HG22 VAL   417      28.139  47.230  36.312  1.00  0.00
H
ATOM   6920 HG23 VAL   417      28.439  48.647  35.299  1.00  0.00
H
ATOM   6921  C   VAL   417      30.314  48.923  33.368  1.00  0.00
C
ATOM   6922  O   VAL   417      30.992  49.782  33.930  1.00  0.00
O
ATOM   6923  N   ASN   418      29.413  49.247  32.435  1.00  0.00
N
ATOM   6924  H   ASN   418      28.873  48.512  32.006  1.00  0.00
H
ATOM   6925  CA  ASN   418      29.159  50.632  32.021  1.00  0.00
C
ATOM   6926  HA  ASN   418      30.101  51.179  32.108  1.00  0.00
H
ATOM   6927  CB  ASN   418      28.755  50.687  30.533  1.00  0.00
C
ATOM   6928  HB2 ASN   418      29.379  50.000  29.963  1.00  0.00
H
ATOM   6929  HB3 ASN   418      27.715  50.388  30.409  1.00  0.00
H
ATOM   6930  CG  ASN   418      28.935  52.083  29.956  1.00  0.00
C
ATOM   6931  OD1 ASN   418      29.001  53.079  30.653  1.00  0.00
O
ATOM   6932  ND2 ASN   418      29.072  52.206  28.657  1.00  0.00
N
ATOM   6933 HD21 ASN   418      29.210  53.139  28.310  1.00  0.00
H
ATOM   6934 HD22 ASN   418      29.040  51.404  28.052  1.00  0.00
H
ATOM   6935  C   ASN   418      28.180  51.326  32.987  1.00  0.00
C
ATOM   6936  O   ASN   418      27.003  51.535  32.675  1.00  0.00
O
ATOM   6937  N   THR   419      28.689  51.646  34.179  1.00  0.00
N
ATOM   6938  H   THR   419      29.650  51.373  34.358  1.00  0.00
H
ATOM   6939  CA  THR   419      28.006  52.404  35.238  1.00  0.00
C
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ATOM   6940  HA  THR   419      27.020  52.701  34.884  1.00  0.00
H
ATOM   6941  CB  THR   419      27.723  51.504  36.456  1.00  0.00
C
ATOM   6942  HB  THR   419      27.117  50.667  36.106  1.00  0.00
H
ATOM   6943  CG2 THR   419      28.933  50.912  37.182  1.00  0.00
C
ATOM   6944 HG21 THR   419      29.429  51.671  37.785  1.00  0.00
H
ATOM   6945 HG22 THR   419      28.606  50.101  37.834  1.00  0.00
H
ATOM   6946 HG23 THR   419      29.639  50.515  36.459  1.00  0.00
H
ATOM   6947  OG1 THR   419      26.963  52.216  37.395  1.00  0.00
O
ATOM   6948  HG1 THR   419      26.876  51.659  38.173  1.00  0.00
H
ATOM   6949  C   THR   419      28.797  53.690  35.546  1.00  0.00
C
ATOM   6950  O   THR   419      29.781  53.656  36.285  1.00  0.00
O
ATOM   6951  N   PRO   420      28.466  54.827  34.896  1.00  0.00
N
ATOM   6952  CD  PRO   420      27.565  54.935  33.756  1.00  0.00
C
ATOM   6953  HD2 PRO   420      26.539  55.059  34.109  1.00  0.00
H
ATOM   6954  HD3 PRO   420      27.633  54.066  33.100  1.00  0.00
H
ATOM   6955  CG  PRO   420      28.016  56.181  32.995  1.00  0.00
C
ATOM   6956  HG2 PRO   420      27.196  56.635  32.438  1.00  0.00
H
ATOM   6957  HG3 PRO   420      28.847  55.932  32.332  1.00  0.00
H
ATOM   6958  CB  PRO   420      28.511  57.086  34.120  1.00  0.00
C
ATOM   6959  HB2 PRO   420      27.655  57.570  34.597  1.00  0.00
H
ATOM   6960  HB3 PRO   420      29.219  57.833  33.759  1.00  0.00
H
ATOM   6961  CA  PRO   420      29.168  56.098  35.091  1.00  0.00
C
ATOM   6962  HA  PRO   420      30.199  55.939  34.786  1.00  0.00
H
ATOM   6963  C   PRO   420      29.115  56.619  36.543  1.00  0.00
C
ATOM   6964  O   PRO   420      28.080  56.473  37.193  1.00  0.00
O
ATOM   6965  N   PRO   421      30.165  57.308  37.041  1.00  0.00
N
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ATOM   6966  CD  PRO   421      30.177  57.820  38.404  1.00  0.00
C
ATOM   6967  HD2 PRO   421      29.929  57.036  39.121  1.00  0.00
H
ATOM   6968  HD3 PRO   421      29.468  58.645  38.489  1.00  0.00
H
ATOM   6969  CG  PRO   421      31.596  58.324  38.639  1.00  0.00
C
ATOM   6970  HG2 PRO   421      32.213  57.484  38.946  1.00  0.00
H
ATOM   6971  HG3 PRO   421      31.633  59.127  39.377  1.00  0.00
H
ATOM   6972  CB  PRO   421      32.026  58.783  37.247  1.00  0.00
C
ATOM   6973  HB2 PRO   421      33.113  58.811  37.150  1.00  0.00
H
ATOM   6974  HB3 PRO   421      31.597  59.764  37.035  1.00  0.00
H
ATOM   6975  CA  PRO   421      31.388  57.723  36.340  1.00  0.00
C
ATOM   6976  HA  PRO   421      31.128  58.185  35.388  1.00  0.00
H
ATOM   6977  C   PRO   421      32.376  56.572  36.082  1.00  0.00
C
ATOM   6978  O   PRO   421      32.597  55.718  36.937  1.00  0.00
O
ATOM   6979  N   LEU   422      33.017  56.590  34.909  1.00  0.00
N
ATOM   6980  H   LEU   422      32.874  57.374  34.294  1.00  0.00
H
ATOM   6981  CA  LEU   422      33.996  55.577  34.499  1.00  0.00
C
ATOM   6982  HA  LEU   422      33.844  54.682  35.106  1.00  0.00
H
ATOM   6983  CB  LEU   422      33.800  55.177  33.024  1.00  0.00
C
ATOM   6984  HB2 LEU   422      34.077  56.027  32.396  1.00  0.00
H
ATOM   6985  HB3 LEU   422      34.496  54.364  32.807  1.00  0.00
H
ATOM   6986  CG  LEU   422      32.384  54.724  32.625  1.00  0.00
C
ATOM   6987  HG  LEU   422      31.704  55.574  32.693  1.00  0.00
H
ATOM   6988  CD1 LEU   422      32.416  54.241  31.174  1.00  0.00
C
ATOM   6989 HD11 LEU   422      33.049  53.359  31.086  1.00  0.00
H
ATOM   6990 HD12 LEU   422      31.405  53.995  30.852  1.00  0.00
H
ATOM   6991 HD13 LEU   422      32.798  55.034  30.531  1.00  0.00
H
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ATOM   6992  CD2 LEU   422      31.841  53.589  33.494  1.00  0.00
C
ATOM   6993 HD21 LEU   422      31.733  53.925  34.524  1.00  0.00
H
ATOM   6994 HD22 LEU   422      30.858  53.291  33.131  1.00  0.00
H
ATOM   6995 HD23 LEU   422      32.516  52.736  33.475  1.00  0.00
H
ATOM   6996  C   LEU   422      35.440  56.038  34.741  1.00  0.00
C
ATOM   6997  O   LEU   422      35.770  57.217  34.604  1.00  0.00
O
ATOM   6998  N   VAL   423      36.314  55.080  35.035  1.00  0.00
N
ATOM   6999  H   VAL   423      35.957  54.132  35.095  1.00  0.00
H
ATOM   7000  CA  VAL   423      37.755  55.275  35.206  1.00  0.00
C
ATOM   7001  HA  VAL   423      37.923  56.250  35.669  1.00  0.00
H
ATOM   7002  CB  VAL   423      38.337  54.205  36.141  1.00  0.00
C
ATOM   7003  HB  VAL   423      38.130  53.231  35.714  1.00  0.00
H
ATOM   7004  CG1 VAL   423      39.857  54.348  36.286  1.00  0.00
C
ATOM   7005 HG11 VAL   423      40.123  55.383  36.480  1.00  0.00
H
ATOM   7006 HG12 VAL   423      40.224  53.721  37.097  1.00  0.00
H
ATOM   7007 HG13 VAL   423      40.337  54.031  35.362  1.00  0.00
H
ATOM   7008  CG2 VAL   423      37.679  54.265  37.522  1.00  0.00
C
ATOM   7009 HG21 VAL   423      36.625  54.001  37.445  1.00  0.00
H
ATOM   7010 HG22 VAL   423      38.158  53.551  38.192  1.00  0.00
H
ATOM   7011 HG23 VAL   423      37.763  55.274  37.926  1.00  0.00
H
ATOM   7012  C   VAL   423      38.463  55.249  33.852  1.00  0.00
C
ATOM   7013  O   VAL   423      38.328  54.301  33.071  1.00  0.00
O
ATOM   7014  N   LYS   424      39.275  56.277  33.602  1.00  0.00
N
ATOM   7015  H   LYS   424      39.346  57.007  34.301  1.00  0.00
H
ATOM   7016  CA  LYS   424      40.139  56.413  32.427  1.00  0.00
C
ATOM   7017  HA  LYS   424      40.425  55.427  32.083  1.00  0.00
H
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ATOM   7018  CB  LYS   424      39.371  57.092  31.281  1.00  0.00
C
ATOM   7019  HB2 LYS   424      39.996  57.092  30.386  1.00  0.00
H
ATOM   7020  HB3 LYS   424      38.484  56.493  31.066  1.00  0.00
H
ATOM   7021  CG  LYS   424      38.943  58.538  31.585  1.00  0.00
C
ATOM   7022  HG2 LYS   424      38.421  58.580  32.542  1.00  0.00
H
ATOM   7023  HG3 LYS   424      39.828  59.174  31.634  1.00  0.00
H
ATOM   7024  CD  LYS   424      37.998  59.040  30.487  1.00  0.00
C
ATOM   7025  HD2 LYS   424      38.476  58.946  29.510  1.00  0.00
H
ATOM   7026  HD3 LYS   424      37.101  58.418  30.489  1.00  0.00
H
ATOM   7027  CE  LYS   424      37.574  60.492  30.718  1.00  0.00
C
ATOM   7028  HE2 LYS   424      36.729  60.705  30.056  1.00  0.00
H
ATOM   7029  HE3 LYS   424      37.236  60.620  31.751  1.00  0.00
H
ATOM   7030  NZ  LYS   424      38.664  61.442  30.405  1.00  0.00
N
ATOM   7031  HZ1 LYS   424      39.006  61.276  29.465  1.00  0.00
H
ATOM   7032  HZ2 LYS   424      38.284  62.386  30.405  1.00  0.00
H
ATOM   7033  HZ3 LYS   424      39.413  61.385  31.082  1.00  0.00
H
ATOM   7034  C   LYS   424      41.422  57.154  32.789  1.00  0.00
C
ATOM   7035  O   LYS   424      41.423  57.962  33.711  1.00  0.00
O
ATOM   7036  N   LEU   425      42.491  56.904  32.039  1.00  0.00
N
ATOM   7037  H   LEU   425      42.397  56.253  31.277  1.00  0.00
H
ATOM   7038  CA  LEU   425      43.638  57.810  32.014  1.00  0.00
C
ATOM   7039  HA  LEU   425      43.905  58.087  33.037  1.00  0.00
H
ATOM   7040  CB  LEU   425      44.847  57.116  31.351  1.00  0.00
C
ATOM   7041  HB2 LEU   425      44.574  56.847  30.329  1.00  0.00
H
ATOM   7042  HB3 LEU   425      45.675  57.825  31.297  1.00  0.00
H
ATOM   7043  CG  LEU   425      45.328  55.848  32.090  1.00  0.00
C
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ATOM   7044  HG  LEU   425      44.486  55.173  32.238  1.00  0.00
H
ATOM   7045  CD1 LEU   425      46.366  55.107  31.252  1.00  0.00
C
ATOM   7046 HD11 LEU   425      47.253  55.724  31.113  1.00  0.00
H
ATOM   7047 HD12 LEU   425      46.655  54.183  31.748  1.00  0.00
H
ATOM   7048 HD13 LEU   425      45.949  54.857  30.276  1.00  0.00
H
ATOM   7049  CD2 LEU   425      45.938  56.166  33.458  1.00  0.00
C
ATOM   7050 HD21 LEU   425      45.198  56.627  34.109  1.00  0.00
H
ATOM   7051 HD22 LEU   425      46.283  55.246  33.929  1.00  0.00
H
ATOM   7052 HD23 LEU   425      46.788  56.839  33.339  1.00  0.00
H
ATOM   7053  C   LEU   425      43.197  59.086  31.280  1.00  0.00
C
ATOM   7054  O   LEU   425      42.516  59.014  30.255  1.00  0.00
O
ATOM   7055  N   TRP   426      43.518  60.254  31.831  1.00  0.00
N
ATOM   7056  H   TRP   426      44.037  60.259  32.695  1.00  0.00
H
ATOM   7057  CA  TRP   426      42.983  61.529  31.339  1.00  0.00
C
ATOM   7058  HA  TRP   426      41.989  61.357  30.930  1.00  0.00
H
ATOM   7059  CB  TRP   426      42.816  62.481  32.524  1.00  0.00
C
ATOM   7060  HB2 TRP   426      43.762  62.567  33.063  1.00  0.00
H
ATOM   7061  HB3 TRP   426      42.562  63.463  32.136  1.00  0.00
H
ATOM   7062  CG  TRP   426      41.722  62.077  33.461  1.00  0.00
C
ATOM   7063  CD1 TRP   426      41.817  61.185  34.473  1.00  0.00
C
ATOM   7064  HD1 TRP   426      42.718  60.653  34.771  1.00  0.00
H
ATOM   7065  NE1 TRP   426      40.589  61.013  35.069  1.00  0.00
N
ATOM   7066  HE1 TRP   426      40.457  60.392  35.863  1.00  0.00
H
ATOM   7067  CE2 TRP   426      39.615  61.768  34.445  1.00  0.00
C
ATOM   7068  CZ2 TRP   426      38.232  61.905  34.633  1.00  0.00
C
ATOM   7069  HZ2 TRP   426      37.734  61.337  35.405  1.00  0.00
H
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ATOM   7070  CH2 TRP   426      37.512  62.798  33.823  1.00  0.00
C
ATOM   7071  HH2 TRP   426      36.447  62.928  33.968  1.00  0.00
H
ATOM   7072  CZ3 TRP   426      38.183  63.552  32.839  1.00  0.00
C
ATOM   7073  HZ3 TRP   426      37.628  64.264  32.242  1.00  0.00
H
ATOM   7074  CE3 TRP   426      39.572  63.401  32.652  1.00  0.00
C
ATOM   7075  HE3 TRP   426      40.084  64.004  31.914  1.00  0.00
H
ATOM   7076  CD2 TRP   426      40.319  62.494  33.440  1.00  0.00
C
ATOM   7077  C   TRP   426      43.797  62.140  30.192  1.00  0.00
C
ATOM   7078  O   TRP   426      43.281  62.980  29.462  1.00  0.00
O
ATOM   7079  N   TYR   427      45.045  61.703  30.042  1.00  0.00
N
ATOM   7080  H   TYR   427      45.382  61.015  30.701  1.00  0.00
H
ATOM   7081  CA  TYR   427      45.998  62.063  28.995  1.00  0.00
C
ATOM   7082  HA  TYR   427      45.485  62.099  28.033  1.00  0.00
H
ATOM   7083  CB  TYR   427      46.625  63.445  29.277  1.00  0.00
C
ATOM   7084  HB2 TYR   427      47.328  63.689  28.478  1.00  0.00
H
ATOM   7085  HB3 TYR   427      45.838  64.201  29.240  1.00  0.00
H
ATOM   7086  CG  TYR   427      47.333  63.541  30.616  1.00  0.00
C
ATOM   7087  CD1 TYR   427      46.569  63.698  31.787  1.00  0.00
C
ATOM   7088  HD1 TYR   427      45.501  63.820  31.714  1.00  0.00
H
ATOM   7089  CE1 TYR   427      47.182  63.658  33.048  1.00  0.00
C
ATOM   7090  HE1 TYR   427      46.589  63.747  33.945  1.00  0.00
H
ATOM   7091  CZ  TYR   427      48.575  63.484  33.141  1.00  0.00
C
ATOM   7092  OH  TYR   427      49.139  63.388  34.369  1.00  0.00
O
ATOM   7093  HH  TYR   427      48.451  63.361  35.050  1.00  0.00
H
ATOM   7094  CE2 TYR   427      49.356  63.380  31.970  1.00  0.00
C
ATOM   7095  HE2 TYR   427      50.425  63.260  32.055  1.00  0.00
H
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ATOM   7096  CD2 TYR   427      48.734  63.404  30.705  1.00  0.00
C
ATOM   7097  HD2 TYR   427      49.325  63.298  29.806  1.00  0.00
H
ATOM   7098  C   TYR   427      47.080  60.973  28.929  1.00  0.00
C
ATOM   7099  O   TYR   427      47.277  60.210  29.883  1.00  0.00
O
ATOM   7100  N   GLN   428      47.796  60.917  27.812  1.00  0.00
N
ATOM   7101  H   GLN   428      47.625  61.607  27.091  1.00  0.00
H
ATOM   7102  CA  GLN   428      48.955  60.052  27.600  1.00  0.00
C
ATOM   7103  HA  GLN   428      49.252  59.598  28.547  1.00  0.00
H
ATOM   7104  CB  GLN   428      48.563  58.937  26.609  1.00  0.00
C
ATOM   7105  HB2 GLN   428      47.709  58.393  27.018  1.00  0.00
H
ATOM   7106  HB3 GLN   428      48.250  59.395  25.670  1.00  0.00
H
ATOM   7107  CG  GLN   428      49.676  57.923  26.304  1.00  0.00
C
ATOM   7108  HG2 GLN   428      49.282  57.155  25.642  1.00  0.00
H
ATOM   7109  HG3 GLN   428      50.482  58.427  25.776  1.00  0.00
H
ATOM   7110  CD  GLN   428      50.211  57.237  27.552  1.00  0.00
C
ATOM   7111  OE1 GLN   428      49.458  56.730  28.369  1.00  0.00
O
ATOM   7112  NE2 GLN   428      51.510  57.244  27.765  1.00  0.00
N
ATOM   7113 HE21 GLN   428      51.842  56.721  28.574  1.00  0.00
H
ATOM   7114 HE22 GLN   428      52.146  57.593  27.061  1.00  0.00
H
ATOM   7115  C   GLN   428      50.110  60.929  27.105  1.00  0.00
C
ATOM   7116  O   GLN   428      49.875  61.911  26.401  1.00  0.00
O
ATOM   7117  N   LEU   429      51.347  60.597  27.477  1.00  0.00
N
ATOM   7118  H   LEU   429      51.486  59.759  28.021  1.00  0.00
H
ATOM   7119  CA  LEU   429      52.528  61.258  26.915  1.00  0.00
C
ATOM   7120  HA  LEU   429      52.272  62.287  26.654  1.00  0.00
H
ATOM   7121  CB  LEU   429      53.683  61.313  27.934  1.00  0.00
C
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ATOM   7122  HB2 LEU   429      54.078  60.303  28.063  1.00  0.00
H
ATOM   7123  HB3 LEU   429      54.474  61.929  27.502  1.00  0.00
H
ATOM   7124  CG  LEU   429      53.317  61.874  29.323  1.00  0.00
C
ATOM   7125  HG  LEU   429      52.637  61.180  29.818  1.00  0.00
H
ATOM   7126  CD1 LEU   429      54.582  61.982  30.174  1.00  0.00
C
ATOM   7127 HD11 LEU   429      55.229  62.766  29.784  1.00  0.00
H
ATOM   7128 HD12 LEU   429      54.307  62.209  31.201  1.00  0.00
H
ATOM   7129 HD13 LEU   429      55.115  61.033  30.163  1.00  0.00
H
ATOM   7130  CD2 LEU   429      52.652  63.252  29.270  1.00  0.00
C
ATOM   7131 HD21 LEU   429      51.687  63.177  28.771  1.00  0.00
H
ATOM   7132 HD22 LEU   429      52.488  63.623  30.281  1.00  0.00
H
ATOM   7133 HD23 LEU   429      53.281  63.953  28.720  1.00  0.00
H
ATOM   7134  C   LEU   429      52.931  60.549  25.616  1.00  0.00
C
ATOM   7135  O   LEU   429      52.899  59.316  25.554  1.00  0.00
O
ATOM   7136  N   GLU   430      53.306  61.318  24.595  1.00  0.00
N
ATOM   7137  H   GLU   430      53.369  62.320  24.741  1.00  0.00
H
ATOM   7138  CA  GLU   430      53.735  60.770  23.306  1.00  0.00
C
ATOM   7139  HA  GLU   430      52.952  60.099  22.948  1.00  0.00
H
ATOM   7140  CB  GLU   430      53.939  61.877  22.260  1.00  0.00
C
ATOM   7141  HB2 GLU   430      54.545  62.673  22.696  1.00  0.00
H
ATOM   7142  HB3 GLU   430      54.487  61.466  21.412  1.00  0.00
H
ATOM   7143  CG  GLU   430      52.631  62.478  21.730  1.00  0.00
C
ATOM   7144  HG2 GLU   430      52.038  62.863  22.563  1.00  0.00
H
ATOM   7145  HG3 GLU   430      52.891  63.321  21.092  1.00  0.00
H
ATOM   7146  CD  GLU   430      51.809  61.481  20.899  1.00  0.00
C
ATOM   7147  OE1 GLU   430      52.121  61.291  19.702  1.00  0.00
O
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ATOM   7148  OE2 GLU   430      50.820  60.921  21.420  1.00  0.00
O
ATOM   7149  C   GLU   430      55.018  59.944  23.464  1.00  0.00
C
ATOM   7150  O   GLU   430      55.899  60.256  24.268  1.00  0.00
O
ATOM   7151  N   LYS   431      55.131  58.871  22.676  1.00  0.00
N
ATOM   7152  H   LYS   431      54.369  58.671  22.044  1.00  0.00
H
ATOM   7153  CA  LYS   431      56.237  57.903  22.784  1.00  0.00
C
ATOM   7154  HA  LYS   431      56.485  57.793  23.842  1.00  0.00
H
ATOM   7155  CB  LYS   431      55.776  56.530  22.256  1.00  0.00
C
ATOM   7156  HB2 LYS   431      55.654  56.582  21.172  1.00  0.00
H
ATOM   7157  HB3 LYS   431      56.555  55.798  22.477  1.00  0.00
H
ATOM   7158  CG  LYS   431      54.443  56.081  22.891  1.00  0.00
C
ATOM   7159  HG2 LYS   431      54.509  56.157  23.978  1.00  0.00
H
ATOM   7160  HG3 LYS   431      53.652  56.753  22.554  1.00  0.00
H
ATOM   7161  CD  LYS   431      54.015  54.660  22.512  1.00  0.00
C
ATOM   7162  HD2 LYS   431      52.975  54.531  22.818  1.00  0.00
H
ATOM   7163  HD3 LYS   431      54.072  54.546  21.430  1.00  0.00
H
ATOM   7164  CE  LYS   431      54.877  53.600  23.206  1.00  0.00
C
ATOM   7165  HE2 LYS   431      55.887  53.625  22.789  1.00  0.00
H
ATOM   7166  HE3 LYS   431      54.932  53.842  24.273  1.00  0.00
H
ATOM   7167  NZ  LYS   431      54.283  52.252  23.075  1.00  0.00
N
ATOM   7168  HZ1 LYS   431      53.940  52.065  22.143  1.00  0.00
H
ATOM   7169  HZ2 LYS   431      54.932  51.542  23.378  1.00  0.00
H
ATOM   7170  HZ3 LYS   431      53.529  52.175  23.771  1.00  0.00
H
ATOM   7171  C   LYS   431      57.518  58.393  22.096  1.00  0.00
C
ATOM   7172  O   LYS   431      58.614  58.030  22.518  1.00  0.00
O
ATOM   7173  N   GLU   432      57.366  59.255  21.094  1.00  0.00
N
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ATOM   7174  H   GLU   432      56.426  59.581  20.928  1.00  0.00
H
ATOM   7175  CA  GLU   432      58.385  59.850  20.218  1.00  0.00
C
ATOM   7176  HA  GLU   432      59.374  59.715  20.658  1.00  0.00
H
ATOM   7177  CB  GLU   432      58.308  59.136  18.841  1.00  0.00
C
ATOM   7178  HB2 GLU   432      57.584  58.321  18.890  1.00  0.00
H
ATOM   7179  HB3 GLU   432      57.933  59.835  18.094  1.00  0.00
H
ATOM   7180  CG  GLU   432      59.607  58.530  18.291  1.00  0.00
C
ATOM   7181  HG2 GLU   432      59.361  57.945  17.405  1.00  0.00
H
ATOM   7182  HG3 GLU   432      60.264  59.325  17.950  1.00  0.00
H
ATOM   7183  CD  GLU   432      60.333  57.628  19.292  1.00  0.00
C
ATOM   7184  OE1 GLU   432      59.841  56.515  19.563  1.00  0.00
O
ATOM   7185  OE2 GLU   432      61.389  58.059  19.821  1.00  0.00
O
ATOM   7186  C   GLU   432      58.094  61.372  20.094  1.00  0.00
C
ATOM   7187  O   GLU   432      56.937  61.767  20.259  1.00  0.00
O
ATOM   7188  N   PRO   433      59.089  62.243  19.831  1.00  0.00
N
ATOM   7189  CD  PRO   433      60.498  61.933  19.656  1.00  0.00
C
ATOM   7190  HD2 PRO   433      60.650  61.059  19.035  1.00  0.00
H
ATOM   7191  HD3 PRO   433      60.965  61.765  20.625  1.00  0.00
H
ATOM   7192  CG  PRO   433      61.100  63.166  18.987  1.00  0.00
C
ATOM   7193  HG2 PRO   433      60.923  63.128  17.908  1.00  0.00
H
ATOM   7194  HG3 PRO   433      62.164  63.261  19.207  1.00  0.00
H
ATOM   7195  CB  PRO   433      60.282  64.303  19.603  1.00  0.00
C
ATOM   7196  HB2 PRO   433      60.281  65.190  18.969  1.00  0.00
H
ATOM   7197  HB3 PRO   433      60.674  64.548  20.590  1.00  0.00
H
ATOM   7198  CA  PRO   433      58.882  63.696  19.739  1.00  0.00
C
ATOM   7199  HA  PRO   433      58.433  64.060  20.663  1.00  0.00
H
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ATOM   7200  C   PRO   433      57.978  64.108  18.566  1.00  0.00
C
ATOM   7201  O   PRO   433      58.053  63.537  17.476  1.00  0.00
O
ATOM   7202  N   ILE   434      57.177  65.164  18.760  1.00  0.00
N
ATOM   7203  H   ILE   434      57.236  65.644  19.653  1.00  0.00
H
ATOM   7204  CA  ILE   434      56.262  65.691  17.740  1.00  0.00
C
ATOM   7205  HA  ILE   434      55.873  64.835  17.185  1.00  0.00
H
ATOM   7206  CB  ILE   434      55.041  66.441  18.334  1.00  0.00
C
ATOM   7207  HB  ILE   434      55.377  67.380  18.778  1.00  0.00
H
ATOM   7208  CG2 ILE   434      54.070  66.773  17.182  1.00  0.00
C
ATOM   7209 HG21 ILE   434      53.799  65.866  16.643  1.00  0.00
H
ATOM   7210 HG22 ILE   434      53.163  67.236  17.559  1.00  0.00
H
ATOM   7211 HG23 ILE   434      54.521  67.481  16.487  1.00  0.00
H
ATOM   7212  CG1 ILE   434      54.241  65.654  19.400  1.00  0.00
C
ATOM   7213 HG12 ILE   434      53.232  66.061  19.450  1.00  0.00
H
ATOM   7214 HG13 ILE   434      54.169  64.604  19.110  1.00  0.00
H
ATOM   7215  CD1 ILE   434      54.810  65.764  20.819  1.00  0.00
C
ATOM   7216 HD11 ILE   434      54.931  66.811  21.094  1.00  0.00
H
ATOM   7217 HD12 ILE   434      54.125  65.295  21.524  1.00  0.00
H
ATOM   7218 HD13 ILE   434      55.768  65.259  20.881  1.00  0.00
H
ATOM   7219  C   ILE   434      57.023  66.582  16.748  1.00  0.00
C
ATOM   7220  O   ILE   434      57.722  67.525  17.138  1.00  0.00
O
ATOM   7221  N   VAL   435      56.843  66.310  15.453  1.00  0.00
N
ATOM   7222  H   VAL   435      56.239  65.533  15.219  1.00  0.00
H
ATOM   7223  CA  VAL   435      57.424  67.089  14.347  1.00  0.00
C
ATOM   7224  HA  VAL   435      58.465  67.285  14.603  1.00  0.00
H
ATOM   7225  CB  VAL   435      57.400  66.305  13.014  1.00  0.00
C
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ATOM   7226  HB  VAL   435      56.390  66.322  12.604  1.00  0.00
H
ATOM   7227  CG1 VAL   435      58.358  66.942  11.996  1.00  0.00
C
ATOM   7228 HG11 VAL   435      59.383  66.916  12.369  1.00  0.00
H
ATOM   7229 HG12 VAL   435      58.308  66.390  11.056  1.00  0.00
H
ATOM   7230 HG13 VAL   435      58.068  67.971  11.790  1.00  0.00
H
ATOM   7231  CG2 VAL   435      57.821  64.836  13.173  1.00  0.00
C
ATOM   7232 HG21 VAL   435      57.085  64.296  13.770  1.00  0.00
H
ATOM   7233 HG22 VAL   435      57.863  64.353  12.196  1.00  0.00
H
ATOM   7234 HG23 VAL   435      58.796  64.768  13.656  1.00  0.00
H
ATOM   7235  C   VAL   435      56.687  68.427  14.184  1.00  0.00
C
ATOM   7236  O   VAL   435      55.458  68.471  14.195  1.00  0.00
O
ATOM   7237  N   GLY   436      57.429  69.525  14.009  1.00  0.00
N
ATOM   7238  H   GLY   436      58.430  69.429  13.982  1.00  0.00
H
ATOM   7239  CA  GLY   436      56.853  70.861  13.778  1.00  0.00
C
ATOM   7240  HA2 GLY   436      57.644  71.526  13.439  1.00  0.00
H
ATOM   7241  HA3 GLY   436      56.103  70.793  12.992  1.00  0.00
H
ATOM   7242  C   GLY   436      56.205  71.519  15.002  1.00  0.00
C
ATOM   7243  O   GLY   436      55.459  72.488  14.855  1.00  0.00
O
ATOM   7244  N   ALA   437      56.490  71.022  16.205  1.00  0.00
N
ATOM   7245  H   ALA   437      57.134  70.248  16.249  1.00  0.00
H
ATOM   7246  CA  ALA   437      56.025  71.568  17.480  1.00  0.00
C
ATOM   7247  HA  ALA   437      55.187  72.249  17.309  1.00  0.00
H
ATOM   7248  CB  ALA   437      55.518  70.394  18.324  1.00  0.00
C
ATOM   7249  HB1 ALA   437      56.311  69.657  18.462  1.00  0.00
H
ATOM   7250  HB2 ALA   437      55.199  70.752  19.299  1.00  0.00
H
ATOM   7251  HB3 ALA   437      54.670  69.922  17.825  1.00  0.00
H
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ATOM   7252  C   ALA   437      57.134  72.367  18.199  1.00  0.00
C
ATOM   7253  O   ALA   437      58.319  72.153  17.941  1.00  0.00
O
ATOM   7254  N   GLU   438      56.770  73.268  19.118  1.00  0.00
N
ATOM   7255  H   GLU   438      55.793  73.376  19.339  1.00  0.00
H
ATOM   7256  CA  GLU   438      57.777  73.995  19.911  1.00  0.00
C
ATOM   7257  HA  GLU   438      58.579  74.277  19.226  1.00  0.00
H
ATOM   7258  CB  GLU   438      57.238  75.299  20.542  1.00  0.00
C
ATOM   7259  HB2 GLU   438      56.244  75.141  20.961  1.00  0.00
H
ATOM   7260  HB3 GLU   438      57.917  75.610  21.337  1.00  0.00
H
ATOM   7261  CG  GLU   438      57.199  76.376  19.450  1.00  0.00
C
ATOM   7262  HG2 GLU   438      58.125  76.301  18.887  1.00  0.00
H
ATOM   7263  HG3 GLU   438      56.371  76.154  18.778  1.00  0.00
H
ATOM   7264  CD  GLU   438      57.106  77.837  19.899  1.00  0.00
C
ATOM   7265  OE1 GLU   438      56.316  78.591  19.274  1.00  0.00
O
ATOM   7266  OE2 GLU   438      57.919  78.295  20.740  1.00  0.00
O
ATOM   7267  C   GLU   438      58.438  73.081  20.941  1.00  0.00
C
ATOM   7268  O   GLU   438      57.767  72.404  21.727  1.00  0.00
O
ATOM   7269  N   THR   439      59.773  73.094  20.939  1.00  0.00
N
ATOM   7270  H   THR   439      60.252  73.633  20.224  1.00  0.00
H
ATOM   7271  CA  THR   439      60.612  72.390  21.907  1.00  0.00
C
ATOM   7272  HA  THR   439      60.026  71.611  22.378  1.00  0.00
H
ATOM   7273  CB  THR   439      61.808  71.706  21.231  1.00  0.00
C
ATOM   7274  HB  THR   439      62.459  72.462  20.789  1.00  0.00
H
ATOM   7275  CG2 THR   439      62.608  70.831  22.196  1.00  0.00
C
ATOM   7276 HG21 THR   439      61.975  70.032  22.582  1.00  0.00
H
ATOM   7277 HG22 THR   439      63.458  70.395  21.672  1.00  0.00
H
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ATOM   7278 HG23 THR   439      62.977  71.426  23.031  1.00  0.00
H
ATOM   7279  OG1 THR   439      61.344  70.839  20.219  1.00  0.00
O
ATOM   7280  HG1 THR   439      62.089  70.626  19.653  1.00  0.00
H
ATOM   7281  C   THR   439      61.037  73.370  22.989  1.00  0.00
C
ATOM   7282  O   THR   439      61.960  74.165  22.797  1.00  0.00
O
ATOM   7283  N   PHE   440      60.325  73.323  24.112  1.00  0.00
N
ATOM   7284  H   PHE   440      59.604  72.609  24.182  1.00  0.00
H
ATOM   7285  CA  PHE   440      60.617  74.088  25.317  1.00  0.00
C
ATOM   7286  HA  PHE   440      60.954  75.085  25.041  1.00  0.00
H
ATOM   7287  CB  PHE   440      59.342  74.224  26.167  1.00  0.00
C
ATOM   7288  HB2 PHE   440      58.910  73.235  26.316  1.00  0.00
H
ATOM   7289  HB3 PHE   440      59.636  74.589  27.150  1.00  0.00
H
ATOM   7290  CG  PHE   440      58.268  75.152  25.620  1.00  0.00
C
ATOM   7291  CD1 PHE   440      57.434  74.746  24.560  1.00  0.00
C
ATOM   7292  HD1 PHE   440      57.548  73.762  24.127  1.00  0.00
H
ATOM   7293  CE1 PHE   440      56.453  75.621  24.058  1.00  0.00
C
ATOM   7294  HE1 PHE   440      55.824  75.307  23.240  1.00  0.00
H
ATOM   7295  CZ  PHE   440      56.289  76.900  24.617  1.00  0.00
C
ATOM   7296  HZ  PHE   440      55.543  77.579  24.225  1.00  0.00
H
ATOM   7297  CE2 PHE   440      57.090  77.294  25.700  1.00  0.00
C
ATOM   7298  HE2 PHE   440      56.943  78.263  26.155  1.00  0.00
H
ATOM   7299  CD2 PHE   440      58.079  76.425  26.194  1.00  0.00
C
ATOM   7300  HD2 PHE   440      58.695  76.739  27.021  1.00  0.00
H
ATOM   7301  C   PHE   440      61.731  73.398  26.110  1.00  0.00
C
ATOM   7302  O   PHE   440      61.572  72.271  26.577  1.00  0.00
O
ATOM   7303  N   TYR   441      62.848  74.092  26.304  1.00  0.00
N
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ATOM   7304  H   TYR   441      62.935  75.011  25.884  1.00  0.00
H
ATOM   7305  CA  TYR   441      63.864  73.729  27.287  1.00  0.00
C
ATOM   7306  HA  TYR   441      63.820  72.662  27.500  1.00  0.00
H
ATOM   7307  CB  TYR   441      65.262  74.070  26.741  1.00  0.00
C
ATOM   7308  HB2 TYR   441      65.311  75.138  26.524  1.00  0.00
H
ATOM   7309  HB3 TYR   441      65.994  73.867  27.524  1.00  0.00
H
ATOM   7310  CG  TYR   441      65.664  73.303  25.489  1.00  0.00
C
ATOM   7311  CD1 TYR   441      65.162  73.672  24.224  1.00  0.00
C
ATOM   7312  HD1 TYR   441      64.480  74.507  24.139  1.00  0.00
H
ATOM   7313  CE1 TYR   441      65.521  72.944  23.072  1.00  0.00
C
ATOM   7314  HE1 TYR   441      65.111  73.222  22.114  1.00  0.00
H
ATOM   7315  CZ  TYR   441      66.399  71.844  23.181  1.00  0.00
C
ATOM   7316  OH  TYR   441      66.759  71.130  22.083  1.00  0.00
O
ATOM   7317  HH  TYR   441      66.337  71.451  21.285  1.00  0.00
H
ATOM   7318  CE2 TYR   441      66.921  71.487  24.441  1.00  0.00
C
ATOM   7319  HE2 TYR   441      67.577  70.633  24.516  1.00  0.00
H
ATOM   7320  CD2 TYR   441      66.558  72.219  25.587  1.00  0.00
C
ATOM   7321  HD2 TYR   441      66.947  71.935  26.554  1.00  0.00
H
ATOM   7322  C   TYR   441      63.533  74.480  28.578  1.00  0.00
C
ATOM   7323  O   TYR   441      63.352  75.702  28.532  1.00  0.00
O
ATOM   7324  N   VAL   442      63.396  73.765  29.700  1.00  0.00
N
ATOM   7325  H   VAL   442      63.520  72.757  29.671  1.00  0.00
H
ATOM   7326  CA  VAL   442      62.876  74.326  30.958  1.00  0.00
C
ATOM   7327  HA  VAL   442      62.928  75.410  30.890  1.00  0.00
H
ATOM   7328  CB  VAL   442      61.387  73.977  31.187  1.00  0.00
C
ATOM   7329  HB  VAL   442      60.960  74.770  31.793  1.00  0.00
H
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ATOM   7330  CG1 VAL   442      60.557  73.915  29.899  1.00  0.00
C
ATOM   7331 HG11 VAL   442      60.907  73.107  29.257  1.00  0.00
H
ATOM   7332 HG12 VAL   442      59.521  73.715  30.158  1.00  0.00
H
ATOM   7333 HG13 VAL   442      60.622  74.861  29.368  1.00  0.00
H
ATOM   7334  CG2 VAL   442      61.120  72.673  31.941  1.00  0.00
C
ATOM   7335 HG21 VAL   442      61.553  72.722  32.940  1.00  0.00
H
ATOM   7336 HG22 VAL   442      60.046  72.552  32.048  1.00  0.00
H
ATOM   7337 HG23 VAL   442      61.540  71.827  31.396  1.00  0.00
H
ATOM   7338  C   VAL   442      63.728  73.943  32.167  1.00  0.00
C
ATOM   7339  O   VAL   442      64.186  72.807  32.278  1.00  0.00
O
ATOM   7340  N   ASP   443      63.890  74.889  33.086  1.00  0.00
N
ATOM   7341  H   ASP   443      63.437  75.790  32.959  1.00  0.00
H
ATOM   7342  CA  ASP   443      64.582  74.717  34.364  1.00  0.00
C
ATOM   7343  HA  ASP   443      64.373  73.726  34.770  1.00  0.00
H
ATOM   7344  CB  ASP   443      66.103  74.832  34.156  1.00  0.00
C
ATOM   7345  HB2 ASP   443      66.460  74.074  33.453  1.00  0.00
H
ATOM   7346  HB3 ASP   443      66.295  75.798  33.709  1.00  0.00
H
ATOM   7347  CG  ASP   443      66.890  74.765  35.469  1.00  0.00
C
ATOM   7348  OD1 ASP   443      66.395  74.136  36.425  1.00  0.00
O
ATOM   7349  OD2 ASP   443      67.924  75.462  35.564  1.00  0.00
O
ATOM   7350  C   ASP   443      64.071  75.793  35.339  1.00  0.00
C
ATOM   7351  O   ASP   443      63.504  76.811  34.922  1.00  0.00
O
ATOM   7352  N   GLY   444      64.274  75.618  36.637  1.00  0.00
N
ATOM   7353  H   GLY   444      64.910  74.856  36.895  1.00  0.00
H
ATOM   7354  CA  GLY   444      64.164  76.686  37.592  1.00  0.00
C
ATOM   7355  HA2 GLY   444      64.483  77.612  37.121  1.00  0.00
H
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ATOM   7356  HA3 GLY   444      63.119  76.767  37.862  1.00  0.00
H
ATOM   7357  C   GLY   444      65.023  76.432  38.826  1.00  0.00
C
ATOM   7358  O   GLY   444      64.944  75.373  39.444  1.00  0.00
O
ATOM   7359  N   ALA   445      65.751  77.452  39.276  1.00  0.00
N
ATOM   7360  H   ALA   445      65.654  78.342  38.805  1.00  0.00
H
ATOM   7361  CA  ALA   445      66.621  77.369  40.446  1.00  0.00
C
ATOM   7362  HA  ALA   445      66.623  76.340  40.820  1.00  0.00
H
ATOM   7363  CB  ALA   445      68.052  77.694  40.004  1.00  0.00
C
ATOM   7364  HB1 ALA   445      68.093  78.712  39.614  1.00  0.00
H
ATOM   7365  HB2 ALA   445      68.731  77.592  40.850  1.00  0.00
H
ATOM   7366  HB3 ALA   445      68.358  76.995  39.220  1.00  0.00
H
ATOM   7367  C   ALA   445      66.139  78.277  41.591  1.00  0.00
C
ATOM   7368  O   ALA   445      65.570  79.350  41.371  1.00  0.00
O
ATOM   7369  N   ALA   446      66.415  77.873  42.831  1.00  0.00
N
ATOM   7370  H   ALA   446      66.900  76.995  42.939  1.00  0.00
H
ATOM   7371  CA  ALA   446      66.063  78.608  44.049  1.00  0.00
C
ATOM   7372  HA  ALA   446      65.846  79.644  43.790  1.00  0.00
H
ATOM   7373  CB  ALA   446      64.809  77.979  44.663  1.00  0.00
C
ATOM   7374  HB1 ALA   446      65.042  76.975  45.020  1.00  0.00
H
ATOM   7375  HB2 ALA   446      64.463  78.588  45.499  1.00  0.00
H
ATOM   7376  HB3 ALA   446      64.023  77.915  43.913  1.00  0.00
H
ATOM   7377  C   ALA   446      67.204  78.610  45.071  1.00  0.00
C
ATOM   7378  O   ALA   446      67.942  77.626  45.172  1.00  0.00
O
ATOM   7379  N   ASN   447      67.310  79.682  45.861  1.00  0.00
N
ATOM   7380  H   ASN   447      66.623  80.424  45.750  1.00  0.00
H
ATOM   7381  CA  ASN   447      68.264  79.785  46.956  1.00  0.00
C
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ATOM   7382  HA  ASN   447      69.115  79.150  46.712  1.00  0.00
H
ATOM   7383  CB  ASN   447      68.749  81.239  47.107  1.00  0.00
C
ATOM   7384  HB2 ASN   447      69.186  81.608  46.180  1.00  0.00
H
ATOM   7385  HB3 ASN   447      67.891  81.861  47.360  1.00  0.00
H
ATOM   7386  CG  ASN   447      69.771  81.341  48.225  1.00  0.00
C
ATOM   7387  OD1 ASN   447      69.558  82.013  49.213  1.00  0.00
O
ATOM   7388  ND2 ASN   447      70.847  80.596  48.168  1.00  0.00
N
ATOM   7389 HD21 ASN   447      71.343  80.439  49.049  1.00  0.00
H
ATOM   7390 HD22 ASN   447      71.100  80.069  47.357  1.00  0.00
H
ATOM   7391  C   ASN   447      67.697  79.224  48.263  1.00  0.00
C
ATOM   7392  O   ASN   447      66.631  79.621  48.728  1.00  0.00
O
ATOM   7393  N   ARG   448      68.452  78.330  48.901  1.00  0.00
N
ATOM   7394  H   ARG   448      69.359  78.108  48.514  1.00  0.00
H
ATOM   7395  CA  ARG   448      68.054  77.647  50.139  1.00  0.00
C
ATOM   7396  HA  ARG   448      66.988  77.441  50.046  1.00  0.00
H
ATOM   7397  CB  ARG   448      68.748  76.270  50.234  1.00  0.00
C
ATOM   7398  HB2 ARG   448      68.558  75.836  51.215  1.00  0.00
H
ATOM   7399  HB3 ARG   448      68.269  75.621  49.502  1.00  0.00
H
ATOM   7400  CG  ARG   448      70.264  76.254  49.953  1.00  0.00
C
ATOM   7401  HG2 ARG   448      70.476  76.789  49.029  1.00  0.00
H
ATOM   7402  HG3 ARG   448      70.798  76.742  50.763  1.00  0.00
H
ATOM   7403  CD  ARG   448      70.795  74.830  49.760  1.00  0.00
C
ATOM   7404  HD2 ARG   448      70.140  74.300  49.064  1.00  0.00
H
ATOM   7405  HD3 ARG   448      71.788  74.894  49.309  1.00  0.00
H
ATOM   7406  NE  ARG   448      70.900  74.084  51.025  1.00  0.00
N
ATOM   7407  HE  ARG   448      70.841  74.616  51.877  1.00  0.00
H
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ATOM   7408  CZ  ARG   448      71.275  72.822  51.126  1.00  0.00
C
ATOM   7409  NH1 ARG   448      71.490  72.050  50.102  1.00  0.00
N
ATOM   7410 HH11 ARG   448      71.357  72.395  49.151  1.00  0.00
H
ATOM   7411 HH12 ARG   448      71.841  71.120  50.251  1.00  0.00
H
ATOM   7412  NH2 ARG   448      71.479  72.275  52.282  1.00  0.00
N
ATOM   7413 HH21 ARG   448      71.395  72.796  53.145  1.00  0.00
H
ATOM   7414 HH22 ARG   448      71.961  71.385  52.287  1.00  0.00
H
ATOM   7415  C   ARG   448      68.134  78.521  51.401  1.00  0.00
C
ATOM   7416  O   ARG   448      67.577  78.112  52.420  1.00  0.00
O
ATOM   7417  N   GLU   449      68.684  79.733  51.315  1.00  0.00
N
ATOM   7418  H   GLU   449      69.252  79.921  50.497  1.00  0.00
H
ATOM   7419  CA  GLU   449      68.755  80.727  52.393  1.00  0.00
C
ATOM   7420  HA  GLU   449      68.526  80.242  53.342  1.00  0.00
H
ATOM   7421  CB  GLU   449      70.190  81.282  52.509  1.00  0.00
C
ATOM   7422  HB2 GLU   449      70.488  81.765  51.579  1.00  0.00
H
ATOM   7423  HB3 GLU   449      70.178  82.055  53.278  1.00  0.00
H
ATOM   7424  CG  GLU   449      71.256  80.247  52.918  1.00  0.00
C
ATOM   7425  HG2 GLU   449      72.147  80.797  53.228  1.00  0.00
H
ATOM   7426  HG3 GLU   449      70.887  79.708  53.795  1.00  0.00
H
ATOM   7427  CD  GLU   449      71.676  79.234  51.834  1.00  0.00
C
ATOM   7428  OE1 GLU   449      71.400  79.463  50.628  1.00  0.00
O
ATOM   7429  OE2 GLU   449      72.272  78.204  52.217  1.00  0.00
O
ATOM   7430  C   GLU   449      67.712  81.855  52.241  1.00  0.00
C
ATOM   7431  O   GLU   449      66.889  82.044  53.136  1.00  0.00
O
ATOM   7432  N   THR   450      67.667  82.582  51.119  1.00  0.00
N
ATOM   7433  H   THR   450      68.375  82.417  50.411  1.00  0.00
H
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ATOM   7434  CA  THR   450      66.678  83.654  50.863  1.00  0.00
C
ATOM   7435  HA  THR   450      66.556  84.230  51.777  1.00  0.00
H
ATOM   7436  CB  THR   450      67.122  84.635  49.764  1.00  0.00
C
ATOM   7437  HB  THR   450      66.387  85.438  49.707  1.00  0.00
H
ATOM   7438  CG2 THR   450      68.490  85.276  49.997  1.00  0.00
C
ATOM   7439 HG21 THR   450      69.265  84.514  50.093  1.00  0.00
H
ATOM   7440 HG22 THR   450      68.735  85.932  49.162  1.00  0.00
H
ATOM   7441 HG23 THR   450      68.461  85.870  50.910  1.00  0.00
H
ATOM   7442  OG1 THR   450      67.154  83.992  48.514  1.00  0.00
O
ATOM   7443  HG1 THR   450      67.890  84.361  48.019  1.00  0.00
H
ATOM   7444  C   THR   450      65.293  83.126  50.477  1.00  0.00
C
ATOM   7445  O   THR   450      64.316  83.863  50.588  1.00  0.00
O
ATOM   7446  N   LYS   451      65.206  81.866  50.020  1.00  0.00
N
ATOM   7447  H   LYS   451      66.081  81.364  49.926  1.00  0.00
H
ATOM   7448  CA  LYS   451      64.016  81.190  49.457  1.00  0.00
C
ATOM   7449  HA  LYS   451      64.330  80.193  49.157  1.00  0.00
H
ATOM   7450  CB  LYS   451      62.925  80.989  50.527  1.00  0.00
C
ATOM   7451  HB2 LYS   451      62.430  81.945  50.702  1.00  0.00
H
ATOM   7452  HB3 LYS   451      62.177  80.302  50.134  1.00  0.00
H
ATOM   7453  CG  LYS   451      63.414  80.447  51.883  1.00  0.00
C
ATOM   7454  HG2 LYS   451      64.107  81.162  52.329  1.00  0.00
H
ATOM   7455  HG3 LYS   451      62.549  80.371  52.545  1.00  0.00
H
ATOM   7456  CD  LYS   451      64.090  79.069  51.807  1.00  0.00
C
ATOM   7457  HD2 LYS   451      63.375  78.343  51.415  1.00  0.00
H
ATOM   7458  HD3 LYS   451      64.959  79.117  51.148  1.00  0.00
H
ATOM   7459  CE  LYS   451      64.532  78.683  53.226  1.00  0.00
C
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ATOM   7460  HE2 LYS   451      65.290  79.403  53.553  1.00  0.00
H
ATOM   7461  HE3 LYS   451      63.676  78.768  53.899  1.00  0.00
H
ATOM   7462  NZ  LYS   451      65.094  77.313  53.297  1.00  0.00
N
ATOM   7463  HZ1 LYS   451      65.982  77.296  52.798  1.00  0.00
H
ATOM   7464  HZ2 LYS   451      65.294  77.063  54.256  1.00  0.00
H
ATOM   7465  HZ3 LYS   451      64.456  76.625  52.921  1.00  0.00
H
ATOM   7466  C   LYS   451      63.487  81.777  48.139  1.00  0.00
C
ATOM   7467  O   LYS   451      62.552  81.219  47.563  1.00  0.00
O
ATOM   7468  N   LEU   452      64.120  82.828  47.617  1.00  0.00
N
ATOM   7469  H   LEU   452      64.899  83.207  48.130  1.00  0.00
H
ATOM   7470  CA  LEU   452      63.846  83.359  46.284  1.00  0.00
C
ATOM   7471  HA  LEU   452      62.774  83.548  46.199  1.00  0.00
H
ATOM   7472  CB  LEU   452      64.625  84.669  46.061  1.00  0.00
C
ATOM   7473  HB2 LEU   452      65.688  84.445  46.160  1.00  0.00
H
ATOM   7474  HB3 LEU   452      64.452  85.008  45.038  1.00  0.00
H
ATOM   7475  CG  LEU   452      64.265  85.814  47.025  1.00  0.00
C
ATOM   7476  HG  LEU   452      64.286  85.453  48.052  1.00  0.00
H
ATOM   7477  CD1 LEU   452      65.290  86.943  46.897  1.00  0.00
C
ATOM   7478 HD11 LEU   452      65.277  87.354  45.887  1.00  0.00
H
ATOM   7479 HD12 LEU   452      65.055  87.731  47.611  1.00  0.00
H
ATOM   7480 HD13 LEU   452      66.285  86.557  47.115  1.00  0.00
H
ATOM   7481  CD2 LEU   452      62.885  86.402  46.725  1.00  0.00
C
ATOM   7482 HD21 LEU   452      62.128  85.624  46.806  1.00  0.00
H
ATOM   7483 HD22 LEU   452      62.657  87.184  47.447  1.00  0.00
H
ATOM   7484 HD23 LEU   452      62.860  86.815  45.717  1.00  0.00
H
ATOM   7485  C   LEU   452      64.247  82.337  45.216  1.00  0.00
C
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ATOM   7486  O   LEU   452      65.241  81.620  45.365  1.00  0.00
O
ATOM   7487  N   GLY   453      63.514  82.315  44.107  1.00  0.00
N
ATOM   7488  H   GLY   453      62.704  82.922  44.059  1.00  0.00
H
ATOM   7489  CA  GLY   453      63.852  81.507  42.936  1.00  0.00
C
ATOM   7490  HA2 GLY   453      64.928  81.334  42.902  1.00  0.00
H
ATOM   7491  HA3 GLY   453      63.344  80.546  43.005  1.00  0.00
H
ATOM   7492  C   GLY   453      63.467  82.172  41.623  1.00  0.00
C
ATOM   7493  O   GLY   453      62.771  83.189  41.611  1.00  0.00
O
ATOM   7494  N   LYS   454      63.902  81.582  40.513  1.00  0.00
N
ATOM   7495  H   LYS   454      64.490  80.754  40.614  1.00  0.00
H
ATOM   7496  CA  LYS   454      63.422  81.895  39.163  1.00  0.00
C
ATOM   7497  HA  LYS   454      62.514  82.497  39.230  1.00  0.00
H
ATOM   7498  CB  LYS   454      64.477  82.686  38.365  1.00  0.00
C
ATOM   7499  HB2 LYS   454      65.381  82.084  38.292  1.00  0.00
H
ATOM   7500  HB3 LYS   454      64.096  82.857  37.357  1.00  0.00
H
ATOM   7501  CG  LYS   454      64.813  84.045  39.004  1.00  0.00
C
ATOM   7502  HG2 LYS   454      63.895  84.630  39.080  1.00  0.00
H
ATOM   7503  HG3 LYS   454      65.199  83.880  40.012  1.00  0.00
H
ATOM   7504  CD  LYS   454      65.857  84.860  38.222  1.00  0.00
C
ATOM   7505  HD2 LYS   454      66.794  84.301  38.165  1.00  0.00
H
ATOM   7506  HD3 LYS   454      65.488  85.064  37.215  1.00  0.00
H
ATOM   7507  CE  LYS   454      66.064  86.173  38.991  1.00  0.00
C
ATOM   7508  HE2 LYS   454      65.088  86.650  39.122  1.00  0.00
H
ATOM   7509  HE3 LYS   454      66.429  85.937  39.995  1.00  0.00
H
ATOM   7510  NZ  LYS   454      66.983  87.137  38.336  1.00  0.00
N
ATOM   7511  HZ1 LYS   454      66.599  87.510  37.472  1.00  0.00
H
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ATOM   7512  HZ2 LYS   454      67.088  87.959  38.922  1.00  0.00
H
ATOM   7513  HZ3 LYS   454      67.892  86.742  38.154  1.00  0.00
H
ATOM   7514  C   LYS   454      63.069  80.583  38.471  1.00  0.00
C
ATOM   7515  O   LYS   454      63.824  79.620  38.571  1.00  0.00
O
ATOM   7516  N   ALA   455      61.948  80.548  37.770  1.00  0.00
N
ATOM   7517  H   ALA   455      61.378  81.386  37.745  1.00  0.00
H
ATOM   7518  CA  ALA   455      61.573  79.452  36.878  1.00  0.00
C
ATOM   7519  HA  ALA   455      62.364  78.699  36.848  1.00  0.00
H
ATOM   7520  CB  ALA   455      60.295  78.793  37.403  1.00  0.00
C
ATOM   7521  HB1 ALA   455      59.477  79.516  37.412  1.00  0.00
H
ATOM   7522  HB2 ALA   455      60.031  77.959  36.756  1.00  0.00
H
ATOM   7523  HB3 ALA   455      60.467  78.416  38.412  1.00  0.00
H
ATOM   7524  C   ALA   455      61.412  80.008  35.461  1.00  0.00
C
ATOM   7525  O   ALA   455      60.978  81.154  35.301  1.00  0.00
O
ATOM   7526  N   GLY   456      61.784  79.246  34.437  1.00  0.00
N
ATOM   7527  H   GLY   456      62.184  78.322  34.605  1.00  0.00
H
ATOM   7528  CA  GLY   456      61.844  79.782  33.080  1.00  0.00
C
ATOM   7529  HA2 GLY   456      60.970  80.409  32.900  1.00  0.00
H
ATOM   7530  HA3 GLY   456      62.737  80.402  32.992  1.00  0.00
H
ATOM   7531  C   GLY   456      61.898  78.735  31.978  1.00  0.00
C
ATOM   7532  O   GLY   456      62.035  77.537  32.220  1.00  0.00
O
ATOM   7533  N   TYR   457      61.785  79.216  30.744  1.00  0.00
N
ATOM   7534  H   TYR   457      61.711  80.221  30.623  1.00  0.00
H
ATOM   7535  CA  TYR   457      61.940  78.404  29.547  1.00  0.00
C
ATOM   7536  HA  TYR   457      62.621  77.590  29.792  1.00  0.00
H
ATOM   7537  CB  TYR   457      60.589  77.786  29.135  1.00  0.00
C
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ATOM   7538  HB2 TYR   457      60.773  77.060  28.344  1.00  0.00
H
ATOM   7539  HB3 TYR   457      60.185  77.235  29.986  1.00  0.00
H
ATOM   7540  CG  TYR   457      59.543  78.771  28.637  1.00  0.00
C
ATOM   7541  CD1 TYR   457      59.696  79.386  27.378  1.00  0.00
C
ATOM   7542  HD1 TYR   457      60.527  79.127  26.739  1.00  0.00
H
ATOM   7543  CE1 TYR   457      58.783  80.360  26.948  1.00  0.00
C
ATOM   7544  HE1 TYR   457      58.942  80.848  26.007  1.00  0.00
H
ATOM   7545  CZ  TYR   457      57.668  80.682  27.748  1.00  0.00
C
ATOM   7546  OH  TYR   457      56.824  81.672  27.359  1.00  0.00
O
ATOM   7547  HH  TYR   457      57.105  82.099  26.554  1.00  0.00
H
ATOM   7548  CE2 TYR   457      57.454  79.991  28.959  1.00  0.00
C
ATOM   7549  HE2 TYR   457      56.563  80.194  29.534  1.00  0.00
H
ATOM   7550  CD2 TYR   457      58.403  79.053  29.413  1.00  0.00
C
ATOM   7551  HD2 TYR   457      58.252  78.543  30.354  1.00  0.00
H
ATOM   7552  C   TYR   457      62.572  79.203  28.402  1.00  0.00
C
ATOM   7553  O   TYR   457      62.505  80.438  28.353  1.00  0.00
O
ATOM   7554  N   VAL   458      63.115  78.482  27.426  1.00  0.00
N
ATOM   7555  H   VAL   458      63.177  77.473  27.561  1.00  0.00
H
ATOM   7556  CA  VAL   458      63.543  79.005  26.122  1.00  0.00
C
ATOM   7557  HA  VAL   458      62.933  79.877  25.893  1.00  0.00
H
ATOM   7558  CB  VAL   458      65.018  79.495  26.145  1.00  0.00
C
ATOM   7559  HB  VAL   458      64.989  80.564  26.357  1.00  0.00
H
ATOM   7560  CG1 VAL   458      65.892  78.865  27.240  1.00  0.00
C
ATOM   7561 HG11 VAL   458      65.890  77.782  27.134  1.00  0.00
H
ATOM   7562 HG12 VAL   458      66.913  79.236  27.170  1.00  0.00
H
ATOM   7563 HG13 VAL   458      65.513  79.140  28.224  1.00  0.00
H
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ATOM   7564  CG2 VAL   458      65.757  79.333  24.813  1.00  0.00
C
ATOM   7565 HG21 VAL   458      65.188  79.800  24.009  1.00  0.00
H
ATOM   7566 HG22 VAL   458      66.728  79.825  24.879  1.00  0.00
H
ATOM   7567 HG23 VAL   458      65.910  78.274  24.595  1.00  0.00
H
ATOM   7568  C   VAL   458      63.224  77.953  25.051  1.00  0.00
C
ATOM   7569  O   VAL   458      63.414  76.759  25.283  1.00  0.00
O
ATOM   7570  N   THR   459      62.696  78.374  23.898  1.00  0.00
N
ATOM   7571  H   THR   459      62.537  79.369  23.779  1.00  0.00
H
ATOM   7572  CA  THR   459      62.304  77.478  22.788  1.00  0.00
C
ATOM   7573  HA  THR   459      62.452  76.457  23.134  1.00  0.00
H
ATOM   7574  CB  THR   459      60.810  77.578  22.382  1.00  0.00
C
ATOM   7575  HB  THR   459      60.544  76.645  21.884  1.00  0.00
H
ATOM   7576  CG2 THR   459      59.874  77.774  23.568  1.00  0.00
C
ATOM   7577 HG21 THR   459      60.014  78.764  23.998  1.00  0.00
H
ATOM   7578 HG22 THR   459      58.843  77.669  23.232  1.00  0.00
H
ATOM   7579 HG23 THR   459      60.080  77.020  24.323  1.00  0.00
H
ATOM   7580  OG1 THR   459      60.503  78.607  21.467  1.00  0.00
O
ATOM   7581  HG1 THR   459      59.554  78.468  21.231  1.00  0.00
H
ATOM   7582  C   THR   459      63.202  77.624  21.566  1.00  0.00
C
ATOM   7583  O   THR   459      63.825  78.664  21.341  1.00  0.00
O
ATOM   7584  N   ASN   460      63.232  76.596  20.713  1.00  0.00
N
ATOM   7585  H   ASN   460      62.704  75.762  20.946  1.00  0.00
H
ATOM   7586  CA  ASN   460      63.969  76.615  19.444  1.00  0.00
C
ATOM   7587  HA  ASN   460      65.012  76.854  19.663  1.00  0.00
H
ATOM   7588  CB  ASN   460      63.918  75.206  18.831  1.00  0.00
C
ATOM   7589  HB2 ASN   460      64.604  75.171  17.985  1.00  0.00
H
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ATOM   7590  HB3 ASN   460      64.253  74.472  19.563  1.00  0.00
H
ATOM   7591  CG  ASN   460      62.521  74.824  18.366  1.00  0.00
C
ATOM   7592  OD1 ASN   460      61.609  74.652  19.161  1.00  0.00
O
ATOM   7593  ND2 ASN   460      62.304  74.715  17.078  1.00  0.00
N
ATOM   7594 HD21 ASN   460      61.379  74.446  16.787  1.00  0.00
H
ATOM   7595 HD22 ASN   460      63.036  74.888  16.410  1.00  0.00
H
ATOM   7596  C   ASN   460      63.473  77.691  18.447  1.00  0.00
C
ATOM   7597  O   ASN   460      64.200  78.029  17.517  1.00  0.00
O
ATOM   7598  N   LYS   461      62.273  78.253  18.658  1.00  0.00
N
ATOM   7599  H   LYS   461      61.734  77.917  19.446  1.00  0.00
H
ATOM   7600  CA  LYS   461      61.742  79.422  17.925  1.00  0.00
C
ATOM   7601  HA  LYS   461      62.158  79.410  16.915  1.00  0.00
H
ATOM   7602  CB  LYS   461      60.206  79.309  17.806  1.00  0.00
C
ATOM   7603  HB2 LYS   461      59.791  78.884  18.721  1.00  0.00
H
ATOM   7604  HB3 LYS   461      59.782  80.304  17.675  1.00  0.00
H
ATOM   7605  CG  LYS   461      59.797  78.453  16.593  1.00  0.00
C
ATOM   7606  HG2 LYS   461      60.179  78.919  15.685  1.00  0.00
H
ATOM   7607  HG3 LYS   461      60.253  77.465  16.686  1.00  0.00
H
ATOM   7608  CD  LYS   461      58.277  78.276  16.449  1.00  0.00
C
ATOM   7609  HD2 LYS   461      58.071  77.699  15.546  1.00  0.00
H
ATOM   7610  HD3 LYS   461      57.928  77.689  17.284  1.00  0.00
H
ATOM   7611  CE  LYS   461      57.479  79.587  16.416  1.00  0.00
C
ATOM   7612  HE2 LYS   461      57.779  80.210  17.262  1.00  0.00
H
ATOM   7613  HE3 LYS   461      57.707  80.117  15.487  1.00  0.00
H
ATOM   7614  NZ  LYS   461      56.028  79.319  16.520  1.00  0.00
N
ATOM   7615  HZ1 LYS   461      55.815  78.882  17.418  1.00  0.00
H
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ATOM   7616  HZ2 LYS   461      55.486  80.168  16.442  1.00  0.00
H
ATOM   7617  HZ3 LYS   461      55.723  78.693  15.773  1.00  0.00
H
ATOM   7618  C   LYS   461      62.195  80.774  18.505  1.00  0.00
C
ATOM   7619  O   LYS   461      61.726  81.818  18.052  1.00  0.00
O
ATOM   7620  N   GLY   462      63.090  80.789  19.498  1.00  0.00
N
ATOM   7621  H   GLY   462      63.422  79.903  19.863  1.00  0.00
H
ATOM   7622  CA  GLY   462      63.637  82.013  20.089  1.00  0.00
C
ATOM   7623  HA2 GLY   462      64.548  81.760  20.628  1.00  0.00
H
ATOM   7624  HA3 GLY   462      63.898  82.712  19.296  1.00  0.00
H
ATOM   7625  C   GLY   462      62.700  82.731  21.070  1.00  0.00
C
ATOM   7626  O   GLY   462      62.979  83.866  21.452  1.00  0.00
O
ATOM   7627  N   ARG   463      61.602  82.089  21.488  1.00  0.00
N
ATOM   7628  H   ARG   463      61.461  81.147  21.148  1.00  0.00
H
ATOM   7629  CA  ARG   463      60.724  82.561  22.573  1.00  0.00
C
ATOM   7630  HA  ARG   463      60.614  83.646  22.490  1.00  0.00
H
ATOM   7631  CB  ARG   463      59.348  81.886  22.413  1.00  0.00
C
ATOM   7632  HB2 ARG   463      58.946  82.146  21.432  1.00  0.00
H
ATOM   7633  HB3 ARG   463      59.503  80.808  22.445  1.00  0.00
H
ATOM   7634  CG  ARG   463      58.309  82.262  23.488  1.00  0.00
C
ATOM   7635  HG2 ARG   463      58.806  82.327  24.451  1.00  0.00
H
ATOM   7636  HG3 ARG   463      57.896  83.248  23.274  1.00  0.00
H
ATOM   7637  CD  ARG   463      57.179  81.217  23.615  1.00  0.00
C
ATOM   7638  HD2 ARG   463      57.546  80.222  23.349  1.00  0.00
H
ATOM   7639  HD3 ARG   463      56.875  81.167  24.661  1.00  0.00
H
ATOM   7640  NE  ARG   463      55.981  81.555  22.823  1.00  0.00
N
ATOM   7641  HE  ARG   463      55.187  81.896  23.337  1.00  0.00
H
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ATOM   7642  CZ  ARG   463      55.792  81.335  21.534  1.00  0.00
C
ATOM   7643  NH1 ARG   463      56.693  80.782  20.790  1.00  0.00
N
ATOM   7644 HH11 ARG   463      57.468  80.316  21.236  1.00  0.00
H
ATOM   7645 HH12 ARG   463      56.395  80.239  19.983  1.00  0.00
H
ATOM   7646  NH2 ARG   463      54.664  81.653  20.965  1.00  0.00
N
ATOM   7647 HH21 ARG   463      53.927  82.071  21.497  1.00  0.00
H
ATOM   7648 HH22 ARG   463      54.560  81.518  19.973  1.00  0.00
H
ATOM   7649  C   ARG   463      61.383  82.241  23.917  1.00  0.00
C
ATOM   7650  O   ARG   463      61.863  81.127  24.117  1.00  0.00
O
ATOM   7651  N   GLN   464      61.373  83.189  24.853  1.00  0.00
N
ATOM   7652  H   GLN   464      60.945  84.074  24.625  1.00  0.00
H
ATOM   7653  CA  GLN   464      62.090  83.103  26.128  1.00  0.00
C
ATOM   7654  HA  GLN   464      62.272  82.056  26.377  1.00  0.00
H
ATOM   7655  CB  GLN   464      63.442  83.811  25.924  1.00  0.00
C
ATOM   7656  HB2 GLN   464      63.891  83.415  25.010  1.00  0.00
H
ATOM   7657  HB3 GLN   464      63.272  84.880  25.775  1.00  0.00
H
ATOM   7658  CG  GLN   464      64.452  83.627  27.064  1.00  0.00
C
ATOM   7659  HG2 GLN   464      64.118  84.187  27.937  1.00  0.00
H
ATOM   7660  HG3 GLN   464      64.519  82.576  27.339  1.00  0.00
H
ATOM   7661  CD  GLN   464      65.841  84.105  26.638  1.00  0.00
C
ATOM   7662  OE1 GLN   464      66.433  83.635  25.681  1.00  0.00
O
ATOM   7663  NE2 GLN   464      66.421  85.073  27.315  1.00  0.00
N
ATOM   7664 HE21 GLN   464      67.335  85.335  26.986  1.00  0.00
H
ATOM   7665 HE22 GLN   464      65.986  85.470  28.123  1.00  0.00
H
ATOM   7666  C   GLN   464      61.265  83.735  27.264  1.00  0.00
C
ATOM   7667  O   GLN   464      60.609  84.753  27.039  1.00  0.00
O
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ATOM   7668  N   LYS   465      61.294  83.156  28.470  1.00  0.00
N
ATOM   7669  H   LYS   465      61.802  82.278  28.569  1.00  0.00
H
ATOM   7670  CA  LYS   465      60.597  83.679  29.666  1.00  0.00
C
ATOM   7671  HA  LYS   465      60.573  84.769  29.616  1.00  0.00
H
ATOM   7672  CB  LYS   465      59.147  83.155  29.666  1.00  0.00
C
ATOM   7673  HB2 LYS   465      58.714  83.365  28.687  1.00  0.00
H
ATOM   7674  HB3 LYS   465      59.165  82.072  29.806  1.00  0.00
H
ATOM   7675  CG  LYS   465      58.230  83.784  30.733  1.00  0.00
C
ATOM   7676  HG2 LYS   465      58.573  83.508  31.731  1.00  0.00
H
ATOM   7677  HG3 LYS   465      58.254  84.870  30.635  1.00  0.00
H
ATOM   7678  CD  LYS   465      56.789  83.286  30.534  1.00  0.00
C
ATOM   7679  HD2 LYS   465      56.473  83.514  29.514  1.00  0.00
H
ATOM   7680  HD3 LYS   465      56.775  82.204  30.662  1.00  0.00
H
ATOM   7681  CE  LYS   465      55.784  83.898  31.518  1.00  0.00
C
ATOM   7682  HE2 LYS   465      56.046  83.570  32.528  1.00  0.00
H
ATOM   7683  HE3 LYS   465      55.854  84.990  31.482  1.00  0.00
H
ATOM   7684  NZ  LYS   465      54.405  83.462  31.178  1.00  0.00
N
ATOM   7685  HZ1 LYS   465      54.379  82.470  30.921  1.00  0.00
H
ATOM   7686  HZ2 LYS   465      53.723  83.628  31.903  1.00  0.00
H
ATOM   7687  HZ3 LYS   465      54.045  83.897  30.335  1.00  0.00
H
ATOM   7688  C   LYS   465      61.312  83.269  30.951  1.00  0.00
C
ATOM   7689  O   LYS   465      61.782  82.138  31.057  1.00  0.00
O
ATOM   7690  N   VAL   466      61.338  84.156  31.947  1.00  0.00
N
ATOM   7691  H   VAL   466      60.898  85.054  31.797  1.00  0.00
H
ATOM   7692  CA  VAL   466      61.636  83.811  33.347  1.00  0.00
C
ATOM   7693  HA  VAL   466      61.484  82.738  33.466  1.00  0.00
H
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ATOM   7694  CB  VAL   466      63.096  84.107  33.783  1.00  0.00
C
ATOM   7695  HB  VAL   466      63.314  83.459  34.633  1.00  0.00
H
ATOM   7696  CG1 VAL   466      64.134  83.797  32.697  1.00  0.00
C
ATOM   7697 HG11 VAL   466      64.014  84.472  31.850  1.00  0.00
H
ATOM   7698 HG12 VAL   466      65.134  83.918  33.110  1.00  0.00
H
ATOM   7699 HG13 VAL   466      64.021  82.766  32.361  1.00  0.00
H
ATOM   7700  CG2 VAL   466      63.347  85.549  34.253  1.00  0.00
C
ATOM   7701 HG21 VAL   466      62.816  85.732  35.188  1.00  0.00
H
ATOM   7702 HG22 VAL   466      64.410  85.705  34.437  1.00  0.00
H
ATOM   7703 HG23 VAL   466      62.994  86.255  33.503  1.00  0.00
H
ATOM   7704  C   VAL   466      60.631  84.524  34.250  1.00  0.00
C
ATOM   7705  O   VAL   466      60.220  85.640  33.932  1.00  0.00
O
ATOM   7706  N   VAL   467      60.257  83.919  35.375  1.00  0.00
N
ATOM   7707  H   VAL   467      60.589  82.973  35.545  1.00  0.00
H
ATOM   7708  CA  VAL   467      59.397  84.532  36.402  1.00  0.00
C
ATOM   7709  HA  VAL   467      59.284  85.589  36.171  1.00  0.00
H
ATOM   7710  CB  VAL   467      57.981  83.911  36.405  1.00  0.00
C
ATOM   7711  HB  VAL   467      58.047  82.866  36.715  1.00  0.00
H
ATOM   7712  CG1 VAL   467      57.042  84.649  37.368  1.00  0.00
C
ATOM   7713 HG11 VAL   467      56.950  85.697  37.083  1.00  0.00
H
ATOM   7714 HG12 VAL   467      56.055  84.188  37.347  1.00  0.00
H
ATOM   7715 HG13 VAL   467      57.415  84.583  38.390  1.00  0.00
H
ATOM   7716  CG2 VAL   467      57.324  83.969  35.017  1.00  0.00
C
ATOM   7717 HG21 VAL   467      57.895  83.369  34.311  1.00  0.00
H
ATOM   7718 HG22 VAL   467      56.313  83.564  35.069  1.00  0.00
H
ATOM   7719 HG23 VAL   467      57.286  85.001  34.664  1.00  0.00
H
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ATOM   7720  C   VAL   467      60.070  84.375  37.774  1.00  0.00
C
ATOM   7721  O   VAL   467      60.543  83.274  38.068  1.00  0.00
O
ATOM   7722  N   PRO   468      60.162  85.429  38.611  1.00  0.00
N
ATOM   7723  CD  PRO   468      59.827  86.816  38.303  1.00  0.00
C
ATOM   7724  HD2 PRO   468      58.790  86.914  37.985  1.00  0.00
H
ATOM   7725  HD3 PRO   468      60.494  87.183  37.521  1.00  0.00
H
ATOM   7726  CG  PRO   468      60.057  87.614  39.590  1.00  0.00
C
ATOM   7727  HG2 PRO   468      59.132  87.664  40.166  1.00  0.00
H
ATOM   7728  HG3 PRO   468      60.430  88.617  39.383  1.00  0.00
H
ATOM   7729  CB  PRO   468      61.090  86.772  40.340  1.00  0.00
C
ATOM   7730  HB2 PRO   468      61.058  86.948  41.417  1.00  0.00
H
ATOM   7731  HB3 PRO   468      62.088  86.983  39.952  1.00  0.00
H
ATOM   7732  CA  PRO   468      60.692  85.339  39.973  1.00  0.00
C
ATOM   7733  HA  PRO   468      61.581  84.710  39.985  1.00  0.00
H
ATOM   7734  C   PRO   468      59.660  84.767  40.961  1.00  0.00
C
ATOM   7735  O   PRO   468      58.457  84.958  40.799  1.00  0.00
O
ATOM   7736  N   LEU   469      60.132  84.101  42.019  1.00  0.00
N
ATOM   7737  H   LEU   469      61.137  83.973  42.082  1.00  0.00
H
ATOM   7738  CA  LEU   469      59.310  83.457  43.049  1.00  0.00
C
ATOM   7739  HA  LEU   469      58.271  83.769  42.919  1.00  0.00
H
ATOM   7740  CB  LEU   469      59.365  81.924  42.897  1.00  0.00
C
ATOM   7741  HB2 LEU   469      60.399  81.588  42.983  1.00  0.00
H
ATOM   7742  HB3 LEU   469      58.808  81.495  43.730  1.00  0.00
H
ATOM   7743  CG  LEU   469      58.754  81.419  41.574  1.00  0.00
C
ATOM   7744  HG  LEU   469      58.022  82.139  41.209  1.00  0.00
H
ATOM   7745  CD1 LEU   469      59.816  81.183  40.495  1.00  0.00
C
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ATOM   7746 HD11 LEU   469      60.504  80.399  40.798  1.00  0.00
H
ATOM   7747 HD12 LEU   469      59.331  80.903  39.560  1.00  0.00
H
ATOM   7748 HD13 LEU   469      60.383  82.092  40.325  1.00  0.00
H
ATOM   7749  CD2 LEU   469      58.033  80.090  41.780  1.00  0.00
C
ATOM   7750 HD21 LEU   469      57.281  80.185  42.564  1.00  0.00
H
ATOM   7751 HD22 LEU   469      57.516  79.837  40.856  1.00  0.00
H
ATOM   7752 HD23 LEU   469      58.739  79.303  42.042  1.00  0.00
H
ATOM   7753  C   LEU   469      59.737  83.890  44.458  1.00  0.00
C
ATOM   7754  O   LEU   469      60.924  84.099  44.709  1.00  0.00
O
ATOM   7755  N   THR   470      58.769  84.002  45.372  1.00  0.00
N
ATOM   7756  H   THR   470      57.821  83.780  45.099  1.00  0.00
H
ATOM   7757  CA  THR   470      58.928  84.559  46.730  1.00  0.00
C
ATOM   7758  HA  THR   470      59.537  85.461  46.667  1.00  0.00
H
ATOM   7759  CB  THR   470      57.558  84.945  47.322  1.00  0.00
C
ATOM   7760  HB  THR   470      57.657  85.094  48.398  1.00  0.00
H
ATOM   7761  CG2 THR   470      56.992  86.222  46.707  1.00  0.00
C
ATOM   7762 HG21 THR   470      56.840  86.098  45.635  1.00  0.00
H
ATOM   7763 HG22 THR   470      56.038  86.461  47.180  1.00  0.00
H
ATOM   7764 HG23 THR   470      57.679  87.050  46.883  1.00  0.00
H
ATOM   7765  OG1 THR   470      56.625  83.911  47.075  1.00  0.00
O
ATOM   7766  HG1 THR   470      55.770  84.194  47.422  1.00  0.00
H
ATOM   7767  C   THR   470      59.637  83.627  47.714  1.00  0.00
C
ATOM   7768  O   THR   470      60.684  83.983  48.248  1.00  0.00
O
ATOM   7769  N   ASN   471      59.058  82.456  48.000  1.00  0.00
N
ATOM   7770  H   ASN   471      58.151  82.273  47.587  1.00  0.00
H
ATOM   7771  CA  ASN   471      59.579  81.502  48.981  1.00  0.00
C
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ATOM   7772  HA  ASN   471      60.663  81.600  48.989  1.00  0.00
H
ATOM   7773  CB  ASN   471      59.107  81.879  50.401  1.00  0.00
C
ATOM   7774  HB2 ASN   471      59.311  81.055  51.083  1.00  0.00
H
ATOM   7775  HB3 ASN   471      59.703  82.729  50.728  1.00  0.00
H
ATOM   7776  CG  ASN   471      57.635  82.251  50.532  1.00  0.00
C
ATOM   7777  OD1 ASN   471      56.744  81.530  50.128  1.00  0.00
O
ATOM   7778  ND2 ASN   471      57.331  83.361  51.157  1.00  0.00
N
ATOM   7779 HD21 ASN   471      56.348  83.556  51.283  1.00  0.00
H
ATOM   7780 HD22 ASN   471      58.041  83.968  51.529  1.00  0.00
H
ATOM   7781  C   ASN   471      59.309  80.047  48.553  1.00  0.00
C
ATOM   7782  O   ASN   471      58.359  79.390  48.986  1.00  0.00
O
ATOM   7783  N   THR   472      60.174  79.562  47.664  1.00  0.00
N
ATOM   7784  H   THR   472      60.995  80.125  47.453  1.00  0.00
H
ATOM   7785  CA  THR   472      60.031  78.301  46.928  1.00  0.00
C
ATOM   7786  HA  THR   472      59.093  77.830  47.216  1.00  0.00
H
ATOM   7787  CB  THR   472      59.917  78.619  45.428  1.00  0.00
C
ATOM   7788  HB  THR   472      59.142  79.374  45.290  1.00  0.00
H
ATOM   7789  CG2 THR   472      61.209  79.150  44.816  1.00  0.00
C
ATOM   7790 HG21 THR   472      61.985  78.391  44.879  1.00  0.00
H
ATOM   7791 HG22 THR   472      61.038  79.414  43.776  1.00  0.00
H
ATOM   7792 HG23 THR   472      61.541  80.042  45.345  1.00  0.00
H
ATOM   7793  OG1 THR   472      59.530  77.470  44.718  1.00  0.00
O
ATOM   7794  HG1 THR   472      59.624  77.667  43.781  1.00  0.00
H
ATOM   7795  C   THR   472      61.155  77.303  47.258  1.00  0.00
C
ATOM   7796  O   THR   472      62.113  77.628  47.961  1.00  0.00
O
ATOM   7797  N   THR   473      61.040  76.070  46.760  1.00  0.00
N
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ATOM   7798  H   THR   473      60.298  75.910  46.090  1.00  0.00
H
ATOM   7799  CA  THR   473      62.095  75.044  46.826  1.00  0.00
C
ATOM   7800  HA  THR   473      62.894  75.398  47.476  1.00  0.00
H
ATOM   7801  CB  THR   473      61.605  73.706  47.407  1.00  0.00
C
ATOM   7802  HB  THR   473      62.474  73.064  47.552  1.00  0.00
H
ATOM   7803  CG2 THR   473      60.884  73.847  48.745  1.00  0.00
C
ATOM   7804 HG21 THR   473      59.975  74.437  48.629  1.00  0.00
H
ATOM   7805 HG22 THR   473      60.620  72.859  49.124  1.00  0.00
H
ATOM   7806 HG23 THR   473      61.541  74.335  49.465  1.00  0.00
H
ATOM   7807  OG1 THR   473      60.722  73.057  46.525  1.00  0.00
O
ATOM   7808  HG1 THR   473      60.677  72.139  46.812  1.00  0.00
H
ATOM   7809  C   THR   473      62.703  74.823  45.443  1.00  0.00
C
ATOM   7810  O   THR   473      62.045  75.069  44.433  1.00  0.00
O
ATOM   7811  N   ASN   474      63.935  74.311  45.393  1.00  0.00
N
ATOM   7812  H   ASN   474      64.403  74.088  46.255  1.00  0.00
H
ATOM   7813  CA  ASN   474      64.640  73.995  44.141  1.00  0.00
C
ATOM   7814  HA  ASN   474      64.749  74.911  43.556  1.00  0.00
H
ATOM   7815  CB  ASN   474      66.046  73.509  44.564  1.00  0.00
C
ATOM   7816  HB2 ASN   474      66.403  74.104  45.403  1.00  0.00
H
ATOM   7817  HB3 ASN   474      66.001  72.467  44.882  1.00  0.00
H
ATOM   7818  CG  ASN   474      67.098  73.626  43.479  1.00  0.00
C
ATOM   7819  OD1 ASN   474      67.451  72.667  42.830  1.00  0.00
O
ATOM   7820  ND2 ASN   474      67.731  74.770  43.325  1.00  0.00
N
ATOM   7821 HD21 ASN   474      68.445  74.737  42.614  1.00  0.00
H
ATOM   7822 HD22 ASN   474      67.654  75.503  44.007  1.00  0.00
H
ATOM   7823  C   ASN   474      63.831  72.999  43.266  1.00  0.00
C
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ATOM   7824  O   ASN   474      63.801  73.105  42.048  1.00  0.00
O
ATOM   7825  N   GLN   475      63.044  72.123  43.905  1.00  0.00
N
ATOM   7826  H   GLN   475      63.099  72.103  44.912  1.00  0.00
H
ATOM   7827  CA  GLN   475      62.143  71.159  43.261  1.00  0.00
C
ATOM   7828  HA  GLN   475      62.656  70.712  42.413  1.00  0.00
H
ATOM   7829  CB  GLN   475      61.792  70.047  44.264  1.00  0.00
C
ATOM   7830  HB2 GLN   475      61.240  70.469  45.105  1.00  0.00
H
ATOM   7831  HB3 GLN   475      61.132  69.350  43.764  1.00  0.00
H
ATOM   7832  CG  GLN   475      63.000  69.249  44.778  1.00  0.00
C
ATOM   7833  HG2 GLN   475      62.636  68.345  45.265  1.00  0.00
H
ATOM   7834  HG3 GLN   475      63.613  68.948  43.927  1.00  0.00
H
ATOM   7835  CD  GLN   475      63.850  70.019  45.787  1.00  0.00
C
ATOM   7836  OE1 GLN   475      63.366  70.822  46.576  1.00  0.00
O
ATOM   7837  NE2 GLN   475      65.151  69.847  45.778  1.00  0.00
N
ATOM   7838 HE21 GLN   475      65.690  70.327  46.473  1.00  0.00
H
ATOM   7839 HE22 GLN   475      65.582  69.283  45.062  1.00  0.00
H
ATOM   7840  C   GLN   475      60.838  71.787  42.734  1.00  0.00
C
ATOM   7841  O   GLN   475      60.265  71.341  41.738  1.00  0.00
O
ATOM   7842  N   LYS   476      60.335  72.822  43.413  1.00  0.00
N
ATOM   7843  H   LYS   476      60.860  73.173  44.204  1.00  0.00
H
ATOM   7844  CA  LYS   476      59.155  73.575  42.958  1.00  0.00
C
ATOM   7845  HA  LYS   476      58.398  72.880  42.593  1.00  0.00
H
ATOM   7846  CB  LYS   476      58.569  74.418  44.099  1.00  0.00
C
ATOM   7847  HB2 LYS   476      59.389  74.895  44.635  1.00  0.00
H
ATOM   7848  HB3 LYS   476      57.943  75.201  43.662  1.00  0.00
H
ATOM   7849  CG  LYS   476      57.706  73.638  45.098  1.00  0.00
C
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ATOM   7850  HG2 LYS   476      56.854  73.196  44.581  1.00  0.00
H
ATOM   7851  HG3 LYS   476      58.294  72.840  45.546  1.00  0.00
H
ATOM   7852  CD  LYS   476      57.213  74.606  46.184  1.00  0.00
C
ATOM   7853  HD2 LYS   476      58.073  75.088  46.651  1.00  0.00
H
ATOM   7854  HD3 LYS   476      56.594  75.371  45.711  1.00  0.00
H
ATOM   7855  CE  LYS   476      56.390  73.884  47.255  1.00  0.00
C
ATOM   7856  HE2 LYS   476      55.567  73.355  46.765  1.00  0.00
H
ATOM   7857  HE3 LYS   476      57.019  73.140  47.755  1.00  0.00
H
ATOM   7858  NZ  LYS   476      55.838  74.837  48.250  1.00  0.00
N
ATOM   7859  HZ1 LYS   476      55.305  75.570  47.802  1.00  0.00
H
ATOM   7860  HZ2 LYS   476      55.184  74.351  48.867  1.00  0.00
H
ATOM   7861  HZ3 LYS   476      56.557  75.248  48.830  1.00  0.00
H
ATOM   7862  C   LYS   476      59.491  74.478  41.783  1.00  0.00
C
ATOM   7863  O   LYS   476      58.616  74.699  40.954  1.00  0.00
O
ATOM   7864  N   THR   477      60.712  75.012  41.674  1.00  0.00
N
ATOM   7865  H   THR   477      61.424  74.828  42.376  1.00  0.00
H
ATOM   7866  CA  THR   477      61.087  75.858  40.537  1.00  0.00
C
ATOM   7867  HA  THR   477      60.288  76.581  40.381  1.00  0.00
H
ATOM   7868  CB  THR   477      62.376  76.629  40.837  1.00  0.00
C
ATOM   7869  HB  THR   477      62.781  77.015  39.910  1.00  0.00
H
ATOM   7870  CG2 THR   477      62.093  77.769  41.804  1.00  0.00
C
ATOM   7871 HG21 THR   477      61.840  77.334  42.764  1.00  0.00
H
ATOM   7872 HG22 THR   477      62.988  78.371  41.899  1.00  0.00
H
ATOM   7873 HG23 THR   477      61.271  78.387  41.451  1.00  0.00
H
ATOM   7874  OG1 THR   477      63.325  75.850  41.517  1.00  0.00
O
ATOM   7875  HG1 THR   477      63.891  75.386  40.874  1.00  0.00
H
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ATOM   7876  C   THR   477      61.186  75.053  39.233  1.00  0.00
C
ATOM   7877  O   THR   477      60.709  75.529  38.205  1.00  0.00
O
ATOM   7878  N   GLU   478      61.670  73.808  39.289  1.00  0.00
N
ATOM   7879  H   GLU   478      62.184  73.532  40.116  1.00  0.00
H
ATOM   7880  CA  GLU   478      61.632  72.828  38.188  1.00  0.00
C
ATOM   7881  HA  GLU   478      62.167  73.224  37.327  1.00  0.00
H
ATOM   7882  CB  GLU   478      62.325  71.534  38.652  1.00  0.00
C
ATOM   7883  HB2 GLU   478      61.779  71.171  39.518  1.00  0.00
H
ATOM   7884  HB3 GLU   478      62.224  70.775  37.877  1.00  0.00
H
ATOM   7885  CG  GLU   478      63.817  71.696  39.011  1.00  0.00
C
ATOM   7886  HG2 GLU   478      64.399  71.693  38.088  1.00  0.00
H
ATOM   7887  HG3 GLU   478      63.972  72.668  39.480  1.00  0.00
H
ATOM   7888  CD  GLU   478      64.358  70.551  39.897  1.00  0.00
C
ATOM   7889  OE1 GLU   478      63.557  69.740  40.433  1.00  0.00
O
ATOM   7890  OE2 GLU   478      65.589  70.376  39.976  1.00  0.00
O
ATOM   7891  C   GLU   478      60.180  72.532  37.742  1.00  0.00
C
ATOM   7892  O   GLU   478      59.847  72.633  36.557  1.00  0.00
O
ATOM   7893  N   LEU   479      59.268  72.244  38.691  1.00  0.00
N
ATOM   7894  H   LEU   479      59.590  72.135  39.645  1.00  0.00
H
ATOM   7895  CA  LEU   479      57.836  72.062  38.388  1.00  0.00
C
ATOM   7896  HA  LEU   479      57.745  71.285  37.633  1.00  0.00
H
ATOM   7897  CB  LEU   479      57.042  71.659  39.649  1.00  0.00
C
ATOM   7898  HB2 LEU   479      57.417  72.245  40.486  1.00  0.00
H
ATOM   7899  HB3 LEU   479      56.011  71.969  39.489  1.00  0.00
H
ATOM   7900  CG  LEU   479      57.005  70.168  40.035  1.00  0.00
C
ATOM   7901  HG  LEU   479      58.011  69.816  40.265  1.00  0.00
H
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ATOM   7902  CD1 LEU   479      56.113  70.018  41.273  1.00  0.00
C
ATOM   7903 HD11 LEU   479      55.097  70.339  41.040  1.00  0.00
H
ATOM   7904 HD12 LEU   479      56.093  68.977  41.589  1.00  0.00
H
ATOM   7905 HD13 LEU   479      56.506  70.624  42.088  1.00  0.00
H
ATOM   7906  CD2 LEU   479      56.384  69.294  38.941  1.00  0.00
C
ATOM   7907 HD21 LEU   479      57.008  69.299  38.054  1.00  0.00
H
ATOM   7908 HD22 LEU   479      56.299  68.266  39.287  1.00  0.00
H
ATOM   7909 HD23 LEU   479      55.397  69.664  38.676  1.00  0.00
H
ATOM   7910  C   LEU   479      57.194  73.322  37.781  1.00  0.00
C
ATOM   7911  O   LEU   479      56.434  73.226  36.815  1.00  0.00
O
ATOM   7912  N   GLN   480      57.488  74.504  38.332  1.00  0.00
N
ATOM   7913  H   GLN   480      58.123  74.524  39.123  1.00  0.00
H
ATOM   7914  CA  GLN   480      56.978  75.767  37.801  1.00  0.00
C
ATOM   7915  HA  GLN   480      55.887  75.724  37.796  1.00  0.00
H
ATOM   7916  CB  GLN   480      57.438  76.955  38.664  1.00  0.00
C
ATOM   7917  HB2 GLN   480      58.503  76.838  38.866  1.00  0.00
H
ATOM   7918  HB3 GLN   480      57.308  77.882  38.104  1.00  0.00
H
ATOM   7919  CG  GLN   480      56.684  77.086  39.996  1.00  0.00
C
ATOM   7920  HG2 GLN   480      56.592  76.119  40.467  1.00  0.00
H
ATOM   7921  HG3 GLN   480      57.297  77.670  40.669  1.00  0.00
H
ATOM   7922  CD  GLN   480      55.300  77.736  39.922  1.00  0.00
C
ATOM   7923  OE1 GLN   480      54.762  78.164  40.925  1.00  0.00
O
ATOM   7924  NE2 GLN   480      54.650  77.843  38.783  1.00  0.00
N
ATOM   7925 HE21 GLN   480      53.734  78.256  38.852  1.00  0.00
H
ATOM   7926 HE22 GLN   480      55.048  77.546  37.911  1.00  0.00
H
ATOM   7927  C   GLN   480      57.438  75.976  36.361  1.00  0.00
C
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ATOM   7928  O   GLN   480      56.634  76.436  35.560  1.00  0.00
O
ATOM   7929  N   ALA   481      58.679  75.622  36.017  1.00  0.00
N
ATOM   7930  H   ALA   481      59.305  75.259  36.730  1.00  0.00
H
ATOM   7931  CA  ALA   481      59.210  75.768  34.667  1.00  0.00
C
ATOM   7932  HA  ALA   481      59.115  76.816  34.370  1.00  0.00
H
ATOM   7933  CB  ALA   481      60.692  75.379  34.721  1.00  0.00
C
ATOM   7934  HB1 ALA   481      60.794  74.303  34.855  1.00  0.00
H
ATOM   7935  HB2 ALA   481      61.205  75.663  33.809  1.00  0.00
H
ATOM   7936  HB3 ALA   481      61.184  75.880  35.551  1.00  0.00
H
ATOM   7937  C   ALA   481      58.418  74.924  33.648  1.00  0.00
C
ATOM   7938  O   ALA   481      58.038  75.441  32.594  1.00  0.00
O
ATOM   7939  N   ILE   482      58.070  73.673  33.991  1.00  0.00
N
ATOM   7940  H   ILE   482      58.424  73.292  34.864  1.00  0.00
H
ATOM   7941  CA  ILE   482      57.164  72.844  33.173  1.00  0.00
C
ATOM   7942  HA  ILE   482      57.546  72.835  32.153  1.00  0.00
H
ATOM   7943  CB  ILE   482      57.129  71.377  33.674  1.00  0.00
C
ATOM   7944  HB  ILE   482      56.799  71.372  34.716  1.00  0.00
H
ATOM   7945  CG2 ILE   482      56.130  70.545  32.843  1.00  0.00
C
ATOM   7946 HG21 ILE   482      56.407  70.577  31.787  1.00  0.00
H
ATOM   7947 HG22 ILE   482      56.121  69.511  33.179  1.00  0.00
H
ATOM   7948 HG23 ILE   482      55.117  70.929  32.959  1.00  0.00
H
ATOM   7949  CG1 ILE   482      58.535  70.735  33.591  1.00  0.00
C
ATOM   7950 HG12 ILE   482      58.874  70.753  32.557  1.00  0.00
H
ATOM   7951 HG13 ILE   482      59.231  71.327  34.183  1.00  0.00
H
ATOM   7952  CD1 ILE   482      58.620  69.288  34.089  1.00  0.00
C
ATOM   7953 HD11 ILE   482      58.224  68.607  33.336  1.00  0.00
H
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ATOM   7954 HD12 ILE   482      59.662  69.031  34.276  1.00  0.00
H
ATOM   7955 HD13 ILE   482      58.048  69.184  35.008  1.00  0.00
H
ATOM   7956  C   ILE   482      55.758  73.463  33.102  1.00  0.00
C
ATOM   7957  O   ILE   482      55.153  73.459  32.033  1.00  0.00
O
ATOM   7958  N   TYR   483      55.240  74.051  34.190  1.00  0.00
N
ATOM   7959  H   TYR   483      55.751  74.008  35.064  1.00  0.00
H
ATOM   7960  CA  TYR   483      53.938  74.728  34.148  1.00  0.00
C
ATOM   7961  HA  TYR   483      53.237  74.010  33.724  1.00  0.00
H
ATOM   7962  CB  TYR   483      53.423  75.095  35.549  1.00  0.00
C
ATOM   7963  HB2 TYR   483      53.435  74.214  36.185  1.00  0.00
H
ATOM   7964  HB3 TYR   483      54.106  75.817  35.988  1.00  0.00
H
ATOM   7965  CG  TYR   483      52.016  75.679  35.550  1.00  0.00
C
ATOM   7966  CD1 TYR   483      50.970  75.048  34.840  1.00  0.00
C
ATOM   7967  HD1 TYR   483      51.143  74.119  34.318  1.00  0.00
H
ATOM   7968  CE1 TYR   483      49.695  75.640  34.776  1.00  0.00
C
ATOM   7969  HE1 TYR   483      48.906  75.169  34.209  1.00  0.00
H
ATOM   7970  CZ  TYR   483      49.446  76.854  35.444  1.00  0.00
C
ATOM   7971  OH  TYR   483      48.226  77.447  35.330  1.00  0.00
O
ATOM   7972  HH  TYR   483      47.634  76.890  34.816  1.00  0.00
H
ATOM   7973  CE2 TYR   483      50.472  77.456  36.202  1.00  0.00
C
ATOM   7974  HE2 TYR   483      50.264  78.363  36.748  1.00  0.00
H
ATOM   7975  CD2 TYR   483      51.755  76.877  36.242  1.00  0.00
C
ATOM   7976  HD2 TYR   483      52.539  77.361  36.804  1.00  0.00
H
ATOM   7977  C   TYR   483      53.930  75.947  33.211  1.00  0.00
C
ATOM   7978  O   TYR   483      53.066  76.012  32.340  1.00  0.00
O
ATOM   7979  N   LEU   484      54.910  76.860  33.305  1.00  0.00
N
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ATOM   7980  H   LEU   484      55.621  76.722  34.014  1.00  0.00
H
ATOM   7981  CA  LEU   484      55.033  77.998  32.378  1.00  0.00
C
ATOM   7982  HA  LEU   484      54.151  78.636  32.469  1.00  0.00
H
ATOM   7983  CB  LEU   484      56.288  78.840  32.694  1.00  0.00
C
ATOM   7984  HB2 LEU   484      57.166  78.212  32.531  1.00  0.00
H
ATOM   7985  HB3 LEU   484      56.326  79.658  31.970  1.00  0.00
H
ATOM   7986  CG  LEU   484      56.408  79.459  34.100  1.00  0.00
C
ATOM   7987  HG  LEU   484      56.474  78.672  34.840  1.00  0.00
H
ATOM   7988  CD1 LEU   484      57.701  80.272  34.183  1.00  0.00
C
ATOM   7989 HD11 LEU   484      57.669  81.100  33.479  1.00  0.00
H
ATOM   7990 HD12 LEU   484      57.831  80.654  35.195  1.00  0.00
H
ATOM   7991 HD13 LEU   484      58.549  79.630  33.946  1.00  0.00
H
ATOM   7992  CD2 LEU   484      55.236  80.358  34.484  1.00  0.00
C
ATOM   7993 HD21 LEU   484      54.318  79.769  34.506  1.00  0.00
H
ATOM   7994 HD22 LEU   484      55.400  80.768  35.481  1.00  0.00
H
ATOM   7995 HD23 LEU   484      55.124  81.165  33.763  1.00  0.00
H
ATOM   7996  C   LEU   484      55.115  77.500  30.916  1.00  0.00
C
ATOM   7997  O   LEU   484      54.416  78.013  30.041  1.00  0.00
O
ATOM   7998  N   ALA   485      55.910  76.455  30.666  1.00  0.00
N
ATOM   7999  H   ALA   485      56.495  76.110  31.422  1.00  0.00
H
ATOM   8000  CA  ALA   485      56.073  75.828  29.345  1.00  0.00
C
ATOM   8001  HA  ALA   485      56.230  76.630  28.624  1.00  0.00
H
ATOM   8002  CB  ALA   485      57.334  74.976  29.400  1.00  0.00
C
ATOM   8003  HB1 ALA   485      57.228  74.190  30.150  1.00  0.00
H
ATOM   8004  HB2 ALA   485      57.505  74.518  28.428  1.00  0.00
H
ATOM   8005  HB3 ALA   485      58.173  75.624  29.657  1.00  0.00
H
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ATOM   8006  C   ALA   485      54.860  75.025  28.861  1.00  0.00
C
ATOM   8007  O   ALA   485      54.812  74.642  27.691  1.00  0.00
O
ATOM   8008  N   LEU   486      53.867  74.792  29.716  1.00  0.00
N
ATOM   8009  H   LEU   486      54.036  75.057  30.683  1.00  0.00
H
ATOM   8010  CA  LEU   486      52.550  74.259  29.360  1.00  0.00
C
ATOM   8011  HA  LEU   486      52.608  73.788  28.381  1.00  0.00
H
ATOM   8012  CB  LEU   486      52.132  73.151  30.342  1.00  0.00
C
ATOM   8013  HB2 LEU   486      52.222  73.515  31.364  1.00  0.00
H
ATOM   8014  HB3 LEU   486      51.085  72.934  30.176  1.00  0.00
H
ATOM   8015  CG  LEU   486      52.864  71.809  30.190  1.00  0.00
C
ATOM   8016  HG  LEU   486      53.938  71.953  30.230  1.00  0.00
H
ATOM   8017  CD1 LEU   486      52.432  70.935  31.360  1.00  0.00
C
ATOM   8018 HD11 LEU   486      51.350  70.802  31.341  1.00  0.00
H
ATOM   8019 HD12 LEU   486      52.926  69.966  31.310  1.00  0.00
H
ATOM   8020 HD13 LEU   486      52.715  71.430  32.289  1.00  0.00
H
ATOM   8021  CD2 LEU   486      52.489  71.076  28.894  1.00  0.00
C
ATOM   8022 HD21 LEU   486      52.845  71.633  28.029  1.00  0.00
H
ATOM   8023 HD22 LEU   486      52.965  70.096  28.885  1.00  0.00
H
ATOM   8024 HD23 LEU   486      51.409  70.943  28.830  1.00  0.00
H
ATOM   8025  C   LEU   486      51.479  75.365  29.230  1.00  0.00
C
ATOM   8026  O   LEU   486      50.571  75.212  28.409  1.00  0.00
O
ATOM   8027  N   GLN   487      51.588  76.469  29.973  1.00  0.00
N
ATOM   8028  H   GLN   487      52.337  76.504  30.655  1.00  0.00
H
ATOM   8029  CA  GLN   487      50.720  77.649  29.846  1.00  0.00
C
ATOM   8030  HA  GLN   487      49.672  77.351  29.896  1.00  0.00
H
ATOM   8031  CB  GLN   487      51.003  78.665  30.967  1.00  0.00
C
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ATOM   8032  HB2 GLN   487      52.074  78.865  31.013  1.00  0.00
H
ATOM   8033  HB3 GLN   487      50.506  79.602  30.705  1.00  0.00
H
ATOM   8034  CG  GLN   487      50.511  78.280  32.363  1.00  0.00
C
ATOM   8035  HG2 GLN   487      49.439  78.087  32.321  1.00  0.00
H
ATOM   8036  HG3 GLN   487      51.009  77.377  32.709  1.00  0.00
H
ATOM   8037  CD  GLN   487      50.790  79.416  33.347  1.00  0.00
C
ATOM   8038  OE1 GLN   487      51.845  80.031  33.374  1.00  0.00
O
ATOM   8039  NE2 GLN   487      49.846  79.770  34.186  1.00  0.00
N
ATOM   8040 HE21 GLN   487      50.084  80.494  34.832  1.00  0.00
H
ATOM   8041 HE22 GLN   487      49.030  79.187  34.286  1.00  0.00
H
ATOM   8042  C   GLN   487      50.950  78.359  28.503  1.00  0.00
C
ATOM   8043  O   GLN   487      50.018  78.502  27.708  1.00  0.00
O
ATOM   8044  N   ASP   488      52.196  78.782  28.248  1.00  0.00
N
ATOM   8045  H   ASP   488      52.907  78.613  28.966  1.00  0.00
H
ATOM   8046  CA  ASP   488      52.603  79.556  27.062  1.00  0.00
C
ATOM   8047  HA  ASP   488      51.797  80.262  26.830  1.00  0.00
H
ATOM   8048  CB  ASP   488      53.837  80.397  27.443  1.00  0.00
C
ATOM   8049  HB2 ASP   488      54.665  79.725  27.691  1.00  0.00
H
ATOM   8050  HB3 ASP   488      54.142  80.996  26.582  1.00  0.00
H
ATOM   8051  CG  ASP   488      53.590  81.362  28.628  1.00  0.00
C
ATOM   8052  OD1 ASP   488      52.677  82.220  28.535  1.00  0.00
O
ATOM   8053  OD2 ASP   488      54.340  81.294  29.634  1.00  0.00
O
ATOM   8054  C   ASP   488      52.849  78.668  25.828  1.00  0.00
C
ATOM   8055  O   ASP   488      53.287  79.153  24.786  1.00  0.00
O
ATOM   8056  N   SER   489      52.560  77.374  25.958  1.00  0.00
N
ATOM   8057  H   SER   489      52.185  77.112  26.854  1.00  0.00
H
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ATOM   8058  CA  SER   489      52.649  76.325  24.941  1.00  0.00
C
ATOM   8059  HA  SER   489      53.569  76.483  24.364  1.00  0.00
H
ATOM   8060  CB  SER   489      52.725  74.965  25.655  1.00  0.00
C
ATOM   8061  HB2 SER   489      53.716  74.581  25.584  1.00  0.00
H
ATOM   8062  HB3 SER   489      52.542  75.130  26.704  1.00  0.00
H
ATOM   8063  OG  SER   489      51.860  73.933  25.250  1.00  0.00
O
ATOM   8064  HG  SER   489      52.289  73.098  25.415  1.00  0.00
H
ATOM   8065  C   SER   489      51.488  76.406  23.945  1.00  0.00
C
ATOM   8066  O   SER   489      50.416  76.972  24.196  1.00  0.00
O
ATOM   8067  N   GLY   490      51.704  75.763  22.798  1.00  0.00
N
ATOM   8068  H   GLY   490      52.604  75.335  22.672  1.00  0.00
H
ATOM   8069  CA  GLY   490      50.681  75.499  21.796  1.00  0.00
C
ATOM   8070  HA2 GLY   490      50.056  76.376  21.637  1.00  0.00
H
ATOM   8071  HA3 GLY   490      51.168  75.245  20.861  1.00  0.00
H
ATOM   8072  C   GLY   490      49.767  74.342  22.210  1.00  0.00
C
ATOM   8073  O   GLY   490      49.388  74.197  23.378  1.00  0.00
O
ATOM   8074  N   LEU   491      49.409  73.496  21.235  1.00  0.00
N
ATOM   8075  H   LEU   491      49.727  73.704  20.295  1.00  0.00
H
ATOM   8076  CA  LEU   491      48.520  72.327  21.417  1.00  0.00
C
ATOM   8077  HA  LEU   491      48.095  72.369  22.420  1.00  0.00
H
ATOM   8078  CB  LEU   491      47.387  72.444  20.379  1.00  0.00
C
ATOM   8079  HB2 LEU   491      47.282  73.487  20.067  1.00  0.00
H
ATOM   8080  HB3 LEU   491      47.664  71.870  19.496  1.00  0.00
H
ATOM   8081  CG  LEU   491      46.021  71.972  20.888  1.00  0.00
C
ATOM   8082  HG  LEU   491      46.092  70.948  21.239  1.00  0.00
H
ATOM   8083  CD1 LEU   491      45.476  72.856  22.016  1.00  0.00
C
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ATOM   8084 HD11 LEU   491      45.510  73.907  21.726  1.00  0.00
H
ATOM   8085 HD12 LEU   491      44.442  72.580  22.230  1.00  0.00
H
ATOM   8086 HD13 LEU   491      46.048  72.710  22.930  1.00  0.00
H
ATOM   8087  CD2 LEU   491      45.044  72.046  19.721  1.00  0.00
C
ATOM   8088 HD21 LEU   491      45.386  71.406  18.906  1.00  0.00
H
ATOM   8089 HD22 LEU   491      44.070  71.687  20.040  1.00  0.00
H
ATOM   8090 HD23 LEU   491      44.951  73.072  19.359  1.00  0.00
H
ATOM   8091  C   LEU   491      49.288  71.001  21.322  1.00  0.00
C
ATOM   8092  O   LEU   491      48.956  70.044  22.016  1.00  0.00
O
ATOM   8093  N   GLU   492      50.340  71.000  20.511  1.00  0.00
N
ATOM   8094  H   GLU   492      50.527  71.849  20.010  1.00  0.00
H
ATOM   8095  CA  GLU   492      51.385  69.984  20.456  1.00  0.00
C
ATOM   8096  HA  GLU   492      51.130  69.156  21.113  1.00  0.00
H
ATOM   8097  CB  GLU   492      51.549  69.451  19.020  1.00  0.00
C
ATOM   8098  HB2 GLU   492      51.969  70.244  18.393  1.00  0.00
H
ATOM   8099  HB3 GLU   492      52.270  68.633  19.055  1.00  0.00
H
ATOM   8100  CG  GLU   492      50.259  68.946  18.355  1.00  0.00
C
ATOM   8101  HG2 GLU   492      49.824  68.147  18.953  1.00  0.00
H
ATOM   8102  HG3 GLU   492      49.533  69.760  18.305  1.00  0.00
H
ATOM   8103  CD  GLU   492      50.536  68.458  16.930  1.00  0.00
C
ATOM   8104  OE1 GLU   492      51.050  69.246  16.109  1.00  0.00
O
ATOM   8105  OE2 GLU   492      50.231  67.291  16.590  1.00  0.00
O
ATOM   8106  C   GLU   492      52.700  70.623  20.925  1.00  0.00
C
ATOM   8107  O   GLU   492      53.066  71.688  20.414  1.00  0.00
O
ATOM   8108  N   VAL   493      53.409  70.021  21.886  1.00  0.00
N
ATOM   8109  H   VAL   493      53.067  69.139  22.255  1.00  0.00
H
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ATOM   8110  CA  VAL   493      54.699  70.542  22.387  1.00  0.00
C
ATOM   8111  HA  VAL   493      55.189  71.030  21.548  1.00  0.00
H
ATOM   8112  CB  VAL   493      54.556  71.595  23.516  1.00  0.00
C
ATOM   8113  HB  VAL   493      55.555  71.804  23.913  1.00  0.00
H
ATOM   8114  CG1 VAL   493      54.019  72.924  22.976  1.00  0.00
C
ATOM   8115 HG11 VAL   493      52.957  72.851  22.745  1.00  0.00
H
ATOM   8116 HG12 VAL   493      54.182  73.699  23.707  1.00  0.00
H
ATOM   8117 HG13 VAL   493      54.576  73.201  22.082  1.00  0.00
H
ATOM   8118  CG2 VAL   493      53.660  71.145  24.682  1.00  0.00
C
ATOM   8119 HG21 VAL   493      54.032  70.200  25.070  1.00  0.00
H
ATOM   8120 HG22 VAL   493      53.708  71.877  25.487  1.00  0.00
H
ATOM   8121 HG23 VAL   493      52.629  71.014  24.347  1.00  0.00
H
ATOM   8122  C   VAL   493      55.664  69.454  22.852  1.00  0.00
C
ATOM   8123  O   VAL   493      55.253  68.425  23.391  1.00  0.00
O
ATOM   8124  N   ASN   494      56.960  69.724  22.698  1.00  0.00
N
ATOM   8125  H   ASN   494      57.224  70.628  22.310  1.00  0.00
H
ATOM   8126  CA  ASN   494      58.036  68.930  23.284  1.00  0.00
C
ATOM   8127  HA  ASN   494      57.641  67.977  23.645  1.00  0.00
H
ATOM   8128  CB  ASN   494      59.103  68.642  22.206  1.00  0.00
C
ATOM   8129  HB2 ASN   494      59.599  69.572  21.950  1.00  0.00
H
ATOM   8130  HB3 ASN   494      59.854  67.969  22.618  1.00  0.00
H
ATOM   8131  CG  ASN   494      58.561  68.025  20.927  1.00  0.00
C
ATOM   8132  OD1 ASN   494      58.125  66.887  20.898  1.00  0.00
O
ATOM   8133  ND2 ASN   494      58.600  68.730  19.816  1.00  0.00
N
ATOM   8134 HD21 ASN   494      58.257  68.294  18.969  1.00  0.00
H
ATOM   8135 HD22 ASN   494      58.983  69.665  19.819  1.00  0.00
H
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ATOM   8136  C   ASN   494      58.612  69.704  24.483  1.00  0.00
C
ATOM   8137  O   ASN   494      58.876  70.901  24.365  1.00  0.00
O
ATOM   8138  N   ILE   495      58.830  69.052  25.624  1.00  0.00
N
ATOM   8139  H   ILE   495      58.555  68.074  25.684  1.00  0.00
H
ATOM   8140  CA  ILE   495      59.419  69.655  26.828  1.00  0.00
C
ATOM   8141  HA  ILE   495      59.751  70.667  26.604  1.00  0.00
H
ATOM   8142  CB  ILE   495      58.371  69.756  27.967  1.00  0.00
C
ATOM   8143  HB  ILE   495      57.998  68.753  28.188  1.00  0.00
H
ATOM   8144  CG2 ILE   495      59.007  70.326  29.252  1.00  0.00
C
ATOM   8145 HG21 ILE   495      59.363  71.339  29.072  1.00  0.00
H
ATOM   8146 HG22 ILE   495      58.281  70.340  30.063  1.00  0.00
H
ATOM   8147 HG23 ILE   495      59.841  69.708  29.584  1.00  0.00
H
ATOM   8148  CG1 ILE   495      57.178  70.639  27.520  1.00  0.00
C
ATOM   8149 HG12 ILE   495      57.546  71.630  27.253  1.00  0.00
H
ATOM   8150 HG13 ILE   495      56.722  70.202  26.632  1.00  0.00
H
ATOM   8151  CD1 ILE   495      56.058  70.810  28.551  1.00  0.00
C
ATOM   8152 HD11 ILE   495      56.403  71.393  29.406  1.00  0.00
H
ATOM   8153 HD12 ILE   495      55.237  71.352  28.084  1.00  0.00
H
ATOM   8154 HD13 ILE   495      55.702  69.834  28.884  1.00  0.00
H
ATOM   8155  C   ILE   495      60.647  68.839  27.230  1.00  0.00
C
ATOM   8156  O   ILE   495      60.558  67.617  27.346  1.00  0.00
O
ATOM   8157  N   VAL   496      61.784  69.494  27.469  1.00  0.00
N
ATOM   8158  H   VAL   496      61.798  70.504  27.344  1.00  0.00
H
ATOM   8159  CA  VAL   496      62.963  68.850  28.077  1.00  0.00
C
ATOM   8160  HA  VAL   496      62.687  67.821  28.290  1.00  0.00
H
ATOM   8161  CB  VAL   496      64.200  68.733  27.152  1.00  0.00
C
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ATOM   8162  HB  VAL   496      64.667  67.772  27.372  1.00  0.00
H
ATOM   8163  CG1 VAL   496      63.853  68.741  25.656  1.00  0.00
C
ATOM   8164 HG11 VAL   496      63.482  69.724  25.367  1.00  0.00
H
ATOM   8165 HG12 VAL   496      64.742  68.512  25.070  1.00  0.00
H
ATOM   8166 HG13 VAL   496      63.088  67.995  25.449  1.00  0.00
H
ATOM   8167  CG2 VAL   496      65.273  69.799  27.379  1.00  0.00
C
ATOM   8168 HG21 VAL   496      65.662  69.742  28.397  1.00  0.00
H
ATOM   8169 HG22 VAL   496      66.102  69.636  26.693  1.00  0.00
H
ATOM   8170 HG23 VAL   496      64.840  70.782  27.212  1.00  0.00
H
ATOM   8171  C   VAL   496      63.272  69.480  29.433  1.00  0.00
C
ATOM   8172  O   VAL   496      63.171  70.697  29.599  1.00  0.00
O
ATOM   8173  N   THR   497      63.657  68.637  30.389  1.00  0.00
N
ATOM   8174  H   THR   497      63.709  67.648  30.166  1.00  0.00
H
ATOM   8175  CA  THR   497      63.969  68.997  31.780  1.00  0.00
C
ATOM   8176  HA  THR   497      64.265  70.046  31.829  1.00  0.00
H
ATOM   8177  CB  THR   497      62.708  68.811  32.653  1.00  0.00
C
ATOM   8178  HB  THR   497      61.915  69.444  32.252  1.00  0.00
H
ATOM   8179  CG2 THR   497      62.184  67.370  32.698  1.00  0.00
C
ATOM   8180 HG21 THR   497      62.948  66.705  33.101  1.00  0.00
H
ATOM   8181 HG22 THR   497      61.306  67.326  33.341  1.00  0.00
H
ATOM   8182 HG23 THR   497      61.905  67.039  31.698  1.00  0.00
H
ATOM   8183  OG1 THR   497      62.930  69.201  33.989  1.00  0.00
O
ATOM   8184  HG1 THR   497      62.949  70.163  34.018  1.00  0.00
H
ATOM   8185  C   THR   497      65.134  68.141  32.291  1.00  0.00
C
ATOM   8186  O   THR   497      65.371  67.048  31.772  1.00  0.00
O
ATOM   8187  N   ASP   498      65.856  68.601  33.308  1.00  0.00
N
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ATOM   8188  H   ASP   498      65.678  69.528  33.690  1.00  0.00
H
ATOM   8189  CA  ASP   498      66.837  67.803  34.052  1.00  0.00
C
ATOM   8190  HA  ASP   498      67.105  66.928  33.462  1.00  0.00
H
ATOM   8191  CB  ASP   498      68.112  68.635  34.234  1.00  0.00
C
ATOM   8192  HB2 ASP   498      68.876  67.981  34.650  1.00  0.00
H
ATOM   8193  HB3 ASP   498      68.443  68.975  33.256  1.00  0.00
H
ATOM   8194  CG  ASP   498      67.952  69.852  35.147  1.00  0.00
C
ATOM   8195  OD1 ASP   498      66.805  70.209  35.478  1.00  0.00
O
ATOM   8196  OD2 ASP   498      69.008  70.398  35.551  1.00  0.00
O
ATOM   8197  C   ASP   498      66.274  67.267  35.381  1.00  0.00
C
ATOM   8198  O   ASP   498      66.866  66.389  36.021  1.00  0.00
O
ATOM   8199  N   SER   499      65.080  67.718  35.762  1.00  0.00
N
ATOM   8200  H   SER   499      64.709  68.488  35.226  1.00  0.00
H
ATOM   8201  CA  SER   499      64.441  67.321  37.013  1.00  0.00
C
ATOM   8202  HA  SER   499      65.226  67.333  37.776  1.00  0.00
H
ATOM   8203  CB  SER   499      63.379  68.316  37.458  1.00  0.00
C
ATOM   8204  HB2 SER   499      63.838  69.287  37.575  1.00  0.00
H
ATOM   8205  HB3 SER   499      62.653  68.377  36.636  1.00  0.00
H
ATOM   8206  OG  SER   499      62.755  67.944  38.679  1.00  0.00
O
ATOM   8207  HG  SER   499      63.045  68.589  39.367  1.00  0.00
H
ATOM   8208  C   SER   499      63.811  65.937  36.936  1.00  0.00
C
ATOM   8209  O   SER   499      62.693  65.730  36.451  1.00  0.00
O
ATOM   8210  N   GLN   500      64.510  64.971  37.524  1.00  0.00
N
ATOM   8211  H   GLN   500      65.440  65.198  37.846  1.00  0.00
H
ATOM   8212  CA  GLN   500      63.961  63.630  37.739  1.00  0.00
C
ATOM   8213  HA  GLN   500      63.649  63.237  36.773  1.00  0.00
H
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ATOM   8214  CB  GLN   500      65.027  62.701  38.338  1.00  0.00
C
ATOM   8215  HB2 GLN   500      65.235  63.020  39.361  1.00  0.00
H
ATOM   8216  HB3 GLN   500      64.598  61.699  38.371  1.00  0.00
H
ATOM   8217  CG  GLN   500      66.339  62.650  37.538  1.00  0.00
C
ATOM   8218  HG2 GLN   500      66.096  62.485  36.490  1.00  0.00
H
ATOM   8219  HG3 GLN   500      66.874  63.597  37.627  1.00  0.00
H
ATOM   8220  CD  GLN   500      67.269  61.534  38.014  1.00  0.00
C
ATOM   8221  OE1 GLN   500      67.526  61.354  39.198  1.00  0.00
O
ATOM   8222  NE2 GLN   500      67.805  60.744  37.108  1.00  0.00
N
ATOM   8223 HE21 GLN   500      68.391  59.998  37.441  1.00  0.00
H
ATOM   8224 HE22 GLN   500      67.657  60.918  36.127  1.00  0.00
H
ATOM   8225  C   GLN   500      62.728  63.646  38.655  1.00  0.00
C
ATOM   8226  O   GLN   500      61.861  62.782  38.534  1.00  0.00
O
ATOM   8227  N   TYR   501      62.629  64.630  39.555  1.00  0.00
N
ATOM   8228  H   TYR   501      63.348  65.339  39.552  1.00  0.00
H
ATOM   8229  CA  TYR   501      61.490  64.803  40.458  1.00  0.00
C
ATOM   8230  HA  TYR   501      61.252  63.842  40.922  1.00  0.00
H
ATOM   8231  CB  TYR   501      61.864  65.810  41.559  1.00  0.00
C
ATOM   8232  HB2 TYR   501      62.608  65.353  42.210  1.00  0.00
H
ATOM   8233  HB3 TYR   501      62.329  66.689  41.107  1.00  0.00
H
ATOM   8234  CG  TYR   501      60.682  66.264  42.397  1.00  0.00
C
ATOM   8235  CD1 TYR   501      60.114  65.394  43.347  1.00  0.00
C
ATOM   8236  HD1 TYR   501      60.521  64.401  43.478  1.00  0.00
H
ATOM   8237  CE1 TYR   501      59.011  65.810  44.117  1.00  0.00
C
ATOM   8238  HE1 TYR   501      58.581  65.139  44.844  1.00  0.00
H
ATOM   8239  CZ  TYR   501      58.464  67.099  43.929  1.00  0.00
C
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ATOM   8240  OH  TYR   501      57.407  67.506  44.683  1.00  0.00
O
ATOM   8241  HH  TYR   501      57.185  66.853  45.349  1.00  0.00
H
ATOM   8242  CE2 TYR   501      59.012  67.956  42.953  1.00  0.00
C
ATOM   8243  HE2 TYR   501      58.594  68.939  42.804  1.00  0.00
H
ATOM   8244  CD2 TYR   501      60.122  67.541  42.192  1.00  0.00
C
ATOM   8245  HD2 TYR   501      60.555  68.214  41.458  1.00  0.00
H
ATOM   8246  C   TYR   501      60.235  65.256  39.701  1.00  0.00
C
ATOM   8247  O   TYR   501      59.207  64.579  39.759  1.00  0.00
O
ATOM   8248  N   ALA   502      60.328  66.357  38.949  1.00  0.00
N
ATOM   8249  H   ALA   502      61.212  66.858  38.903  1.00  0.00
H
ATOM   8250  CA  ALA   502      59.214  66.892  38.176  1.00  0.00
C
ATOM   8251  HA  ALA   502      58.392  67.093  38.860  1.00  0.00
H
ATOM   8252  CB  ALA   502      59.669  68.212  37.543  1.00  0.00
C
ATOM   8253  HB1 ALA   502      60.482  68.025  36.841  1.00  0.00
H
ATOM   8254  HB2 ALA   502      58.844  68.662  37.000  1.00  0.00
H
ATOM   8255  HB3 ALA   502      60.011  68.906  38.315  1.00  0.00
H
ATOM   8256  C   ALA   502      58.730  65.881  37.123  1.00  0.00
C
ATOM   8257  O   ALA   502      57.530  65.620  37.007  1.00  0.00
O
ATOM   8258  N   LEU   503      59.669  65.238  36.420  1.00  0.00
N
ATOM   8259  H   LEU   503      60.641  65.500  36.561  1.00  0.00
H
ATOM   8260  CA  LEU   503      59.382  64.193  35.442  1.00  0.00
C
ATOM   8261  HA  LEU   503      58.695  64.609  34.704  1.00  0.00
H
ATOM   8262  CB  LEU   503      60.703  63.829  34.750  1.00  0.00
C
ATOM   8263  HB2 LEU   503      61.132  64.740  34.322  1.00  0.00
H
ATOM   8264  HB3 LEU   503      61.393  63.445  35.505  1.00  0.00
H
ATOM   8265  CG  LEU   503      60.558  62.778  33.638  1.00  0.00
C
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ATOM   8266  HG  LEU   503      60.118  61.862  34.032  1.00  0.00
H
ATOM   8267  CD1 LEU   503      59.705  63.291  32.479  1.00  0.00
C
ATOM   8268 HD11 LEU   503      60.093  64.247  32.125  1.00  0.00
H
ATOM   8269 HD12 LEU   503      59.724  62.577  31.657  1.00  0.00
H
ATOM   8270 HD13 LEU   503      58.674  63.411  32.804  1.00  0.00
H
ATOM   8271  CD2 LEU   503      61.943  62.462  33.096  1.00  0.00
C
ATOM   8272 HD21 LEU   503      62.561  62.042  33.889  1.00  0.00
H
ATOM   8273 HD22 LEU   503      61.868  61.735  32.286  1.00  0.00
H
ATOM   8274 HD23 LEU   503      62.398  63.381  32.727  1.00  0.00
H
ATOM   8275  C   LEU   503      58.713  62.959  36.073  1.00  0.00
C
ATOM   8276  O   LEU   503      57.711  62.478  35.547  1.00  0.00
O
ATOM   8277  N   GLY   504      59.233  62.468  37.203  1.00  0.00
N
ATOM   8278  H   GLY   504      60.058  62.909  37.591  1.00  0.00
H
ATOM   8279  CA  GLY   504      58.735  61.259  37.870  1.00  0.00
C
ATOM   8280  HA2 GLY   504      58.778  60.422  37.173  1.00  0.00
H
ATOM   8281  HA3 GLY   504      59.380  61.037  38.719  1.00  0.00
H
ATOM   8282  C   GLY   504      57.300  61.381  38.385  1.00  0.00
C
ATOM   8283  O   GLY   504      56.572  60.387  38.402  1.00  0.00
O
ATOM   8284  N   ILE   505      56.855  62.596  38.734  1.00  0.00
N
ATOM   8285  H   ILE   505      57.520  63.364  38.732  1.00  0.00
H
ATOM   8286  CA  ILE   505      55.440  62.873  39.022  1.00  0.00
C
ATOM   8287  HA  ILE   505      55.086  62.136  39.743  1.00  0.00
H
ATOM   8288  CB  ILE   505      55.242  64.285  39.632  1.00  0.00
C
ATOM   8289  HB  ILE   505      55.678  65.024  38.957  1.00  0.00
H
ATOM   8290  CG2 ILE   505      53.737  64.601  39.789  1.00  0.00
C
ATOM   8291 HG21 ILE   505      53.253  63.836  40.396  1.00  0.00
H
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ATOM   8292 HG22 ILE   505      53.588  65.574  40.254  1.00  0.00
H
ATOM   8293 HG23 ILE   505      53.250  64.643  38.815  1.00  0.00
H
ATOM   8294  CG1 ILE   505      55.958  64.382  40.997  1.00  0.00
C
ATOM   8295 HG12 ILE   505      55.475  63.712  41.705  1.00  0.00
H
ATOM   8296 HG13 ILE   505      56.986  64.047  40.893  1.00  0.00
H
ATOM   8297  CD1 ILE   505      56.005  65.798  41.582  1.00  0.00
C
ATOM   8298 HD11 ILE   505      55.005  66.172  41.793  1.00  0.00
H
ATOM   8299 HD12 ILE   505      56.560  65.769  42.516  1.00  0.00
H
ATOM   8300 HD13 ILE   505      56.510  66.467  40.887  1.00  0.00
H
ATOM   8301  C   ILE   505      54.598  62.700  37.752  1.00  0.00
C
ATOM   8302  O   ILE   505      53.622  61.954  37.759  1.00  0.00
O
ATOM   8303  N   ILE   506      54.974  63.380  36.665  1.00  0.00
N
ATOM   8304  H   ILE   506      55.822  63.932  36.716  1.00  0.00
H
ATOM   8305  CA  ILE   506      54.163  63.472  35.439  1.00  0.00
C
ATOM   8306  HA  ILE   506      53.136  63.705  35.726  1.00  0.00
H
ATOM   8307  CB  ILE   506      54.673  64.636  34.552  1.00  0.00
C
ATOM   8308  HB  ILE   506      55.711  64.434  34.279  1.00  0.00
H
ATOM   8309  CG2 ILE   506      53.831  64.738  33.267  1.00  0.00
C
ATOM   8310 HG21 ILE   506      52.785  64.913  33.521  1.00  0.00
H
ATOM   8311 HG22 ILE   506      54.187  65.546  32.630  1.00  0.00
H
ATOM   8312 HG23 ILE   506      53.900  63.818  32.692  1.00  0.00
H
ATOM   8313  CG1 ILE   506      54.605  65.987  35.312  1.00  0.00
C
ATOM   8314 HG12 ILE   506      53.562  66.272  35.453  1.00  0.00
H
ATOM   8315 HG13 ILE   506      55.048  65.884  36.301  1.00  0.00
H
ATOM   8316  CD1 ILE   506      55.348  67.131  34.613  1.00  0.00
C
ATOM   8317 HD11 ILE   506      54.847  67.403  33.686  1.00  0.00
H
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ATOM   8318 HD12 ILE   506      55.365  68.003  35.266  1.00  0.00
H
ATOM   8319 HD13 ILE   506      56.376  66.832  34.402  1.00  0.00
H
ATOM   8320  C   ILE   506      54.110  62.123  34.700  1.00  0.00
C
ATOM   8321  O   ILE   506      53.049  61.731  34.215  1.00  0.00
O
ATOM   8322  N   GLN   507      55.209  61.360  34.674  1.00  0.00
N
ATOM   8323  H   GLN   507      56.061  61.726  35.089  1.00  0.00
H
ATOM   8324  CA  GLN   507      55.244  60.030  34.051  1.00  0.00
C
ATOM   8325  HA  GLN   507      54.870  60.121  33.030  1.00  0.00
H
ATOM   8326  CB  GLN   507      56.688  59.498  33.991  1.00  0.00
C
ATOM   8327  HB2 GLN   507      57.156  59.582  34.975  1.00  0.00
H
ATOM   8328  HB3 GLN   507      56.653  58.441  33.716  1.00  0.00
H
ATOM   8329  CG  GLN   507      57.533  60.223  32.931  1.00  0.00
C
ATOM   8330  HG2 GLN   507      56.992  60.206  31.986  1.00  0.00
H
ATOM   8331  HG3 GLN   507      57.667  61.262  33.215  1.00  0.00
H
ATOM   8332  CD  GLN   507      58.907  59.590  32.709  1.00  0.00
C
ATOM   8333  OE1 GLN   507      59.487  58.928  33.555  1.00  0.00
O
ATOM   8334  NE2 GLN   507      59.497  59.775  31.547  1.00  0.00
N
ATOM   8335 HE21 GLN   507      60.391  59.339  31.422  1.00  0.00
H
ATOM   8336 HE22 GLN   507      59.052  60.287  30.806  1.00  0.00
H
ATOM   8337  C   GLN   507      54.324  59.012  34.744  1.00  0.00
C
ATOM   8338  O   GLN   507      53.878  58.072  34.095  1.00  0.00
O
ATOM   8339  N   ALA   508      53.973  59.196  36.024  1.00  0.00
N
ATOM   8340  H   ALA   508      54.338  59.999  36.521  1.00  0.00
H
ATOM   8341  CA  ALA   508      53.006  58.331  36.712  1.00  0.00
C
ATOM   8342  HA  ALA   508      53.200  57.303  36.403  1.00  0.00
H
ATOM   8343  CB  ALA   508      53.243  58.418  38.225  1.00  0.00
C
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ATOM   8344  HB1 ALA   508      53.009  59.423  38.579  1.00  0.00
H
ATOM   8345  HB2 ALA   508      52.601  57.699  38.732  1.00  0.00
H
ATOM   8346  HB3 ALA   508      54.284  58.191  38.454  1.00  0.00
H
ATOM   8347  C   ALA   508      51.536  58.616  36.328  1.00  0.00
C
ATOM   8348  O   ALA   508      50.631  58.031  36.927  1.00  0.00
O
ATOM   8349  N   GLN   509      51.310  59.523  35.367  1.00  0.00
N
ATOM   8350  H   GLN   509      52.121  59.972  34.957  1.00  0.00
H
ATOM   8351  CA  GLN   509      50.012  59.968  34.849  1.00  0.00
C
ATOM   8352  HA  GLN   509      50.185  60.913  34.333  1.00  0.00
H
ATOM   8353  CB  GLN   509      49.465  58.961  33.813  1.00  0.00
C
ATOM   8354  HB2 GLN   509      49.192  58.037  34.325  1.00  0.00
H
ATOM   8355  HB3 GLN   509      48.562  59.385  33.367  1.00  0.00
H
ATOM   8356  CG  GLN   509      50.456  58.616  32.696  1.00  0.00
C
ATOM   8357  HG2 GLN   509      50.721  59.518  32.145  1.00  0.00
H
ATOM   8358  HG3 GLN   509      51.363  58.197  33.132  1.00  0.00
H
ATOM   8359  CD  GLN   509      49.889  57.586  31.736  1.00  0.00
C
ATOM   8360  OE1 GLN   509      50.286  56.432  31.744  1.00  0.00
O
ATOM   8361  NE2 GLN   509      48.979  57.943  30.861  1.00  0.00
N
ATOM   8362 HE21 GLN   509      48.829  57.287  30.099  1.00  0.00
H
ATOM   8363 HE22 GLN   509      48.599  58.876  30.828  1.00  0.00
H
ATOM   8364  C   GLN   509      48.993  60.269  35.966  1.00  0.00
C
ATOM   8365  O   GLN   509      47.952  59.605  36.017  1.00  0.00
O
ATOM   8366  N   PRO   510      49.263  61.202  36.905  1.00  0.00
N
ATOM   8367  CD  PRO   510      50.435  62.053  37.054  1.00  0.00
C
ATOM   8368  HD2 PRO   510      50.288  62.979  36.501  1.00  0.00
H
ATOM   8369  HD3 PRO   510      51.358  61.577  36.734  1.00  0.00
H
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ATOM   8370  CG  PRO   510      50.499  62.374  38.542  1.00  0.00
C
ATOM   8371  HG2 PRO   510      51.013  63.321  38.720  1.00  0.00
H
ATOM   8372  HG3 PRO   510      50.996  61.557  39.070  1.00  0.00
H
ATOM   8373  CB  PRO   510      49.026  62.422  38.955  1.00  0.00
C
ATOM   8374  HB2 PRO   510      48.647  63.435  38.887  1.00  0.00
H
ATOM   8375  HB3 PRO   510      48.893  62.076  39.974  1.00  0.00
H
ATOM   8376  CA  PRO   510      48.303  61.503  37.961  1.00  0.00
C
ATOM   8377  HA  PRO   510      48.055  60.576  38.475  1.00  0.00
H
ATOM   8378  C   PRO   510      47.023  62.135  37.388  1.00  0.00
C
ATOM   8379  O   PRO   510      47.037  62.714  36.297  1.00  0.00
O
ATOM   8380  N   ASP   511      45.938  62.087  38.163  1.00  0.00
N
ATOM   8381  H   ASP   511      45.993  61.523  39.004  1.00  0.00
H
ATOM   8382  CA  ASP   511      44.738  62.922  37.987  1.00  0.00
C
ATOM   8383  HA  ASP   511      45.011  63.737  37.320  1.00  0.00
H
ATOM   8384  CB  ASP   511      43.614  62.153  37.254  1.00  0.00
C
ATOM   8385  HB2 ASP   511      42.789  62.837  37.048  1.00  0.00
H
ATOM   8386  HB3 ASP   511      44.011  61.839  36.288  1.00  0.00
H
ATOM   8387  CG  ASP   511      43.041  60.922  37.970  1.00  0.00
C
ATOM   8388  OD1 ASP   511      42.682  61.013  39.162  1.00  0.00
O
ATOM   8389  OD2 ASP   511      42.953  59.839  37.350  1.00  0.00
O
ATOM   8390  C   ASP   511      44.306  63.655  39.284  1.00  0.00
C
ATOM   8391  O   ASP   511      43.343  64.421  39.282  1.00  0.00
O
ATOM   8392  N   LYS   512      45.073  63.496  40.374  1.00  0.00
N
ATOM   8393  H   LYS   512      45.832  62.829  40.317  1.00  0.00
H
ATOM   8394  CA  LYS   512      44.868  64.134  41.694  1.00  0.00
C
ATOM   8395  HA  LYS   512      44.306  65.063  41.559  1.00  0.00
H
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ATOM   8396  CB  LYS   512      44.093  63.194  42.656  1.00  0.00
C
ATOM   8397  HB2 LYS   512      44.807  62.555  43.183  1.00  0.00
H
ATOM   8398  HB3 LYS   512      43.572  63.803  43.393  1.00  0.00
H
ATOM   8399  CG  LYS   512      43.094  62.278  41.941  1.00  0.00
C
ATOM   8400  HG2 LYS   512      42.412  62.890  41.344  1.00  0.00
H
ATOM   8401  HG3 LYS   512      43.679  61.635  41.285  1.00  0.00
H
ATOM   8402  CD  LYS   512      42.271  61.339  42.821  1.00  0.00
C
ATOM   8403  HD2 LYS   512      42.934  60.705  43.413  1.00  0.00
H
ATOM   8404  HD3 LYS   512      41.594  61.912  43.457  1.00  0.00
H
ATOM   8405  CE  LYS   512      41.494  60.486  41.815  1.00  0.00
C
ATOM   8406  HE2 LYS   512      40.852  61.130  41.210  1.00  0.00
H
ATOM   8407  HE3 LYS   512      42.208  60.055  41.111  1.00  0.00
H
ATOM   8408  NZ  LYS   512      40.721  59.396  42.431  1.00  0.00
N
ATOM   8409  HZ1 LYS   512      40.024  59.733  43.060  1.00  0.00
H
ATOM   8410  HZ2 LYS   512      40.261  58.884  41.674  1.00  0.00
H
ATOM   8411  HZ3 LYS   512      41.320  58.750  42.932  1.00  0.00
H
ATOM   8412  C   LYS   512      46.215  64.467  42.330  1.00  0.00
C
ATOM   8413  O   LYS   512      47.149  63.660  42.245  1.00  0.00
O
ATOM   8414  N   SER   513      46.299  65.586  43.045  1.00  0.00
N
ATOM   8415  H   SER   513      45.543  66.254  42.994  1.00  0.00
H
ATOM   8416  CA  SER   513      47.434  65.905  43.912  1.00  0.00
C
ATOM   8417  HA  SER   513      47.849  64.968  44.287  1.00  0.00
H
ATOM   8418  CB  SER   513      48.520  66.628  43.107  1.00  0.00
C
ATOM   8419  HB2 SER   513      48.793  66.029  42.240  1.00  0.00
H
ATOM   8420  HB3 SER   513      48.118  67.590  42.766  1.00  0.00
H
ATOM   8421  OG  SER   513      49.661  66.856  43.910  1.00  0.00
O
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ATOM   8422  HG  SER   513      50.302  66.135  43.790  1.00  0.00
H
ATOM   8423  C   SER   513      47.042  66.771  45.113  1.00  0.00
C
ATOM   8424  O   SER   513      46.184  67.649  45.013  1.00  0.00
O
ATOM   8425  N   GLU   514      47.732  66.585  46.241  1.00  0.00
N
ATOM   8426  H   GLU   514      48.422  65.840  46.252  1.00  0.00
H
ATOM   8427  CA  GLU   514      47.703  67.540  47.365  1.00  0.00
C
ATOM   8428  HA  GLU   514      46.667  67.782  47.602  1.00  0.00
H
ATOM   8429  CB  GLU   514      48.361  66.938  48.618  1.00  0.00
C
ATOM   8430  HB2 GLU   514      49.416  66.746  48.410  1.00  0.00
H
ATOM   8431  HB3 GLU   514      48.306  67.683  49.414  1.00  0.00
H
ATOM   8432  CG  GLU   514      47.711  65.649  49.134  1.00  0.00
C
ATOM   8433  HG2 GLU   514      46.627  65.789  49.175  1.00  0.00
H
ATOM   8434  HG3 GLU   514      47.930  64.830  48.446  1.00  0.00
H
ATOM   8435  CD  GLU   514      48.253  65.316  50.532  1.00  0.00
C
ATOM   8436  OE1 GLU   514      49.496  65.301  50.700  1.00  0.00
O
ATOM   8437  OE2 GLU   514      47.441  65.145  51.466  1.00  0.00
O
ATOM   8438  C   GLU   514      48.412  68.868  47.036  1.00  0.00
C
ATOM   8439  O   GLU   514      48.221  69.863  47.735  1.00  0.00
O
ATOM   8440  N   SER   515      49.238  68.895  45.985  1.00  0.00
N
ATOM   8441  H   SER   515      49.292  68.064  45.404  1.00  0.00
H
ATOM   8442  CA  SER   515      50.012  70.061  45.561  1.00  0.00
C
ATOM   8443  HA  SER   515      50.223  70.683  46.431  1.00  0.00
H
ATOM   8444  CB  SER   515      51.354  69.595  44.994  1.00  0.00
C
ATOM   8445  HB2 SER   515      51.867  68.984  45.738  1.00  0.00
H
ATOM   8446  HB3 SER   515      51.178  68.987  44.107  1.00  0.00
H
ATOM   8447  OG  SER   515      52.171  70.703  44.658  1.00  0.00
O
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ATOM   8448  HG  SER   515      52.977  70.362  44.259  1.00  0.00
H
ATOM   8449  C   SER   515      49.244  70.892  44.533  1.00  0.00
C
ATOM   8450  O   SER   515      49.067  70.476  43.388  1.00  0.00
O
ATOM   8451  N   GLU   516      48.844  72.102  44.937  1.00  0.00
N
ATOM   8452  H   GLU   516      48.967  72.309  45.916  1.00  0.00
H
ATOM   8453  CA  GLU   516      48.200  73.141  44.113  1.00  0.00
C
ATOM   8454  HA  GLU   516      47.136  72.926  44.009  1.00  0.00
H
ATOM   8455  CB  GLU   516      48.365  74.483  44.859  1.00  0.00
C
ATOM   8456  HB2 GLU   516      47.834  74.425  45.810  1.00  0.00
H
ATOM   8457  HB3 GLU   516      49.421  74.629  45.092  1.00  0.00
H
ATOM   8458  CG  GLU   516      47.888  75.724  44.086  1.00  0.00
C
ATOM   8459  HG2 GLU   516      48.034  76.602  44.719  1.00  0.00
H
ATOM   8460  HG3 GLU   516      48.522  75.855  43.207  1.00  0.00
H
ATOM   8461  CD  GLU   516      46.418  75.650  43.659  1.00  0.00
C
ATOM   8462  OE1 GLU   516      46.068  76.294  42.647  1.00  0.00
O
ATOM   8463  OE2 GLU   516      45.636  74.969  44.357  1.00  0.00
O
ATOM   8464  C   GLU   516      48.797  73.237  42.697  1.00  0.00
C
ATOM   8465  O   GLU   516      48.090  73.102  41.701  1.00  0.00
O
ATOM   8466  N   LEU   517      50.120  73.399  42.623  1.00  0.00
N
ATOM   8467  H   LEU   517      50.628  73.442  43.491  1.00  0.00
H
ATOM   8468  CA  LEU   517      50.874  73.552  41.377  1.00  0.00
C
ATOM   8469  HA  LEU   517      50.499  74.427  40.841  1.00  0.00
H
ATOM   8470  CB  LEU   517      52.350  73.774  41.770  1.00  0.00
C
ATOM   8471  HB2 LEU   517      52.387  74.377  42.679  1.00  0.00
H
ATOM   8472  HB3 LEU   517      52.767  72.797  42.021  1.00  0.00
H
ATOM   8473  CG  LEU   517      53.263  74.482  40.745  1.00  0.00
C
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ATOM   8474  HG  LEU   517      53.122  75.560  40.832  1.00  0.00
H
ATOM   8475  CD1 LEU   517      54.707  74.130  41.109  1.00  0.00
C
ATOM   8476 HD11 LEU   517      54.812  73.056  41.253  1.00  0.00
H
ATOM   8477 HD12 LEU   517      55.370  74.412  40.298  1.00  0.00
H
ATOM   8478 HD13 LEU   517      54.993  74.655  42.018  1.00  0.00
H
ATOM   8479  CD2 LEU   517      53.052  74.109  39.283  1.00  0.00
C
ATOM   8480 HD21 LEU   517      52.072  74.451  38.948  1.00  0.00
H
ATOM   8481 HD22 LEU   517      53.798  74.598  38.659  1.00  0.00
H
ATOM   8482 HD23 LEU   517      53.127  73.031  39.164  1.00  0.00
H
ATOM   8483  C   LEU   517      50.708  72.319  40.469  1.00  0.00
C
ATOM   8484  O   LEU   517      50.491  72.450  39.267  1.00  0.00
O
ATOM   8485  N   VAL   518      50.757  71.106  41.034  1.00  0.00
N
ATOM   8486  H   VAL   518      50.757  71.041  42.043  1.00  0.00
H
ATOM   8487  CA  VAL   518      50.593  69.879  40.245  1.00  0.00
C
ATOM   8488  HA  VAL   518      51.284  69.920  39.402  1.00  0.00
H
ATOM   8489  CB  VAL   518      50.917  68.609  41.051  1.00  0.00
C
ATOM   8490  HB  VAL   518      50.255  68.564  41.911  1.00  0.00
H
ATOM   8491  CG1 VAL   518      50.735  67.333  40.216  1.00  0.00
C
ATOM   8492 HG11 VAL   518      51.353  67.380  39.318  1.00  0.00
H
ATOM   8493 HG12 VAL   518      51.022  66.461  40.805  1.00  0.00
H
ATOM   8494 HG13 VAL   518      49.692  67.216  39.924  1.00  0.00
H
ATOM   8495  CG2 VAL   518      52.373  68.622  41.538  1.00  0.00
C
ATOM   8496 HG21 VAL   518      52.561  69.498  42.153  1.00  0.00
H
ATOM   8497 HG22 VAL   518      52.563  67.728  42.131  1.00  0.00
H
ATOM   8498 HG23 VAL   518      53.050  68.635  40.684  1.00  0.00
H
ATOM   8499  C   VAL   518      49.188  69.830  39.653  1.00  0.00
C
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ATOM   8500  O   VAL   518      49.074  69.580  38.463  1.00  0.00
O
ATOM   8501  N   ASN   519      48.133  70.162  40.403  1.00  0.00
N
ATOM   8502  H   ASN   519      48.283  70.427  41.369  1.00  0.00
H
ATOM   8503  CA  ASN   519      46.768  70.194  39.851  1.00  0.00
C
ATOM   8504  HA  ASN   519      46.525  69.198  39.478  1.00  0.00
H
ATOM   8505  CB  ASN   519      45.763  70.540  40.960  1.00  0.00
C
ATOM   8506  HB2 ASN   519      45.973  71.539  41.343  1.00  0.00
H
ATOM   8507  HB3 ASN   519      44.759  70.550  40.535  1.00  0.00
H
ATOM   8508  CG  ASN   519      45.770  69.529  42.090  1.00  0.00
C
ATOM   8509  OD1 ASN   519      45.618  68.333  41.896  1.00  0.00
O
ATOM   8510  ND2 ASN   519      45.958  69.970  43.312  1.00  0.00
N
ATOM   8511 HD21 ASN   519      46.028  69.266  44.036  1.00  0.00
H
ATOM   8512 HD22 ASN   519      46.147  70.942  43.473  1.00  0.00
H
ATOM   8513  C   ASN   519      46.636  71.158  38.652  1.00  0.00
C
ATOM   8514  O   ASN   519      45.921  70.849  37.698  1.00  0.00
O
ATOM   8515  N   GLN   520      47.371  72.279  38.650  1.00  0.00
N
ATOM   8516  H   GLN   520      47.933  72.488  39.467  1.00  0.00
H
ATOM   8517  CA  GLN   520      47.433  73.204  37.509  1.00  0.00
C
ATOM   8518  HA  GLN   520      46.416  73.425  37.180  1.00  0.00
H
ATOM   8519  CB  GLN   520      48.094  74.525  37.932  1.00  0.00
C
ATOM   8520  HB2 GLN   520      49.114  74.327  38.249  1.00  0.00
H
ATOM   8521  HB3 GLN   520      48.141  75.168  37.060  1.00  0.00
H
ATOM   8522  CG  GLN   520      47.352  75.290  39.042  1.00  0.00
C
ATOM   8523  HG2 GLN   520      46.399  75.648  38.651  1.00  0.00
H
ATOM   8524  HG3 GLN   520      47.146  74.625  39.879  1.00  0.00
H
ATOM   8525  CD  GLN   520      48.150  76.486  39.565  1.00  0.00
C
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ATOM   8526  OE1 GLN   520      49.170  76.899  39.039  1.00  0.00
O
ATOM   8527  NE2 GLN   520      47.733  77.113  40.635  1.00  0.00
N
ATOM   8528 HE21 GLN   520      48.303  77.861  40.958  1.00  0.00
H
ATOM   8529 HE22 GLN   520      46.954  76.754  41.198  1.00  0.00
H
ATOM   8530  C   GLN   520      48.172  72.594  36.302  1.00  0.00
C
ATOM   8531  O   GLN   520      47.701  72.730  35.175  1.00  0.00
O
ATOM   8532  N   ILE   521      49.286  71.876  36.513  1.00  0.00
N
ATOM   8533  H   ILE   521      49.632  71.814  37.466  1.00  0.00
H
ATOM   8534  CA  ILE   521      49.982  71.113  35.452  1.00  0.00
C
ATOM   8535  HA  ILE   521      50.224  71.795  34.636  1.00  0.00
H
ATOM   8536  CB  ILE   521      51.306  70.493  35.977  1.00  0.00
C
ATOM   8537  HB  ILE   521      51.071  69.869  36.839  1.00  0.00
H
ATOM   8538  CG2 ILE   521      52.011  69.608  34.928  1.00  0.00
C
ATOM   8539 HG21 ILE   521      52.443  70.227  34.147  1.00  0.00
H
ATOM   8540 HG22 ILE   521      52.804  69.028  35.397  1.00  0.00
H
ATOM   8541 HG23 ILE   521      51.324  68.898  34.475  1.00  0.00
H
ATOM   8542  CG1 ILE   521      52.289  71.601  36.411  1.00  0.00
C
ATOM   8543 HG12 ILE   521      52.567  72.188  35.536  1.00  0.00
H
ATOM   8544 HG13 ILE   521      51.801  72.269  37.114  1.00  0.00
H
ATOM   8545  CD1 ILE   521      53.563  71.074  37.080  1.00  0.00
C
ATOM   8546 HD11 ILE   521      54.185  70.538  36.363  1.00  0.00
H
ATOM   8547 HD12 ILE   521      54.144  71.910  37.464  1.00  0.00
H
ATOM   8548 HD13 ILE   521      53.296  70.413  37.906  1.00  0.00
H
ATOM   8549  C   ILE   521      49.054  70.031  34.874  1.00  0.00
C
ATOM   8550  O   ILE   521      48.999  69.865  33.660  1.00  0.00
O
ATOM   8551  N   ILE   522      48.304  69.328  35.727  1.00  0.00
N
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ATOM   8552  H   ILE   522      48.424  69.517  36.715  1.00  0.00
H
ATOM   8553  CA  ILE   522      47.347  68.277  35.341  1.00  0.00
C
ATOM   8554  HA  ILE   522      47.874  67.528  34.750  1.00  0.00
H
ATOM   8555  CB  ILE   522      46.767  67.586  36.599  1.00  0.00
C
ATOM   8556  HB  ILE   522      46.312  68.366  37.205  1.00  0.00
H
ATOM   8557  CG2 ILE   522      45.641  66.590  36.261  1.00  0.00
C
ATOM   8558 HG21 ILE   522      45.997  65.841  35.554  1.00  0.00
H
ATOM   8559 HG22 ILE   522      45.303  66.100  37.173  1.00  0.00
H
ATOM   8560 HG23 ILE   522      44.784  67.106  35.825  1.00  0.00
H
ATOM   8561  CG1 ILE   522      47.867  66.911  37.459  1.00  0.00
C
ATOM   8562 HG12 ILE   522      48.760  67.521  37.461  1.00  0.00
H
ATOM   8563 HG13 ILE   522      47.499  66.836  38.484  1.00  0.00
H
ATOM   8564  CD1 ILE   522      48.332  65.533  37.003  1.00  0.00
C
ATOM   8565 HD11 ILE   522      48.517  65.525  35.932  1.00  0.00
H
ATOM   8566 HD12 ILE   522      49.251  65.259  37.515  1.00  0.00
H
ATOM   8567 HD13 ILE   522      47.564  64.819  37.265  1.00  0.00
H
ATOM   8568  C   ILE   522      46.253  68.873  34.445  1.00  0.00
C
ATOM   8569  O   ILE   522      46.080  68.413  33.319  1.00  0.00
O
ATOM   8570  N   GLU   523      45.562  69.935  34.886  1.00  0.00
N
ATOM   8571  H   GLU   523      45.742  70.273  35.828  1.00  0.00
H
ATOM   8572  CA  GLU   523      44.578  70.656  34.060  1.00  0.00
C
ATOM   8573  HA  GLU   523      43.737  69.995  33.852  1.00  0.00
H
ATOM   8574  CB  GLU   523      44.070  71.899  34.824  1.00  0.00
C
ATOM   8575  HB2 GLU   523      43.660  71.584  35.784  1.00  0.00
H
ATOM   8576  HB3 GLU   523      44.910  72.571  35.008  1.00  0.00
H
ATOM   8577  CG  GLU   523      42.978  72.651  34.043  1.00  0.00
C
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ATOM   8578  HG2 GLU   523      43.291  72.772  33.005  1.00  0.00
H
ATOM   8579  HG3 GLU   523      42.069  72.047  34.037  1.00  0.00
H
ATOM   8580  CD  GLU   523      42.659  74.056  34.574  1.00  0.00
C
ATOM   8581  OE1 GLU   523      42.083  74.826  33.765  1.00  0.00
O
ATOM   8582  OE2 GLU   523      42.965  74.394  35.736  1.00  0.00
O
ATOM   8583  C   GLU   523      45.183  71.075  32.710  1.00  0.00
C
ATOM   8584  O   GLU   523      44.582  70.868  31.651  1.00  0.00
O
ATOM   8585  N   GLN   524      46.394  71.634  32.736  1.00  0.00
N
ATOM   8586  H   GLN   524      46.842  71.785  33.635  1.00  0.00
H
ATOM   8587  CA  GLN   524      47.068  72.113  31.538  1.00  0.00
C
ATOM   8588  HA  GLN   524      46.368  72.764  31.015  1.00  0.00
H
ATOM   8589  CB  GLN   524      48.292  72.938  31.963  1.00  0.00
C
ATOM   8590  HB2 GLN   524      48.054  73.496  32.864  1.00  0.00
H
ATOM   8591  HB3 GLN   524      49.120  72.263  32.189  1.00  0.00
H
ATOM   8592  CG  GLN   524      48.739  73.962  30.918  1.00  0.00
C
ATOM   8593  HG2 GLN   524      49.697  74.367  31.234  1.00  0.00
H
ATOM   8594  HG3 GLN   524      48.861  73.472  29.953  1.00  0.00
H
ATOM   8595  CD  GLN   524      47.784  75.138  30.786  1.00  0.00
C
ATOM   8596  OE1 GLN   524      47.773  76.054  31.590  1.00  0.00
O
ATOM   8597  NE2 GLN   524      46.953  75.172  29.766  1.00  0.00
N
ATOM   8598 HE21 GLN   524      46.373  75.990  29.710  1.00  0.00
H
ATOM   8599 HE22 GLN   524      46.925  74.420  29.105  1.00  0.00
H
ATOM   8600  C   GLN   524      47.436  70.973  30.576  1.00  0.00
C
ATOM   8601  O   GLN   524      47.400  71.211  29.372  1.00  0.00
O
ATOM   8602  N   LEU   525      47.737  69.765  31.080  1.00  0.00
N
ATOM   8603  H   LEU   525      47.772  69.679  32.092  1.00  0.00
H
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ATOM   8604  CA  LEU   525      48.001  68.548  30.297  1.00  0.00
C
ATOM   8605  HA  LEU   525      48.640  68.814  29.458  1.00  0.00
H
ATOM   8606  CB  LEU   525      48.734  67.496  31.163  1.00  0.00
C
ATOM   8607  HB2 LEU   525      48.226  67.418  32.124  1.00  0.00
H
ATOM   8608  HB3 LEU   525      48.656  66.520  30.680  1.00  0.00
H
ATOM   8609  CG  LEU   525      50.228  67.789  31.402  1.00  0.00
C
ATOM   8610  HG  LEU   525      50.346  68.820  31.723  1.00  0.00
H
ATOM   8611  CD1 LEU   525      50.792  66.881  32.494  1.00  0.00
C
ATOM   8612 HD11 LEU   525      50.736  65.839  32.184  1.00  0.00
H
ATOM   8613 HD12 LEU   525      51.831  67.147  32.689  1.00  0.00
H
ATOM   8614 HD13 LEU   525      50.218  67.013  33.410  1.00  0.00
H
ATOM   8615  CD2 LEU   525      51.074  67.569  30.143  1.00  0.00
C
ATOM   8616 HD21 LEU   525      50.763  68.258  29.363  1.00  0.00
H
ATOM   8617 HD22 LEU   525      52.123  67.752  30.369  1.00  0.00
H
ATOM   8618 HD23 LEU   525      50.958  66.544  29.789  1.00  0.00
H
ATOM   8619  C   LEU   525      46.728  67.953  29.676  1.00  0.00
C
ATOM   8620  O   LEU   525      46.775  67.591  28.503  1.00  0.00
O
ATOM   8621  N   ILE   526      45.588  67.917  30.385  1.00  0.00
N
ATOM   8622  H   ILE   526      45.618  68.213  31.357  1.00  0.00
H
ATOM   8623  CA  ILE   526      44.296  67.506  29.784  1.00  0.00
C
ATOM   8624  HA  ILE   526      44.428  66.517  29.341  1.00  0.00
H
ATOM   8625  CB  ILE   526      43.159  67.411  30.844  1.00  0.00
C
ATOM   8626  HB  ILE   526      43.211  68.275  31.510  1.00  0.00
H
ATOM   8627  CG2 ILE   526      41.754  67.408  30.199  1.00  0.00
C
ATOM   8628 HG21 ILE   526      41.672  66.588  29.483  1.00  0.00
H
ATOM   8629 HG22 ILE   526      40.982  67.302  30.959  1.00  0.00
H
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ATOM   8630 HG23 ILE   526      41.563  68.350  29.687  1.00  0.00
H
ATOM   8631  CG1 ILE   526      43.229  66.107  31.677  1.00  0.00
C
ATOM   8632 HG12 ILE   526      42.259  65.924  32.143  1.00  0.00
H
ATOM   8633 HG13 ILE   526      43.442  65.271  31.011  1.00  0.00
H
ATOM   8634  CD1 ILE   526      44.244  66.104  32.817  1.00  0.00
C
ATOM   8635 HD11 ILE   526      44.035  66.941  33.483  1.00  0.00
H
ATOM   8636 HD12 ILE   526      44.150  65.180  33.388  1.00  0.00
H
ATOM   8637 HD13 ILE   526      45.256  66.170  32.423  1.00  0.00
H
ATOM   8638  C   ILE   526      43.912  68.444  28.622  1.00  0.00
C
ATOM   8639  O   ILE   526      43.322  67.999  27.637  1.00  0.00
O
ATOM   8640  N   LYS   527      44.270  69.734  28.705  1.00  0.00
N
ATOM   8641  H   LYS   527      44.674  70.044  29.582  1.00  0.00
H
ATOM   8642  CA  LYS   527      44.060  70.725  27.633  1.00  0.00
C
ATOM   8643  HA  LYS   527      43.070  70.555  27.204  1.00  0.00
H
ATOM   8644  CB  LYS   527      44.101  72.145  28.220  1.00  0.00
C
ATOM   8645  HB2 LYS   527      44.987  72.254  28.846  1.00  0.00
H
ATOM   8646  HB3 LYS   527      44.185  72.857  27.398  1.00  0.00
H
ATOM   8647  CG  LYS   527      42.851  72.530  29.022  1.00  0.00
C
ATOM   8648  HG2 LYS   527      41.972  72.411  28.386  1.00  0.00
H
ATOM   8649  HG3 LYS   527      42.752  71.883  29.894  1.00  0.00
H
ATOM   8650  CD  LYS   527      42.974  74.000  29.461  1.00  0.00
C
ATOM   8651  HD2 LYS   527      43.755  74.091  30.218  1.00  0.00
H
ATOM   8652  HD3 LYS   527      43.262  74.597  28.595  1.00  0.00
H
ATOM   8653  CE  LYS   527      41.664  74.592  29.990  1.00  0.00
C
ATOM   8654  HE2 LYS   527      41.787  75.671  30.114  1.00  0.00
H
ATOM   8655  HE3 LYS   527      40.878  74.426  29.248  1.00  0.00
H
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ATOM   8656  NZ  LYS   527      41.245  74.001  31.278  1.00  0.00
N
ATOM   8657  HZ1 LYS   527      41.887  74.193  32.046  1.00  0.00
H
ATOM   8658  HZ2 LYS   527      40.367  74.427  31.563  1.00  0.00
H
ATOM   8659  HZ3 LYS   527      41.067  73.002  31.180  1.00  0.00
H
ATOM   8660  C   LYS   527      45.034  70.616  26.444  1.00  0.00
C
ATOM   8661  O   LYS   527      44.892  71.398  25.501  1.00  0.00
O
ATOM   8662  N   LYS   528      46.031  69.723  26.459  1.00  0.00
N
ATOM   8663  H   LYS   528      46.066  69.054  27.223  1.00  0.00
H
ATOM   8664  CA  LYS   528      46.924  69.493  25.305  1.00  0.00
C
ATOM   8665  HA  LYS   528      46.860  70.340  24.624  1.00  0.00
H
ATOM   8666  CB  LYS   528      48.394  69.348  25.728  1.00  0.00
C
ATOM   8667  HB2 LYS   528      48.488  68.461  26.357  1.00  0.00
H
ATOM   8668  HB3 LYS   528      48.995  69.181  24.837  1.00  0.00
H
ATOM   8669  CG  LYS   528      48.991  70.548  26.475  1.00  0.00
C
ATOM   8670  HG2 LYS   528      48.563  70.555  27.466  1.00  0.00
H
ATOM   8671  HG3 LYS   528      50.062  70.389  26.597  1.00  0.00
H
ATOM   8672  CD  LYS   528      48.766  71.917  25.812  1.00  0.00
C
ATOM   8673  HD2 LYS   528      49.370  71.977  24.905  1.00  0.00
H
ATOM   8674  HD3 LYS   528      47.717  72.056  25.556  1.00  0.00
H
ATOM   8675  CE  LYS   528      49.168  73.025  26.790  1.00  0.00
C
ATOM   8676  HE2 LYS   528      48.498  72.989  27.653  1.00  0.00
H
ATOM   8677  HE3 LYS   528      50.186  72.832  27.148  1.00  0.00
H
ATOM   8678  NZ  LYS   528      49.126  74.367  26.159  1.00  0.00
N
ATOM   8679  HZ1 LYS   528      48.203  74.638  25.851  1.00  0.00
H
ATOM   8680  HZ2 LYS   528      49.520  75.054  26.797  1.00  0.00
H
ATOM   8681  HZ3 LYS   528      49.727  74.368  25.335  1.00  0.00
H
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ATOM   8682  C   LYS   528      46.471  68.301  24.474  1.00  0.00
C
ATOM   8683  O   LYS   528      45.770  67.414  24.947  1.00  0.00
O
ATOM   8684  N   GLU   529      46.894  68.296  23.216  1.00  0.00
N
ATOM   8685  H   GLU   529      47.490  69.051  22.899  1.00  0.00
H
ATOM   8686  CA  GLU   529      46.550  67.242  22.263  1.00  0.00
C
ATOM   8687  HA  GLU   529      45.643  66.735  22.603  1.00  0.00
H
ATOM   8688  CB  GLU   529      46.230  67.913  20.918  1.00  0.00
C
ATOM   8689  HB2 GLU   529      45.548  68.736  21.132  1.00  0.00
H
ATOM   8690  HB3 GLU   529      47.141  68.339  20.491  1.00  0.00
H
ATOM   8691  CG  GLU   529      45.553  66.994  19.888  1.00  0.00
C
ATOM   8692  HG2 GLU   529      46.295  66.692  19.143  1.00  0.00
H
ATOM   8693  HG3 GLU   529      45.189  66.091  20.383  1.00  0.00
H
ATOM   8694  CD  GLU   529      44.381  67.708  19.192  1.00  0.00
C
ATOM   8695  OE1 GLU   529      44.632  68.687  18.449  1.00  0.00
O
ATOM   8696  OE2 GLU   529      43.215  67.296  19.400  1.00  0.00
O
ATOM   8697  C   GLU   529      47.653  66.178  22.208  1.00  0.00
C
ATOM   8698  O   GLU   529      47.356  64.991  22.324  1.00  0.00
O
ATOM   8699  N   LYS   530      48.927  66.598  22.123  1.00  0.00
N
ATOM   8700  H   LYS   530      49.078  67.597  22.051  1.00  0.00
H
ATOM   8701  CA  LYS   530      50.118  65.723  22.124  1.00  0.00
C
ATOM   8702  HA  LYS   530      49.882  64.778  22.622  1.00  0.00
H
ATOM   8703  CB  LYS   530      50.520  65.423  20.664  1.00  0.00
C
ATOM   8704  HB2 LYS   530      50.522  66.356  20.101  1.00  0.00
H
ATOM   8705  HB3 LYS   530      51.533  65.029  20.651  1.00  0.00
H
ATOM   8706  CG  LYS   530      49.606  64.393  19.968  1.00  0.00
C
ATOM   8707  HG2 LYS   530      49.902  63.390  20.267  1.00  0.00
H
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ATOM   8708  HG3 LYS   530      48.577  64.533  20.279  1.00  0.00
H
ATOM   8709  CD  LYS   530      49.595  64.498  18.441  1.00  0.00
C
ATOM   8710  HD2 LYS   530      48.890  63.762  18.053  1.00  0.00
H
ATOM   8711  HD3 LYS   530      49.227  65.490  18.176  1.00  0.00
H
ATOM   8712  CE  LYS   530      50.963  64.261  17.794  1.00  0.00
C
ATOM   8713  HE2 LYS   530      51.710  64.870  18.307  1.00  0.00
H
ATOM   8714  HE3 LYS   530      51.240  63.209  17.912  1.00  0.00
H
ATOM   8715  NZ  LYS   530      50.925  64.640  16.363  1.00  0.00
N
ATOM   8716  HZ1 LYS   530      50.712  65.637  16.280  1.00  0.00
H
ATOM   8717  HZ2 LYS   530      51.818  64.464  15.908  1.00  0.00
H
ATOM   8718  HZ3 LYS   530      50.221  64.133  15.847  1.00  0.00
H
ATOM   8719  C   LYS   530      51.276  66.386  22.883  1.00  0.00
C
ATOM   8720  O   LYS   530      51.734  67.459  22.493  1.00  0.00
O
ATOM   8721  N   VAL   531      51.771  65.764  23.954  1.00  0.00
N
ATOM   8722  H   VAL   531      51.364  64.882  24.229  1.00  0.00
H
ATOM   8723  CA  VAL   531      52.910  66.276  24.745  1.00  0.00
C
ATOM   8724  HA  VAL   531      53.347  67.125  24.223  1.00  0.00
H
ATOM   8725  CB  VAL   531      52.487  66.778  26.141  1.00  0.00
C
ATOM   8726  HB  VAL   531      52.104  65.942  26.728  1.00  0.00
H
ATOM   8727  CG1 VAL   531      53.664  67.405  26.897  1.00  0.00
C
ATOM   8728 HG11 VAL   531      54.082  68.239  26.335  1.00  0.00
H
ATOM   8729 HG12 VAL   531      53.336  67.753  27.877  1.00  0.00
H
ATOM   8730 HG13 VAL   531      54.437  66.658  27.048  1.00  0.00
H
ATOM   8731  CG2 VAL   531      51.403  67.852  26.045  1.00  0.00
C
ATOM   8732 HG21 VAL   531      50.496  67.409  25.638  1.00  0.00
H
ATOM   8733 HG22 VAL   531      51.180  68.242  27.037  1.00  0.00
H
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ATOM   8734 HG23 VAL   531      51.737  68.664  25.400  1.00  0.00
H
ATOM   8735  C   VAL   531      53.991  65.210  24.876  1.00  0.00
C
ATOM   8736  O   VAL   531      53.707  64.088  25.292  1.00  0.00
O
ATOM   8737  N   TYR   532      55.235  65.582  24.579  1.00  0.00
N
ATOM   8738  H   TYR   532      55.381  66.530  24.245  1.00  0.00
H
ATOM   8739  CA  TYR   532      56.423  64.744  24.762  1.00  0.00
C
ATOM   8740  HA  TYR   532      56.126  63.730  25.035  1.00  0.00
H
ATOM   8741  CB  TYR   532      57.172  64.674  23.428  1.00  0.00
C
ATOM   8742  HB2 TYR   532      56.501  64.242  22.688  1.00  0.00
H
ATOM   8743  HB3 TYR   532      57.414  65.687  23.108  1.00  0.00
H
ATOM   8744  CG  TYR   532      58.434  63.840  23.430  1.00  0.00
C
ATOM   8745  CD1 TYR   532      58.330  62.440  23.375  1.00  0.00
C
ATOM   8746  HD1 TYR   532      57.353  61.981  23.339  1.00  0.00
H
ATOM   8747  CE1 TYR   532      59.485  61.639  23.339  1.00  0.00
C
ATOM   8748  HE1 TYR   532      59.390  60.566  23.305  1.00  0.00
H
ATOM   8749  CZ  TYR   532      60.757  62.246  23.327  1.00  0.00
C
ATOM   8750  OH  TYR   532      61.877  61.482  23.252  1.00  0.00
O
ATOM   8751  HH  TYR   532      61.663  60.546  23.240  1.00  0.00
H
ATOM   8752  CE2 TYR   532      60.862  63.652  23.347  1.00  0.00
C
ATOM   8753  HE2 TYR   532      61.837  64.105  23.299  1.00  0.00
H
ATOM   8754  CD2 TYR   532      59.703  64.450  23.416  1.00  0.00
C
ATOM   8755  HD2 TYR   532      59.783  65.527  23.435  1.00  0.00
H
ATOM   8756  C   TYR   532      57.305  65.313  25.879  1.00  0.00
C
ATOM   8757  O   TYR   532      57.630  66.501  25.847  1.00  0.00
O
ATOM   8758  N   LEU   533      57.704  64.483  26.850  1.00  0.00
N
ATOM   8759  H   LEU   533      57.451  63.508  26.775  1.00  0.00
H
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ATOM   8760  CA  LEU   533      58.650  64.852  27.914  1.00  0.00
C
ATOM   8761  HA  LEU   533      58.891  65.911  27.832  1.00  0.00
H
ATOM   8762  CB  LEU   533      58.056  64.621  29.322  1.00  0.00
C
ATOM   8763  HB2 LEU   533      57.382  63.765  29.307  1.00  0.00
H
ATOM   8764  HB3 LEU   533      58.881  64.364  29.984  1.00  0.00
H
ATOM   8765  CG  LEU   533      57.355  65.843  29.947  1.00  0.00
C
ATOM   8766  HG  LEU   533      58.024  66.703  29.896  1.00  0.00
H
ATOM   8767  CD1 LEU   533      56.057  66.195  29.232  1.00  0.00
C
ATOM   8768 HD11 LEU   533      55.396  65.329  29.203  1.00  0.00
H
ATOM   8769 HD12 LEU   533      55.559  67.019  29.743  1.00  0.00
H
ATOM   8770 HD13 LEU   533      56.296  66.516  28.222  1.00  0.00
H
ATOM   8771  CD2 LEU   533      57.027  65.586  31.419  1.00  0.00
C
ATOM   8772 HD21 LEU   533      57.952  65.494  31.984  1.00  0.00
H
ATOM   8773 HD22 LEU   533      56.469  66.428  31.826  1.00  0.00
H
ATOM   8774 HD23 LEU   533      56.440  64.674  31.521  1.00  0.00
H
ATOM   8775  C   LEU   533      59.961  64.073  27.745  1.00  0.00
C
ATOM   8776  O   LEU   533      59.963  62.845  27.790  1.00  0.00
O
ATOM   8777  N   ALA   534      61.071  64.797  27.617  1.00  0.00
N
ATOM   8778  H   ALA   534      60.976  65.807  27.604  1.00  0.00
H
ATOM   8779  CA  ALA   534      62.426  64.253  27.569  1.00  0.00
C
ATOM   8780  HA  ALA   534      62.375  63.163  27.552  1.00  0.00
H
ATOM   8781  CB  ALA   534      63.098  64.712  26.272  1.00  0.00
C
ATOM   8782  HB1 ALA   534      63.133  65.800  26.245  1.00  0.00
H
ATOM   8783  HB2 ALA   534      64.113  64.316  26.214  1.00  0.00
H
ATOM   8784  HB3 ALA   534      62.527  64.346  25.424  1.00  0.00
H
ATOM   8785  C   ALA   534      63.246  64.653  28.801  1.00  0.00
C
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ATOM   8786  O   ALA   534      62.994  65.683  29.434  1.00  0.00
O
ATOM   8787  N   TRP   535      64.274  63.857  29.104  1.00  0.00
N
ATOM   8788  H   TRP   535      64.464  63.064  28.509  1.00  0.00
H
ATOM   8789  CA  TRP   535      65.200  64.099  30.204  1.00  0.00
C
ATOM   8790  HA  TRP   535      64.914  65.012  30.720  1.00  0.00
H
ATOM   8791  CB  TRP   535      65.111  62.960  31.219  1.00  0.00
C
ATOM   8792  HB2 TRP   535      64.067  62.789  31.458  1.00  0.00
H
ATOM   8793  HB3 TRP   535      65.489  62.043  30.765  1.00  0.00
H
ATOM   8794  CG  TRP   535      65.876  63.248  32.469  1.00  0.00
C
ATOM   8795  CD1 TRP   535      65.483  64.083  33.456  1.00  0.00
C
ATOM   8796  HD1 TRP   535      64.546  64.635  33.470  1.00  0.00
H
ATOM   8797  NE1 TRP   535      66.496  64.215  34.376  1.00  0.00
N
ATOM   8798  HE1 TRP   535      66.490  64.911  35.116  1.00  0.00
H
ATOM   8799  CE2 TRP   535      67.612  63.490  34.028  1.00  0.00
C
ATOM   8800  CZ2 TRP   535      68.880  63.340  34.611  1.00  0.00
C
ATOM   8801  HZ2 TRP   535      69.121  63.859  35.529  1.00  0.00
H
ATOM   8802  CH2 TRP   535      69.828  62.524  33.976  1.00  0.00
C
ATOM   8803  HH2 TRP   535      70.813  62.395  34.403  1.00  0.00
H
ATOM   8804  CZ3 TRP   535      69.498  61.878  32.766  1.00  0.00
C
ATOM   8805  HZ3 TRP   535      70.229  61.251  32.274  1.00  0.00
H
ATOM   8806  CE3 TRP   535      68.225  62.047  32.192  1.00  0.00
C
ATOM   8807  HE3 TRP   535      67.986  61.565  31.255  1.00  0.00
H
ATOM   8808  CD2 TRP   535      67.243  62.850  32.814  1.00  0.00
C
ATOM   8809  C   TRP   535      66.639  64.266  29.711  1.00  0.00
C
ATOM   8810  O   TRP   535      67.071  63.526  28.827  1.00  0.00
O
ATOM   8811  N   VAL   536      67.387  65.198  30.304  1.00  0.00
N
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ATOM   8812  H   VAL   536      66.962  65.773  31.028  1.00  0.00
H
ATOM   8813  CA  VAL   536      68.824  65.394  30.041  1.00  0.00
C
ATOM   8814  HA  VAL   536      69.206  64.472  29.613  1.00  0.00
H
ATOM   8815  CB  VAL   536      69.079  66.517  29.014  1.00  0.00
C
ATOM   8816  HB  VAL   536      70.156  66.677  28.957  1.00  0.00
H
ATOM   8817  CG1 VAL   536      68.612  66.112  27.611  1.00  0.00
C
ATOM   8818 HG11 VAL   536      67.528  65.995  27.594  1.00  0.00
H
ATOM   8819 HG12 VAL   536      68.897  66.877  26.890  1.00  0.00
H
ATOM   8820 HG13 VAL   536      69.072  65.165  27.329  1.00  0.00
H
ATOM   8821  CG2 VAL   536      68.421  67.857  29.370  1.00  0.00
C
ATOM   8822 HG21 VAL   536      68.772  68.201  30.344  1.00  0.00
H
ATOM   8823 HG22 VAL   536      68.679  68.601  28.619  1.00  0.00
H
ATOM   8824 HG23 VAL   536      67.336  67.751  29.410  1.00  0.00
H
ATOM   8825  C   VAL   536      69.597  65.674  31.337  1.00  0.00
C
ATOM   8826  O   VAL   536      69.059  66.329  32.223  1.00  0.00
O
ATOM   8827  N   PRO   537      70.864  65.235  31.480  1.00  0.00
N
ATOM   8828  CD  PRO   537      71.518  64.206  30.684  1.00  0.00
C
ATOM   8829  HD2 PRO   537      71.950  64.655  29.792  1.00  0.00
H
ATOM   8830  HD3 PRO   537      70.825  63.412  30.408  1.00  0.00
H
ATOM   8831  CG  PRO   537      72.622  63.629  31.571  1.00  0.00
C
ATOM   8832  HG2 PRO   537      73.474  63.286  30.985  1.00  0.00
H
ATOM   8833  HG3 PRO   537      72.226  62.816  32.179  1.00  0.00
H
ATOM   8834  CB  PRO   537      72.993  64.807  32.467  1.00  0.00
C
ATOM   8835  HB2 PRO   537      73.690  65.449  31.930  1.00  0.00
H
ATOM   8836  HB3 PRO   537      73.423  64.483  33.415  1.00  0.00
H
ATOM   8837  CA  PRO   537      71.658  65.529  32.671  1.00  0.00
C
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ATOM   8838  HA  PRO   537      71.148  65.077  33.524  1.00  0.00
H
ATOM   8839  C   PRO   537      71.862  67.030  32.956  1.00  0.00
C
ATOM   8840  O   PRO   537      72.322  67.793  32.099  1.00  0.00
O
ATOM   8841  N   ALA   538      71.599  67.413  34.207  1.00  0.00
N
ATOM   8842  H   ALA   538      71.140  66.757  34.816  1.00  0.00
H
ATOM   8843  CA  ALA   538      71.896  68.729  34.773  1.00  0.00
C
ATOM   8844  HA  ALA   538      71.304  69.478  34.241  1.00  0.00
H
ATOM   8845  CB  ALA   538      71.459  68.733  36.243  1.00  0.00
C
ATOM   8846  HB1 ALA   538      72.132  68.122  36.841  1.00  0.00
H
ATOM   8847  HB2 ALA   538      71.473  69.757  36.620  1.00  0.00
H
ATOM   8848  HB3 ALA   538      70.442  68.358  36.346  1.00  0.00
H
ATOM   8849  C   ALA   538      73.390  69.091  34.664  1.00  0.00
C
ATOM   8850  O   ALA   538      74.258  68.212  34.654  1.00  0.00
O
ATOM   8851  N   HIE   539      73.701  70.392  34.588  1.00  0.00
N
ATOM   8852  H   HIE   539      72.932  71.042  34.710  1.00  0.00
H
ATOM   8853  CA  HIE   539      75.072  70.954  34.580  1.00  0.00
C
ATOM   8854  HA  HIE   539      74.971  72.009  34.328  1.00  0.00
H
ATOM   8855  CB  HIE   539      75.667  70.908  36.004  1.00  0.00
C
ATOM   8856  HB2 HIE   539      75.819  69.868  36.296  1.00  0.00
H
ATOM   8857  HB3 HIE   539      76.636  71.410  36.019  1.00  0.00
H
ATOM   8858  CG  HIE   539      74.769  71.575  37.015  1.00  0.00
C
ATOM   8859  ND1 HIE   539      73.768  70.916  37.729  1.00  0.00
N
ATOM   8860  CE1 HIE   539      72.992  71.882  38.249  1.00  0.00
C
ATOM   8861  HE1 HIE   539      72.056  71.705  38.769  1.00  0.00
H
ATOM   8862  NE2 HIE   539      73.498  73.093  37.950  1.00  0.00
N
ATOM   8863  HE2 HIE   539      73.018  73.968  38.117  1.00  0.00
H
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ATOM   8864  CD2 HIE   539      74.618  72.920  37.171  1.00  0.00
C
ATOM   8865  HD2 HIE   539      75.182  73.691  36.663  1.00  0.00
H
ATOM   8866  C   HIE   539      76.022  70.383  33.505  1.00  0.00
C
ATOM   8867  O   HIE   539      77.236  70.561  33.598  1.00  0.00
O
ATOM   8868  N   LYS   540      75.489  69.715  32.474  1.00  0.00
N
ATOM   8869  H   LYS   540      74.495  69.528  32.538  1.00  0.00
H
ATOM   8870  CA  LYS   540      76.259  68.956  31.465  1.00  0.00
C
ATOM   8871  HA  LYS   540      77.275  68.848  31.848  1.00  0.00
H
ATOM   8872  CB  LYS   540      75.636  67.549  31.330  1.00  0.00
C
ATOM   8873  HB2 LYS   540      75.063  67.317  32.229  1.00  0.00
H
ATOM   8874  HB3 LYS   540      74.934  67.551  30.495  1.00  0.00
H
ATOM   8875  CG  LYS   540      76.651  66.410  31.127  1.00  0.00
C
ATOM   8876  HG2 LYS   540      76.099  65.514  30.842  1.00  0.00
H
ATOM   8877  HG3 LYS   540      77.332  66.661  30.313  1.00  0.00
H
ATOM   8878  CD  LYS   540      77.457  66.098  32.401  1.00  0.00
C
ATOM   8879  HD2 LYS   540      78.057  66.967  32.677  1.00  0.00
H
ATOM   8880  HD3 LYS   540      76.768  65.873  33.218  1.00  0.00
H
ATOM   8881  CE  LYS   540      78.384  64.896  32.166  1.00  0.00
C
ATOM   8882  HE2 LYS   540      77.778  64.006  31.971  1.00  0.00
H
ATOM   8883  HE3 LYS   540      78.985  65.100  31.276  1.00  0.00
H
ATOM   8884  NZ  LYS   540      79.290  64.654  33.316  1.00  0.00
N
ATOM   8885  HZ1 LYS   540      78.795  64.328  34.145  1.00  0.00
H
ATOM   8886  HZ2 LYS   540      79.953  63.922  33.107  1.00  0.00
H
ATOM   8887  HZ3 LYS   540      79.823  65.495  33.540  1.00  0.00
H
ATOM   8888  C   LYS   540      76.431  69.668  30.114  1.00  0.00
C
ATOM   8889  O   LYS   540      77.039  69.111  29.203  1.00  0.00
O
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ATOM   8890  N   GLY   541      75.915  70.894  29.973  1.00  0.00
N
ATOM   8891  H   GLY   541      75.471  71.296  30.783  1.00  0.00
H
ATOM   8892  CA  GLY   541      76.107  71.743  28.786  1.00  0.00
C
ATOM   8893  HA2 GLY   541      75.695  72.725  28.998  1.00  0.00
H
ATOM   8894  HA3 GLY   541      77.170  71.881  28.601  1.00  0.00
H
ATOM   8895  C   GLY   541      75.457  71.202  27.503  1.00  0.00
C
ATOM   8896  O   GLY   541      76.099  71.174  26.457  1.00  0.00
O
ATOM   8897  N   ILE   542      74.214  70.712  27.594  1.00  0.00
N
ATOM   8898  H   ILE   542      73.749  70.785  28.483  1.00  0.00
H
ATOM   8899  CA  ILE   542      73.480  70.052  26.498  1.00  0.00
C
ATOM   8900  HA  ILE   542      74.185  69.711  25.737  1.00  0.00
H
ATOM   8901  CB  ILE   542      72.738  68.805  27.049  1.00  0.00
C
ATOM   8902  HB  ILE   542      72.144  69.115  27.911  1.00  0.00
H
ATOM   8903  CG2 ILE   542      71.772  68.202  26.007  1.00  0.00
C
ATOM   8904 HG21 ILE   542      72.318  67.916  25.107  1.00  0.00
H
ATOM   8905 HG22 ILE   542      71.272  67.324  26.412  1.00  0.00
H
ATOM   8906 HG23 ILE   542      70.991  68.916  25.746  1.00  0.00
H
ATOM   8907  CG1 ILE   542      73.756  67.737  27.517  1.00  0.00
C
ATOM   8908 HG12 ILE   542      74.265  67.317  26.648  1.00  0.00
H
ATOM   8909 HG13 ILE   542      74.512  68.204  28.146  1.00  0.00
H
ATOM   8910  CD1 ILE   542      73.139  66.597  28.335  1.00  0.00
C
ATOM   8911 HD11 ILE   542      72.470  65.996  27.719  1.00  0.00
H
ATOM   8912 HD12 ILE   542      73.932  65.949  28.707  1.00  0.00
H
ATOM   8913 HD13 ILE   542      72.589  67.004  29.184  1.00  0.00
H
ATOM   8914  C   ILE   542      72.513  71.043  25.832  1.00  0.00
C
ATOM   8915  O   ILE   542      71.576  71.497  26.487  1.00  0.00
O
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ATOM   8916  N   GLY   543      72.680  71.322  24.534  1.00  0.00
N
ATOM   8917  H   GLY   543      73.496  70.945  24.061  1.00  0.00
H
ATOM   8918  CA  GLY   543      71.699  72.053  23.712  1.00  0.00
C
ATOM   8919  HA2 GLY   543      72.178  72.373  22.787  1.00  0.00
H
ATOM   8920  HA3 GLY   543      70.894  71.368  23.445  1.00  0.00
H
ATOM   8921  C   GLY   543      71.092  73.296  24.384  1.00  0.00
C
ATOM   8922  O   GLY   543      71.806  74.176  24.861  1.00  0.00
O
ATOM   8923  N   GLY   544      69.757  73.358  24.449  1.00  0.00
N
ATOM   8924  H   GLY   544      69.212  72.610  24.046  1.00  0.00
H
ATOM   8925  CA  GLY   544      69.037  74.443  25.123  1.00  0.00
C
ATOM   8926  HA2 GLY   544      69.466  75.397  24.822  1.00  0.00
H
ATOM   8927  HA3 GLY   544      68.002  74.440  24.788  1.00  0.00
H
ATOM   8928  C   GLY   544      69.042  74.381  26.659  1.00  0.00
C
ATOM   8929  O   GLY   544      68.834  75.416  27.285  1.00  0.00
O
ATOM   8930  N   ASN   545      69.329  73.225  27.276  1.00  0.00
N
ATOM   8931  H   ASN   545      69.645  72.450  26.712  1.00  0.00
H
ATOM   8932  CA  ASN   545      69.355  73.049  28.740  1.00  0.00
C
ATOM   8933  HA  ASN   545      68.392  73.339  29.161  1.00  0.00
H
ATOM   8934  CB  ASN   545      69.550  71.553  29.063  1.00  0.00
C
ATOM   8935  HB2 ASN   545      68.678  70.996  28.728  1.00  0.00
H
ATOM   8936  HB3 ASN   545      70.422  71.162  28.555  1.00  0.00
H
ATOM   8937  CG  ASN   545      69.710  71.293  30.548  1.00  0.00
C
ATOM   8938  OD1 ASN   545      68.928  71.744  31.351  1.00  0.00
O
ATOM   8939  ND2 ASN   545      70.714  70.547  30.953  1.00  0.00
N
ATOM   8940 HD21 ASN   545      70.706  70.349  31.940  1.00  0.00
H
ATOM   8941 HD22 ASN   545      71.306  70.060  30.313  1.00  0.00
H
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ATOM   8942  C   ASN   545      70.420  73.949  29.399  1.00  0.00
C
ATOM   8943  O   ASN   545      70.145  74.628  30.384  1.00  0.00
O
ATOM   8944  N   GLU   546      71.604  74.061  28.782  1.00  0.00
N
ATOM   8945  H   GLU   546      71.746  73.530  27.932  1.00  0.00
H
ATOM   8946  CA  GLU   546      72.647  75.008  29.212  1.00  0.00
C
ATOM   8947  HA  GLU   546      72.966  74.754  30.223  1.00  0.00
H
ATOM   8948  CB  GLU   546      73.840  74.889  28.250  1.00  0.00
C
ATOM   8949  HB2 GLU   546      74.116  73.841  28.155  1.00  0.00
H
ATOM   8950  HB3 GLU   546      73.540  75.248  27.265  1.00  0.00
H
ATOM   8951  CG  GLU   546      75.049  75.697  28.751  1.00  0.00
C
ATOM   8952  HG2 GLU   546      74.776  76.749  28.828  1.00  0.00
H
ATOM   8953  HG3 GLU   546      75.318  75.340  29.749  1.00  0.00
H
ATOM   8954  CD  GLU   546      76.266  75.617  27.830  1.00  0.00
C
ATOM   8955  OE1 GLU   546      76.120  75.749  26.593  1.00  0.00
O
ATOM   8956  OE2 GLU   546      77.409  75.549  28.349  1.00  0.00
O
ATOM   8957  C   GLU   546      72.162  76.468  29.227  1.00  0.00
C
ATOM   8958  O   GLU   546      72.586  77.269  30.064  1.00  0.00
O
ATOM   8959  N   GLN   547      71.276  76.827  28.296  1.00  0.00
N
ATOM   8960  H   GLN   547      70.880  76.115  27.698  1.00  0.00
H
ATOM   8961  CA  GLN   547      70.773  78.188  28.185  1.00  0.00
C
ATOM   8962  HA  GLN   547      71.612  78.858  28.355  1.00  0.00
H
ATOM   8963  CB  GLN   547      70.199  78.466  26.783  1.00  0.00
C
ATOM   8964  HB2 GLN   547      69.194  78.045  26.745  1.00  0.00
H
ATOM   8965  HB3 GLN   547      70.093  79.544  26.658  1.00  0.00
H
ATOM   8966  CG  GLN   547      70.980  77.893  25.580  1.00  0.00
C
ATOM   8967  HG2 GLN   547      71.039  76.811  25.674  1.00  0.00
H
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ATOM   8968  HG3 GLN   547      70.395  78.107  24.686  1.00  0.00
H
ATOM   8969  CD  GLN   547      72.394  78.416  25.324  1.00  0.00
C
ATOM   8970  OE1 GLN   547      72.979  78.138  24.289  1.00  0.00
O
ATOM   8971  NE2 GLN   547      72.998  79.232  26.163  1.00  0.00
N
ATOM   8972 HE21 GLN   547      74.001  79.324  26.034  1.00  0.00
H
ATOM   8973 HE22 GLN   547      72.565  79.498  27.027  1.00  0.00
H
ATOM   8974  C   GLN   547      69.763  78.506  29.290  1.00  0.00
C
ATOM   8975  O   GLN   547      69.751  79.642  29.749  1.00  0.00
O
ATOM   8976  N   VAL   548      68.952  77.539  29.739  1.00  0.00
N
ATOM   8977  H   VAL   548      69.017  76.614  29.332  1.00  0.00
H
ATOM   8978  CA  VAL   548      67.970  77.780  30.811  1.00  0.00
C
ATOM   8979  HA  VAL   548      67.477  78.720  30.555  1.00  0.00
H
ATOM   8980  CB  VAL   548      66.860  76.714  30.928  1.00  0.00
C
ATOM   8981  HB  VAL   548      67.105  76.047  31.750  1.00  0.00
H
ATOM   8982  CG1 VAL   548      65.525  77.422  31.208  1.00  0.00
C
ATOM   8983 HG11 VAL   548      65.267  78.083  30.381  1.00  0.00
H
ATOM   8984 HG12 VAL   548      64.736  76.684  31.320  1.00  0.00
H
ATOM   8985 HG13 VAL   548      65.593  77.995  32.133  1.00  0.00
H
ATOM   8986  CG2 VAL   548      66.660  75.826  29.701  1.00  0.00
C
ATOM   8987 HG21 VAL   548      67.566  75.261  29.523  1.00  0.00
H
ATOM   8988 HG22 VAL   548      65.864  75.115  29.908  1.00  0.00
H
ATOM   8989 HG23 VAL   548      66.412  76.420  28.827  1.00  0.00
H
ATOM   8990  C   VAL   548      68.651  78.019  32.161  1.00  0.00
C
ATOM   8991  O   VAL   548      68.381  79.081  32.725  1.00  0.00
O
ATOM   8992  N   ASP   549      69.591  77.157  32.608  1.00  0.00
N
ATOM   8993  H   ASP   549      69.714  76.287  32.100  1.00  0.00
H
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ATOM   8994  CA  ASP   549      70.387  77.346  33.849  1.00  0.00
C
ATOM   8995  HA  ASP   549      69.747  77.189  34.718  1.00  0.00
H
ATOM   8996  CB  ASP   549      71.559  76.327  33.937  1.00  0.00
C
ATOM   8997  HB2 ASP   549      71.136  75.363  34.184  1.00  0.00
H
ATOM   8998  HB3 ASP   549      71.990  76.210  32.952  1.00  0.00
H
ATOM   8999  CG  ASP   549      72.727  76.612  34.919  1.00  0.00
C
ATOM   9000  OD1 ASP   549      72.526  77.298  35.950  1.00  0.00
O
ATOM   9001  OD2 ASP   549      73.876  76.161  34.675  1.00  0.00
O
ATOM   9002  C   ASP   549      70.903  78.781  33.912  1.00  0.00
C
ATOM   9003  O   ASP   549      70.598  79.525  34.845  1.00  0.00
O
ATOM   9004  N   LYS   550      71.596  79.212  32.853  1.00  0.00
N
ATOM   9005  H   LYS   550      71.725  78.564  32.081  1.00  0.00
H
ATOM   9006  CA  LYS   550      72.213  80.541  32.776  1.00  0.00
C
ATOM   9007  HA  LYS   550      72.962  80.589  33.566  1.00  0.00
H
ATOM   9008  CB  LYS   550      72.910  80.646  31.408  1.00  0.00
C
ATOM   9009  HB2 LYS   550      73.613  79.817  31.301  1.00  0.00
H
ATOM   9010  HB3 LYS   550      72.162  80.563  30.617  1.00  0.00
H
ATOM   9011  CG  LYS   550      73.670  81.968  31.246  1.00  0.00
C
ATOM   9012  HG2 LYS   550      72.964  82.796  31.322  1.00  0.00
H
ATOM   9013  HG3 LYS   550      74.409  82.051  32.046  1.00  0.00
H
ATOM   9014  CD  LYS   550      74.362  82.048  29.880  1.00  0.00
C
ATOM   9015  HD2 LYS   550      75.177  81.323  29.839  1.00  0.00
H
ATOM   9016  HD3 LYS   550      73.638  81.802  29.100  1.00  0.00
H
ATOM   9017  CE  LYS   550      74.896  83.457  29.608  1.00  0.00
C
ATOM   9018  HE2 LYS   550      75.357  83.465  28.617  1.00  0.00
H
ATOM   9019  HE3 LYS   550      74.050  84.150  29.581  1.00  0.00
H
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ATOM   9020  NZ  LYS   550      75.872  83.880  30.634  1.00  0.00
N
ATOM   9021  HZ1 LYS   550      76.625  83.201  30.731  1.00  0.00
H
ATOM   9022  HZ2 LYS   550      76.294  84.780  30.435  1.00  0.00
H
ATOM   9023  HZ3 LYS   550      75.429  83.974  31.541  1.00  0.00
H
ATOM   9024  C   LYS   550      71.224  81.698  33.023  1.00  0.00
C
ATOM   9025  O   LYS   550      71.636  82.731  33.564  1.00  0.00
O
ATOM   9026  N   LEU   551      69.946  81.538  32.659  1.00  0.00
N
ATOM   9027  H   LEU   551      69.678  80.622  32.314  1.00  0.00
H
ATOM   9028  CA  LEU   551      68.878  82.515  32.903  1.00  0.00
C
ATOM   9029  HA  LEU   551      69.297  83.517  32.831  1.00  0.00
H
ATOM   9030  CB  LEU   551      67.757  82.382  31.852  1.00  0.00
C
ATOM   9031  HB2 LEU   551      67.282  81.409  31.978  1.00  0.00
H
ATOM   9032  HB3 LEU   551      67.007  83.137  32.077  1.00  0.00
H
ATOM   9033  CG  LEU   551      68.170  82.542  30.381  1.00  0.00
C
ATOM   9034  HG  LEU   551      68.923  81.809  30.134  1.00  0.00
H
ATOM   9035  CD1 LEU   551      66.944  82.307  29.501  1.00  0.00
C
ATOM   9036 HD11 LEU   551      66.186  83.065  29.692  1.00  0.00
H
ATOM   9037 HD12 LEU   551      67.244  82.329  28.455  1.00  0.00
H
ATOM   9038 HD13 LEU   551      66.530  81.321  29.713  1.00  0.00
H
ATOM   9039  CD2 LEU   551      68.747  83.923  30.064  1.00  0.00
C
ATOM   9040 HD21 LEU   551      69.676  84.064  30.614  1.00  0.00
H
ATOM   9041 HD22 LEU   551      68.977  83.972  29.000  1.00  0.00
H
ATOM   9042 HD23 LEU   551      68.036  84.705  30.325  1.00  0.00
H
ATOM   9043  C   LEU   551      68.270  82.392  34.308  1.00  0.00
C
ATOM   9044  O   LEU   551      68.055  83.415  34.964  1.00  0.00
O
ATOM   9045  N   VAL   552      67.969  81.177  34.778  1.00  0.00
N
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ATOM   9046  H   VAL   552      68.173  80.361  34.200  1.00  0.00
H
ATOM   9047  CA  VAL   552      67.269  80.990  36.061  1.00  0.00
C
ATOM   9048  HA  VAL   552      66.588  81.833  36.176  1.00  0.00
H
ATOM   9049  CB  VAL   552      66.380  79.738  36.072  1.00  0.00
C
ATOM   9050  HB  VAL   552      65.942  79.671  37.063  1.00  0.00
H
ATOM   9051  CG1 VAL   552      65.236  79.890  35.065  1.00  0.00
C
ATOM   9052 HG11 VAL   552      65.633  79.968  34.052  1.00  0.00
H
ATOM   9053 HG12 VAL   552      64.605  79.006  35.116  1.00  0.00
H
ATOM   9054 HG13 VAL   552      64.638  80.768  35.302  1.00  0.00
H
ATOM   9055  CG2 VAL   552      67.109  78.424  35.815  1.00  0.00
C
ATOM   9056 HG21 VAL   552      67.995  78.320  36.442  1.00  0.00
H
ATOM   9057 HG22 VAL   552      66.445  77.591  36.033  1.00  0.00
H
ATOM   9058 HG23 VAL   552      67.397  78.329  34.777  1.00  0.00
H
ATOM   9059  C   VAL   552      68.192  81.038  37.278  1.00  0.00
C
ATOM   9060  O   VAL   552      67.825  81.619  38.299  1.00  0.00
O
ATOM   9061  N   SER   553      69.436  80.559  37.172  1.00  0.00
N
ATOM   9062  H   SER   553      69.720  80.114  36.296  1.00  0.00
H
ATOM   9063  CA  SER   553      70.424  80.619  38.257  1.00  0.00
C
ATOM   9064  HA  SER   553      69.846  80.402  39.143  1.00  0.00
H
ATOM   9065  CB  SER   553      71.449  79.489  38.167  1.00  0.00
C
ATOM   9066  HB2 SER   553      71.907  79.376  39.152  1.00  0.00
H
ATOM   9067  HB3 SER   553      70.945  78.564  37.921  1.00  0.00
H
ATOM   9068  OG  SER   553      72.452  79.677  37.209  1.00  0.00
O
ATOM   9069  HG  SER   553      72.380  78.912  36.615  1.00  0.00
H
ATOM   9070  C   SER   553      71.053  82.011  38.461  1.00  0.00
C
ATOM   9071  O   SER   553      71.848  82.225  39.385  1.00  0.00
O
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ATOM   9072  N   ALA   554      70.642  82.999  37.657  1.00  0.00
N
ATOM   9073  H   ALA   554      70.008  82.734  36.917  1.00  0.00
H
ATOM   9074  CA  ALA   554      71.158  84.366  37.625  1.00  0.00
C
ATOM   9075  HA  ALA   554      72.179  84.345  37.247  1.00  0.00
H
ATOM   9076  CB  ALA   554      70.289  85.154  36.636  1.00  0.00
C
ATOM   9077  HB1 ALA   554      69.240  85.109  36.939  1.00  0.00
H
ATOM   9078  HB2 ALA   554      70.606  86.201  36.610  1.00  0.00
H
ATOM   9079  HB3 ALA   554      70.384  84.733  35.634  1.00  0.00
H
ATOM   9080  C   ALA   554      71.166  85.107  38.981  1.00  0.00
C
ATOM   9081  O   ALA   554      72.085  85.879  39.249  1.00  0.00
O
ATOM   9082  N   GLY   555      70.138  84.906  39.817  1.00  0.00
N
ATOM   9083  H   GLY   555      69.450  84.218  39.545  1.00  0.00
H
ATOM   9084  CA  GLY   555      69.980  85.578  41.129  1.00  0.00
C
ATOM   9085  HA2 GLY   555      70.651  86.438  41.179  1.00  0.00
H
ATOM   9086  HA3 GLY   555      68.959  85.946  41.229  1.00  0.00
H
ATOM   9087  C   GLY   555      70.286  84.697  42.341  1.00  0.00
C
ATOM   9088  O   GLY   555      69.865  85.023  43.448  1.00  0.00
O
ATOM   9089  N   ILE   556      70.959  83.561  42.137  1.00  0.00
N
ATOM   9090  H   ILE   556      71.272  83.368  41.194  1.00  0.00
H
ATOM   9091  CA  ILE   556      71.280  82.566  43.173  1.00  0.00
C
ATOM   9092  HA  ILE   556      71.060  82.992  44.153  1.00  0.00
H
ATOM   9093  CB  ILE   556      70.397  81.280  43.047  1.00  0.00
C
ATOM   9094  HB  ILE   556      69.493  81.451  43.635  1.00  0.00
H
ATOM   9095  CG2 ILE   556      69.929  80.973  41.619  1.00  0.00
C
ATOM   9096 HG21 ILE   556      70.794  80.671  41.034  1.00  0.00
H
ATOM   9097 HG22 ILE   556      69.208  80.155  41.631  1.00  0.00
H
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ATOM   9098 HG23 ILE   556      69.431  81.828  41.158  1.00  0.00
H
ATOM   9099  CG1 ILE   556      71.035  79.949  43.518  1.00  0.00
C
ATOM   9100 HG12 ILE   556      70.318  79.148  43.352  1.00  0.00
H
ATOM   9101 HG13 ILE   556      71.898  79.710  42.904  1.00  0.00
H
ATOM   9102  CD1 ILE   556      71.436  79.878  44.984  1.00  0.00
C
ATOM   9103 HD11 ILE   556      70.544  80.037  45.557  1.00  0.00
H
ATOM   9104 HD12 ILE   556      71.834  78.887  45.212  1.00  0.00
H
ATOM   9105 HD13 ILE   556      72.166  80.636  45.252  1.00  0.00
H
ATOM   9106  C   ILE   556      72.785  82.280  43.184  1.00  0.00
C
ATOM   9107  O   ILE   556      73.445  82.453  44.205  1.00  0.00
O
ATOM   9108  N   ARG   557      73.325  81.827  42.055  1.00  0.00
N
ATOM   9109  H   ARG   557      72.752  81.823  41.219  1.00  0.00
H
ATOM   9110  CA  ARG   557      74.636  81.171  41.980  1.00  0.00
C
ATOM   9111  HA  ARG   557      74.820  80.651  42.924  1.00  0.00
H
ATOM   9112  CB  ARG   557      74.512  80.131  40.858  1.00  0.00
C
ATOM   9113  HB2 ARG   557      73.804  79.370  41.197  1.00  0.00
H
ATOM   9114  HB3 ARG   557      74.087  80.624  39.979  1.00  0.00
H
ATOM   9115  CG  ARG   557      75.794  79.421  40.415  1.00  0.00
C
ATOM   9116  HG2 ARG   557      76.499  80.146  40.004  1.00  0.00
H
ATOM   9117  HG3 ARG   557      76.249  78.897  41.256  1.00  0.00
H
ATOM   9118  CD  ARG   557      75.384  78.422  39.324  1.00  0.00
C
ATOM   9119  HD2 ARG   557      74.722  77.672  39.761  1.00  0.00
H
ATOM   9120  HD3 ARG   557      74.836  78.955  38.544  1.00  0.00
H
ATOM   9121  NE  ARG   557      76.543  77.746  38.729  1.00  0.00
N
ATOM   9122  HE  ARG   557      77.422  77.803  39.241  1.00  0.00
H
ATOM   9123  CZ  ARG   557      76.547  77.051  37.607  1.00  0.00
C
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ATOM   9124  NH1 ARG   557      75.469  76.901  36.878  1.00  0.00
N
ATOM   9125 HH11 ARG   557      74.594  77.340  37.129  1.00  0.00
H
ATOM   9126 HH12 ARG   557      75.415  76.414  35.988  1.00  0.00
H
ATOM   9127  NH2 ARG   557      77.660  76.495  37.216  1.00  0.00
N
ATOM   9128 HH21 ARG   557      78.500  76.602  37.771  1.00  0.00
H
ATOM   9129 HH22 ARG   557      77.681  75.981  36.359  1.00  0.00
H
ATOM   9130  C   ARG   557      75.769  82.185  41.804  1.00  0.00
C
ATOM   9131  O   ARG   557      75.599  83.191  41.114  1.00  0.00
O
ATOM   9132  N   LYS   558      76.939  81.923  42.399  1.00  0.00
N
ATOM   9133  H   LYS   558      77.020  81.061  42.923  1.00  0.00
H
ATOM   9134  CA  LYS   558      78.170  82.723  42.235  1.00  0.00
C
ATOM   9135  HA  LYS   558      78.163  83.118  41.227  1.00  0.00
H
ATOM   9136  CB  LYS   558      78.219  83.874  43.273  1.00  0.00
C
ATOM   9137  HB2 LYS   558      77.770  83.520  44.205  1.00  0.00
H
ATOM   9138  HB3 LYS   558      79.254  84.126  43.509  1.00  0.00
H
ATOM   9139  CG  LYS   558      77.521  85.187  42.866  1.00  0.00
C
ATOM   9140  HG2 LYS   558      76.502  84.989  42.549  1.00  0.00
H
ATOM   9141  HG3 LYS   558      77.441  85.791  43.769  1.00  0.00
H
ATOM   9142  CD  LYS   558      78.245  86.057  41.815  1.00  0.00
C
ATOM   9143  HD2 LYS   558      77.709  87.006  41.741  1.00  0.00
H
ATOM   9144  HD3 LYS   558      79.239  86.291  42.200  1.00  0.00
H
ATOM   9145  CE  LYS   558      78.410  85.491  40.393  1.00  0.00
C
ATOM   9146  HE2 LYS   558      78.907  86.249  39.780  1.00  0.00
H
ATOM   9147  HE3 LYS   558      79.080  84.629  40.425  1.00  0.00
H
ATOM   9148  NZ  LYS   558      77.125  85.113  39.750  1.00  0.00
N
ATOM   9149  HZ1 LYS   558      76.484  85.887  39.704  1.00  0.00
H
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ATOM   9150  HZ2 LYS   558      77.285  84.781  38.796  1.00  0.00
H
ATOM   9151  HZ3 LYS   558      76.656  84.344  40.228  1.00  0.00
H
ATOM   9152  C   LYS   558      79.439  81.869  42.306  1.00  0.00
C
ATOM   9153  O   LYS   558      79.404  80.704  42.680  1.00  0.00
O
ATOM   9154  N   VAL   559      80.552  82.497  41.934  1.00  0.00
N
ATOM   9155  H   VAL   559      80.485  83.487  41.760  1.00  0.00
H
ATOM   9156  CA  VAL   559      81.926  81.981  41.920  1.00  0.00
C
ATOM   9157  HA  VAL   559      81.985  81.093  42.554  1.00  0.00
H
ATOM   9158  CB  VAL   559      82.325  81.581  40.480  1.00  0.00
C
ATOM   9159  HB  VAL   559      81.634  80.801  40.155  1.00  0.00
H
ATOM   9160  CG1 VAL   559      82.218  82.734  39.467  1.00  0.00
C
ATOM   9161 HG11 VAL   559      82.896  83.544  39.739  1.00  0.00
H
ATOM   9162 HG12 VAL   559      82.485  82.372  38.474  1.00  0.00
H
ATOM   9163 HG13 VAL   559      81.198  83.112  39.427  1.00  0.00
H
ATOM   9164  CG2 VAL   559      83.738  80.993  40.403  1.00  0.00
C
ATOM   9165 HG21 VAL   559      83.840  80.176  41.117  1.00  0.00
H
ATOM   9166 HG22 VAL   559      83.916  80.608  39.398  1.00  0.00
H
ATOM   9167 HG23 VAL   559      84.486  81.758  40.617  1.00  0.00
H
ATOM   9168  C   VAL   559      82.841  83.066  42.505  1.00  0.00
C
ATOM   9169  O   VAL   559      82.533  84.250  42.345  1.00  0.00
O
ATOM   9170  N   LEU   560      83.925  82.671  43.180  1.00  0.00
N
ATOM   9171  H   LEU   560      84.107  81.680  43.252  1.00  0.00
H
ATOM   9172  CA  LEU   560      84.923  83.553  43.806  1.00  0.00
C
ATOM   9173  HA  LEU   560      84.737  84.586  43.506  1.00  0.00
H
ATOM   9174  CB  LEU   560      84.761  83.433  45.347  1.00  0.00
C
ATOM   9175  HB2 LEU   560      83.695  83.427  45.577  1.00  0.00
H
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ATOM   9176  HB3 LEU   560      85.166  82.474  45.672  1.00  0.00
H
ATOM   9177  CG  LEU   560      85.392  84.544  46.205  1.00  0.00
C
ATOM   9178  HG  LEU   560      84.900  85.490  45.978  1.00  0.00
H
ATOM   9179  CD1 LEU   560      85.158  84.212  47.681  1.00  0.00
C
ATOM   9180 HD11 LEU   560      85.671  83.284  47.939  1.00  0.00
H
ATOM   9181 HD12 LEU   560      85.541  85.019  48.305  1.00  0.00
H
ATOM   9182 HD13 LEU   560      84.091  84.101  47.869  1.00  0.00
H
ATOM   9183  CD2 LEU   560      86.897  84.710  46.003  1.00  0.00
C
ATOM   9184 HD21 LEU   560      87.091  85.105  45.007  1.00  0.00
H
ATOM   9185 HD22 LEU   560      87.297  85.413  46.731  1.00  0.00
H
ATOM   9186 HD23 LEU   560      87.397  83.747  46.114  1.00  0.00
H
ATOM   9187  C   LEU   560      86.319  83.191  43.285  1.00  0.00
C
ATOM   9188  O   LEU   560      86.936  84.006  42.572  1.00  0.00
O
ATOM   9189  OXT LEU   560      86.777  82.069  43.611  1.00  0.00
O
TER    9190      LEU   560
HETATM 9191  S1  UNX   561      35.486  37.261  77.137  1.00  0.00
S
HETATM 9192  C1  UNX   561      34.619  37.057  78.721  1.00  0.00
C
HETATM 9193  O1  UNX   561      34.489  38.385  79.291  1.00  0.00
O
HETATM 9194  C2  UNX   561      35.704  39.138  79.050  1.00  0.00
C
HETATM 9195  N1  UNX   561      35.596  40.560  79.421  1.00  0.00
N
HETATM 9196  C3  UNX   561      34.474  41.256  78.985  1.00  0.00
C
HETATM 9197  C4  UNX   561      34.402  42.623  79.202  1.00  0.00
C
HETATM 9198  C5  UNX   561      35.481  43.274  79.900  1.00  0.00
C
HETATM 9199  N2  UNX   561      36.524  42.532  80.291  1.00  0.00
N
HETATM 9200  C6  UNX   561      36.635  41.182  80.057  1.00  0.00
C
HETATM 9201  O2  UNX   561      37.643  40.578  80.392  1.00  0.00
O
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HETATM 9202  N3  UNX   561      35.452  44.619  80.144  1.00  0.00
N
HETATM 9203  H1  UNX   561      36.220  45.062  80.637  1.00  0.00
H
HETATM 9204  H2  UNX   561      34.677  45.185  79.825  1.00  0.00
H
HETATM 9205  H3  UNX   561      33.551  43.195  78.861  1.00  0.00
H
HETATM 9206  H4  UNX   561      33.721  40.670  78.468  1.00  0.00
H
HETATM 9207  C7  UNX   561      35.997  38.939  77.560  1.00  0.00
C
HETATM 9208  H5  UNX   561      37.055  39.094  77.341  1.00  0.00
H
HETATM 9209  H6  UNX   561      35.406  39.639  76.967  1.00  0.00
H
HETATM 9210  H7  UNX   561      36.490  38.669  79.658  1.00  0.00
H
HETATM 9211  C8  UNX   561      33.249  36.395  78.527  1.00  0.00
C
HETATM 9212  O3  UNX   561      32.357  37.317  77.865  1.00  0.00
O
HETATM 9213  P1  UNX   561      30.960  37.697  78.555  1.00  0.00
P
HETATM 9214  O4  UNX   561      31.390  38.137  80.039  1.00  0.00
O
HETATM 9215  P2  UNX   561      31.015  37.462  81.445  1.00  0.00
P
HETATM 9216  O5  UNX   561      31.289  38.677  82.454  1.00  0.00
O
HETATM 9217  P3  UNX   561      31.664  38.553  84.003  1.00  0.00
P
HETATM 9218  O6  UNX   561      30.255  38.160  84.688  1.00  0.00
O
HETATM 9219  H8  UNX   561      30.336  38.166  85.659  1.00  0.00
H
HETATM 9220  O7  UNX   561      31.837  40.096  84.466  1.00  0.00
O
HETATM 9221  H9  UNX   561      31.975  40.147  85.429  1.00  0.00
H
HETATM 9222  O8  UNX   561      32.798  37.656  84.310  1.00  0.00
O
HETATM 9223  O9  UNX   561      32.271  36.466  81.720  1.00  0.00
O
HETATM 9224  H10 UNX   561      32.307  35.769  81.042  1.00  0.00
H
HETATM 9225  O10 UNX   561      29.674  36.844  81.543  1.00  0.00
O
HETATM 9226  O11 UNX   561      30.639  39.139  77.878  1.00  0.00
O
HETATM 9227  H11 UNX   561      30.437  39.028  76.933  1.00  0.00
H
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HETATM 9228  O12 UNX   561      29.877  36.695  78.430  1.00  0.00
O
HETATM 9229  H12 UNX   561      32.830  36.045  79.463  1.00  0.00
H
HETATM 9230  H13 UNX   561      33.371  35.509  77.913  1.00  0.00
H
HETATM 9231  H14 UNX   561      35.248  36.461  79.399  1.00  0.00
H
CONECT 9192 9191 9193 9211 9231
CONECT 9194 9193 9195 9207 9210
CONECT 9196 9195 9197 9206
CONECT 9197 9196 9198 9205
CONECT 9198 9197 9199 9202
CONECT 9200 9195 9199 9201
CONECT 9207 9191 9194 9208 9209
CONECT 9211 9192 9212 9229 9230
CONECT 9203 9202
CONECT 9224 9223
CONECT 9227 9226
CONECT 9229 9211
CONECT 9230 9211
CONECT 9231 9192
CONECT 9204 9202
CONECT 9205 9197
CONECT 9206 9196
CONECT 9208 9207
CONECT 9209 9207
CONECT 9210 9194
CONECT 9219 9218
CONECT 9221 9220
CONECT 9195 9194 9196 9200
CONECT 9199 9198 9200
CONECT 9202 9198 9203 9204
CONECT 9193 9192 9194
CONECT 9225 9215
CONECT 9226 9213 9227
CONECT 9228 9213
CONECT 9201 9200
CONECT 9212 9211 9213
CONECT 9214 9213 9215
CONECT 9216 9215 9217
CONECT 9218 9217 9219
CONECT 9220 9217 9221
CONECT 9222 9217
CONECT 9223 9215 9224
CONECT 9213 9212 9214 9226 9228
CONECT 9215 9214 9216 9223 9225
CONECT 9217 9216 9218 9220 9222
CONECT 9191 9192 9207
END
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PDB structure of M184V variant HIV-RT complexed with 3TC

```
REMARK  default_name
HELIX    1   1 GLU     28  LYS     43  1
16
HELIX    2   2 ARG     78  ARG     83  1
6
HELIX    3   3 PRO     97  GLY     99  1
3
HELIX    4   4 ALA    114  SER    117  1
4
HELIX    5   5 PHE    124  THR    128  1
5
HELIX    6   6 GLY    155  GLN    174  1
20
HELIX    7   7 ILE    195  TRP    212  1
18
HELIX    8   8 VAL    254  GLN    269  1
16
HELIX    9   9 LEU    279  LEU    283  1
5
HELIX   10  10 GLU    297  ILE    309  1
13
HELIX   11  11 ASP    364  TRP    383  1
20
HELIX   12  12 LYS    395  GLU    404  1
10
HELIX   13  13 ASN    474  GLN    487  1
14
HELIX   14  14 GLN    500  ALA    508  1
9
HELIX   15  15 GLU    516  ILE    526  1
11
HELIX   16  16 ASN    545  GLY    555  1
11
SHEET    1   1 1 ILE    47  LYS     49  0
SHEET    2   2 1 VAL    60  LYS     64  0
SHEET    3   3 1 TRP    71  VAL     75  0
SHEET    4   4 1 SER   105  LEU   109  0
SHEET    5   5 1 TYR   144  TYR   146  0
SHEET    6   6 1 VAL   179  TYR   183  0
SHEET    7   7 1 ASP   186  SER   191  0
SHEET    8   8 1 PHE   227  TRP   229  0
SHEET    9   9 1 TYR   232  LEU   234  0
SHEET   10  10 1 TRP   239  VAL   241  0
SHEET   11  11 1 ILE   326  GLY   333  0
SHEET   12  12 1 GLN   336  TYR   342  0
SHEET   13  13 1 ASN   348  TYR   354  0
SHEET   14  14 1 LYS   388  LEU   391  0
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SHEET   15  15 1 TRP   414  PHE   416  0
SHEET   16  16 1 GLU   438  ALA   446  0
SHEET   17  17 1 GLY   453  THR   459  0
SHEET   18  18 1 GLN   464  LEU   469  0
SHEET   19  19 1 GLU   492  THR   497  0
SHEET   20  20 1 LYS   530  TRP   535  0
ATOM      1  N   PRO     1      32.039  26.133  91.756  1.00  0.00
N
ATOM      2  H2  PRO     1      32.689  26.908  91.901  1.00  0.00
H
ATOM      3  H3  PRO     1      32.191  25.465  92.511  1.00  0.00
H
ATOM      4  CD  PRO     1      30.632  26.592  91.717  1.00  0.00
C
ATOM      5  HD2 PRO     1      30.538  27.609  92.094  1.00  0.00
H
ATOM      6  HD3 PRO     1      30.015  25.924  92.324  1.00  0.00
H
ATOM      7  CG  PRO     1      30.149  26.528  90.269  1.00  0.00
C
ATOM      8  HG2 PRO     1      30.411  27.449  89.740  1.00  0.00
H
ATOM      9  HG3 PRO     1      29.072  26.349  90.209  1.00  0.00
H
ATOM     10  CB  PRO     1      30.953  25.349  89.724  1.00  0.00
C
ATOM     11  HB2 PRO     1      31.059  25.394  88.637  1.00  0.00
H
ATOM     12  HB3 PRO     1      30.471  24.414  90.017  1.00  0.00
H
ATOM     13  CA  PRO     1      32.300  25.485  90.449  1.00  0.00
C
ATOM     14  HA  PRO     1      32.710  24.487  90.613  1.00  0.00
H
ATOM     15  C   PRO     1      33.324  26.281  89.628  1.00  0.00
C
ATOM     16  O   PRO     1      33.250  27.507  89.591  1.00  0.00
O
ATOM     17  N   ILE     2      34.271  25.570  89.000  1.00  0.00
N
ATOM     18  H   ILE     2      34.232  24.565  89.073  1.00  0.00
H
ATOM     19  CA  ILE     2      35.282  26.119  88.072  1.00  0.00
C
ATOM     20  HA  ILE     2      34.928  27.090  87.718  1.00  0.00
H
ATOM     21  CB  ILE     2      36.658  26.358  88.756  1.00  0.00
C
ATOM     22  HB  ILE     2      37.062  25.387  89.051  1.00  0.00
H
ATOM     23  CG2 ILE     2      37.639  27.038  87.771  1.00  0.00
C
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ATOM     24 HG21 ILE     2      37.299  28.049  87.547  1.00  0.00
H
ATOM     25 HG22 ILE     2      38.639  27.079  88.200  1.00  0.00
H
ATOM     26 HG23 ILE     2      37.724  26.505  86.827  1.00  0.00
H
ATOM     27  CG1 ILE     2      36.544  27.225  90.032  1.00  0.00
C
ATOM     28 HG12 ILE     2      36.280  28.247  89.757  1.00  0.00
H
ATOM     29 HG13 ILE     2      35.755  26.843  90.678  1.00  0.00
H
ATOM     30  CD1 ILE     2      37.827  27.222  90.874  1.00  0.00
C
ATOM     31 HD11 ILE     2      38.646  27.708  90.350  1.00  0.00
H
ATOM     32 HD12 ILE     2      37.646  27.758  91.799  1.00  0.00
H
ATOM     33 HD13 ILE     2      38.107  26.199  91.120  1.00  0.00
H
ATOM     34  C   ILE     2      35.340  25.199  86.839  1.00  0.00
C
ATOM     35  O   ILE     2      34.400  25.206  86.058  1.00  0.00
O
ATOM     36  N   SER     3      36.377  24.361  86.693  1.00  0.00
N
ATOM     37  H   SER     3      37.109  24.396  87.383  1.00  0.00
H
ATOM     38  CA  SER     3      36.574  23.407  85.586  1.00  0.00
C
ATOM     39  HA  SER     3      35.635  22.888  85.409  1.00  0.00
H
ATOM     40  CB  SER     3      36.973  24.181  84.320  1.00  0.00
C
ATOM     41  HB2 SER     3      36.120  24.781  84.008  1.00  0.00
H
ATOM     42  HB3 SER     3      37.832  24.821  84.522  1.00  0.00
H
ATOM     43  OG  SER     3      37.277  23.321  83.241  1.00  0.00
O
ATOM     44  HG  SER     3      36.421  23.173  82.801  1.00  0.00
H
ATOM     45  C   SER     3      37.682  22.392  85.924  1.00  0.00
C
ATOM     46  O   SER     3      38.581  22.717  86.704  1.00  0.00
O
ATOM     47  N   PRO     4      37.663  21.176  85.344  1.00  0.00
N
ATOM     48  CD  PRO     4      36.517  20.570  84.669  1.00  0.00
C
ATOM     49  HD2 PRO     4      36.326  21.064  83.723  1.00  0.00
H
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ATOM     50  HD3 PRO     4      35.626  20.623  85.296  1.00  0.00
H
ATOM     51  CG  PRO     4      36.872  19.100  84.422  1.00  0.00
C
ATOM     52  HG2 PRO     4      37.233  18.962  83.402  1.00  0.00
H
ATOM     53  HG3 PRO     4      36.023  18.447  84.619  1.00  0.00
H
ATOM     54  CB  PRO     4      38.009  18.848  85.414  1.00  0.00
C
ATOM     55  HB2 PRO     4      38.654  18.023  85.110  1.00  0.00
H
ATOM     56  HB3 PRO     4      37.590  18.653  86.405  1.00  0.00
H
ATOM     57  CA  PRO     4      38.742  20.194  85.431  1.00  0.00
C
ATOM     58  HA  PRO     4      39.264  20.290  86.383  1.00  0.00
H
ATOM     59  C   PRO     4      39.803  20.299  84.310  1.00  0.00
C
ATOM     60  O   PRO     4      40.617  19.387  84.180  1.00  0.00
O
ATOM     61  N   ILE     5      39.812  21.353  83.478  1.00  0.00
N
ATOM     62  H   ILE     5      39.128  22.089  83.605  1.00  0.00
H
ATOM     63  CA  ILE     5      40.858  21.532  82.454  1.00  0.00
C
ATOM     64  HA  ILE     5      40.947  20.575  81.936  1.00  0.00
H
ATOM     65  CB  ILE     5      40.450  22.592  81.403  1.00  0.00
C
ATOM     66  HB  ILE     5      39.456  22.314  81.053  1.00  0.00
H
ATOM     67  CG2 ILE     5      40.384  24.015  81.982  1.00  0.00
C
ATOM     68 HG21 ILE     5      41.386  24.361  82.228  1.00  0.00
H
ATOM     69 HG22 ILE     5      39.945  24.696  81.254  1.00  0.00
H
ATOM     70 HG23 ILE     5      39.782  24.042  82.881  1.00  0.00
H
ATOM     71  CG1 ILE     5      41.377  22.650  80.161  1.00  0.00
C
ATOM     72 HG12 ILE     5      40.993  23.401  79.469  1.00  0.00
H
ATOM     73 HG13 ILE     5      42.367  22.991  80.462  1.00  0.00
H
ATOM     74  CD1 ILE     5      41.524  21.332  79.377  1.00  0.00
C
ATOM     75 HD11 ILE     5      40.539  20.985  79.059  1.00  0.00
H
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ATOM     76 HD12 ILE     5      42.147  21.489  78.489  1.00  0.00
H
ATOM     77 HD13 ILE     5      41.996  20.566  79.996  1.00  0.00
H
ATOM     78  C   ILE     5      42.232  21.819  83.079  1.00  0.00
C
ATOM     79  O   ILE     5      42.349  22.513  84.088  1.00  0.00
O
ATOM     80  N   GLU     6      43.285  21.307  82.441  1.00  0.00
N
ATOM     81  H   GLU     6      43.117  20.715  81.647  1.00  0.00
H
ATOM     82  CA  GLU     6      44.680  21.588  82.793  1.00  0.00
C
ATOM     83  HA  GLU     6      44.855  21.261  83.819  1.00  0.00
H
ATOM     84  CB  GLU     6      45.626  20.805  81.863  1.00  0.00
C
ATOM     85  HB2 GLU     6      45.403  21.060  80.825  1.00  0.00
H
ATOM     86  HB3 GLU     6      46.651  21.110  82.080  1.00  0.00
H
ATOM     87  CG  GLU     6      45.514  19.283  82.048  1.00  0.00
C
ATOM     88  HG2 GLU     6      45.802  19.039  83.074  1.00  0.00
H
ATOM     89  HG3 GLU     6      44.477  18.971  81.904  1.00  0.00
H
ATOM     90  CD  GLU     6      46.421  18.515  81.077  1.00  0.00
C
ATOM     91  OE1 GLU     6      47.636  18.804  81.057  1.00  0.00
O
ATOM     92  OE2 GLU     6      45.955  17.556  80.416  1.00  0.00
O
ATOM     93  C   GLU     6      44.991  23.093  82.711  1.00  0.00
C
ATOM     94  O   GLU     6      44.718  23.741  81.694  1.00  0.00
O
ATOM     95  N   THR     7      45.595  23.638  83.771  1.00  0.00
N
ATOM     96  H   THR     7      45.840  23.052  84.555  1.00  0.00
H
ATOM     97  CA  THR     7      46.070  25.025  83.824  1.00  0.00
C
ATOM     98  HA  THR     7      45.244  25.687  83.563  1.00  0.00
H
ATOM     99  CB  THR     7      46.569  25.404  85.231  1.00  0.00
C
ATOM    100  HB  THR     7      47.062  26.376  85.181  1.00  0.00
H
ATOM    101  CG2 THR     7      45.441  25.458  86.256  1.00  0.00
C
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ATOM    102 HG21 THR     7      45.006  24.466  86.382  1.00  0.00
H
ATOM    103 HG22 THR     7      45.826  25.805  87.213  1.00  0.00
H
ATOM    104 HG23 THR     7      44.670  26.141  85.913  1.00  0.00
H
ATOM    105  OG1 THR     7      47.468  24.443  85.731  1.00  0.00
O
ATOM    106  HG1 THR     7      48.056  24.877  86.354  1.00  0.00
H
ATOM    107  C   THR     7      47.200  25.243  82.819  1.00  0.00
C
ATOM    108  O   THR     7      48.138  24.448  82.737  1.00  0.00
O
ATOM    109  N   VAL     8      47.144  26.348  82.069  1.00  0.00
N
ATOM    110  H   VAL     8      46.380  26.992  82.199  1.00  0.00
H
ATOM    111  CA  VAL     8      48.252  26.735  81.183  1.00  0.00
C
ATOM    112  HA  VAL     8      48.630  25.827  80.718  1.00  0.00
H
ATOM    113  CB  VAL     8      47.796  27.670  80.051  1.00  0.00
C
ATOM    114  HB  VAL     8      47.414  28.595  80.483  1.00  0.00
H
ATOM    115  CG1 VAL     8      48.965  27.997  79.108  1.00  0.00
C
ATOM    116 HG11 VAL     8      49.419  27.079  78.737  1.00  0.00
H
ATOM    117 HG12 VAL     8      48.619  28.570  78.251  1.00  0.00
H
ATOM    118 HG13 VAL     8      49.717  28.590  79.631  1.00  0.00
H
ATOM    119  CG2 VAL     8      46.683  27.023  79.213  1.00  0.00
C
ATOM    120 HG21 VAL     8      45.797  26.859  79.826  1.00  0.00
H
ATOM    121 HG22 VAL     8      46.412  27.679  78.386  1.00  0.00
H
ATOM    122 HG23 VAL     8      47.027  26.068  78.815  1.00  0.00
H
ATOM    123  C   VAL     8      49.357  27.383  82.030  1.00  0.00
C
ATOM    124  O   VAL     8      49.042  28.320  82.770  1.00  0.00
O
ATOM    125  N   PRO     9      50.620  26.919  81.946  1.00  0.00
N
ATOM    126  CD  PRO     9      51.098  25.823  81.115  1.00  0.00
C
ATOM    127  HD2 PRO     9      50.772  25.924  80.081  1.00  0.00
H
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ATOM    128  HD3 PRO     9      50.743  24.880  81.530  1.00  0.00
H
ATOM    129  CG  PRO     9      52.621  25.874  81.188  1.00  0.00
C
ATOM    130  HG2 PRO     9      53.005  26.567  80.437  1.00  0.00
H
ATOM    131  HG3 PRO     9      53.058  24.883  81.060  1.00  0.00
H
ATOM    132  CB  PRO     9      52.867  26.432  82.589  1.00  0.00
C
ATOM    133  HB2 PRO     9      53.838  26.924  82.664  1.00  0.00
H
ATOM    134  HB3 PRO     9      52.792  25.622  83.318  1.00  0.00
H
ATOM    135  CA  PRO     9      51.707  27.413  82.786  1.00  0.00
C
ATOM    136  HA  PRO     9      51.387  27.380  83.823  1.00  0.00
H
ATOM    137  C   PRO     9      52.105  28.848  82.423  1.00  0.00
C
ATOM    138  O   PRO     9      52.218  29.175  81.239  1.00  0.00
O
ATOM    139  N   VAL    10      52.342  29.694  83.431  1.00  0.00
N
ATOM    140  H   VAL    10      52.241  29.341  84.383  1.00  0.00
H
ATOM    141  CA  VAL    10      52.605  31.137  83.248  1.00  0.00
C
ATOM    142  HA  VAL    10      52.984  31.293  82.239  1.00  0.00
H
ATOM    143  CB  VAL    10      51.287  31.928  83.391  1.00  0.00
C
ATOM    144  HB  VAL    10      50.733  31.552  84.255  1.00  0.00
H
ATOM    145  CG1 VAL    10      51.467  33.436  83.591  1.00  0.00
C
ATOM    146 HG11 VAL    10      51.926  33.891  82.714  1.00  0.00
H
ATOM    147 HG12 VAL    10      50.491  33.861  83.790  1.00  0.00
H
ATOM    148 HG13 VAL    10      52.071  33.640  84.472  1.00  0.00
H
ATOM    149  CG2 VAL    10      50.442  31.745  82.120  1.00  0.00
C
ATOM    150 HG21 VAL    10      50.086  30.717  82.056  1.00  0.00
H
ATOM    151 HG22 VAL    10      49.579  32.398  82.122  1.00  0.00
H
ATOM    152 HG23 VAL    10      51.051  31.963  81.244  1.00  0.00
H
ATOM    153  C   VAL    10      53.672  31.668  84.209  1.00  0.00
C
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ATOM    154  O   VAL    10      53.669  31.355  85.398  1.00  0.00
O
ATOM    155  N   LYS    11      54.560  32.542  83.708  1.00  0.00
N
ATOM    156  H   LYS    11      54.498  32.747  82.713  1.00  0.00
H
ATOM    157  CA  LYS    11      55.642  33.182  84.481  1.00  0.00
C
ATOM    158  HA  LYS    11      55.457  32.995  85.540  1.00  0.00
H
ATOM    159  CB  LYS    11      56.991  32.513  84.129  1.00  0.00
C
ATOM    160  HB2 LYS    11      57.138  32.530  83.046  1.00  0.00
H
ATOM    161  HB3 LYS    11      57.803  33.077  84.593  1.00  0.00
H
ATOM    162  CG  LYS    11      57.051  31.060  84.643  1.00  0.00
C
ATOM    163  HG2 LYS    11      56.833  31.066  85.713  1.00  0.00
H
ATOM    164  HG3 LYS    11      56.288  30.466  84.140  1.00  0.00
H
ATOM    165  CD  LYS    11      58.417  30.387  84.427  1.00  0.00
C
ATOM    166  HD2 LYS    11      58.609  30.282  83.358  1.00  0.00
H
ATOM    167  HD3 LYS    11      59.194  31.007  84.877  1.00  0.00
H
ATOM    168  CE  LYS    11      58.402  29.007  85.106  1.00  0.00
C
ATOM    169  HE2 LYS    11      58.074  29.155  86.140  1.00  0.00
H
ATOM    170  HE3 LYS    11      57.659  28.372  84.615  1.00  0.00
H
ATOM    171  NZ  LYS    11      59.730  28.338  85.120  1.00  0.00
N
ATOM    172  HZ1 LYS    11      60.449  28.943  85.509  1.00  0.00
H
ATOM    173  HZ2 LYS    11      59.698  27.519  85.710  1.00  0.00
H
ATOM    174  HZ3 LYS    11      60.015  28.001  84.201  1.00  0.00
H
ATOM    175  C   LYS    11      55.688  34.714  84.330  1.00  0.00
C
ATOM    176  O   LYS    11      55.208  35.297  83.355  1.00  0.00
O
ATOM    177  N   LEU    12      56.302  35.371  85.318  1.00  0.00
N
ATOM    178  H   LEU    12      56.690  34.809  86.057  1.00  0.00
H
ATOM    179  CA  LEU    12      56.760  36.764  85.225  1.00  0.00
C
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ATOM    180  HA  LEU    12      55.986  37.373  84.765  1.00  0.00
H
ATOM    181  CB  LEU    12      57.044  37.326  86.636  1.00  0.00
C
ATOM    182  HB2 LEU    12      57.804  36.703  87.111  1.00  0.00
H
ATOM    183  HB3 LEU    12      57.467  38.328  86.541  1.00  0.00
H
ATOM    184  CG  LEU    12      55.817  37.411  87.567  1.00  0.00
C
ATOM    185  HG  LEU    12      55.344  36.431  87.635  1.00  0.00
H
ATOM    186  CD1 LEU    12      56.256  37.824  88.971  1.00  0.00
C
ATOM    187 HD11 LEU    12      56.754  38.794  88.939  1.00  0.00
H
ATOM    188 HD12 LEU    12      55.391  37.877  89.632  1.00  0.00
H
ATOM    189 HD13 LEU    12      56.952  37.085  89.370  1.00  0.00
H
ATOM    190  CD2 LEU    12      54.780  38.433  87.087  1.00  0.00
C
ATOM    191 HD21 LEU    12      54.394  38.155  86.109  1.00  0.00
H
ATOM    192 HD22 LEU    12      53.945  38.458  87.788  1.00  0.00
H
ATOM    193 HD23 LEU    12      55.234  39.422  87.030  1.00  0.00
H
ATOM    194  C   LEU    12      58.005  36.855  84.320  1.00  0.00
C
ATOM    195  O   LEU    12      58.705  35.861  84.114  1.00  0.00
O
ATOM    196  N   LYS    13      58.290  38.047  83.786  1.00  0.00
N
ATOM    197  H   LYS    13      57.697  38.827  84.048  1.00  0.00
H
ATOM    198  CA  LYS    13      59.520  38.332  83.027  1.00  0.00
C
ATOM    199  HA  LYS    13      59.617  37.561  82.267  1.00  0.00
H
ATOM    200  CB  LYS    13      59.430  39.695  82.313  1.00  0.00
C
ATOM    201  HB2 LYS    13      59.157  40.470  83.032  1.00  0.00
H
ATOM    202  HB3 LYS    13      60.412  39.941  81.904  1.00  0.00
H
ATOM    203  CG  LYS    13      58.417  39.678  81.155  1.00  0.00
C
ATOM    204  HG2 LYS    13      58.690  38.895  80.447  1.00  0.00
H
ATOM    205  HG3 LYS    13      57.425  39.464  81.552  1.00  0.00
H
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ATOM    206  CD  LYS    13      58.375  41.029  80.428  1.00  0.00
C
ATOM    207  HD2 LYS    13      58.074  41.795  81.145  1.00  0.00
H
ATOM    208  HD3 LYS    13      59.368  41.276  80.045  1.00  0.00
H
ATOM    209  CE  LYS    13      57.373  40.997  79.265  1.00  0.00
C
ATOM    210  HE2 LYS    13      57.757  40.368  78.453  1.00  0.00
H
ATOM    211  HE3 LYS    13      56.445  40.551  79.624  1.00  0.00
H
ATOM    212  NZ  LYS    13      57.090  42.360  78.768  1.00  0.00
N
ATOM    213  HZ1 LYS    13      57.911  42.781  78.331  1.00  0.00
H
ATOM    214  HZ2 LYS    13      56.353  42.354  78.066  1.00  0.00
H
ATOM    215  HZ3 LYS    13      56.790  42.964  79.523  1.00  0.00
H
ATOM    216  C   LYS    13      60.752  38.256  83.954  1.00  0.00
C
ATOM    217  O   LYS    13      60.648  38.661  85.115  1.00  0.00
O
ATOM    218  N   PRO    14      61.914  37.752  83.484  1.00  0.00
N
ATOM    219  CD  PRO    14      62.158  37.180  82.165  1.00  0.00
C
ATOM    220  HD2 PRO    14      62.332  37.982  81.446  1.00  0.00
H
ATOM    221  HD3 PRO    14      61.338  36.543  81.836  1.00  0.00
H
ATOM    222  CG  PRO    14      63.418  36.328  82.307  1.00  0.00
C
ATOM    223  HG2 PRO    14      63.975  36.268  81.371  1.00  0.00
H
ATOM    224  HG3 PRO    14      63.147  35.331  82.659  1.00  0.00
H
ATOM    225  CB  PRO    14      64.200  37.063  83.392  1.00  0.00
C
ATOM    226  HB2 PRO    14      64.726  37.910  82.947  1.00  0.00
H
ATOM    227  HB3 PRO    14      64.902  36.402  83.903  1.00  0.00
H
ATOM    228  CA  PRO    14      63.093  37.556  84.330  1.00  0.00
C
ATOM    229  HA  PRO    14      62.859  36.762  85.040  1.00  0.00
H
ATOM    230  C   PRO    14      63.516  38.813  85.106  1.00  0.00
C
ATOM    231  O   PRO    14      63.503  39.923  84.579  1.00  0.00
O
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ATOM    232  N   GLY    15      63.884  38.632  86.377  1.00  0.00
N
ATOM    233  H   GLY    15      63.846  37.697  86.752  1.00  0.00
H
ATOM    234  CA  GLY    15      64.293  39.712  87.285  1.00  0.00
C
ATOM    235  HA2 GLY    15      64.863  39.283  88.108  1.00  0.00
H
ATOM    236  HA3 GLY    15      64.953  40.393  86.744  1.00  0.00
H
ATOM    237  C   GLY    15      63.150  40.551  87.884  1.00  0.00
C
ATOM    238  O   GLY    15      63.405  41.304  88.827  1.00  0.00
O
ATOM    239  N   MET    16      61.906  40.420  87.398  1.00  0.00
N
ATOM    240  H   MET    16      61.739  39.760  86.647  1.00  0.00
H
ATOM    241  CA  MET    16      60.751  41.195  87.873  1.00  0.00
C
ATOM    242  HA  MET    16      61.121  42.102  88.350  1.00  0.00
H
ATOM    243  CB  MET    16      59.864  41.644  86.697  1.00  0.00
C
ATOM    244  HB2 MET    16      59.415  40.771  86.222  1.00  0.00
H
ATOM    245  HB3 MET    16      59.059  42.266  87.089  1.00  0.00
H
ATOM    246  CG  MET    16      60.632  42.450  85.642  1.00  0.00
C
ATOM    247  HG2 MET    16      61.204  43.239  86.132  1.00  0.00
H
ATOM    248  HG3 MET    16      61.339  41.785  85.142  1.00  0.00
H
ATOM    249  SD  MET    16      59.562  43.201  84.382  1.00  0.00
S
ATOM    250  CE  MET    16      59.292  44.836  85.118  1.00  0.00
C
ATOM    251  HE1 MET    16      60.222  45.404  85.103  1.00  0.00
H
ATOM    252  HE2 MET    16      58.539  45.372  84.541  1.00  0.00
H
ATOM    253  HE3 MET    16      58.954  44.734  86.148  1.00  0.00
H
ATOM    254  C   MET    16      59.916  40.431  88.914  1.00  0.00
C
ATOM    255  O   MET    16      59.543  39.279  88.711  1.00  0.00
O
ATOM    256  N   ASP    17      59.576  41.115  90.008  1.00  0.00
N
ATOM    257  H   ASP    17      59.936  42.047  90.101  1.00  0.00
H
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ATOM    258  CA  ASP    17      58.664  40.652  91.066  1.00  0.00
C
ATOM    259  HA  ASP    17      58.580  39.564  91.018  1.00  0.00
H
ATOM    260  CB  ASP    17      59.292  41.018  92.423  1.00  0.00
C
ATOM    261  HB2 ASP    17      60.312  40.631  92.453  1.00  0.00
H
ATOM    262  HB3 ASP    17      59.338  42.106  92.512  1.00  0.00
H
ATOM    263  CG  ASP    17      58.529  40.439  93.615  1.00  0.00
C
ATOM    264  OD1 ASP    17      58.254  39.217  93.601  1.00  0.00
O
ATOM    265  OD2 ASP    17      58.169  41.210  94.527  1.00  0.00
O
ATOM    266  C   ASP    17      57.241  41.231  90.881  1.00  0.00
C
ATOM    267  O   ASP    17      57.039  42.137  90.067  1.00  0.00
O
ATOM    268  N   GLY    18      56.255  40.708  91.617  1.00  0.00
N
ATOM    269  H   GLY    18      56.515  40.001  92.296  1.00  0.00
H
ATOM    270  CA  GLY    18      54.825  41.027  91.480  1.00  0.00
C
ATOM    271  HA2 GLY    18      54.514  40.785  90.464  1.00  0.00
H
ATOM    272  HA3 GLY    18      54.271  40.380  92.155  1.00  0.00
H
ATOM    273  C   GLY    18      54.390  42.477  91.787  1.00  0.00
C
ATOM    274  O   GLY    18      55.188  43.315  92.214  1.00  0.00
O
ATOM    275  N   PRO    19      53.100  42.804  91.563  1.00  0.00
N
ATOM    276  CD  PRO    19      52.057  41.904  91.085  1.00  0.00
C
ATOM    277  HD2 PRO    19      51.921  41.063  91.765  1.00  0.00
H
ATOM    278  HD3 PRO    19      52.314  41.551  90.086  1.00  0.00
H
ATOM    279  CG  PRO    19      50.770  42.731  91.015  1.00  0.00
C
ATOM    280  HG2 PRO    19      50.211  42.635  91.947  1.00  0.00
H
ATOM    281  HG3 PRO    19      50.144  42.434  90.176  1.00  0.00
H
ATOM    282  CB  PRO    19      51.286  44.163  90.862  1.00  0.00
C
ATOM    283  HB2 PRO    19      50.560  44.897  91.213  1.00  0.00
H
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ATOM    284  HB3 PRO    19      51.540  44.345  89.815  1.00  0.00
H
ATOM    285  CA  PRO    19      52.561  44.154  91.713  1.00  0.00
C
ATOM    286  HA  PRO    19      53.266  44.880  91.304  1.00  0.00
H
ATOM    287  C   PRO    19      52.265  44.501  93.184  1.00  0.00
C
ATOM    288  O   PRO    19      51.634  43.730  93.903  1.00  0.00
O
ATOM    289  N   LYS    20      52.681  45.696  93.621  1.00  0.00
N
ATOM    290  H   LYS    20      53.212  46.256  92.972  1.00  0.00
H
ATOM    291  CA  LYS    20      52.507  46.219  94.997  1.00  0.00
C
ATOM    292  HA  LYS    20      51.863  45.536  95.555  1.00  0.00
H
ATOM    293  CB  LYS    20      53.864  46.264  95.733  1.00  0.00
C
ATOM    294  HB2 LYS    20      54.514  46.984  95.232  1.00  0.00
H
ATOM    295  HB3 LYS    20      53.684  46.623  96.748  1.00  0.00
H
ATOM    296  CG  LYS    20      54.599  44.913  95.835  1.00  0.00
C
ATOM    297  HG2 LYS    20      53.953  44.179  96.318  1.00  0.00
H
ATOM    298  HG3 LYS    20      54.863  44.555  94.839  1.00  0.00
H
ATOM    299  CD  LYS    20      55.881  45.095  96.662  1.00  0.00
C
ATOM    300  HD2 LYS    20      56.497  45.859  96.185  1.00  0.00
H
ATOM    301  HD3 LYS    20      55.609  45.441  97.661  1.00  0.00
H
ATOM    302  CE  LYS    20      56.702  43.805  96.788  1.00  0.00
C
ATOM    303  HE2 LYS    20      56.091  43.038  97.272  1.00  0.00
H
ATOM    304  HE3 LYS    20      56.967  43.441  95.788  1.00  0.00
H
ATOM    305  NZ  LYS    20      57.934  44.049  97.580  1.00  0.00
N
ATOM    306  HZ1 LYS    20      57.713  44.353  98.515  1.00  0.00
H
ATOM    307  HZ2 LYS    20      58.481  43.195  97.696  1.00  0.00
H
ATOM    308  HZ3 LYS    20      58.513  44.772  97.153  1.00  0.00
H
ATOM    309  C   LYS    20      51.772  47.574  95.024  1.00  0.00
C
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ATOM    310  O   LYS    20      52.148  48.494  95.752  1.00  0.00
O
ATOM    311  N   VAL    21      50.757  47.730  94.171  1.00  0.00
N
ATOM    312  H   VAL    21      50.392  46.898  93.720  1.00  0.00
H
ATOM    313  CA  VAL    21      50.022  48.994  93.973  1.00  0.00
C
ATOM    314  HA  VAL    21      50.656  49.814  94.308  1.00  0.00
H
ATOM    315  CB  VAL    21      49.760  49.261  92.473  1.00  0.00
C
ATOM    316  HB  VAL    21      50.722  49.479  92.006  1.00  0.00
H
ATOM    317  CG1 VAL    21      49.168  48.059  91.733  1.00  0.00
C
ATOM    318 HG11 VAL    21      48.300  47.703  92.274  1.00  0.00
H
ATOM    319 HG12 VAL    21      48.879  48.341  90.720  1.00  0.00
H
ATOM    320 HG13 VAL    21      49.900  47.255  91.672  1.00  0.00
H
ATOM    321  CG2 VAL    21      48.859  50.482  92.256  1.00  0.00
C
ATOM    322 HG21 VAL    21      49.289  51.355  92.747  1.00  0.00
H
ATOM    323 HG22 VAL    21      48.772  50.692  91.189  1.00  0.00
H
ATOM    324 HG23 VAL    21      47.861  50.298  92.655  1.00  0.00
H
ATOM    325  C   VAL    21      48.768  49.021  94.854  1.00  0.00
C
ATOM    326  O   VAL    21      47.979  48.079  94.850  1.00  0.00
O
ATOM    327  N   LYS    22      48.583  50.085  95.647  1.00  0.00
N
ATOM    328  H   LYS    22      49.254  50.836  95.597  1.00  0.00
H
ATOM    329  CA  LYS    22      47.487  50.196  96.631  1.00  0.00
C
ATOM    330  HA  LYS    22      47.508  49.294  97.245  1.00  0.00
H
ATOM    331  CB  LYS    22      47.743  51.414  97.549  1.00  0.00
C
ATOM    332  HB2 LYS    22      48.800  51.438  97.822  1.00  0.00
H
ATOM    333  HB3 LYS    22      47.511  52.327  96.997  1.00  0.00
H
ATOM    334  CG  LYS    22      46.923  51.381  98.853  1.00  0.00
C
ATOM    335  HG2 LYS    22      45.867  51.278  98.620  1.00  0.00
H
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ATOM    336  HG3 LYS    22      47.223  50.514  99.445  1.00  0.00
H
ATOM    337  CD  LYS    22      47.096  52.656  99.693  1.00  0.00
C
ATOM    338  HD2 LYS    22      48.120  52.718 100.064  1.00  0.00
H
ATOM    339  HD3 LYS    22      46.883  53.526  99.069  1.00  0.00
H
ATOM    340  CE  LYS    22      46.110  52.626 100.868  1.00  0.00
C
ATOM    341  HE2 LYS    22      45.111  52.436 100.463  1.00  0.00
H
ATOM    342  HE3 LYS    22      46.369  51.796 101.531  1.00  0.00
H
ATOM    343  NZ  LYS    22      46.090  53.904 101.620  1.00  0.00
N
ATOM    344  HZ1 LYS    22      45.878  54.684 101.016  1.00  0.00
H
ATOM    345  HZ2 LYS    22      45.371  53.889 102.344  1.00  0.00
H
ATOM    346  HZ3 LYS    22      46.973  54.108 102.087  1.00  0.00
H
ATOM    347  C   LYS    22      46.106  50.267  95.949  1.00  0.00
C
ATOM    348  O   LYS    22      45.978  50.752  94.828  1.00  0.00
O
ATOM    349  N   GLN    23      45.065  49.823  96.657  1.00  0.00
N
ATOM    350  H   GLN    23      45.254  49.442  97.566  1.00  0.00
H
ATOM    351  CA  GLN    23      43.674  50.171  96.343  1.00  0.00
C
ATOM    352  HA  GLN    23      43.465  49.837  95.327  1.00  0.00
H
ATOM    353  CB  GLN    23      42.711  49.457  97.318  1.00  0.00
C
ATOM    354  HB2 GLN    23      43.282  48.990  98.124  1.00  0.00
H
ATOM    355  HB3 GLN    23      42.042  50.185  97.778  1.00  0.00
H
ATOM    356  CG  GLN    23      41.854  48.368  96.649  1.00  0.00
C
ATOM    357  HG2 GLN    23      42.507  47.597  96.236  1.00  0.00
H
ATOM    358  HG3 GLN    23      41.239  47.902  97.420  1.00  0.00
H
ATOM    359  CD  GLN    23      40.926  48.865  95.544  1.00  0.00
C
ATOM    360  OE1 GLN    23      40.967  49.987  95.078  1.00  0.00
O
ATOM    361  NE2 GLN    23      40.078  48.016  95.017  1.00  0.00
N
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ATOM    362 HE21 GLN    23      39.441  48.391  94.328  1.00  0.00
H
ATOM    363 HE22 GLN    23      40.004  47.085  95.403  1.00  0.00
H
ATOM    364  C   GLN    23      43.468  51.702  96.372  1.00  0.00
C
ATOM    365  O   GLN    23      44.039  52.395  97.218  1.00  0.00
O
ATOM    366  N   TRP    24      42.637  52.210  95.462  1.00  0.00
N
ATOM    367  H   TRP    24      42.083  51.550  94.924  1.00  0.00
H
ATOM    368  CA  TRP    24      42.266  53.620  95.309  1.00  0.00
C
ATOM    369  HA  TRP    24      42.975  54.230  95.869  1.00  0.00
H
ATOM    370  CB  TRP    24      42.424  53.987  93.815  1.00  0.00
C
ATOM    371  HB2 TRP    24      42.241  55.048  93.681  1.00  0.00
H
ATOM    372  HB3 TRP    24      43.471  53.828  93.553  1.00  0.00
H
ATOM    373  CG  TRP    24      41.591  53.273  92.785  1.00  0.00
C
ATOM    374  CD1 TRP    24      40.256  53.080  92.849  1.00  0.00
C
ATOM    375  HD1 TRP    24      39.623  53.387  93.671  1.00  0.00
H
ATOM    376  NE1 TRP    24      39.809  52.460  91.702  1.00  0.00
N
ATOM    377  HE1 TRP    24      38.836  52.236  91.555  1.00  0.00
H
ATOM    378  CE2 TRP    24      40.834  52.234  90.813  1.00  0.00
C
ATOM    379  CZ2 TRP    24      40.879  51.686  89.522  1.00  0.00
C
ATOM    380  HZ2 TRP    24      39.978  51.336  89.040  1.00  0.00
H
ATOM    381  CH2 TRP    24      42.113  51.610  88.857  1.00  0.00
C
ATOM    382  HH2 TRP    24      42.173  51.204  87.856  1.00  0.00
H
ATOM    383  CZ3 TRP    24      43.278  52.074  89.488  1.00  0.00
C
ATOM    384  HZ3 TRP    24      44.227  51.995  88.972  1.00  0.00
H
ATOM    385  CE3 TRP    24      43.218  52.636  90.780  1.00  0.00
C
ATOM    386  HE3 TRP    24      44.123  52.995  91.246  1.00  0.00
H
ATOM    387  CD2 TRP    24      41.995  52.734  91.481  1.00  0.00
C
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ATOM    388  C   TRP    24      40.864  53.888  95.911  1.00  0.00
C
ATOM    389  O   TRP    24      40.140  52.933  96.200  1.00  0.00
O
ATOM    390  N   PRO    25      40.435  55.148  96.132  1.00  0.00
N
ATOM    391  CD  PRO    25      41.189  56.386  96.007  1.00  0.00
C
ATOM    392  HD2 PRO    25      41.902  56.385  95.186  1.00  0.00
H
ATOM    393  HD3 PRO    25      41.713  56.578  96.945  1.00  0.00
H
ATOM    394  CG  PRO    25      40.135  57.466  95.779  1.00  0.00
C
ATOM    395  HG2 PRO    25      39.827  57.466  94.731  1.00  0.00
H
ATOM    396  HG3 PRO    25      40.497  58.453  96.076  1.00  0.00
H
ATOM    397  CB  PRO    25      38.982  56.982  96.661  1.00  0.00
C
ATOM    398  HB2 PRO    25      38.024  57.358  96.300  1.00  0.00
H
ATOM    399  HB3 PRO    25      39.148  57.310  97.688  1.00  0.00
H
ATOM    400  CA  PRO    25      39.072  55.448  96.587  1.00  0.00
C
ATOM    401  HA  PRO    25      38.941  55.041  97.590  1.00  0.00
H
ATOM    402  C   PRO    25      37.992  54.854  95.664  1.00  0.00
C
ATOM    403  O   PRO    25      38.013  55.066  94.453  1.00  0.00
O
ATOM    404  N   LEU    26      37.021  54.139  96.245  1.00  0.00
N
ATOM    405  H   LEU    26      37.048  54.043  97.247  1.00  0.00
H
ATOM    406  CA  LEU    26      35.852  53.573  95.557  1.00  0.00
C
ATOM    407  HA  LEU    26      35.894  53.827  94.498  1.00  0.00
H
ATOM    408  CB  LEU    26      35.816  52.033  95.691  1.00  0.00
C
ATOM    409  HB2 LEU    26      35.716  51.792  96.750  1.00  0.00
H
ATOM    410  HB3 LEU    26      34.918  51.671  95.187  1.00  0.00
H
ATOM    411  CG  LEU    26      37.020  51.243  95.147  1.00  0.00
C
ATOM    412  HG  LEU    26      37.908  51.503  95.721  1.00  0.00
H
ATOM    413  CD1 LEU    26      36.746  49.742  95.302  1.00  0.00
C
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ATOM    414 HD11 LEU    26      35.908  49.445  94.675  1.00  0.00
H
ATOM    415 HD12 LEU    26      37.630  49.184  95.006  1.00  0.00
H
ATOM    416 HD13 LEU    26      36.516  49.506  96.337  1.00  0.00
H
ATOM    417  CD2 LEU    26      37.286  51.498  93.665  1.00  0.00
C
ATOM    418 HD21 LEU    26      37.475  52.558  93.506  1.00  0.00
H
ATOM    419 HD22 LEU    26      38.178  50.941  93.377  1.00  0.00
H
ATOM    420 HD23 LEU    26      36.441  51.178  93.060  1.00  0.00
H
ATOM    421  C   LEU    26      34.550  54.167  96.129  1.00  0.00
C
ATOM    422  O   LEU    26      34.447  54.405  97.329  1.00  0.00
O
ATOM    423  N   THR    27      33.535  54.350  95.278  1.00  0.00
N
ATOM    424  H   THR    27      33.697  54.209  94.292  1.00  0.00
H
ATOM    425  CA  THR    27      32.165  54.758  95.661  1.00  0.00
C
ATOM    426  HA  THR    27      32.200  55.742  96.128  1.00  0.00
H
ATOM    427  CB  THR    27      31.283  54.810  94.394  1.00  0.00
C
ATOM    428  HB  THR    27      31.105  53.792  94.068  1.00  0.00
H
ATOM    429  CG2 THR    27      29.928  55.465  94.609  1.00  0.00
C
ATOM    430 HG21 THR    27      30.044  56.514  94.875  1.00  0.00
H
ATOM    431 HG22 THR    27      29.340  55.370  93.697  1.00  0.00
H
ATOM    432 HG23 THR    27      29.400  54.941  95.401  1.00  0.00
H
ATOM    433  OG1 THR    27      31.914  55.483  93.323  1.00  0.00
O
ATOM    434  HG1 THR    27      31.239  56.031  92.910  1.00  0.00
H
ATOM    435  C   THR    27      31.538  53.762  96.651  1.00  0.00
C
ATOM    436  O   THR    27      31.481  52.579  96.326  1.00  0.00
O
ATOM    437  N   GLU    28      30.999  54.221  97.791  1.00  0.00
N
ATOM    438  H   GLU    28      31.130  55.198  98.008  1.00  0.00
H
ATOM    439  CA  GLU    28      30.345  53.386  98.829  1.00  0.00
C
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ATOM    440  HA  GLU    28      31.094  52.748  99.291  1.00  0.00
H
ATOM    441  CB  GLU    28      29.775  54.326  99.923  1.00  0.00
C
ATOM    442  HB2 GLU    28      30.624  54.830 100.392  1.00  0.00
H
ATOM    443  HB3 GLU    28      29.153  55.080  99.433  1.00  0.00
H
ATOM    444  CG  GLU    28      28.931  53.623 101.011  1.00  0.00
C
ATOM    445  HG2 GLU    28      28.042  53.223 100.545  1.00  0.00
H
ATOM    446  HG3 GLU    28      29.485  52.786 101.415  1.00  0.00
H
ATOM    447  CD  GLU    28      28.515  54.549 102.163  1.00  0.00
C
ATOM    448  OE1 GLU    28      28.866  55.725 102.177  1.00  0.00
O
ATOM    449  OE2 GLU    28      27.782  54.057 103.090  1.00  0.00
O
ATOM    450  C   GLU    28      29.276  52.441  98.239  1.00  0.00
C
ATOM    451  O   GLU    28      29.279  51.236  98.499  1.00  0.00
O
ATOM    452  N   GLU    29      28.403  52.958  97.368  1.00  0.00
N
ATOM    453  H   GLU    29      28.440  53.948  97.197  1.00  0.00
H
ATOM    454  CA  GLU    29      27.413  52.177  96.607  1.00  0.00
C
ATOM    455  HA  GLU    29      26.753  51.660  97.304  1.00  0.00
H
ATOM    456  CB  GLU    29      26.559  53.173  95.791  1.00  0.00
C
ATOM    457  HB2 GLU    29      25.824  53.591  96.479  1.00  0.00
H
ATOM    458  HB3 GLU    29      27.178  54.011  95.477  1.00  0.00
H
ATOM    459  CG  GLU    29      25.804  52.623  94.564  1.00  0.00
C
ATOM    460  HG2 GLU    29      25.364  51.659  94.831  1.00  0.00
H
ATOM    461  HG3 GLU    29      24.979  53.306  94.351  1.00  0.00
H
ATOM    462  CD  GLU    29      26.672  52.497  93.289  1.00  0.00
C
ATOM    463  OE1 GLU    29      27.677  53.239  93.158  1.00  0.00
O
ATOM    464  OE2 GLU    29      26.333  51.658  92.427  1.00  0.00
O
ATOM    465  C   GLU    29      28.072  51.079  95.752  1.00  0.00
C
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ATOM    466  O   GLU    29      27.699  49.908  95.834  1.00  0.00
O
ATOM    467  N   LYS    30      29.109  51.428  94.987  1.00  0.00
N
ATOM    468  H   LYS    30      29.307  52.415  94.907  1.00  0.00
H
ATOM    469  CA  LYS    30      29.808  50.498  94.093  1.00  0.00
C
ATOM    470  HA  LYS    30      29.043  49.981  93.506  1.00  0.00
H
ATOM    471  CB  LYS    30      30.703  51.317  93.156  1.00  0.00
C
ATOM    472  HB2 LYS    30      30.125  52.171  92.794  1.00  0.00
H
ATOM    473  HB3 LYS    30      31.553  51.684  93.733  1.00  0.00
H
ATOM    474  CG  LYS    30      31.237  50.534  91.948  1.00  0.00
C
ATOM    475  HG2 LYS    30      31.761  49.649  92.306  1.00  0.00
H
ATOM    476  HG3 LYS    30      30.407  50.212  91.318  1.00  0.00
H
ATOM    477  CD  LYS    30      32.222  51.391  91.133  1.00  0.00
C
ATOM    478  HD2 LYS    30      33.071  51.637  91.773  1.00  0.00
H
ATOM    479  HD3 LYS    30      32.610  50.801  90.306  1.00  0.00
H
ATOM    480  CE  LYS    30      31.625  52.703  90.591  1.00  0.00
C
ATOM    481  HE2 LYS    30      31.254  53.298  91.431  1.00  0.00
H
ATOM    482  HE3 LYS    30      32.422  53.278  90.109  1.00  0.00
H
ATOM    483  NZ  LYS    30      30.535  52.471  89.613  1.00  0.00
N
ATOM    484  HZ1 LYS    30      29.813  51.874  89.998  1.00  0.00
H
ATOM    485  HZ2 LYS    30      30.115  53.350  89.338  1.00  0.00
H
ATOM    486  HZ3 LYS    30      30.916  52.078  88.756  1.00  0.00
H
ATOM    487  C   LYS    30      30.600  49.438  94.860  1.00  0.00
C
ATOM    488  O   LYS    30      30.681  48.307  94.391  1.00  0.00
O
ATOM    489  N   ILE    31      31.151  49.763  96.039  1.00  0.00
N
ATOM    490  H   ILE    31      31.056  50.726  96.344  1.00  0.00
H
ATOM    491  CA  ILE    31      31.808  48.790  96.937  1.00  0.00
C
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ATOM    492  HA  ILE    31      32.673  48.369  96.424  1.00  0.00
H
ATOM    493  CB  ILE    31      32.308  49.439  98.260  1.00  0.00
C
ATOM    494  HB  ILE    31      31.487  49.991  98.719  1.00  0.00
H
ATOM    495  CG2 ILE    31      32.761  48.355  99.265  1.00  0.00
C
ATOM    496 HG21 ILE    31      33.526  47.715  98.823  1.00  0.00
H
ATOM    497 HG22 ILE    31      33.159  48.803 100.173  1.00  0.00
H
ATOM    498 HG23 ILE    31      31.918  47.741  99.573  1.00  0.00
H
ATOM    499  CG1 ILE    31      33.472  50.416  97.982  1.00  0.00
C
ATOM    500 HG12 ILE    31      34.342  49.856  97.648  1.00  0.00
H
ATOM    501 HG13 ILE    31      33.209  51.086  97.170  1.00  0.00
H
ATOM    502  CD1 ILE    31      33.859  51.276  99.195  1.00  0.00
C
ATOM    503 HD11 ILE    31      34.326  50.663  99.963  1.00  0.00
H
ATOM    504 HD12 ILE    31      34.566  52.049  98.893  1.00  0.00
H
ATOM    505 HD13 ILE    31      32.976  51.751  99.620  1.00  0.00
H
ATOM    506  C   ILE    31      30.852  47.629  97.221  1.00  0.00
C
ATOM    507  O   ILE    31      31.265  46.476  97.111  1.00  0.00
O
ATOM    508  N   LYS    32      29.571  47.918  97.498  1.00  0.00
N
ATOM    509  H   LYS    32      29.303  48.898  97.504  1.00  0.00
H
ATOM    510  CA  LYS    32      28.524  46.921  97.780  1.00  0.00
C
ATOM    511  HA  LYS    32      28.749  46.451  98.736  1.00  0.00
H
ATOM    512  CB  LYS    32      27.165  47.648  97.874  1.00  0.00
C
ATOM    513  HB2 LYS    32      27.319  48.688  98.170  1.00  0.00
H
ATOM    514  HB3 LYS    32      26.702  47.669  96.885  1.00  0.00
H
ATOM    515  CG  LYS    32      26.171  47.022  98.864  1.00  0.00
C
ATOM    516  HG2 LYS    32      25.181  47.428  98.646  1.00  0.00
H
ATOM    517  HG3 LYS    32      26.139  45.941  98.718  1.00  0.00
H
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ATOM    518  CD  LYS    32      26.520  47.349 100.327  1.00  0.00
C
ATOM    519  HD2 LYS    32      27.426  46.813 100.614  1.00  0.00
H
ATOM    520  HD3 LYS    32      26.692  48.422 100.428  1.00  0.00
H
ATOM    521  CE  LYS    32      25.355  46.942 101.237  1.00  0.00
C
ATOM    522  HE2 LYS    32      24.486  47.558 100.989  1.00  0.00
H
ATOM    523  HE3 LYS    32      25.102  45.897 101.033  1.00  0.00
H
ATOM    524  NZ  LYS    32      25.696  47.083 102.672  1.00  0.00
N
ATOM    525  HZ1 LYS    32      26.073  47.990 102.920  1.00  0.00
H
ATOM    526  HZ2 LYS    32      24.890  46.958 103.270  1.00  0.00
H
ATOM    527  HZ3 LYS    32      26.353  46.352 102.944  1.00  0.00
H
ATOM    528  C   LYS    32      28.492  45.798  96.732  1.00  0.00
C
ATOM    529  O   LYS    32      28.509  44.628  97.107  1.00  0.00
O
ATOM    530  N   ALA    33      28.572  46.149  95.444  1.00  0.00
N
ATOM    531  H   ALA    33      28.601  47.135  95.229  1.00  0.00
H
ATOM    532  CA  ALA    33      28.622  45.195  94.333  1.00  0.00
C
ATOM    533  HA  ALA    33      27.772  44.513  94.419  1.00  0.00
H
ATOM    534  CB  ALA    33      28.472  45.971  93.019  1.00  0.00
C
ATOM    535  HB1 ALA    33      29.322  46.637  92.870  1.00  0.00
H
ATOM    536  HB2 ALA    33      28.432  45.259  92.195  1.00  0.00
H
ATOM    537  HB3 ALA    33      27.550  46.554  93.028  1.00  0.00
H
ATOM    538  C   ALA    33      29.907  44.341  94.313  1.00  0.00
C
ATOM    539  O   ALA    33      29.867  43.169  93.952  1.00  0.00
O
ATOM    540  N   LEU    34      31.066  44.880  94.714  1.00  0.00
N
ATOM    541  H   LEU    34      31.069  45.831  95.065  1.00  0.00
H
ATOM    542  CA  LEU    34      32.284  44.067  94.822  1.00  0.00
C
ATOM    543  HA  LEU    34      32.331  43.408  93.954  1.00  0.00
H
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ATOM    544  CB  LEU    34      33.569  44.912  94.821  1.00  0.00
C
ATOM    545  HB2 LEU    34      33.548  45.628  95.643  1.00  0.00
H
ATOM    546  HB3 LEU    34      34.367  44.204  95.027  1.00  0.00
H
ATOM    547  CG  LEU    34      33.934  45.621  93.503  1.00  0.00
C
ATOM    548  HG  LEU    34      33.700  44.972  92.658  1.00  0.00
H
ATOM    549  CD1 LEU    34      33.222  46.959  93.331  1.00  0.00
C
ATOM    550 HD11 LEU    34      33.328  47.561  94.233  1.00  0.00
H
ATOM    551 HD12 LEU    34      33.629  47.509  92.487  1.00  0.00
H
ATOM    552 HD13 LEU    34      32.166  46.775  93.144  1.00  0.00
H
ATOM    553  CD2 LEU    34      35.435  45.912  93.476  1.00  0.00
C
ATOM    554 HD21 LEU    34      35.988  44.976  93.527  1.00  0.00
H
ATOM    555 HD22 LEU    34      35.699  46.420  92.550  1.00  0.00
H
ATOM    556 HD23 LEU    34      35.705  46.543  94.324  1.00  0.00
H
ATOM    557  C   LEU    34      32.261  43.139  96.051  1.00  0.00
C
ATOM    558  O   LEU    34      32.845  42.062  95.978  1.00  0.00
O
ATOM    559  N   VAL    35      31.608  43.519  97.157  1.00  0.00
N
ATOM    560  H   VAL    35      31.183  44.441  97.171  1.00  0.00
H
ATOM    561  CA  VAL    35      31.470  42.645  98.345  1.00  0.00
C
ATOM    562  HA  VAL    35      32.437  42.180  98.533  1.00  0.00
H
ATOM    563  CB  VAL    35      31.071  43.430  99.616  1.00  0.00
C
ATOM    564  HB  VAL    35      30.047  43.790  99.506  1.00  0.00
H
ATOM    565  CG1 VAL    35      31.159  42.540 100.865  1.00  0.00
C
ATOM    566 HG11 VAL    35      32.177  42.167 100.989  1.00  0.00
H
ATOM    567 HG12 VAL    35      30.880  43.111 101.751  1.00  0.00
H
ATOM    568 HG13 VAL    35      30.482  41.690 100.783  1.00  0.00
H
ATOM    569  CG2 VAL    35      31.981  44.631  99.911  1.00  0.00
C
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ATOM    570 HG21 VAL    35      32.038  45.295  99.059  1.00  0.00
H
ATOM    571 HG22 VAL    35      31.584  45.196 100.753  1.00  0.00
H
ATOM    572 HG23 VAL    35      32.986  44.295 100.156  1.00  0.00
H
ATOM    573  C   VAL    35      30.468  41.511  98.078  1.00  0.00
C
ATOM    574  O   VAL    35      30.746  40.357  98.406  1.00  0.00
O
ATOM    575  N   GLU    36      29.348  41.825  97.416  1.00  0.00
N
ATOM    576  H   GLU    36      29.175  42.806  97.221  1.00  0.00
H
ATOM    577  CA  GLU    36      28.379  40.869  96.852  1.00  0.00
C
ATOM    578  HA  GLU    36      27.875  40.330  97.654  1.00  0.00
H
ATOM    579  CB  GLU    36      27.326  41.679  96.063  1.00  0.00
C
ATOM    580  HB2 GLU    36      26.733  42.259  96.772  1.00  0.00
H
ATOM    581  HB3 GLU    36      27.855  42.387  95.430  1.00  0.00
H
ATOM    582  CG  GLU    36      26.368  40.883  95.162  1.00  0.00
C
ATOM    583  HG2 GLU    36      26.937  40.222  94.507  1.00  0.00
H
ATOM    584  HG3 GLU    36      25.720  40.262  95.786  1.00  0.00
H
ATOM    585  CD  GLU    36      25.540  41.846  94.293  1.00  0.00
C
ATOM    586  OE1 GLU    36      26.114  42.424  93.337  1.00  0.00
O
ATOM    587  OE2 GLU    36      24.342  42.029  94.603  1.00  0.00
O
ATOM    588  C   GLU    36      29.089  39.825  95.976  1.00  0.00
C
ATOM    589  O   GLU    36      29.133  38.644  96.331  1.00  0.00
O
ATOM    590  N   ILE    37      29.728  40.268  94.886  1.00  0.00
N
ATOM    591  H   ILE    37      29.634  41.250  94.643  1.00  0.00
H
ATOM    592  CA  ILE    37      30.406  39.380  93.936  1.00  0.00
C
ATOM    593  HA  ILE    37      29.686  38.639  93.583  1.00  0.00
H
ATOM    594  CB  ILE    37      30.903  40.201  92.722  1.00  0.00
C
ATOM    595  HB  ILE    37      31.471  41.046  93.116  1.00  0.00
H
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ATOM    596  CG2 ILE    37      31.866  39.399  91.827  1.00  0.00
C
ATOM    597 HG21 ILE    37      31.405  38.448  91.547  1.00  0.00
H
ATOM    598 HG22 ILE    37      32.096  39.965  90.927  1.00  0.00
H
ATOM    599 HG23 ILE    37      32.792  39.193  92.361  1.00  0.00
H
ATOM    600  CG1 ILE    37      29.744  40.781  91.870  1.00  0.00
C
ATOM    601 HG12 ILE    37      29.058  41.328  92.513  1.00  0.00
H
ATOM    602 HG13 ILE    37      30.160  41.499  91.162  1.00  0.00
H
ATOM    603  CD1 ILE    37      28.897  39.769  91.088  1.00  0.00
C
ATOM    604 HD11 ILE    37      28.418  39.076  91.778  1.00  0.00
H
ATOM    605 HD12 ILE    37      28.120  40.303  90.540  1.00  0.00
H
ATOM    606 HD13 ILE    37      29.507  39.215  90.375  1.00  0.00
H
ATOM    607  C   ILE    37      31.530  38.589  94.617  1.00  0.00
C
ATOM    608  O   ILE    37      31.642  37.390  94.396  1.00  0.00
O
ATOM    609  N   CYS    38      32.360  39.179  95.482  1.00  0.00
N
ATOM    610  H   CYS    38      32.263  40.165  95.696  1.00  0.00
H
ATOM    611  CA  CYS    38      33.422  38.398  96.125  1.00  0.00
C
ATOM    612  HA  CYS    38      33.935  37.818  95.357  1.00  0.00
H
ATOM    613  CB  CYS    38      34.455  39.336  96.738  1.00  0.00
C
ATOM    614  HB2 CYS    38      33.950  40.068  97.370  1.00  0.00
H
ATOM    615  HB3 CYS    38      35.138  38.747  97.348  1.00  0.00
H
ATOM    616  SG  CYS    38      35.395  40.159  95.417  1.00  0.00
S
ATOM    617  HG  CYS    38      35.874  41.080  96.254  1.00  0.00
H
ATOM    618  C   CYS    38      32.886  37.354  97.125  1.00  0.00
C
ATOM    619  O   CYS    38      33.508  36.308  97.274  1.00  0.00
O
ATOM    620  N   THR    39      31.720  37.572  97.744  1.00  0.00
N
ATOM    621  H   THR    39      31.235  38.450  97.580  1.00  0.00
H
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ATOM    622  CA  THR    39      31.040  36.537  98.553  1.00  0.00
C
ATOM    623  HA  THR    39      31.769  36.097  99.234  1.00  0.00
H
ATOM    624  CB  THR    39      29.904  37.135  99.402  1.00  0.00
C
ATOM    625  HB  THR    39      29.099  37.472  98.747  1.00  0.00
H
ATOM    626  CG2 THR    39      29.354  36.150 100.439  1.00  0.00
C
ATOM    627 HG21 THR    39      30.166  35.799 101.076  1.00  0.00
H
ATOM    628 HG22 THR    39      28.605  36.648 101.053  1.00  0.00
H
ATOM    629 HG23 THR    39      28.889  35.293  99.948  1.00  0.00
H
ATOM    630  OG1 THR    39      30.380  38.244 100.133  1.00  0.00
O
ATOM    631  HG1 THR    39      30.517  38.973  99.510  1.00  0.00
H
ATOM    632  C   THR    39      30.492  35.404  97.673  1.00  0.00
C
ATOM    633  O   THR    39      30.539  34.234  98.056  1.00  0.00
O
ATOM    634  N   GLU    40      30.020  35.724  96.462  1.00  0.00
N
ATOM    635  H   GLU    40      29.975  36.708  96.210  1.00  0.00
H
ATOM    636  CA  GLU    40      29.604  34.743  95.456  1.00  0.00
C
ATOM    637  HA  GLU    40      28.894  34.068  95.923  1.00  0.00
H
ATOM    638  CB  GLU    40      28.901  35.466  94.287  1.00  0.00
C
ATOM    639  HB2 GLU    40      28.120  36.108  94.699  1.00  0.00
H
ATOM    640  HB3 GLU    40      29.619  36.093  93.764  1.00  0.00
H
ATOM    641  CG  GLU    40      28.264  34.502  93.276  1.00  0.00
C
ATOM    642  HG2 GLU    40      29.012  33.774  92.969  1.00  0.00
H
ATOM    643  HG3 GLU    40      27.467  33.960  93.785  1.00  0.00
H
ATOM    644  CD  GLU    40      27.704  35.184  92.011  1.00  0.00
C
ATOM    645  OE1 GLU    40      27.581  36.424  91.971  1.00  0.00
O
ATOM    646  OE2 GLU    40      27.362  34.441  91.058  1.00  0.00
O
ATOM    647  C   GLU    40      30.792  33.884  94.991  1.00  0.00
C
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ATOM    648  O   GLU    40      30.743  32.658  95.089  1.00  0.00
O
ATOM    649  N   LEU    41      31.880  34.522  94.553  1.00  0.00
N
ATOM    650  H   LEU    41      31.836  35.535  94.508  1.00  0.00
H
ATOM    651  CA  LEU    41      33.052  33.847  93.986  1.00  0.00
C
ATOM    652  HA  LEU    41      32.699  33.139  93.236  1.00  0.00
H
ATOM    653  CB  LEU    41      33.945  34.897  93.293  1.00  0.00
C
ATOM    654  HB2 LEU    41      34.280  35.598  94.057  1.00  0.00
H
ATOM    655  HB3 LEU    41      34.826  34.389  92.908  1.00  0.00
H
ATOM    656  CG  LEU    41      33.311  35.711  92.143  1.00  0.00
C
ATOM    657  HG  LEU    41      32.460  36.266  92.506  1.00  0.00
H
ATOM    658  CD1 LEU    41      34.350  36.711  91.632  1.00  0.00
C
ATOM    659 HD11 LEU    41      35.227  36.168  91.286  1.00  0.00
H
ATOM    660 HD12 LEU    41      33.923  37.285  90.811  1.00  0.00
H
ATOM    661 HD13 LEU    41      34.632  37.385  92.438  1.00  0.00
H
ATOM    662  CD2 LEU    41      32.825  34.883  90.961  1.00  0.00
C
ATOM    663 HD21 LEU    41      32.070  34.170  91.297  1.00  0.00
H
ATOM    664 HD22 LEU    41      32.347  35.536  90.230  1.00  0.00
H
ATOM    665 HD23 LEU    41      33.665  34.377  90.497  1.00  0.00
H
ATOM    666  C   LEU    41      33.852  33.027  95.028  1.00  0.00
C
ATOM    667  O   LEU    41      34.495  32.047  94.652  1.00  0.00
O
ATOM    668  N   GLU    42      33.800  33.397  96.315  1.00  0.00
N
ATOM    669  H   GLU    42      33.301  34.251  96.532  1.00  0.00
H
ATOM    670  CA  GLU    42      34.398  32.666  97.451  1.00  0.00
C
ATOM    671  HA  GLU    42      35.446  32.445  97.237  1.00  0.00
H
ATOM    672  CB  GLU    42      34.335  33.570  98.703  1.00  0.00
C
ATOM    673  HB2 GLU    42      34.964  34.446  98.541  1.00  0.00
H
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ATOM    674  HB3 GLU    42      33.307  33.921  98.797  1.00  0.00
H
ATOM    675  CG  GLU    42      34.712  32.945 100.059  1.00  0.00
C
ATOM    676  HG2 GLU    42      34.326  33.601 100.842  1.00  0.00
H
ATOM    677  HG3 GLU    42      34.198  31.990 100.180  1.00  0.00
H
ATOM    678  CD  GLU    42      36.222  32.773 100.279  1.00  0.00
C
ATOM    679  OE1 GLU    42      36.724  31.643 100.097  1.00  0.00
O
ATOM    680  OE2 GLU    42      36.879  33.752 100.696  1.00  0.00
O
ATOM    681  C   GLU    42      33.693  31.317  97.682  1.00  0.00
C
ATOM    682  O   GLU    42      34.355  30.276  97.725  1.00  0.00
O
ATOM    683  N   LYS    43      32.349  31.284  97.774  1.00  0.00
N
ATOM    684  H   LYS    43      31.833  32.157  97.724  1.00  0.00
H
ATOM    685  CA  LYS    43      31.615  30.007  97.946  1.00  0.00
C
ATOM    686  HA  LYS    43      32.114  29.450  98.740  1.00  0.00
H
ATOM    687  CB  LYS    43      30.155  30.232  98.392  1.00  0.00
C
ATOM    688  HB2 LYS    43      29.780  29.284  98.783  1.00  0.00
H
ATOM    689  HB3 LYS    43      30.133  30.960  99.206  1.00  0.00
H
ATOM    690  CG  LYS    43      29.216  30.695  97.264  1.00  0.00
C
ATOM    691  HG2 LYS    43      29.501  31.701  96.968  1.00  0.00
H
ATOM    692  HG3 LYS    43      29.311  30.024  96.411  1.00  0.00
H
ATOM    693  CD  LYS    43      27.742  30.702  97.683  1.00  0.00
C
ATOM    694  HD2 LYS    43      27.513  29.756  98.177  1.00  0.00
H
ATOM    695  HD3 LYS    43      27.564  31.508  98.396  1.00  0.00
H
ATOM    696  CE  LYS    43      26.805  30.837  96.471  1.00  0.00
C
ATOM    697  HE2 LYS    43      26.949  29.969  95.822  1.00  0.00
H
ATOM    698  HE3 LYS    43      25.773  30.813  96.832  1.00  0.00
H
ATOM    699  NZ  LYS    43      27.037  32.076  95.690  1.00  0.00
N
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ATOM    700  HZ1 LYS    43      27.969  32.087  95.291  1.00  0.00
H
ATOM    701  HZ2 LYS    43      26.372  32.141  94.915  1.00  0.00
H
ATOM    702  HZ3 LYS    43      26.907  32.895  96.264  1.00  0.00
H
ATOM    703  C   LYS    43      31.704  29.100  96.715  1.00  0.00
C
ATOM    704  O   LYS    43      31.578  27.885  96.819  1.00  0.00
O
ATOM    705  N   GLU    44      31.934  29.692  95.546  1.00  0.00
N
ATOM    706  H   GLU    44      31.959  30.704  95.529  1.00  0.00
H
ATOM    707  CA  GLU    44      32.140  28.971  94.294  1.00  0.00
C
ATOM    708  HA  GLU    44      31.518  28.078  94.299  1.00  0.00
H
ATOM    709  CB  GLU    44      31.672  29.854  93.137  1.00  0.00
C
ATOM    710  HB2 GLU    44      32.235  30.786  93.161  1.00  0.00
H
ATOM    711  HB3 GLU    44      31.914  29.347  92.207  1.00  0.00
H
ATOM    712  CG  GLU    44      30.149  30.093  93.121  1.00  0.00
C
ATOM    713  HG2 GLU    44      29.661  29.116  93.061  1.00  0.00
H
ATOM    714  HG3 GLU    44      29.788  30.595  94.020  1.00  0.00
H
ATOM    715  CD  GLU    44      29.756  30.934  91.914  1.00  0.00
C
ATOM    716  OE1 GLU    44      30.466  31.917  91.624  1.00  0.00
O
ATOM    717  OE2 GLU    44      28.786  30.575  91.216  1.00  0.00
O
ATOM    718  C   GLU    44      33.595  28.494  94.091  1.00  0.00
C
ATOM    719  O   GLU    44      33.855  27.785  93.115  1.00  0.00
O
ATOM    720  N   GLY    45      34.530  28.872  94.977  1.00  0.00
N
ATOM    721  H   GLY    45      34.236  29.459  95.751  1.00  0.00
H
ATOM    722  CA  GLY    45      35.963  28.534  94.937  1.00  0.00
C
ATOM    723  HA2 GLY    45      36.389  28.728  95.922  1.00  0.00
H
ATOM    724  HA3 GLY    45      36.077  27.472  94.723  1.00  0.00
H
ATOM    725  C   GLY    45      36.789  29.317  93.904  1.00  0.00
C
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ATOM    726  O   GLY    45      38.012  29.165  93.839  1.00  0.00
O
ATOM    727  N   LYS    46      36.126  30.159  93.098  1.00  0.00
N
ATOM    728  H   LYS    46      35.145  30.277  93.308  1.00  0.00
H
ATOM    729  CA  LYS    46      36.694  30.959  91.995  1.00  0.00
C
ATOM    730  HA  LYS    46      37.190  30.288  91.294  1.00  0.00
H
ATOM    731  CB  LYS    46      35.541  31.689  91.262  1.00  0.00
C
ATOM    732  HB2 LYS    46      35.023  32.320  91.984  1.00  0.00
H
ATOM    733  HB3 LYS    46      35.967  32.347  90.504  1.00  0.00
H
ATOM    734  CG  LYS    46      34.501  30.769  90.575  1.00  0.00
C
ATOM    735  HG2 LYS    46      34.953  30.277  89.716  1.00  0.00
H
ATOM    736  HG3 LYS    46      34.161  30.010  91.278  1.00  0.00
H
ATOM    737  CD  LYS    46      33.279  31.587  90.122  1.00  0.00
C
ATOM    738  HD2 LYS    46      32.822  31.981  91.028  1.00  0.00
H
ATOM    739  HD3 LYS    46      33.608  32.429  89.528  1.00  0.00
H
ATOM    740  CE  LYS    46      32.229  30.828  89.287  1.00  0.00
C
ATOM    741  HE2 LYS    46      32.670  30.526  88.331  1.00  0.00
H
ATOM    742  HE3 LYS    46      31.959  29.916  89.825  1.00  0.00
H
ATOM    743  NZ  LYS    46      31.000  31.649  89.068  1.00  0.00
N
ATOM    744  HZ1 LYS    46      31.146  32.507  88.560  1.00  0.00
H
ATOM    745  HZ2 LYS    46      30.250  31.142  88.628  1.00  0.00
H
ATOM    746  HZ3 LYS    46      30.625  31.928  89.979  1.00  0.00
H
ATOM    747  C   LYS    46      37.761  31.946  92.509  1.00  0.00
C
ATOM    748  O   LYS    46      38.752  32.217  91.829  1.00  0.00
O
ATOM    749  N   ILE    47      37.593  32.439  93.736  1.00  0.00
N
ATOM    750  H   ILE    47      36.772  32.131  94.243  1.00  0.00
H
ATOM    751  CA  ILE    47      38.607  33.182  94.501  1.00  0.00
C
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ATOM    752  HA  ILE    47      39.569  33.078  94.002  1.00  0.00
H
ATOM    753  CB  ILE    47      38.273  34.696  94.565  1.00  0.00
C
ATOM    754  HB  ILE    47      39.129  35.201  95.012  1.00  0.00
H
ATOM    755  CG2 ILE    47      38.090  35.290  93.150  1.00  0.00
C
ATOM    756 HG21 ILE    47      37.134  34.980  92.730  1.00  0.00
H
ATOM    757 HG22 ILE    47      38.130  36.377  93.188  1.00  0.00
H
ATOM    758 HG23 ILE    47      38.882  34.945  92.490  1.00  0.00
H
ATOM    759  CG1 ILE    47      37.056  34.997  95.469  1.00  0.00
C
ATOM    760 HG12 ILE    47      36.188  34.459  95.097  1.00  0.00
H
ATOM    761 HG13 ILE    47      37.261  34.645  96.481  1.00  0.00
H
ATOM    762  CD1 ILE    47      36.703  36.484  95.573  1.00  0.00
C
ATOM    763 HD11 ILE    47      36.316  36.853  94.624  1.00  0.00
H
ATOM    764 HD12 ILE    47      35.940  36.614  96.339  1.00  0.00
H
ATOM    765 HD13 ILE    47      37.583  37.056  95.859  1.00  0.00
H
ATOM    766  C   ILE    47      38.781  32.565  95.899  1.00  0.00
C
ATOM    767  O   ILE    47      37.858  31.924  96.395  1.00  0.00
O
ATOM    768  N   SER    48      39.925  32.809  96.542  1.00  0.00
N
ATOM    769  H   SER    48      40.644  33.332  96.055  1.00  0.00
H
ATOM    770  CA  SER    48      40.164  32.490  97.961  1.00  0.00
C
ATOM    771  HA  SER    48      39.285  32.012  98.398  1.00  0.00
H
ATOM    772  CB  SER    48      41.370  31.553  98.135  1.00  0.00
C
ATOM    773  HB2 SER    48      42.251  32.019  97.691  1.00  0.00
H
ATOM    774  HB3 SER    48      41.558  31.416  99.201  1.00  0.00
H
ATOM    775  OG  SER    48      41.174  30.280  97.547  1.00  0.00
O
ATOM    776  HG  SER    48      41.761  29.651  97.981  1.00  0.00
H
ATOM    777  C   SER    48      40.470  33.760  98.753  1.00  0.00
C
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ATOM    778  O   SER    48      41.169  34.642  98.246  1.00  0.00
O
ATOM    779  N   LYS    49      40.054  33.833 100.022  1.00  0.00
N
ATOM    780  H   LYS    49      39.342  33.180 100.340  1.00  0.00
H
ATOM    781  CA  LYS    49      40.686  34.719 101.019  1.00  0.00
C
ATOM    782  HA  LYS    49      40.648  35.741 100.641  1.00  0.00
H
ATOM    783  CB  LYS    49      39.870  34.654 102.321  1.00  0.00
C
ATOM    784  HB2 LYS    49      38.819  34.812 102.073  1.00  0.00
H
ATOM    785  HB3 LYS    49      39.972  33.661 102.762  1.00  0.00
H
ATOM    786  CG  LYS    49      40.284  35.722 103.347  1.00  0.00
C
ATOM    787  HG2 LYS    49      41.303  35.531 103.686  1.00  0.00
H
ATOM    788  HG3 LYS    49      40.248  36.700 102.867  1.00  0.00
H
ATOM    789  CD  LYS    49      39.347  35.726 104.563  1.00  0.00
C
ATOM    790  HD2 LYS    49      38.323  35.902 104.226  1.00  0.00
H
ATOM    791  HD3 LYS    49      39.399  34.754 105.059  1.00  0.00
H
ATOM    792  CE  LYS    49      39.769  36.827 105.543  1.00  0.00
C
ATOM    793  HE2 LYS    49      40.798  36.635 105.862  1.00  0.00
H
ATOM    794  HE3 LYS    49      39.751  37.787 105.025  1.00  0.00
H
ATOM    795  NZ  LYS    49      38.880  36.884 106.725  1.00  0.00
N
ATOM    796  HZ1 LYS    49      38.943  36.024 107.271  1.00  0.00
H
ATOM    797  HZ2 LYS    49      39.147  37.645 107.349  1.00  0.00
H
ATOM    798  HZ3 LYS    49      37.913  36.998 106.465  1.00  0.00
H
ATOM    799  C   LYS    49      42.168  34.347 101.225  1.00  0.00
C
ATOM    800  O   LYS    49      42.536  33.179 101.080  1.00  0.00
O
ATOM    801  N   ILE    50      43.017  35.328 101.555  1.00  0.00
N
ATOM    802  H   ILE    50      42.632  36.255 101.681  1.00  0.00
H
ATOM    803  CA  ILE    50      44.468  35.141 101.791  1.00  0.00
C
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ATOM    804  HA  ILE    50      44.650  34.072 101.909  1.00  0.00
H
ATOM    805  CB  ILE    50      45.318  35.607 100.586  1.00  0.00
C
ATOM    806  HB  ILE    50      46.370  35.486 100.853  1.00  0.00
H
ATOM    807  CG2 ILE    50      45.056  34.696  99.379  1.00  0.00
C
ATOM    808 HG21 ILE    50      44.065  34.894  98.969  1.00  0.00
H
ATOM    809 HG22 ILE    50      45.818  34.863  98.619  1.00  0.00
H
ATOM    810 HG23 ILE    50      45.109  33.650  99.680  1.00  0.00
H
ATOM    811  CG1 ILE    50      45.078  37.096 100.266  1.00  0.00
C
ATOM    812 HG12 ILE    50      44.035  37.246  99.986  1.00  0.00
H
ATOM    813 HG13 ILE    50      45.285  37.673 101.168  1.00  0.00
H
ATOM    814  CD1 ILE    50      45.956  37.664  99.150  1.00  0.00
C
ATOM    815 HD11 ILE    50      45.679  37.234  98.190  1.00  0.00
H
ATOM    816 HD12 ILE    50      45.817  38.743  99.101  1.00  0.00
H
ATOM    817 HD13 ILE    50      47.001  37.448  99.358  1.00  0.00
H
ATOM    818  C   ILE    50      44.969  35.784 103.097  1.00  0.00
C
ATOM    819  O   ILE    50      44.323  36.678 103.646  1.00  0.00
O
ATOM    820  N   GLY    51      46.129  35.317 103.574  1.00  0.00
N
ATOM    821  H   GLY    51      46.671  34.679 103.008  1.00  0.00
H
ATOM    822  CA  GLY    51      46.726  35.681 104.860  1.00  0.00
C
ATOM    823  HA2 GLY    51      45.938  35.778 105.606  1.00  0.00
H
ATOM    824  HA3 GLY    51      47.382  34.867 105.172  1.00  0.00
H
ATOM    825  C   GLY    51      47.559  36.971 104.864  1.00  0.00
C
ATOM    826  O   GLY    51      47.536  37.756 103.907  1.00  0.00
O
ATOM    827  N   PRO    52      48.277  37.250 105.973  1.00  0.00
N
ATOM    828  CD  PRO    52      48.205  36.563 107.250  1.00  0.00
C
ATOM    829  HD2 PRO    52      48.986  35.802 107.298  1.00  0.00
H
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ATOM    830  HD3 PRO    52      47.226  36.116 107.420  1.00  0.00
H
ATOM    831  CG  PRO    52      48.476  37.650 108.288  1.00  0.00
C
ATOM    832  HG2 PRO    52      48.849  37.238 109.225  1.00  0.00
H
ATOM    833  HG3 PRO    52      47.572  38.240 108.450  1.00  0.00
H
ATOM    834  CB  PRO    52      49.529  38.507 107.588  1.00  0.00
C
ATOM    835  HB2 PRO    52      50.514  38.055 107.716  1.00  0.00
H
ATOM    836  HB3 PRO    52      49.533  39.532 107.964  1.00  0.00
H
ATOM    837  CA  PRO    52      49.096  38.448 106.118  1.00  0.00
C
ATOM    838  HA  PRO    52      48.466  39.299 105.921  1.00  0.00
H
ATOM    839  C   PRO    52      50.295  38.499 105.172  1.00  0.00
C
ATOM    840  O   PRO    52      50.599  39.579 104.666  1.00  0.00
O
ATOM    841  N   GLU    53      50.930  37.350 104.937  1.00  0.00
N
ATOM    842  H   GLU    53      50.521  36.507 105.342  1.00  0.00
H
ATOM    843  CA  GLU    53      52.217  37.166 104.257  1.00  0.00
C
ATOM    844  HA  GLU    53      52.963  37.761 104.786  1.00  0.00
H
ATOM    845  CB  GLU    53      52.643  35.686 104.371  1.00  0.00
C
ATOM    846  HB2 GLU    53      53.654  35.595 103.970  1.00  0.00
H
ATOM    847  HB3 GLU    53      52.696  35.420 105.428  1.00  0.00
H
ATOM    848  CG  GLU    53      51.750  34.656 103.640  1.00  0.00
C
ATOM    849  HG2 GLU    53      51.782  34.857 102.566  1.00  0.00
H
ATOM    850  HG3 GLU    53      52.183  33.666 103.794  1.00  0.00
H
ATOM    851  CD  GLU    53      50.292  34.649 104.129  1.00  0.00
C
ATOM    852  OE1 GLU    53      50.089  34.649 105.366  1.00  0.00
O
ATOM    853  OE2 GLU    53      49.374  34.763 103.287  1.00  0.00
O
ATOM    854  C   GLU    53      52.277  37.613 102.794  1.00  0.00
C
ATOM    855  O   GLU    53      53.357  37.988 102.339  1.00  0.00
O
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ATOM    856  N   ASN    54      51.164  37.587 102.052  1.00  0.00
N
ATOM    857  H   ASN    54      50.308  37.254 102.475  1.00  0.00
H
ATOM    858  CA  ASN    54      51.158  37.997 100.647  1.00  0.00
C
ATOM    859  HA  ASN    54      51.998  37.503 100.160  1.00  0.00
H
ATOM    860  CB  ASN    54      49.884  37.461  99.966  1.00  0.00
C
ATOM    861  HB2 ASN    54      49.801  36.391 100.164  1.00  0.00
H
ATOM    862  HB3 ASN    54      49.012  37.962 100.384  1.00  0.00
H
ATOM    863  CG  ASN    54      49.899  37.682  98.459  1.00  0.00
C
ATOM    864  OD1 ASN    54      50.490  38.617  97.952  1.00  0.00
O
ATOM    865  ND2 ASN    54      49.277  36.830  97.682  1.00  0.00
N
ATOM    866 HD21 ASN    54      49.305  37.030  96.687  1.00  0.00
H
ATOM    867 HD22 ASN    54      48.791  36.037  98.057  1.00  0.00
H
ATOM    868  C   ASN    54      51.333  39.536 100.530  1.00  0.00
C
ATOM    869  O   ASN    54      50.451  40.276 100.987  1.00  0.00
O
ATOM    870  N   PRO    55      52.432  40.030  99.913  1.00  0.00
N
ATOM    871  CD  PRO    55      53.531  39.264  99.326  1.00  0.00
C
ATOM    872  HD2 PRO    55      53.190  38.690  98.466  1.00  0.00
H
ATOM    873  HD3 PRO    55      53.955  38.592 100.067  1.00  0.00
H
ATOM    874  CG  PRO    55      54.599  40.274  98.895  1.00  0.00
C
ATOM    875  HG2 PRO    55      54.469  40.532  97.843  1.00  0.00
H
ATOM    876  HG3 PRO    55      55.610  39.905  99.073  1.00  0.00
H
ATOM    877  CB  PRO    55      54.282  41.490  99.761  1.00  0.00
C
ATOM    878  HB2 PRO    55      54.663  42.414  99.322  1.00  0.00
H
ATOM    879  HB3 PRO    55      54.694  41.345 100.761  1.00  0.00
H
ATOM    880  CA  PRO    55      52.750  41.455  99.817  1.00  0.00
C
ATOM    881  HA  PRO    55      52.402  41.986 100.703  1.00  0.00
H
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ATOM    882  C   PRO    55      52.141  42.126  98.575  1.00  0.00
C
ATOM    883  O   PRO    55      52.319  43.331  98.386  1.00  0.00
O
ATOM    884  N   TYR    56      51.492  41.361  97.692  1.00  0.00
N
ATOM    885  H   TYR    56      51.318  40.385  97.913  1.00  0.00
H
ATOM    886  CA  TYR    56      51.003  41.842  96.406  1.00  0.00
C
ATOM    887  HA  TYR    56      51.654  42.656  96.092  1.00  0.00
H
ATOM    888  CB  TYR    56      51.121  40.731  95.348  1.00  0.00
C
ATOM    889  HB2 TYR    56      50.385  39.957  95.574  1.00  0.00
H
ATOM    890  HB3 TYR    56      50.874  41.142  94.369  1.00  0.00
H
ATOM    891  CG  TYR    56      52.504  40.102  95.275  1.00  0.00
C
ATOM    892  CD1 TYR    56      53.620  40.884  94.915  1.00  0.00
C
ATOM    893  HD1 TYR    56      53.482  41.923  94.648  1.00  0.00
H
ATOM    894  CE1 TYR    56      54.913  40.323  94.934  1.00  0.00
C
ATOM    895  HE1 TYR    56      55.767  40.927  94.672  1.00  0.00
H
ATOM    896  CZ  TYR    56      55.098  38.980  95.334  1.00  0.00
C
ATOM    897  OH  TYR    56      56.332  38.407  95.367  1.00  0.00
O
ATOM    898  HH  TYR    56      57.025  38.947  94.938  1.00  0.00
H
ATOM    899  CE2 TYR    56      53.976  38.197  95.674  1.00  0.00
C
ATOM    900  HE2 TYR    56      54.118  37.168  95.964  1.00  0.00
H
ATOM    901  CD2 TYR    56      52.685  38.753  95.633  1.00  0.00
C
ATOM    902  HD2 TYR    56      51.829  38.150  95.904  1.00  0.00
H
ATOM    903  C   TYR    56      49.584  42.405  96.524  1.00  0.00
C
ATOM    904  O   TYR    56      48.757  41.917  97.295  1.00  0.00
O
ATOM    905  N   ASN    57      49.287  43.438  95.737  1.00  0.00
N
ATOM    906  H   ASN    57      50.003  43.759  95.093  1.00  0.00
H
ATOM    907  CA  ASN    57      47.938  43.976  95.586  1.00  0.00
C
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ATOM    908  HA  ASN    57      47.233  43.144  95.616  1.00  0.00
H
ATOM    909  CB  ASN    57      47.605  44.945  96.742  1.00  0.00
C
ATOM    910  HB2 ASN    57      47.715  44.427  97.697  1.00  0.00
H
ATOM    911  HB3 ASN    57      48.303  45.782  96.721  1.00  0.00
H
ATOM    912  CG  ASN    57      46.181  45.479  96.648  1.00  0.00
C
ATOM    913  OD1 ASN    57      45.205  44.830  96.970  1.00  0.00
O
ATOM    914  ND2 ASN    57      45.977  46.655  96.117  1.00  0.00
N
ATOM    915 HD21 ASN    57      45.022  46.901  95.946  1.00  0.00
H
ATOM    916 HD22 ASN    57      46.756  47.145  95.688  1.00  0.00
H
ATOM    917  C   ASN    57      47.801  44.665  94.224  1.00  0.00
C
ATOM    918  O   ASN    57      48.734  45.315  93.745  1.00  0.00
O
ATOM    919  N   THR    58      46.603  44.571  93.650  1.00  0.00
N
ATOM    920  H   THR    58      45.929  43.934  94.060  1.00  0.00
H
ATOM    921  CA  THR    58      46.168  45.370  92.500  1.00  0.00
C
ATOM    922  HA  THR    58      46.911  46.139  92.325  1.00  0.00
H
ATOM    923  CB  THR    58      46.104  44.507  91.234  1.00  0.00
C
ATOM    924  HB  THR    58      45.279  43.793  91.304  1.00  0.00
H
ATOM    925  CG2 THR    58      45.982  45.360  89.979  1.00  0.00
C
ATOM    926 HG21 THR    58      46.836  46.035  89.914  1.00  0.00
H
ATOM    927 HG22 THR    58      45.986  44.715  89.108  1.00  0.00
H
ATOM    928 HG23 THR    58      45.055  45.934  89.982  1.00  0.00
H
ATOM    929  OG1 THR    58      47.310  43.797  91.083  1.00  0.00
O
ATOM    930  HG1 THR    58      47.367  43.187  91.822  1.00  0.00
H
ATOM    931  C   THR    58      44.812  46.038  92.776  1.00  0.00
C
ATOM    932  O   THR    58      43.927  45.382  93.333  1.00  0.00
O
ATOM    933  N   PRO    59      44.604  47.325  92.424  1.00  0.00
N
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ATOM    934  CD  PRO    59      45.595  48.275  91.940  1.00  0.00
C
ATOM    935  HD2 PRO    59      46.218  47.855  91.151  1.00  0.00
H
ATOM    936  HD3 PRO    59      46.206  48.601  92.783  1.00  0.00
H
ATOM    937  CG  PRO    59      44.818  49.465  91.388  1.00  0.00
C
ATOM    938  HG2 PRO    59      44.589  49.294  90.341  1.00  0.00
H
ATOM    939  HG3 PRO    59      45.369  50.398  91.504  1.00  0.00
H
ATOM    940  CB  PRO    59      43.526  49.461  92.200  1.00  0.00
C
ATOM    941  HB2 PRO    59      42.693  49.873  91.629  1.00  0.00
H
ATOM    942  HB3 PRO    59      43.674  50.037  93.113  1.00  0.00
H
ATOM    943  CA  PRO    59      43.307  47.983  92.547  1.00  0.00
C
ATOM    944  HA  PRO    59      42.979  47.918  93.584  1.00  0.00
H
ATOM    945  C   PRO    59      42.235  47.331  91.664  1.00  0.00
C
ATOM    946  O   PRO    59      42.489  46.873  90.547  1.00  0.00
O
ATOM    947  N   VAL    60      41.008  47.312  92.188  1.00  0.00
N
ATOM    948  H   VAL    60      40.880  47.802  93.064  1.00  0.00
H
ATOM    949  CA  VAL    60      39.826  46.694  91.559  1.00  0.00
C
ATOM    950  HA  VAL    60      40.076  46.498  90.519  1.00  0.00
H
ATOM    951  CB  VAL    60      39.434  45.334  92.174  1.00  0.00
C
ATOM    952  HB  VAL    60      38.607  44.924  91.593  1.00  0.00
H
ATOM    953  CG1 VAL    60      40.593  44.349  92.102  1.00  0.00
C
ATOM    954 HG11 VAL    60      41.424  44.720  92.701  1.00  0.00
H
ATOM    955 HG12 VAL    60      40.304  43.365  92.462  1.00  0.00
H
ATOM    956 HG13 VAL    60      40.923  44.289  91.076  1.00  0.00
H
ATOM    957  CG2 VAL    60      38.987  45.375  93.634  1.00  0.00
C
ATOM    958 HG21 VAL    60      38.270  46.178  93.797  1.00  0.00
H
ATOM    959 HG22 VAL    60      38.519  44.430  93.892  1.00  0.00
H
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ATOM    960 HG23 VAL    60      39.854  45.522  94.275  1.00  0.00
H
ATOM    961  C   VAL    60      38.617  47.625  91.572  1.00  0.00
C
ATOM    962  O   VAL    60      38.471  48.444  92.477  1.00  0.00
O
ATOM    963  N   PHE    61      37.725  47.465  90.594  1.00  0.00
N
ATOM    964  H   PHE    61      37.883  46.732  89.909  1.00  0.00
H
ATOM    965  CA  PHE    61      36.534  48.293  90.392  1.00  0.00
C
ATOM    966  HA  PHE    61      36.176  48.652  91.359  1.00  0.00
H
ATOM    967  CB  PHE    61      36.920  49.524  89.543  1.00  0.00
C
ATOM    968  HB2 PHE    61      36.042  50.160  89.421  1.00  0.00
H
ATOM    969  HB3 PHE    61      37.638  50.112  90.118  1.00  0.00
H
ATOM    970  CG  PHE    61      37.529  49.243  88.172  1.00  0.00
C
ATOM    971  CD1 PHE    61      38.874  48.828  88.052  1.00  0.00
C
ATOM    972  HD1 PHE    61      39.487  48.699  88.931  1.00  0.00
H
ATOM    973  CE1 PHE    61      39.444  48.608  86.785  1.00  0.00
C
ATOM    974  HE1 PHE    61      40.475  48.293  86.699  1.00  0.00
H
ATOM    975  CZ  PHE    61      38.686  48.835  85.625  1.00  0.00
C
ATOM    976  HZ  PHE    61      39.135  48.696  84.650  1.00  0.00
H
ATOM    977  CE2 PHE    61      37.355  49.270  85.735  1.00  0.00
C
ATOM    978  HE2 PHE    61      36.786  49.473  84.838  1.00  0.00
H
ATOM    979  CD2 PHE    61      36.773  49.462  87.002  1.00  0.00
C
ATOM    980  HD2 PHE    61      35.754  49.811  87.070  1.00  0.00
H
ATOM    981  C   PHE    61      35.392  47.470  89.773  1.00  0.00
C
ATOM    982  O   PHE    61      35.580  46.307  89.407  1.00  0.00
O
ATOM    983  N   ALA    62      34.198  48.060  89.674  1.00  0.00
N
ATOM    984  H   ALA    62      34.103  49.014  89.983  1.00  0.00
H
ATOM    985  CA  ALA    62      33.041  47.450  89.021  1.00  0.00
C
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ATOM    986  HA  ALA    62      33.368  46.544  88.515  1.00  0.00
H
ATOM    987  CB  ALA    62      32.000  47.032  90.064  1.00  0.00
C
ATOM    988  HB1 ALA    62      31.671  47.894  90.645  1.00  0.00
H
ATOM    989  HB2 ALA    62      31.135  46.598  89.565  1.00  0.00
H
ATOM    990  HB3 ALA    62      32.428  46.280  90.724  1.00  0.00
H
ATOM    991  C   ALA    62      32.439  48.367  87.949  1.00  0.00
C
ATOM    992  O   ALA    62      32.269  49.569  88.156  1.00  0.00
O
ATOM    993  N   ILE    63      32.082  47.767  86.816  1.00  0.00
N
ATOM    994  H   ILE    63      32.265  46.772  86.739  1.00  0.00
H
ATOM    995  CA  ILE    63      31.405  48.419  85.688  1.00  0.00
C
ATOM    996  HA  ILE    63      31.208  49.454  85.966  1.00  0.00
H
ATOM    997  CB  ILE    63      32.351  48.451  84.463  1.00  0.00
C
ATOM    998  HB  ILE    63      33.318  48.822  84.810  1.00  0.00
H
ATOM    999  CG2 ILE    63      32.568  47.039  83.892  1.00  0.00
C
ATOM   1000 HG21 ILE    63      31.626  46.637  83.525  1.00  0.00
H
ATOM   1001 HG22 ILE    63      33.279  47.066  83.068  1.00  0.00
H
ATOM   1002 HG23 ILE    63      32.969  46.382  84.662  1.00  0.00
H
ATOM   1003  CG1 ILE    63      31.846  49.439  83.387  1.00  0.00
C
ATOM   1004 HG12 ILE    63      30.948  49.043  82.912  1.00  0.00
H
ATOM   1005 HG13 ILE    63      31.594  50.385  83.869  1.00  0.00
H
ATOM   1006  CD1 ILE    63      32.883  49.736  82.295  1.00  0.00
C
ATOM   1007 HD11 ILE    63      33.059  48.849  81.687  1.00  0.00
H
ATOM   1008 HD12 ILE    63      32.509  50.530  81.647  1.00  0.00
H
ATOM   1009 HD13 ILE    63      33.821  50.063  82.746  1.00  0.00
H
ATOM   1010  C   ILE    63      30.039  47.761  85.432  1.00  0.00
C
ATOM   1011  O   ILE    63      29.820  46.604  85.798  1.00  0.00
O
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ATOM   1012  N   LYS    64      29.098  48.497  84.836  1.00  0.00
N
ATOM   1013  H   LYS    64      29.347  49.429  84.540  1.00  0.00
H
ATOM   1014  CA  LYS    64      27.762  47.996  84.466  1.00  0.00
C
ATOM   1015  HA  LYS    64      27.293  47.544  85.342  1.00  0.00
H
ATOM   1016  CB  LYS    64      26.897  49.180  83.970  1.00  0.00
C
ATOM   1017  HB2 LYS    64      27.348  49.545  83.045  1.00  0.00
H
ATOM   1018  HB3 LYS    64      25.902  48.822  83.705  1.00  0.00
H
ATOM   1019  CG  LYS    64      26.769  50.391  84.928  1.00  0.00
C
ATOM   1020  HG2 LYS    64      27.590  50.410  85.645  1.00  0.00
H
ATOM   1021  HG3 LYS    64      26.868  51.293  84.321  1.00  0.00
H
ATOM   1022  CD  LYS    64      25.442  50.513  85.698  1.00  0.00
C
ATOM   1023  HD2 LYS    64      25.423  51.495  86.177  1.00  0.00
H
ATOM   1024  HD3 LYS    64      24.610  50.476  84.996  1.00  0.00
H
ATOM   1025  CE  LYS    64      25.262  49.444  86.783  1.00  0.00
C
ATOM   1026  HE2 LYS    64      25.244  48.455  86.320  1.00  0.00
H
ATOM   1027  HE3 LYS    64      26.118  49.487  87.459  1.00  0.00
H
ATOM   1028  NZ  LYS    64      24.002  49.653  87.540  1.00  0.00
N
ATOM   1029  HZ1 LYS    64      23.215  49.249  87.039  1.00  0.00
H
ATOM   1030  HZ2 LYS    64      23.999  49.191  88.440  1.00  0.00
H
ATOM   1031  HZ3 LYS    64      23.775  50.631  87.685  1.00  0.00
H
ATOM   1032  C   LYS    64      27.893  46.915  83.371  1.00  0.00
C
ATOM   1033  O   LYS    64      28.752  47.035  82.494  1.00  0.00
O
ATOM   1034  N   LYS    65      27.056  45.867  83.396  1.00  0.00
N
ATOM   1035  H   LYS    65      26.427  45.787  84.187  1.00  0.00
H
ATOM   1036  CA  LYS    65      26.858  44.932  82.260  1.00  0.00
C
ATOM   1037  HA  LYS    65      27.801  44.812  81.726  1.00  0.00
H
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ATOM   1038  CB  LYS    65      26.415  43.540  82.768  1.00  0.00
C
ATOM   1039  HB2 LYS    65      25.511  43.640  83.372  1.00  0.00
H
ATOM   1040  HB3 LYS    65      26.157  42.928  81.902  1.00  0.00
H
ATOM   1041  CG  LYS    65      27.476  42.763  83.574  1.00  0.00
C
ATOM   1042  HG2 LYS    65      28.416  42.734  83.019  1.00  0.00
H
ATOM   1043  HG3 LYS    65      27.644  43.246  84.537  1.00  0.00
H
ATOM   1044  CD  LYS    65      26.957  41.329  83.790  1.00  0.00
C
ATOM   1045  HD2 LYS    65      26.010  41.392  84.326  1.00  0.00
H
ATOM   1046  HD3 LYS    65      26.779  40.871  82.814  1.00  0.00
H
ATOM   1047  CE  LYS    65      27.900  40.422  84.589  1.00  0.00
C
ATOM   1048  HE2 LYS    65      28.885  40.423  84.113  1.00  0.00
H
ATOM   1049  HE3 LYS    65      28.009  40.838  85.593  1.00  0.00
H
ATOM   1050  NZ  LYS    65      27.373  39.031  84.672  1.00  0.00
N
ATOM   1051  HZ1 LYS    65      27.348  38.596  83.758  1.00  0.00
H
ATOM   1052  HZ2 LYS    65      27.955  38.446  85.268  1.00  0.00
H
ATOM   1053  HZ3 LYS    65      26.426  39.022  85.032  1.00  0.00
H
ATOM   1054  C   LYS    65      25.869  45.510  81.227  1.00  0.00
C
ATOM   1055  O   LYS    65      25.255  46.544  81.481  1.00  0.00
O
ATOM   1056  N   LYS    66      25.675  44.806  80.100  1.00  0.00
N
ATOM   1057  H   LYS    66      26.211  43.958  79.994  1.00  0.00
H
ATOM   1058  CA  LYS    66      24.763  45.150  78.981  1.00  0.00
C
ATOM   1059  HA  LYS    66      25.212  45.961  78.403  1.00  0.00
H
ATOM   1060  CB  LYS    66      24.615  43.910  78.064  1.00  0.00
C
ATOM   1061  HB2 LYS    66      24.609  43.006  78.678  1.00  0.00
H
ATOM   1062  HB3 LYS    66      23.650  43.947  77.554  1.00  0.00
H
ATOM   1063  CG  LYS    66      25.716  43.786  76.989  1.00  0.00
C
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ATOM   1064  HG2 LYS    66      26.693  43.942  77.449  1.00  0.00
H
ATOM   1065  HG3 LYS    66      25.689  42.776  76.576  1.00  0.00
H
ATOM   1066  CD  LYS    66      25.504  44.795  75.845  1.00  0.00
C
ATOM   1067  HD2 LYS    66      24.525  44.630  75.393  1.00  0.00
H
ATOM   1068  HD3 LYS    66      25.508  45.805  76.254  1.00  0.00
H
ATOM   1069  CE  LYS    66      26.596  44.736  74.770  1.00  0.00
C
ATOM   1070  HE2 LYS    66      26.648  45.722  74.302  1.00  0.00
H
ATOM   1071  HE3 LYS    66      27.564  44.537  75.238  1.00  0.00
H
ATOM   1072  NZ  LYS    66      26.322  43.744  73.705  1.00  0.00
N
ATOM   1073  HZ1 LYS    66      25.374  43.850  73.347  1.00  0.00
H
ATOM   1074  HZ2 LYS    66      26.975  43.896  72.945  1.00  0.00
H
ATOM   1075  HZ3 LYS    66      26.481  42.782  74.003  1.00  0.00
H
ATOM   1076  C   LYS    66      23.368  45.664  79.402  1.00  0.00
C
ATOM   1077  O   LYS    66      22.867  46.592  78.780  1.00  0.00
O
ATOM   1078  N   ASN    67      22.775  45.112  80.470  1.00  0.00
N
ATOM   1079  H   ASN    67      23.218  44.299  80.859  1.00  0.00
H
ATOM   1080  CA  ASN    67      21.449  45.498  80.987  1.00  0.00
C
ATOM   1081  HA  ASN    67      20.899  45.997  80.188  1.00  0.00
H
ATOM   1082  CB  ASN    67      20.669  44.219  81.356  1.00  0.00
C
ATOM   1083  HB2 ASN    67      21.315  43.486  81.838  1.00  0.00
H
ATOM   1084  HB3 ASN    67      19.878  44.465  82.065  1.00  0.00
H
ATOM   1085  CG  ASN    67      20.009  43.585  80.143  1.00  0.00
C
ATOM   1086  OD1 ASN    67      20.663  43.121  79.225  1.00  0.00
O
ATOM   1087  ND2 ASN    67      18.699  43.572  80.094  1.00  0.00
N
ATOM   1088 HD21 ASN    67      18.280  43.154  79.268  1.00  0.00
H
ATOM   1089 HD22 ASN    67      18.140  43.987  80.819  1.00  0.00
H
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ATOM   1090  C   ASN    67      21.464  46.505  82.160  1.00  0.00
C
ATOM   1091  O   ASN    67      20.406  46.859  82.667  1.00  0.00
O
ATOM   1092  N   SER    68      22.640  46.914  82.646  1.00  0.00
N
ATOM   1093  H   SER    68      23.464  46.691  82.101  1.00  0.00
H
ATOM   1094  CA  SER    68      22.860  47.697  83.882  1.00  0.00
C
ATOM   1095  HA  SER    68      23.937  47.765  84.011  1.00  0.00
H
ATOM   1096  CB  SER    68      22.354  49.136  83.704  1.00  0.00
C
ATOM   1097  HB2 SER    68      21.305  49.109  83.421  1.00  0.00
H
ATOM   1098  HB3 SER    68      22.439  49.688  84.637  1.00  0.00
H
ATOM   1099  OG  SER    68      23.096  49.813  82.706  1.00  0.00
O
ATOM   1100  HG  SER    68      22.586  50.595  82.450  1.00  0.00
H
ATOM   1101  C   SER    68      22.360  47.071  85.199  1.00  0.00
C
ATOM   1102  O   SER    68      22.819  47.496  86.255  1.00  0.00
O
ATOM   1103  N   THR    69      21.508  46.039  85.177  1.00  0.00
N
ATOM   1104  H   THR    69      21.009  45.863  84.314  1.00  0.00
H
ATOM   1105  CA  THR    69      20.970  45.346  86.366  1.00  0.00
C
ATOM   1106  HA  THR    69      20.434  46.071  86.975  1.00  0.00
H
ATOM   1107  CB  THR    69      19.982  44.239  85.939  1.00  0.00
C
ATOM   1108  HB  THR    69      20.543  43.390  85.545  1.00  0.00
H
ATOM   1109  CG2 THR    69      19.080  43.743  87.068  1.00  0.00
C
ATOM   1110 HG21 THR    69      18.521  44.574  87.495  1.00  0.00
H
ATOM   1111 HG22 THR    69      18.388  42.994  86.682  1.00  0.00
H
ATOM   1112 HG23 THR    69      19.685  43.281  87.849  1.00  0.00
H
ATOM   1113  OG1 THR    69      19.137  44.711  84.916  1.00  0.00
O
ATOM   1114  HG1 THR    69      18.361  44.143  84.883  1.00  0.00
H
ATOM   1115  C   THR    69      22.038  44.701  87.252  1.00  0.00
C
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ATOM   1116  O   THR    69      21.902  44.684  88.472  1.00  0.00
O
ATOM   1117  N   ARG    70      23.127  44.188  86.656  1.00  0.00
N
ATOM   1118  H   ARG    70      23.200  44.306  85.657  1.00  0.00
H
ATOM   1119  CA  ARG    70      24.246  43.543  87.372  1.00  0.00
C
ATOM   1120  HA  ARG    70      24.165  43.854  88.416  1.00  0.00
H
ATOM   1121  CB  ARG    70      24.092  41.996  87.344  1.00  0.00
C
ATOM   1122  HB2 ARG    70      23.027  41.764  87.443  1.00  0.00
H
ATOM   1123  HB3 ARG    70      24.437  41.597  86.386  1.00  0.00
H
ATOM   1124  CG  ARG    70      24.840  41.291  88.501  1.00  0.00
C
ATOM   1125  HG2 ARG    70      25.902  41.234  88.265  1.00  0.00
H
ATOM   1126  HG3 ARG    70      24.728  41.900  89.402  1.00  0.00
H
ATOM   1127  CD  ARG    70      24.328  39.879  88.843  1.00  0.00
C
ATOM   1128  HD2 ARG    70      24.674  39.651  89.853  1.00  0.00
H
ATOM   1129  HD3 ARG    70      23.237  39.874  88.874  1.00  0.00
H
ATOM   1130  NE  ARG    70      24.855  38.813  87.961  1.00  0.00
N
ATOM   1131  HE  ARG    70      25.704  38.374  88.275  1.00  0.00
H
ATOM   1132  CZ  ARG    70      24.220  38.194  86.982  1.00  0.00
C
ATOM   1133  NH1 ARG    70      23.037  38.539  86.573  1.00  0.00
N
ATOM   1134 HH11 ARG    70      22.432  39.093  87.168  1.00  0.00
H
ATOM   1135 HH12 ARG    70      22.596  37.953  85.868  1.00  0.00
H
ATOM   1136  NH2 ARG    70      24.739  37.170  86.376  1.00  0.00
N
ATOM   1137 HH21 ARG    70      25.476  36.649  86.821  1.00  0.00
H
ATOM   1138 HH22 ARG    70      24.113  36.671  85.752  1.00  0.00
H
ATOM   1139  C   ARG    70      25.612  44.067  86.907  1.00  0.00
C
ATOM   1140  O   ARG    70      25.737  44.739  85.878  1.00  0.00
O
ATOM   1141  N   TRP    71      26.629  43.775  87.708  1.00  0.00
N
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ATOM   1142  H   TRP    71      26.427  43.205  88.516  1.00  0.00
H
ATOM   1143  CA  TRP    71      27.968  44.357  87.646  1.00  0.00
C
ATOM   1144  HA  TRP    71      27.953  45.229  86.989  1.00  0.00
H
ATOM   1145  CB  TRP    71      28.317  44.849  89.054  1.00  0.00
C
ATOM   1146  HB2 TRP    71      28.273  44.005  89.749  1.00  0.00
H
ATOM   1147  HB3 TRP    71      29.341  45.218  89.052  1.00  0.00
H
ATOM   1148  CG  TRP    71      27.428  45.953  89.552  1.00  0.00
C
ATOM   1149  CD1 TRP    71      26.337  45.803  90.341  1.00  0.00
C
ATOM   1150  HD1 TRP    71      25.973  44.860  90.744  1.00  0.00
H
ATOM   1151  NE1 TRP    71      25.791  47.041  90.622  1.00  0.00
N
ATOM   1152  HE1 TRP    71      25.011  47.168  91.257  1.00  0.00
H
ATOM   1153  CE2 TRP    71      26.517  48.061  90.043  1.00  0.00
C
ATOM   1154  CZ2 TRP    71      26.412  49.460  90.076  1.00  0.00
C
ATOM   1155  HZ2 TRP    71      25.654  49.941  90.682  1.00  0.00
H
ATOM   1156  CH2 TRP    71      27.354  50.241  89.384  1.00  0.00
C
ATOM   1157  HH2 TRP    71      27.287  51.321  89.445  1.00  0.00
H
ATOM   1158  CZ3 TRP    71      28.378  49.615  88.649  1.00  0.00
C
ATOM   1159  HZ3 TRP    71      29.104  50.211  88.115  1.00  0.00
H
ATOM   1160  CE3 TRP    71      28.478  48.208  88.633  1.00  0.00
C
ATOM   1161  HE3 TRP    71      29.290  47.734  88.111  1.00  0.00
H
ATOM   1162  CD2 TRP    71      27.559  47.394  89.332  1.00  0.00
C
ATOM   1163  C   TRP    71      29.020  43.381  87.101  1.00  0.00
C
ATOM   1164  O   TRP    71      28.842  42.164  87.106  1.00  0.00
O
ATOM   1165  N   ARG    72      30.144  43.930  86.640  1.00  0.00
N
ATOM   1166  H   ARG    72      30.165  44.945  86.588  1.00  0.00
H
ATOM   1167  CA  ARG    72      31.340  43.220  86.176  1.00  0.00
C
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ATOM   1168  HA  ARG    72      31.220  42.148  86.338  1.00  0.00
H
ATOM   1169  CB  ARG    72      31.484  43.465  84.659  1.00  0.00
C
ATOM   1170  HB2 ARG    72      30.782  42.806  84.146  1.00  0.00
H
ATOM   1171  HB3 ARG    72      31.191  44.491  84.436  1.00  0.00
H
ATOM   1172  CG  ARG    72      32.896  43.243  84.090  1.00  0.00
C
ATOM   1173  HG2 ARG    72      33.568  43.986  84.509  1.00  0.00
H
ATOM   1174  HG3 ARG    72      33.268  42.259  84.366  1.00  0.00
H
ATOM   1175  CD  ARG    72      32.937  43.403  82.567  1.00  0.00
C
ATOM   1176  HD2 ARG    72      32.403  44.310  82.280  1.00  0.00
H
ATOM   1177  HD3 ARG    72      33.977  43.516  82.268  1.00  0.00
H
ATOM   1178  NE  ARG    72      32.414  42.216  81.875  1.00  0.00
N
ATOM   1179  HE  ARG    72      32.965  41.372  82.002  1.00  0.00
H
ATOM   1180  CZ  ARG    72      31.461  42.187  80.959  1.00  0.00
C
ATOM   1181  NH1 ARG    72      30.769  43.224  80.585  1.00  0.00
N
ATOM   1182 HH11 ARG    72      30.995  44.156  80.931  1.00  0.00
H
ATOM   1183 HH12 ARG    72      30.167  43.156  79.789  1.00  0.00
H
ATOM   1184  NH2 ARG    72      31.180  41.078  80.352  1.00  0.00
N
ATOM   1185 HH21 ARG    72      31.732  40.254  80.524  1.00  0.00
H
ATOM   1186 HH22 ARG    72      30.495  41.054  79.617  1.00  0.00
H
ATOM   1187  C   ARG    72      32.542  43.684  87.001  1.00  0.00
C
ATOM   1188  O   ARG    72      32.907  44.857  86.942  1.00  0.00
O
ATOM   1189  N   LYS    73      33.146  42.759  87.757  1.00  0.00
N
ATOM   1190  H   LYS    73      32.735  41.838  87.772  1.00  0.00
H
ATOM   1191  CA  LYS    73      34.400  42.960  88.506  1.00  0.00
C
ATOM   1192  HA  LYS    73      34.337  43.895  89.065  1.00  0.00
H
ATOM   1193  CB  LYS    73      34.581  41.798  89.508  1.00  0.00
C
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ATOM   1194  HB2 LYS    73      33.768  41.838  90.237  1.00  0.00
H
ATOM   1195  HB3 LYS    73      34.510  40.848  88.973  1.00  0.00
H
ATOM   1196  CG  LYS    73      35.925  41.822  90.261  1.00  0.00
C
ATOM   1197  HG2 LYS    73      36.740  41.680  89.550  1.00  0.00
H
ATOM   1198  HG3 LYS    73      36.048  42.789  90.752  1.00  0.00
H
ATOM   1199  CD  LYS    73      35.978  40.686  91.300  1.00  0.00
C
ATOM   1200  HD2 LYS    73      35.243  40.863  92.088  1.00  0.00
H
ATOM   1201  HD3 LYS    73      35.723  39.747  90.806  1.00  0.00
H
ATOM   1202  CE  LYS    73      37.361  40.497  91.929  1.00  0.00
C
ATOM   1203  HE2 LYS    73      37.276  39.708  92.682  1.00  0.00
H
ATOM   1204  HE3 LYS    73      38.047  40.133  91.162  1.00  0.00
H
ATOM   1205  NZ  LYS    73      37.875  41.731  92.571  1.00  0.00
N
ATOM   1206  HZ1 LYS    73      37.199  42.056  93.249  1.00  0.00
H
ATOM   1207  HZ2 LYS    73      38.731  41.521  93.083  1.00  0.00
H
ATOM   1208  HZ3 LYS    73      38.057  42.463  91.897  1.00  0.00
H
ATOM   1209  C   LYS    73      35.579  43.071  87.537  1.00  0.00
C
ATOM   1210  O   LYS    73      35.816  42.141  86.771  1.00  0.00
O
ATOM   1211  N   LEU    74      36.334  44.164  87.605  1.00  0.00
N
ATOM   1212  H   LEU    74      36.076  44.888  88.270  1.00  0.00
H
ATOM   1213  CA  LEU    74      37.569  44.374  86.848  1.00  0.00
C
ATOM   1214  HA  LEU    74      37.824  43.468  86.293  1.00  0.00
H
ATOM   1215  CB  LEU    74      37.377  45.528  85.845  1.00  0.00
C
ATOM   1216  HB2 LEU    74      37.065  46.417  86.397  1.00  0.00
H
ATOM   1217  HB3 LEU    74      38.335  45.744  85.369  1.00  0.00
H
ATOM   1218  CG  LEU    74      36.342  45.248  84.739  1.00  0.00
C
ATOM   1219  HG  LEU    74      35.371  45.063  85.195  1.00  0.00
H
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ATOM   1220  CD1 LEU    74      36.201  46.455  83.815  1.00  0.00
C
ATOM   1221 HD11 LEU    74      37.167  46.710  83.376  1.00  0.00
H
ATOM   1222 HD12 LEU    74      35.496  46.232  83.014  1.00  0.00
H
ATOM   1223 HD13 LEU    74      35.824  47.303  84.385  1.00  0.00
H
ATOM   1224  CD2 LEU    74      36.723  44.046  83.874  1.00  0.00
C
ATOM   1225 HD21 LEU    74      36.655  43.135  84.462  1.00  0.00
H
ATOM   1226 HD22 LEU    74      36.039  43.951  83.035  1.00  0.00
H
ATOM   1227 HD23 LEU    74      37.737  44.165  83.492  1.00  0.00
H
ATOM   1228  C   LEU    74      38.742  44.645  87.796  1.00  0.00
C
ATOM   1229  O   LEU    74      38.555  45.033  88.952  1.00  0.00
O
ATOM   1230  N   VAL    75      39.954  44.423  87.297  1.00  0.00
N
ATOM   1231  H   VAL    75      40.037  44.104  86.340  1.00  0.00
H
ATOM   1232  CA  VAL    75      41.219  44.649  88.004  1.00  0.00
C
ATOM   1233  HA  VAL    75      41.041  45.209  88.922  1.00  0.00
H
ATOM   1234  CB  VAL    75      41.901  43.309  88.350  1.00  0.00
C
ATOM   1235  HB  VAL    75      42.295  42.872  87.433  1.00  0.00
H
ATOM   1236  CG1 VAL    75      43.075  43.556  89.303  1.00  0.00
C
ATOM   1237 HG11 VAL    75      42.822  44.263  90.088  1.00  0.00
H
ATOM   1238 HG12 VAL    75      43.403  42.628  89.767  1.00  0.00
H
ATOM   1239 HG13 VAL    75      43.905  43.959  88.728  1.00  0.00
H
ATOM   1240  CG2 VAL    75      40.947  42.260  88.947  1.00  0.00
C
ATOM   1241 HG21 VAL    75      40.255  41.936  88.170  1.00  0.00
H
ATOM   1242 HG22 VAL    75      41.525  41.396  89.272  1.00  0.00
H
ATOM   1243 HG23 VAL    75      40.390  42.670  89.783  1.00  0.00
H
ATOM   1244  C   VAL    75      42.131  45.465  87.092  1.00  0.00
C
ATOM   1245  O   VAL    75      42.275  45.117  85.921  1.00  0.00
O
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ATOM   1246  N   ASP    76      42.765  46.524  87.600  1.00  0.00
N
ATOM   1247  H   ASP    76      42.661  46.733  88.588  1.00  0.00
H
ATOM   1248  CA  ASP    76      43.760  47.291  86.834  1.00  0.00
C
ATOM   1249  HA  ASP    76      43.457  47.288  85.785  1.00  0.00
H
ATOM   1250  CB  ASP    76      43.781  48.767  87.259  1.00  0.00
C
ATOM   1251  HB2 ASP    76      42.771  49.159  87.162  1.00  0.00
H
ATOM   1252  HB3 ASP    76      44.071  48.832  88.304  1.00  0.00
H
ATOM   1253  CG  ASP    76      44.718  49.637  86.403  1.00  0.00
C
ATOM   1254  OD1 ASP    76      44.997  49.275  85.240  1.00  0.00
O
ATOM   1255  OD2 ASP    76      45.132  50.723  86.866  1.00  0.00
O
ATOM   1256  C   ASP    76      45.125  46.589  86.879  1.00  0.00
C
ATOM   1257  O   ASP    76      46.126  47.108  87.372  1.00  0.00
O
ATOM   1258  N   PHE    77      45.167  45.368  86.336  1.00  0.00
N
ATOM   1259  H   PHE    77      44.306  44.997  85.949  1.00  0.00
H
ATOM   1260  CA  PHE    77      46.386  44.573  86.181  1.00  0.00
C
ATOM   1261  HA  PHE    77      46.919  44.600  87.127  1.00  0.00
H
ATOM   1262  CB  PHE    77      46.037  43.097  85.875  1.00  0.00
C
ATOM   1263  HB2 PHE    77      45.224  43.070  85.157  1.00  0.00
H
ATOM   1264  HB3 PHE    77      46.881  42.602  85.401  1.00  0.00
H
ATOM   1265  CG  PHE    77      45.664  42.228  87.059  1.00  0.00
C
ATOM   1266  CD1 PHE    77      46.479  42.192  88.208  1.00  0.00
C
ATOM   1267  HD1 PHE    77      47.366  42.803  88.274  1.00  0.00
H
ATOM   1268  CE1 PHE    77      46.141  41.368  89.293  1.00  0.00
C
ATOM   1269  HE1 PHE    77      46.766  41.357  90.175  1.00  0.00
H
ATOM   1270  CZ  PHE    77      44.984  40.577  89.236  1.00  0.00
C
ATOM   1271  HZ  PHE    77      44.685  39.980  90.083  1.00  0.00
H
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ATOM   1272  CE2 PHE    77      44.190  40.587  88.083  1.00  0.00
C
ATOM   1273  HE2 PHE    77      43.298  39.995  88.067  1.00  0.00
H
ATOM   1274  CD2 PHE    77      44.531  41.396  86.987  1.00  0.00
C
ATOM   1275  HD2 PHE    77      43.906  41.400  86.103  1.00  0.00
H
ATOM   1276  C   PHE    77      47.390  45.184  85.186  1.00  0.00
C
ATOM   1277  O   PHE    77      48.369  44.529  84.863  1.00  0.00
O
ATOM   1278  N   ARG    78      47.245  46.447  84.764  1.00  0.00
N
ATOM   1279  H   ARG    78      46.456  46.967  85.134  1.00  0.00
H
ATOM   1280  CA  ARG    78      48.232  47.222  83.990  1.00  0.00
C
ATOM   1281  HA  ARG    78      48.263  46.862  82.962  1.00  0.00
H
ATOM   1282  CB  ARG    78      47.712  48.666  83.997  1.00  0.00
C
ATOM   1283  HB2 ARG    78      46.751  48.683  83.478  1.00  0.00
H
ATOM   1284  HB3 ARG    78      47.553  48.957  85.036  1.00  0.00
H
ATOM   1285  CG  ARG    78      48.629  49.715  83.364  1.00  0.00
C
ATOM   1286  HG2 ARG    78      49.494  49.861  84.013  1.00  0.00
H
ATOM   1287  HG3 ARG    78      48.974  49.355  82.391  1.00  0.00
H
ATOM   1288  CD  ARG    78      47.906  51.062  83.172  1.00  0.00
C
ATOM   1289  HD2 ARG    78      48.664  51.801  82.911  1.00  0.00
H
ATOM   1290  HD3 ARG    78      47.223  50.974  82.326  1.00  0.00
H
ATOM   1291  NE  ARG    78      47.133  51.505  84.360  1.00  0.00
N
ATOM   1292  HE  ARG    78      46.581  50.801  84.849  1.00  0.00
H
ATOM   1293  CZ  ARG    78      46.938  52.751  84.758  1.00  0.00
C
ATOM   1294  NH1 ARG    78      47.457  53.774  84.135  1.00  0.00
N
ATOM   1295 HH11 ARG    78      48.013  53.599  83.318  1.00  0.00
H
ATOM   1296 HH12 ARG    78      47.235  54.731  84.397  1.00  0.00
H
ATOM   1297  NH2 ARG    78      46.192  52.994  85.791  1.00  0.00
N
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ATOM   1298 HH21 ARG    78      45.769  52.191  86.275  1.00  0.00
H
ATOM   1299 HH22 ARG    78      46.019  53.929  86.091  1.00  0.00
H
ATOM   1300  C   ARG    78      49.658  47.108  84.544  1.00  0.00
C
ATOM   1301  O   ARG    78      50.589  46.913  83.768  1.00  0.00
O
ATOM   1302  N   GLU    79      49.834  47.141  85.868  1.00  0.00
N
ATOM   1303  H   GLU    79      49.029  47.331  86.449  1.00  0.00
H
ATOM   1304  CA  GLU    79      51.150  46.932  86.495  1.00  0.00
C
ATOM   1305  HA  GLU    79      51.883  47.532  85.951  1.00  0.00
H
ATOM   1306  CB  GLU    79      51.110  47.447  87.946  1.00  0.00
C
ATOM   1307  HB2 GLU    79      50.671  48.445  87.949  1.00  0.00
H
ATOM   1308  HB3 GLU    79      50.459  46.800  88.535  1.00  0.00
H
ATOM   1309  CG  GLU    79      52.483  47.523  88.636  1.00  0.00
C
ATOM   1310  HG2 GLU    79      52.331  47.881  89.656  1.00  0.00
H
ATOM   1311  HG3 GLU    79      52.909  46.521  88.706  1.00  0.00
H
ATOM   1312  CD  GLU    79      53.466  48.471  87.929  1.00  0.00
C
ATOM   1313  OE1 GLU    79      53.155  49.679  87.821  1.00  0.00
O
ATOM   1314  OE2 GLU    79      54.551  48.000  87.518  1.00  0.00
O
ATOM   1315  C   GLU    79      51.619  45.464  86.390  1.00  0.00
C
ATOM   1316  O   GLU    79      52.774  45.210  86.068  1.00  0.00
O
ATOM   1317  N   LEU    80      50.729  44.477  86.565  1.00  0.00
N
ATOM   1318  H   LEU    80      49.765  44.736  86.710  1.00  0.00
H
ATOM   1319  CA  LEU    80      51.041  43.049  86.372  1.00  0.00
C
ATOM   1320  HA  LEU    80      51.928  42.809  86.959  1.00  0.00
H
ATOM   1321  CB  LEU    80      49.860  42.203  86.903  1.00  0.00
C
ATOM   1322  HB2 LEU    80      49.693  42.442  87.952  1.00  0.00
H
ATOM   1323  HB3 LEU    80      48.962  42.485  86.359  1.00  0.00
H
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ATOM   1324  CG  LEU    80      50.034  40.675  86.764  1.00  0.00
C
ATOM   1325  HG  LEU    80      50.259  40.435  85.728  1.00  0.00
H
ATOM   1326  CD1 LEU    80      51.150  40.138  87.661  1.00  0.00
C
ATOM   1327 HD11 LEU    80      50.920  40.354  88.703  1.00  0.00
H
ATOM   1328 HD12 LEU    80      51.230  39.058  87.537  1.00  0.00
H
ATOM   1329 HD13 LEU    80      52.105  40.584  87.389  1.00  0.00
H
ATOM   1330  CD2 LEU    80      48.744  39.945  87.131  1.00  0.00
C
ATOM   1331 HD21 LEU    80      47.925  40.298  86.505  1.00  0.00
H
ATOM   1332 HD22 LEU    80      48.867  38.876  86.963  1.00  0.00
H
ATOM   1333 HD23 LEU    80      48.496  40.112  88.180  1.00  0.00
H
ATOM   1334  C   LEU    80      51.357  42.716  84.897  1.00  0.00
C
ATOM   1335  O   LEU    80      52.258  41.930  84.615  1.00  0.00
O
ATOM   1336  N   ASN    81      50.632  43.314  83.952  1.00  0.00
N
ATOM   1337  H   ASN    81      49.913  43.953  84.271  1.00  0.00
H
ATOM   1338  CA  ASN    81      50.685  43.033  82.517  1.00  0.00
C
ATOM   1339  HA  ASN    81      50.512  41.967  82.357  1.00  0.00
H
ATOM   1340  CB  ASN    81      49.564  43.832  81.818  1.00  0.00
C
ATOM   1341  HB2 ASN    81      49.560  44.857  82.183  1.00  0.00
H
ATOM   1342  HB3 ASN    81      49.762  43.863  80.749  1.00  0.00
H
ATOM   1343  CG  ASN    81      48.183  43.221  81.995  1.00  0.00
C
ATOM   1344  OD1 ASN    81      48.042  42.014  82.105  1.00  0.00
O
ATOM   1345  ND2 ASN    81      47.131  44.006  81.986  1.00  0.00
N
ATOM   1346 HD21 ASN    81      46.210  43.603  82.123  1.00  0.00
H
ATOM   1347 HD22 ASN    81      47.221  44.990  81.818  1.00  0.00
H
ATOM   1348  C   ASN    81      52.072  43.344  81.937  1.00  0.00
C
ATOM   1349  O   ASN    81      52.644  42.507  81.239  1.00  0.00
O
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ATOM   1350  N   LYS    82      52.660  44.488  82.315  1.00  0.00
N
ATOM   1351  H   LYS    82      52.112  45.133  82.873  1.00  0.00
H
ATOM   1352  CA  LYS    82      54.037  44.871  81.945  1.00  0.00
C
ATOM   1353  HA  LYS    82      54.114  44.920  80.857  1.00  0.00
H
ATOM   1354  CB  LYS    82      54.347  46.264  82.532  1.00  0.00
C
ATOM   1355  HB2 LYS    82      54.176  46.258  83.613  1.00  0.00
H
ATOM   1356  HB3 LYS    82      55.398  46.500  82.353  1.00  0.00
H
ATOM   1357  CG  LYS    82      53.488  47.358  81.877  1.00  0.00
C
ATOM   1358  HG2 LYS    82      53.701  47.379  80.810  1.00  0.00
H
ATOM   1359  HG3 LYS    82      52.435  47.119  82.000  1.00  0.00
H
ATOM   1360  CD  LYS    82      53.745  48.753  82.463  1.00  0.00
C
ATOM   1361  HD2 LYS    82      53.570  48.742  83.542  1.00  0.00
H
ATOM   1362  HD3 LYS    82      54.774  49.055  82.255  1.00  0.00
H
ATOM   1363  CE  LYS    82      52.763  49.715  81.785  1.00  0.00
C
ATOM   1364  HE2 LYS    82      52.821  49.576  80.702  1.00  0.00
H
ATOM   1365  HE3 LYS    82      51.745  49.446  82.088  1.00  0.00
H
ATOM   1366  NZ  LYS    82      53.007  51.145  82.093  1.00  0.00
N
ATOM   1367  HZ1 LYS    82      53.933  51.449  81.799  1.00  0.00
H
ATOM   1368  HZ2 LYS    82      52.315  51.686  81.571  1.00  0.00
H
ATOM   1369  HZ3 LYS    82      52.888  51.345  83.072  1.00  0.00
H
ATOM   1370  C   LYS    82      55.078  43.841  82.410  1.00  0.00
C
ATOM   1371  O   LYS    82      56.044  43.571  81.694  1.00  0.00
O
ATOM   1372  N   ARG    83      54.844  43.259  83.594  1.00  0.00
N
ATOM   1373  H   ARG    83      53.993  43.545  84.061  1.00  0.00
H
ATOM   1374  CA  ARG    83      55.733  42.337  84.329  1.00  0.00
C
ATOM   1375  HA  ARG    83      56.771  42.554  84.062  1.00  0.00
H
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ATOM   1376  CB  ARG    83      55.555  42.561  85.848  1.00  0.00
C
ATOM   1377  HB2 ARG    83      54.561  42.211  86.133  1.00  0.00
H
ATOM   1378  HB3 ARG    83      56.295  41.959  86.382  1.00  0.00
H
ATOM   1379  CG  ARG    83      55.711  44.028  86.291  1.00  0.00
C
ATOM   1380  HG2 ARG    83      56.747  44.329  86.171  1.00  0.00
H
ATOM   1381  HG3 ARG    83      55.121  44.677  85.654  1.00  0.00
H
ATOM   1382  CD  ARG    83      55.239  44.252  87.739  1.00  0.00
C
ATOM   1383  HD2 ARG    83      54.613  45.144  87.773  1.00  0.00
H
ATOM   1384  HD3 ARG    83      54.630  43.406  88.069  1.00  0.00
H
ATOM   1385  NE  ARG    83      56.364  44.435  88.663  1.00  0.00
N
ATOM   1386  HE  ARG    83      56.627  43.628  89.227  1.00  0.00
H
ATOM   1387  CZ  ARG    83      57.099  45.523  88.779  1.00  0.00
C
ATOM   1388  NH1 ARG    83      56.829  46.639  88.168  1.00  0.00
N
ATOM   1389 HH11 ARG    83      55.907  46.813  87.757  1.00  0.00
H
ATOM   1390 HH12 ARG    83      57.421  47.455  88.232  1.00  0.00
H
ATOM   1391  NH2 ARG    83      58.158  45.511  89.530  1.00  0.00
N
ATOM   1392 HH21 ARG    83      58.354  44.687  90.071  1.00  0.00
H
ATOM   1393 HH22 ARG    83      58.709  46.344  89.601  1.00  0.00
H
ATOM   1394  C   ARG    83      55.505  40.857  83.989  1.00  0.00
C
ATOM   1395  O   ARG    83      56.358  40.031  84.289  1.00  0.00
O
ATOM   1396  N   THR    84      54.375  40.507  83.379  1.00  0.00
N
ATOM   1397  H   THR    84      53.719  41.243  83.159  1.00  0.00
H
ATOM   1398  CA  THR    84      54.056  39.138  82.951  1.00  0.00
C
ATOM   1399  HA  THR    84      54.448  38.429  83.679  1.00  0.00
H
ATOM   1400  CB  THR    84      52.547  38.899  82.864  1.00  0.00
C
ATOM   1401  HB  THR    84      52.114  39.522  82.073  1.00  0.00
H
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ATOM   1402  CG2 THR    84      52.191  37.427  82.657  1.00  0.00
C
ATOM   1403 HG21 THR    84      52.717  36.831  83.401  1.00  0.00
H
ATOM   1404 HG22 THR    84      51.125  37.307  82.797  1.00  0.00
H
ATOM   1405 HG23 THR    84      52.451  37.088  81.658  1.00  0.00
H
ATOM   1406  OG1 THR    84      51.930  39.212  84.085  1.00  0.00
O
ATOM   1407  HG1 THR    84      52.125  40.146  84.284  1.00  0.00
H
ATOM   1408  C   THR    84      54.666  38.853  81.590  1.00  0.00
C
ATOM   1409  O   THR    84      54.747  39.755  80.753  1.00  0.00
O
ATOM   1410  N   GLN    85      55.035  37.594  81.340  1.00  0.00
N
ATOM   1411  H   GLN    85      54.953  36.893  82.073  1.00  0.00
H
ATOM   1412  CA  GLN    85      55.455  37.118  80.019  1.00  0.00
C
ATOM   1413  HA  GLN    85      56.468  37.483  79.850  1.00  0.00
H
ATOM   1414  CB  GLN    85      55.495  35.580  80.010  1.00  0.00
C
ATOM   1415  HB2 GLN    85      55.915  35.255  79.058  1.00  0.00
H
ATOM   1416  HB3 GLN    85      56.156  35.224  80.801  1.00  0.00
H
ATOM   1417  CG  GLN    85      54.102  34.946  80.174  1.00  0.00
C
ATOM   1418  HG2 GLN    85      53.730  35.100  81.185  1.00  0.00
H
ATOM   1419  HG3 GLN    85      53.396  35.395  79.479  1.00  0.00
H
ATOM   1420  CD  GLN    85      54.143  33.459  79.890  1.00  0.00
C
ATOM   1421  OE1 GLN    85      54.365  32.651  80.776  1.00  0.00
O
ATOM   1422  NE2 GLN    85      53.960  33.056  78.652  1.00  0.00
N
ATOM   1423 HE21 GLN    85      53.975  32.067  78.492  1.00  0.00
H
ATOM   1424 HE22 GLN    85      53.804  33.737  77.911  1.00  0.00
H
ATOM   1425  C   GLN    85      54.582  37.609  78.848  1.00  0.00
C
ATOM   1426  O   GLN    85      53.420  38.004  79.001  1.00  0.00
O
ATOM   1427  N   ASP    86      55.151  37.549  77.653  1.00  0.00
N
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ATOM   1428  H   ASP    86      56.125  37.286  77.581  1.00  0.00
H
ATOM   1429  CA  ASP    86      54.416  37.689  76.407  1.00  0.00
C
ATOM   1430  HA  ASP    86      53.743  38.540  76.491  1.00  0.00
H
ATOM   1431  CB  ASP    86      55.413  38.016  75.290  1.00  0.00
C
ATOM   1432  HB2 ASP    86      56.057  37.157  75.115  1.00  0.00
H
ATOM   1433  HB3 ASP    86      54.868  38.232  74.369  1.00  0.00
H
ATOM   1434  CG  ASP    86      56.268  39.224  75.688  1.00  0.00
C
ATOM   1435  OD1 ASP    86      57.385  39.012  76.213  1.00  0.00
O
ATOM   1436  OD2 ASP    86      55.755  40.359  75.566  1.00  0.00
O
ATOM   1437  C   ASP    86      53.553  36.443  76.125  1.00  0.00
C
ATOM   1438  O   ASP    86      53.807  35.343  76.628  1.00  0.00
O
ATOM   1439  N   PHE    87      52.510  36.632  75.318  1.00  0.00
N
ATOM   1440  H   PHE    87      52.384  37.539  74.890  1.00  0.00
H
ATOM   1441  CA  PHE    87      51.608  35.586  74.833  1.00  0.00
C
ATOM   1442  HA  PHE    87      52.058  34.602  74.977  1.00  0.00
H
ATOM   1443  CB  PHE    87      50.257  35.632  75.572  1.00  0.00
C
ATOM   1444  HB2 PHE    87      49.808  36.616  75.416  1.00  0.00
H
ATOM   1445  HB3 PHE    87      49.585  34.909  75.103  1.00  0.00
H
ATOM   1446  CG  PHE    87      50.307  35.341  77.064  1.00  0.00
C
ATOM   1447  CD1 PHE    87      50.541  36.383  77.982  1.00  0.00
C
ATOM   1448  HD1 PHE    87      50.711  37.386  77.621  1.00  0.00
H
ATOM   1449  CE1 PHE    87      50.574  36.121  79.363  1.00  0.00
C
ATOM   1450  HE1 PHE    87      50.767  36.923  80.058  1.00  0.00
H
ATOM   1451  CZ  PHE    87      50.382  34.811  79.834  1.00  0.00
C
ATOM   1452  HZ  PHE    87      50.424  34.601  80.893  1.00  0.00
H
ATOM   1453  CE2 PHE    87      50.149  33.768  78.923  1.00  0.00
C
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ATOM   1454  HE2 PHE    87      50.012  32.759  79.284  1.00  0.00
H
ATOM   1455  CD2 PHE    87      50.107  34.031  77.542  1.00  0.00
C
ATOM   1456  HD2 PHE    87      49.929  33.222  76.849  1.00  0.00
H
ATOM   1457  C   PHE    87      51.374  35.810  73.338  1.00  0.00
C
ATOM   1458  O   PHE    87      51.297  36.956  72.894  1.00  0.00
O
ATOM   1459  N   TRP    88      51.220  34.731  72.571  1.00  0.00
N
ATOM   1460  H   TRP    88      51.274  33.817  72.990  1.00  0.00
H
ATOM   1461  CA  TRP    88      50.727  34.839  71.201  1.00  0.00
C
ATOM   1462  HA  TRP    88      51.029  35.803  70.789  1.00  0.00
H
ATOM   1463  CB  TRP    88      51.361  33.772  70.309  1.00  0.00
C
ATOM   1464  HB2 TRP    88      52.443  33.802  70.447  1.00  0.00
H
ATOM   1465  HB3 TRP    88      51.010  32.785  70.614  1.00  0.00
H
ATOM   1466  CG  TRP    88      51.059  34.004  68.862  1.00  0.00
C
ATOM   1467  CD1 TRP    88      50.010  33.485  68.186  1.00  0.00
C
ATOM   1468  HD1 TRP    88      49.267  32.821  68.614  1.00  0.00
H
ATOM   1469  NE1 TRP    88      49.979  34.003  66.907  1.00  0.00
N
ATOM   1470  HE1 TRP    88      49.220  33.822  66.266  1.00  0.00
H
ATOM   1471  CE2 TRP    88      51.007  34.899  66.692  1.00  0.00
C
ATOM   1472  CZ2 TRP    88      51.381  35.697  65.597  1.00  0.00
C
ATOM   1473  HZ2 TRP    88      50.825  35.661  64.672  1.00  0.00
H
ATOM   1474  CH2 TRP    88      52.488  36.557  65.722  1.00  0.00
C
ATOM   1475  HH2 TRP    88      52.790  37.182  64.892  1.00  0.00
H
ATOM   1476  CZ3 TRP    88      53.200  36.611  66.934  1.00  0.00
C
ATOM   1477  HZ3 TRP    88      54.042  37.283  67.031  1.00  0.00
H
ATOM   1478  CE3 TRP    88      52.816  35.804  68.024  1.00  0.00
C
ATOM   1479  HE3 TRP    88      53.359  35.868  68.955  1.00  0.00
H
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ATOM   1480  CD2 TRP    88      51.717  34.921  67.930  1.00  0.00
C
ATOM   1481  C   TRP    88      49.196  34.787  71.197  1.00  0.00
C
ATOM   1482  O   TRP    88      48.607  33.786  71.607  1.00  0.00
O
ATOM   1483  N   GLU    89      48.560  35.868  70.746  1.00  0.00
N
ATOM   1484  H   GLU    89      49.108  36.654  70.437  1.00  0.00
H
ATOM   1485  CA  GLU    89      47.099  35.989  70.687  1.00  0.00
C
ATOM   1486  HA  GLU    89      46.687  35.783  71.676  1.00  0.00
H
ATOM   1487  CB  GLU    89      46.695  37.420  70.278  1.00  0.00
C
ATOM   1488  HB2 GLU    89      47.155  37.637  69.314  1.00  0.00
H
ATOM   1489  HB3 GLU    89      45.613  37.459  70.140  1.00  0.00
H
ATOM   1490  CG  GLU    89      47.113  38.535  71.259  1.00  0.00
C
ATOM   1491  HG2 GLU    89      48.140  38.373  71.593  1.00  0.00
H
ATOM   1492  HG3 GLU    89      47.108  39.472  70.700  1.00  0.00
H
ATOM   1493  CD  GLU    89      46.185  38.702  72.477  1.00  0.00
C
ATOM   1494  OE1 GLU    89      45.523  37.713  72.862  1.00  0.00
O
ATOM   1495  OE2 GLU    89      46.105  39.844  73.003  1.00  0.00
O
ATOM   1496  C   GLU    89      46.519  34.972  69.684  1.00  0.00
C
ATOM   1497  O   GLU    89      46.847  34.991  68.497  1.00  0.00
O
ATOM   1498  N   VAL    90      45.622  34.089  70.142  1.00  0.00
N
ATOM   1499  H   VAL    90      45.414  34.098  71.131  1.00  0.00
H
ATOM   1500  CA  VAL    90      44.966  33.066  69.294  1.00  0.00
C
ATOM   1501  HA  VAL    90      45.674  32.799  68.509  1.00  0.00
H
ATOM   1502  CB  VAL    90      44.714  31.778  70.110  1.00  0.00
C
ATOM   1503  HB  VAL    90      45.652  31.532  70.609  1.00  0.00
H
ATOM   1504  CG1 VAL    90      43.651  31.953  71.199  1.00  0.00
C
ATOM   1505 HG11 VAL    90      42.683  32.189  70.756  1.00  0.00
H
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ATOM   1506 HG12 VAL    90      43.567  31.034  71.777  1.00  0.00
H
ATOM   1507 HG13 VAL    90      43.937  32.757  71.872  1.00  0.00
H
ATOM   1508  CG2 VAL    90      44.351  30.559  69.253  1.00  0.00
C
ATOM   1509 HG21 VAL    90      45.055  30.463  68.426  1.00  0.00
H
ATOM   1510 HG22 VAL    90      44.399  29.658  69.863  1.00  0.00
H
ATOM   1511 HG23 VAL    90      43.342  30.654  68.853  1.00  0.00
H
ATOM   1512  C   VAL    90      43.720  33.601  68.562  1.00  0.00
C
ATOM   1513  O   VAL    90      43.116  32.905  67.748  1.00  0.00
O
ATOM   1514  N   GLN    91      43.337  34.855  68.819  1.00  0.00
N
ATOM   1515  H   GLN    91      43.884  35.379  69.485  1.00  0.00
H
ATOM   1516  CA  GLN    91      42.177  35.513  68.212  1.00  0.00
C
ATOM   1517  HA  GLN    91      41.490  34.724  67.903  1.00  0.00
H
ATOM   1518  CB  GLN    91      41.459  36.380  69.275  1.00  0.00
C
ATOM   1519  HB2 GLN    91      41.933  36.255  70.249  1.00  0.00
H
ATOM   1520  HB3 GLN    91      41.539  37.438  69.030  1.00  0.00
H
ATOM   1521  CG  GLN    91      39.972  36.018  69.401  1.00  0.00
C
ATOM   1522  HG2 GLN    91      39.887  35.020  69.827  1.00  0.00
H
ATOM   1523  HG3 GLN    91      39.482  36.722  70.073  1.00  0.00
H
ATOM   1524  CD  GLN    91      39.258  36.038  68.058  1.00  0.00
C
ATOM   1525  OE1 GLN    91      38.698  35.055  67.604  1.00  0.00
O
ATOM   1526  NE2 GLN    91      39.320  37.124  67.326  1.00  0.00
N
ATOM   1527 HE21 GLN    91      38.877  37.056  66.414  1.00  0.00
H
ATOM   1528 HE22 GLN    91      39.889  37.901  67.603  1.00  0.00
H
ATOM   1529  C   GLN    91      42.568  36.284  66.932  1.00  0.00
C
ATOM   1530  O   GLN    91      42.896  37.469  66.977  1.00  0.00
O
ATOM   1531  N   LEU    92      42.519  35.612  65.778  1.00  0.00
N
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ATOM   1532  H   LEU    92      42.206  34.651  65.807  1.00  0.00
H
ATOM   1533  CA  LEU    92      43.060  36.119  64.503  1.00  0.00
C
ATOM   1534  HA  LEU    92      43.975  36.679  64.710  1.00  0.00
H
ATOM   1535  CB  LEU    92      43.414  34.912  63.610  1.00  0.00
C
ATOM   1536  HB2 LEU    92      42.708  34.101  63.800  1.00  0.00
H
ATOM   1537  HB3 LEU    92      43.292  35.207  62.567  1.00  0.00
H
ATOM   1538  CG  LEU    92      44.857  34.394  63.762  1.00  0.00
C
ATOM   1539  HG  LEU    92      45.542  35.164  63.406  1.00  0.00
H
ATOM   1540  CD1 LEU    92      45.244  34.027  65.195  1.00  0.00
C
ATOM   1541 HD11 LEU    92      44.552  33.283  65.588  1.00  0.00
H
ATOM   1542 HD12 LEU    92      46.254  33.622  65.212  1.00  0.00
H
ATOM   1543 HD13 LEU    92      45.226  34.911  65.831  1.00  0.00
H
ATOM   1544  CD2 LEU    92      45.030  33.147  62.893  1.00  0.00
C
ATOM   1545 HD21 LEU    92      44.788  33.380  61.856  1.00  0.00
H
ATOM   1546 HD22 LEU    92      46.060  32.800  62.944  1.00  0.00
H
ATOM   1547 HD23 LEU    92      44.369  32.354  63.244  1.00  0.00
H
ATOM   1548  C   LEU    92      42.132  37.090  63.750  1.00  0.00
C
ATOM   1549  O   LEU    92      42.609  37.901  62.955  1.00  0.00
O
ATOM   1550  N   GLY    93      40.817  37.013  63.961  1.00  0.00
N
ATOM   1551  H   GLY    93      40.482  36.280  64.576  1.00  0.00
H
ATOM   1552  CA  GLY    93      39.829  37.845  63.266  1.00  0.00
C
ATOM   1553  HA2 GLY    93      40.147  38.888  63.306  1.00  0.00
H
ATOM   1554  HA3 GLY    93      39.777  37.547  62.219  1.00  0.00
H
ATOM   1555  C   GLY    93      38.427  37.748  63.869  1.00  0.00
C
ATOM   1556  O   GLY    93      38.184  36.940  64.765  1.00  0.00
O
ATOM   1557  N   ILE    94      37.505  38.595  63.413  1.00  0.00
N
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ATOM   1558  H   ILE    94      37.726  39.179  62.621  1.00  0.00
H
ATOM   1559  CA  ILE    94      36.131  38.665  63.936  1.00  0.00
C
ATOM   1560  HA  ILE    94      36.089  38.135  64.885  1.00  0.00
H
ATOM   1561  CB  ILE    94      35.723  40.126  64.245  1.00  0.00
C
ATOM   1562  HB  ILE    94      35.683  40.684  63.306  1.00  0.00
H
ATOM   1563  CG2 ILE    94      34.329  40.147  64.898  1.00  0.00
C
ATOM   1564 HG21 ILE    94      34.362  39.634  65.858  1.00  0.00
H
ATOM   1565 HG22 ILE    94      33.986  41.170  65.047  1.00  0.00
H
ATOM   1566 HG23 ILE    94      33.593  39.663  64.260  1.00  0.00
H
ATOM   1567  CG1 ILE    94      36.739  40.809  65.195  1.00  0.00
C
ATOM   1568 HG12 ILE    94      36.729  40.298  66.159  1.00  0.00
H
ATOM   1569 HG13 ILE    94      37.744  40.722  64.784  1.00  0.00
H
ATOM   1570  CD1 ILE    94      36.488  42.306  65.422  1.00  0.00
C
ATOM   1571 HD11 ILE    94      35.550  42.469  65.952  1.00  0.00
H
ATOM   1572 HD12 ILE    94      37.296  42.720  66.026  1.00  0.00
H
ATOM   1573 HD13 ILE    94      36.462  42.825  64.463  1.00  0.00
H
ATOM   1574  C   ILE    94      35.178  37.989  62.932  1.00  0.00
C
ATOM   1575  O   ILE    94      35.230  38.338  61.750  1.00  0.00
O
ATOM   1576  N   PRO    95      34.314  37.047  63.363  1.00  0.00
N
ATOM   1577  CD  PRO    95      34.322  36.386  64.658  1.00  0.00
C
ATOM   1578  HD2 PRO    95      33.878  37.046  65.403  1.00  0.00
H
ATOM   1579  HD3 PRO    95      35.335  36.104  64.951  1.00  0.00
H
ATOM   1580  CG  PRO    95      33.462  35.134  64.494  1.00  0.00
C
ATOM   1581  HG2 PRO    95      32.988  34.841  65.430  1.00  0.00
H
ATOM   1582  HG3 PRO    95      34.064  34.318  64.091  1.00  0.00
H
ATOM   1583  CB  PRO    95      32.439  35.578  63.454  1.00  0.00
C
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ATOM   1584  HB2 PRO    95      31.649  36.145  63.952  1.00  0.00
H
ATOM   1585  HB3 PRO    95      32.019  34.734  62.906  1.00  0.00
H
ATOM   1586  CA  PRO    95      33.246  36.496  62.533  1.00  0.00
C
ATOM   1587  HA  PRO    95      33.695  35.903  61.735  1.00  0.00
H
ATOM   1588  C   PRO    95      32.347  37.582  61.930  1.00  0.00
C
ATOM   1589  O   PRO    95      32.062  38.592  62.568  1.00  0.00
O
ATOM   1590  N   HIE    96      31.856  37.349  60.714  1.00  0.00
N
ATOM   1591  H   HIE    96      32.077  36.476  60.259  1.00  0.00
H
ATOM   1592  CA  HIE    96      30.944  38.259  60.016  1.00  0.00
C
ATOM   1593  HA  HIE    96      30.626  39.037  60.710  1.00  0.00
H
ATOM   1594  CB  HIE    96      31.700  38.933  58.855  1.00  0.00
C
ATOM   1595  HB2 HIE    96      32.670  39.273  59.223  1.00  0.00
H
ATOM   1596  HB3 HIE    96      31.885  38.195  58.073  1.00  0.00
H
ATOM   1597  CG  HIE    96      31.000  40.119  58.232  1.00  0.00
C
ATOM   1598  ND1 HIE    96      29.705  40.118  57.720  1.00  0.00
N
ATOM   1599  CE1 HIE    96      29.485  41.343  57.226  1.00  0.00
C
ATOM   1600  HE1 HIE    96      28.561  41.657  56.755  1.00  0.00
H
ATOM   1601  NE2 HIE    96      30.580  42.106  57.381  1.00  0.00
N
ATOM   1602  HE2 HIE    96      30.684  43.053  57.046  1.00  0.00
H
ATOM   1603  CD2 HIE    96      31.541  41.354  58.024  1.00  0.00
C
ATOM   1604  HD2 HIE    96      32.540  41.663  58.300  1.00  0.00
H
ATOM   1605  C   HIE    96      29.714  37.469  59.546  1.00  0.00
C
ATOM   1606  O   HIE    96      29.893  36.379  58.996  1.00  0.00
O
ATOM   1607  N   PRO    97      28.477  37.966  59.730  1.00  0.00
N
ATOM   1608  CD  PRO    97      28.121  39.235  60.346  1.00  0.00
C
ATOM   1609  HD2 PRO    97      28.825  40.034  60.126  1.00  0.00
H
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ATOM   1610  HD3 PRO    97      28.041  39.092  61.422  1.00  0.00
H
ATOM   1611  CG  PRO    97      26.756  39.573  59.767  1.00  0.00
C
ATOM   1612  HG2 PRO    97      26.869  39.966  58.757  1.00  0.00
H
ATOM   1613  HG3 PRO    97      26.202  40.263  60.398  1.00  0.00
H
ATOM   1614  CB  PRO    97      26.115  38.192  59.730  1.00  0.00
C
ATOM   1615  HB2 PRO    97      25.268  38.138  59.052  1.00  0.00
H
ATOM   1616  HB3 PRO    97      25.811  37.936  60.738  1.00  0.00
H
ATOM   1617  CA  PRO    97      27.258  37.273  59.298  1.00  0.00
C
ATOM   1618  HA  PRO    97      27.169  36.318  59.814  1.00  0.00
H
ATOM   1619  C   PRO    97      27.212  37.000  57.790  1.00  0.00
C
ATOM   1620  O   PRO    97      26.672  35.981  57.374  1.00  0.00
O
ATOM   1621  N   ALA    98      27.866  37.829  56.976  1.00  0.00
N
ATOM   1622  H   ALA    98      28.309  38.650  57.371  1.00  0.00
H
ATOM   1623  CA  ALA    98      28.033  37.590  55.547  1.00  0.00
C
ATOM   1624  HA  ALA    98      27.045  37.432  55.105  1.00  0.00
H
ATOM   1625  CB  ALA    98      28.636  38.865  54.951  1.00  0.00
C
ATOM   1626  HB1 ALA    98      29.677  38.963  55.259  1.00  0.00
H
ATOM   1627  HB2 ALA    98      28.585  38.834  53.868  1.00  0.00
H
ATOM   1628  HB3 ALA    98      28.065  39.732  55.282  1.00  0.00
H
ATOM   1629  C   ALA    98      28.899  36.342  55.241  1.00  0.00
C
ATOM   1630  O   ALA    98      28.828  35.803  54.144  1.00  0.00
O
ATOM   1631  N   GLY    99      29.710  35.849  56.185  1.00  0.00
N
ATOM   1632  H   GLY    99      29.732  36.312  57.086  1.00  0.00
H
ATOM   1633  CA  GLY    99      30.433  34.572  56.070  1.00  0.00
C
ATOM   1634  HA2 GLY    99      30.752  34.412  55.042  1.00  0.00
H
ATOM   1635  HA3 GLY    99      31.330  34.619  56.686  1.00  0.00
H
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ATOM   1636  C   GLY    99      29.623  33.347  56.519  1.00  0.00
C
ATOM   1637  O   GLY    99      29.990  32.211  56.198  1.00  0.00
O
ATOM   1638  N   LEU   100      28.514  33.550  57.244  1.00  0.00
N
ATOM   1639  H   LEU   100      28.181  34.499  57.367  1.00  0.00
H
ATOM   1640  CA  LEU   100      27.654  32.460  57.704  1.00  0.00
C
ATOM   1641  HA  LEU   100      28.299  31.669  58.082  1.00  0.00
H
ATOM   1642  CB  LEU   100      26.718  32.908  58.844  1.00  0.00
C
ATOM   1643  HB2 LEU   100      26.212  33.825  58.550  1.00  0.00
H
ATOM   1644  HB3 LEU   100      25.941  32.151  58.970  1.00  0.00
H
ATOM   1645  CG  LEU   100      27.402  33.112  60.208  1.00  0.00
C
ATOM   1646  HG  LEU   100      28.197  33.853  60.117  1.00  0.00
H
ATOM   1647  CD1 LEU   100      26.371  33.609  61.220  1.00  0.00
C
ATOM   1648 HD11 LEU   100      25.549  32.897  61.303  1.00  0.00
H
ATOM   1649 HD12 LEU   100      26.837  33.722  62.199  1.00  0.00
H
ATOM   1650 HD13 LEU   100      25.978  34.575  60.908  1.00  0.00
H
ATOM   1651  CD2 LEU   100      27.983  31.801  60.748  1.00  0.00
C
ATOM   1652 HD21 LEU   100      28.799  31.465  60.115  1.00  0.00
H
ATOM   1653 HD22 LEU   100      28.384  31.960  61.749  1.00  0.00
H
ATOM   1654 HD23 LEU   100      27.207  31.037  60.794  1.00  0.00
H
ATOM   1655  C   LEU   100      26.859  31.858  56.547  1.00  0.00
C
ATOM   1656  O   LEU   100      26.380  32.557  55.655  1.00  0.00
O
ATOM   1657  N   LYS   101      26.693  30.535  56.609  1.00  0.00
N
ATOM   1658  H   LYS   101      27.022  30.076  57.442  1.00  0.00
H
ATOM   1659  CA  LYS   101      25.842  29.749  55.716  1.00  0.00
C
ATOM   1660  HA  LYS   101      25.617  30.331  54.819  1.00  0.00
H
ATOM   1661  CB  LYS   101      26.559  28.454  55.294  1.00  0.00
C
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ATOM   1662  HB2 LYS   101      26.750  27.852  56.184  1.00  0.00
H
ATOM   1663  HB3 LYS   101      25.896  27.886  54.639  1.00  0.00
H
ATOM   1664  CG  LYS   101      27.891  28.703  54.559  1.00  0.00
C
ATOM   1665  HG2 LYS   101      27.700  29.269  53.647  1.00  0.00
H
ATOM   1666  HG3 LYS   101      28.564  29.279  55.195  1.00  0.00
H
ATOM   1667  CD  LYS   101      28.563  27.367  54.203  1.00  0.00
C
ATOM   1668  HD2 LYS   101      28.761  26.805  55.118  1.00  0.00
H
ATOM   1669  HD3 LYS   101      27.861  26.784  53.603  1.00  0.00
H
ATOM   1670  CE  LYS   101      29.864  27.518  53.397  1.00  0.00
C
ATOM   1671  HE2 LYS   101      30.125  26.530  53.006  1.00  0.00
H
ATOM   1672  HE3 LYS   101      29.680  28.173  52.538  1.00  0.00
H
ATOM   1673  NZ  LYS   101      31.006  28.024  54.199  1.00  0.00
N
ATOM   1674  HZ1 LYS   101      31.079  27.527  55.074  1.00  0.00
H
ATOM   1675  HZ2 LYS   101      31.884  27.836  53.708  1.00  0.00
H
ATOM   1676  HZ3 LYS   101      30.925  29.016  54.379  1.00  0.00
H
ATOM   1677  C   LYS   101      24.527  29.450  56.442  1.00  0.00
C
ATOM   1678  O   LYS   101      24.554  29.164  57.641  1.00  0.00
O
ATOM   1679  N   LYS   102      23.409  29.479  55.711  1.00  0.00
N
ATOM   1680  H   LYS   102      23.515  29.697  54.737  1.00  0.00
H
ATOM   1681  CA  LYS   102      22.063  29.130  56.208  1.00  0.00
C
ATOM   1682  HA  LYS   102      21.823  29.818  57.025  1.00  0.00
H
ATOM   1683  CB  LYS   102      20.990  29.323  55.109  1.00  0.00
C
ATOM   1684  HB2 LYS   102      20.042  28.973  55.522  1.00  0.00
H
ATOM   1685  HB3 LYS   102      20.863  30.390  54.923  1.00  0.00
H
ATOM   1686  CG  LYS   102      21.208  28.584  53.764  1.00  0.00
C
ATOM   1687  HG2 LYS   102      21.665  27.613  53.960  1.00  0.00
H
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ATOM   1688  HG3 LYS   102      20.229  28.386  53.330  1.00  0.00
H
ATOM   1689  CD  LYS   102      22.043  29.328  52.698  1.00  0.00
C
ATOM   1690  HD2 LYS   102      23.032  29.531  53.100  1.00  0.00
H
ATOM   1691  HD3 LYS   102      22.200  28.658  51.853  1.00  0.00
H
ATOM   1692  CE  LYS   102      21.404  30.642  52.194  1.00  0.00
C
ATOM   1693  HE2 LYS   102      20.940  31.161  53.037  1.00  0.00
H
ATOM   1694  HE3 LYS   102      22.192  31.296  51.806  1.00  0.00
H
ATOM   1695  NZ  LYS   102      20.399  30.406  51.122  1.00  0.00
N
ATOM   1696  HZ1 LYS   102      19.794  29.609  51.334  1.00  0.00
H
ATOM   1697  HZ2 LYS   102      19.819  31.219  50.953  1.00  0.00
H
ATOM   1698  HZ3 LYS   102      20.855  30.154  50.257  1.00  0.00
H
ATOM   1699  C   LYS   102      22.023  27.712  56.810  1.00  0.00
C
ATOM   1700  O   LYS   102      22.745  26.828  56.347  1.00  0.00
O
ATOM   1701  N   LYS   103      21.191  27.517  57.844  1.00  0.00
N
ATOM   1702  H   LYS   103      20.633  28.301  58.152  1.00  0.00
H
ATOM   1703  CA  LYS   103      20.989  26.251  58.576  1.00  0.00
C
ATOM   1704  HA  LYS   103      21.165  25.426  57.895  1.00  0.00
H
ATOM   1705  CB  LYS   103      21.950  26.167  59.788  1.00  0.00
C
ATOM   1706  HB2 LYS   103      21.829  27.070  60.387  1.00  0.00
H
ATOM   1707  HB3 LYS   103      21.657  25.326  60.414  1.00  0.00
H
ATOM   1708  CG  LYS   103      23.444  26.007  59.442  1.00  0.00
C
ATOM   1709  HG2 LYS   103      23.773  26.854  58.841  1.00  0.00
H
ATOM   1710  HG3 LYS   103      24.025  26.005  60.365  1.00  0.00
H
ATOM   1711  CD  LYS   103      23.715  24.699  58.693  1.00  0.00
C
ATOM   1712  HD2 LYS   103      23.560  23.856  59.367  1.00  0.00
H
ATOM   1713  HD3 LYS   103      23.021  24.614  57.864  1.00  0.00
H
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ATOM   1714  CE  LYS   103      25.110  24.655  58.079  1.00  0.00
C
ATOM   1715  HE2 LYS   103      25.209  25.520  57.419  1.00  0.00
H
ATOM   1716  HE3 LYS   103      25.869  24.723  58.859  1.00  0.00
H
ATOM   1717  NZ  LYS   103      25.273  23.408  57.300  1.00  0.00
N
ATOM   1718  HZ1 LYS   103      24.426  23.198  56.764  1.00  0.00
H
ATOM   1719  HZ2 LYS   103      26.096  23.440  56.710  1.00  0.00
H
ATOM   1720  HZ3 LYS   103      25.402  22.604  57.907  1.00  0.00
H
ATOM   1721  C   LYS   103      19.535  26.087  59.024  1.00  0.00
C
ATOM   1722  O   LYS   103      18.922  27.062  59.455  1.00  0.00
O
ATOM   1723  N   LYS   104      18.986  24.866  58.928  1.00  0.00
N
ATOM   1724  H   LYS   104      19.564  24.137  58.509  1.00  0.00
H
ATOM   1725  CA  LYS   104      17.571  24.570  59.259  1.00  0.00
C
ATOM   1726  HA  LYS   104      16.951  25.255  58.679  1.00  0.00
H
ATOM   1727  CB  LYS   104      17.227  23.125  58.847  1.00  0.00
C
ATOM   1728  HB2 LYS   104      17.702  22.905  57.888  1.00  0.00
H
ATOM   1729  HB3 LYS   104      17.609  22.424  59.591  1.00  0.00
H
ATOM   1730  CG  LYS   104      15.709  22.925  58.688  1.00  0.00
C
ATOM   1731  HG2 LYS   104      15.211  23.073  59.647  1.00  0.00
H
ATOM   1732  HG3 LYS   104      15.334  23.668  57.982  1.00  0.00
H
ATOM   1733  CD  LYS   104      15.368  21.525  58.159  1.00  0.00
C
ATOM   1734  HD2 LYS   104      15.986  21.310  57.285  1.00  0.00
H
ATOM   1735  HD3 LYS   104      15.574  20.782  58.933  1.00  0.00
H
ATOM   1736  CE  LYS   104      13.886  21.473  57.761  1.00  0.00
C
ATOM   1737  HE2 LYS   104      13.275  21.622  58.656  1.00  0.00
H
ATOM   1738  HE3 LYS   104      13.675  22.290  57.063  1.00  0.00
H
ATOM   1739  NZ  LYS   104      13.529  20.178  57.137  1.00  0.00
N
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ATOM   1740  HZ1 LYS   104      13.569  19.428  57.832  1.00  0.00
H
ATOM   1741  HZ2 LYS   104      12.554  20.165  56.847  1.00  0.00
H
ATOM   1742  HZ3 LYS   104      14.108  19.954  56.343  1.00  0.00
H
ATOM   1743  C   LYS   104      17.224  24.823  60.738  1.00  0.00
C
ATOM   1744  O   LYS   104      16.108  25.241  61.048  1.00  0.00
O
ATOM   1745  N   SER   105      18.192  24.612  61.628  1.00  0.00
N
ATOM   1746  H   SER   105      19.070  24.237  61.284  1.00  0.00
H
ATOM   1747  CA  SER   105      18.092  24.894  63.061  1.00  0.00
C
ATOM   1748  HA  SER   105      17.226  25.536  63.236  1.00  0.00
H
ATOM   1749  CB  SER   105      17.896  23.602  63.857  1.00  0.00
C
ATOM   1750  HB2 SER   105      18.734  22.923  63.687  1.00  0.00
H
ATOM   1751  HB3 SER   105      17.834  23.855  64.916  1.00  0.00
H
ATOM   1752  OG  SER   105      16.701  22.941  63.483  1.00  0.00
O
ATOM   1753  HG  SER   105      16.926  22.233  62.856  1.00  0.00
H
ATOM   1754  C   SER   105      19.337  25.637  63.563  1.00  0.00
C
ATOM   1755  O   SER   105      20.468  25.290  63.220  1.00  0.00
O
ATOM   1756  N   VAL   106      19.136  26.655  64.402  1.00  0.00
N
ATOM   1757  H   VAL   106      18.190  26.885  64.669  1.00  0.00
H
ATOM   1758  CA  VAL   106      20.197  27.466  65.017  1.00  0.00
C
ATOM   1759  HA  VAL   106      21.141  26.930  64.947  1.00  0.00
H
ATOM   1760  CB  VAL   106      20.373  28.816  64.275  1.00  0.00
C
ATOM   1761  HB  VAL   106      19.428  29.357  64.300  1.00  0.00
H
ATOM   1762  CG1 VAL   106      21.455  29.717  64.886  1.00  0.00
C
ATOM   1763 HG11 VAL   106      22.408  29.188  64.951  1.00  0.00
H
ATOM   1764 HG12 VAL   106      21.579  30.605  64.267  1.00  0.00
H
ATOM   1765 HG13 VAL   106      21.151  30.064  65.873  1.00  0.00
H
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ATOM   1766  CG2 VAL   106      20.770  28.604  62.806  1.00  0.00
C
ATOM   1767 HG21 VAL   106      19.978  28.084  62.267  1.00  0.00
H
ATOM   1768 HG22 VAL   106      20.924  29.568  62.318  1.00  0.00
H
ATOM   1769 HG23 VAL   106      21.692  28.025  62.745  1.00  0.00
H
ATOM   1770  C   VAL   106      19.885  27.672  66.505  1.00  0.00
C
ATOM   1771  O   VAL   106      18.726  27.610  66.918  1.00  0.00
O
ATOM   1772  N   THR   107      20.921  27.885  67.314  1.00  0.00
N
ATOM   1773  H   THR   107      21.851  27.810  66.910  1.00  0.00
H
ATOM   1774  CA  THR   107      20.873  28.362  68.705  1.00  0.00
C
ATOM   1775  HA  THR   107      20.016  29.020  68.844  1.00  0.00
H
ATOM   1776  CB  THR   107      20.785  27.200  69.710  1.00  0.00
C
ATOM   1777  HB  THR   107      21.111  27.543  70.692  1.00  0.00
H
ATOM   1778  CG2 THR   107      19.380  26.630  69.850  1.00  0.00
C
ATOM   1779 HG21 THR   107      19.113  26.084  68.949  1.00  0.00
H
ATOM   1780 HG22 THR   107      19.344  25.960  70.703  1.00  0.00
H
ATOM   1781 HG23 THR   107      18.674  27.444  69.988  1.00  0.00
H
ATOM   1782  OG1 THR   107      21.577  26.105  69.316  1.00  0.00
O
ATOM   1783  HG1 THR   107      22.345  26.046  69.894  1.00  0.00
H
ATOM   1784  C   THR   107      22.145  29.155  69.002  1.00  0.00
C
ATOM   1785  O   THR   107      23.171  28.900  68.368  1.00  0.00
O
ATOM   1786  N   VAL   108      22.129  30.051  69.998  1.00  0.00
N
ATOM   1787  H   VAL   108      21.281  30.206  70.526  1.00  0.00
H
ATOM   1788  CA  VAL   108      23.366  30.678  70.514  1.00  0.00
C
ATOM   1789  HA  VAL   108      24.190  30.103  70.111  1.00  0.00
H
ATOM   1790  CB  VAL   108      23.625  32.123  70.025  1.00  0.00
C
ATOM   1791  HB  VAL   108      24.702  32.289  70.078  1.00  0.00
H
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ATOM   1792  CG1 VAL   108      23.205  32.332  68.564  1.00  0.00
C
ATOM   1793 HG11 VAL   108      22.123  32.257  68.464  1.00  0.00
H
ATOM   1794 HG12 VAL   108      23.522  33.319  68.234  1.00  0.00
H
ATOM   1795 HG13 VAL   108      23.682  31.581  67.936  1.00  0.00
H
ATOM   1796  CG2 VAL   108      22.973  33.207  70.887  1.00  0.00
C
ATOM   1797 HG21 VAL   108      23.491  33.276  71.844  1.00  0.00
H
ATOM   1798 HG22 VAL   108      23.055  34.175  70.392  1.00  0.00
H
ATOM   1799 HG23 VAL   108      21.930  32.975  71.054  1.00  0.00
H
ATOM   1800  C   VAL   108      23.454  30.550  72.038  1.00  0.00
C
ATOM   1801  O   VAL   108      22.417  30.581  72.705  1.00  0.00
O
ATOM   1802  N   LEU   109      24.662  30.345  72.571  1.00  0.00
N
ATOM   1803  H   LEU   109      25.457  30.373  71.938  1.00  0.00
H
ATOM   1804  CA  LEU   109      24.969  30.149  73.996  1.00  0.00
C
ATOM   1805  HA  LEU   109      24.089  30.386  74.580  1.00  0.00
H
ATOM   1806  CB  LEU   109      25.393  28.692  74.315  1.00  0.00
C
ATOM   1807  HB2 LEU   109      26.304  28.461  73.771  1.00  0.00
H
ATOM   1808  HB3 LEU   109      25.658  28.667  75.376  1.00  0.00
H
ATOM   1809  CG  LEU   109      24.386  27.547  74.083  1.00  0.00
C
ATOM   1810  HG  LEU   109      23.462  27.762  74.618  1.00  0.00
H
ATOM   1811  CD1 LEU   109      24.061  27.236  72.614  1.00  0.00
C
ATOM   1812 HD11 LEU   109      24.979  27.250  72.022  1.00  0.00
H
ATOM   1813 HD12 LEU   109      23.596  26.258  72.525  1.00  0.00
H
ATOM   1814 HD13 LEU   109      23.375  27.974  72.216  1.00  0.00
H
ATOM   1815  CD2 LEU   109      24.990  26.262  74.654  1.00  0.00
C
ATOM   1816 HD21 LEU   109      25.249  26.400  75.702  1.00  0.00
H
ATOM   1817 HD22 LEU   109      24.286  25.437  74.575  1.00  0.00
H
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ATOM   1818 HD23 LEU   109      25.903  26.018  74.113  1.00  0.00
H
ATOM   1819  C   LEU   109      26.045  31.140  74.474  1.00  0.00
C
ATOM   1820  O   LEU   109      26.821  31.653  73.673  1.00  0.00
O
ATOM   1821  N   ASP   110      26.072  31.363  75.788  1.00  0.00
N
ATOM   1822  H   ASP   110      25.452  30.818  76.366  1.00  0.00
H
ATOM   1823  CA  ASP   110      26.950  32.272  76.546  1.00  0.00
C
ATOM   1824  HA  ASP   110      27.853  32.471  75.964  1.00  0.00
H
ATOM   1825  CB  ASP   110      26.144  33.569  76.813  1.00  0.00
C
ATOM   1826  HB2 ASP   110      25.788  33.958  75.859  1.00  0.00
H
ATOM   1827  HB3 ASP   110      25.257  33.298  77.387  1.00  0.00
H
ATOM   1828  CG  ASP   110      26.825  34.717  77.570  1.00  0.00
C
ATOM   1829  OD1 ASP   110      27.175  35.725  76.912  1.00  0.00
O
ATOM   1830  OD2 ASP   110      26.836  34.675  78.818  1.00  0.00
O
ATOM   1831  C   ASP   110      27.341  31.551  77.852  1.00  0.00
C
ATOM   1832  O   ASP   110      26.543  30.744  78.352  1.00  0.00
O
ATOM   1833  N   VAL   111      28.549  31.768  78.387  1.00  0.00
N
ATOM   1834  H   VAL   111      29.150  32.497  78.005  1.00  0.00
H
ATOM   1835  CA  VAL   111      29.033  31.013  79.561  1.00  0.00
C
ATOM   1836  HA  VAL   111      28.377  30.159  79.725  1.00  0.00
H
ATOM   1837  CB  VAL   111      30.439  30.416  79.360  1.00  0.00
C
ATOM   1838  HB  VAL   111      31.146  31.219  79.174  1.00  0.00
H
ATOM   1839  CG1 VAL   111      30.906  29.637  80.604  1.00  0.00
C
ATOM   1840 HG11 VAL   111      30.280  28.758  80.759  1.00  0.00
H
ATOM   1841 HG12 VAL   111      31.941  29.337  80.472  1.00  0.00
H
ATOM   1842 HG13 VAL   111      30.864  30.261  81.496  1.00  0.00
H
ATOM   1843  CG2 VAL   111      30.475  29.442  78.173  1.00  0.00
C
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ATOM   1844 HG21 VAL   111      30.124  29.940  77.269  1.00  0.00
H
ATOM   1845 HG22 VAL   111      31.497  29.116  77.995  1.00  0.00
H
ATOM   1846 HG23 VAL   111      29.839  28.580  78.367  1.00  0.00
H
ATOM   1847  C   VAL   111      28.963  31.874  80.819  1.00  0.00
C
ATOM   1848  O   VAL   111      29.659  32.882  80.962  1.00  0.00
O
ATOM   1849  N   GLY   112      28.192  31.404  81.805  1.00  0.00
N
ATOM   1850  H   GLY   112      27.734  30.510  81.665  1.00  0.00
H
ATOM   1851  CA  GLY   112      28.054  32.072  83.099  1.00  0.00
C
ATOM   1852  HA2 GLY   112      27.578  33.038  82.937  1.00  0.00
H
ATOM   1853  HA3 GLY   112      27.413  31.483  83.754  1.00  0.00
H
ATOM   1854  C   GLY   112      29.410  32.283  83.777  1.00  0.00
C
ATOM   1855  O   GLY   112      30.054  31.325  84.207  1.00  0.00
O
ATOM   1856  N   ASP   113      29.831  33.552  83.842  1.00  0.00
N
ATOM   1857  H   ASP   113      29.249  34.237  83.381  1.00  0.00
H
ATOM   1858  CA  ASP   113      31.114  34.011  84.373  1.00  0.00
C
ATOM   1859  HA  ASP   113      31.168  35.075  84.158  1.00  0.00
H
ATOM   1860  CB  ASP   113      31.125  33.881  85.909  1.00  0.00
C
ATOM   1861  HB2 ASP   113      31.040  32.831  86.181  1.00  0.00
H
ATOM   1862  HB3 ASP   113      32.067  34.237  86.306  1.00  0.00
H
ATOM   1863  CG  ASP   113      30.009  34.670  86.600  1.00  0.00
C
ATOM   1864  OD1 ASP   113      29.642  35.767  86.118  1.00  0.00
O
ATOM   1865  OD2 ASP   113      29.548  34.172  87.653  1.00  0.00
O
ATOM   1866  C   ASP   113      32.363  33.423  83.670  1.00  0.00
C
ATOM   1867  O   ASP   113      33.413  33.353  84.289  1.00  0.00
O
ATOM   1868  N   ALA   114      32.273  33.058  82.384  1.00  0.00
N
ATOM   1869  H   ALA   114      31.363  33.154  81.946  1.00  0.00
H
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ATOM   1870  CA  ALA   114      33.276  32.373  81.538  1.00  0.00
C
ATOM   1871  HA  ALA   114      32.944  31.340  81.446  1.00  0.00
H
ATOM   1872  CB  ALA   114      33.221  33.007  80.141  1.00  0.00
C
ATOM   1873  HB1 ALA   114      33.658  34.005  80.142  1.00  0.00
H
ATOM   1874  HB2 ALA   114      33.759  32.381  79.428  1.00  0.00
H
ATOM   1875  HB3 ALA   114      32.184  33.090  79.823  1.00  0.00
H
ATOM   1876  C   ALA   114      34.735  32.294  82.038  1.00  0.00
C
ATOM   1877  O   ALA   114      35.234  31.211  82.348  1.00  0.00
O
ATOM   1878  N   TYR   115      35.436  33.433  82.145  1.00  0.00
N
ATOM   1879  H   TYR   115      34.963  34.287  81.907  1.00  0.00
H
ATOM   1880  CA  TYR   115      36.825  33.502  82.631  1.00  0.00
C
ATOM   1881  HA  TYR   115      37.487  32.946  81.966  1.00  0.00
H
ATOM   1882  CB  TYR   115      37.281  34.969  82.684  1.00  0.00
C
ATOM   1883  HB2 TYR   115      36.478  35.577  83.101  1.00  0.00
H
ATOM   1884  HB3 TYR   115      38.113  35.022  83.380  1.00  0.00
H
ATOM   1885  CG  TYR   115      37.782  35.635  81.418  1.00  0.00
C
ATOM   1886  CD1 TYR   115      37.665  35.037  80.146  1.00  0.00
C
ATOM   1887  HD1 TYR   115      37.191  34.071  80.026  1.00  0.00
H
ATOM   1888  CE1 TYR   115      38.178  35.696  79.015  1.00  0.00
C
ATOM   1889  HE1 TYR   115      38.090  35.229  78.048  1.00  0.00
H
ATOM   1890  CZ  TYR   115      38.779  36.966  79.150  1.00  0.00
C
ATOM   1891  OH  TYR   115      39.240  37.629  78.062  1.00  0.00
O
ATOM   1892  HH  TYR   115      39.071  37.130  77.262  1.00  0.00
H
ATOM   1893  CE2 TYR   115      38.901  37.561  80.419  1.00  0.00
C
ATOM   1894  HE2 TYR   115      39.388  38.516  80.508  1.00  0.00
H
ATOM   1895  CD2 TYR   115      38.420  36.883  81.552  1.00  0.00
C
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ATOM   1896  HD2 TYR   115      38.553  37.305  82.537  1.00  0.00
H
ATOM   1897  C   TYR   115      36.997  32.897  84.034  1.00  0.00
C
ATOM   1898  O   TYR   115      37.939  32.143  84.273  1.00  0.00
O
ATOM   1899  N   PHE   116      36.060  33.155  84.949  1.00  0.00
N
ATOM   1900  H   PHE   116      35.211  33.630  84.660  1.00  0.00
H
ATOM   1901  CA  PHE   116      36.080  32.587  86.292  1.00  0.00
C
ATOM   1902  HA  PHE   116      37.088  32.716  86.661  1.00  0.00
H
ATOM   1903  CB  PHE   116      35.106  33.323  87.220  1.00  0.00
C
ATOM   1904  HB2 PHE   116      34.089  33.127  86.885  1.00  0.00
H
ATOM   1905  HB3 PHE   116      35.206  32.865  88.198  1.00  0.00
H
ATOM   1906  CG  PHE   116      35.279  34.818  87.423  1.00  0.00
C
ATOM   1907  CD1 PHE   116      36.078  35.289  88.481  1.00  0.00
C
ATOM   1908  HD1 PHE   116      36.640  34.591  89.083  1.00  0.00
H
ATOM   1909  CE1 PHE   116      36.107  36.659  88.793  1.00  0.00
C
ATOM   1910  HE1 PHE   116      36.691  37.000  89.635  1.00  0.00
H
ATOM   1911  CZ  PHE   116      35.343  37.571  88.051  1.00  0.00
C
ATOM   1912  HZ  PHE   116      35.346  38.618  88.313  1.00  0.00
H
ATOM   1913  CE2 PHE   116      34.539  37.106  86.999  1.00  0.00
C
ATOM   1914  HE2 PHE   116      33.900  37.788  86.466  1.00  0.00
H
ATOM   1915  CD2 PHE   116      34.516  35.737  86.678  1.00  0.00
C
ATOM   1916  HD2 PHE   116      33.872  35.385  85.885  1.00  0.00
H
ATOM   1917  C   PHE   116      35.803  31.074  86.332  1.00  0.00
C
ATOM   1918  O   PHE   116      35.947  30.465  87.387  1.00  0.00
O
ATOM   1919  N   SER   117      35.446  30.462  85.204  1.00  0.00
N
ATOM   1920  H   SER   117      35.295  31.024  84.376  1.00  0.00
H
ATOM   1921  CA  SER   117      35.270  29.015  85.065  1.00  0.00
C
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ATOM   1922  HA  SER   117      35.139  28.587  86.056  1.00  0.00
H
ATOM   1923  CB  SER   117      33.984  28.701  84.286  1.00  0.00
C
ATOM   1924  HB2 SER   117      34.063  29.093  83.273  1.00  0.00
H
ATOM   1925  HB3 SER   117      33.838  27.620  84.234  1.00  0.00
H
ATOM   1926  OG  SER   117      32.877  29.296  84.950  1.00  0.00
O
ATOM   1927  HG  SER   117      32.133  29.371  84.343  1.00  0.00
H
ATOM   1928  C   SER   117      36.504  28.314  84.485  1.00  0.00
C
ATOM   1929  O   SER   117      36.464  27.106  84.294  1.00  0.00
O
ATOM   1930  N   VAL   118      37.632  29.005  84.252  1.00  0.00
N
ATOM   1931  H   VAL   118      37.635  30.005  84.425  1.00  0.00
H
ATOM   1932  CA  VAL   118      38.906  28.373  83.847  1.00  0.00
C
ATOM   1933  HA  VAL   118      38.736  27.308  83.702  1.00  0.00
H
ATOM   1934  CB  VAL   118      39.405  28.922  82.499  1.00  0.00
C
ATOM   1935  HB  VAL   118      39.546  29.999  82.588  1.00  0.00
H
ATOM   1936  CG1 VAL   118      40.733  28.288  82.055  1.00  0.00
C
ATOM   1937 HG11 VAL   118      40.618  27.211  81.939  1.00  0.00
H
ATOM   1938 HG12 VAL   118      41.044  28.720  81.104  1.00  0.00
H
ATOM   1939 HG13 VAL   118      41.518  28.485  82.786  1.00  0.00
H
ATOM   1940  CG2 VAL   118      38.391  28.645  81.383  1.00  0.00
C
ATOM   1941 HG21 VAL   118      37.462  29.178  81.584  1.00  0.00
H
ATOM   1942 HG22 VAL   118      38.784  28.981  80.424  1.00  0.00
H
ATOM   1943 HG23 VAL   118      38.178  27.577  81.326  1.00  0.00
H
ATOM   1944  C   VAL   118      39.964  28.567  84.946  1.00  0.00
C
ATOM   1945  O   VAL   118      40.229  29.712  85.323  1.00  0.00
O
ATOM   1946  N   PRO   119      40.590  27.491  85.467  1.00  0.00
N
ATOM   1947  CD  PRO   119      40.425  26.095  85.083  1.00  0.00
C
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ATOM   1948  HD2 PRO   119      40.487  25.977  84.004  1.00  0.00
H
ATOM   1949  HD3 PRO   119      39.470  25.727  85.453  1.00  0.00
H
ATOM   1950  CG  PRO   119      41.556  25.322  85.756  1.00  0.00
C
ATOM   1951  HG2 PRO   119      42.446  25.333  85.123  1.00  0.00
H
ATOM   1952  HG3 PRO   119      41.264  24.297  85.994  1.00  0.00
H
ATOM   1953  CB  PRO   119      41.801  26.148  87.016  1.00  0.00
C
ATOM   1954  HB2 PRO   119      42.801  25.988  87.413  1.00  0.00
H
ATOM   1955  HB3 PRO   119      41.058  25.889  87.770  1.00  0.00
H
ATOM   1956  CA  PRO   119      41.571  27.589  86.543  1.00  0.00
C
ATOM   1957  HA  PRO   119      41.146  28.163  87.365  1.00  0.00
H
ATOM   1958  C   PRO   119      42.866  28.280  86.090  1.00  0.00
C
ATOM   1959  O   PRO   119      43.332  28.111  84.962  1.00  0.00
O
ATOM   1960  N   LEU   120      43.470  29.035  87.009  1.00  0.00
N
ATOM   1961  H   LEU   120      43.032  29.098  87.922  1.00  0.00
H
ATOM   1962  CA  LEU   120      44.751  29.724  86.841  1.00  0.00
C
ATOM   1963  HA  LEU   120      44.951  29.836  85.774  1.00  0.00
H
ATOM   1964  CB  LEU   120      44.611  31.120  87.478  1.00  0.00
C
ATOM   1965  HB2 LEU   120      43.767  31.632  87.021  1.00  0.00
H
ATOM   1966  HB3 LEU   120      44.388  30.986  88.536  1.00  0.00
H
ATOM   1967  CG  LEU   120      45.835  32.041  87.367  1.00  0.00
C
ATOM   1968  HG  LEU   120      46.714  31.538  87.766  1.00  0.00
H
ATOM   1969  CD1 LEU   120      46.097  32.469  85.921  1.00  0.00
C
ATOM   1970 HD11 LEU   120      45.225  32.989  85.523  1.00  0.00
H
ATOM   1971 HD12 LEU   120      46.955  33.140  85.885  1.00  0.00
H
ATOM   1972 HD13 LEU   120      46.314  31.601  85.301  1.00  0.00
H
ATOM   1973  CD2 LEU   120      45.587  33.299  88.196  1.00  0.00
C
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ATOM   1974 HD21 LEU   120      45.382  33.029  89.232  1.00  0.00
H
ATOM   1975 HD22 LEU   120      46.474  33.929  88.167  1.00  0.00
H
ATOM   1976 HD23 LEU   120      44.729  33.845  87.801  1.00  0.00
H
ATOM   1977  C   LEU   120      45.894  28.908  87.472  1.00  0.00
C
ATOM   1978  O   LEU   120      45.685  28.265  88.507  1.00  0.00
O
ATOM   1979  N   ASP   121      47.090  28.981  86.870  1.00  0.00
N
ATOM   1980  H   ASP   121      47.157  29.545  86.038  1.00  0.00
H
ATOM   1981  CA  ASP   121      48.360  28.417  87.374  1.00  0.00
C
ATOM   1982  HA  ASP   121      48.347  27.336  87.236  1.00  0.00
H
ATOM   1983  CB  ASP   121      49.532  28.987  86.541  1.00  0.00
C
ATOM   1984  HB2 ASP   121      49.342  28.777  85.488  1.00  0.00
H
ATOM   1985  HB3 ASP   121      49.560  30.071  86.651  1.00  0.00
H
ATOM   1986  CG  ASP   121      50.914  28.416  86.909  1.00  0.00
C
ATOM   1987  OD1 ASP   121      51.163  28.105  88.098  1.00  0.00
O
ATOM   1988  OD2 ASP   121      51.737  28.218  85.988  1.00  0.00
O
ATOM   1989  C   ASP   121      48.555  28.718  88.870  1.00  0.00
C
ATOM   1990  O   ASP   121      48.567  29.881  89.271  1.00  0.00
O
ATOM   1991  N   GLU   122      48.703  27.666  89.686  1.00  0.00
N
ATOM   1992  H   GLU   122      48.806  26.759  89.262  1.00  0.00
H
ATOM   1993  CA  GLU   122      48.706  27.729  91.151  1.00  0.00
C
ATOM   1994  HA  GLU   122      47.774  28.189  91.461  1.00  0.00
H
ATOM   1995  CB  GLU   122      48.719  26.298  91.721  1.00  0.00
C
ATOM   1996  HB2 GLU   122      47.947  25.711  91.218  1.00  0.00
H
ATOM   1997  HB3 GLU   122      49.688  25.839  91.521  1.00  0.00
H
ATOM   1998  CG  GLU   122      48.431  26.282  93.231  1.00  0.00
C
ATOM   1999  HG2 GLU   122      49.248  26.783  93.757  1.00  0.00
H
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ATOM   2000  HG3 GLU   122      47.515  26.847  93.419  1.00  0.00
H
ATOM   2001  CD  GLU   122      48.281  24.859  93.791  1.00  0.00
C
ATOM   2002  OE1 GLU   122      49.319  24.155  93.892  1.00  0.00
O
ATOM   2003  OE2 GLU   122      47.152  24.485  94.179  1.00  0.00
O
ATOM   2004  C   GLU   122      49.842  28.586  91.744  1.00  0.00
C
ATOM   2005  O   GLU   122      49.610  29.281  92.735  1.00  0.00
O
ATOM   2006  N   ASP   123      51.032  28.598  91.132  1.00  0.00
N
ATOM   2007  H   ASP   123      51.135  28.098  90.252  1.00  0.00
H
ATOM   2008  CA  ASP   123      52.148  29.450  91.576  1.00  0.00
C
ATOM   2009  HA  ASP   123      52.236  29.400  92.664  1.00  0.00
H
ATOM   2010  CB  ASP   123      53.467  28.974  90.948  1.00  0.00
C
ATOM   2011  HB2 ASP   123      53.312  28.712  89.900  1.00  0.00
H
ATOM   2012  HB3 ASP   123      54.180  29.801  90.976  1.00  0.00
H
ATOM   2013  CG  ASP   123      54.118  27.818  91.701  1.00  0.00
C
ATOM   2014  OD1 ASP   123      54.614  28.068  92.824  1.00  0.00
O
ATOM   2015  OD2 ASP   123      54.274  26.718  91.122  1.00  0.00
O
ATOM   2016  C   ASP   123      51.928  30.920  91.198  1.00  0.00
C
ATOM   2017  O   ASP   123      52.362  31.828  91.913  1.00  0.00
O
ATOM   2018  N   PHE   124      51.238  31.174  90.079  1.00  0.00
N
ATOM   2019  H   PHE   124      50.890  30.382  89.548  1.00  0.00
H
ATOM   2020  CA  PHE   124      50.980  32.525  89.579  1.00  0.00
C
ATOM   2021  HA  PHE   124      51.889  33.108  89.722  1.00  0.00
H
ATOM   2022  CB  PHE   124      50.699  32.467  88.070  1.00  0.00
C
ATOM   2023  HB2 PHE   124      51.407  31.780  87.602  1.00  0.00
H
ATOM   2024  HB3 PHE   124      49.698  32.066  87.910  1.00  0.00
H
ATOM   2025  CG  PHE   124      50.830  33.816  87.385  1.00  0.00
C
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ATOM   2026  CD1 PHE   124      52.108  34.366  87.170  1.00  0.00
C
ATOM   2027  HD1 PHE   124      52.988  33.812  87.468  1.00  0.00
H
ATOM   2028  CE1 PHE   124      52.241  35.631  86.570  1.00  0.00
C
ATOM   2029  HE1 PHE   124      53.222  36.047  86.405  1.00  0.00
H
ATOM   2030  CZ  PHE   124      51.098  36.348  86.180  1.00  0.00
C
ATOM   2031  HZ  PHE   124      51.201  37.319  85.723  1.00  0.00
H
ATOM   2032  CE2 PHE   124      49.820  35.799  86.385  1.00  0.00
C
ATOM   2033  HE2 PHE   124      48.940  36.346  86.080  1.00  0.00
H
ATOM   2034  CD2 PHE   124      49.687  34.537  86.991  1.00  0.00
C
ATOM   2035  HD2 PHE   124      48.706  34.125  87.165  1.00  0.00
H
ATOM   2036  C   PHE   124      49.855  33.244  90.345  1.00  0.00
C
ATOM   2037  O   PHE   124      49.791  34.478  90.343  1.00  0.00
O
ATOM   2038  N   ARG   125      48.997  32.495  91.059  1.00  0.00
N
ATOM   2039  H   ARG   125      49.112  31.488  90.999  1.00  0.00
H
ATOM   2040  CA  ARG   125      47.877  33.041  91.853  1.00  0.00
C
ATOM   2041  HA  ARG   125      47.180  33.533  91.176  1.00  0.00
H
ATOM   2042  CB  ARG   125      47.115  31.931  92.600  1.00  0.00
C
ATOM   2043  HB2 ARG   125      47.797  31.387  93.257  1.00  0.00
H
ATOM   2044  HB3 ARG   125      46.341  32.392  93.209  1.00  0.00
H
ATOM   2045  CG  ARG   125      46.422  30.954  91.647  1.00  0.00
C
ATOM   2046  HG2 ARG   125      45.681  31.478  91.044  1.00  0.00
H
ATOM   2047  HG3 ARG   125      47.163  30.530  90.991  1.00  0.00
H
ATOM   2048  CD  ARG   125      45.754  29.796  92.380  1.00  0.00
C
ATOM   2049  HD2 ARG   125      46.500  29.291  92.999  1.00  0.00
H
ATOM   2050  HD3 ARG   125      44.966  30.184  93.026  1.00  0.00
H
ATOM   2051  NE  ARG   125      45.203  28.841  91.404  1.00  0.00
N
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ATOM   2052  HE  ARG   125      45.436  28.976  90.427  1.00  0.00
H
ATOM   2053  CZ  ARG   125      44.538  27.737  91.674  1.00  0.00
C
ATOM   2054  NH1 ARG   125      44.255  27.346  92.879  1.00  0.00
N
ATOM   2055 HH11 ARG   125      44.578  27.865  93.672  1.00  0.00
H
ATOM   2056 HH12 ARG   125      43.828  26.429  92.977  1.00  0.00
H
ATOM   2057  NH2 ARG   125      44.146  26.962  90.716  1.00  0.00
N
ATOM   2058 HH21 ARG   125      44.387  27.199  89.765  1.00  0.00
H
ATOM   2059 HH22 ARG   125      43.646  26.119  90.976  1.00  0.00
H
ATOM   2060  C   ARG   125      48.335  34.120  92.833  1.00  0.00
C
ATOM   2061  O   ARG   125      47.643  35.127  92.935  1.00  0.00
O
ATOM   2062  N   LYS   126      49.518  33.977  93.448  1.00  0.00
N
ATOM   2063  H   LYS   126      50.028  33.126  93.253  1.00  0.00
H
ATOM   2064  CA  LYS   126      50.111  34.933  94.412  1.00  0.00
C
ATOM   2065  HA  LYS   126      49.620  34.814  95.381  1.00  0.00
H
ATOM   2066  CB  LYS   126      51.621  34.660  94.566  1.00  0.00
C
ATOM   2067  HB2 LYS   126      52.102  34.879  93.610  1.00  0.00
H
ATOM   2068  HB3 LYS   126      52.027  35.349  95.310  1.00  0.00
H
ATOM   2069  CG  LYS   126      51.989  33.223  94.972  1.00  0.00
C
ATOM   2070  HG2 LYS   126      51.630  33.016  95.981  1.00  0.00
H
ATOM   2071  HG3 LYS   126      51.519  32.522  94.285  1.00  0.00
H
ATOM   2072  CD  LYS   126      53.512  33.038  94.904  1.00  0.00
C
ATOM   2073  HD2 LYS   126      53.883  33.482  93.978  1.00  0.00
H
ATOM   2074  HD3 LYS   126      53.978  33.543  95.751  1.00  0.00
H
ATOM   2075  CE  LYS   126      53.876  31.550  94.900  1.00  0.00
C
ATOM   2076  HE2 LYS   126      53.511  31.080  95.819  1.00  0.00
H
ATOM   2077  HE3 LYS   126      53.365  31.081  94.053  1.00  0.00
H
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ATOM   2078  NZ  LYS   126      55.340  31.365  94.761  1.00  0.00
N
ATOM   2079  HZ1 LYS   126      55.838  31.599  95.616  1.00  0.00
H
ATOM   2080  HZ2 LYS   126      55.582  30.399  94.542  1.00  0.00
H
ATOM   2081  HZ3 LYS   126      55.703  31.921  94.004  1.00  0.00
H
ATOM   2082  C   LYS   126      49.957  36.394  93.971  1.00  0.00
C
ATOM   2083  O   LYS   126      49.606  37.250  94.780  1.00  0.00
O
ATOM   2084  N   TYR   127      50.204  36.665  92.686  1.00  0.00
N
ATOM   2085  H   TYR   127      50.443  35.886  92.086  1.00  0.00
H
ATOM   2086  CA  TYR   127      50.273  38.007  92.104  1.00  0.00
C
ATOM   2087  HA  TYR   127      50.684  38.682  92.857  1.00  0.00
H
ATOM   2088  CB  TYR   127      51.238  37.973  90.910  1.00  0.00
C
ATOM   2089  HB2 TYR   127      50.731  37.505  90.064  1.00  0.00
H
ATOM   2090  HB3 TYR   127      51.480  38.994  90.619  1.00  0.00
H
ATOM   2091  CG  TYR   127      52.532  37.228  91.180  1.00  0.00
C
ATOM   2092  CD1 TYR   127      53.431  37.708  92.152  1.00  0.00
C
ATOM   2093  HD1 TYR   127      53.196  38.603  92.710  1.00  0.00
H
ATOM   2094  CE1 TYR   127      54.615  36.999  92.429  1.00  0.00
C
ATOM   2095  HE1 TYR   127      55.311  37.372  93.164  1.00  0.00
H
ATOM   2096  CZ  TYR   127      54.879  35.781  91.772  1.00  0.00
C
ATOM   2097  OH  TYR   127      55.999  35.077  92.077  1.00  0.00
O
ATOM   2098  HH  TYR   127      56.557  35.553  92.697  1.00  0.00
H
ATOM   2099  CE2 TYR   127      53.966  35.287  90.817  1.00  0.00
C
ATOM   2100  HE2 TYR   127      54.166  34.343  90.333  1.00  0.00
H
ATOM   2101  CD2 TYR   127      52.800  36.016  90.514  1.00  0.00
C
ATOM   2102  HD2 TYR   127      52.094  35.630  89.789  1.00  0.00
H
ATOM   2103  C   TYR   127      48.908  38.575  91.681  1.00  0.00
C
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ATOM   2104  O   TYR   127      48.822  39.749  91.324  1.00  0.00
O
ATOM   2105  N   THR   128      47.839  37.767  91.732  1.00  0.00
N
ATOM   2106  H   THR   128      47.969  36.814  92.057  1.00  0.00
H
ATOM   2107  CA  THR   128      46.460  38.206  91.452  1.00  0.00
C
ATOM   2108  HA  THR   128      46.530  39.021  90.740  1.00  0.00
H
ATOM   2109  CB  THR   128      45.593  37.130  90.785  1.00  0.00
C
ATOM   2110  HB  THR   128      44.692  37.616  90.415  1.00  0.00
H
ATOM   2111  CG2 THR   128      46.269  36.476  89.589  1.00  0.00
C
ATOM   2112 HG21 THR   128      47.092  35.832  89.905  1.00  0.00
H
ATOM   2113 HG22 THR   128      45.526  35.897  89.045  1.00  0.00
H
ATOM   2114 HG23 THR   128      46.654  37.254  88.929  1.00  0.00
H
ATOM   2115  OG1 THR   128      45.203  36.131  91.698  1.00  0.00
O
ATOM   2116  HG1 THR   128      45.650  35.310  91.465  1.00  0.00
H
ATOM   2117  C   THR   128      45.740  38.777  92.676  1.00  0.00
C
ATOM   2118  O   THR   128      44.555  39.105  92.592  1.00  0.00
O
ATOM   2119  N   ALA   129      46.444  38.893  93.804  1.00  0.00
N
ATOM   2120  H   ALA   129      47.404  38.585  93.798  1.00  0.00
H
ATOM   2121  CA  ALA   129      45.927  39.414  95.059  1.00  0.00
C
ATOM   2122  HA  ALA   129      45.148  38.735  95.396  1.00  0.00
H
ATOM   2123  CB  ALA   129      47.056  39.376  96.093  1.00  0.00
C
ATOM   2124  HB1 ALA   129      47.912  39.945  95.731  1.00  0.00
H
ATOM   2125  HB2 ALA   129      46.717  39.809  97.034  1.00  0.00
H
ATOM   2126  HB3 ALA   129      47.360  38.343  96.265  1.00  0.00
H
ATOM   2127  C   ALA   129      45.313  40.819  94.920  1.00  0.00
C
ATOM   2128  O   ALA   129      45.853  41.706  94.247  1.00  0.00
O
ATOM   2129  N   PHE   130      44.169  41.022  95.576  1.00  0.00
N
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ATOM   2130  H   PHE   130      43.773  40.244  96.097  1.00  0.00
H
ATOM   2131  CA  PHE   130      43.457  42.292  95.616  1.00  0.00
C
ATOM   2132  HA  PHE   130      44.193  43.091  95.534  1.00  0.00
H
ATOM   2133  CB  PHE   130      42.491  42.406  94.424  1.00  0.00
C
ATOM   2134  HB2 PHE   130      42.103  43.424  94.424  1.00  0.00
H
ATOM   2135  HB3 PHE   130      43.055  42.283  93.497  1.00  0.00
H
ATOM   2136  CG  PHE   130      41.312  41.436  94.431  1.00  0.00
C
ATOM   2137  CD1 PHE   130      41.436  40.161  93.846  1.00  0.00
C
ATOM   2138  HD1 PHE   130      42.378  39.862  93.411  1.00  0.00
H
ATOM   2139  CE1 PHE   130      40.369  39.243  93.888  1.00  0.00
C
ATOM   2140  HE1 PHE   130      40.495  38.245  93.487  1.00  0.00
H
ATOM   2141  CZ  PHE   130      39.171  39.591  94.531  1.00  0.00
C
ATOM   2142  HZ  PHE   130      38.379  38.859  94.633  1.00  0.00
H
ATOM   2143  CE2 PHE   130      39.046  40.853  95.136  1.00  0.00
C
ATOM   2144  HE2 PHE   130      38.154  41.077  95.699  1.00  0.00
H
ATOM   2145  CD2 PHE   130      40.105  41.780  95.075  1.00  0.00
C
ATOM   2146  HD2 PHE   130      40.022  42.728  95.589  1.00  0.00
H
ATOM   2147  C   PHE   130      42.695  42.480  96.933  1.00  0.00
C
ATOM   2148  O   PHE   130      42.144  41.532  97.490  1.00  0.00
O
ATOM   2149  N   THR   131      42.580  43.725  97.386  1.00  0.00
N
ATOM   2150  H   THR   131      43.195  44.425  96.989  1.00  0.00
H
ATOM   2151  CA  THR   131      41.756  44.107  98.544  1.00  0.00
C
ATOM   2152  HA  THR   131      41.579  43.225  99.162  1.00  0.00
H
ATOM   2153  CB  THR   131      42.515  45.108  99.427  1.00  0.00
C
ATOM   2154  HB  THR   131      42.827  45.969  98.832  1.00  0.00
H
ATOM   2155  CG2 THR   131      41.731  45.578 100.651  1.00  0.00
C
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ATOM   2156 HG21 THR   131      41.357  44.714 101.205  1.00  0.00
H
ATOM   2157 HG22 THR   131      42.386  46.162 101.299  1.00  0.00
H
ATOM   2158 HG23 THR   131      40.893  46.206 100.346  1.00  0.00
H
ATOM   2159  OG1 THR   131      43.653  44.459  99.927  1.00  0.00
O
ATOM   2160  HG1 THR   131      44.209  45.108 100.400  1.00  0.00
H
ATOM   2161  C   THR   131      40.393  44.651  98.112  1.00  0.00
C
ATOM   2162  O   THR   131      40.288  45.462  97.185  1.00  0.00
O
ATOM   2163  N   ILE   132      39.343  44.237  98.822  1.00  0.00
N
ATOM   2164  H   ILE   132      39.503  43.525  99.532  1.00  0.00
H
ATOM   2165  CA  ILE   132      38.022  44.873  98.827  1.00  0.00
C
ATOM   2166  HA  ILE   132      37.930  45.515  97.956  1.00  0.00
H
ATOM   2167  CB  ILE   132      36.912  43.802  98.763  1.00  0.00
C
ATOM   2168  HB  ILE   132      37.036  43.125  99.612  1.00  0.00
H
ATOM   2169  CG2 ILE   132      35.510  44.423  98.873  1.00  0.00
C
ATOM   2170 HG21 ILE   132      35.377  45.238  98.162  1.00  0.00
H
ATOM   2171 HG22 ILE   132      34.752  43.660  98.690  1.00  0.00
H
ATOM   2172 HG23 ILE   132      35.356  44.809  99.881  1.00  0.00
H
ATOM   2173  CG1 ILE   132      36.995  42.953  97.481  1.00  0.00
C
ATOM   2174 HG12 ILE   132      37.907  42.360  97.519  1.00  0.00
H
ATOM   2175 HG13 ILE   132      36.153  42.262  97.472  1.00  0.00
H
ATOM   2176  CD1 ILE   132      36.990  43.754  96.174  1.00  0.00
C
ATOM   2177 HD11 ILE   132      37.934  44.283  96.064  1.00  0.00
H
ATOM   2178 HD12 ILE   132      36.854  43.079  95.331  1.00  0.00
H
ATOM   2179 HD13 ILE   132      36.185  44.482  96.181  1.00  0.00
H
ATOM   2180  C   ILE   132      37.905  45.727 100.096  1.00  0.00
C
ATOM   2181  O   ILE   132      38.105  45.195 101.186  1.00  0.00
O
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ATOM   2182  N   PRO   133      37.601  47.034 100.002  1.00  0.00
N
ATOM   2183  CD  PRO   133      37.416  47.812  98.786  1.00  0.00
C
ATOM   2184  HD2 PRO   133      36.743  47.321  98.082  1.00  0.00
H
ATOM   2185  HD3 PRO   133      38.385  48.011  98.326  1.00  0.00
H
ATOM   2186  CG  PRO   133      36.805  49.131  99.233  1.00  0.00
C
ATOM   2187  HG2 PRO   133      35.724  49.018  99.261  1.00  0.00
H
ATOM   2188  HG3 PRO   133      37.092  49.940  98.562  1.00  0.00
H
ATOM   2189  CB  PRO   133      37.345  49.306 100.656  1.00  0.00
C
ATOM   2190  HB2 PRO   133      36.704  49.946 101.267  1.00  0.00
H
ATOM   2191  HB3 PRO   133      38.361  49.706 100.625  1.00  0.00
H
ATOM   2192  CA  PRO   133      37.368  47.866 101.180  1.00  0.00
C
ATOM   2193  HA  PRO   133      38.185  47.740 101.892  1.00  0.00
H
ATOM   2194  C   PRO   133      36.044  47.509 101.875  1.00  0.00
C
ATOM   2195  O   PRO   133      35.084  47.090 101.230  1.00  0.00
O
ATOM   2196  N   SER   134      35.975  47.750 103.184  1.00  0.00
N
ATOM   2197  H   SER   134      36.811  48.000 103.689  1.00  0.00
H
ATOM   2198  CA  SER   134      34.720  47.733 103.947  1.00  0.00
C
ATOM   2199  HA  SER   134      34.247  46.758 103.834  1.00  0.00
H
ATOM   2200  CB  SER   134      34.990  47.973 105.430  1.00  0.00
C
ATOM   2201  HB2 SER   134      35.391  48.978 105.571  1.00  0.00
H
ATOM   2202  HB3 SER   134      34.055  47.895 105.988  1.00  0.00
H
ATOM   2203  OG  SER   134      35.922  47.063 105.952  1.00  0.00
O
ATOM   2204  HG  SER   134      36.149  47.448 106.830  1.00  0.00
H
ATOM   2205  C   SER   134      33.750  48.823 103.484  1.00  0.00
C
ATOM   2206  O   SER   134      34.184  49.891 103.048  1.00  0.00
O
ATOM   2207  N   ILE   135      32.441  48.599 103.665  1.00  0.00
N
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ATOM   2208  H   ILE   135      32.166  47.699 104.029  1.00  0.00
H
ATOM   2209  CA  ILE   135      31.367  49.484 103.180  1.00  0.00
C
ATOM   2210  HA  ILE   135      31.413  49.500 102.090  1.00  0.00
H
ATOM   2211  CB  ILE   135      29.976  48.930 103.596  1.00  0.00
C
ATOM   2212  HB  ILE   135      29.937  48.860 104.685  1.00  0.00
H
ATOM   2213  CG2 ILE   135      28.850  49.885 103.155  1.00  0.00
C
ATOM   2214 HG21 ILE   135      28.846  49.998 102.069  1.00  0.00
H
ATOM   2215 HG22 ILE   135      27.883  49.506 103.487  1.00  0.00
H
ATOM   2216 HG23 ILE   135      28.971  50.872 103.606  1.00  0.00
H
ATOM   2217  CG1 ILE   135      29.623  47.541 102.997  1.00  0.00
C
ATOM   2218 HG12 ILE   135      28.562  47.355 103.174  1.00  0.00
H
ATOM   2219 HG13 ILE   135      29.784  47.556 101.918  1.00  0.00
H
ATOM   2220  CD1 ILE   135      30.357  46.331 103.586  1.00  0.00
C
ATOM   2221 HD11 ILE   135      30.347  46.374 104.676  1.00  0.00
H
ATOM   2222 HD12 ILE   135      29.847  45.423 103.267  1.00  0.00
H
ATOM   2223 HD13 ILE   135      31.381  46.282 103.221  1.00  0.00
H
ATOM   2224  C   ILE   135      31.571  50.944 103.638  1.00  0.00
C
ATOM   2225  O   ILE   135      31.510  51.845 102.810  1.00  0.00
O
ATOM   2226  N   ASN   136      31.881  51.178 104.923  1.00  0.00
N
ATOM   2227  H   ASN   136      31.950  50.392 105.548  1.00  0.00
H
ATOM   2228  CA  ASN   136      32.144  52.524 105.467  1.00  0.00
C
ATOM   2229  HA  ASN   136      31.821  53.246 104.713  1.00  0.00
H
ATOM   2230  CB  ASN   136      31.245  52.796 106.693  1.00  0.00
C
ATOM   2231  HB2 ASN   136      31.237  53.872 106.871  1.00  0.00
H
ATOM   2232  HB3 ASN   136      30.221  52.492 106.477  1.00  0.00
H
ATOM   2233  CG  ASN   136      31.720  52.129 107.972  1.00  0.00
C
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ATOM   2234  OD1 ASN   136      32.522  52.657 108.713  1.00  0.00
O
ATOM   2235  ND2 ASN   136      31.255  50.940 108.282  1.00  0.00
N
ATOM   2236 HD21 ASN   136      31.597  50.565 109.152  1.00  0.00
H
ATOM   2237 HD22 ASN   136      30.511  50.516 107.764  1.00  0.00
H
ATOM   2238  C   ASN   136      33.644  52.858 105.674  1.00  0.00
C
ATOM   2239  O   ASN   136      33.968  53.882 106.266  1.00  0.00
O
ATOM   2240  N   ASN   137      34.564  52.037 105.140  1.00  0.00
N
ATOM   2241  H   ASN   137      34.233  51.276 104.560  1.00  0.00
H
ATOM   2242  CA  ASN   137      36.016  52.293 105.158  1.00  0.00
C
ATOM   2243  HA  ASN   137      36.484  51.396 104.752  1.00  0.00
H
ATOM   2244  CB  ASN   137      36.317  53.458 104.177  1.00  0.00
C
ATOM   2245  HB2 ASN   137      35.516  53.537 103.441  1.00  0.00
H
ATOM   2246  HB3 ASN   137      36.348  54.403 104.719  1.00  0.00
H
ATOM   2247  CG  ASN   137      37.614  53.294 103.407  1.00  0.00
C
ATOM   2248  OD1 ASN   137      38.649  53.874 103.689  1.00  0.00
O
ATOM   2249  ND2 ASN   137      37.586  52.515 102.351  1.00  0.00
N
ATOM   2250 HD21 ASN   137      38.420  52.511 101.796  1.00  0.00
H
ATOM   2251 HD22 ASN   137      36.713  52.114 102.056  1.00  0.00
H
ATOM   2252  C   ASN   137      36.632  52.462 106.579  1.00  0.00
C
ATOM   2253  O   ASN   137      37.497  53.312 106.790  1.00  0.00
O
ATOM   2254  N   GLU   138      36.175  51.684 107.570  1.00  0.00
N
ATOM   2255  H   GLU   138      35.479  50.986 107.352  1.00  0.00
H
ATOM   2256  CA  GLU   138      36.608  51.779 108.984  1.00  0.00
C
ATOM   2257  HA  GLU   138      36.769  52.829 109.222  1.00  0.00
H
ATOM   2258  CB  GLU   138      35.500  51.276 109.947  1.00  0.00
C
ATOM   2259  HB2 GLU   138      35.950  50.998 110.900  1.00  0.00
H
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ATOM   2260  HB3 GLU   138      34.862  52.132 110.151  1.00  0.00
H
ATOM   2261  CG  GLU   138      34.554  50.142 109.495  1.00  0.00
C
ATOM   2262  HG2 GLU   138      33.771  50.014 110.244  1.00  0.00
H
ATOM   2263  HG3 GLU   138      34.055  50.456 108.579  1.00  0.00
H
ATOM   2264  CD  GLU   138      35.240  48.799 109.231  1.00  0.00
C
ATOM   2265  OE1 GLU   138      35.748  48.644 108.100  1.00  0.00
O
ATOM   2266  OE2 GLU   138      35.282  47.914 110.112  1.00  0.00
O
ATOM   2267  C   GLU   138      37.959  51.096 109.275  1.00  0.00
C
ATOM   2268  O   GLU   138      38.796  51.617 110.020  1.00  0.00
O
ATOM   2269  N   THR   139      38.173  49.932 108.669  1.00  0.00
N
ATOM   2270  H   THR   139      37.407  49.545 108.120  1.00  0.00
H
ATOM   2271  CA  THR   139      39.355  49.080 108.784  1.00  0.00
C
ATOM   2272  HA  THR   139      40.209  49.685 109.090  1.00  0.00
H
ATOM   2273  CB  THR   139      39.128  47.974 109.838  1.00  0.00
C
ATOM   2274  HB  THR   139      40.028  47.365 109.872  1.00  0.00
H
ATOM   2275  CG2 THR   139      38.909  48.517 111.254  1.00  0.00
C
ATOM   2276 HG21 THR   139      37.962  49.049 111.334  1.00  0.00
H
ATOM   2277 HG22 THR   139      38.921  47.691 111.964  1.00  0.00
H
ATOM   2278 HG23 THR   139      39.723  49.199 111.508  1.00  0.00
H
ATOM   2279  OG1 THR   139      38.066  47.108 109.470  1.00  0.00
O
ATOM   2280  HG1 THR   139      37.199  47.523 109.634  1.00  0.00
H
ATOM   2281  C   THR   139      39.671  48.466 107.409  1.00  0.00
C
ATOM   2282  O   THR   139      38.880  48.602 106.469  1.00  0.00
O
ATOM   2283  N   PRO   140      40.824  47.798 107.224  1.00  0.00
N
ATOM   2284  CD  PRO   140      42.009  47.819 108.064  1.00  0.00
C
ATOM   2285  HD2 PRO   140      41.906  47.090 108.868  1.00  0.00
H
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ATOM   2286  HD3 PRO   140      42.202  48.812 108.470  1.00  0.00
H
ATOM   2287  CG  PRO   140      43.153  47.400 107.144  1.00  0.00
C
ATOM   2288  HG2 PRO   140      43.972  46.945 107.699  1.00  0.00
H
ATOM   2289  HG3 PRO   140      43.507  48.259 106.575  1.00  0.00
H
ATOM   2290  CB  PRO   140      42.472  46.404 106.206  1.00  0.00
C
ATOM   2291  HB2 PRO   140      42.422  45.429 106.695  1.00  0.00
H
ATOM   2292  HB3 PRO   140      42.989  46.322 105.250  1.00  0.00
H
ATOM   2293  CA  PRO   140      41.069  46.995 106.032  1.00  0.00
C
ATOM   2294  HA  PRO   140      41.066  47.659 105.167  1.00  0.00
H
ATOM   2295  C   PRO   140      39.998  45.910 105.855  1.00  0.00
C
ATOM   2296  O   PRO   140      39.797  45.067 106.732  1.00  0.00
O
ATOM   2297  N   GLY   141      39.336  45.927 104.699  1.00  0.00
N
ATOM   2298  H   GLY   141      39.534  46.664 104.047  1.00  0.00
H
ATOM   2299  CA  GLY   141      38.430  44.860 104.290  1.00  0.00
C
ATOM   2300  HA2 GLY   141      37.844  44.538 105.148  1.00  0.00
H
ATOM   2301  HA3 GLY   141      37.718  45.231 103.561  1.00  0.00
H
ATOM   2302  C   GLY   141      39.174  43.637 103.742  1.00  0.00
C
ATOM   2303  O   GLY   141      40.387  43.487 103.912  1.00  0.00
O
ATOM   2304  N   ILE   142      38.443  42.725 103.099  1.00  0.00
N
ATOM   2305  H   ILE   142      37.481  42.936 102.877  1.00  0.00
H
ATOM   2306  CA  ILE   142      38.958  41.388 102.779  1.00  0.00
C
ATOM   2307  HA  ILE   142      39.505  41.023 103.651  1.00  0.00
H
ATOM   2308  CB  ILE   142      37.795  40.399 102.543  1.00  0.00
C
ATOM   2309  HB  ILE   142      37.271  40.697 101.635  1.00  0.00
H
ATOM   2310  CG2 ILE   142      38.342  38.977 102.339  1.00  0.00
C
ATOM   2311 HG21 ILE   142      39.021  38.713 103.146  1.00  0.00
H
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ATOM   2312 HG22 ILE   142      37.523  38.257 102.308  1.00  0.00
H
ATOM   2313 HG23 ILE   142      38.877  38.912 101.391  1.00  0.00
H
ATOM   2314  CG1 ILE   142      36.756  40.392 103.691  1.00  0.00
C
ATOM   2315 HG12 ILE   142      36.268  41.366 103.735  1.00  0.00
H
ATOM   2316 HG13 ILE   142      35.979  39.663 103.453  1.00  0.00
H
ATOM   2317  CD1 ILE   142      37.310  40.072 105.089  1.00  0.00
C
ATOM   2318 HD11 ILE   142      38.062  40.805 105.382  1.00  0.00
H
ATOM   2319 HD12 ILE   142      36.497  40.109 105.813  1.00  0.00
H
ATOM   2320 HD13 ILE   142      37.745  39.074 105.108  1.00  0.00
H
ATOM   2321  C   ILE   142      39.958  41.425 101.611  1.00  0.00
C
ATOM   2322  O   ILE   142      39.644  41.882 100.508  1.00  0.00
O
ATOM   2323  N   ARG   143      41.160  40.882 101.852  1.00  0.00
N
ATOM   2324  H   ARG   143      41.328  40.557 102.791  1.00  0.00
H
ATOM   2325  CA  ARG   143      42.116  40.473 100.814  1.00  0.00
C
ATOM   2326  HA  ARG   143      42.105  41.203 100.003  1.00  0.00
H
ATOM   2327  CB  ARG   143      43.549  40.361 101.365  1.00  0.00
C
ATOM   2328  HB2 ARG   143      43.522  40.140 102.434  1.00  0.00
H
ATOM   2329  HB3 ARG   143      44.042  39.530 100.870  1.00  0.00
H
ATOM   2330  CG  ARG   143      44.405  41.604 101.087  1.00  0.00
C
ATOM   2331  HG2 ARG   143      44.372  41.821 100.019  1.00  0.00
H
ATOM   2332  HG3 ARG   143      43.993  42.453 101.633  1.00  0.00
H
ATOM   2333  CD  ARG   143      45.873  41.384 101.490  1.00  0.00
C
ATOM   2334  HD2 ARG   143      46.264  40.509 100.967  1.00  0.00
H
ATOM   2335  HD3 ARG   143      46.457  42.257 101.189  1.00  0.00
H
ATOM   2336  NE  ARG   143      45.991  41.193 102.944  1.00  0.00
N
ATOM   2337  HE  ARG   143      45.131  41.239 103.460  1.00  0.00
H
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ATOM   2338  CZ  ARG   143      47.079  40.956 103.655  1.00  0.00
C
ATOM   2339  NH1 ARG   143      48.274  40.804 103.148  1.00  0.00
N
ATOM   2340 HH11 ARG   143      48.409  40.772 102.149  1.00  0.00
H
ATOM   2341 HH12 ARG   143      49.050  40.464 103.706  1.00  0.00
H
ATOM   2342  NH2 ARG   143      46.948  40.897 104.948  1.00  0.00
N
ATOM   2343 HH21 ARG   143      46.035  40.830 105.358  1.00  0.00
H
ATOM   2344 HH22 ARG   143      47.769  40.741 105.498  1.00  0.00
H
ATOM   2345  C   ARG   143      41.695  39.129 100.223  1.00  0.00
C
ATOM   2346  O   ARG   143      41.488  38.161 100.954  1.00  0.00
O
ATOM   2347  N   TYR   144      41.651  39.077  98.900  1.00  0.00
N
ATOM   2348  H   TYR   144      41.878  39.920  98.386  1.00  0.00
H
ATOM   2349  CA  TYR   144      41.328  37.901  98.102  1.00  0.00
C
ATOM   2350  HA  TYR   144      41.272  37.021  98.741  1.00  0.00
H
ATOM   2351  CB  TYR   144      39.975  38.119  97.423  1.00  0.00
C
ATOM   2352  HB2 TYR   144      40.041  39.065  96.895  1.00  0.00
H
ATOM   2353  HB3 TYR   144      39.820  37.333  96.682  1.00  0.00
H
ATOM   2354  CG  TYR   144      38.748  38.154  98.307  1.00  0.00
C
ATOM   2355  CD1 TYR   144      38.172  36.950  98.754  1.00  0.00
C
ATOM   2356  HD1 TYR   144      38.649  36.002  98.543  1.00  0.00
H
ATOM   2357  CE1 TYR   144      36.952  36.968  99.452  1.00  0.00
C
ATOM   2358  HE1 TYR   144      36.512  36.039  99.785  1.00  0.00
H
ATOM   2359  CZ  TYR   144      36.303  38.195  99.701  1.00  0.00
C
ATOM   2360  OH  TYR   144      35.111  38.220 100.346  1.00  0.00
O
ATOM   2361  HH  TYR   144      34.814  37.330 100.554  1.00  0.00
H
ATOM   2362  CE2 TYR   144      36.888  39.403  99.266  1.00  0.00
C
ATOM   2363  HE2 TYR   144      36.384  40.335  99.470  1.00  0.00
H
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ATOM   2364  CD2 TYR   144      38.118  39.383  98.583  1.00  0.00
C
ATOM   2365  HD2 TYR   144      38.580  40.305  98.263  1.00  0.00
H
ATOM   2366  C   TYR   144      42.391  37.664  97.023  1.00  0.00
C
ATOM   2367  O   TYR   144      43.143  38.567  96.660  1.00  0.00
O
ATOM   2368  N   GLN   145      42.400  36.458  96.462  1.00  0.00
N
ATOM   2369  H   GLN   145      41.788  35.763  96.881  1.00  0.00
H
ATOM   2370  CA  GLN   145      43.262  35.992  95.381  1.00  0.00
C
ATOM   2371  HA  GLN   145      43.776  36.821  94.886  1.00  0.00
H
ATOM   2372  CB  GLN   145      44.291  35.065  96.034  1.00  0.00
C
ATOM   2373  HB2 GLN   145      44.858  35.657  96.749  1.00  0.00
H
ATOM   2374  HB3 GLN   145      43.773  34.263  96.569  1.00  0.00
H
ATOM   2375  CG  GLN   145      45.285  34.445  95.061  1.00  0.00
C
ATOM   2376  HG2 GLN   145      44.758  33.931  94.260  1.00  0.00
H
ATOM   2377  HG3 GLN   145      45.892  35.240  94.639  1.00  0.00
H
ATOM   2378  CD  GLN   145      46.185  33.447  95.779  1.00  0.00
C
ATOM   2379  OE1 GLN   145      47.259  33.778  96.250  1.00  0.00
O
ATOM   2380  NE2 GLN   145      45.771  32.204  95.905  1.00  0.00
N
ATOM   2381 HE21 GLN   145      46.400  31.574  96.376  1.00  0.00
H
ATOM   2382 HE22 GLN   145      44.883  31.903  95.532  1.00  0.00
H
ATOM   2383  C   GLN   145      42.410  35.253  94.344  1.00  0.00
C
ATOM   2384  O   GLN   145      41.536  34.474  94.711  1.00  0.00
O
ATOM   2385  N   TYR   146      42.664  35.459  93.053  1.00  0.00
N
ATOM   2386  H   TYR   146      43.458  36.032  92.787  1.00  0.00
H
ATOM   2387  CA  TYR   146      42.008  34.668  92.011  1.00  0.00
C
ATOM   2388  HA  TYR   146      40.956  34.541  92.270  1.00  0.00
H
ATOM   2389  CB  TYR   146      42.094  35.356  90.641  1.00  0.00
C
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ATOM   2390  HB2 TYR   146      43.103  35.716  90.463  1.00  0.00
H
ATOM   2391  HB3 TYR   146      41.927  34.584  89.896  1.00  0.00
H
ATOM   2392  CG  TYR   146      41.132  36.490  90.346  1.00  0.00
C
ATOM   2393  CD1 TYR   146      41.372  37.783  90.847  1.00  0.00
C
ATOM   2394  HD1 TYR   146      42.188  37.951  91.538  1.00  0.00
H
ATOM   2395  CE1 TYR   146      40.583  38.871  90.418  1.00  0.00
C
ATOM   2396  HE1 TYR   146      40.784  39.856  90.803  1.00  0.00
H
ATOM   2397  CZ  TYR   146      39.557  38.667  89.468  1.00  0.00
C
ATOM   2398  OH  TYR   146      38.837  39.724  88.994  1.00  0.00
O
ATOM   2399  HH  TYR   146      39.314  40.546  89.115  1.00  0.00
H
ATOM   2400  CE2 TYR   146      39.305  37.368  88.983  1.00  0.00
C
ATOM   2401  HE2 TYR   146      38.565  37.206  88.216  1.00  0.00
H
ATOM   2402  CD2 TYR   146      40.081  36.283  89.433  1.00  0.00
C
ATOM   2403  HD2 TYR   146      39.917  35.295  89.022  1.00  0.00
H
ATOM   2404  C   TYR   146      42.636  33.272  91.910  1.00  0.00
C
ATOM   2405  O   TYR   146      43.848  33.133  91.747  1.00  0.00
O
ATOM   2406  N   ASN   147      41.789  32.240  91.907  1.00  0.00
N
ATOM   2407  H   ASN   147      40.805  32.423  92.070  1.00  0.00
H
ATOM   2408  CA  ASN   147      42.172  30.866  91.558  1.00  0.00
C
ATOM   2409  HA  ASN   147      43.232  30.738  91.762  1.00  0.00
H
ATOM   2410  CB  ASN   147      41.384  29.886  92.444  1.00  0.00
C
ATOM   2411  HB2 ASN   147      40.314  30.045  92.298  1.00  0.00
H
ATOM   2412  HB3 ASN   147      41.621  28.865  92.142  1.00  0.00
H
ATOM   2413  CG  ASN   147      41.714  29.999  93.921  1.00  0.00
C
ATOM   2414  OD1 ASN   147      42.811  30.368  94.320  1.00  0.00
O
ATOM   2415  ND2 ASN   147      40.770  29.664  94.761  1.00  0.00
N
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ATOM   2416 HD21 ASN   147      40.940  29.811  95.750  1.00  0.00
H
ATOM   2417 HD22 ASN   147      39.857  29.377  94.427  1.00  0.00
H
ATOM   2418  C   ASN   147      41.971  30.558  90.061  1.00  0.00
C
ATOM   2419  O   ASN   147      42.265  29.457  89.594  1.00  0.00
O
ATOM   2420  N   VAL   148      41.450  31.534  89.317  1.00  0.00
N
ATOM   2421  H   VAL   148      41.307  32.420  89.775  1.00  0.00
H
ATOM   2422  CA  VAL   148      40.875  31.429  87.968  1.00  0.00
C
ATOM   2423  HA  VAL   148      41.247  30.533  87.474  1.00  0.00
H
ATOM   2424  CB  VAL   148      39.337  31.338  88.055  1.00  0.00
C
ATOM   2425  HB  VAL   148      38.935  31.190  87.055  1.00  0.00
H
ATOM   2426  CG1 VAL   148      38.920  30.134  88.904  1.00  0.00
C
ATOM   2427 HG11 VAL   148      39.193  30.275  89.947  1.00  0.00
H
ATOM   2428 HG12 VAL   148      37.844  30.000  88.852  1.00  0.00
H
ATOM   2429 HG13 VAL   148      39.406  29.241  88.520  1.00  0.00
H
ATOM   2430  CG2 VAL   148      38.704  32.613  88.630  1.00  0.00
C
ATOM   2431 HG21 VAL   148      38.787  33.423  87.906  1.00  0.00
H
ATOM   2432 HG22 VAL   148      37.652  32.428  88.839  1.00  0.00
H
ATOM   2433 HG23 VAL   148      39.197  32.915  89.547  1.00  0.00
H
ATOM   2434  C   VAL   148      41.290  32.628  87.113  1.00  0.00
C
ATOM   2435  O   VAL   148      41.806  33.610  87.646  1.00  0.00
O
ATOM   2436  N   LEU   149      41.078  32.566  85.800  1.00  0.00
N
ATOM   2437  H   LEU   149      40.623  31.736  85.428  1.00  0.00
H
ATOM   2438  CA  LEU   149      41.442  33.649  84.876  1.00  0.00
C
ATOM   2439  HA  LEU   149      42.523  33.762  84.901  1.00  0.00
H
ATOM   2440  CB  LEU   149      41.044  33.250  83.444  1.00  0.00
C
ATOM   2441  HB2 LEU   149      40.210  32.550  83.474  1.00  0.00
H
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ATOM   2442  HB3 LEU   149      40.700  34.143  82.918  1.00  0.00
H
ATOM   2443  CG  LEU   149      42.176  32.637  82.613  1.00  0.00
C
ATOM   2444  HG  LEU   149      42.938  33.398  82.448  1.00  0.00
H
ATOM   2445  CD1 LEU   149      42.845  31.433  83.276  1.00  0.00
C
ATOM   2446 HD11 LEU   149      42.097  30.691  83.545  1.00  0.00
H
ATOM   2447 HD12 LEU   149      43.564  30.989  82.593  1.00  0.00
H
ATOM   2448 HD13 LEU   149      43.375  31.741  84.175  1.00  0.00
H
ATOM   2449  CD2 LEU   149      41.567  32.213  81.276  1.00  0.00
C
ATOM   2450 HD21 LEU   149      41.055  33.060  80.823  1.00  0.00
H
ATOM   2451 HD22 LEU   149      42.332  31.870  80.596  1.00  0.00
H
ATOM   2452 HD23 LEU   149      40.853  31.409  81.431  1.00  0.00
H
ATOM   2453  C   LEU   149      40.789  34.993  85.279  1.00  0.00
C
ATOM   2454  O   LEU   149      39.561  35.087  85.340  1.00  0.00
O
ATOM   2455  N   PRO   150      41.570  36.064  85.527  1.00  0.00
N
ATOM   2456  CD  PRO   150      43.007  36.051  85.780  1.00  0.00
C
ATOM   2457  HD2 PRO   150      43.556  35.841  84.866  1.00  0.00
H
ATOM   2458  HD3 PRO   150      43.239  35.294  86.528  1.00  0.00
H
ATOM   2459  CG  PRO   150      43.371  37.435  86.330  1.00  0.00
C
ATOM   2460  HG2 PRO   150      43.745  38.071  85.530  1.00  0.00
H
ATOM   2461  HG3 PRO   150      44.102  37.371  87.137  1.00  0.00
H
ATOM   2462  CB  PRO   150      42.035  37.971  86.842  1.00  0.00
C
ATOM   2463  HB2 PRO   150      41.966  39.054  86.810  1.00  0.00
H
ATOM   2464  HB3 PRO   150      41.876  37.602  87.851  1.00  0.00
H
ATOM   2465  CA  PRO   150      41.011  37.358  85.900  1.00  0.00
C
ATOM   2466  HA  PRO   150      40.075  37.218  86.442  1.00  0.00
H
ATOM   2467  C   PRO   150      40.742  38.269  84.694  1.00  0.00
C
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ATOM   2468  O   PRO   150      41.515  38.321  83.735  1.00  0.00
O
ATOM   2469  N   GLN   151      39.673  39.064  84.758  1.00  0.00
N
ATOM   2470  H   GLN   151      39.093  39.018  85.581  1.00  0.00
H
ATOM   2471  CA  GLN   151      39.390  40.094  83.748  1.00  0.00
C
ATOM   2472  HA  GLN   151      39.507  39.649  82.758  1.00  0.00
H
ATOM   2473  CB  GLN   151      37.937  40.585  83.882  1.00  0.00
C
ATOM   2474  HB2 GLN   151      37.769  40.924  84.904  1.00  0.00
H
ATOM   2475  HB3 GLN   151      37.798  41.437  83.216  1.00  0.00
H
ATOM   2476  CG  GLN   151      36.891  39.514  83.525  1.00  0.00
C
ATOM   2477  HG2 GLN   151      36.983  39.234  82.476  1.00  0.00
H
ATOM   2478  HG3 GLN   151      37.076  38.621  84.124  1.00  0.00
H
ATOM   2479  CD  GLN   151      35.462  39.985  83.791  1.00  0.00
C
ATOM   2480  OE1 GLN   151      34.760  40.531  82.948  1.00  0.00
O
ATOM   2481  NE2 GLN   151      34.978  39.799  84.996  1.00  0.00
N
ATOM   2482 HE21 GLN   151      34.054  40.132  85.168  1.00  0.00
H
ATOM   2483 HE22 GLN   151      35.542  39.377  85.712  1.00  0.00
H
ATOM   2484  C   GLN   151      40.387  41.269  83.867  1.00  0.00
C
ATOM   2485  O   GLN   151      40.591  41.787  84.968  1.00  0.00
O
ATOM   2486  N   GLY   152      40.972  41.707  82.739  1.00  0.00
N
ATOM   2487  H   GLY   152      40.718  41.262  81.868  1.00  0.00
H
ATOM   2488  CA  GLY   152      41.955  42.802  82.670  1.00  0.00
C
ATOM   2489  HA2 GLY   152      41.735  43.401  81.790  1.00  0.00
H
ATOM   2490  HA3 GLY   152      41.846  43.448  83.539  1.00  0.00
H
ATOM   2491  C   GLY   152      43.430  42.389  82.552  1.00  0.00
C
ATOM   2492  O   GLY   152      44.311  43.232  82.684  1.00  0.00
O
ATOM   2493  N   TRP   153      43.716  41.114  82.293  1.00  0.00
N
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ATOM   2494  H   TRP   153      42.958  40.468  82.143  1.00  0.00
H
ATOM   2495  CA  TRP   153      45.084  40.569  82.232  1.00  0.00
C
ATOM   2496  HA  TRP   153      45.796  41.377  82.394  1.00  0.00
H
ATOM   2497  CB  TRP   153      45.238  39.568  83.387  1.00  0.00
C
ATOM   2498  HB2 TRP   153      45.141  40.105  84.332  1.00  0.00
H
ATOM   2499  HB3 TRP   153      44.418  38.849  83.336  1.00  0.00
H
ATOM   2500  CG  TRP   153      46.520  38.791  83.401  1.00  0.00
C
ATOM   2501  CD1 TRP   153      47.763  39.294  83.577  1.00  0.00
C
ATOM   2502  HD1 TRP   153      47.986  40.336  83.775  1.00  0.00
H
ATOM   2503  NE1 TRP   153      48.701  38.285  83.459  1.00  0.00
N
ATOM   2504  HE1 TRP   153      49.697  38.426  83.620  1.00  0.00
H
ATOM   2505  CE2 TRP   153      48.099  37.068  83.209  1.00  0.00
C
ATOM   2506  CZ2 TRP   153      48.584  35.768  83.016  1.00  0.00
C
ATOM   2507  HZ2 TRP   153      49.645  35.593  83.002  1.00  0.00
H
ATOM   2508  CH2 TRP   153      47.675  34.704  82.880  1.00  0.00
C
ATOM   2509  HH2 TRP   153      48.022  33.689  82.784  1.00  0.00
H
ATOM   2510  CZ3 TRP   153      46.297  34.955  82.897  1.00  0.00
C
ATOM   2511  HZ3 TRP   153      45.595  34.137  82.795  1.00  0.00
H
ATOM   2512  CE3 TRP   153      45.827  36.269  83.060  1.00  0.00
C
ATOM   2513  HE3 TRP   153      44.772  36.454  83.102  1.00  0.00
H
ATOM   2514  CD2 TRP   153      46.705  37.356  83.216  1.00  0.00
C
ATOM   2515  C   TRP   153      45.423  39.938  80.866  1.00  0.00
C
ATOM   2516  O   TRP   153      44.576  39.261  80.283  1.00  0.00
O
ATOM   2517  N   LYS   154      46.666  40.125  80.376  1.00  0.00
N
ATOM   2518  H   LYS   154      47.278  40.706  80.941  1.00  0.00
H
ATOM   2519  CA  LYS   154      47.165  39.690  79.048  1.00  0.00
C
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ATOM   2520  HA  LYS   154      46.707  40.305  78.270  1.00  0.00
H
ATOM   2521  CB  LYS   154      48.701  39.834  78.972  1.00  0.00
C
ATOM   2522  HB2 LYS   154      49.137  39.380  79.866  1.00  0.00
H
ATOM   2523  HB3 LYS   154      49.056  39.271  78.105  1.00  0.00
H
ATOM   2524  CG  LYS   154      49.212  41.276  78.822  1.00  0.00
C
ATOM   2525  HG2 LYS   154      48.987  41.641  77.817  1.00  0.00
H
ATOM   2526  HG3 LYS   154      48.692  41.912  79.535  1.00  0.00
H
ATOM   2527  CD  LYS   154      50.725  41.381  79.087  1.00  0.00
C
ATOM   2528  HD2 LYS   154      50.991  42.438  79.096  1.00  0.00
H
ATOM   2529  HD3 LYS   154      50.930  40.963  80.072  1.00  0.00
H
ATOM   2530  CE  LYS   154      51.602  40.673  78.045  1.00  0.00
C
ATOM   2531  HE2 LYS   154      51.311  39.622  77.972  1.00  0.00
H
ATOM   2532  HE3 LYS   154      51.428  41.144  77.073  1.00  0.00
H
ATOM   2533  NZ  LYS   154      53.046  40.769  78.381  1.00  0.00
N
ATOM   2534  HZ1 LYS   154      53.305  40.152  79.147  1.00  0.00
H
ATOM   2535  HZ2 LYS   154      53.608  40.518  77.576  1.00  0.00
H
ATOM   2536  HZ3 LYS   154      53.312  41.720  78.618  1.00  0.00
H
ATOM   2537  C   LYS   154      46.833  38.236  78.701  1.00  0.00
C
ATOM   2538  O   LYS   154      46.456  37.960  77.570  1.00  0.00
O
ATOM   2539  N   GLY   155      46.998  37.315  79.653  1.00  0.00
N
ATOM   2540  H   GLY   155      47.290  37.617  80.570  1.00  0.00
H
ATOM   2541  CA  GLY   155      46.781  35.891  79.405  1.00  0.00
C
ATOM   2542  HA2 GLY   155      47.345  35.584  78.521  1.00  0.00
H
ATOM   2543  HA3 GLY   155      47.164  35.317  80.247  1.00  0.00
H
ATOM   2544  C   GLY   155      45.302  35.544  79.200  1.00  0.00
C
ATOM   2545  O   GLY   155      44.976  34.823  78.266  1.00  0.00
O
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ATOM   2546  N   SER   156      44.396  36.070  80.031  1.00  0.00
N
ATOM   2547  H   SER   156      44.709  36.736  80.723  1.00  0.00
H
ATOM   2548  CA  SER   156      42.989  35.648  80.090  1.00  0.00
C
ATOM   2549  HA  SER   156      42.966  34.675  80.578  1.00  0.00
H
ATOM   2550  CB  SER   156      42.174  36.586  80.971  1.00  0.00
C
ATOM   2551  HB2 SER   156      42.365  37.621  80.691  1.00  0.00
H
ATOM   2552  HB3 SER   156      41.117  36.362  80.852  1.00  0.00
H
ATOM   2553  OG  SER   156      42.524  36.360  82.317  1.00  0.00
O
ATOM   2554  HG  SER   156      42.135  37.073  82.863  1.00  0.00
H
ATOM   2555  C   SER   156      42.265  35.473  78.743  1.00  0.00
C
ATOM   2556  O   SER   156      41.640  34.423  78.587  1.00  0.00
O
ATOM   2557  N   PRO   157      42.325  36.391  77.748  1.00  0.00
N
ATOM   2558  CD  PRO   157      42.955  37.708  77.761  1.00  0.00
C
ATOM   2559  HD2 PRO   157      43.953  37.700  78.185  1.00  0.00
H
ATOM   2560  HD3 PRO   157      42.331  38.403  78.321  1.00  0.00
H
ATOM   2561  CG  PRO   157      43.047  38.150  76.298  1.00  0.00
C
ATOM   2562  HG2 PRO   157      43.960  37.760  75.843  1.00  0.00
H
ATOM   2563  HG3 PRO   157      43.006  39.236  76.186  1.00  0.00
H
ATOM   2564  CB  PRO   157      41.833  37.475  75.661  1.00  0.00
C
ATOM   2565  HB2 PRO   157      41.984  37.317  74.590  1.00  0.00
H
ATOM   2566  HB3 PRO   157      40.952  38.099  75.828  1.00  0.00
H
ATOM   2567  CA  PRO   157      41.684  36.161  76.449  1.00  0.00
C
ATOM   2568  HA  PRO   157      40.624  35.957  76.592  1.00  0.00
H
ATOM   2569  C   PRO   157      42.268  34.943  75.728  1.00  0.00
C
ATOM   2570  O   PRO   157      41.528  34.000  75.437  1.00  0.00
O
ATOM   2571  N   ALA   158      43.583  34.918  75.505  1.00  0.00
N
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ATOM   2572  H   ALA   158      44.137  35.715  75.784  1.00  0.00
H
ATOM   2573  CA  ALA   158      44.237  33.855  74.750  1.00  0.00
C
ATOM   2574  HA  ALA   158      43.702  33.756  73.806  1.00  0.00
H
ATOM   2575  CB  ALA   158      45.681  34.293  74.463  1.00  0.00
C
ATOM   2576  HB1 ALA   158      46.232  34.424  75.397  1.00  0.00
H
ATOM   2577  HB2 ALA   158      46.183  33.544  73.854  1.00  0.00
H
ATOM   2578  HB3 ALA   158      45.674  35.242  73.925  1.00  0.00
H
ATOM   2579  C   ALA   158      44.175  32.491  75.464  1.00  0.00
C
ATOM   2580  O   ALA   158      43.912  31.466  74.830  1.00  0.00
O
ATOM   2581  N   ILE   159      44.352  32.477  76.792  1.00  0.00
N
ATOM   2582  H   ILE   159      44.537  33.368  77.243  1.00  0.00
H
ATOM   2583  CA  ILE   159      44.251  31.270  77.623  1.00  0.00
C
ATOM   2584  HA  ILE   159      44.876  30.500  77.174  1.00  0.00
H
ATOM   2585  CB  ILE   159      44.763  31.519  79.064  1.00  0.00
C
ATOM   2586  HB  ILE   159      44.164  32.319  79.498  1.00  0.00
H
ATOM   2587  CG2 ILE   159      44.575  30.249  79.928  1.00  0.00
C
ATOM   2588 HG21 ILE   159      45.002  29.381  79.430  1.00  0.00
H
ATOM   2589 HG22 ILE   159      45.055  30.368  80.899  1.00  0.00
H
ATOM   2590 HG23 ILE   159      43.519  30.043  80.101  1.00  0.00
H
ATOM   2591  CG1 ILE   159      46.241  31.975  79.159  1.00  0.00
C
ATOM   2592 HG12 ILE   159      46.362  32.964  78.736  1.00  0.00
H
ATOM   2593 HG13 ILE   159      46.513  32.055  80.212  1.00  0.00
H
ATOM   2594  CD1 ILE   159      47.248  31.069  78.454  1.00  0.00
C
ATOM   2595 HD11 ILE   159      47.174  31.186  77.373  1.00  0.00
H
ATOM   2596 HD12 ILE   159      48.258  31.322  78.773  1.00  0.00
H
ATOM   2597 HD13 ILE   159      47.041  30.041  78.717  1.00  0.00
H
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ATOM   2598  C   ILE   159      42.816  30.726  77.626  1.00  0.00
C
ATOM   2599  O   ILE   159      42.638  29.513  77.484  1.00  0.00
O
ATOM   2600  N   PHE   160      41.791  31.585  77.745  1.00  0.00
N
ATOM   2601  H   PHE   160      41.963  32.578  77.872  1.00  0.00
H
ATOM   2602  CA  PHE   160      40.398  31.135  77.673  1.00  0.00
C
ATOM   2603  HA  PHE   160      40.256  30.332  78.399  1.00  0.00
H
ATOM   2604  CB  PHE   160      39.418  32.264  78.034  1.00  0.00
C
ATOM   2605  HB2 PHE   160      39.651  32.638  79.029  1.00  0.00
H
ATOM   2606  HB3 PHE   160      39.543  33.087  77.329  1.00  0.00
H
ATOM   2607  CG  PHE   160      37.975  31.790  78.016  1.00  0.00
C
ATOM   2608  CD1 PHE   160      37.402  31.229  79.174  1.00  0.00
C
ATOM   2609  HD1 PHE   160      37.955  31.216  80.101  1.00  0.00
H
ATOM   2610  CE1 PHE   160      36.129  30.635  79.120  1.00  0.00
C
ATOM   2611  HE1 PHE   160      35.703  30.174  80.000  1.00  0.00
H
ATOM   2612  CZ  PHE   160      35.419  30.607  77.910  1.00  0.00
C
ATOM   2613  HZ  PHE   160      34.449  30.132  77.856  1.00  0.00
H
ATOM   2614  CE2 PHE   160      35.972  31.193  76.762  1.00  0.00
C
ATOM   2615  HE2 PHE   160      35.424  31.155  75.833  1.00  0.00
H
ATOM   2616  CD2 PHE   160      37.241  31.793  76.815  1.00  0.00
C
ATOM   2617  HD2 PHE   160      37.667  32.208  75.914  1.00  0.00
H
ATOM   2618  C   PHE   160      40.081  30.556  76.289  1.00  0.00
C
ATOM   2619  O   PHE   160      39.613  29.428  76.194  1.00  0.00
O
ATOM   2620  N   GLN   161      40.377  31.284  75.210  1.00  0.00
N
ATOM   2621  H   GLN   161      40.792  32.202  75.346  1.00  0.00
H
ATOM   2622  CA  GLN   161      40.035  30.884  73.836  1.00  0.00
C
ATOM   2623  HA  GLN   161      38.959  30.709  73.753  1.00  0.00
H
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ATOM   2624  CB  GLN   161      40.415  32.056  72.920  1.00  0.00
C
ATOM   2625  HB2 GLN   161      41.469  32.294  73.096  1.00  0.00
H
ATOM   2626  HB3 GLN   161      40.308  31.742  71.880  1.00  0.00
H
ATOM   2627  CG  GLN   161      39.538  33.302  73.120  1.00  0.00
C
ATOM   2628  HG2 GLN   161      38.628  33.159  72.551  1.00  0.00
H
ATOM   2629  HG3 GLN   161      39.244  33.420  74.159  1.00  0.00
H
ATOM   2630  CD  GLN   161      40.215  34.586  72.666  1.00  0.00
C
ATOM   2631  OE1 GLN   161      41.320  34.627  72.149  1.00  0.00
O
ATOM   2632  NE2 GLN   161      39.559  35.715  72.836  1.00  0.00
N
ATOM   2633 HE21 GLN   161      40.049  36.545  72.573  1.00  0.00
H
ATOM   2634 HE22 GLN   161      38.634  35.732  73.223  1.00  0.00
H
ATOM   2635  C   GLN   161      40.748  29.586  73.399  1.00  0.00
C
ATOM   2636  O   GLN   161      40.158  28.726  72.732  1.00  0.00
O
ATOM   2637  N   SER   162      42.008  29.416  73.818  1.00  0.00
N
ATOM   2638  H   SER   162      42.443  30.171  74.339  1.00  0.00
H
ATOM   2639  CA  SER   162      42.776  28.182  73.620  1.00  0.00
C
ATOM   2640  HA  SER   162      42.784  27.939  72.556  1.00  0.00
H
ATOM   2641  CB  SER   162      44.223  28.433  74.056  1.00  0.00
C
ATOM   2642  HB2 SER   162      44.636  29.253  73.464  1.00  0.00
H
ATOM   2643  HB3 SER   162      44.245  28.717  75.109  1.00  0.00
H
ATOM   2644  OG  SER   162      45.009  27.276  73.860  1.00  0.00
O
ATOM   2645  HG  SER   162      45.936  27.520  73.947  1.00  0.00
H
ATOM   2646  C   SER   162      42.146  26.999  74.378  1.00  0.00
C
ATOM   2647  O   SER   162      41.866  25.959  73.781  1.00  0.00
O
ATOM   2648  N   SER   163      41.824  27.170  75.667  1.00  0.00
N
ATOM   2649  H   SER   163      42.063  28.045  76.120  1.00  0.00
H
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ATOM   2650  CA  SER   163      41.174  26.122  76.469  1.00  0.00
C
ATOM   2651  HA  SER   163      41.755  25.215  76.352  1.00  0.00
H
ATOM   2652  CB  SER   163      41.188  26.491  77.955  1.00  0.00
C
ATOM   2653  HB2 SER   163      40.792  27.496  78.103  1.00  0.00
H
ATOM   2654  HB3 SER   163      40.580  25.788  78.524  1.00  0.00
H
ATOM   2655  OG  SER   163      42.521  26.430  78.422  1.00  0.00
O
ATOM   2656  HG  SER   163      42.739  27.304  78.766  1.00  0.00
H
ATOM   2657  C   SER   163      39.761  25.785  75.985  1.00  0.00
C
ATOM   2658  O   SER   163      39.427  24.610  75.872  1.00  0.00
O
ATOM   2659  N   MET   164      38.962  26.784  75.610  1.00  0.00
N
ATOM   2660  H   MET   164      39.312  27.731  75.703  1.00  0.00
H
ATOM   2661  CA  MET   164      37.614  26.618  75.061  1.00  0.00
C
ATOM   2662  HA  MET   164      37.012  26.079  75.790  1.00  0.00
H
ATOM   2663  CB  MET   164      36.988  28.010  74.841  1.00  0.00
C
ATOM   2664  HB2 MET   164      37.100  28.603  75.750  1.00  0.00
H
ATOM   2665  HB3 MET   164      37.509  28.527  74.035  1.00  0.00
H
ATOM   2666  CG  MET   164      35.496  27.927  74.508  1.00  0.00
C
ATOM   2667  HG2 MET   164      35.111  28.930  74.323  1.00  0.00
H
ATOM   2668  HG3 MET   164      35.372  27.347  73.593  1.00  0.00
H
ATOM   2669  SD  MET   164      34.493  27.177  75.815  1.00  0.00
S
ATOM   2670  CE  MET   164      32.914  27.159  74.946  1.00  0.00
C
ATOM   2671  HE1 MET   164      32.991  26.521  74.065  1.00  0.00
H
ATOM   2672  HE2 MET   164      32.155  26.768  75.620  1.00  0.00
H
ATOM   2673  HE3 MET   164      32.640  28.170  74.637  1.00  0.00
H
ATOM   2674  C   MET   164      37.643  25.773  73.777  1.00  0.00
C
ATOM   2675  O   MET   164      36.856  24.840  73.622  1.00  0.00
O
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ATOM   2676  N   THR   165      38.647  25.992  72.922  1.00  0.00
N
ATOM   2677  H   THR   165      39.264  26.777  73.100  1.00  0.00
H
ATOM   2678  CA  THR   165      38.882  25.149  71.740  1.00  0.00
C
ATOM   2679  HA  THR   165      37.965  25.134  71.153  1.00  0.00
H
ATOM   2680  CB  THR   165      39.997  25.727  70.857  1.00  0.00
C
ATOM   2681  HB  THR   165      40.931  25.794  71.416  1.00  0.00
H
ATOM   2682  CG2 THR   165      40.221  24.925  69.576  1.00  0.00
C
ATOM   2683 HG21 THR   165      39.274  24.796  69.053  1.00  0.00
H
ATOM   2684 HG22 THR   165      40.920  25.459  68.933  1.00  0.00
H
ATOM   2685 HG23 THR   165      40.640  23.944  69.808  1.00  0.00
H
ATOM   2686  OG1 THR   165      39.616  27.020  70.445  1.00  0.00
O
ATOM   2687  HG1 THR   165      39.728  27.615  71.201  1.00  0.00
H
ATOM   2688  C   THR   165      39.183  23.696  72.114  1.00  0.00
C
ATOM   2689  O   THR   165      38.588  22.788  71.530  1.00  0.00
O
ATOM   2690  N   LYS   166      40.031  23.454  73.129  1.00  0.00
N
ATOM   2691  H   LYS   166      40.474  24.247  73.580  1.00  0.00
H
ATOM   2692  CA  LYS   166      40.293  22.097  73.656  1.00  0.00
C
ATOM   2693  HA  LYS   166      40.624  21.456  72.833  1.00  0.00
H
ATOM   2694  CB  LYS   166      41.395  22.109  74.736  1.00  0.00
C
ATOM   2695  HB2 LYS   166      41.102  22.774  75.548  1.00  0.00
H
ATOM   2696  HB3 LYS   166      41.468  21.098  75.144  1.00  0.00
H
ATOM   2697  CG  LYS   166      42.783  22.507  74.208  1.00  0.00
C
ATOM   2698  HG2 LYS   166      43.037  21.845  73.379  1.00  0.00
H
ATOM   2699  HG3 LYS   166      42.761  23.529  73.832  1.00  0.00
H
ATOM   2700  CD  LYS   166      43.875  22.382  75.286  1.00  0.00
C
ATOM   2701  HD2 LYS   166      43.850  21.372  75.699  1.00  0.00
H
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ATOM   2702  HD3 LYS   166      44.844  22.524  74.803  1.00  0.00
H
ATOM   2703  CE  LYS   166      43.730  23.418  76.411  1.00  0.00
C
ATOM   2704  HE2 LYS   166      43.895  24.411  75.981  1.00  0.00
H
ATOM   2705  HE3 LYS   166      42.711  23.387  76.802  1.00  0.00
H
ATOM   2706  NZ  LYS   166      44.692  23.171  77.516  1.00  0.00
N
ATOM   2707  HZ1 LYS   166      45.627  22.976  77.150  1.00  0.00
H
ATOM   2708  HZ2 LYS   166      44.733  23.946  78.165  1.00  0.00
H
ATOM   2709  HZ3 LYS   166      44.452  22.336  78.030  1.00  0.00
H
ATOM   2710  C   LYS   166      39.032  21.429  74.222  1.00  0.00
C
ATOM   2711  O   LYS   166      38.849  20.230  74.028  1.00  0.00
O
ATOM   2712  N   ILE   167      38.145  22.187  74.877  1.00  0.00
N
ATOM   2713  H   ILE   167      38.385  23.158  75.046  1.00  0.00
H
ATOM   2714  CA  ILE   167      36.868  21.671  75.400  1.00  0.00
C
ATOM   2715  HA  ILE   167      37.078  20.751  75.949  1.00  0.00
H
ATOM   2716  CB  ILE   167      36.230  22.688  76.389  1.00  0.00
C
ATOM   2717  HB  ILE   167      36.511  23.700  76.095  1.00  0.00
H
ATOM   2718  CG2 ILE   167      34.689  22.624  76.431  1.00  0.00
C
ATOM   2719 HG21 ILE   167      34.357  21.615  76.679  1.00  0.00
H
ATOM   2720 HG22 ILE   167      34.308  23.315  77.184  1.00  0.00
H
ATOM   2721 HG23 ILE   167      34.270  22.925  75.471  1.00  0.00
H
ATOM   2722  CG1 ILE   167      36.694  22.440  77.839  1.00  0.00
C
ATOM   2723 HG12 ILE   167      36.169  23.126  78.507  1.00  0.00
H
ATOM   2724 HG13 ILE   167      36.412  21.426  78.109  1.00  0.00
H
ATOM   2725  CD1 ILE   167      38.193  22.572  78.107  1.00  0.00
C
ATOM   2726 HD11 ILE   167      38.528  23.595  77.960  1.00  0.00
H
ATOM   2727 HD12 ILE   167      38.372  22.294  79.140  1.00  0.00
H
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ATOM   2728 HD13 ILE   167      38.749  21.891  77.467  1.00  0.00
H
ATOM   2729  C   ILE   167      35.928  21.266  74.255  1.00  0.00
C
ATOM   2730  O   ILE   167      35.250  20.245  74.362  1.00  0.00
O
ATOM   2731  N   LEU   168      35.881  22.017  73.151  1.00  0.00
N
ATOM   2732  H   LEU   168      36.422  22.875  73.132  1.00  0.00
H
ATOM   2733  CA  LEU   168      35.005  21.699  72.015  1.00  0.00
C
ATOM   2734  HA  LEU   168      34.066  21.310  72.408  1.00  0.00
H
ATOM   2735  CB  LEU   168      34.682  22.978  71.222  1.00  0.00
C
ATOM   2736  HB2 LEU   168      35.616  23.430  70.885  1.00  0.00
H
ATOM   2737  HB3 LEU   168      34.113  22.688  70.338  1.00  0.00
H
ATOM   2738  CG  LEU   168      33.862  24.033  71.990  1.00  0.00
C
ATOM   2739  HG  LEU   168      34.435  24.420  72.828  1.00  0.00
H
ATOM   2740  CD1 LEU   168      33.567  25.185  71.037  1.00  0.00
C
ATOM   2741 HD11 LEU   168      32.953  24.848  70.204  1.00  0.00
H
ATOM   2742 HD12 LEU   168      33.046  25.967  71.584  1.00  0.00
H
ATOM   2743 HD13 LEU   168      34.507  25.597  70.672  1.00  0.00
H
ATOM   2744  CD2 LEU   168      32.525  23.498  72.515  1.00  0.00
C
ATOM   2745 HD21 LEU   168      32.702  22.780  73.315  1.00  0.00
H
ATOM   2746 HD22 LEU   168      31.936  24.317  72.928  1.00  0.00
H
ATOM   2747 HD23 LEU   168      31.967  23.021  71.710  1.00  0.00
H
ATOM   2748  C   LEU   168      35.535  20.581  71.098  1.00  0.00
C
ATOM   2749  O   LEU   168      34.729  19.985  70.381  1.00  0.00
O
ATOM   2750  N   GLU   169      36.835  20.260  71.115  1.00  0.00
N
ATOM   2751  H   GLU   169      37.453  20.795  71.714  1.00  0.00
H
ATOM   2752  CA  GLU   169      37.441  19.276  70.197  1.00  0.00
C
ATOM   2753  HA  GLU   169      37.325  19.679  69.190  1.00  0.00
H
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ATOM   2754  CB  GLU   169      38.965  19.149  70.428  1.00  0.00
C
ATOM   2755  HB2 GLU   169      39.404  20.143  70.520  1.00  0.00
H
ATOM   2756  HB3 GLU   169      39.165  18.601  71.345  1.00  0.00
H
ATOM   2757  CG  GLU   169      39.622  18.420  69.240  1.00  0.00
C
ATOM   2758  HG2 GLU   169      39.104  17.471  69.081  1.00  0.00
H
ATOM   2759  HG3 GLU   169      39.487  19.028  68.343  1.00  0.00
H
ATOM   2760  CD  GLU   169      41.119  18.119  69.408  1.00  0.00
C
ATOM   2761  OE1 GLU   169      41.847  18.920  70.029  1.00  0.00
O
ATOM   2762  OE2 GLU   169      41.556  17.085  68.841  1.00  0.00
O
ATOM   2763  C   GLU   169      36.733  17.895  70.198  1.00  0.00
C
ATOM   2764  O   GLU   169      36.376  17.428  69.112  1.00  0.00
O
ATOM   2765  N   PRO   170      36.421  17.248  71.348  1.00  0.00
N
ATOM   2766  CD  PRO   170      36.758  17.619  72.717  1.00  0.00
C
ATOM   2767  HD2 PRO   170      35.958  18.231  73.132  1.00  0.00
H
ATOM   2768  HD3 PRO   170      37.707  18.145  72.797  1.00  0.00
H
ATOM   2769  CG  PRO   170      36.826  16.302  73.483  1.00  0.00
C
ATOM   2770  HG2 PRO   170      36.647  16.447  74.550  1.00  0.00
H
ATOM   2771  HG3 PRO   170      37.790  15.818  73.311  1.00  0.00
H
ATOM   2772  CB  PRO   170      35.716  15.487  72.818  1.00  0.00
C
ATOM   2773  HB2 PRO   170      34.755  15.740  73.270  1.00  0.00
H
ATOM   2774  HB3 PRO   170      35.902  14.417  72.911  1.00  0.00
H
ATOM   2775  CA  PRO   170      35.749  15.943  71.351  1.00  0.00
C
ATOM   2776  HA  PRO   170      36.353  15.238  70.781  1.00  0.00
H
ATOM   2777  C   PRO   170      34.336  15.986  70.747  1.00  0.00
C
ATOM   2778  O   PRO   170      33.923  15.051  70.062  1.00  0.00
O
ATOM   2779  N   PHE   171      33.604  17.083  70.961  1.00  0.00
N
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ATOM   2780  H   PHE   171      34.021  17.848  71.470  1.00  0.00
H
ATOM   2781  CA  PHE   171      32.259  17.265  70.411  1.00  0.00
C
ATOM   2782  HA  PHE   171      31.689  16.344  70.561  1.00  0.00
H
ATOM   2783  CB  PHE   171      31.552  18.398  71.169  1.00  0.00
C
ATOM   2784  HB2 PHE   171      31.601  18.191  72.240  1.00  0.00
H
ATOM   2785  HB3 PHE   171      32.080  19.338  70.994  1.00  0.00
H
ATOM   2786  CG  PHE   171      30.096  18.561  70.775  1.00  0.00
C
ATOM   2787  CD1 PHE   171      29.086  17.953  71.544  1.00  0.00
C
ATOM   2788  HD1 PHE   171      29.338  17.387  72.430  1.00  0.00
H
ATOM   2789  CE1 PHE   171      27.740  18.075  71.160  1.00  0.00
C
ATOM   2790  HE1 PHE   171      26.967  17.608  71.750  1.00  0.00
H
ATOM   2791  CZ  PHE   171      27.394  18.799  70.007  1.00  0.00
C
ATOM   2792  HZ  PHE   171      26.354  18.886  69.722  1.00  0.00
H
ATOM   2793  CE2 PHE   171      28.398  19.403  69.234  1.00  0.00
C
ATOM   2794  HE2 PHE   171      28.132  19.955  68.343  1.00  0.00
H
ATOM   2795  CD2 PHE   171      29.746  19.290  69.620  1.00  0.00
C
ATOM   2796  HD2 PHE   171      30.513  19.758  69.021  1.00  0.00
H
ATOM   2797  C   PHE   171      32.305  17.534  68.898  1.00  0.00
C
ATOM   2798  O   PHE   171      31.520  16.952  68.146  1.00  0.00
O
ATOM   2799  N   LYS   172      33.258  18.363  68.436  1.00  0.00
N
ATOM   2800  H   LYS   172      33.874  18.802  69.117  1.00  0.00
H
ATOM   2801  CA  LYS   172      33.527  18.613  67.007  1.00  0.00
C
ATOM   2802  HA  LYS   172      32.635  19.027  66.534  1.00  0.00
H
ATOM   2803  CB  LYS   172      34.699  19.610  66.860  1.00  0.00
C
ATOM   2804  HB2 LYS   172      35.507  19.287  67.515  1.00  0.00
H
ATOM   2805  HB3 LYS   172      35.086  19.562  65.840  1.00  0.00
H
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ATOM   2806  CG  LYS   172      34.382  21.084  67.188  1.00  0.00
C
ATOM   2807  HG2 LYS   172      33.758  21.143  68.082  1.00  0.00
H
ATOM   2808  HG3 LYS   172      35.327  21.583  67.408  1.00  0.00
H
ATOM   2809  CD  LYS   172      33.692  21.826  66.029  1.00  0.00
C
ATOM   2810  HD2 LYS   172      34.189  21.591  65.086  1.00  0.00
H
ATOM   2811  HD3 LYS   172      32.660  21.475  65.959  1.00  0.00
H
ATOM   2812  CE  LYS   172      33.685  23.352  66.224  1.00  0.00
C
ATOM   2813  HE2 LYS   172      32.969  23.782  65.518  1.00  0.00
H
ATOM   2814  HE3 LYS   172      33.331  23.575  67.235  1.00  0.00
H
ATOM   2815  NZ  LYS   172      35.015  23.976  65.995  1.00  0.00
N
ATOM   2816  HZ1 LYS   172      35.385  23.761  65.074  1.00  0.00
H
ATOM   2817  HZ2 LYS   172      34.990  24.986  66.071  1.00  0.00
H
ATOM   2818  HZ3 LYS   172      35.722  23.628  66.629  1.00  0.00
H
ATOM   2819  C   LYS   172      33.834  17.306  66.255  1.00  0.00
C
ATOM   2820  O   LYS   172      33.303  17.108  65.167  1.00  0.00
O
ATOM   2821  N   LYS   173      34.621  16.394  66.850  1.00  0.00
N
ATOM   2822  H   LYS   173      35.066  16.659  67.724  1.00  0.00
H
ATOM   2823  CA  LYS   173      34.947  15.081  66.254  1.00  0.00
C
ATOM   2824  HA  LYS   173      35.298  15.245  65.234  1.00  0.00
H
ATOM   2825  CB  LYS   173      36.059  14.375  67.049  1.00  0.00
C
ATOM   2826  HB2 LYS   173      35.797  14.347  68.108  1.00  0.00
H
ATOM   2827  HB3 LYS   173      36.126  13.346  66.691  1.00  0.00
H
ATOM   2828  CG  LYS   173      37.443  15.016  66.876  1.00  0.00
C
ATOM   2829  HG2 LYS   173      37.666  15.103  65.812  1.00  0.00
H
ATOM   2830  HG3 LYS   173      37.454  16.011  67.315  1.00  0.00
H
ATOM   2831  CD  LYS   173      38.512  14.138  67.542  1.00  0.00
C
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ATOM   2832  HD2 LYS   173      38.284  14.007  68.602  1.00  0.00
H
ATOM   2833  HD3 LYS   173      38.514  13.161  67.052  1.00  0.00
H
ATOM   2834  CE  LYS   173      39.892  14.782  67.390  1.00  0.00
C
ATOM   2835  HE2 LYS   173      40.004  15.110  66.353  1.00  0.00
H
ATOM   2836  HE3 LYS   173      39.955  15.665  68.034  1.00  0.00
H
ATOM   2837  NZ  LYS   173      40.985  13.835  67.712  1.00  0.00
N
ATOM   2838  HZ1 LYS   173      40.966  13.029  67.100  1.00  0.00
H
ATOM   2839  HZ2 LYS   173      41.880  14.291  67.557  1.00  0.00
H
ATOM   2840  HZ3 LYS   173      40.995  13.551  68.687  1.00  0.00
H
ATOM   2841  C   LYS   173      33.740  14.142  66.124  1.00  0.00
C
ATOM   2842  O   LYS   173      33.594  13.490  65.095  1.00  0.00
O
ATOM   2843  N   GLN   174      32.881  14.058  67.144  1.00  0.00
N
ATOM   2844  H   GLN   174      33.073  14.585  67.985  1.00  0.00
H
ATOM   2845  CA  GLN   174      31.696  13.181  67.088  1.00  0.00
C
ATOM   2846  HA  GLN   174      32.002  12.215  66.682  1.00  0.00
H
ATOM   2847  CB  GLN   174      31.122  12.937  68.494  1.00  0.00
C
ATOM   2848  HB2 GLN   174      30.989  13.885  69.020  1.00  0.00
H
ATOM   2849  HB3 GLN   174      30.144  12.463  68.386  1.00  0.00
H
ATOM   2850  CG  GLN   174      32.029  12.002  69.311  1.00  0.00
C
ATOM   2851  HG2 GLN   174      32.290  11.132  68.709  1.00  0.00
H
ATOM   2852  HG3 GLN   174      32.949  12.529  69.561  1.00  0.00
H
ATOM   2853  CD  GLN   174      31.361  11.493  70.586  1.00  0.00
C
ATOM   2854  OE1 GLN   174      30.305  10.880  70.575  1.00  0.00
O
ATOM   2855  NE2 GLN   174      31.962  11.690  71.738  1.00  0.00
N
ATOM   2856 HE21 GLN   174      31.500  11.321  72.550  1.00  0.00
H
ATOM   2857 HE22 GLN   174      32.861  12.136  71.775  1.00  0.00
H
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ATOM   2858  C   GLN   174      30.608  13.712  66.142  1.00  0.00
C
ATOM   2859  O   GLN   174      29.914  12.924  65.492  1.00  0.00
O
ATOM   2860  N   ASN   175      30.499  15.041  66.011  1.00  0.00
N
ATOM   2861  H   ASN   175      31.111  15.622  66.572  1.00  0.00
H
ATOM   2862  CA  ASN   175      29.459  15.717  65.240  1.00  0.00
C
ATOM   2863  HA  ASN   175      28.824  14.971  64.759  1.00  0.00
H
ATOM   2864  CB  ASN   175      28.580  16.493  66.247  1.00  0.00
C
ATOM   2865  HB2 ASN   175      29.159  17.303  66.692  1.00  0.00
H
ATOM   2866  HB3 ASN   175      27.753  16.930  65.703  1.00  0.00
H
ATOM   2867  CG  ASN   175      27.960  15.644  67.343  1.00  0.00
C
ATOM   2868  OD1 ASN   175      27.193  14.730  67.091  1.00  0.00
O
ATOM   2869  ND2 ASN   175      28.203  15.952  68.594  1.00  0.00
N
ATOM   2870 HD21 ASN   175      27.723  15.426  69.310  1.00  0.00
H
ATOM   2871 HD22 ASN   175      28.804  16.727  68.822  1.00  0.00
H
ATOM   2872  C   ASN   175      30.012  16.618  64.096  1.00  0.00
C
ATOM   2873  O   ASN   175      29.734  17.821  64.113  1.00  0.00
O
ATOM   2874  N   PRO   176      30.742  16.095  63.078  1.00  0.00
N
ATOM   2875  CD  PRO   176      31.133  14.702  62.889  1.00  0.00
C
ATOM   2876  HD2 PRO   176      30.313  14.143  62.435  1.00  0.00
H
ATOM   2877  HD3 PRO   176      31.444  14.228  63.812  1.00  0.00
H
ATOM   2878  CG  PRO   176      32.334  14.724  61.949  1.00  0.00
C
ATOM   2879  HG2 PRO   176      32.410  13.802  61.371  1.00  0.00
H
ATOM   2880  HG3 PRO   176      33.243  14.897  62.526  1.00  0.00
H
ATOM   2881  CB  PRO   176      32.044  15.930  61.065  1.00  0.00
C
ATOM   2882  HB2 PRO   176      31.356  15.635  60.269  1.00  0.00
H
ATOM   2883  HB3 PRO   176      32.954  16.350  60.636  1.00  0.00
H
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ATOM   2884  CA  PRO   176      31.359  16.917  62.018  1.00  0.00
C
ATOM   2885  HA  PRO   176      32.118  17.555  62.473  1.00  0.00
H
ATOM   2886  C   PRO   176      30.386  17.797  61.219  1.00  0.00
C
ATOM   2887  O   PRO   176      30.780  18.834  60.690  1.00  0.00
O
ATOM   2888  N   ASP   177      29.116  17.392  61.134  1.00  0.00
N
ATOM   2889  H   ASP   177      28.877  16.508  61.552  1.00  0.00
H
ATOM   2890  CA  ASP   177      28.072  18.115  60.401  1.00  0.00
C
ATOM   2891  HA  ASP   177      28.519  18.523  59.492  1.00  0.00
H
ATOM   2892  CB  ASP   177      26.968  17.129  59.972  1.00  0.00
C
ATOM   2893  HB2 ASP   177      26.544  16.669  60.867  1.00  0.00
H
ATOM   2894  HB3 ASP   177      26.172  17.688  59.477  1.00  0.00
H
ATOM   2895  CG  ASP   177      27.430  16.030  59.003  1.00  0.00
C
ATOM   2896  OD1 ASP   177      28.312  16.276  58.152  1.00  0.00
O
ATOM   2897  OD2 ASP   177      26.852  14.919  59.068  1.00  0.00
O
ATOM   2898  C   ASP   177      27.481  19.312  61.187  1.00  0.00
C
ATOM   2899  O   ASP   177      26.668  20.061  60.638  1.00  0.00
O
ATOM   2900  N   ILE   178      27.868  19.527  62.453  1.00  0.00
N
ATOM   2901  H   ILE   178      28.601  18.935  62.833  1.00  0.00
H
ATOM   2902  CA  ILE   178      27.409  20.654  63.283  1.00  0.00
C
ATOM   2903  HA  ILE   178      26.434  20.985  62.925  1.00  0.00
H
ATOM   2904  CB  ILE   178      27.241  20.238  64.762  1.00  0.00
C
ATOM   2905  HB  ILE   178      28.218  19.929  65.142  1.00  0.00
H
ATOM   2906  CG2 ILE   178      26.767  21.432  65.611  1.00  0.00
C
ATOM   2907 HG21 ILE   178      25.868  21.873  65.180  1.00  0.00
H
ATOM   2908 HG22 ILE   178      26.558  21.107  66.631  1.00  0.00
H
ATOM   2909 HG23 ILE   178      27.544  22.193  65.651  1.00  0.00
H
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ATOM   2910  CG1 ILE   178      26.275  19.048  64.951  1.00  0.00
C
ATOM   2911 HG12 ILE   178      26.643  18.210  64.362  1.00  0.00
H
ATOM   2912 HG13 ILE   178      26.296  18.750  66.000  1.00  0.00
H
ATOM   2913  CD1 ILE   178      24.817  19.276  64.545  1.00  0.00
C
ATOM   2914 HD11 ILE   178      24.771  19.528  63.487  1.00  0.00
H
ATOM   2915 HD12 ILE   178      24.256  18.356  64.705  1.00  0.00
H
ATOM   2916 HD13 ILE   178      24.367  20.067  65.144  1.00  0.00
H
ATOM   2917  C   ILE   178      28.382  21.829  63.152  1.00  0.00
C
ATOM   2918  O   ILE   178      29.562  21.724  63.489  1.00  0.00
O
ATOM   2919  N   VAL   179      27.878  22.989  62.728  1.00  0.00
N
ATOM   2920  H   VAL   179      26.879  23.061  62.567  1.00  0.00
H
ATOM   2921  CA  VAL   179      28.687  24.207  62.601  1.00  0.00
C
ATOM   2922  HA  VAL   179      29.716  23.920  62.380  1.00  0.00
H
ATOM   2923  CB  VAL   179      28.203  25.102  61.443  1.00  0.00
C
ATOM   2924  HB  VAL   179      27.221  25.520  61.675  1.00  0.00
H
ATOM   2925  CG1 VAL   179      29.187  26.254  61.209  1.00  0.00
C
ATOM   2926 HG11 VAL   179      30.168  25.858  60.947  1.00  0.00
H
ATOM   2927 HG12 VAL   179      28.823  26.888  60.402  1.00  0.00
H
ATOM   2928 HG13 VAL   179      29.271  26.859  62.110  1.00  0.00
H
ATOM   2929  CG2 VAL   179      28.106  24.303  60.138  1.00  0.00
C
ATOM   2930 HG21 VAL   179      27.288  23.586  60.207  1.00  0.00
H
ATOM   2931 HG22 VAL   179      27.923  24.967  59.296  1.00  0.00
H
ATOM   2932 HG23 VAL   179      29.037  23.762  59.968  1.00  0.00
H
ATOM   2933  C   VAL   179      28.667  24.956  63.927  1.00  0.00
C
ATOM   2934  O   VAL   179      27.630  25.492  64.314  1.00  0.00
O
ATOM   2935  N   ILE   180      29.818  25.021  64.601  1.00  0.00
N
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ATOM   2936  H   ILE   180      30.619  24.547  64.216  1.00  0.00
H
ATOM   2937  CA  ILE   180      30.010  25.835  65.810  1.00  0.00
C
ATOM   2938  HA  ILE   180      29.056  26.278  66.076  1.00  0.00
H
ATOM   2939  CB  ILE   180      30.455  25.018  67.045  1.00  0.00
C
ATOM   2940  HB  ILE   180      31.464  24.650  66.877  1.00  0.00
H
ATOM   2941  CG2 ILE   180      30.482  25.945  68.279  1.00  0.00
C
ATOM   2942 HG21 ILE   180      29.495  26.377  68.448  1.00  0.00
H
ATOM   2943 HG22 ILE   180      30.791  25.404  69.170  1.00  0.00
H
ATOM   2944 HG23 ILE   180      31.192  26.760  68.137  1.00  0.00
H
ATOM   2945  CG1 ILE   180      29.532  23.803  67.269  1.00  0.00
C
ATOM   2946 HG12 ILE   180      28.515  24.158  67.419  1.00  0.00
H
ATOM   2947 HG13 ILE   180      29.549  23.176  66.378  1.00  0.00
H
ATOM   2948  CD1 ILE   180      29.926  22.909  68.447  1.00  0.00
C
ATOM   2949 HD11 ILE   180      29.784  23.431  69.392  1.00  0.00
H
ATOM   2950 HD12 ILE   180      29.285  22.030  68.445  1.00  0.00
H
ATOM   2951 HD13 ILE   180      30.965  22.595  68.346  1.00  0.00
H
ATOM   2952  C   ILE   180      30.997  26.958  65.503  1.00  0.00
C
ATOM   2953  O   ILE   180      32.188  26.693  65.317  1.00  0.00
O
ATOM   2954  N   TYR   181      30.504  28.195  65.495  1.00  0.00
N
ATOM   2955  H   TYR   181      29.526  28.299  65.754  1.00  0.00
H
ATOM   2956  CA  TYR   181      31.339  29.387  65.637  1.00  0.00
C
ATOM   2957  HA  TYR   181      32.329  29.215  65.212  1.00  0.00
H
ATOM   2958  CB  TYR   181      30.712  30.592  64.916  1.00  0.00
C
ATOM   2959  HB2 TYR   181      29.632  30.565  65.034  1.00  0.00
H
ATOM   2960  HB3 TYR   181      31.065  31.506  65.397  1.00  0.00
H
ATOM   2961  CG  TYR   181      31.020  30.690  63.437  1.00  0.00
C
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ATOM   2962  CD1 TYR   181      30.490  29.743  62.541  1.00  0.00
C
ATOM   2963  HD1 TYR   181      29.870  28.944  62.919  1.00  0.00
H
ATOM   2964  CE1 TYR   181      30.753  29.851  61.162  1.00  0.00
C
ATOM   2965  HE1 TYR   181      30.339  29.128  60.479  1.00  0.00
H
ATOM   2966  CZ  TYR   181      31.532  30.927  60.680  1.00  0.00
C
ATOM   2967  OH  TYR   181      31.760  31.073  59.350  1.00  0.00
O
ATOM   2968  HH  TYR   181      31.307  30.419  58.822  1.00  0.00
H
ATOM   2969  CE2 TYR   181      32.060  31.875  61.578  1.00  0.00
C
ATOM   2970  HE2 TYR   181      32.648  32.695  61.193  1.00  0.00
H
ATOM   2971  CD2 TYR   181      31.810  31.752  62.957  1.00  0.00
C
ATOM   2972  HD2 TYR   181      32.212  32.479  63.646  1.00  0.00
H
ATOM   2973  C   TYR   181      31.484  29.662  67.132  1.00  0.00
C
ATOM   2974  O   TYR   181      30.480  29.788  67.828  1.00  0.00
O
ATOM   2975  N   GLN   182      32.725  29.767  67.605  1.00  0.00
N
ATOM   2976  H   GLN   182      33.489  29.687  66.953  1.00  0.00
H
ATOM   2977  CA  GLN   182      33.053  30.292  68.929  1.00  0.00
C
ATOM   2978  HA  GLN   182      32.134  30.437  69.495  1.00  0.00
H
ATOM   2979  CB  GLN   182      33.922  29.300  69.740  1.00  0.00
C
ATOM   2980  HB2 GLN   182      34.129  29.739  70.717  1.00  0.00
H
ATOM   2981  HB3 GLN   182      33.353  28.385  69.899  1.00  0.00
H
ATOM   2982  CG  GLN   182      35.253  28.908  69.072  1.00  0.00
C
ATOM   2983  HG2 GLN   182      35.036  28.437  68.113  1.00  0.00
H
ATOM   2984  HG3 GLN   182      35.852  29.799  68.887  1.00  0.00
H
ATOM   2985  CD  GLN   182      36.112  27.956  69.901  1.00  0.00
C
ATOM   2986  OE1 GLN   182      36.156  27.977  71.118  1.00  0.00
O
ATOM   2987  NE2 GLN   182      36.883  27.105  69.262  1.00  0.00
N
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ATOM   2988 HE21 GLN   182      37.626  26.721  69.828  1.00  0.00
H
ATOM   2989 HE22 GLN   182      36.932  27.100  68.260  1.00  0.00
H
ATOM   2990  C   GLN   182      33.704  31.669  68.753  1.00  0.00
C
ATOM   2991  O   GLN   182      34.634  31.814  67.956  1.00  0.00
O
ATOM   2992  N   TYR   183      33.240  32.672  69.493  1.00  0.00
N
ATOM   2993  H   TYR   183      32.402  32.517  70.053  1.00  0.00
H
ATOM   2994  CA  TYR   183      33.963  33.929  69.684  1.00  0.00
C
ATOM   2995  HA  TYR   183      34.973  33.830  69.285  1.00  0.00
H
ATOM   2996  CB  TYR   183      33.296  35.088  68.934  1.00  0.00
C
ATOM   2997  HB2 TYR   183      33.119  34.791  67.901  1.00  0.00
H
ATOM   2998  HB3 TYR   183      32.325  35.313  69.381  1.00  0.00
H
ATOM   2999  CG  TYR   183      34.167  36.328  68.941  1.00  0.00
C
ATOM   3000  CD1 TYR   183      35.165  36.480  67.961  1.00  0.00
C
ATOM   3001  HD1 TYR   183      35.308  35.702  67.223  1.00  0.00
H
ATOM   3002  CE1 TYR   183      35.984  37.622  67.957  1.00  0.00
C
ATOM   3003  HE1 TYR   183      36.735  37.734  67.194  1.00  0.00
H
ATOM   3004  CZ  TYR   183      35.839  38.593  68.971  1.00  0.00
C
ATOM   3005  OH  TYR   183      36.651  39.682  68.988  1.00  0.00
O
ATOM   3006  HH  TYR   183      37.235  39.695  68.231  1.00  0.00
H
ATOM   3007  CE2 TYR   183      34.862  38.425  69.973  1.00  0.00
C
ATOM   3008  HE2 TYR   183      34.754  39.170  70.745  1.00  0.00
H
ATOM   3009  CD2 TYR   183      34.023  37.294  69.954  1.00  0.00
C
ATOM   3010  HD2 TYR   183      33.264  37.160  70.718  1.00  0.00
H
ATOM   3011  C   TYR   183      34.080  34.193  71.180  1.00  0.00
C
ATOM   3012  O   TYR   183      33.122  34.610  71.823  1.00  0.00
O
ATOM   3013  N   VAL   184      35.264  33.917  71.739  1.00  0.00
N
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ATOM   3014  H   VAL   184      35.973  33.525  71.141  1.00  0.00
H
ATOM   3015  CA  VAL   184      35.434  33.758  73.187  1.00  0.00
C
ATOM   3016  HA  VAL   184      36.465  33.458  73.371  1.00  0.00
H
ATOM   3017  CB  VAL   184      35.202  35.095  73.949  1.00  0.00
C
ATOM   3018  HB  VAL   184      34.134  35.324  73.922  1.00  0.00
H
ATOM   3019  CG2 VAL   184      35.583  34.912  75.426  1.00  0.00
C
ATOM   3020 HG21 VAL   184      36.620  35.175  75.616  1.00  0.00
H
ATOM   3021 HG22 VAL   184      34.908  35.531  76.009  1.00  0.00
H
ATOM   3022 HG23 VAL   184      35.409  33.898  75.773  1.00  0.00
H
ATOM   3023  CG1 VAL   184      35.941  36.321  73.345  1.00  0.00
C
ATOM   3024 HG12 VAL   184      36.980  36.340  73.673  1.00  0.00
H
ATOM   3025 HG13 VAL   184      35.930  36.282  72.256  1.00  0.00
H
ATOM   3026  CD1 VAL   184      35.264  37.641  73.729  1.00  0.00
C
ATOM   3027 HD11 VAL   184      35.215  37.746  74.808  1.00  0.00
H
ATOM   3028 HD12 VAL   184      35.827  38.476  73.314  1.00  0.00
H
ATOM   3029 HD13 VAL   184      34.252  37.662  73.324  1.00  0.00
H
ATOM   3030  C   VAL   184      34.557  32.574  73.655  1.00  0.00
C
ATOM   3031  O   VAL   184      34.893  31.430  73.360  1.00  0.00
O
ATOM   3032  N   ASP   185      33.471  32.864  74.366  1.00  0.00
N
ATOM   3033  H   ASP   185      33.306  33.844  74.578  1.00  0.00
H
ATOM   3034  CA  ASP   185      32.481  31.981  74.983  1.00  0.00
C
ATOM   3035  HA  ASP   185      32.811  30.944  74.923  1.00  0.00
H
ATOM   3036  CB  ASP   185      32.387  32.367  76.465  1.00  0.00
C
ATOM   3037  HB2 ASP   185      31.751  31.644  76.961  1.00  0.00
H
ATOM   3038  HB3 ASP   185      33.377  32.307  76.909  1.00  0.00
H
ATOM   3039  CG  ASP   185      31.840  33.768  76.742  1.00  0.00
C
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ATOM   3040  OD1 ASP   185      32.325  34.724  76.094  1.00  0.00
O
ATOM   3041  OD2 ASP   185      31.003  33.874  77.662  1.00  0.00
O
ATOM   3042  C   ASP   185      31.101  32.064  74.307  1.00  0.00
C
ATOM   3043  O   ASP   185      30.238  31.228  74.566  1.00  0.00
O
ATOM   3044  N   ASP   186      30.916  33.043  73.418  1.00  0.00
N
ATOM   3045  H   ASP   186      31.678  33.690  73.272  1.00  0.00
H
ATOM   3046  CA  ASP   186      29.753  33.189  72.546  1.00  0.00
C
ATOM   3047  HA  ASP   186      28.850  33.111  73.153  1.00  0.00
H
ATOM   3048  CB  ASP   186      29.802  34.595  71.912  1.00  0.00
C
ATOM   3049  HB2 ASP   186      30.054  35.316  72.694  1.00  0.00
H
ATOM   3050  HB3 ASP   186      30.598  34.630  71.169  1.00  0.00
H
ATOM   3051  CG  ASP   186      28.500  35.047  71.243  1.00  0.00
C
ATOM   3052  OD1 ASP   186      27.971  36.105  71.672  1.00  0.00
O
ATOM   3053  OD2 ASP   186      28.063  34.390  70.272  1.00  0.00
O
ATOM   3054  C   ASP   186      29.765  32.052  71.506  1.00  0.00
C
ATOM   3055  O   ASP   186      30.642  31.988  70.634  1.00  0.00
O
ATOM   3056  N   LEU   187      28.839  31.099  71.653  1.00  0.00
N
ATOM   3057  H   LEU   187      28.180  31.219  72.418  1.00  0.00
H
ATOM   3058  CA  LEU   187      28.732  29.899  70.819  1.00  0.00
C
ATOM   3059  HA  LEU   187      29.606  29.823  70.175  1.00  0.00
H
ATOM   3060  CB  LEU   187      28.654  28.631  71.689  1.00  0.00
C
ATOM   3061  HB2 LEU   187      27.803  28.738  72.350  1.00  0.00
H
ATOM   3062  HB3 LEU   187      28.453  27.782  71.033  1.00  0.00
H
ATOM   3063  CG  LEU   187      29.872  28.289  72.551  1.00  0.00
C
ATOM   3064  HG  LEU   187      30.064  29.084  73.263  1.00  0.00
H
ATOM   3065  CD1 LEU   187      29.557  27.002  73.317  1.00  0.00
C
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ATOM   3066 HD11 LEU   187      29.384  26.184  72.620  1.00  0.00
H
ATOM   3067 HD12 LEU   187      30.384  26.753  73.976  1.00  0.00
H
ATOM   3068 HD13 LEU   187      28.667  27.160  73.928  1.00  0.00
H
ATOM   3069  CD2 LEU   187      31.117  28.054  71.702  1.00  0.00
C
ATOM   3070 HD21 LEU   187      31.369  28.976  71.183  1.00  0.00
H
ATOM   3071 HD22 LEU   187      31.952  27.799  72.347  1.00  0.00
H
ATOM   3072 HD23 LEU   187      30.937  27.258  70.981  1.00  0.00
H
ATOM   3073  C   LEU   187      27.496  29.960  69.925  1.00  0.00
C
ATOM   3074  O   LEU   187      26.391  29.662  70.379  1.00  0.00
O
ATOM   3075  N   TYR   188      27.677  30.225  68.635  1.00  0.00
N
ATOM   3076  H   TYR   188      28.631  30.380  68.325  1.00  0.00
H
ATOM   3077  CA  TYR   188      26.647  30.000  67.621  1.00  0.00
C
ATOM   3078  HA  TYR   188      25.661  30.182  68.052  1.00  0.00
H
ATOM   3079  CB  TYR   188      26.860  30.998  66.474  1.00  0.00
C
ATOM   3080  HB2 TYR   188      26.610  31.991  66.847  1.00  0.00
H
ATOM   3081  HB3 TYR   188      27.916  31.013  66.222  1.00  0.00
H
ATOM   3082  CG  TYR   188      26.080  30.755  65.194  1.00  0.00
C
ATOM   3083  CD1 TYR   188      26.505  29.781  64.266  1.00  0.00
C
ATOM   3084  HD1 TYR   188      27.378  29.181  64.475  1.00  0.00
H
ATOM   3085  CE1 TYR   188      25.800  29.588  63.062  1.00  0.00
C
ATOM   3086  HE1 TYR   188      26.121  28.832  62.364  1.00  0.00
H
ATOM   3087  CZ  TYR   188      24.677  30.393  62.773  1.00  0.00
C
ATOM   3088  OH  TYR   188      23.997  30.240  61.606  1.00  0.00
O
ATOM   3089  HH  TYR   188      24.383  29.580  61.031  1.00  0.00
H
ATOM   3090  CE2 TYR   188      24.260  31.372  63.697  1.00  0.00
C
ATOM   3091  HE2 TYR   188      23.398  31.980  63.469  1.00  0.00
H
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ATOM   3092  CD2 TYR   188      24.958  31.553  64.904  1.00  0.00
C
ATOM   3093  HD2 TYR   188      24.644  32.319  65.600  1.00  0.00
H
ATOM   3094  C   TYR   188      26.716  28.539  67.171  1.00  0.00
C
ATOM   3095  O   TYR   188      27.763  28.091  66.699  1.00  0.00
O
ATOM   3096  N   VAL   189      25.609  27.800  67.295  1.00  0.00
N
ATOM   3097  H   VAL   189      24.782  28.245  67.684  1.00  0.00
H
ATOM   3098  CA  VAL   189      25.498  26.385  66.902  1.00  0.00
C
ATOM   3099  HA  VAL   189      26.435  26.077  66.441  1.00  0.00
H
ATOM   3100  CB  VAL   189      25.260  25.449  68.107  1.00  0.00
C
ATOM   3101  HB  VAL   189      24.265  25.623  68.512  1.00  0.00
H
ATOM   3102  CG1 VAL   189      25.366  23.986  67.652  1.00  0.00
C
ATOM   3103 HG11 VAL   189      26.311  23.823  67.138  1.00  0.00
H
ATOM   3104 HG12 VAL   189      25.318  23.317  68.510  1.00  0.00
H
ATOM   3105 HG13 VAL   189      24.548  23.739  66.976  1.00  0.00
H
ATOM   3106  CG2 VAL   189      26.270  25.666  69.241  1.00  0.00
C
ATOM   3107 HG21 VAL   189      26.146  26.663  69.662  1.00  0.00
H
ATOM   3108 HG22 VAL   189      26.106  24.938  70.034  1.00  0.00
H
ATOM   3109 HG23 VAL   189      27.284  25.564  68.862  1.00  0.00
H
ATOM   3110  C   VAL   189      24.390  26.227  65.857  1.00  0.00
C
ATOM   3111  O   VAL   189      23.204  26.337  66.174  1.00  0.00
O
ATOM   3112  N   GLY   190      24.772  25.936  64.609  1.00  0.00
N
ATOM   3113  H   GLY   190      25.767  25.803  64.441  1.00  0.00
H
ATOM   3114  CA  GLY   190      23.856  25.752  63.476  1.00  0.00
C
ATOM   3115  HA2 GLY   190      22.831  25.934  63.794  1.00  0.00
H
ATOM   3116  HA3 GLY   190      24.088  26.484  62.704  1.00  0.00
H
ATOM   3117  C   GLY   190      23.948  24.351  62.860  1.00  0.00
C
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ATOM   3118  O   GLY   190      25.043  23.826  62.658  1.00  0.00
O
ATOM   3119  N   SER   191      22.803  23.752  62.530  1.00  0.00
N
ATOM   3120  H   SER   191      21.925  24.245  62.713  1.00  0.00
H
ATOM   3121  CA  SER   191      22.718  22.446  61.863  1.00  0.00
C
ATOM   3122  HA  SER   191      23.617  22.311  61.259  1.00  0.00
H
ATOM   3123  CB  SER   191      22.667  21.308  62.882  1.00  0.00
C
ATOM   3124  HB2 SER   191      23.011  20.384  62.403  1.00  0.00
H
ATOM   3125  HB3 SER   191      23.279  21.551  63.748  1.00  0.00
H
ATOM   3126  OG  SER   191      21.346  21.137  63.352  1.00  0.00
O
ATOM   3127  HG  SER   191      21.230  21.671  64.139  1.00  0.00
H
ATOM   3128  C   SER   191      21.520  22.343  60.920  1.00  0.00
C
ATOM   3129  O   SER   191      20.562  23.107  61.003  1.00  0.00
O
ATOM   3130  N   ASP   192      21.560  21.347  60.042  1.00  0.00
N
ATOM   3131  H   ASP   192      22.351  20.726  60.037  1.00  0.00
H
ATOM   3132  CA  ASP   192      20.463  21.041  59.122  1.00  0.00
C
ATOM   3133  HA  ASP   192      19.804  21.904  59.080  1.00  0.00
H
ATOM   3134  CB  ASP   192      21.024  20.875  57.704  1.00  0.00
C
ATOM   3135  HB2 ASP   192      21.777  20.086  57.694  1.00  0.00
H
ATOM   3136  HB3 ASP   192      20.211  20.597  57.033  1.00  0.00
H
ATOM   3137  CG  ASP   192      21.627  22.192  57.208  1.00  0.00
C
ATOM   3138  OD1 ASP   192      20.895  23.206  57.221  1.00  0.00
O
ATOM   3139  OD2 ASP   192      22.819  22.223  56.802  1.00  0.00
O
ATOM   3140  C   ASP   192      19.552  19.894  59.619  1.00  0.00
C
ATOM   3141  O   ASP   192      18.842  19.248  58.842  1.00  0.00
O
ATOM   3142  N   LEU   193      19.562  19.653  60.937  1.00  0.00
N
ATOM   3143  H   LEU   193      20.127  20.263  61.515  1.00  0.00
H
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ATOM   3144  CA  LEU   193      18.636  18.765  61.644  1.00  0.00
C
ATOM   3145  HA  LEU   193      18.490  17.857  61.057  1.00  0.00
H
ATOM   3146  CB  LEU   193      19.234  18.371  63.014  1.00  0.00
C
ATOM   3147  HB2 LEU   193      19.245  19.259  63.648  1.00  0.00
H
ATOM   3148  HB3 LEU   193      18.569  17.648  63.478  1.00  0.00
H
ATOM   3149  CG  LEU   193      20.650  17.760  63.017  1.00  0.00
C
ATOM   3150  HG  LEU   193      21.357  18.472  62.592  1.00  0.00
H
ATOM   3151  CD1 LEU   193      21.076  17.480  64.460  1.00  0.00
C
ATOM   3152 HD11 LEU   193      20.400  16.760  64.920  1.00  0.00
H
ATOM   3153 HD12 LEU   193      22.087  17.075  64.467  1.00  0.00
H
ATOM   3154 HD13 LEU   193      21.060  18.406  65.035  1.00  0.00
H
ATOM   3155  CD2 LEU   193      20.730  16.444  62.237  1.00  0.00
C
ATOM   3156 HD21 LEU   193      20.503  16.606  61.184  1.00  0.00
H
ATOM   3157 HD22 LEU   193      21.735  16.024  62.307  1.00  0.00
H
ATOM   3158 HD23 LEU   193      20.021  15.723  62.646  1.00  0.00
H
ATOM   3159  C   LEU   193      17.261  19.438  61.836  1.00  0.00
C
ATOM   3160  O   LEU   193      17.143  20.669  61.854  1.00  0.00
O
ATOM   3161  N   GLU   194      16.220  18.623  62.041  1.00  0.00
N
ATOM   3162  H   GLU   194      16.400  17.633  62.049  1.00  0.00
H
ATOM   3163  CA  GLU   194      14.904  19.097  62.505  1.00  0.00
C
ATOM   3164  HA  GLU   194      14.540  19.868  61.824  1.00  0.00
H
ATOM   3165  CB  GLU   194      13.879  17.947  62.538  1.00  0.00
C
ATOM   3166  HB2 GLU   194      14.295  17.121  63.115  1.00  0.00
H
ATOM   3167  HB3 GLU   194      12.986  18.281  63.068  1.00  0.00
H
ATOM   3168  CG  GLU   194      13.463  17.432  61.150  1.00  0.00
C
ATOM   3169  HG2 GLU   194      14.358  17.118  60.610  1.00  0.00
H
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ATOM   3170  HG3 GLU   194      12.834  16.551  61.287  1.00  0.00
H
ATOM   3171  CD  GLU   194      12.687  18.462  60.314  1.00  0.00
C
ATOM   3172  OE1 GLU   194      11.965  19.305  60.891  1.00  0.00
O
ATOM   3173  OE2 GLU   194      12.806  18.430  59.067  1.00  0.00
O
ATOM   3174  C   GLU   194      14.995  19.727  63.906  1.00  0.00
C
ATOM   3175  O   GLU   194      15.875  19.383  64.698  1.00  0.00
O
ATOM   3176  N   ILE   195      14.039  20.604  64.237  1.00  0.00
N
ATOM   3177  H   ILE   195      13.341  20.809  63.536  1.00  0.00
H
ATOM   3178  CA  ILE   195      14.062  21.443  65.454  1.00  0.00
C
ATOM   3179  HA  ILE   195      14.901  22.134  65.360  1.00  0.00
H
ATOM   3180  CB  ILE   195      12.765  22.292  65.565  1.00  0.00
C
ATOM   3181  HB  ILE   195      11.912  21.613  65.623  1.00  0.00
H
ATOM   3182  CG2 ILE   195      12.779  23.155  66.848  1.00  0.00
C
ATOM   3183 HG21 ILE   195      13.611  23.858  66.808  1.00  0.00
H
ATOM   3184 HG22 ILE   195      11.842  23.700  66.955  1.00  0.00
H
ATOM   3185 HG23 ILE   195      12.880  22.529  67.735  1.00  0.00
H
ATOM   3186  CG1 ILE   195      12.584  23.195  64.318  1.00  0.00
C
ATOM   3187 HG12 ILE   195      13.419  23.893  64.252  1.00  0.00
H
ATOM   3188 HG13 ILE   195      12.594  22.579  63.418  1.00  0.00
H
ATOM   3189  CD1 ILE   195      11.268  23.986  64.294  1.00  0.00
C
ATOM   3190 HD11 ILE   195      11.264  24.748  65.072  1.00  0.00
H
ATOM   3191 HD12 ILE   195      11.161  24.480  63.328  1.00  0.00
H
ATOM   3192 HD13 ILE   195      10.426  23.310  64.439  1.00  0.00
H
ATOM   3193  C   ILE   195      14.303  20.610  66.728  1.00  0.00
C
ATOM   3194  O   ILE   195      15.160  20.967  67.537  1.00  0.00
O
ATOM   3195  N   GLY   196      13.587  19.487  66.891  1.00  0.00
N
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ATOM   3196  H   GLY   196      12.945  19.234  66.157  1.00  0.00
H
ATOM   3197  CA  GLY   196      13.720  18.579  68.042  1.00  0.00
C
ATOM   3198  HA2 GLY   196      13.536  19.123  68.968  1.00  0.00
H
ATOM   3199  HA3 GLY   196      12.975  17.787  67.964  1.00  0.00
H
ATOM   3200  C   GLY   196      15.103  17.921  68.132  1.00  0.00
C
ATOM   3201  O   GLY   196      15.760  18.017  69.165  1.00  0.00
O
ATOM   3202  N   GLN   197      15.597  17.361  67.024  1.00  0.00
N
ATOM   3203  H   GLN   197      15.012  17.338  66.205  1.00  0.00
H
ATOM   3204  CA  GLN   197      16.933  16.755  66.929  1.00  0.00
C
ATOM   3205  HA  GLN   197      17.013  15.949  67.660  1.00  0.00
H
ATOM   3206  CB  GLN   197      17.124  16.183  65.519  1.00  0.00
C
ATOM   3207  HB2 GLN   197      16.973  16.982  64.795  1.00  0.00
H
ATOM   3208  HB3 GLN   197      18.150  15.822  65.428  1.00  0.00
H
ATOM   3209  CG  GLN   197      16.172  15.039  65.161  1.00  0.00
C
ATOM   3210  HG2 GLN   197      16.262  14.236  65.893  1.00  0.00
H
ATOM   3211  HG3 GLN   197      15.144  15.400  65.159  1.00  0.00
H
ATOM   3212  CD  GLN   197      16.523  14.490  63.784  1.00  0.00
C
ATOM   3213  OE1 GLN   197      17.518  13.813  63.600  1.00  0.00
O
ATOM   3214  NE2 GLN   197      15.759  14.790  62.757  1.00  0.00
N
ATOM   3215 HE21 GLN   197      15.996  14.296  61.900  1.00  0.00
H
ATOM   3216 HE22 GLN   197      14.886  15.264  62.875  1.00  0.00
H
ATOM   3217  C   GLN   197      18.059  17.764  67.212  1.00  0.00
C
ATOM   3218  O   GLN   197      19.068  17.429  67.837  1.00  0.00
O
ATOM   3219  N   HIE   198      17.873  19.026  66.801  1.00  0.00
N
ATOM   3220  H   HIE   198      17.051  19.233  66.240  1.00  0.00
H
ATOM   3221  CA  HIE   198      18.772  20.118  67.177  1.00  0.00
C
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ATOM   3222  HA  HIE   198      19.788  19.837  66.892  1.00  0.00
H
ATOM   3223  CB  HIE   198      18.431  21.404  66.408  1.00  0.00
C
ATOM   3224  HB2 HIE   198      18.300  21.150  65.354  1.00  0.00
H
ATOM   3225  HB3 HIE   198      17.484  21.809  66.769  1.00  0.00
H
ATOM   3226  CG  HIE   198      19.504  22.472  66.500  1.00  0.00
C
ATOM   3227  ND1 HIE   198      20.656  22.527  65.708  1.00  0.00
N
ATOM   3228  CE1 HIE   198      21.287  23.664  66.053  1.00  0.00
C
ATOM   3229  HE1 HIE   198      22.210  24.015  65.614  1.00  0.00
H
ATOM   3230  NE2 HIE   198      20.607  24.310  67.013  1.00  0.00
N
ATOM   3231  HE2 HIE   198      20.924  25.163  67.474  1.00  0.00
H
ATOM   3232  CD2 HIE   198      19.473  23.580  67.297  1.00  0.00
C
ATOM   3233  HD2 HIE   198      18.696  23.838  67.995  1.00  0.00
H
ATOM   3234  C   HIE   198      18.765  20.311  68.698  1.00  0.00
C
ATOM   3235  O   HIE   198      19.842  20.353  69.281  1.00  0.00
O
ATOM   3236  N   ARG   199      17.604  20.323  69.384  1.00  0.00
N
ATOM   3237  H   ARG   199      16.740  20.198  68.866  1.00  0.00
H
ATOM   3238  CA  ARG   199      17.563  20.361  70.870  1.00  0.00
C
ATOM   3239  HA  ARG   199      18.056  21.272  71.203  1.00  0.00
H
ATOM   3240  CB  ARG   199      16.136  20.330  71.468  1.00  0.00
C
ATOM   3241  HB2 ARG   199      15.712  19.331  71.353  1.00  0.00
H
ATOM   3242  HB3 ARG   199      16.228  20.500  72.544  1.00  0.00
H
ATOM   3243  CG  ARG   199      15.133  21.359  70.924  1.00  0.00
C
ATOM   3244  HG2 ARG   199      14.842  21.067  69.926  1.00  0.00
H
ATOM   3245  HG3 ARG   199      14.231  21.336  71.532  1.00  0.00
H
ATOM   3246  CD  ARG   199      15.694  22.786  70.913  1.00  0.00
C
ATOM   3247  HD2 ARG   199      15.838  23.108  71.948  1.00  0.00
H
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ATOM   3248  HD3 ARG   199      16.661  22.781  70.408  1.00  0.00
H
ATOM   3249  NE  ARG   199      14.800  23.731  70.220  1.00  0.00
N
ATOM   3250  HE  ARG   199      13.797  23.544  70.244  1.00  0.00
H
ATOM   3251  CZ  ARG   199      15.168  24.834  69.604  1.00  0.00
C
ATOM   3252  NH1 ARG   199      16.403  25.247  69.568  1.00  0.00
N
ATOM   3253 HH11 ARG   199      17.124  24.746  70.029  1.00  0.00
H
ATOM   3254 HH12 ARG   199      16.558  26.184  69.207  1.00  0.00
H
ATOM   3255  NH2 ARG   199      14.281  25.554  68.985  1.00  0.00
N
ATOM   3256 HH21 ARG   199      13.308  25.292  69.033  1.00  0.00
H
ATOM   3257 HH22 ARG   199      14.569  26.471  68.659  1.00  0.00
H
ATOM   3258  C   ARG   199      18.386  19.238  71.496  1.00  0.00
C
ATOM   3259  O   ARG   199      19.122  19.529  72.435  1.00  0.00
O
ATOM   3260  N   THR   200      18.345  18.019  70.953  1.00  0.00
N
ATOM   3261  H   THR   200      17.666  17.819  70.226  1.00  0.00
H
ATOM   3262  CA  THR   200      19.193  16.919  71.435  1.00  0.00
C
ATOM   3263  HA  THR   200      18.952  16.748  72.482  1.00  0.00
H
ATOM   3264  CB  THR   200      18.962  15.611  70.663  1.00  0.00
C
ATOM   3265  HB  THR   200      19.459  15.666  69.694  1.00  0.00
H
ATOM   3266  CG2 THR   200      19.486  14.413  71.454  1.00  0.00
C
ATOM   3267 HG21 THR   200      19.006  14.390  72.431  1.00  0.00
H
ATOM   3268 HG22 THR   200      19.255  13.490  70.927  1.00  0.00
H
ATOM   3269 HG23 THR   200      20.567  14.483  71.581  1.00  0.00
H
ATOM   3270  OG1 THR   200      17.599  15.367  70.432  1.00  0.00
O
ATOM   3271  HG1 THR   200      17.577  14.658  69.763  1.00  0.00
H
ATOM   3272  C   THR   200      20.677  17.279  71.363  1.00  0.00
C
ATOM   3273  O   THR   200      21.353  17.250  72.388  1.00  0.00
O
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ATOM   3274  N   LYS   201      21.182  17.717  70.199  1.00  0.00
N
ATOM   3275  H   LYS   201      20.567  17.748  69.390  1.00  0.00
H
ATOM   3276  CA  LYS   201      22.595  18.120  70.047  1.00  0.00
C
ATOM   3277  HA  LYS   201      23.212  17.309  70.429  1.00  0.00
H
ATOM   3278  CB  LYS   201      22.934  18.391  68.567  1.00  0.00
C
ATOM   3279  HB2 LYS   201      22.216  19.110  68.170  1.00  0.00
H
ATOM   3280  HB3 LYS   201      23.924  18.845  68.507  1.00  0.00
H
ATOM   3281  CG  LYS   201      22.925  17.136  67.679  1.00  0.00
C
ATOM   3282  HG2 LYS   201      21.964  16.631  67.785  1.00  0.00
H
ATOM   3283  HG3 LYS   201      23.039  17.448  66.642  1.00  0.00
H
ATOM   3284  CD  LYS   201      24.067  16.168  68.017  1.00  0.00
C
ATOM   3285  HD2 LYS   201      25.024  16.601  67.725  1.00  0.00
H
ATOM   3286  HD3 LYS   201      24.092  16.005  69.087  1.00  0.00
H
ATOM   3287  CE  LYS   201      23.875  14.815  67.328  1.00  0.00
C
ATOM   3288  HE2 LYS   201      22.823  14.526  67.396  1.00  0.00
H
ATOM   3289  HE3 LYS   201      24.145  14.901  66.271  1.00  0.00
H
ATOM   3290  NZ  LYS   201      24.699  13.778  67.986  1.00  0.00
N
ATOM   3291  HZ1 LYS   201      24.438  13.698  68.975  1.00  0.00
H
ATOM   3292  HZ2 LYS   201      24.600  12.895  67.495  1.00  0.00
H
ATOM   3293  HZ3 LYS   201      25.682  14.029  67.932  1.00  0.00
H
ATOM   3294  C   LYS   201      22.974  19.332  70.897  1.00  0.00
C
ATOM   3295  O   LYS   201      24.123  19.441  71.317  1.00  0.00
O
ATOM   3296  N   ILE   202      22.033  20.232  71.167  1.00  0.00
N
ATOM   3297  H   ILE   202      21.122  20.103  70.743  1.00  0.00
H
ATOM   3298  CA  ILE   202      22.269  21.397  72.028  1.00  0.00
C
ATOM   3299  HA  ILE   202      23.268  21.780  71.815  1.00  0.00
H
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ATOM   3300  CB  ILE   202      21.248  22.506  71.707  1.00  0.00
C
ATOM   3301  HB  ILE   202      20.244  22.095  71.837  1.00  0.00
H
ATOM   3302  CG2 ILE   202      21.378  23.706  72.660  1.00  0.00
C
ATOM   3303 HG21 ILE   202      22.411  24.059  72.672  1.00  0.00
H
ATOM   3304 HG22 ILE   202      20.718  24.497  72.316  1.00  0.00
H
ATOM   3305 HG23 ILE   202      21.094  23.401  73.669  1.00  0.00
H
ATOM   3306  CG1 ILE   202      21.382  23.028  70.258  1.00  0.00
C
ATOM   3307 HG12 ILE   202      21.013  22.292  69.566  1.00  0.00
H
ATOM   3308 HG13 ILE   202      20.731  23.889  70.130  1.00  0.00
H
ATOM   3309  CD1 ILE   202      22.804  23.346  69.786  1.00  0.00
C
ATOM   3310 HD11 ILE   202      23.388  22.428  69.740  1.00  0.00
H
ATOM   3311 HD12 ILE   202      22.757  23.750  68.777  1.00  0.00
H
ATOM   3312 HD13 ILE   202      23.291  24.062  70.445  1.00  0.00
H
ATOM   3313  C   ILE   202      22.304  21.020  73.511  1.00  0.00
C
ATOM   3314  O   ILE   202      23.114  21.594  74.235  1.00  0.00
O
ATOM   3315  N   GLU   203      21.510  20.048  73.968  1.00  0.00
N
ATOM   3316  H   GLU   203      20.830  19.617  73.347  1.00  0.00
H
ATOM   3317  CA  GLU   203      21.649  19.503  75.321  1.00  0.00
C
ATOM   3318  HA  GLU   203      21.827  20.330  76.002  1.00  0.00
H
ATOM   3319  CB  GLU   203      20.351  18.833  75.797  1.00  0.00
C
ATOM   3320  HB2 GLU   203      20.051  18.087  75.060  1.00  0.00
H
ATOM   3321  HB3 GLU   203      20.554  18.305  76.728  1.00  0.00
H
ATOM   3322  CG  GLU   203      19.188  19.826  76.039  1.00  0.00
C
ATOM   3323  HG2 GLU   203      18.936  20.324  75.100  1.00  0.00
H
ATOM   3324  HG3 GLU   203      18.312  19.244  76.332  1.00  0.00
H
ATOM   3325  CD  GLU   203      19.459  20.878  77.142  1.00  0.00
C
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ATOM   3326  OE1 GLU   203      19.604  20.481  78.324  1.00  0.00
O
ATOM   3327  OE2 GLU   203      19.497  22.100  76.839  1.00  0.00
O
ATOM   3328  C   GLU   203      22.888  18.593  75.443  1.00  0.00
C
ATOM   3329  O   GLU   203      23.598  18.718  76.434  1.00  0.00
O
ATOM   3330  N   GLU   204      23.253  17.788  74.431  1.00  0.00
N
ATOM   3331  H   GLU   204      22.603  17.644  73.664  1.00  0.00
H
ATOM   3332  CA  GLU   204      24.556  17.087  74.391  1.00  0.00
C
ATOM   3333  HA  GLU   204      24.591  16.371  75.210  1.00  0.00
H
ATOM   3334  CB  GLU   204      24.790  16.351  73.047  1.00  0.00
C
ATOM   3335  HB2 GLU   204      24.624  17.053  72.233  1.00  0.00
H
ATOM   3336  HB3 GLU   204      25.845  16.072  73.022  1.00  0.00
H
ATOM   3337  CG  GLU   204      23.995  15.066  72.750  1.00  0.00
C
ATOM   3338  HG2 GLU   204      24.261  14.314  73.496  1.00  0.00
H
ATOM   3339  HG3 GLU   204      22.927  15.267  72.842  1.00  0.00
H
ATOM   3340  CD  GLU   204      24.317  14.520  71.336  1.00  0.00
C
ATOM   3341  OE1 GLU   204      25.509  14.456  70.955  1.00  0.00
O
ATOM   3342  OE2 GLU   204      23.393  14.168  70.567  1.00  0.00
O
ATOM   3343  C   GLU   204      25.724  18.073  74.593  1.00  0.00
C
ATOM   3344  O   GLU   204      26.607  17.846  75.422  1.00  0.00
O
ATOM   3345  N   LEU   205      25.707  19.196  73.865  1.00  0.00
N
ATOM   3346  H   LEU   205      24.972  19.288  73.174  1.00  0.00
H
ATOM   3347  CA  LEU   205      26.723  20.249  73.929  1.00  0.00
C
ATOM   3348  HA  LEU   205      27.698  19.777  73.807  1.00  0.00
H
ATOM   3349  CB  LEU   205      26.482  21.199  72.735  1.00  0.00
C
ATOM   3350  HB2 LEU   205      26.446  20.587  71.836  1.00  0.00
H
ATOM   3351  HB3 LEU   205      25.497  21.656  72.831  1.00  0.00
H
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ATOM   3352  CG  LEU   205      27.516  22.306  72.462  1.00  0.00
C
ATOM   3353  HG  LEU   205      27.340  22.657  71.445  1.00  0.00
H
ATOM   3354  CD1 LEU   205      27.342  23.517  73.373  1.00  0.00
C
ATOM   3355 HD11 LEU   205      27.628  23.280  74.395  1.00  0.00
H
ATOM   3356 HD12 LEU   205      27.973  24.327  73.012  1.00  0.00
H
ATOM   3357 HD13 LEU   205      26.303  23.841  73.353  1.00  0.00
H
ATOM   3358  CD2 LEU   205      28.967  21.830  72.532  1.00  0.00
C
ATOM   3359 HD21 LEU   205      29.091  20.959  71.891  1.00  0.00
H
ATOM   3360 HD22 LEU   205      29.619  22.626  72.177  1.00  0.00
H
ATOM   3361 HD23 LEU   205      29.242  21.573  73.555  1.00  0.00
H
ATOM   3362  C   LEU   205      26.723  20.951  75.296  1.00  0.00
C
ATOM   3363  O   LEU   205      27.767  21.045  75.941  1.00  0.00
O
ATOM   3364  N   ARG   206      25.554  21.386  75.780  1.00  0.00
N
ATOM   3365  H   ARG   206      24.731  21.236  75.203  1.00  0.00
H
ATOM   3366  CA  ARG   206      25.350  22.022  77.098  1.00  0.00
C
ATOM   3367  HA  ARG   206      25.931  22.945  77.161  1.00  0.00
H
ATOM   3368  CB  ARG   206      23.854  22.367  77.202  1.00  0.00
C
ATOM   3369  HB2 ARG   206      23.599  23.040  76.380  1.00  0.00
H
ATOM   3370  HB3 ARG   206      23.274  21.453  77.094  1.00  0.00
H
ATOM   3371  CG  ARG   206      23.442  23.035  78.515  1.00  0.00
C
ATOM   3372  HG2 ARG   206      23.612  22.359  79.350  1.00  0.00
H
ATOM   3373  HG3 ARG   206      24.043  23.926  78.645  1.00  0.00
H
ATOM   3374  CD  ARG   206      21.958  23.406  78.482  1.00  0.00
C
ATOM   3375  HD2 ARG   206      21.748  23.971  77.568  1.00  0.00
H
ATOM   3376  HD3 ARG   206      21.372  22.485  78.471  1.00  0.00
H
ATOM   3377  NE  ARG   206      21.589  24.214  79.656  1.00  0.00
N
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ATOM   3378  HE  ARG   206      22.305  24.407  80.337  1.00  0.00
H
ATOM   3379  CZ  ARG   206      20.408  24.750  79.887  1.00  0.00
C
ATOM   3380  NH1 ARG   206      19.359  24.514  79.151  1.00  0.00
N
ATOM   3381 HH11 ARG   206      19.368  23.732  78.503  1.00  0.00
H
ATOM   3382 HH12 ARG   206      18.519  25.018  79.397  1.00  0.00
H
ATOM   3383  NH2 ARG   206      20.273  25.599  80.856  1.00  0.00
N
ATOM   3384 HH21 ARG   206      21.057  25.899  81.412  1.00  0.00
H
ATOM   3385 HH22 ARG   206      19.367  26.062  80.949  1.00  0.00
H
ATOM   3386  C   ARG   206      25.810  21.123  78.256  1.00  0.00
C
ATOM   3387  O   ARG   206      26.447  21.599  79.194  1.00  0.00
O
ATOM   3388  N   GLN   207      25.545  19.819  78.173  1.00  0.00
N
ATOM   3389  H   GLN   207      24.979  19.495  77.393  1.00  0.00
H
ATOM   3390  CA  GLN   207      25.902  18.843  79.205  1.00  0.00
C
ATOM   3391  HA  GLN   207      25.738  19.317  80.173  1.00  0.00
H
ATOM   3392  CB  GLN   207      24.958  17.637  79.076  1.00  0.00
C
ATOM   3393  HB2 GLN   207      23.971  17.973  78.764  1.00  0.00
H
ATOM   3394  HB3 GLN   207      25.337  16.964  78.308  1.00  0.00
H
ATOM   3395  CG  GLN   207      24.783  16.881  80.397  1.00  0.00
C
ATOM   3396  HG2 GLN   207      24.279  15.939  80.185  1.00  0.00
H
ATOM   3397  HG3 GLN   207      25.760  16.658  80.827  1.00  0.00
H
ATOM   3398  CD  GLN   207      23.928  17.641  81.404  1.00  0.00
C
ATOM   3399  OE1 GLN   207      23.113  18.493  81.083  1.00  0.00
O
ATOM   3400  NE2 GLN   207      24.071  17.353  82.680  1.00  0.00
N
ATOM   3401 HE21 GLN   207      23.433  17.814  83.304  1.00  0.00
H
ATOM   3402 HE22 GLN   207      24.699  16.629  82.964  1.00  0.00
H
ATOM   3403  C   GLN   207      27.379  18.415  79.128  1.00  0.00
C
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ATOM   3404  O   GLN   207      27.984  18.068  80.146  1.00  0.00
O
ATOM   3405  N   HIE   208      27.978  18.457  77.933  1.00  0.00
N
ATOM   3406  H   HIE   208      27.395  18.635  77.120  1.00  0.00
H
ATOM   3407  CA  HIE   208      29.424  18.311  77.715  1.00  0.00
C
ATOM   3408  HA  HIE   208      29.783  17.422  78.232  1.00  0.00
H
ATOM   3409  CB  HIE   208      29.698  18.115  76.212  1.00  0.00
C
ATOM   3410  HB2 HIE   208      29.236  17.178  75.889  1.00  0.00
H
ATOM   3411  HB3 HIE   208      29.241  18.927  75.640  1.00  0.00
H
ATOM   3412  CG  HIE   208      31.163  18.065  75.860  1.00  0.00
C
ATOM   3413  ND1 HIE   208      32.046  17.014  76.138  1.00  0.00
N
ATOM   3414  CE1 HIE   208      33.230  17.408  75.643  1.00  0.00
C
ATOM   3415  HE1 HIE   208      34.146  16.829  75.691  1.00  0.00
H
ATOM   3416  NE2 HIE   208      33.131  18.624  75.085  1.00  0.00
N
ATOM   3417  HE2 HIE   208      33.906  19.161  74.700  1.00  0.00
H
ATOM   3418  CD2 HIE   208      31.835  19.056  75.212  1.00  0.00
C
ATOM   3419  HD2 HIE   208      31.419  19.992  74.875  1.00  0.00
H
ATOM   3420  C   HIE   208      30.185  19.501  78.315  1.00  0.00
C
ATOM   3421  O   HIE   208      31.072  19.292  79.141  1.00  0.00
O
ATOM   3422  N   LEU   209      29.767  20.739  78.017  1.00  0.00
N
ATOM   3423  H   LEU   209      29.012  20.838  77.345  1.00  0.00
H
ATOM   3424  CA  LEU   209      30.275  21.960  78.659  1.00  0.00
C
ATOM   3425  HA  LEU   209      31.325  22.093  78.403  1.00  0.00
H
ATOM   3426  CB  LEU   209      29.474  23.181  78.158  1.00  0.00
C
ATOM   3427  HB2 LEU   209      28.414  22.971  78.267  1.00  0.00
H
ATOM   3428  HB3 LEU   209      29.670  24.023  78.811  1.00  0.00
H
ATOM   3429  CG  LEU   209      29.737  23.646  76.715  1.00  0.00
C
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ATOM   3430  HG  LEU   209      29.465  22.857  76.022  1.00  0.00
H
ATOM   3431  CD1 LEU   209      28.871  24.873  76.431  1.00  0.00
C
ATOM   3432 HD11 LEU   209      29.168  25.701  77.077  1.00  0.00
H
ATOM   3433 HD12 LEU   209      28.982  25.172  75.392  1.00  0.00
H
ATOM   3434 HD13 LEU   209      27.822  24.641  76.620  1.00  0.00
H
ATOM   3435  CD2 LEU   209      31.193  24.024  76.450  1.00  0.00
C
ATOM   3436 HD21 LEU   209      31.827  23.145  76.552  1.00  0.00
H
ATOM   3437 HD22 LEU   209      31.291  24.401  75.433  1.00  0.00
H
ATOM   3438 HD23 LEU   209      31.509  24.796  77.151  1.00  0.00
H
ATOM   3439  C   LEU   209      30.219  21.863  80.193  1.00  0.00
C
ATOM   3440  O   LEU   209      31.225  22.109  80.859  1.00  0.00
O
ATOM   3441  N   LEU   210      29.092  21.412  80.755  1.00  0.00
N
ATOM   3442  H   LEU   210      28.281  21.295  80.157  1.00  0.00
H
ATOM   3443  CA  LEU   210      28.917  21.276  82.204  1.00  0.00
C
ATOM   3444  HA  LEU   210      29.165  22.246  82.637  1.00  0.00
H
ATOM   3445  CB  LEU   210      27.433  20.983  82.488  1.00  0.00
C
ATOM   3446  HB2 LEU   210      26.827  21.729  81.971  1.00  0.00
H
ATOM   3447  HB3 LEU   210      27.194  20.007  82.065  1.00  0.00
H
ATOM   3448  CG  LEU   210      27.046  20.992  83.981  1.00  0.00
C
ATOM   3449  HG  LEU   210      27.634  20.246  84.517  1.00  0.00
H
ATOM   3450  CD1 LEU   210      27.260  22.362  84.638  1.00  0.00
C
ATOM   3451 HD11 LEU   210      26.718  23.133  84.089  1.00  0.00
H
ATOM   3452 HD12 LEU   210      26.900  22.339  85.666  1.00  0.00
H
ATOM   3453 HD13 LEU   210      28.320  22.611  84.658  1.00  0.00
H
ATOM   3454  CD2 LEU   210      25.568  20.623  84.119  1.00  0.00
C
ATOM   3455 HD21 LEU   210      25.382  19.642  83.683  1.00  0.00
H
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ATOM   3456 HD22 LEU   210      25.288  20.592  85.172  1.00  0.00
H
ATOM   3457 HD23 LEU   210      24.949  21.358  83.605  1.00  0.00
H
ATOM   3458  C   LEU   210      29.854  20.232  82.855  1.00  0.00
C
ATOM   3459  O   LEU   210      30.296  20.448  83.983  1.00  0.00
O
ATOM   3460  N   ARG   211      30.231  19.144  82.159  1.00  0.00
N
ATOM   3461  H   ARG   211      29.844  19.024  81.228  1.00  0.00
H
ATOM   3462  CA  ARG   211      31.277  18.197  82.630  1.00  0.00
C
ATOM   3463  HA  ARG   211      31.057  17.899  83.656  1.00  0.00
H
ATOM   3464  CB  ARG   211      31.340  16.942  81.746  1.00  0.00
C
ATOM   3465  HB2 ARG   211      31.319  17.216  80.690  1.00  0.00
H
ATOM   3466  HB3 ARG   211      32.286  16.430  81.938  1.00  0.00
H
ATOM   3467  CG  ARG   211      30.213  15.957  82.057  1.00  0.00
C
ATOM   3468  HG2 ARG   211      30.246  15.699  83.118  1.00  0.00
H
ATOM   3469  HG3 ARG   211      29.249  16.411  81.830  1.00  0.00
H
ATOM   3470  CD  ARG   211      30.411  14.687  81.223  1.00  0.00
C
ATOM   3471  HD2 ARG   211      30.321  14.924  80.160  1.00  0.00
H
ATOM   3472  HD3 ARG   211      31.421  14.310  81.399  1.00  0.00
H
ATOM   3473  NE  ARG   211      29.458  13.635  81.605  1.00  0.00
N
ATOM   3474  HE  ARG   211      29.824  12.906  82.213  1.00  0.00
H
ATOM   3475  CZ  ARG   211      28.183  13.544  81.279  1.00  0.00
C
ATOM   3476  NH1 ARG   211      27.570  14.428  80.547  1.00  0.00
N
ATOM   3477 HH11 ARG   211      28.069  15.224  80.197  1.00  0.00
H
ATOM   3478 HH12 ARG   211      26.591  14.270  80.346  1.00  0.00
H
ATOM   3479  NH2 ARG   211      27.459  12.557  81.707  1.00  0.00
N
ATOM   3480 HH21 ARG   211      27.864  11.830  82.269  1.00  0.00
H
ATOM   3481 HH22 ARG   211      26.487  12.522  81.421  1.00  0.00
H
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ATOM   3482  C   ARG   211      32.671  18.823  82.684  1.00  0.00
C
ATOM   3483  O   ARG   211      33.498  18.399  83.493  1.00  0.00
O
ATOM   3484  N   TRP   212      32.900  19.839  81.856  1.00  0.00
N
ATOM   3485  H   TRP   212      32.165  20.083  81.204  1.00  0.00
H
ATOM   3486  CA  TRP   212      34.082  20.697  81.879  1.00  0.00
C
ATOM   3487  HA  TRP   212      34.892  20.142  82.349  1.00  0.00
H
ATOM   3488  CB  TRP   212      34.535  20.987  80.442  1.00  0.00
C
ATOM   3489  HB2 TRP   212      33.712  21.426  79.875  1.00  0.00
H
ATOM   3490  HB3 TRP   212      35.348  21.711  80.466  1.00  0.00
H
ATOM   3491  CG  TRP   212      35.047  19.777  79.729  1.00  0.00
C
ATOM   3492  CD1 TRP   212      34.352  19.023  78.849  1.00  0.00
C
ATOM   3493  HD1 TRP   212      33.336  19.219  78.531  1.00  0.00
H
ATOM   3494  NE1 TRP   212      35.114  17.944  78.458  1.00  0.00
N
ATOM   3495  HE1 TRP   212      34.758  17.208  77.867  1.00  0.00
H
ATOM   3496  CE2 TRP   212      36.367  17.971  79.035  1.00  0.00
C
ATOM   3497  CZ2 TRP   212      37.479  17.121  78.955  1.00  0.00
C
ATOM   3498  HZ2 TRP   212      37.443  16.229  78.347  1.00  0.00
H
ATOM   3499  CH2 TRP   212      38.635  17.435  79.691  1.00  0.00
C
ATOM   3500  HH2 TRP   212      39.500  16.786  79.648  1.00  0.00
H
ATOM   3501  CZ3 TRP   212      38.666  18.591  80.492  1.00  0.00
C
ATOM   3502  HZ3 TRP   212      39.557  18.821  81.062  1.00  0.00
H
ATOM   3503  CE3 TRP   212      37.542  19.438  80.567  1.00  0.00
C
ATOM   3504  HE3 TRP   212      37.580  20.322  81.187  1.00  0.00
H
ATOM   3505  CD2 TRP   212      36.361  19.143  79.848  1.00  0.00
C
ATOM   3506  C   TRP   212      33.888  21.962  82.728  1.00  0.00
C
ATOM   3507  O   TRP   212      34.759  22.824  82.719  1.00  0.00
O
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ATOM   3508  N   GLY   213      32.791  22.080  83.485  1.00  0.00
N
ATOM   3509  H   GLY   213      32.112  21.332  83.461  1.00  0.00
H
ATOM   3510  CA  GLY   213      32.510  23.207  84.380  1.00  0.00
C
ATOM   3511  HA2 GLY   213      31.745  22.906  85.094  1.00  0.00
H
ATOM   3512  HA3 GLY   213      33.420  23.428  84.927  1.00  0.00
H
ATOM   3513  C   GLY   213      32.029  24.501  83.706  1.00  0.00
C
ATOM   3514  O   GLY   213      31.642  25.443  84.397  1.00  0.00
O
ATOM   3515  N   LEU   214      31.967  24.537  82.371  1.00  0.00
N
ATOM   3516  H   LEU   214      32.205  23.690  81.873  1.00  0.00
H
ATOM   3517  CA  LEU   214      31.430  25.654  81.585  1.00  0.00
C
ATOM   3518  HA  LEU   214      31.873  26.586  81.936  1.00  0.00
H
ATOM   3519  CB  LEU   214      31.798  25.477  80.092  1.00  0.00
C
ATOM   3520  HB2 LEU   214      31.574  24.454  79.803  1.00  0.00
H
ATOM   3521  HB3 LEU   214      31.140  26.123  79.509  1.00  0.00
H
ATOM   3522  CG  LEU   214      33.242  25.769  79.630  1.00  0.00
C
ATOM   3523  HG  LEU   214      33.281  25.545  78.564  1.00  0.00
H
ATOM   3524  CD1 LEU   214      33.644  27.231  79.790  1.00  0.00
C
ATOM   3525 HD11 LEU   214      33.630  27.530  80.837  1.00  0.00
H
ATOM   3526 HD12 LEU   214      34.647  27.376  79.388  1.00  0.00
H
ATOM   3527 HD13 LEU   214      32.961  27.845  79.209  1.00  0.00
H
ATOM   3528  CD2 LEU   214      34.305  24.906  80.302  1.00  0.00
C
ATOM   3529 HD21 LEU   214      34.030  23.858  80.211  1.00  0.00
H
ATOM   3530 HD22 LEU   214      35.261  25.066  79.806  1.00  0.00
H
ATOM   3531 HD23 LEU   214      34.406  25.172  81.354  1.00  0.00
H
ATOM   3532  C   LEU   214      29.902  25.741  81.804  1.00  0.00
C
ATOM   3533  O   LEU   214      29.107  25.103  81.109  1.00  0.00
O
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ATOM   3534  N   TYR   215      29.483  26.502  82.817  1.00  0.00
N
ATOM   3535  H   TYR   215      30.190  26.925  83.402  1.00  0.00
H
ATOM   3536  CA  TYR   215      28.086  26.620  83.241  1.00  0.00
C
ATOM   3537  HA  TYR   215      27.680  25.614  83.359  1.00  0.00
H
ATOM   3538  CB  TYR   215      28.034  27.310  84.615  1.00  0.00
C
ATOM   3539  HB2 TYR   215      28.885  26.975  85.211  1.00  0.00
H
ATOM   3540  HB3 TYR   215      28.147  28.388  84.487  1.00  0.00
H
ATOM   3541  CG  TYR   215      26.772  27.036  85.412  1.00  0.00
C
ATOM   3542  CD1 TYR   215      26.818  26.153  86.510  1.00  0.00
C
ATOM   3543  HD1 TYR   215      27.749  25.668  86.772  1.00  0.00
H
ATOM   3544  CE1 TYR   215      25.664  25.919  87.285  1.00  0.00
C
ATOM   3545  HE1 TYR   215      25.708  25.257  88.137  1.00  0.00
H
ATOM   3546  CZ  TYR   215      24.453  26.564  86.950  1.00  0.00
C
ATOM   3547  OH  TYR   215      23.332  26.370  87.693  1.00  0.00
O
ATOM   3548  HH  TYR   215      23.463  25.764  88.425  1.00  0.00
H
ATOM   3549  CE2 TYR   215      24.404  27.433  85.840  1.00  0.00
C
ATOM   3550  HE2 TYR   215      23.472  27.920  85.598  1.00  0.00
H
ATOM   3551  CD2 TYR   215      25.562  27.675  85.076  1.00  0.00
C
ATOM   3552  HD2 TYR   215      25.524  28.369  84.248  1.00  0.00
H
ATOM   3553  C   TYR   215      27.246  27.370  82.191  1.00  0.00
C
ATOM   3554  O   TYR   215      27.569  28.500  81.827  1.00  0.00
O
ATOM   3555  N   THR   216      26.148  26.761  81.729  1.00  0.00
N
ATOM   3556  H   THR   216      25.913  25.852  82.099  1.00  0.00
H
ATOM   3557  CA  THR   216      25.265  27.341  80.700  1.00  0.00
C
ATOM   3558  HA  THR   216      25.773  28.165  80.205  1.00  0.00
H
ATOM   3559  CB  THR   216      24.945  26.329  79.595  1.00  0.00
C
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ATOM   3560  HB  THR   216      24.285  25.565  80.004  1.00  0.00
H
ATOM   3561  CG2 THR   216      24.279  26.998  78.394  1.00  0.00
C
ATOM   3562 HG21 THR   216      24.978  27.707  77.946  1.00  0.00
H
ATOM   3563 HG22 THR   216      24.010  26.238  77.665  1.00  0.00
H
ATOM   3564 HG23 THR   216      23.379  27.530  78.702  1.00  0.00
H
ATOM   3565  OG1 THR   216      26.102  25.694  79.093  1.00  0.00
O
ATOM   3566  HG1 THR   216      26.696  25.488  79.820  1.00  0.00
H
ATOM   3567  C   THR   216      23.954  27.849  81.317  1.00  0.00
C
ATOM   3568  O   THR   216      23.042  27.042  81.547  1.00  0.00
O
ATOM   3569  N   PRO   217      23.821  29.161  81.588  1.00  0.00
N
ATOM   3570  CD  PRO   217      24.845  30.196  81.470  1.00  0.00
C
ATOM   3571  HD2 PRO   217      25.418  30.125  80.547  1.00  0.00
H
ATOM   3572  HD3 PRO   217      25.513  30.137  82.331  1.00  0.00
H
ATOM   3573  CG  PRO   217      24.107  31.532  81.490  1.00  0.00
C
ATOM   3574  HG2 PRO   217      23.800  31.801  80.478  1.00  0.00
H
ATOM   3575  HG3 PRO   217      24.718  32.323  81.927  1.00  0.00
H
ATOM   3576  CB  PRO   217      22.879  31.216  82.343  1.00  0.00
C
ATOM   3577  HB2 PRO   217      22.050  31.887  82.116  1.00  0.00
H
ATOM   3578  HB3 PRO   217      23.145  31.286  83.400  1.00  0.00
H
ATOM   3579  CA  PRO   217      22.550  29.757  81.990  1.00  0.00
C
ATOM   3580  HA  PRO   217      22.172  29.246  82.877  1.00  0.00
H
ATOM   3581  C   PRO   217      21.498  29.670  80.870  1.00  0.00
C
ATOM   3582  O   PRO   217      21.825  29.609  79.686  1.00  0.00
O
ATOM   3583  N   ASP   218      20.213  29.737  81.232  1.00  0.00
N
ATOM   3584  H   ASP   218      19.997  29.777  82.216  1.00  0.00
H
ATOM   3585  CA  ASP   218      19.094  29.770  80.273  1.00  0.00
C
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ATOM   3586  HA  ASP   218      19.326  29.074  79.465  1.00  0.00
H
ATOM   3587  CB  ASP   218      17.801  29.256  80.934  1.00  0.00
C
ATOM   3588  HB2 ASP   218      17.598  29.842  81.833  1.00  0.00
H
ATOM   3589  HB3 ASP   218      16.964  29.393  80.250  1.00  0.00
H
ATOM   3590  CG  ASP   218      17.882  27.767  81.283  1.00  0.00
C
ATOM   3591  OD1 ASP   218      17.941  26.921  80.360  1.00  0.00
O
ATOM   3592  OD2 ASP   218      17.937  27.438  82.489  1.00  0.00
O
ATOM   3593  C   ASP   218      18.908  31.147  79.586  1.00  0.00
C
ATOM   3594  O   ASP   218      17.948  31.350  78.849  1.00  0.00
O
ATOM   3595  N   GLN   219      19.838  32.094  79.764  1.00  0.00
N
ATOM   3596  H   GLN   219      20.627  31.856  80.345  1.00  0.00
H
ATOM   3597  CA  GLN   219      19.904  33.376  79.034  1.00  0.00
C
ATOM   3598  HA  GLN   219      18.887  33.727  78.857  1.00  0.00
H
ATOM   3599  CB  GLN   219      20.628  34.446  79.881  1.00  0.00
C
ATOM   3600  HB2 GLN   219      21.527  34.020  80.330  1.00  0.00
H
ATOM   3601  HB3 GLN   219      20.938  35.269  79.235  1.00  0.00
H
ATOM   3602  CG  GLN   219      19.735  35.066  80.967  1.00  0.00
C
ATOM   3603  HG2 GLN   219      20.284  35.872  81.454  1.00  0.00
H
ATOM   3604  HG3 GLN   219      18.857  35.507  80.491  1.00  0.00
H
ATOM   3605  CD  GLN   219      19.292  34.077  82.040  1.00  0.00
C
ATOM   3606  OE1 GLN   219      20.087  33.547  82.797  1.00  0.00
O
ATOM   3607  NE2 GLN   219      18.015  33.787  82.144  1.00  0.00
N
ATOM   3608 HE21 GLN   219      17.760  33.137  82.864  1.00  0.00
H
ATOM   3609 HE22 GLN   219      17.343  34.204  81.525  1.00  0.00
H
ATOM   3610  C   GLN   219      20.513  33.189  77.631  1.00  0.00
C
ATOM   3611  O   GLN   219      21.392  33.929  77.195  1.00  0.00
O
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ATOM   3612  N   LYS   220      20.046  32.160  76.922  1.00  0.00
N
ATOM   3613  H   LYS   220      19.246  31.665  77.307  1.00  0.00
H
ATOM   3614  CA  LYS   220      20.600  31.673  75.658  1.00  0.00
C
ATOM   3615  HA  LYS   220      21.243  32.448  75.232  1.00  0.00
H
ATOM   3616  CB  LYS   220      21.489  30.455  75.968  1.00  0.00
C
ATOM   3617  HB2 LYS   220      22.137  30.278  75.124  1.00  0.00
H
ATOM   3618  HB3 LYS   220      22.141  30.717  76.804  1.00  0.00
H
ATOM   3619  CG  LYS   220      20.779  29.138  76.317  1.00  0.00
C
ATOM   3620  HG2 LYS   220      21.467  28.530  76.907  1.00  0.00
H
ATOM   3621  HG3 LYS   220      19.889  29.333  76.918  1.00  0.00
H
ATOM   3622  CD  LYS   220      20.406  28.340  75.061  1.00  0.00
C
ATOM   3623  HD2 LYS   220      19.585  28.819  74.530  1.00  0.00
H
ATOM   3624  HD3 LYS   220      21.268  28.297  74.395  1.00  0.00
H
ATOM   3625  CE  LYS   220      19.996  26.924  75.454  1.00  0.00
C
ATOM   3626  HE2 LYS   220      20.783  26.495  76.082  1.00  0.00
H
ATOM   3627  HE3 LYS   220      19.077  26.971  76.048  1.00  0.00
H
ATOM   3628  NZ  LYS   220      19.809  26.100  74.242  1.00  0.00
N
ATOM   3629  HZ1 LYS   220      20.688  26.041  73.745  1.00  0.00
H
ATOM   3630  HZ2 LYS   220      19.518  25.160  74.488  1.00  0.00
H
ATOM   3631  HZ3 LYS   220      19.134  26.541  73.631  1.00  0.00
H
ATOM   3632  C   LYS   220      19.478  31.426  74.653  1.00  0.00
C
ATOM   3633  O   LYS   220      18.389  30.999  75.032  1.00  0.00
O
ATOM   3634  N   HIE   221      19.734  31.684  73.377  1.00  0.00
N
ATOM   3635  H   HIE   221      20.689  31.866  73.101  1.00  0.00
H
ATOM   3636  CA  HIE   221      18.676  31.704  72.361  1.00  0.00
C
ATOM   3637  HA  HIE   221      17.782  32.164  72.792  1.00  0.00
H
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ATOM   3638  CB  HIE   221      19.083  32.592  71.174  1.00  0.00
C
ATOM   3639  HB2 HIE   221      19.963  32.163  70.700  1.00  0.00
H
ATOM   3640  HB3 HIE   221      18.279  32.549  70.442  1.00  0.00
H
ATOM   3641  CG  HIE   221      19.311  34.067  71.480  1.00  0.00
C
ATOM   3642  ND1 HIE   221      18.697  35.122  70.804  1.00  0.00
N
ATOM   3643  CE1 HIE   221      19.153  36.250  71.362  1.00  0.00
C
ATOM   3644  HE1 HIE   221      18.867  37.244  71.052  1.00  0.00
H
ATOM   3645  NE2 HIE   221      20.047  35.975  72.321  1.00  0.00
N
ATOM   3646  HE2 HIE   221      20.596  36.652  72.835  1.00  0.00
H
ATOM   3647  CD2 HIE   221      20.159  34.606  72.408  1.00  0.00
C
ATOM   3648  HD2 HIE   221      20.815  34.067  73.071  1.00  0.00
H
ATOM   3649  C   HIE   221      18.287  30.264  71.968  1.00  0.00
C
ATOM   3650  O   HIE   221      19.154  29.385  71.830  1.00  0.00
O
ATOM   3651  N   GLN   222      16.983  30.001  71.826  1.00  0.00
N
ATOM   3652  H   GLN   222      16.358  30.813  71.839  1.00  0.00
H
ATOM   3653  CA  GLN   222      16.369  28.697  71.565  1.00  0.00
C
ATOM   3654  HA  GLN   222      17.174  27.974  71.482  1.00  0.00
H
ATOM   3655  CB  GLN   222      15.514  28.250  72.754  1.00  0.00
C
ATOM   3656  HB2 GLN   222      14.753  29.006  72.964  1.00  0.00
H
ATOM   3657  HB3 GLN   222      15.001  27.340  72.442  1.00  0.00
H
ATOM   3658  CG  GLN   222      16.302  27.921  74.034  1.00  0.00
C
ATOM   3659  HG2 GLN   222      17.148  27.299  73.760  1.00  0.00
H
ATOM   3660  HG3 GLN   222      16.667  28.839  74.490  1.00  0.00
H
ATOM   3661  CD  GLN   222      15.431  27.172  75.045  1.00  0.00
C
ATOM   3662  OE1 GLN   222      14.263  27.452  75.244  1.00  0.00
O
ATOM   3663  NE2 GLN   222      15.906  26.121  75.687  1.00  0.00
N
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ATOM   3664 HE21 GLN   222      15.241  25.670  76.301  1.00  0.00
H
ATOM   3665 HE22 GLN   222      16.848  25.804  75.622  1.00  0.00
H
ATOM   3666  C   GLN   222      15.495  28.614  70.284  1.00  0.00
C
ATOM   3667  O   GLN   222      15.788  27.811  69.406  1.00  0.00
O
ATOM   3668  N   LYS   223      14.392  29.357  70.168  1.00  0.00
N
ATOM   3669  H   LYS   223      14.183  29.986  70.943  1.00  0.00
H
ATOM   3670  CA  LYS   223      13.448  29.354  69.017  1.00  0.00
C
ATOM   3671  HA  LYS   223      14.002  29.038  68.133  1.00  0.00
H
ATOM   3672  CB  LYS   223      12.303  28.350  69.287  1.00  0.00
C
ATOM   3673  HB2 LYS   223      12.723  27.420  69.656  1.00  0.00
H
ATOM   3674  HB3 LYS   223      11.698  28.747  70.105  1.00  0.00
H
ATOM   3675  CG  LYS   223      11.375  28.031  68.087  1.00  0.00
C
ATOM   3676  HG2 LYS   223      10.732  27.196  68.362  1.00  0.00
H
ATOM   3677  HG3 LYS   223      10.713  28.877  67.935  1.00  0.00
H
ATOM   3678  CD  LYS   223      12.060  27.710  66.740  1.00  0.00
C
ATOM   3679  HD2 LYS   223      12.823  28.455  66.515  1.00  0.00
H
ATOM   3680  HD3 LYS   223      12.520  26.721  66.789  1.00  0.00
H
ATOM   3681  CE  LYS   223      11.027  27.759  65.603  1.00  0.00
C
ATOM   3682  HE2 LYS   223      10.277  26.974  65.751  1.00  0.00
H
ATOM   3683  HE3 LYS   223      10.506  28.720  65.672  1.00  0.00
H
ATOM   3684  NZ  LYS   223      11.639  27.662  64.248  1.00  0.00
N
ATOM   3685  HZ1 LYS   223      11.975  26.738  63.993  1.00  0.00
H
ATOM   3686  HZ2 LYS   223      10.954  27.958  63.551  1.00  0.00
H
ATOM   3687  HZ3 LYS   223      12.411  28.298  64.126  1.00  0.00
H
ATOM   3688  C   LYS   223      12.944  30.766  68.679  1.00  0.00
C
ATOM   3689  O   LYS   223      11.752  31.006  68.487  1.00  0.00
O
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ATOM   3690  N   GLU   224      13.869  31.708  68.581  1.00  0.00
N
ATOM   3691  H   GLU   224      14.820  31.467  68.839  1.00  0.00
H
ATOM   3692  CA  GLU   224      13.633  33.108  68.233  1.00  0.00
C
ATOM   3693  HA  GLU   224      12.567  33.329  68.238  1.00  0.00
H
ATOM   3694  CB  GLU   224      14.291  34.050  69.267  1.00  0.00
C
ATOM   3695  HB2 GLU   224      15.369  34.108  69.096  1.00  0.00
H
ATOM   3696  HB3 GLU   224      13.891  35.049  69.088  1.00  0.00
H
ATOM   3697  CG  GLU   224      14.020  33.693  70.746  1.00  0.00
C
ATOM   3698  HG2 GLU   224      14.350  34.530  71.363  1.00  0.00
H
ATOM   3699  HG3 GLU   224      12.942  33.575  70.879  1.00  0.00
H
ATOM   3700  CD  GLU   224      14.750  32.421  71.211  1.00  0.00
C
ATOM   3701  OE1 GLU   224      15.845  32.134  70.695  1.00  0.00
O
ATOM   3702  OE2 GLU   224      14.195  31.613  71.990  1.00  0.00
O
ATOM   3703  C   GLU   224      14.198  33.361  66.828  1.00  0.00
C
ATOM   3704  O   GLU   224      15.400  33.202  66.627  1.00  0.00
O
ATOM   3705  N   PRO   225      13.381  33.727  65.822  1.00  0.00
N
ATOM   3706  CD  PRO   225      11.931  33.603  65.746  1.00  0.00
C
ATOM   3707  HD2 PRO   225      11.445  34.483  66.167  1.00  0.00
H
ATOM   3708  HD3 PRO   225      11.575  32.703  66.249  1.00  0.00
H
ATOM   3709  CG  PRO   225      11.638  33.502  64.251  1.00  0.00
C
ATOM   3710  HG2 PRO   225      10.637  33.855  63.997  1.00  0.00
H
ATOM   3711  HG3 PRO   225      11.763  32.461  63.949  1.00  0.00
H
ATOM   3712  CB  PRO   225      12.741  34.343  63.601  1.00  0.00
C
ATOM   3713  HB2 PRO   225      12.489  35.402  63.583  1.00  0.00
H
ATOM   3714  HB3 PRO   225      12.932  33.995  62.589  1.00  0.00
H
ATOM   3715  CA  PRO   225      13.936  34.111  64.527  1.00  0.00
C
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ATOM   3716  HA  PRO   225      14.508  33.264  64.131  1.00  0.00
H
ATOM   3717  C   PRO   225      14.888  35.325  64.617  1.00  0.00
C
ATOM   3718  O   PRO   225      15.800  35.343  63.811  1.00  0.00
O
ATOM   3719  N   PRO   226      14.743  36.312  65.535  1.00  0.00
N
ATOM   3720  CD  PRO   226      13.466  36.772  66.048  1.00  0.00
C
ATOM   3721  HD2 PRO   226      13.384  36.527  67.107  1.00  0.00
H
ATOM   3722  HD3 PRO   226      12.633  36.334  65.509  1.00  0.00
H
ATOM   3723  CG  PRO   226      13.489  38.292  65.870  1.00  0.00
C
ATOM   3724  HG2 PRO   226      12.774  38.794  66.525  1.00  0.00
H
ATOM   3725  HG3 PRO   226      13.322  38.578  64.826  1.00  0.00
H
ATOM   3726  CB  PRO   226      14.931  38.599  66.275  1.00  0.00
C
ATOM   3727  HB2 PRO   226      14.966  38.697  67.363  1.00  0.00
H
ATOM   3728  HB3 PRO   226      15.299  39.516  65.814  1.00  0.00
H
ATOM   3729  CA  PRO   226      15.732  37.376  65.777  1.00  0.00
C
ATOM   3730  HA  PRO   226      16.183  37.658  64.829  1.00  0.00
H
ATOM   3731  C   PRO   226      16.881  36.951  66.718  1.00  0.00
C
ATOM   3732  O   PRO   226      16.926  37.349  67.884  1.00  0.00
O
ATOM   3733  N   PHE   227      17.847  36.173  66.222  1.00  0.00
N
ATOM   3734  H   PHE   227      17.788  35.868  65.254  1.00  0.00
H
ATOM   3735  CA  PHE   227      19.043  35.833  67.001  1.00  0.00
C
ATOM   3736  HA  PHE   227      18.733  35.506  67.995  1.00  0.00
H
ATOM   3737  CB  PHE   227      19.800  34.683  66.330  1.00  0.00
C
ATOM   3738  HB2 PHE   227      19.841  34.895  65.273  1.00  0.00
H
ATOM   3739  HB3 PHE   227      20.822  34.659  66.712  1.00  0.00
H
ATOM   3740  CG  PHE   227      19.191  33.310  66.496  1.00  0.00
C
ATOM   3741  CD1 PHE   227      19.297  32.648  67.729  1.00  0.00
C
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ATOM   3742  HD1 PHE   227      19.797  33.139  68.549  1.00  0.00
H
ATOM   3743  CE1 PHE   227      18.720  31.377  67.901  1.00  0.00
C
ATOM   3744  HE1 PHE   227      18.757  30.889  68.862  1.00  0.00
H
ATOM   3745  CZ  PHE   227      18.047  30.763  66.833  1.00  0.00
C
ATOM   3746  HZ  PHE   227      17.574  29.805  66.975  1.00  0.00
H
ATOM   3747  CE2 PHE   227      17.966  31.410  65.588  1.00  0.00
C
ATOM   3748  HE2 PHE   227      17.442  30.943  64.767  1.00  0.00
H
ATOM   3749  CD2 PHE   227      18.534  32.684  65.419  1.00  0.00
C
ATOM   3750  HD2 PHE   227      18.445  33.194  64.470  1.00  0.00
H
ATOM   3751  C   PHE   227      19.971  37.050  67.157  1.00  0.00
C
ATOM   3752  O   PHE   227      20.457  37.602  66.168  1.00  0.00
O
ATOM   3753  N   LEU   228      20.286  37.433  68.398  1.00  0.00
N
ATOM   3754  H   LEU   228      19.889  36.914  69.166  1.00  0.00
H
ATOM   3755  CA  LEU   228      21.299  38.459  68.684  1.00  0.00
C
ATOM   3756  HA  LEU   228      21.329  39.172  67.860  1.00  0.00
H
ATOM   3757  CB  LEU   228      20.957  39.235  69.973  1.00  0.00
C
ATOM   3758  HB2 LEU   228      20.925  38.527  70.800  1.00  0.00
H
ATOM   3759  HB3 LEU   228      21.775  39.927  70.173  1.00  0.00
H
ATOM   3760  CG  LEU   228      19.644  40.039  69.953  1.00  0.00
C
ATOM   3761  HG  LEU   228      18.810  39.368  69.753  1.00  0.00
H
ATOM   3762  CD1 LEU   228      19.432  40.686  71.323  1.00  0.00
C
ATOM   3763 HD11 LEU   228      20.257  41.364  71.547  1.00  0.00
H
ATOM   3764 HD12 LEU   228      18.499  41.248  71.315  1.00  0.00
H
ATOM   3765 HD13 LEU   228      19.377  39.919  72.094  1.00  0.00
H
ATOM   3766  CD2 LEU   228      19.653  41.158  68.912  1.00  0.00
C
ATOM   3767 HD21 LEU   228      19.831  40.742  67.923  1.00  0.00
H
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ATOM   3768 HD22 LEU   228      18.683  41.655  68.895  1.00  0.00
H
ATOM   3769 HD23 LEU   228      20.422  41.889  69.149  1.00  0.00
H
ATOM   3770  C   LEU   228      22.683  37.805  68.787  1.00  0.00
C
ATOM   3771  O   LEU   228      22.966  37.119  69.765  1.00  0.00
O
ATOM   3772  N   TRP   229      23.553  38.040  67.801  1.00  0.00
N
ATOM   3773  H   TRP   229      23.234  38.586  67.008  1.00  0.00
H
ATOM   3774  CA  TRP   229      24.900  37.453  67.728  1.00  0.00
C
ATOM   3775  HA  TRP   229      25.216  37.101  68.714  1.00  0.00
H
ATOM   3776  CB  TRP   229      24.854  36.245  66.786  1.00  0.00
C
ATOM   3777  HB2 TRP   229      24.184  35.498  67.217  1.00  0.00
H
ATOM   3778  HB3 TRP   229      24.417  36.564  65.839  1.00  0.00
H
ATOM   3779  CG  TRP   229      26.177  35.597  66.498  1.00  0.00
C
ATOM   3780  CD1 TRP   229      26.864  34.803  67.348  1.00  0.00
C
ATOM   3781  HD1 TRP   229      26.557  34.549  68.361  1.00  0.00
H
ATOM   3782  NE1 TRP   229      28.030  34.371  66.749  1.00  0.00
N
ATOM   3783  HE1 TRP   229      28.707  33.817  67.260  1.00  0.00
H
ATOM   3784  CE2 TRP   229      28.153  34.854  65.460  1.00  0.00
C
ATOM   3785  CZ2 TRP   229      29.111  34.689  64.443  1.00  0.00
C
ATOM   3786  HZ2 TRP   229      29.947  34.022  64.586  1.00  0.00
H
ATOM   3787  CH2 TRP   229      28.958  35.395  63.235  1.00  0.00
C
ATOM   3788  HH2 TRP   229      29.669  35.271  62.430  1.00  0.00
H
ATOM   3789  CZ3 TRP   229      27.872  36.272  63.070  1.00  0.00
C
ATOM   3790  HZ3 TRP   229      27.759  36.818  62.148  1.00  0.00
H
ATOM   3791  CE3 TRP   229      26.914  36.420  64.090  1.00  0.00
C
ATOM   3792  HE3 TRP   229      26.078  37.090  63.953  1.00  0.00
H
ATOM   3793  CD2 TRP   229      27.009  35.695  65.298  1.00  0.00
C
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ATOM   3794  C   TRP   229      25.920  38.481  67.227  1.00  0.00
C
ATOM   3795  O   TRP   229      25.665  39.154  66.233  1.00  0.00
O
ATOM   3796  N   MET   230      27.067  38.620  67.900  1.00  0.00
N
ATOM   3797  H   MET   230      27.222  37.989  68.678  1.00  0.00
H
ATOM   3798  CA  MET   230      28.209  39.472  67.497  1.00  0.00
C
ATOM   3799  HA  MET   230      28.858  39.527  68.370  1.00  0.00
H
ATOM   3800  CB  MET   230      29.015  38.763  66.388  1.00  0.00
C
ATOM   3801  HB2 MET   230      28.345  38.469  65.581  1.00  0.00
H
ATOM   3802  HB3 MET   230      29.757  39.437  65.965  1.00  0.00
H
ATOM   3803  CG  MET   230      29.742  37.521  66.917  1.00  0.00
C
ATOM   3804  HG2 MET   230      29.000  36.822  67.298  1.00  0.00
H
ATOM   3805  HG3 MET   230      30.256  37.041  66.083  1.00  0.00
H
ATOM   3806  SD  MET   230      30.948  37.812  68.243  1.00  0.00
S
ATOM   3807  CE  MET   230      32.112  38.908  67.400  1.00  0.00
C
ATOM   3808  HE1 MET   230      31.625  39.854  67.162  1.00  0.00
H
ATOM   3809  HE2 MET   230      32.962  39.101  68.051  1.00  0.00
H
ATOM   3810  HE3 MET   230      32.454  38.431  66.483  1.00  0.00
H
ATOM   3811  C   MET   230      27.924  40.961  67.164  1.00  0.00
C
ATOM   3812  O   MET   230      28.781  41.640  66.602  1.00  0.00
O
ATOM   3813  N   GLY   231      26.759  41.503  67.543  1.00  0.00
N
ATOM   3814  H   GLY   231      26.099  40.891  67.995  1.00  0.00
H
ATOM   3815  CA  GLY   231      26.314  42.863  67.178  1.00  0.00
C
ATOM   3816  HA2 GLY   231      25.809  43.305  68.036  1.00  0.00
H
ATOM   3817  HA3 GLY   231      27.175  43.486  66.935  1.00  0.00
H
ATOM   3818  C   GLY   231      25.338  42.924  65.993  1.00  0.00
C
ATOM   3819  O   GLY   231      25.000  44.011  65.524  1.00  0.00
O
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ATOM   3820  N   TYR   232      24.850  41.769  65.542  1.00  0.00
N
ATOM   3821  H   TYR   232      25.204  40.914  65.953  1.00  0.00
H
ATOM   3822  CA  TYR   232      23.894  41.586  64.451  1.00  0.00
C
ATOM   3823  HA  TYR   232      23.691  42.551  63.987  1.00  0.00
H
ATOM   3824  CB  TYR   232      24.514  40.665  63.383  1.00  0.00
C
ATOM   3825  HB2 TYR   232      24.573  39.646  63.771  1.00  0.00
H
ATOM   3826  HB3 TYR   232      23.883  40.642  62.492  1.00  0.00
H
ATOM   3827  CG  TYR   232      25.892  41.138  62.993  1.00  0.00
C
ATOM   3828  CD1 TYR   232      26.017  42.347  62.290  1.00  0.00
C
ATOM   3829  HD1 TYR   232      25.131  42.849  61.928  1.00  0.00
H
ATOM   3830  CE1 TYR   232      27.285  42.923  62.115  1.00  0.00
C
ATOM   3831  HE1 TYR   232      27.375  43.871  61.611  1.00  0.00
H
ATOM   3832  CZ  TYR   232      28.430  42.272  62.627  1.00  0.00
C
ATOM   3833  OH  TYR   232      29.658  42.844  62.510  1.00  0.00
O
ATOM   3834  HH  TYR   232      29.586  43.791  62.294  1.00  0.00
H
ATOM   3835  CE2 TYR   232      28.305  41.022  63.267  1.00  0.00
C
ATOM   3836  HE2 TYR   232      29.187  40.528  63.646  1.00  0.00
H
ATOM   3837  CD2 TYR   232      27.032  40.461  63.463  1.00  0.00
C
ATOM   3838  HD2 TYR   232      26.923  39.535  64.009  1.00  0.00
H
ATOM   3839  C   TYR   232      22.565  41.025  64.953  1.00  0.00
C
ATOM   3840  O   TYR   232      22.490  40.436  66.037  1.00  0.00
O
ATOM   3841  N   GLU   233      21.531  41.210  64.143  1.00  0.00
N
ATOM   3842  H   GLU   233      21.698  41.737  63.290  1.00  0.00
H
ATOM   3843  CA  GLU   233      20.284  40.452  64.198  1.00  0.00
C
ATOM   3844  HA  GLU   233      20.225  39.900  65.136  1.00  0.00
H
ATOM   3845  CB  GLU   233      19.060  41.393  64.134  1.00  0.00
C
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ATOM   3846  HB2 GLU   233      18.996  41.861  63.151  1.00  0.00
H
ATOM   3847  HB3 GLU   233      18.162  40.792  64.288  1.00  0.00
H
ATOM   3848  CG  GLU   233      19.122  42.492  65.209  1.00  0.00
C
ATOM   3849  HG2 GLU   233      19.412  42.036  66.153  1.00  0.00
H
ATOM   3850  HG3 GLU   233      19.897  43.214  64.943  1.00  0.00
H
ATOM   3851  CD  GLU   233      17.789  43.229  65.397  1.00  0.00
C
ATOM   3852  OE1 GLU   233      17.425  44.061  64.537  1.00  0.00
O
ATOM   3853  OE2 GLU   233      17.125  43.019  66.438  1.00  0.00
O
ATOM   3854  C   GLU   233      20.329  39.446  63.039  1.00  0.00
C
ATOM   3855  O   GLU   233      20.352  39.848  61.875  1.00  0.00
O
ATOM   3856  N   LEU   234      20.419  38.150  63.345  1.00  0.00
N
ATOM   3857  H   LEU   234      20.373  37.884  64.325  1.00  0.00
H
ATOM   3858  CA  LEU   234      20.398  37.059  62.365  1.00  0.00
C
ATOM   3859  HA  LEU   234      20.725  37.421  61.391  1.00  0.00
H
ATOM   3860  CB  LEU   234      21.337  35.923  62.825  1.00  0.00
C
ATOM   3861  HB2 LEU   234      20.972  35.573  63.775  1.00  0.00
H
ATOM   3862  HB3 LEU   234      21.243  35.084  62.138  1.00  0.00
H
ATOM   3863  CG  LEU   234      22.819  36.238  63.050  1.00  0.00
C
ATOM   3864  HG  LEU   234      22.922  36.993  63.829  1.00  0.00
H
ATOM   3865  CD1 LEU   234      23.521  34.954  63.496  1.00  0.00
C
ATOM   3866 HD11 LEU   234      23.419  34.189  62.726  1.00  0.00
H
ATOM   3867 HD12 LEU   234      24.579  35.138  63.665  1.00  0.00
H
ATOM   3868 HD13 LEU   234      23.079  34.596  64.425  1.00  0.00
H
ATOM   3869  CD2 LEU   234      23.540  36.720  61.800  1.00  0.00
C
ATOM   3870 HD21 LEU   234      23.112  37.664  61.471  1.00  0.00
H
ATOM   3871 HD22 LEU   234      24.581  36.873  62.066  1.00  0.00
H
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ATOM   3872 HD23 LEU   234      23.484  35.973  61.014  1.00  0.00
H
ATOM   3873  C   LEU   234      18.955  36.539  62.262  1.00  0.00
C
ATOM   3874  O   LEU   234      18.414  36.115  63.280  1.00  0.00
O
ATOM   3875  N   HIE   235      18.348  36.556  61.071  1.00  0.00
N
ATOM   3876  H   HIE   235      18.894  36.842  60.263  1.00  0.00
H
ATOM   3877  CA  HIE   235      17.015  36.016  60.747  1.00  0.00
C
ATOM   3878  HA  HIE   235      16.488  35.781  61.665  1.00  0.00
H
ATOM   3879  CB  HIE   235      16.220  37.105  59.987  1.00  0.00
C
ATOM   3880  HB2 HIE   235      16.784  37.419  59.116  1.00  0.00
H
ATOM   3881  HB3 HIE   235      15.281  36.714  59.610  1.00  0.00
H
ATOM   3882  CG  HIE   235      15.885  38.334  60.796  1.00  0.00
C
ATOM   3883  ND1 HIE   235      15.727  39.623  60.287  1.00  0.00
N
ATOM   3884  CE1 HIE   235      15.430  40.398  61.341  1.00  0.00
C
ATOM   3885  HE1 HIE   235      15.271  41.466  61.289  1.00  0.00
H
ATOM   3886  NE2 HIE   235      15.369  39.667  62.466  1.00  0.00
N
ATOM   3887  HE2 HIE   235      15.192  40.027  63.394  1.00  0.00
H
ATOM   3888  CD2 HIE   235      15.645  38.362  62.136  1.00  0.00
C
ATOM   3889  HD2 HIE   235      15.696  37.515  62.796  1.00  0.00
H
ATOM   3890  C   HIE   235      17.154  34.693  59.952  1.00  0.00
C
ATOM   3891  O   HIE   235      18.260  34.348  59.559  1.00  0.00
O
ATOM   3892  N   PRO   236      16.092  33.901  59.690  1.00  0.00
N
ATOM   3893  CD  PRO   236      14.760  34.015  60.248  1.00  0.00
C
ATOM   3894  HD2 PRO   236      14.408  35.038  60.335  1.00  0.00
H
ATOM   3895  HD3 PRO   236      14.761  33.542  61.232  1.00  0.00
H
ATOM   3896  CG  PRO   236      13.872  33.219  59.297  1.00  0.00
C
ATOM   3897  HG2 PRO   236      13.657  33.802  58.400  1.00  0.00
H
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ATOM   3898  HG3 PRO   236      12.949  32.897  59.780  1.00  0.00
H
ATOM   3899  CB  PRO   236      14.771  32.036  58.936  1.00  0.00
C
ATOM   3900  HB2 PRO   236      14.508  31.621  57.959  1.00  0.00
H
ATOM   3901  HB3 PRO   236      14.683  31.262  59.701  1.00  0.00
H
ATOM   3902  CA  PRO   236      16.196  32.620  58.959  1.00  0.00
C
ATOM   3903  HA  PRO   236      16.837  31.947  59.530  1.00  0.00
H
ATOM   3904  C   PRO   236      16.781  32.696  57.536  1.00  0.00
C
ATOM   3905  O   PRO   236      17.330  31.703  57.060  1.00  0.00
O
ATOM   3906  N   ASP   237      16.654  33.829  56.838  1.00  0.00
N
ATOM   3907  H   ASP   237      16.061  34.561  57.212  1.00  0.00
H
ATOM   3908  CA  ASP   237      17.130  34.021  55.461  1.00  0.00
C
ATOM   3909  HA  ASP   237      17.703  33.145  55.161  1.00  0.00
H
ATOM   3910  CB  ASP   237      15.915  34.097  54.516  1.00  0.00
C
ATOM   3911  HB2 ASP   237      16.292  34.137  53.494  1.00  0.00
H
ATOM   3912  HB3 ASP   237      15.332  33.183  54.616  1.00  0.00
H
ATOM   3913  CG  ASP   237      14.961  35.277  54.740  1.00  0.00
C
ATOM   3914  OD1 ASP   237      14.716  35.646  55.908  1.00  0.00
O
ATOM   3915  OD2 ASP   237      14.450  35.801  53.723  1.00  0.00
O
ATOM   3916  C   ASP   237      18.084  35.218  55.267  1.00  0.00
C
ATOM   3917  O   ASP   237      18.871  35.220  54.317  1.00  0.00
O
ATOM   3918  N   LYS   238      18.023  36.234  56.136  1.00  0.00
N
ATOM   3919  H   LYS   238      17.377  36.148  56.909  1.00  0.00
H
ATOM   3920  CA  LYS   238      18.822  37.475  56.075  1.00  0.00
C
ATOM   3921  HA  LYS   238      19.682  37.321  55.423  1.00  0.00
H
ATOM   3922  CB  LYS   238      17.968  38.645  55.521  1.00  0.00
C
ATOM   3923  HB2 LYS   238      16.960  38.607  55.949  1.00  0.00
H
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ATOM   3924  HB3 LYS   238      18.409  39.583  55.852  1.00  0.00
H
ATOM   3925  CG  LYS   238      17.899  38.717  53.985  1.00  0.00
C
ATOM   3926  HG2 LYS   238      17.723  39.746  53.687  1.00  0.00
H
ATOM   3927  HG3 LYS   238      18.845  38.398  53.555  1.00  0.00
H
ATOM   3928  CD  LYS   238      16.760  37.858  53.452  1.00  0.00
C
ATOM   3929  HD2 LYS   238      16.896  36.855  53.821  1.00  0.00
H
ATOM   3930  HD3 LYS   238      15.813  38.234  53.842  1.00  0.00
H
ATOM   3931  CE  LYS   238      16.679  37.788  51.936  1.00  0.00
C
ATOM   3932  HE2 LYS   238      16.254  38.729  51.582  1.00  0.00
H
ATOM   3933  HE3 LYS   238      17.683  37.656  51.524  1.00  0.00
H
ATOM   3934  NZ  LYS   238      15.820  36.640  51.568  1.00  0.00
N
ATOM   3935  HZ1 LYS   238      15.123  36.474  52.299  1.00  0.00
H
ATOM   3936  HZ2 LYS   238      15.332  36.761  50.692  1.00  0.00
H
ATOM   3937  HZ3 LYS   238      16.353  35.776  51.509  1.00  0.00
H
ATOM   3938  C   LYS   238      19.400  37.845  57.447  1.00  0.00
C
ATOM   3939  O   LYS   238      19.103  37.205  58.446  1.00  0.00
O
ATOM   3940  N   TRP   239      20.195  38.907  57.511  1.00  0.00
N
ATOM   3941  H   TRP   239      20.463  39.343  56.636  1.00  0.00
H
ATOM   3942  CA  TRP   239      20.677  39.522  58.749  1.00  0.00
C
ATOM   3943  HA  TRP   239      19.980  39.287  59.556  1.00  0.00
H
ATOM   3944  CB  TRP   239      22.056  38.935  59.071  1.00  0.00
C
ATOM   3945  HB2 TRP   239      22.378  39.329  60.035  1.00  0.00
H
ATOM   3946  HB3 TRP   239      21.960  37.854  59.177  1.00  0.00
H
ATOM   3947  CG  TRP   239      23.114  39.242  58.046  1.00  0.00
C
ATOM   3948  CD1 TRP   239      23.391  38.508  56.943  1.00  0.00
C
ATOM   3949  HD1 TRP   239      22.881  37.591  56.666  1.00  0.00
H
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ATOM   3950  NE1 TRP   239      24.364  39.138  56.187  1.00  0.00
N
ATOM   3951  HE1 TRP   239      24.669  38.782  55.284  1.00  0.00
H
ATOM   3952  CE2 TRP   239      24.765  40.325  56.773  1.00  0.00
C
ATOM   3953  CZ2 TRP   239      25.678  41.330  56.409  1.00  0.00
C
ATOM   3954  HZ2 TRP   239      26.214  41.262  55.476  1.00  0.00
H
ATOM   3955  CH2 TRP   239      25.866  42.435  57.257  1.00  0.00
C
ATOM   3956  HH2 TRP   239      26.553  43.223  56.981  1.00  0.00
H
ATOM   3957  CZ3 TRP   239      25.151  42.520  58.464  1.00  0.00
C
ATOM   3958  HZ3 TRP   239      25.298  43.365  59.122  1.00  0.00
H
ATOM   3959  CE3 TRP   239      24.235  41.511  58.817  1.00  0.00
C
ATOM   3960  HE3 TRP   239      23.699  41.572  59.751  1.00  0.00
H
ATOM   3961  CD2 TRP   239      24.002  40.401  57.976  1.00  0.00
C
ATOM   3962  C   TRP   239      20.759  41.050  58.624  1.00  0.00
C
ATOM   3963  O   TRP   239      20.728  41.590  57.517  1.00  0.00
O
ATOM   3964  N   THR   240      20.918  41.766  59.738  1.00  0.00
N
ATOM   3965  H   THR   240      20.884  41.280  60.631  1.00  0.00
H
ATOM   3966  CA  THR   240      21.272  43.198  59.742  1.00  0.00
C
ATOM   3967  HA  THR   240      21.927  43.387  58.893  1.00  0.00
H
ATOM   3968  CB  THR   240      20.018  44.062  59.521  1.00  0.00
C
ATOM   3969  HB  THR   240      19.496  43.679  58.644  1.00  0.00
H
ATOM   3970  CG2 THR   240      19.029  44.067  60.686  1.00  0.00
C
ATOM   3971 HG21 THR   240      19.518  44.383  61.606  1.00  0.00
H
ATOM   3972 HG22 THR   240      18.211  44.752  60.466  1.00  0.00
H
ATOM   3973 HG23 THR   240      18.619  43.066  60.824  1.00  0.00
H
ATOM   3974  OG1 THR   240      20.405  45.383  59.216  1.00  0.00
O
ATOM   3975  HG1 THR   240      19.824  45.666  58.487  1.00  0.00
H
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ATOM   3976  C   THR   240      22.071  43.587  60.999  1.00  0.00
C
ATOM   3977  O   THR   240      22.328  42.748  61.861  1.00  0.00
O
ATOM   3978  N   VAL   241      22.524  44.839  61.102  1.00  0.00
N
ATOM   3979  H   VAL   241      22.163  45.497  60.421  1.00  0.00
H
ATOM   3980  CA  VAL   241      23.172  45.388  62.312  1.00  0.00
C
ATOM   3981  HA  VAL   241      23.891  44.661  62.691  1.00  0.00
H
ATOM   3982  CB  VAL   241      23.949  46.693  62.019  1.00  0.00
C
ATOM   3983  HB  VAL   241      24.217  47.149  62.974  1.00  0.00
H
ATOM   3984  CG1 VAL   241      25.262  46.403  61.279  1.00  0.00
C
ATOM   3985 HG11 VAL   241      25.063  45.928  60.319  1.00  0.00
H
ATOM   3986 HG12 VAL   241      25.808  47.333  61.114  1.00  0.00
H
ATOM   3987 HG13 VAL   241      25.887  45.748  61.885  1.00  0.00
H
ATOM   3988  CG2 VAL   241      23.154  47.729  61.210  1.00  0.00
C
ATOM   3989 HG21 VAL   241      22.200  47.931  61.698  1.00  0.00
H
ATOM   3990 HG22 VAL   241      23.717  48.660  61.152  1.00  0.00
H
ATOM   3991 HG23 VAL   241      22.965  47.367  60.198  1.00  0.00
H
ATOM   3992  C   VAL   241      22.148  45.619  63.432  1.00  0.00
C
ATOM   3993  O   VAL   241      20.994  45.953  63.167  1.00  0.00
O
ATOM   3994  N   GLN   242      22.571  45.480  64.694  1.00  0.00
N
ATOM   3995  H   GLN   242      23.524  45.175  64.859  1.00  0.00
H
ATOM   3996  CA  GLN   242      21.759  45.859  65.863  1.00  0.00
C
ATOM   3997  HA  GLN   242      20.786  45.380  65.753  1.00  0.00
H
ATOM   3998  CB  GLN   242      22.418  45.318  67.150  1.00  0.00
C
ATOM   3999  HB2 GLN   242      23.491  45.515  67.125  1.00  0.00
H
ATOM   4000  HB3 GLN   242      22.008  45.826  68.021  1.00  0.00
H
ATOM   4001  CG  GLN   242      22.157  43.810  67.297  1.00  0.00
C
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ATOM   4002  HG2 GLN   242      21.086  43.639  67.404  1.00  0.00
H
ATOM   4003  HG3 GLN   242      22.477  43.312  66.387  1.00  0.00
H
ATOM   4004  CD  GLN   242      22.870  43.165  68.486  1.00  0.00
C
ATOM   4005  OE1 GLN   242      23.200  43.782  69.489  1.00  0.00
O
ATOM   4006  NE2 GLN   242      23.129  41.877  68.427  1.00  0.00
N
ATOM   4007 HE21 GLN   242      23.516  41.448  69.245  1.00  0.00
H
ATOM   4008 HE22 GLN   242      22.828  41.339  67.615  1.00  0.00
H
ATOM   4009  C   GLN   242      21.501  47.387  65.921  1.00  0.00
C
ATOM   4010  O   GLN   242      22.276  48.146  65.326  1.00  0.00
O
ATOM   4011  N   PRO   243      20.446  47.850  66.635  1.00  0.00
N
ATOM   4012  CD  PRO   243      19.550  47.031  67.451  1.00  0.00
C
ATOM   4013  HD2 PRO   243      20.055  46.752  68.374  1.00  0.00
H
ATOM   4014  HD3 PRO   243      19.214  46.141  66.920  1.00  0.00
H
ATOM   4015  CG  PRO   243      18.338  47.896  67.794  1.00  0.00
C
ATOM   4016  HG2 PRO   243      17.949  47.673  68.787  1.00  0.00
H
ATOM   4017  HG3 PRO   243      17.559  47.766  67.041  1.00  0.00
H
ATOM   4018  CB  PRO   243      18.904  49.309  67.714  1.00  0.00
C
ATOM   4019  HB2 PRO   243      19.453  49.529  68.632  1.00  0.00
H
ATOM   4020  HB3 PRO   243      18.120  50.046  67.540  1.00  0.00
H
ATOM   4021  CA  PRO   243      19.865  49.195  66.523  1.00  0.00
C
ATOM   4022  HA  PRO   243      19.266  49.201  65.610  1.00  0.00
H
ATOM   4023  C   PRO   243      20.859  50.370  66.449  1.00  0.00
C
ATOM   4024  O   PRO   243      21.455  50.797  67.443  1.00  0.00
O
ATOM   4025  N   ILE   244      21.006  50.935  65.245  1.00  0.00
N
ATOM   4026  H   ILE   244      20.486  50.527  64.481  1.00  0.00
H
ATOM   4027  CA  ILE   244      22.046  51.918  64.907  1.00  0.00
C
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ATOM   4028  HA  ILE   244      22.883  51.681  65.561  1.00  0.00
H
ATOM   4029  CB  ILE   244      22.563  51.683  63.465  1.00  0.00
C
ATOM   4030  HB  ILE   244      22.920  50.651  63.433  1.00  0.00
H
ATOM   4031  CG2 ILE   244      21.470  51.796  62.383  1.00  0.00
C
ATOM   4032 HG21 ILE   244      21.055  52.804  62.353  1.00  0.00
H
ATOM   4033 HG22 ILE   244      21.902  51.572  61.405  1.00  0.00
H
ATOM   4034 HG23 ILE   244      20.658  51.084  62.557  1.00  0.00
H
ATOM   4035  CG1 ILE   244      23.757  52.594  63.089  1.00  0.00
C
ATOM   4036 HG12 ILE   244      24.067  52.338  62.078  1.00  0.00
H
ATOM   4037 HG13 ILE   244      23.447  53.640  63.072  1.00  0.00
H
ATOM   4038  CD1 ILE   244      24.958  52.424  64.029  1.00  0.00
C
ATOM   4039 HD11 ILE   244      25.214  51.371  64.103  1.00  0.00
H
ATOM   4040 HD12 ILE   244      25.815  52.966  63.644  1.00  0.00
H
ATOM   4041 HD13 ILE   244      24.727  52.800  65.022  1.00  0.00
H
ATOM   4042  C   ILE   244      21.646  53.365  65.254  1.00  0.00
C
ATOM   4043  O   ILE   244      21.466  54.227  64.398  1.00  0.00
O
ATOM   4044  N   VAL   245      21.542  53.662  66.554  1.00  0.00
N
ATOM   4045  H   VAL   245      21.636  52.902  67.220  1.00  0.00
H
ATOM   4046  CA  VAL   245      21.221  55.018  67.030  1.00  0.00
C
ATOM   4047  HA  VAL   245      20.340  55.363  66.485  1.00  0.00
H
ATOM   4048  CB  VAL   245      20.859  55.039  68.529  1.00  0.00
C
ATOM   4049  HB  VAL   245      21.721  54.720  69.116  1.00  0.00
H
ATOM   4050  CG1 VAL   245      20.450  56.445  68.986  1.00  0.00
C
ATOM   4051 HG11 VAL   245      19.622  56.815  68.379  1.00  0.00
H
ATOM   4052 HG12 VAL   245      20.137  56.418  70.031  1.00  0.00
H
ATOM   4053 HG13 VAL   245      21.294  57.130  68.904  1.00  0.00
H
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ATOM   4054  CG2 VAL   245      19.683  54.098  68.819  1.00  0.00
C
ATOM   4055 HG21 VAL   245      19.963  53.067  68.609  1.00  0.00
H
ATOM   4056 HG22 VAL   245      19.398  54.167  69.870  1.00  0.00
H
ATOM   4057 HG23 VAL   245      18.827  54.369  68.199  1.00  0.00
H
ATOM   4058  C   VAL   245      22.371  55.987  66.720  1.00  0.00
C
ATOM   4059  O   VAL   245      23.498  55.804  67.196  1.00  0.00
O
ATOM   4060  N   LEU   246      22.053  57.033  65.951  1.00  0.00
N
ATOM   4061  H   LEU   246      21.125  57.034  65.558  1.00  0.00
H
ATOM   4062  CA  LEU   246      22.884  58.217  65.696  1.00  0.00
C
ATOM   4063  HA  LEU   246      23.923  57.922  65.824  1.00  0.00
H
ATOM   4064  CB  LEU   246      22.673  58.703  64.234  1.00  0.00
C
ATOM   4065  HB2 LEU   246      22.002  58.022  63.707  1.00  0.00
H
ATOM   4066  HB3 LEU   246      22.178  59.676  64.255  1.00  0.00
H
ATOM   4067  CG  LEU   246      23.969  58.841  63.409  1.00  0.00
C
ATOM   4068  HG  LEU   246      24.650  59.516  63.924  1.00  0.00
H
ATOM   4069  CD1 LEU   246      24.646  57.481  63.214  1.00  0.00
C
ATOM   4070 HD11 LEU   246      23.927  56.761  62.825  1.00  0.00
H
ATOM   4071 HD12 LEU   246      25.463  57.568  62.505  1.00  0.00
H
ATOM   4072 HD13 LEU   246      25.046  57.114  64.155  1.00  0.00
H
ATOM   4073  CD2 LEU   246      23.668  59.434  62.031  1.00  0.00
C
ATOM   4074 HD21 LEU   246      23.191  60.407  62.140  1.00  0.00
H
ATOM   4075 HD22 LEU   246      24.591  59.571  61.468  1.00  0.00
H
ATOM   4076 HD23 LEU   246      23.012  58.769  61.472  1.00  0.00
H
ATOM   4077  C   LEU   246      22.560  59.327  66.726  1.00  0.00
C
ATOM   4078  O   LEU   246      21.375  59.563  66.990  1.00  0.00
O
ATOM   4079  N   PRO   247      23.569  60.015  67.306  1.00  0.00
N
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ATOM   4080  CD  PRO   247      24.998  59.842  67.077  1.00  0.00
C
ATOM   4081  HD2 PRO   247      25.227  59.748  66.018  1.00  0.00
H
ATOM   4082  HD3 PRO   247      25.345  58.968  67.630  1.00  0.00
H
ATOM   4083  CG  PRO   247      25.664  61.096  67.633  1.00  0.00
C
ATOM   4084  HG2 PRO   247      25.641  61.880  66.876  1.00  0.00
H
ATOM   4085  HG3 PRO   247      26.683  60.900  67.964  1.00  0.00
H
ATOM   4086  CB  PRO   247      24.750  61.471  68.798  1.00  0.00
C
ATOM   4087  HB2 PRO   247      24.826  62.531  69.048  1.00  0.00
H
ATOM   4088  HB3 PRO   247      24.990  60.858  69.667  1.00  0.00
H
ATOM   4089  CA  PRO   247      23.359  61.096  68.278  1.00  0.00
C
ATOM   4090  HA  PRO   247      22.752  60.733  69.105  1.00  0.00
H
ATOM   4091  C   PRO   247      22.658  62.316  67.665  1.00  0.00
C
ATOM   4092  O   PRO   247      22.792  62.577  66.472  1.00  0.00
O
ATOM   4093  N   GLU   248      21.925  63.082  68.473  1.00  0.00
N
ATOM   4094  H   GLU   248      21.869  62.798  69.453  1.00  0.00
H
ATOM   4095  CA  GLU   248      21.174  64.273  68.003  1.00  0.00
C
ATOM   4096  HA  GLU   248      21.504  64.523  66.992  1.00  0.00
H
ATOM   4097  CB  GLU   248      19.675  63.937  67.913  1.00  0.00
C
ATOM   4098  HB2 GLU   248      19.562  62.972  67.427  1.00  0.00
H
ATOM   4099  HB3 GLU   248      19.287  63.822  68.923  1.00  0.00
H
ATOM   4100  CG  GLU   248      18.837  64.991  67.169  1.00  0.00
C
ATOM   4101  HG2 GLU   248      17.774  64.753  67.347  1.00  0.00
H
ATOM   4102  HG3 GLU   248      19.022  65.957  67.630  1.00  0.00
H
ATOM   4103  CD  GLU   248      19.130  65.061  65.646  1.00  0.00
C
ATOM   4104  OE1 GLU   248      18.340  64.420  64.923  1.00  0.00
O
ATOM   4105  OE2 GLU   248      20.172  65.591  65.180  1.00  0.00
O
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ATOM   4106  C   GLU   248      21.450  65.516  68.868  1.00  0.00
C
ATOM   4107  O   GLU   248      21.006  65.609  70.018  1.00  0.00
O
ATOM   4108  N   LYS   249      22.195  66.481  68.316  1.00  0.00
N
ATOM   4109  H   LYS   249      22.459  66.391  67.346  1.00  0.00
H
ATOM   4110  CA  LYS   249      22.632  67.696  69.018  1.00  0.00
C
ATOM   4111  HA  LYS   249      21.812  68.018  69.650  1.00  0.00
H
ATOM   4112  CB  LYS   249      23.824  67.376  69.954  1.00  0.00
C
ATOM   4113  HB2 LYS   249      24.171  68.292  70.420  1.00  0.00
H
ATOM   4114  HB3 LYS   249      23.491  66.694  70.718  1.00  0.00
H
ATOM   4115  CG  LYS   249      25.042  66.734  69.244  1.00  0.00
C
ATOM   4116  HG2 LYS   249      24.756  65.829  68.716  1.00  0.00
H
ATOM   4117  HG3 LYS   249      25.419  67.437  68.498  1.00  0.00
H
ATOM   4118  CD  LYS   249      26.198  66.386  70.204  1.00  0.00
C
ATOM   4119  HD2 LYS   249      27.102  66.170  69.629  1.00  0.00
H
ATOM   4120  HD3 LYS   249      26.417  67.265  70.801  1.00  0.00
H
ATOM   4121  CE  LYS   249      25.788  65.284  71.193  1.00  0.00
C
ATOM   4122  HE2 LYS   249      24.800  65.479  71.583  1.00  0.00
H
ATOM   4123  HE3 LYS   249      25.806  64.323  70.699  1.00  0.00
H
ATOM   4124  NZ  LYS   249      26.768  65.188  72.316  1.00  0.00
N
ATOM   4125  HZ1 LYS   249      26.559  65.909  72.975  1.00  0.00
H
ATOM   4126  HZ2 LYS   249      26.665  64.341  72.880  1.00  0.00
H
ATOM   4127  HZ3 LYS   249      27.795  65.258  72.030  1.00  0.00
H
ATOM   4128  C   LYS   249      22.910  68.877  68.086  1.00  0.00
C
ATOM   4129  O   LYS   249      23.084  68.725  66.883  1.00  0.00
O
ATOM   4130  N   ASP   250      22.890  70.062  68.686  1.00  0.00
N
ATOM   4131  H   ASP   250      22.865  70.079  69.699  1.00  0.00
H
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ATOM   4132  CA  ASP   250      23.027  71.381  68.057  1.00  0.00
C
ATOM   4133  HA  ASP   250      22.482  71.382  67.112  1.00  0.00
H
ATOM   4134  CB  ASP   250      22.372  72.435  68.984  1.00  0.00
C
ATOM   4135  HB2 ASP   250      22.467  73.407  68.501  1.00  0.00
H
ATOM   4136  HB3 ASP   250      21.308  72.207  69.056  1.00  0.00
H
ATOM   4137  CG  ASP   250      22.940  72.539  70.418  1.00  0.00
C
ATOM   4138  OD1 ASP   250      22.812  73.628  71.017  1.00  0.00
O
ATOM   4139  OD2 ASP   250      23.451  71.534  70.969  1.00  0.00
O
ATOM   4140  C   ASP   250      24.487  71.743  67.746  1.00  0.00
C
ATOM   4141  O   ASP   250      24.826  72.102  66.619  1.00  0.00
O
ATOM   4142  N   SER   251      25.354  71.600  68.746  1.00  0.00
N
ATOM   4143  H   SER   251      24.985  71.299  69.643  1.00  0.00
H
ATOM   4144  CA  SER   251      26.802  71.770  68.660  1.00  0.00
C
ATOM   4145  HA  SER   251      27.069  71.974  67.624  1.00  0.00
H
ATOM   4146  CB  SER   251      27.250  72.979  69.487  1.00  0.00
C
ATOM   4147  HB2 SER   251      28.317  73.152  69.338  1.00  0.00
H
ATOM   4148  HB3 SER   251      26.707  73.864  69.148  1.00  0.00
H
ATOM   4149  OG  SER   251      26.997  72.765  70.862  1.00  0.00
O
ATOM   4150  HG  SER   251      26.867  73.614  71.293  1.00  0.00
H
ATOM   4151  C   SER   251      27.512  70.476  69.068  1.00  0.00
C
ATOM   4152  O   SER   251      26.952  69.620  69.757  1.00  0.00
O
ATOM   4153  N   TRP   252      28.742  70.305  68.581  1.00  0.00
N
ATOM   4154  H   TRP   252      29.168  71.053  68.055  1.00  0.00
H
ATOM   4155  CA  TRP   252      29.441  69.020  68.575  1.00  0.00
C
ATOM   4156  HA  TRP   252      28.933  68.315  69.236  1.00  0.00
H
ATOM   4157  CB  TRP   252      29.410  68.442  67.148  1.00  0.00
C
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ATOM   4158  HB2 TRP   252      29.950  69.119  66.483  1.00  0.00
H
ATOM   4159  HB3 TRP   252      29.958  67.502  67.163  1.00  0.00
H
ATOM   4160  CG  TRP   252      28.048  68.174  66.557  1.00  0.00
C
ATOM   4161  CD1 TRP   252      27.170  69.109  66.120  1.00  0.00
C
ATOM   4162  HD1 TRP   252      27.340  70.177  66.124  1.00  0.00
H
ATOM   4163  NE1 TRP   252      25.996  68.505  65.716  1.00  0.00
N
ATOM   4164  HE1 TRP   252      25.164  69.020  65.453  1.00  0.00
H
ATOM   4165  CE2 TRP   252      26.072  67.136  65.810  1.00  0.00
C
ATOM   4166  CZ2 TRP   252      25.167  66.101  65.527  1.00  0.00
C
ATOM   4167  HZ2 TRP   252      24.184  66.333  65.141  1.00  0.00
H
ATOM   4168  CH2 TRP   252      25.560  64.770  65.747  1.00  0.00
C
ATOM   4169  HH2 TRP   252      24.876  63.962  65.530  1.00  0.00
H
ATOM   4170  CZ3 TRP   252      26.850  64.492  66.235  1.00  0.00
C
ATOM   4171  HZ3 TRP   252      27.165  63.471  66.395  1.00  0.00
H
ATOM   4172  CE3 TRP   252      27.748  65.540  66.506  1.00  0.00
C
ATOM   4173  HE3 TRP   252      28.742  65.315  66.851  1.00  0.00
H
ATOM   4174  CD2 TRP   252      27.381  66.891  66.326  1.00  0.00
C
ATOM   4175  C   TRP   252      30.874  69.182  69.088  1.00  0.00
C
ATOM   4176  O   TRP   252      31.593  70.098  68.683  1.00  0.00
O
ATOM   4177  N   THR   253      31.307  68.287  69.974  1.00  0.00
N
ATOM   4178  H   THR   253      30.686  67.550  70.288  1.00  0.00
H
ATOM   4179  CA  THR   253      32.725  68.208  70.354  1.00  0.00
C
ATOM   4180  HA  THR   253      33.139  69.209  70.327  1.00  0.00
H
ATOM   4181  CB  THR   253      32.941  67.692  71.780  1.00  0.00
C
ATOM   4182  HB  THR   253      34.007  67.760  72.004  1.00  0.00
H
ATOM   4183  CG2 THR   253      32.171  68.497  72.830  1.00  0.00
C
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ATOM   4184 HG21 THR   253      31.101  68.405  72.659  1.00  0.00
H
ATOM   4185 HG22 THR   253      32.417  68.128  73.823  1.00  0.00
H
ATOM   4186 HG23 THR   253      32.448  69.550  72.778  1.00  0.00
H
ATOM   4187  OG1 THR   253      32.540  66.343  71.868  1.00  0.00
O
ATOM   4188  HG1 THR   253      32.094  66.236  72.714  1.00  0.00
H
ATOM   4189  C   THR   253      33.507  67.350  69.362  1.00  0.00
C
ATOM   4190  O   THR   253      32.930  66.525  68.653  1.00  0.00
O
ATOM   4191  N   VAL   254      34.836  67.470  69.352  1.00  0.00
N
ATOM   4192  H   VAL   254      35.251  68.237  69.874  1.00  0.00
H
ATOM   4193  CA  VAL   254      35.729  66.539  68.635  1.00  0.00
C
ATOM   4194  HA  VAL   254      35.566  66.643  67.561  1.00  0.00
H
ATOM   4195  CB  VAL   254      37.192  66.899  68.953  1.00  0.00
C
ATOM   4196  HB  VAL   254      37.286  66.956  70.035  1.00  0.00
H
ATOM   4197  CG1 VAL   254      38.221  65.882  68.441  1.00  0.00
C
ATOM   4198 HG11 VAL   254      38.138  65.775  67.361  1.00  0.00
H
ATOM   4199 HG12 VAL   254      39.225  66.221  68.694  1.00  0.00
H
ATOM   4200 HG13 VAL   254      38.066  64.912  68.911  1.00  0.00
H
ATOM   4201  CG2 VAL   254      37.560  68.259  68.348  1.00  0.00
C
ATOM   4202 HG21 VAL   254      36.814  69.013  68.593  1.00  0.00
H
ATOM   4203 HG22 VAL   254      38.502  68.585  68.777  1.00  0.00
H
ATOM   4204 HG23 VAL   254      37.649  68.187  67.263  1.00  0.00
H
ATOM   4205  C   VAL   254      35.436  65.076  69.007  1.00  0.00
C
ATOM   4206  O   VAL   254      35.406  64.219  68.121  1.00  0.00
O
ATOM   4207  N   ASN   255      35.146  64.781  70.285  1.00  0.00
N
ATOM   4208  H   ASN   255      35.147  65.529  70.971  1.00  0.00
H
ATOM   4209  CA  ASN   255      34.705  63.450  70.710  1.00  0.00
C
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ATOM   4210  HA  ASN   255      35.467  62.731  70.399  1.00  0.00
H
ATOM   4211  CB  ASN   255      34.603  63.416  72.247  1.00  0.00
C
ATOM   4212  HB2 ASN   255      35.511  63.822  72.685  1.00  0.00
H
ATOM   4213  HB3 ASN   255      33.773  64.036  72.582  1.00  0.00
H
ATOM   4214  CG  ASN   255      34.388  62.008  72.772  1.00  0.00
C
ATOM   4215  OD1 ASN   255      33.306  61.452  72.719  1.00  0.00
O
ATOM   4216  ND2 ASN   255      35.414  61.370  73.283  1.00  0.00
N
ATOM   4217 HD21 ASN   255      35.236  60.451  73.639  1.00  0.00
H
ATOM   4218 HD22 ASN   255      36.279  61.847  73.448  1.00  0.00
H
ATOM   4219  C   ASN   255      33.392  63.027  70.057  1.00  0.00
C
ATOM   4220  O   ASN   255      33.318  61.927  69.517  1.00  0.00
O
ATOM   4221  N   ASP   256      32.368  63.892  70.012  1.00  0.00
N
ATOM   4222  H   ASP   256      32.505  64.834  70.381  1.00  0.00
H
ATOM   4223  CA  ASP   256      31.106  63.599  69.350  1.00  0.00
C
ATOM   4224  HA  ASP   256      30.730  62.675  69.774  1.00  0.00
H
ATOM   4225  CB  ASP   256      30.087  64.728  69.571  1.00  0.00
C
ATOM   4226  HB2 ASP   256      30.556  65.683  69.366  1.00  0.00
H
ATOM   4227  HB3 ASP   256      29.253  64.582  68.882  1.00  0.00
H
ATOM   4228  CG  ASP   256      29.399  64.799  70.939  1.00  0.00
C
ATOM   4229  OD1 ASP   256      28.775  63.789  71.381  1.00  0.00
O
ATOM   4230  OD2 ASP   256      29.318  65.887  71.515  1.00  0.00
O
ATOM   4231  C   ASP   256      31.318  63.299  67.823  1.00  0.00
C
ATOM   4232  O   ASP   256      30.700  62.359  67.336  1.00  0.00
O
ATOM   4233  N   ILE   257      32.240  63.967  67.129  1.00  0.00
N
ATOM   4234  H   ILE   257      32.740  64.742  67.546  1.00  0.00
H
ATOM   4235  CA  ILE   257      32.572  63.597  65.727  1.00  0.00
C
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ATOM   4236  HA  ILE   257      31.637  63.511  65.176  1.00  0.00
H
ATOM   4237  CB  ILE   257      33.415  64.673  65.011  1.00  0.00
C
ATOM   4238  HB  ILE   257      34.447  64.581  65.351  1.00  0.00
H
ATOM   4239  CG2 ILE   257      33.386  64.392  63.495  1.00  0.00
C
ATOM   4240 HG21 ILE   257      32.360  64.442  63.126  1.00  0.00
H
ATOM   4241 HG22 ILE   257      33.992  65.124  62.963  1.00  0.00
H
ATOM   4242 HG23 ILE   257      33.776  63.396  63.284  1.00  0.00
H
ATOM   4243  CG1 ILE   257      32.998  66.148  65.224  1.00  0.00
C
ATOM   4244 HG12 ILE   257      33.203  66.417  66.254  1.00  0.00
H
ATOM   4245 HG13 ILE   257      33.638  66.789  64.614  1.00  0.00
H
ATOM   4246  CD1 ILE   257      31.535  66.497  64.914  1.00  0.00
C
ATOM   4247 HD11 ILE   257      30.863  65.904  65.532  1.00  0.00
H
ATOM   4248 HD12 ILE   257      31.378  67.552  65.136  1.00  0.00
H
ATOM   4249 HD13 ILE   257      31.309  66.331  63.864  1.00  0.00
H
ATOM   4250  C   ILE   257      33.249  62.222  65.661  1.00  0.00
C
ATOM   4251  O   ILE   257      32.917  61.417  64.786  1.00  0.00
O
ATOM   4252  N   CYS   258      34.139  61.869  66.609  1.00  0.00
N
ATOM   4253  H   CYS   258      34.405  62.568  67.295  1.00  0.00
H
ATOM   4254  CA  CYS   258      34.713  60.516  66.694  1.00  0.00
C
ATOM   4255  HA  CYS   258      35.236  60.292  65.761  1.00  0.00
H
ATOM   4256  CB  CYS   258      35.720  60.400  67.855  1.00  0.00
C
ATOM   4257  HB2 CYS   258      35.246  60.692  68.791  1.00  0.00
H
ATOM   4258  HB3 CYS   258      36.026  59.356  67.940  1.00  0.00
H
ATOM   4259  SG  CYS   258      37.201  61.405  67.580  1.00  0.00
S
ATOM   4260  HG  CYS   258      37.727  61.247  68.799  1.00  0.00
H
ATOM   4261  C   CYS   258      33.620  59.450  66.886  1.00  0.00
C
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ATOM   4262  O   CYS   258      33.575  58.464  66.144  1.00  0.00
O
ATOM   4263  N   LYS   259      32.710  59.655  67.852  1.00  0.00
N
ATOM   4264  H   LYS   259      32.810  60.497  68.418  1.00  0.00
H
ATOM   4265  CA  LYS   259      31.591  58.739  68.141  1.00  0.00
C
ATOM   4266  HA  LYS   259      31.985  57.749  68.377  1.00  0.00
H
ATOM   4267  CB  LYS   259      30.757  59.263  69.325  1.00  0.00
C
ATOM   4268  HB2 LYS   259      30.418  60.278  69.106  1.00  0.00
H
ATOM   4269  HB3 LYS   259      29.874  58.628  69.427  1.00  0.00
H
ATOM   4270  CG  LYS   259      31.524  59.268  70.656  1.00  0.00
C
ATOM   4271  HG2 LYS   259      31.893  58.265  70.874  1.00  0.00
H
ATOM   4272  HG3 LYS   259      32.384  59.924  70.575  1.00  0.00
H
ATOM   4273  CD  LYS   259      30.655  59.753  71.824  1.00  0.00
C
ATOM   4274  HD2 LYS   259      31.305  59.933  72.680  1.00  0.00
H
ATOM   4275  HD3 LYS   259      30.156  60.690  71.564  1.00  0.00
H
ATOM   4276  CE  LYS   259      29.636  58.672  72.195  1.00  0.00
C
ATOM   4277  HE2 LYS   259      28.858  58.620  71.430  1.00  0.00
H
ATOM   4278  HE3 LYS   259      30.161  57.712  72.208  1.00  0.00
H
ATOM   4279  NZ  LYS   259      29.049  58.897  73.535  1.00  0.00
N
ATOM   4280  HZ1 LYS   259      28.365  59.640  73.529  1.00  0.00
H
ATOM   4281  HZ2 LYS   259      28.639  58.021  73.861  1.00  0.00
H
ATOM   4282  HZ3 LYS   259      29.779  59.120  74.196  1.00  0.00
H
ATOM   4283  C   LYS   259      30.681  58.569  66.925  1.00  0.00
C
ATOM   4284  O   LYS   259      30.271  57.451  66.611  1.00  0.00
O
ATOM   4285  N   LEU   260      30.394  59.675  66.238  1.00  0.00
N
ATOM   4286  H   LEU   260      30.747  60.557  66.601  1.00  0.00
H
ATOM   4287  CA  LEU   260      29.611  59.729  65.011  1.00  0.00
C
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ATOM   4288  HA  LEU   260      28.641  59.274  65.201  1.00  0.00
H
ATOM   4289  CB  LEU   260      29.404  61.216  64.667  1.00  0.00
C
ATOM   4290  HB2 LEU   260      28.909  61.709  65.505  1.00  0.00
H
ATOM   4291  HB3 LEU   260      30.384  61.675  64.558  1.00  0.00
H
ATOM   4292  CG  LEU   260      28.601  61.491  63.388  1.00  0.00
C
ATOM   4293  HG  LEU   260      29.023  60.909  62.570  1.00  0.00
H
ATOM   4294  CD1 LEU   260      27.131  61.114  63.573  1.00  0.00
C
ATOM   4295 HD11 LEU   260      26.672  61.759  64.323  1.00  0.00
H
ATOM   4296 HD12 LEU   260      26.614  61.241  62.629  1.00  0.00
H
ATOM   4297 HD13 LEU   260      27.036  60.073  63.871  1.00  0.00
H
ATOM   4298  CD2 LEU   260      28.706  62.976  63.038  1.00  0.00
C
ATOM   4299 HD21 LEU   260      29.753  63.259  62.947  1.00  0.00
H
ATOM   4300 HD22 LEU   260      28.209  63.188  62.093  1.00  0.00
H
ATOM   4301 HD23 LEU   260      28.251  63.581  63.820  1.00  0.00
H
ATOM   4302  C   LEU   260      30.284  58.927  63.885  1.00  0.00
C
ATOM   4303  O   LEU   260      29.717  57.939  63.425  1.00  0.00
O
ATOM   4304  N   VAL   261      31.505  59.283  63.476  1.00  0.00
N
ATOM   4305  H   VAL   261      31.958  60.073  63.931  1.00  0.00
H
ATOM   4306  CA  VAL   261      32.208  58.617  62.361  1.00  0.00
C
ATOM   4307  HA  VAL   261      31.562  58.663  61.485  1.00  0.00
H
ATOM   4308  CB  VAL   261      33.510  59.369  62.010  1.00  0.00
C
ATOM   4309  HB  VAL   261      34.099  59.514  62.917  1.00  0.00
H
ATOM   4310  CG1 VAL   261      34.376  58.612  60.997  1.00  0.00
C
ATOM   4311 HG11 VAL   261      33.779  58.322  60.134  1.00  0.00
H
ATOM   4312 HG12 VAL   261      35.202  59.243  60.667  1.00  0.00
H
ATOM   4313 HG13 VAL   261      34.797  57.723  61.463  1.00  0.00
H
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ATOM   4314  CG2 VAL   261      33.174  60.739  61.400  1.00  0.00
C
ATOM   4315 HG21 VAL   261      32.627  61.349  62.117  1.00  0.00
H
ATOM   4316 HG22 VAL   261      34.093  61.265  61.137  1.00  0.00
H
ATOM   4317 HG23 VAL   261      32.567  60.616  60.503  1.00  0.00
H
ATOM   4318  C   VAL   261      32.442  57.125  62.642  1.00  0.00
C
ATOM   4319  O   VAL   261      32.320  56.313  61.724  1.00  0.00
O
ATOM   4320  N   GLY   262      32.679  56.727  63.898  1.00  0.00
N
ATOM   4321  H   GLY   262      32.819  57.436  64.614  1.00  0.00
H
ATOM   4322  CA  GLY   262      32.712  55.315  64.302  1.00  0.00
C
ATOM   4323  HA2 GLY   262      33.488  54.797  63.737  1.00  0.00
H
ATOM   4324  HA3 GLY   262      32.967  55.257  65.361  1.00  0.00
H
ATOM   4325  C   GLY   262      31.373  54.589  64.079  1.00  0.00
C
ATOM   4326  O   GLY   262      31.355  53.510  63.482  1.00  0.00
O
ATOM   4327  N   LYS   263      30.245  55.207  64.471  1.00  0.00
N
ATOM   4328  H   LYS   263      30.346  56.118  64.911  1.00  0.00
H
ATOM   4329  CA  LYS   263      28.873  54.715  64.214  1.00  0.00
C
ATOM   4330  HA  LYS   263      28.743  53.748  64.699  1.00  0.00
H
ATOM   4331  CB  LYS   263      27.834  55.713  64.787  1.00  0.00
C
ATOM   4332  HB2 LYS   263      28.329  56.594  65.190  1.00  0.00
H
ATOM   4333  HB3 LYS   263      27.214  56.078  63.967  1.00  0.00
H
ATOM   4334  CG  LYS   263      26.888  55.161  65.870  1.00  0.00
C
ATOM   4335  HG2 LYS   263      26.083  55.884  65.990  1.00  0.00
H
ATOM   4336  HG3 LYS   263      26.445  54.232  65.523  1.00  0.00
H
ATOM   4337  CD  LYS   263      27.529  54.941  67.255  1.00  0.00
C
ATOM   4338  HD2 LYS   263      28.103  54.011  67.275  1.00  0.00
H
ATOM   4339  HD3 LYS   263      28.219  55.763  67.449  1.00  0.00
H
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ATOM   4340  CE  LYS   263      26.481  54.947  68.386  1.00  0.00
C
ATOM   4341  HE2 LYS   263      26.989  54.834  69.350  1.00  0.00
H
ATOM   4342  HE3 LYS   263      25.980  55.921  68.382  1.00  0.00
H
ATOM   4343  NZ  LYS   263      25.457  53.882  68.252  1.00  0.00
N
ATOM   4344  HZ1 LYS   263      25.869  52.958  68.318  1.00  0.00
H
ATOM   4345  HZ2 LYS   263      24.824  53.912  69.043  1.00  0.00
H
ATOM   4346  HZ3 LYS   263      24.909  54.005  67.410  1.00  0.00
H
ATOM   4347  C   LYS   263      28.625  54.487  62.710  1.00  0.00
C
ATOM   4348  O   LYS   263      28.130  53.429  62.324  1.00  0.00
O
ATOM   4349  N   LEU   264      28.993  55.452  61.860  1.00  0.00
N
ATOM   4350  H   LEU   264      29.376  56.301  62.260  1.00  0.00
H
ATOM   4351  CA  LEU   264      28.786  55.374  60.402  1.00  0.00
C
ATOM   4352  HA  LEU   264      27.775  55.014  60.211  1.00  0.00
H
ATOM   4353  CB  LEU   264      28.945  56.763  59.749  1.00  0.00
C
ATOM   4354  HB2 LEU   264      29.873  57.219  60.099  1.00  0.00
H
ATOM   4355  HB3 LEU   264      29.055  56.595  58.675  1.00  0.00
H
ATOM   4356  CG  LEU   264      27.798  57.781  59.902  1.00  0.00
C
ATOM   4357  HG  LEU   264      27.971  58.543  59.152  1.00  0.00
H
ATOM   4358  CD1 LEU   264      26.404  57.201  59.669  1.00  0.00
C
ATOM   4359 HD11 LEU   264      26.133  56.510  60.467  1.00  0.00
H
ATOM   4360 HD12 LEU   264      25.677  58.013  59.639  1.00  0.00
H
ATOM   4361 HD13 LEU   264      26.377  56.681  58.712  1.00  0.00
H
ATOM   4362  CD2 LEU   264      27.800  58.527  61.223  1.00  0.00
C
ATOM   4363 HD21 LEU   264      28.765  59.013  61.342  1.00  0.00
H
ATOM   4364 HD22 LEU   264      27.028  59.293  61.219  1.00  0.00
H
ATOM   4365 HD23 LEU   264      27.626  57.841  62.045  1.00  0.00
H
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ATOM   4366  C   LEU   264      29.722  54.360  59.716  1.00  0.00
C
ATOM   4367  O   LEU   264      29.292  53.631  58.818  1.00  0.00
O
ATOM   4368  N   ASN   265      30.988  54.262  60.136  1.00  0.00
N
ATOM   4369  H   ASN   265      31.319  54.903  60.850  1.00  0.00
H
ATOM   4370  CA  ASN   265      31.911  53.247  59.608  1.00  0.00
C
ATOM   4371  HA  ASN   265      31.907  53.307  58.518  1.00  0.00
H
ATOM   4372  CB  ASN   265      33.345  53.526  60.100  1.00  0.00
C
ATOM   4373  HB2 ASN   265      33.327  53.904  61.121  1.00  0.00
H
ATOM   4374  HB3 ASN   265      33.908  52.593  60.104  1.00  0.00
H
ATOM   4375  CG  ASN   265      34.106  54.483  59.196  1.00  0.00
C
ATOM   4376  OD1 ASN   265      34.067  54.411  57.977  1.00  0.00
O
ATOM   4377  ND2 ASN   265      34.865  55.397  59.746  1.00  0.00
N
ATOM   4378 HD21 ASN   265      35.392  55.998  59.139  1.00  0.00
H
ATOM   4379 HD22 ASN   265      34.884  55.498  60.745  1.00  0.00
H
ATOM   4380  C   ASN   265      31.439  51.817  59.940  1.00  0.00
C
ATOM   4381  O   ASN   265      31.543  50.939  59.089  1.00  0.00
O
ATOM   4382  N   TRP   266      30.833  51.594  61.112  1.00  0.00
N
ATOM   4383  H   TRP   266      30.819  52.338  61.801  1.00  0.00
H
ATOM   4384  CA  TRP   266      30.145  50.336  61.435  1.00  0.00
C
ATOM   4385  HA  TRP   266      30.821  49.501  61.250  1.00  0.00
H
ATOM   4386  CB  TRP   266      29.811  50.341  62.931  1.00  0.00
C
ATOM   4387  HB2 TRP   266      30.748  50.279  63.487  1.00  0.00
H
ATOM   4388  HB3 TRP   266      29.354  51.298  63.188  1.00  0.00
H
ATOM   4389  CG  TRP   266      28.900  49.247  63.403  1.00  0.00
C
ATOM   4390  CD1 TRP   266      27.567  49.381  63.582  1.00  0.00
C
ATOM   4391  HD1 TRP   266      27.016  50.293  63.395  1.00  0.00
H
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ATOM   4392  NE1 TRP   266      27.030  48.187  64.022  1.00  0.00
N
ATOM   4393  HE1 TRP   266      26.048  48.055  64.224  1.00  0.00
H
ATOM   4394  CE2 TRP   266      27.998  47.210  64.142  1.00  0.00
C
ATOM   4395  CZ2 TRP   266      27.958  45.866  64.545  1.00  0.00
C
ATOM   4396  HZ2 TRP   266      27.023  45.402  64.821  1.00  0.00
H
ATOM   4397  CH2 TRP   266      29.149  45.122  64.572  1.00  0.00
C
ATOM   4398  HH2 TRP   266      29.132  44.079  64.867  1.00  0.00
H
ATOM   4399  CZ3 TRP   266      30.358  45.724  64.176  1.00  0.00
C
ATOM   4400  HZ3 TRP   266      31.261  45.130  64.152  1.00  0.00
H
ATOM   4401  CE3 TRP   266      30.387  47.075  63.770  1.00  0.00
C
ATOM   4402  HE3 TRP   266      31.315  47.515  63.440  1.00  0.00
H
ATOM   4403  CD2 TRP   266      29.210  47.857  63.749  1.00  0.00
C
ATOM   4404  C   TRP   266      28.905  50.095  60.549  1.00  0.00
C
ATOM   4405  O   TRP   266      28.748  49.013  59.987  1.00  0.00
O
ATOM   4406  N   ALA   267      28.063  51.111  60.325  1.00  0.00
N
ATOM   4407  H   ALA   267      28.215  51.987  60.810  1.00  0.00
H
ATOM   4408  CA  ALA   267      26.904  50.992  59.427  1.00  0.00
C
ATOM   4409  HA  ALA   267      26.294  50.158  59.779  1.00  0.00
H
ATOM   4410  CB  ALA   267      26.069  52.272  59.534  1.00  0.00
C
ATOM   4411  HB1 ALA   267      26.641  53.128  59.177  1.00  0.00
H
ATOM   4412  HB2 ALA   267      25.166  52.169  58.930  1.00  0.00
H
ATOM   4413  HB3 ALA   267      25.784  52.442  60.572  1.00  0.00
H
ATOM   4414  C   ALA   267      27.295  50.670  57.963  1.00  0.00
C
ATOM   4415  O   ALA   267      26.555  49.976  57.262  1.00  0.00
O
ATOM   4416  N   SER   268      28.506  51.067  57.544  1.00  0.00
N
ATOM   4417  H   SER   268      29.034  51.653  58.179  1.00  0.00
H
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ATOM   4418  CA  SER   268      29.118  50.724  56.249  1.00  0.00
C
ATOM   4419  HA  SER   268      28.429  51.040  55.466  1.00  0.00
H
ATOM   4420  CB  SER   268      30.447  51.466  56.030  1.00  0.00
C
ATOM   4421  HB2 SER   268      31.217  51.016  56.660  1.00  0.00
H
ATOM   4422  HB3 SER   268      30.740  51.337  54.984  1.00  0.00
H
ATOM   4423  OG  SER   268      30.378  52.857  56.300  1.00  0.00
O
ATOM   4424  HG  SER   268      29.925  53.018  57.146  1.00  0.00
H
ATOM   4425  C   SER   268      29.380  49.217  56.045  1.00  0.00
C
ATOM   4426  O   SER   268      29.986  48.835  55.049  1.00  0.00
O
ATOM   4427  N   GLN   269      28.986  48.339  56.976  1.00  0.00
N
ATOM   4428  H   GLN   269      28.606  48.710  57.838  1.00  0.00
H
ATOM   4429  CA  GLN   269      28.927  46.883  56.765  1.00  0.00
C
ATOM   4430  HA  GLN   269      29.872  46.523  56.355  1.00  0.00
H
ATOM   4431  CB  GLN   269      28.654  46.156  58.093  1.00  0.00
C
ATOM   4432  HB2 GLN   269      27.862  46.658  58.657  1.00  0.00
H
ATOM   4433  HB3 GLN   269      28.303  45.149  57.860  1.00  0.00
H
ATOM   4434  CG  GLN   269      29.903  46.008  58.961  1.00  0.00
C
ATOM   4435  HG2 GLN   269      30.735  45.669  58.347  1.00  0.00
H
ATOM   4436  HG3 GLN   269      30.170  46.968  59.400  1.00  0.00
H
ATOM   4437  CD  GLN   269      29.649  44.989  60.060  1.00  0.00
C
ATOM   4438  OE1 GLN   269      29.413  45.300  61.209  1.00  0.00
O
ATOM   4439  NE2 GLN   269      29.652  43.701  59.774  1.00  0.00
N
ATOM   4440 HE21 GLN   269      29.501  43.070  60.547  1.00  0.00
H
ATOM   4441 HE22 GLN   269      29.814  43.351  58.854  1.00  0.00
H
ATOM   4442  C   GLN   269      27.831  46.459  55.781  1.00  0.00
C
ATOM   4443  O   GLN   269      27.998  45.443  55.101  1.00  0.00
O
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ATOM   4444  N   ILE   270      26.702  47.177  55.757  1.00  0.00
N
ATOM   4445  H   ILE   270      26.656  48.024  56.310  1.00  0.00
H
ATOM   4446  CA  ILE   270      25.523  46.768  54.979  1.00  0.00
C
ATOM   4447  HA  ILE   270      25.894  46.206  54.125  1.00  0.00
H
ATOM   4448  CB  ILE   270      24.630  45.827  55.824  1.00  0.00
C
ATOM   4449  HB  ILE   270      25.273  45.049  56.233  1.00  0.00
H
ATOM   4450  CG2 ILE   270      23.999  46.549  57.031  1.00  0.00
C
ATOM   4451 HG21 ILE   270      23.374  47.379  56.707  1.00  0.00
H
ATOM   4452 HG22 ILE   270      23.379  45.851  57.596  1.00  0.00
H
ATOM   4453 HG23 ILE   270      24.775  46.933  57.693  1.00  0.00
H
ATOM   4454  CG1 ILE   270      23.557  45.101  54.983  1.00  0.00
C
ATOM   4455 HG12 ILE   270      22.909  44.532  55.651  1.00  0.00
H
ATOM   4456 HG13 ILE   270      22.931  45.823  54.462  1.00  0.00
H
ATOM   4457  CD1 ILE   270      24.155  44.121  53.960  1.00  0.00
C
ATOM   4458 HD11 ILE   270      24.693  43.330  54.482  1.00  0.00
H
ATOM   4459 HD12 ILE   270      23.357  43.680  53.369  1.00  0.00
H
ATOM   4460 HD13 ILE   270      24.830  44.625  53.270  1.00  0.00
H
ATOM   4461  C   ILE   270      24.734  47.933  54.370  1.00  0.00
C
ATOM   4462  O   ILE   270      24.173  47.773  53.289  1.00  0.00
O
ATOM   4463  N   TYR   271      24.732  49.120  54.985  1.00  0.00
N
ATOM   4464  H   TYR   271      25.251  49.244  55.844  1.00  0.00
H
ATOM   4465  CA  TYR   271      24.148  50.311  54.363  1.00  0.00
C
ATOM   4466  HA  TYR   271      23.169  50.056  53.965  1.00  0.00
H
ATOM   4467  CB  TYR   271      23.916  51.399  55.416  1.00  0.00
C
ATOM   4468  HB2 TYR   271      24.818  51.523  56.011  1.00  0.00
H
ATOM   4469  HB3 TYR   271      23.733  52.345  54.906  1.00  0.00
H
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ATOM   4470  CG  TYR   271      22.740  51.136  56.341  1.00  0.00
C
ATOM   4471  CD1 TYR   271      21.447  51.545  55.960  1.00  0.00
C
ATOM   4472  HD1 TYR   271      21.279  51.996  54.992  1.00  0.00
H
ATOM   4473  CE1 TYR   271      20.359  51.391  56.839  1.00  0.00
C
ATOM   4474  HE1 TYR   271      19.379  51.737  56.538  1.00  0.00
H
ATOM   4475  CZ  TYR   271      20.560  50.797  58.103  1.00  0.00
C
ATOM   4476  OH  TYR   271      19.528  50.679  58.977  1.00  0.00
O
ATOM   4477  HH  TYR   271      18.747  51.148  58.678  1.00  0.00
H
ATOM   4478  CE2 TYR   271      21.845  50.338  58.467  1.00  0.00
C
ATOM   4479  HE2 TYR   271      21.983  49.876  59.432  1.00  0.00
H
ATOM   4480  CD2 TYR   271      22.935  50.514  57.591  1.00  0.00
C
ATOM   4481  HD2 TYR   271      23.922  50.183  57.880  1.00  0.00
H
ATOM   4482  C   TYR   271      25.063  50.777  53.212  1.00  0.00
C
ATOM   4483  O   TYR   271      26.230  51.092  53.461  1.00  0.00
O
ATOM   4484  N   PRO   272      24.601  50.769  51.945  1.00  0.00
N
ATOM   4485  CD  PRO   272      23.271  50.385  51.488  1.00  0.00
C
ATOM   4486  HD2 PRO   272      22.490  50.895  52.053  1.00  0.00
H
ATOM   4487  HD3 PRO   272      23.158  49.304  51.574  1.00  0.00
H
ATOM   4488  CG  PRO   272      23.189  50.783  50.013  1.00  0.00
C
ATOM   4489  HG2 PRO   272      22.817  51.805  49.921  1.00  0.00
H
ATOM   4490  HG3 PRO   272      22.564  50.096  49.442  1.00  0.00
H
ATOM   4491  CB  PRO   272      24.648  50.722  49.563  1.00  0.00
C
ATOM   4492  HB2 PRO   272      24.831  51.351  48.689  1.00  0.00
H
ATOM   4493  HB3 PRO   272      24.922  49.689  49.348  1.00  0.00
H
ATOM   4494  CA  PRO   272      25.400  51.213  50.805  1.00  0.00
C
ATOM   4495  HA  PRO   272      26.392  50.761  50.835  1.00  0.00
H
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ATOM   4496  C   PRO   272      25.544  52.738  50.805  1.00  0.00
C
ATOM   4497  O   PRO   272      24.793  53.451  51.464  1.00  0.00
O
ATOM   4498  N   GLY   273      26.510  53.255  50.044  1.00  0.00
N
ATOM   4499  H   GLY   273      27.102  52.624  49.527  1.00  0.00
H
ATOM   4500  CA  GLY   273      26.639  54.695  49.793  1.00  0.00
C
ATOM   4501  HA2 GLY   273      27.330  54.854  48.968  1.00  0.00
H
ATOM   4502  HA3 GLY   273      25.665  55.081  49.489  1.00  0.00
H
ATOM   4503  C   GLY   273      27.112  55.546  50.976  1.00  0.00
C
ATOM   4504  O   GLY   273      27.357  56.732  50.765  1.00  0.00
O
ATOM   4505  N   ILE   274      27.277  54.978  52.180  1.00  0.00
N
ATOM   4506  H   ILE   274      26.981  54.020  52.296  1.00  0.00
H
ATOM   4507  CA  ILE   274      27.663  55.747  53.369  1.00  0.00
C
ATOM   4508  HA  ILE   274      26.910  56.523  53.446  1.00  0.00
H
ATOM   4509  CB  ILE   274      27.597  54.903  54.674  1.00  0.00
C
ATOM   4510  HB  ILE   274      27.946  53.893  54.454  1.00  0.00
H
ATOM   4511  CG2 ILE   274      28.512  55.445  55.794  1.00  0.00
C
ATOM   4512 HG21 ILE   274      28.238  56.463  56.054  1.00  0.00
H
ATOM   4513 HG22 ILE   274      28.434  54.816  56.676  1.00  0.00
H
ATOM   4514 HG23 ILE   274      29.553  55.409  55.476  1.00  0.00
H
ATOM   4515  CG1 ILE   274      26.123  54.830  55.147  1.00  0.00
C
ATOM   4516 HG12 ILE   274      25.731  55.840  55.266  1.00  0.00
H
ATOM   4517 HG13 ILE   274      25.530  54.331  54.378  1.00  0.00
H
ATOM   4518  CD1 ILE   274      25.896  54.111  56.483  1.00  0.00
C
ATOM   4519 HD11 ILE   274      26.280  54.719  57.302  1.00  0.00
H
ATOM   4520 HD12 ILE   274      24.827  53.974  56.642  1.00  0.00
H
ATOM   4521 HD13 ILE   274      26.395  53.143  56.482  1.00  0.00
H
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ATOM   4522  C   ILE   274      29.009  56.463  53.171  1.00  0.00
C
ATOM   4523  O   ILE   274      29.993  55.865  52.732  1.00  0.00
O
ATOM   4524  N   LYS   275      29.058  57.747  53.544  1.00  0.00
N
ATOM   4525  H   LYS   275      28.201  58.143  53.923  1.00  0.00
H
ATOM   4526  CA  LYS   275      30.250  58.615  53.485  1.00  0.00
C
ATOM   4527  HA  LYS   275      31.120  58.001  53.250  1.00  0.00
H
ATOM   4528  CB  LYS   275      30.097  59.661  52.362  1.00  0.00
C
ATOM   4529  HB2 LYS   275      29.187  60.234  52.543  1.00  0.00
H
ATOM   4530  HB3 LYS   275      30.946  60.345  52.391  1.00  0.00
H
ATOM   4531  CG  LYS   275      30.055  59.014  50.963  1.00  0.00
C
ATOM   4532  HG2 LYS   275      31.030  58.574  50.748  1.00  0.00
H
ATOM   4533  HG3 LYS   275      29.330  58.208  50.956  1.00  0.00
H
ATOM   4534  CD  LYS   275      29.682  59.982  49.829  1.00  0.00
C
ATOM   4535  HD2 LYS   275      30.398  60.803  49.804  1.00  0.00
H
ATOM   4536  HD3 LYS   275      29.748  59.434  48.888  1.00  0.00
H
ATOM   4537  CE  LYS   275      28.253  60.530  49.995  1.00  0.00
C
ATOM   4538  HE2 LYS   275      27.578  59.695  50.210  1.00  0.00
H
ATOM   4539  HE3 LYS   275      28.233  61.208  50.854  1.00  0.00
H
ATOM   4540  NZ  LYS   275      27.781  61.244  48.783  1.00  0.00
N
ATOM   4541  HZ1 LYS   275      27.555  60.604  48.033  1.00  0.00
H
ATOM   4542  HZ2 LYS   275      26.954  61.807  48.981  1.00  0.00
H
ATOM   4543  HZ3 LYS   275      28.441  61.940  48.462  1.00  0.00
H
ATOM   4544  C   LYS   275      30.515  59.265  54.845  1.00  0.00
C
ATOM   4545  O   LYS   275      29.614  59.416  55.664  1.00  0.00
O
ATOM   4546  N   VAL   276      31.784  59.585  55.098  1.00  0.00
N
ATOM   4547  H   VAL   276      32.437  59.426  54.349  1.00  0.00
H
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ATOM   4548  CA  VAL   276      32.298  60.236  56.325  1.00  0.00
C
ATOM   4549  HA  VAL   276      31.538  60.927  56.699  1.00  0.00
H
ATOM   4550  CB  VAL   276      32.619  59.209  57.443  1.00  0.00
C
ATOM   4551  HB  VAL   276      33.071  59.743  58.276  1.00  0.00
H
ATOM   4552  CG1 VAL   276      31.379  58.522  58.021  1.00  0.00
C
ATOM   4553 HG11 VAL   276      30.926  57.853  57.288  1.00  0.00
H
ATOM   4554 HG12 VAL   276      31.670  57.942  58.896  1.00  0.00
H
ATOM   4555 HG13 VAL   276      30.650  59.277  58.322  1.00  0.00
H
ATOM   4556  CG2 VAL   276      33.598  58.108  56.999  1.00  0.00
C
ATOM   4557 HG21 VAL   276      34.532  58.554  56.659  1.00  0.00
H
ATOM   4558 HG22 VAL   276      33.819  57.453  57.841  1.00  0.00
H
ATOM   4559 HG23 VAL   276      33.164  57.512  56.198  1.00  0.00
H
ATOM   4560  C   VAL   276      33.540  61.092  56.015  1.00  0.00
C
ATOM   4561  O   VAL   276      34.373  61.342  56.889  1.00  0.00
O
ATOM   4562  N   ARG   277      33.735  61.478  54.748  1.00  0.00
N
ATOM   4563  H   ARG   277      32.901  61.540  54.162  1.00  0.00
H
ATOM   4564  CA  ARG   277      34.964  62.105  54.239  1.00  0.00
C
ATOM   4565  HA  ARG   277      35.833  61.540  54.574  1.00  0.00
H
ATOM   4566  CB  ARG   277      34.907  62.102  52.706  1.00  0.00
C
ATOM   4567  HB2 ARG   277      34.847  61.068  52.371  1.00  0.00
H
ATOM   4568  HB3 ARG   277      33.984  62.600  52.405  1.00  0.00
H
ATOM   4569  CG  ARG   277      36.077  62.799  51.984  1.00  0.00
C
ATOM   4570  HG2 ARG   277      35.760  62.976  50.957  1.00  0.00
H
ATOM   4571  HG3 ARG   277      36.273  63.776  52.428  1.00  0.00
H
ATOM   4572  CD  ARG   277      37.372  61.967  51.974  1.00  0.00
C
ATOM   4573  HD2 ARG   277      37.760  61.897  52.994  1.00  0.00
H
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ATOM   4574  HD3 ARG   277      37.147  60.953  51.638  1.00  0.00
H
ATOM   4575  NE  ARG   277      38.410  62.550  51.091  1.00  0.00
N
ATOM   4576  HE  ARG   277      39.207  63.004  51.530  1.00  0.00
H
ATOM   4577  CZ  ARG   277      38.427  62.546  49.770  1.00  0.00
C
ATOM   4578  NH1 ARG   277      37.443  62.087  49.063  1.00  0.00
N
ATOM   4579 HH11 ARG   277      36.634  61.748  49.534  1.00  0.00
H
ATOM   4580 HH12 ARG   277      37.499  62.199  48.059  1.00  0.00
H
ATOM   4581  NH2 ARG   277      39.410  63.043  49.090  1.00  0.00
N
ATOM   4582 HH21 ARG   277      40.106  63.595  49.595  1.00  0.00
H
ATOM   4583 HH22 ARG   277      39.350  63.097  48.088  1.00  0.00
H
ATOM   4584  C   ARG   277      35.111  63.521  54.766  1.00  0.00
C
ATOM   4585  O   ARG   277      36.195  63.894  55.198  1.00  0.00
O
ATOM   4586  N   GLN   278      34.032  64.290  54.713  1.00  0.00
N
ATOM   4587  H   GLN   278      33.138  63.855  54.490  1.00  0.00
H
ATOM   4588  CA  GLN   278      34.033  65.703  55.079  1.00  0.00
C
ATOM   4589  HA  GLN   278      35.015  66.117  54.849  1.00  0.00
H
ATOM   4590  CB  GLN   278      32.986  66.468  54.245  1.00  0.00
C
ATOM   4591  HB2 GLN   278      31.993  66.174  54.588  1.00  0.00
H
ATOM   4592  HB3 GLN   278      33.093  67.537  54.439  1.00  0.00
H
ATOM   4593  CG  GLN   278      33.078  66.195  52.724  1.00  0.00
C
ATOM   4594  HG2 GLN   278      32.864  65.143  52.545  1.00  0.00
H
ATOM   4595  HG3 GLN   278      32.284  66.739  52.216  1.00  0.00
H
ATOM   4596  CD  GLN   278      34.408  66.530  52.033  1.00  0.00
C
ATOM   4597  OE1 GLN   278      35.382  67.025  52.582  1.00  0.00
O
ATOM   4598  NE2 GLN   278      34.524  66.239  50.758  1.00  0.00
N
ATOM   4599 HE21 GLN   278      35.342  66.564  50.286  1.00  0.00
H
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ATOM   4600 HE22 GLN   278      33.729  65.859  50.250  1.00  0.00
H
ATOM   4601  C   GLN   278      33.856  65.846  56.593  1.00  0.00
C
ATOM   4602  O   GLN   278      34.582  66.624  57.209  1.00  0.00
O
ATOM   4603  N   LEU   279      33.043  64.987  57.225  1.00  0.00
N
ATOM   4604  H   LEU   279      32.439  64.394  56.652  1.00  0.00
H
ATOM   4605  CA  LEU   279      33.018  64.796  58.681  1.00  0.00
C
ATOM   4606  HA  LEU   279      32.698  65.727  59.144  1.00  0.00
H
ATOM   4607  CB  LEU   279      32.016  63.675  59.030  1.00  0.00
C
ATOM   4608  HB2 LEU   279      32.113  62.872  58.296  1.00  0.00
H
ATOM   4609  HB3 LEU   279      32.268  63.257  60.008  1.00  0.00
H
ATOM   4610  CG  LEU   279      30.552  64.156  59.074  1.00  0.00
C
ATOM   4611  HG  LEU   279      30.326  64.743  58.184  1.00  0.00
H
ATOM   4612  CD1 LEU   279      29.620  62.944  59.115  1.00  0.00
C
ATOM   4613 HD11 LEU   279      29.845  62.318  59.977  1.00  0.00
H
ATOM   4614 HD12 LEU   279      28.589  63.286  59.168  1.00  0.00
H
ATOM   4615 HD13 LEU   279      29.741  62.371  58.196  1.00  0.00
H
ATOM   4616  CD2 LEU   279      30.293  65.001  60.326  1.00  0.00
C
ATOM   4617 HD21 LEU   279      30.873  65.920  60.296  1.00  0.00
H
ATOM   4618 HD22 LEU   279      29.238  65.271  60.380  1.00  0.00
H
ATOM   4619 HD23 LEU   279      30.572  64.446  61.218  1.00  0.00
H
ATOM   4620  C   LEU   279      34.413  64.488  59.255  1.00  0.00
C
ATOM   4621  O   LEU   279      34.808  65.099  60.246  1.00  0.00
O
ATOM   4622  N   SER   280      35.207  63.631  58.603  1.00  0.00
N
ATOM   4623  H   SER   280      34.824  63.123  57.814  1.00  0.00
H
ATOM   4624  CA  SER   280      36.587  63.339  59.036  1.00  0.00
C
ATOM   4625  HA  SER   280      36.549  63.038  60.080  1.00  0.00
H
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ATOM   4626  CB  SER   280      37.185  62.161  58.264  1.00  0.00
C
ATOM   4627  HB2 SER   280      37.180  62.370  57.195  1.00  0.00
H
ATOM   4628  HB3 SER   280      38.214  62.006  58.594  1.00  0.00
H
ATOM   4629  OG  SER   280      36.440  60.987  58.521  1.00  0.00
O
ATOM   4630  HG  SER   280      35.633  61.036  57.974  1.00  0.00
H
ATOM   4631  C   SER   280      37.532  64.552  58.954  1.00  0.00
C
ATOM   4632  O   SER   280      38.490  64.630  59.723  1.00  0.00
O
ATOM   4633  N   LYS   281      37.254  65.549  58.099  1.00  0.00
N
ATOM   4634  H   LYS   281      36.421  65.478  57.525  1.00  0.00
H
ATOM   4635  CA  LYS   281      38.075  66.775  58.009  1.00  0.00
C
ATOM   4636  HA  LYS   281      39.120  66.472  57.959  1.00  0.00
H
ATOM   4637  CB  LYS   281      37.767  67.588  56.746  1.00  0.00
C
ATOM   4638  HB2 LYS   281      36.707  67.832  56.689  1.00  0.00
H
ATOM   4639  HB3 LYS   281      38.324  68.525  56.795  1.00  0.00
H
ATOM   4640  CG  LYS   281      38.205  66.849  55.488  1.00  0.00
C
ATOM   4641  HG2 LYS   281      39.224  66.486  55.618  1.00  0.00
H
ATOM   4642  HG3 LYS   281      37.550  65.999  55.315  1.00  0.00
H
ATOM   4643  CD  LYS   281      38.158  67.793  54.289  1.00  0.00
C
ATOM   4644  HD2 LYS   281      37.136  68.143  54.132  1.00  0.00
H
ATOM   4645  HD3 LYS   281      38.823  68.643  54.460  1.00  0.00
H
ATOM   4646  CE  LYS   281      38.644  66.985  53.095  1.00  0.00
C
ATOM   4647  HE2 LYS   281      39.666  66.651  53.300  1.00  0.00
H
ATOM   4648  HE3 LYS   281      38.022  66.091  52.994  1.00  0.00
H
ATOM   4649  NZ  LYS   281      38.620  67.752  51.833  1.00  0.00
N
ATOM   4650  HZ1 LYS   281      39.129  68.619  51.923  1.00  0.00
H
ATOM   4651  HZ2 LYS   281      39.085  67.185  51.123  1.00  0.00
H
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ATOM   4652  HZ3 LYS   281      37.663  67.942  51.568  1.00  0.00
H
ATOM   4653  C   LYS   281      37.954  67.692  59.224  1.00  0.00
C
ATOM   4654  O   LYS   281      38.834  68.529  59.430  1.00  0.00
O
ATOM   4655  N   LEU   282      36.896  67.567  60.028  1.00  0.00
N
ATOM   4656  H   LEU   282      36.193  66.875  59.790  1.00  0.00
H
ATOM   4657  CA  LEU   282      36.673  68.411  61.211  1.00  0.00
C
ATOM   4658  HA  LEU   282      36.788  69.461  60.937  1.00  0.00
H
ATOM   4659  CB  LEU   282      35.230  68.202  61.714  1.00  0.00
C
ATOM   4660  HB2 LEU   282      34.969  67.148  61.647  1.00  0.00
H
ATOM   4661  HB3 LEU   282      35.185  68.460  62.771  1.00  0.00
H
ATOM   4662  CG  LEU   282      34.165  69.055  60.997  1.00  0.00
C
ATOM   4663  HG  LEU   282      34.358  70.110  61.196  1.00  0.00
H
ATOM   4664  CD1 LEU   282      34.103  68.861  59.484  1.00  0.00
C
ATOM   4665 HD11 LEU   282      33.856  67.825  59.263  1.00  0.00
H
ATOM   4666 HD12 LEU   282      33.339  69.511  59.061  1.00  0.00
H
ATOM   4667 HD13 LEU   282      35.046  69.125  59.012  1.00  0.00
H
ATOM   4668  CD2 LEU   282      32.796  68.680  61.559  1.00  0.00
C
ATOM   4669 HD21 LEU   282      32.724  69.018  62.592  1.00  0.00
H
ATOM   4670 HD22 LEU   282      32.017  69.155  60.973  1.00  0.00
H
ATOM   4671 HD23 LEU   282      32.650  67.601  61.515  1.00  0.00
H
ATOM   4672  C   LEU   282      37.710  68.129  62.316  1.00  0.00
C
ATOM   4673  O   LEU   282      38.057  69.028  63.080  1.00  0.00
O
ATOM   4674  N   LEU   283      38.255  66.907  62.360  1.00  0.00
N
ATOM   4675  H   LEU   283      37.946  66.233  61.672  1.00  0.00
H
ATOM   4676  CA  LEU   283      39.224  66.455  63.367  1.00  0.00
C
ATOM   4677  HA  LEU   283      39.108  67.098  64.240  1.00  0.00
H
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ATOM   4678  CB  LEU   283      38.916  65.014  63.843  1.00  0.00
C
ATOM   4679  HB2 LEU   283      39.442  64.304  63.202  1.00  0.00
H
ATOM   4680  HB3 LEU   283      39.358  64.918  64.836  1.00  0.00
H
ATOM   4681  CG  LEU   283      37.432  64.594  63.931  1.00  0.00
C
ATOM   4682  HG  LEU   283      36.813  65.446  64.215  1.00  0.00
H
ATOM   4683  CD1 LEU   283      36.943  63.994  62.608  1.00  0.00
C
ATOM   4684 HD11 LEU   283      37.627  63.213  62.274  1.00  0.00
H
ATOM   4685 HD12 LEU   283      35.957  63.557  62.727  1.00  0.00
H
ATOM   4686 HD13 LEU   283      36.872  64.757  61.839  1.00  0.00
H
ATOM   4687  CD2 LEU   283      37.266  63.500  64.982  1.00  0.00
C
ATOM   4688 HD21 LEU   283      37.480  63.904  65.971  1.00  0.00
H
ATOM   4689 HD22 LEU   283      36.242  63.130  64.987  1.00  0.00
H
ATOM   4690 HD23 LEU   283      37.941  62.672  64.774  1.00  0.00
H
ATOM   4691  C   LEU   283      40.699  66.610  62.921  1.00  0.00
C
ATOM   4692  O   LEU   283      41.598  66.149  63.628  1.00  0.00
O
ATOM   4693  N   ARG   284      40.952  67.227  61.752  1.00  0.00
N
ATOM   4694  H   ARG   284      40.163  67.619  61.255  1.00  0.00
H
ATOM   4695  CA  ARG   284      42.301  67.428  61.181  1.00  0.00
C
ATOM   4696  HA  ARG   284      42.796  66.456  61.153  1.00  0.00
H
ATOM   4697  CB  ARG   284      42.218  67.973  59.738  1.00  0.00
C
ATOM   4698  HB2 ARG   284      41.434  68.729  59.675  1.00  0.00
H
ATOM   4699  HB3 ARG   284      43.165  68.458  59.493  1.00  0.00
H
ATOM   4700  CG  ARG   284      41.992  66.871  58.689  1.00  0.00
C
ATOM   4701  HG2 ARG   284      42.833  66.177  58.729  1.00  0.00
H
ATOM   4702  HG3 ARG   284      41.081  66.319  58.918  1.00  0.00
H
ATOM   4703  CD  ARG   284      41.901  67.469  57.274  1.00  0.00
C
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ATOM   4704  HD2 ARG   284      40.973  68.040  57.192  1.00  0.00
H
ATOM   4705  HD3 ARG   284      42.744  68.147  57.123  1.00  0.00
H
ATOM   4706  NE  ARG   284      41.937  66.417  56.241  1.00  0.00
N
ATOM   4707  HE  ARG   284      41.966  65.451  56.565  1.00  0.00
H
ATOM   4708  CZ  ARG   284      42.014  66.546  54.928  1.00  0.00
C
ATOM   4709  NH1 ARG   284      41.996  67.700  54.322  1.00  0.00
N
ATOM   4710 HH11 ARG   284      41.903  68.553  54.867  1.00  0.00
H
ATOM   4711 HH12 ARG   284      42.239  67.727  53.351  1.00  0.00
H
ATOM   4712  NH2 ARG   284      42.090  65.480  54.187  1.00  0.00
N
ATOM   4713 HH21 ARG   284      42.158  64.577  54.656  1.00  0.00
H
ATOM   4714 HH22 ARG   284      42.027  65.505  53.175  1.00  0.00
H
ATOM   4715  C   ARG   284      43.178  68.341  62.048  1.00  0.00
C
ATOM   4716  O   ARG   284      42.703  69.300  62.661  1.00  0.00
O
ATOM   4717  N   GLY   285      44.483  68.063  62.025  1.00  0.00
N
ATOM   4718  H   GLY   285      44.766  67.257  61.491  1.00  0.00
H
ATOM   4719  CA  GLY   285      45.493  68.720  62.859  1.00  0.00
C
ATOM   4720  HA2 GLY   285      46.485  68.473  62.477  1.00  0.00
H
ATOM   4721  HA3 GLY   285      45.366  69.801  62.806  1.00  0.00
H
ATOM   4722  C   GLY   285      45.398  68.304  64.334  1.00  0.00
C
ATOM   4723  O   GLY   285      44.652  67.396  64.697  1.00  0.00
O
ATOM   4724  N   THR   286      46.135  68.976  65.215  1.00  0.00
N
ATOM   4725  H   THR   286      46.709  69.750  64.918  1.00  0.00
H
ATOM   4726  CA  THR   286      46.032  68.748  66.665  1.00  0.00
C
ATOM   4727  HA  THR   286      45.958  67.673  66.845  1.00  0.00
H
ATOM   4728  CB  THR   286      47.281  69.246  67.407  1.00  0.00
C
ATOM   4729  HB  THR   286      47.079  69.255  68.478  1.00  0.00
H
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ATOM   4730  CG2 THR   286      48.483  68.345  67.131  1.00  0.00
C
ATOM   4731 HG21 THR   286      48.730  68.357  66.068  1.00  0.00
H
ATOM   4732 HG22 THR   286      49.341  68.694  67.705  1.00  0.00
H
ATOM   4733 HG23 THR   286      48.252  67.321  67.429  1.00  0.00
H
ATOM   4734  OG1 THR   286      47.648  70.542  66.991  1.00  0.00
O
ATOM   4735  HG1 THR   286      48.299  70.868  67.620  1.00  0.00
H
ATOM   4736  C   THR   286      44.768  69.405  67.230  1.00  0.00
C
ATOM   4737  O   THR   286      44.568  70.616  67.095  1.00  0.00
O
ATOM   4738  N   LYS   287      43.925  68.596  67.880  1.00  0.00
N
ATOM   4739  H   LYS   287      44.173  67.618  67.945  1.00  0.00
H
ATOM   4740  CA  LYS   287      42.677  68.965  68.568  1.00  0.00
C
ATOM   4741  HA  LYS   287      42.671  70.029  68.807  1.00  0.00
H
ATOM   4742  CB  LYS   287      41.456  68.626  67.687  1.00  0.00
C
ATOM   4743  HB2 LYS   287      41.424  67.544  67.547  1.00  0.00
H
ATOM   4744  HB3 LYS   287      40.560  68.908  68.235  1.00  0.00
H
ATOM   4745  CG  LYS   287      41.367  69.276  66.296  1.00  0.00
C
ATOM   4746  HG2 LYS   287      42.261  69.038  65.718  1.00  0.00
H
ATOM   4747  HG3 LYS   287      40.516  68.828  65.781  1.00  0.00
H
ATOM   4748  CD  LYS   287      41.151  70.797  66.336  1.00  0.00
C
ATOM   4749  HD2 LYS   287      40.274  71.022  66.946  1.00  0.00
H
ATOM   4750  HD3 LYS   287      42.023  71.281  66.777  1.00  0.00
H
ATOM   4751  CE  LYS   287      40.934  71.310  64.904  1.00  0.00
C
ATOM   4752  HE2 LYS   287      41.740  70.915  64.278  1.00  0.00
H
ATOM   4753  HE3 LYS   287      39.993  70.899  64.520  1.00  0.00
H
ATOM   4754  NZ  LYS   287      40.930  72.796  64.838  1.00  0.00
N
ATOM   4755  HZ1 LYS   287      41.798  73.170  65.196  1.00  0.00
H
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ATOM   4756  HZ2 LYS   287      40.821  73.123  63.887  1.00  0.00
H
ATOM   4757  HZ3 LYS   287      40.180  73.216  65.386  1.00  0.00
H
ATOM   4758  C   LYS   287      42.569  68.189  69.886  1.00  0.00
C
ATOM   4759  O   LYS   287      43.211  67.146  70.026  1.00  0.00
O
ATOM   4760  N   ALA   288      41.736  68.651  70.817  1.00  0.00
N
ATOM   4761  H   ALA   288      41.304  69.559  70.651  1.00  0.00
H
ATOM   4762  CA  ALA   288      41.361  67.901  72.022  1.00  0.00
C
ATOM   4763  HA  ALA   288      41.980  67.006  72.092  1.00  0.00
H
ATOM   4764  CB  ALA   288      41.659  68.744  73.263  1.00  0.00
C
ATOM   4765  HB1 ALA   288      41.035  69.638  73.267  1.00  0.00
H
ATOM   4766  HB2 ALA   288      41.449  68.159  74.158  1.00  0.00
H
ATOM   4767  HB3 ALA   288      42.709  69.035  73.259  1.00  0.00
H
ATOM   4768  C   ALA   288      39.900  67.427  71.986  1.00  0.00
C
ATOM   4769  O   ALA   288      39.035  68.111  71.447  1.00  0.00
O
ATOM   4770  N   LEU   289      39.609  66.285  72.624  1.00  0.00
N
ATOM   4771  H   LEU   289      40.370  65.779  73.053  1.00  0.00
H
ATOM   4772  CA  LEU   289      38.277  65.657  72.666  1.00  0.00
C
ATOM   4773  HA  LEU   289      38.009  65.335  71.660  1.00  0.00
H
ATOM   4774  CB  LEU   289      38.351  64.427  73.597  1.00  0.00
C
ATOM   4775  HB2 LEU   289      38.772  64.746  74.552  1.00  0.00
H
ATOM   4776  HB3 LEU   289      37.343  64.075  73.807  1.00  0.00
H
ATOM   4777  CG  LEU   289      39.176  63.239  73.066  1.00  0.00
C
ATOM   4778  HG  LEU   289      40.200  63.567  72.893  1.00  0.00
H
ATOM   4779  CD1 LEU   289      39.199  62.126  74.116  1.00  0.00
C
ATOM   4780 HD11 LEU   289      38.191  61.775  74.332  1.00  0.00
H
ATOM   4781 HD12 LEU   289      39.803  61.295  73.754  1.00  0.00
H
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ATOM   4782 HD13 LEU   289      39.642  62.505  75.038  1.00  0.00
H
ATOM   4783  CD2 LEU   289      38.617  62.651  71.767  1.00  0.00
C
ATOM   4784 HD21 LEU   289      38.704  63.380  70.962  1.00  0.00
H
ATOM   4785 HD22 LEU   289      39.210  61.780  71.485  1.00  0.00
H
ATOM   4786 HD23 LEU   289      37.577  62.360  71.887  1.00  0.00
H
ATOM   4787  C   LEU   289      37.141  66.592  73.132  1.00  0.00
C
ATOM   4788  O   LEU   289      36.004  66.408  72.703  1.00  0.00
O
ATOM   4789  N   THR   290      37.442  67.581  73.979  1.00  0.00
N
ATOM   4790  H   THR   290      38.395  67.666  74.300  1.00  0.00
H
ATOM   4791  CA  THR   290      36.494  68.565  74.529  1.00  0.00
C
ATOM   4792  HA  THR   290      35.513  68.098  74.619  1.00  0.00
H
ATOM   4793  CB  THR   290      36.947  69.006  75.929  1.00  0.00
C
ATOM   4794  HB  THR   290      36.379  69.884  76.236  1.00  0.00
H
ATOM   4795  CG2 THR   290      36.745  67.915  76.975  1.00  0.00
C
ATOM   4796 HG21 THR   290      37.320  67.026  76.712  1.00  0.00
H
ATOM   4797 HG22 THR   290      37.071  68.286  77.946  1.00  0.00
H
ATOM   4798 HG23 THR   290      35.686  67.660  77.029  1.00  0.00
H
ATOM   4799  OG1 THR   290      38.321  69.327  75.933  1.00  0.00
O
ATOM   4800  HG1 THR   290      38.461  69.930  76.670  1.00  0.00
H
ATOM   4801  C   THR   290      36.304  69.828  73.683  1.00  0.00
C
ATOM   4802  O   THR   290      35.413  70.619  73.994  1.00  0.00
O
ATOM   4803  N   GLU   291      37.110  70.058  72.640  1.00  0.00
N
ATOM   4804  H   GLU   291      37.800  69.362  72.381  1.00  0.00
H
ATOM   4805  CA  GLU   291      36.949  71.239  71.778  1.00  0.00
C
ATOM   4806  HA  GLU   291      36.889  72.125  72.413  1.00  0.00
H
ATOM   4807  CB  GLU   291      38.139  71.425  70.821  1.00  0.00
C
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ATOM   4808  HB2 GLU   291      38.416  70.474  70.366  1.00  0.00
H
ATOM   4809  HB3 GLU   291      37.831  72.104  70.024  1.00  0.00
H
ATOM   4810  CG  GLU   291      39.359  72.053  71.497  1.00  0.00
C
ATOM   4811  HG2 GLU   291      39.054  72.983  71.981  1.00  0.00
H
ATOM   4812  HG3 GLU   291      39.748  71.386  72.268  1.00  0.00
H
ATOM   4813  CD  GLU   291      40.439  72.349  70.455  1.00  0.00
C
ATOM   4814  OE1 GLU   291      40.431  73.477  69.899  1.00  0.00
O
ATOM   4815  OE2 GLU   291      41.268  71.445  70.199  1.00  0.00
O
ATOM   4816  C   GLU   291      35.648  71.164  70.973  1.00  0.00
C
ATOM   4817  O   GLU   291      35.328  70.135  70.374  1.00  0.00
O
ATOM   4818  N   VAL   292      34.912  72.277  70.922  1.00  0.00
N
ATOM   4819  H   VAL   292      35.239  73.095  71.412  1.00  0.00
H
ATOM   4820  CA  VAL   292      33.669  72.403  70.153  1.00  0.00
C
ATOM   4821  HA  VAL   292      33.182  71.431  70.107  1.00  0.00
H
ATOM   4822  CB  VAL   292      32.673  73.366  70.827  1.00  0.00
C
ATOM   4823  HB  VAL   292      33.096  74.371  70.851  1.00  0.00
H
ATOM   4824  CG1 VAL   292      31.337  73.397  70.076  1.00  0.00
C
ATOM   4825 HG11 VAL   292      30.904  72.397  70.048  1.00  0.00
H
ATOM   4826 HG12 VAL   292      30.652  74.074  70.584  1.00  0.00
H
ATOM   4827 HG13 VAL   292      31.487  73.754  69.057  1.00  0.00
H
ATOM   4828  CG2 VAL   292      32.376  72.938  72.270  1.00  0.00
C
ATOM   4829 HG21 VAL   292      33.290  72.949  72.862  1.00  0.00
H
ATOM   4830 HG22 VAL   292      31.671  73.639  72.711  1.00  0.00
H
ATOM   4831 HG23 VAL   292      31.950  71.936  72.284  1.00  0.00
H
ATOM   4832  C   VAL   292      34.020  72.825  68.728  1.00  0.00
C
ATOM   4833  O   VAL   292      34.306  73.994  68.461  1.00  0.00
O
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ATOM   4834  N   ILE   293      34.035  71.850  67.819  1.00  0.00
N
ATOM   4835  H   ILE   293      33.697  70.940  68.106  1.00  0.00
H
ATOM   4836  CA  ILE   293      34.316  72.057  66.395  1.00  0.00
C
ATOM   4837  HA  ILE   293      34.935  72.948  66.324  1.00  0.00
H
ATOM   4838  CB  ILE   293      35.161  70.892  65.819  1.00  0.00
C
ATOM   4839  HB  ILE   293      36.079  70.842  66.408  1.00  0.00
H
ATOM   4840  CG2 ILE   293      34.490  69.513  65.961  1.00  0.00
C
ATOM   4841 HG21 ILE   293      33.587  69.462  65.353  1.00  0.00
H
ATOM   4842 HG22 ILE   293      35.183  68.737  65.636  1.00  0.00
H
ATOM   4843 HG23 ILE   293      34.229  69.324  67.003  1.00  0.00
H
ATOM   4844  CG1 ILE   293      35.567  71.121  64.345  1.00  0.00
C
ATOM   4845 HG12 ILE   293      35.893  70.179  63.918  1.00  0.00
H
ATOM   4846 HG13 ILE   293      34.712  71.465  63.764  1.00  0.00
H
ATOM   4847  CD1 ILE   293      36.723  72.105  64.164  1.00  0.00
C
ATOM   4848 HD11 ILE   293      37.644  71.662  64.542  1.00  0.00
H
ATOM   4849 HD12 ILE   293      36.838  72.316  63.102  1.00  0.00
H
ATOM   4850 HD13 ILE   293      36.528  73.031  64.697  1.00  0.00
H
ATOM   4851  C   ILE   293      32.987  72.312  65.653  1.00  0.00
C
ATOM   4852  O   ILE   293      32.077  71.487  65.737  1.00  0.00
O
ATOM   4853  N   PRO   294      32.820  73.437  64.932  1.00  0.00
N
ATOM   4854  CD  PRO   294      33.759  74.533  64.746  1.00  0.00
C
ATOM   4855  HD2 PRO   294      34.734  74.166  64.437  1.00  0.00
H
ATOM   4856  HD3 PRO   294      33.853  75.094  65.677  1.00  0.00
H
ATOM   4857  CG  PRO   294      33.154  75.426  63.654  1.00  0.00
C
ATOM   4858  HG2 PRO   294      33.492  75.112  62.664  1.00  0.00
H
ATOM   4859  HG3 PRO   294      33.392  76.476  63.822  1.00  0.00
H
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ATOM   4860  CB  PRO   294      31.652  75.162  63.772  1.00  0.00
C
ATOM   4861  HB2 PRO   294      31.124  75.348  62.835  1.00  0.00
H
ATOM   4862  HB3 PRO   294      31.232  75.778  64.569  1.00  0.00
H
ATOM   4863  CA  PRO   294      31.597  73.686  64.175  1.00  0.00
C
ATOM   4864  HA  PRO   294      30.726  73.524  64.810  1.00  0.00
H
ATOM   4865  C   PRO   294      31.521  72.748  62.963  1.00  0.00
C
ATOM   4866  O   PRO   294      32.531  72.485  62.304  1.00  0.00
O
ATOM   4867  N   LEU   295      30.315  72.277  62.636  1.00  0.00
N
ATOM   4868  H   LEU   295      29.521  72.545  63.193  1.00  0.00
H
ATOM   4869  CA  LEU   295      30.070  71.567  61.381  1.00  0.00
C
ATOM   4870  HA  LEU   295      30.888  70.874  61.214  1.00  0.00
H
ATOM   4871  CB  LEU   295      28.767  70.743  61.444  1.00  0.00
C
ATOM   4872  HB2 LEU   295      27.991  71.308  61.963  1.00  0.00
H
ATOM   4873  HB3 LEU   295      28.432  70.579  60.422  1.00  0.00
H
ATOM   4874  CG  LEU   295      28.905  69.340  62.066  1.00  0.00
C
ATOM   4875  HG  LEU   295      29.554  68.739  61.427  1.00  0.00
H
ATOM   4876  CD1 LEU   295      29.491  69.340  63.478  1.00  0.00
C
ATOM   4877 HD11 LEU   295      28.930  70.020  64.114  1.00  0.00
H
ATOM   4878 HD12 LEU   295      29.437  68.334  63.893  1.00  0.00
H
ATOM   4879 HD13 LEU   295      30.536  69.648  63.455  1.00  0.00
H
ATOM   4880  CD2 LEU   295      27.530  68.672  62.124  1.00  0.00
C
ATOM   4881 HD21 LEU   295      27.091  68.633  61.125  1.00  0.00
H
ATOM   4882 HD22 LEU   295      27.623  67.656  62.506  1.00  0.00
H
ATOM   4883 HD23 LEU   295      26.868  69.240  62.777  1.00  0.00
H
ATOM   4884  C   LEU   295      30.091  72.571  60.218  1.00  0.00
C
ATOM   4885  O   LEU   295      29.506  73.650  60.299  1.00  0.00
O
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ATOM   4886  N   THR   296      30.801  72.214  59.150  1.00  0.00
N
ATOM   4887  H   THR   296      31.248  71.314  59.146  1.00  0.00
H
ATOM   4888  CA  THR   296      30.943  73.013  57.923  1.00  0.00
C
ATOM   4889  HA  THR   296      30.952  74.072  58.189  1.00  0.00
H
ATOM   4890  CB  THR   296      32.276  72.697  57.228  1.00  0.00
C
ATOM   4891  HB  THR   296      32.415  73.398  56.413  1.00  0.00
H
ATOM   4892  CG2 THR   296      33.476  72.780  58.170  1.00  0.00
C
ATOM   4893 HG21 THR   296      33.422  71.984  58.915  1.00  0.00
H
ATOM   4894 HG22 THR   296      34.391  72.660  57.592  1.00  0.00
H
ATOM   4895 HG23 THR   296      33.485  73.746  58.680  1.00  0.00
H
ATOM   4896  OG1 THR   296      32.299  71.403  56.680  1.00  0.00
O
ATOM   4897  HG1 THR   296      32.578  71.521  55.764  1.00  0.00
H
ATOM   4898  C   THR   296      29.764  72.774  56.971  1.00  0.00
C
ATOM   4899  O   THR   296      28.974  71.854  57.198  1.00  0.00
O
ATOM   4900  N   GLU   297      29.659  73.538  55.872  1.00  0.00
N
ATOM   4901  H   GLU   297      30.355  74.257  55.708  1.00  0.00
H
ATOM   4902  CA  GLU   297      28.626  73.341  54.832  1.00  0.00
C
ATOM   4903  HA  GLU   297      27.649  73.612  55.231  1.00  0.00
H
ATOM   4904  CB  GLU   297      28.950  74.212  53.597  1.00  0.00
C
ATOM   4905  HB2 GLU   297      29.976  74.001  53.295  1.00  0.00
H
ATOM   4906  HB3 GLU   297      28.315  73.911  52.762  1.00  0.00
H
ATOM   4907  CG  GLU   297      28.828  75.732  53.787  1.00  0.00
C
ATOM   4908  HG2 GLU   297      29.339  76.020  54.708  1.00  0.00
H
ATOM   4909  HG3 GLU   297      29.353  76.216  52.960  1.00  0.00
H
ATOM   4910  CD  GLU   297      27.378  76.241  53.790  1.00  0.00
C
ATOM   4911  OE1 GLU   297      26.617  75.934  52.840  1.00  0.00
O
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ATOM   4912  OE2 GLU   297      27.025  77.016  54.712  1.00  0.00
O
ATOM   4913  C   GLU   297      28.553  71.877  54.363  1.00  0.00
C
ATOM   4914  O   GLU   297      27.475  71.294  54.250  1.00  0.00
O
ATOM   4915  N   GLU   298      29.717  71.272  54.130  1.00  0.00
N
ATOM   4916  H   GLU   298      30.560  71.839  54.169  1.00  0.00
H
ATOM   4917  CA  GLU   298      29.850  69.897  53.661  1.00  0.00
C
ATOM   4918  HA  GLU   298      29.102  69.722  52.887  1.00  0.00
H
ATOM   4919  CB  GLU   298      31.250  69.664  53.072  1.00  0.00
C
ATOM   4920  HB2 GLU   298      32.004  69.799  53.849  1.00  0.00
H
ATOM   4921  HB3 GLU   298      31.293  68.623  52.759  1.00  0.00
H
ATOM   4922  CG  GLU   298      31.603  70.509  51.839  1.00  0.00
C
ATOM   4923  HG2 GLU   298      32.515  70.092  51.403  1.00  0.00
H
ATOM   4924  HG3 GLU   298      30.803  70.394  51.102  1.00  0.00
H
ATOM   4925  CD  GLU   298      31.838  72.002  52.137  1.00  0.00
C
ATOM   4926  OE1 GLU   298      32.171  72.353  53.297  1.00  0.00
O
ATOM   4927  OE2 GLU   298      31.701  72.830  51.203  1.00  0.00
O
ATOM   4928  C   GLU   298      29.619  68.856  54.762  1.00  0.00
C
ATOM   4929  O   GLU   298      29.205  67.749  54.441  1.00  0.00
O
ATOM   4930  N   ALA   299      29.884  69.169  56.035  1.00  0.00
N
ATOM   4931  H   ALA   299      30.180  70.110  56.255  1.00  0.00
H
ATOM   4932  CA  ALA   299      29.676  68.232  57.139  1.00  0.00
C
ATOM   4933  HA  ALA   299      29.899  67.225  56.783  1.00  0.00
H
ATOM   4934  CB  ALA   299      30.661  68.555  58.262  1.00  0.00
C
ATOM   4935  HB1 ALA   299      30.499  69.574  58.606  1.00  0.00
H
ATOM   4936  HB2 ALA   299      30.506  67.870  59.095  1.00  0.00
H
ATOM   4937  HB3 ALA   299      31.680  68.443  57.893  1.00  0.00
H
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ATOM   4938  C   ALA   299      28.219  68.214  57.626  1.00  0.00
C
ATOM   4939  O   ALA   299      27.726  67.147  57.980  1.00  0.00
O
ATOM   4940  N   GLU   300      27.506  69.347  57.591  1.00  0.00
N
ATOM   4941  H   GLU   300      27.970  70.210  57.319  1.00  0.00
H
ATOM   4942  CA  GLU   300      26.043  69.383  57.755  1.00  0.00
C
ATOM   4943  HA  GLU   300      25.758  68.940  58.711  1.00  0.00
H
ATOM   4944  CB  GLU   300      25.537  70.838  57.706  1.00  0.00
C
ATOM   4945  HB2 GLU   300      25.984  71.323  56.838  1.00  0.00
H
ATOM   4946  HB3 GLU   300      24.457  70.836  57.554  1.00  0.00
H
ATOM   4947  CG  GLU   300      25.847  71.683  58.955  1.00  0.00
C
ATOM   4948  HG2 GLU   300      26.873  71.518  59.275  1.00  0.00
H
ATOM   4949  HG3 GLU   300      25.767  72.735  58.671  1.00  0.00
H
ATOM   4950  CD  GLU   300      24.882  71.436  60.125  1.00  0.00
C
ATOM   4951  OE1 GLU   300      24.290  70.342  60.232  1.00  0.00
O
ATOM   4952  OE2 GLU   300      24.644  72.384  60.913  1.00  0.00
O
ATOM   4953  C   GLU   300      25.351  68.576  56.641  1.00  0.00
C
ATOM   4954  O   GLU   300      24.493  67.735  56.918  1.00  0.00
O
ATOM   4955  N   LEU   301      25.754  68.791  55.378  1.00  0.00
N
ATOM   4956  H   LEU   301      26.419  69.537  55.203  1.00  0.00
H
ATOM   4957  CA  LEU   301      25.173  68.093  54.227  1.00  0.00
C
ATOM   4958  HA  LEU   301      24.091  68.163  54.322  1.00  0.00
H
ATOM   4959  CB  LEU   301      25.574  68.807  52.924  1.00  0.00
C
ATOM   4960  HB2 LEU   301      25.219  69.837  52.981  1.00  0.00
H
ATOM   4961  HB3 LEU   301      26.663  68.835  52.848  1.00  0.00
H
ATOM   4962  CG  LEU   301      24.993  68.141  51.656  1.00  0.00
C
ATOM   4963  HG  LEU   301      25.316  67.102  51.610  1.00  0.00
H
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ATOM   4964  CD1 LEU   301      23.460  68.185  51.598  1.00  0.00
C
ATOM   4965 HD11 LEU   301      23.106  69.214  51.646  1.00  0.00
H
ATOM   4966 HD12 LEU   301      23.123  67.720  50.671  1.00  0.00
H
ATOM   4967 HD13 LEU   301      23.039  67.614  52.425  1.00  0.00
H
ATOM   4968  CD2 LEU   301      25.534  68.845  50.413  1.00  0.00
C
ATOM   4969 HD21 LEU   301      26.623  68.818  50.428  1.00  0.00
H
ATOM   4970 HD22 LEU   301      25.189  68.317  49.526  1.00  0.00
H
ATOM   4971 HD23 LEU   301      25.195  69.880  50.388  1.00  0.00
H
ATOM   4972  C   LEU   301      25.517  66.598  54.212  1.00  0.00
C
ATOM   4973  O   LEU   301      24.604  65.782  54.106  1.00  0.00
O
ATOM   4974  N   GLU   302      26.798  66.239  54.359  1.00  0.00
N
ATOM   4975  H   GLU   302      27.495  66.966  54.465  1.00  0.00
H
ATOM   4976  CA  GLU   302      27.239  64.836  54.394  1.00  0.00
C
ATOM   4977  HA  GLU   302      26.919  64.359  53.464  1.00  0.00
H
ATOM   4978  CB  GLU   302      28.781  64.700  54.487  1.00  0.00
C
ATOM   4979  HB2 GLU   302      29.243  65.258  53.671  1.00  0.00
H
ATOM   4980  HB3 GLU   302      29.129  65.117  55.434  1.00  0.00
H
ATOM   4981  CG  GLU   302      29.263  63.239  54.388  1.00  0.00
C
ATOM   4982  HG2 GLU   302      28.829  62.669  55.211  1.00  0.00
H
ATOM   4983  HG3 GLU   302      28.896  62.803  53.454  1.00  0.00
H
ATOM   4984  CD  GLU   302      30.799  63.112  54.459  1.00  0.00
C
ATOM   4985  OE1 GLU   302      31.398  63.409  55.518  1.00  0.00
O
ATOM   4986  OE2 GLU   302      31.444  62.659  53.480  1.00  0.00
O
ATOM   4987  C   GLU   302      26.531  64.106  55.539  1.00  0.00
C
ATOM   4988  O   GLU   302      25.980  63.039  55.300  1.00  0.00
O
ATOM   4989  N   LEU   303      26.436  64.688  56.745  1.00  0.00
N
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ATOM   4990  H   LEU   303      26.837  65.609  56.884  1.00  0.00
H
ATOM   4991  CA  LEU   303      25.681  64.089  57.849  1.00  0.00
C
ATOM   4992  HA  LEU   303      26.097  63.097  58.028  1.00  0.00
H
ATOM   4993  CB  LEU   303      25.883  64.936  59.123  1.00  0.00
C
ATOM   4994  HB2 LEU   303      26.959  65.028  59.281  1.00  0.00
H
ATOM   4995  HB3 LEU   303      25.504  65.945  58.943  1.00  0.00
H
ATOM   4996  CG  LEU   303      25.286  64.408  60.446  1.00  0.00
C
ATOM   4997  HG  LEU   303      25.809  64.928  61.249  1.00  0.00
H
ATOM   4998  CD1 LEU   303      23.794  64.722  60.627  1.00  0.00
C
ATOM   4999 HD11 LEU   303      23.186  64.161  59.922  1.00  0.00
H
ATOM   5000 HD12 LEU   303      23.499  64.468  61.643  1.00  0.00
H
ATOM   5001 HD13 LEU   303      23.622  65.788  60.478  1.00  0.00
H
ATOM   5002  CD2 LEU   303      25.484  62.897  60.648  1.00  0.00
C
ATOM   5003 HD21 LEU   303      26.530  62.619  60.524  1.00  0.00
H
ATOM   5004 HD22 LEU   303      25.157  62.625  61.650  1.00  0.00
H
ATOM   5005 HD23 LEU   303      24.890  62.342  59.927  1.00  0.00
H
ATOM   5006  C   LEU   303      24.201  63.897  57.473  1.00  0.00
C
ATOM   5007  O   LEU   303      23.685  62.796  57.660  1.00  0.00
O
ATOM   5008  N   ALA   304      23.527  64.914  56.926  1.00  0.00
N
ATOM   5009  H   ALA   304      24.012  65.790  56.758  1.00  0.00
H
ATOM   5010  CA  ALA   304      22.108  64.838  56.570  1.00  0.00
C
ATOM   5011  HA  ALA   304      21.553  64.536  57.459  1.00  0.00
H
ATOM   5012  CB  ALA   304      21.614  66.233  56.161  1.00  0.00
C
ATOM   5013  HB1 ALA   304      22.149  66.570  55.273  1.00  0.00
H
ATOM   5014  HB2 ALA   304      20.545  66.198  55.943  1.00  0.00
H
ATOM   5015  HB3 ALA   304      21.788  66.943  56.972  1.00  0.00
H
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ATOM   5016  C   ALA   304      21.820  63.780  55.488  1.00  0.00
C
ATOM   5017  O   ALA   304      20.973  62.914  55.708  1.00  0.00
O
ATOM   5018  N   GLU   305      22.550  63.782  54.366  1.00  0.00
N
ATOM   5019  H   GLU   305      23.270  64.495  54.260  1.00  0.00
H
ATOM   5020  CA  GLU   305      22.405  62.775  53.299  1.00  0.00
C
ATOM   5021  HA  GLU   305      21.412  62.846  52.854  1.00  0.00
H
ATOM   5022  CB  GLU   305      23.472  62.989  52.208  1.00  0.00
C
ATOM   5023  HB2 GLU   305      24.452  62.988  52.687  1.00  0.00
H
ATOM   5024  HB3 GLU   305      23.440  62.138  51.524  1.00  0.00
H
ATOM   5025  CG  GLU   305      23.319  64.266  51.368  1.00  0.00
C
ATOM   5026  HG2 GLU   305      22.372  64.219  50.826  1.00  0.00
H
ATOM   5027  HG3 GLU   305      23.278  65.136  52.021  1.00  0.00
H
ATOM   5028  CD  GLU   305      24.492  64.403  50.380  1.00  0.00
C
ATOM   5029  OE1 GLU   305      25.663  64.153  50.760  1.00  0.00
O
ATOM   5030  OE2 GLU   305      24.256  64.699  49.185  1.00  0.00
O
ATOM   5031  C   GLU   305      22.575  61.354  53.850  1.00  0.00
C
ATOM   5032  O   GLU   305      21.779  60.460  53.569  1.00  0.00
O
ATOM   5033  N   ASN   306      23.594  61.156  54.687  1.00  0.00
N
ATOM   5034  H   ASN   306      24.207  61.945  54.874  1.00  0.00
H
ATOM   5035  CA  ASN   306      23.949  59.871  55.279  1.00  0.00
C
ATOM   5036  HA  ASN   306      24.001  59.126  54.486  1.00  0.00
H
ATOM   5037  CB  ASN   306      25.340  60.079  55.886  1.00  0.00
C
ATOM   5038  HB2 ASN   306      25.873  60.788  55.271  1.00  0.00
H
ATOM   5039  HB3 ASN   306      25.260  60.485  56.895  1.00  0.00
H
ATOM   5040  CG  ASN   306      26.272  58.914  55.824  1.00  0.00
C
ATOM   5041  OD1 ASN   306      26.453  58.280  54.805  1.00  0.00
O
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ATOM   5042  ND2 ASN   306      27.049  58.723  56.852  1.00  0.00
N
ATOM   5043 HD21 ASN   306      27.915  58.268  56.642  1.00  0.00
H
ATOM   5044 HD22 ASN   306      26.966  59.342  57.632  1.00  0.00
H
ATOM   5045  C   ASN   306      22.922  59.399  56.326  1.00  0.00
C
ATOM   5046  O   ASN   306      22.719  58.200  56.524  1.00  0.00
O
ATOM   5047  N   ARG   307      22.244  60.344  56.991  1.00  0.00
N
ATOM   5048  H   ARG   307      22.479  61.312  56.788  1.00  0.00
H
ATOM   5049  CA  ARG   307      21.153  60.095  57.950  1.00  0.00
C
ATOM   5050  HA  ARG   307      21.467  59.294  58.621  1.00  0.00
H
ATOM   5051  CB  ARG   307      20.911  61.374  58.769  1.00  0.00
C
ATOM   5052  HB2 ARG   307      21.872  61.856  58.930  1.00  0.00
H
ATOM   5053  HB3 ARG   307      20.264  62.066  58.221  1.00  0.00
H
ATOM   5054  CG  ARG   307      20.317  61.102  60.154  1.00  0.00
C
ATOM   5055  HG2 ARG   307      19.269  60.799  60.079  1.00  0.00
H
ATOM   5056  HG3 ARG   307      20.899  60.314  60.639  1.00  0.00
H
ATOM   5057  CD  ARG   307      20.429  62.382  60.981  1.00  0.00
C
ATOM   5058  HD2 ARG   307      21.426  62.797  60.842  1.00  0.00
H
ATOM   5059  HD3 ARG   307      19.695  63.115  60.643  1.00  0.00
H
ATOM   5060  NE  ARG   307      20.266  62.075  62.401  1.00  0.00
N
ATOM   5061  HE  ARG   307      19.818  61.208  62.620  1.00  0.00
H
ATOM   5062  CZ  ARG   307      20.711  62.811  63.399  1.00  0.00
C
ATOM   5063  NH1 ARG   307      21.223  63.988  63.220  1.00  0.00
N
ATOM   5064 HH11 ARG   307      21.190  64.384  62.302  1.00  0.00
H
ATOM   5065 HH12 ARG   307      21.215  64.644  64.013  1.00  0.00
H
ATOM   5066  NH2 ARG   307      20.713  62.371  64.609  1.00  0.00
N
ATOM   5067 HH21 ARG   307      20.248  61.531  64.859  1.00  0.00
H
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ATOM   5068 HH22 ARG   307      21.235  62.906  65.286  1.00  0.00
H
ATOM   5069  C   ARG   307      19.877  59.623  57.258  1.00  0.00
C
ATOM   5070  O   ARG   307      19.189  58.763  57.808  1.00  0.00
O
ATOM   5071  N   GLU   308      19.622  60.109  56.041  1.00  0.00
N
ATOM   5072  H   GLU   308      20.213  60.860  55.698  1.00  0.00
H
ATOM   5073  CA  GLU   308      18.524  59.636  55.194  1.00  0.00
C
ATOM   5074  HA  GLU   308      17.632  59.591  55.807  1.00  0.00
H
ATOM   5075  CB  GLU   308      18.220  60.637  54.063  1.00  0.00
C
ATOM   5076  HB2 GLU   308      19.114  60.790  53.460  1.00  0.00
H
ATOM   5077  HB3 GLU   308      17.460  60.205  53.412  1.00  0.00
H
ATOM   5078  CG  GLU   308      17.718  62.005  54.570  1.00  0.00
C
ATOM   5079  HG2 GLU   308      18.528  62.505  55.097  1.00  0.00
H
ATOM   5080  HG3 GLU   308      17.457  62.625  53.710  1.00  0.00
H
ATOM   5081  CD  GLU   308      16.499  61.894  55.498  1.00  0.00
C
ATOM   5082  OE1 GLU   308      15.444  61.399  55.038  1.00  0.00
O
ATOM   5083  OE2 GLU   308      16.615  62.242  56.697  1.00  0.00
O
ATOM   5084  C   GLU   308      18.754  58.199  54.679  1.00  0.00
C
ATOM   5085  O   GLU   308      17.792  57.450  54.526  1.00  0.00
O
ATOM   5086  N   ILE   309      20.008  57.748  54.521  1.00  0.00
N
ATOM   5087  H   ILE   309      20.768  58.408  54.629  1.00  0.00
H
ATOM   5088  CA  ILE   309      20.322  56.332  54.210  1.00  0.00
C
ATOM   5089  HA  ILE   309      19.736  56.043  53.336  1.00  0.00
H
ATOM   5090  CB  ILE   309      21.822  56.126  53.857  1.00  0.00
C
ATOM   5091  HB  ILE   309      22.420  56.332  54.745  1.00  0.00
H
ATOM   5092  CG2 ILE   309      22.076  54.663  53.442  1.00  0.00
C
ATOM   5093 HG21 ILE   309      21.491  54.417  52.554  1.00  0.00
H
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ATOM   5094 HG22 ILE   309      23.131  54.497  53.233  1.00  0.00
H
ATOM   5095 HG23 ILE   309      21.805  53.989  54.248  1.00  0.00
H
ATOM   5096  CG1 ILE   309      22.286  57.063  52.719  1.00  0.00
C
ATOM   5097 HG12 ILE   309      21.715  56.852  51.813  1.00  0.00
H
ATOM   5098 HG13 ILE   309      22.082  58.088  53.007  1.00  0.00
H
ATOM   5099  CD1 ILE   309      23.785  56.987  52.403  1.00  0.00
C
ATOM   5100 HD11 ILE   309      24.023  56.060  51.884  1.00  0.00
H
ATOM   5101 HD12 ILE   309      24.059  57.823  51.759  1.00  0.00
H
ATOM   5102 HD13 ILE   309      24.360  57.048  53.326  1.00  0.00
H
ATOM   5103  C   ILE   309      19.893  55.403  55.364  1.00  0.00
C
ATOM   5104  O   ILE   309      19.394  54.305  55.125  1.00  0.00
O
ATOM   5105  N   LEU   310      20.021  55.843  56.623  1.00  0.00
N
ATOM   5106  H   LEU   310      20.409  56.767  56.762  1.00  0.00
H
ATOM   5107  CA  LEU   310      19.623  55.058  57.803  1.00  0.00
C
ATOM   5108  HA  LEU   310      19.893  54.019  57.612  1.00  0.00
H
ATOM   5109  CB  LEU   310      20.420  55.515  59.049  1.00  0.00
C
ATOM   5110  HB2 LEU   310      20.167  56.556  59.254  1.00  0.00
H
ATOM   5111  HB3 LEU   310      20.088  54.920  59.902  1.00  0.00
H
ATOM   5112  CG  LEU   310      21.954  55.388  58.971  1.00  0.00
C
ATOM   5113  HG  LEU   310      22.336  56.052  58.196  1.00  0.00
H
ATOM   5114  CD1 LEU   310      22.563  55.803  60.312  1.00  0.00
C
ATOM   5115 HD11 LEU   310      22.255  55.110  61.096  1.00  0.00
H
ATOM   5116 HD12 LEU   310      23.649  55.803  60.234  1.00  0.00
H
ATOM   5117 HD13 LEU   310      22.225  56.805  60.565  1.00  0.00
H
ATOM   5118  CD2 LEU   310      22.432  53.965  58.682  1.00  0.00
C
ATOM   5119 HD21 LEU   310      22.143  53.683  57.672  1.00  0.00
H
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ATOM   5120 HD22 LEU   310      23.517  53.920  58.748  1.00  0.00
H
ATOM   5121 HD23 LEU   310      21.995  53.265  59.394  1.00  0.00
H
ATOM   5122  C   LEU   310      18.096  55.044  58.070  1.00  0.00
C
ATOM   5123  O   LEU   310      17.678  54.547  59.119  1.00  0.00
O
ATOM   5124  N   LYS   311      17.251  55.603  57.186  1.00  0.00
N
ATOM   5125  H   LYS   311      17.655  56.020  56.353  1.00  0.00
H
ATOM   5126  CA  LYS   311      15.778  55.671  57.354  1.00  0.00
C
ATOM   5127  HA  LYS   311      15.538  55.877  58.398  1.00  0.00
H
ATOM   5128  CB  LYS   311      15.189  56.778  56.468  1.00  0.00
C
ATOM   5129  HB2 LYS   311      15.503  56.608  55.437  1.00  0.00
H
ATOM   5130  HB3 LYS   311      14.099  56.721  56.481  1.00  0.00
H
ATOM   5131  CG  LYS   311      15.608  58.189  56.870  1.00  0.00
C
ATOM   5132  HG2 LYS   311      16.675  58.204  57.084  1.00  0.00
H
ATOM   5133  HG3 LYS   311      15.418  58.830  56.008  1.00  0.00
H
ATOM   5134  CD  LYS   311      14.848  58.747  58.078  1.00  0.00
C
ATOM   5135  HD2 LYS   311      13.777  58.581  57.951  1.00  0.00
H
ATOM   5136  HD3 LYS   311      15.200  58.277  58.998  1.00  0.00
H
ATOM   5137  CE  LYS   311      15.147  60.246  58.076  1.00  0.00
C
ATOM   5138  HE2 LYS   311      16.220  60.407  58.220  1.00  0.00
H
ATOM   5139  HE3 LYS   311      14.916  60.627  57.076  1.00  0.00
H
ATOM   5140  NZ  LYS   311      14.368  61.034  59.051  1.00  0.00
N
ATOM   5141  HZ1 LYS   311      14.609  60.801  60.013  1.00  0.00
H
ATOM   5142  HZ2 LYS   311      14.576  62.011  58.884  1.00  0.00
H
ATOM   5143  HZ3 LYS   311      13.380  60.894  58.900  1.00  0.00
H
ATOM   5144  C   LYS   311      15.060  54.372  56.997  1.00  0.00
C
ATOM   5145  O   LYS   311      14.217  53.907  57.763  1.00  0.00
O
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ATOM   5146  N   GLU   312      15.376  53.827  55.824  1.00  0.00
N
ATOM   5147  H   GLU   312      16.094  54.278  55.276  1.00  0.00
H
ATOM   5148  CA  GLU   312      14.810  52.579  55.306  1.00  0.00
C
ATOM   5149  HA  GLU   312      13.862  52.383  55.803  1.00  0.00
H
ATOM   5150  CB  GLU   312      14.508  52.689  53.793  1.00  0.00
C
ATOM   5151  HB2 GLU   312      15.431  52.891  53.247  1.00  0.00
H
ATOM   5152  HB3 GLU   312      14.113  51.729  53.461  1.00  0.00
H
ATOM   5153  CG  GLU   312      13.473  53.782  53.457  1.00  0.00
C
ATOM   5154  HG2 GLU   312      12.636  53.689  54.152  1.00  0.00
H
ATOM   5155  HG3 GLU   312      13.932  54.761  53.614  1.00  0.00
H
ATOM   5156  CD  GLU   312      12.937  53.706  52.013  1.00  0.00
C
ATOM   5157  OE1 GLU   312      13.717  53.420  51.078  1.00  0.00
O
ATOM   5158  OE2 GLU   312      11.730  53.978  51.798  1.00  0.00
O
ATOM   5159  C   GLU   312      15.803  51.447  55.627  1.00  0.00
C
ATOM   5160  O   GLU   312      16.854  51.363  54.983  1.00  0.00
O
ATOM   5161  N   PRO   313      15.544  50.595  56.639  1.00  0.00
N
ATOM   5162  CD  PRO   313      14.327  50.493  57.433  1.00  0.00
C
ATOM   5163  HD2 PRO   313      13.432  50.543  56.813  1.00  0.00
H
ATOM   5164  HD3 PRO   313      14.316  51.284  58.183  1.00  0.00
H
ATOM   5165  CG  PRO   313      14.402  49.130  58.121  1.00  0.00
C
ATOM   5166  HG2 PRO   313      14.022  48.358  57.449  1.00  0.00
H
ATOM   5167  HG3 PRO   313      13.855  49.120  59.064  1.00  0.00
H
ATOM   5168  CB  PRO   313      15.906  48.936  58.326  1.00  0.00
C
ATOM   5169  HB2 PRO   313      16.176  47.880  58.398  1.00  0.00
H
ATOM   5170  HB3 PRO   313      16.223  49.468  59.225  1.00  0.00
H
ATOM   5171  CA  PRO   313      16.518  49.606  57.092  1.00  0.00
C
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ATOM   5172  HA  PRO   313      17.432  50.120  57.387  1.00  0.00
H
ATOM   5173  C   PRO   313      16.864  48.604  55.988  1.00  0.00
C
ATOM   5174  O   PRO   313      16.010  48.209  55.192  1.00  0.00
O
ATOM   5175  N   VAL   314      18.133  48.199  55.943  1.00  0.00
N
ATOM   5176  H   VAL   314      18.767  48.535  56.652  1.00  0.00
H
ATOM   5177  CA  VAL   314      18.663  47.234  54.970  1.00  0.00
C
ATOM   5178  HA  VAL   314      17.904  47.046  54.210  1.00  0.00
H
ATOM   5179  CB  VAL   314      19.912  47.763  54.237  1.00  0.00
C
ATOM   5180  HB  VAL   314      20.236  47.007  53.519  1.00  0.00
H
ATOM   5181  CG1 VAL   314      19.617  49.035  53.440  1.00  0.00
C
ATOM   5182 HG11 VAL   314      19.322  49.845  54.106  1.00  0.00
H
ATOM   5183 HG12 VAL   314      20.504  49.333  52.881  1.00  0.00
H
ATOM   5184 HG13 VAL   314      18.810  48.843  52.733  1.00  0.00
H
ATOM   5185  CG2 VAL   314      21.072  48.022  55.201  1.00  0.00
C
ATOM   5186 HG21 VAL   314      21.315  47.113  55.748  1.00  0.00
H
ATOM   5187 HG22 VAL   314      21.946  48.330  54.636  1.00  0.00
H
ATOM   5188 HG23 VAL   314      20.811  48.803  55.909  1.00  0.00
H
ATOM   5189  C   VAL   314      18.955  45.887  55.626  1.00  0.00
C
ATOM   5190  O   VAL   314      19.026  45.762  56.851  1.00  0.00
O
ATOM   5191  N   HIE   315      19.170  44.890  54.775  1.00  0.00
N
ATOM   5192  H   HIE   315      19.161  45.101  53.789  1.00  0.00
H
ATOM   5193  CA  HIE   315      19.461  43.507  55.132  1.00  0.00
C
ATOM   5194  HA  HIE   315      19.809  43.478  56.166  1.00  0.00
H
ATOM   5195  CB  HIE   315      18.167  42.675  55.047  1.00  0.00
C
ATOM   5196  HB2 HIE   315      18.417  41.655  55.320  1.00  0.00
H
ATOM   5197  HB3 HIE   315      17.483  43.047  55.813  1.00  0.00
H
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ATOM   5198  CG  HIE   315      17.398  42.637  53.731  1.00  0.00
C
ATOM   5199  ND1 HIE   315      16.180  41.972  53.559  1.00  0.00
N
ATOM   5200  CE1 HIE   315      15.799  42.199  52.292  1.00  0.00
C
ATOM   5201  HE1 HIE   315      14.885  41.831  51.848  1.00  0.00
H
ATOM   5202  NE2 HIE   315      16.708  42.951  51.656  1.00  0.00
N
ATOM   5203  HE2 HIE   315      16.654  43.261  50.696  1.00  0.00
H
ATOM   5204  CD2 HIE   315      17.716  43.238  52.544  1.00  0.00
C
ATOM   5205  HD2 HIE   315      18.587  43.831  52.331  1.00  0.00
H
ATOM   5206  C   HIE   315      20.586  42.932  54.261  1.00  0.00
C
ATOM   5207  O   HIE   315      20.748  43.337  53.111  1.00  0.00
O
ATOM   5208  N   GLY   316      21.355  41.991  54.804  1.00  0.00
N
ATOM   5209  H   GLY   316      21.160  41.708  55.760  1.00  0.00
H
ATOM   5210  CA  GLY   316      22.305  41.167  54.058  1.00  0.00
C
ATOM   5211  HA2 GLY   316      22.455  41.583  53.065  1.00  0.00
H
ATOM   5212  HA3 GLY   316      23.268  41.156  54.564  1.00  0.00
H
ATOM   5213  C   GLY   316      21.801  39.734  53.933  1.00  0.00
C
ATOM   5214  O   GLY   316      21.137  39.233  54.838  1.00  0.00
O
ATOM   5215  N   VAL   317      22.112  39.061  52.825  1.00  0.00
N
ATOM   5216  H   VAL   317      22.662  39.544  52.123  1.00  0.00
H
ATOM   5217  CA  VAL   317      21.867  37.614  52.656  1.00  0.00
C
ATOM   5218  HA  VAL   317      20.960  37.355  53.203  1.00  0.00
H
ATOM   5219  CB  VAL   317      21.593  37.292  51.170  1.00  0.00
C
ATOM   5220  HB  VAL   317      20.819  37.982  50.832  1.00  0.00
H
ATOM   5221  CG1 VAL   317      22.820  37.496  50.276  1.00  0.00
C
ATOM   5222 HG11 VAL   317      23.647  36.876  50.620  1.00  0.00
H
ATOM   5223 HG12 VAL   317      22.585  37.224  49.247  1.00  0.00
H
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ATOM   5224 HG13 VAL   317      23.118  38.542  50.291  1.00  0.00
H
ATOM   5225  CG2 VAL   317      21.041  35.881  50.939  1.00  0.00
C
ATOM   5226 HG21 VAL   317      20.227  35.673  51.635  1.00  0.00
H
ATOM   5227 HG22 VAL   317      20.658  35.797  49.922  1.00  0.00
H
ATOM   5228 HG23 VAL   317      21.829  35.140  51.059  1.00  0.00
H
ATOM   5229  C   VAL   317      22.999  36.783  53.284  1.00  0.00
C
ATOM   5230  O   VAL   317      24.075  37.307  53.571  1.00  0.00
O
ATOM   5231  N   TYR   318      22.762  35.489  53.509  1.00  0.00
N
ATOM   5232  H   TYR   318      21.839  35.143  53.299  1.00  0.00
H
ATOM   5233  CA  TYR   318      23.795  34.512  53.887  1.00  0.00
C
ATOM   5234  HA  TYR   318      24.519  35.000  54.545  1.00  0.00
H
ATOM   5235  CB  TYR   318      23.162  33.343  54.650  1.00  0.00
C
ATOM   5236  HB2 TYR   318      22.340  32.923  54.066  1.00  0.00
H
ATOM   5237  HB3 TYR   318      23.897  32.551  54.797  1.00  0.00
H
ATOM   5238  CG  TYR   318      22.668  33.768  56.005  1.00  0.00
C
ATOM   5239  CD1 TYR   318      23.583  34.279  56.947  1.00  0.00
C
ATOM   5240  HD1 TYR   318      24.639  34.326  56.717  1.00  0.00
H
ATOM   5241  CE1 TYR   318      23.121  34.776  58.176  1.00  0.00
C
ATOM   5242  HE1 TYR   318      23.821  35.186  58.885  1.00  0.00
H
ATOM   5243  CZ  TYR   318      21.740  34.750  58.462  1.00  0.00
C
ATOM   5244  OH  TYR   318      21.290  35.251  59.635  1.00  0.00
O
ATOM   5245  HH  TYR   318      21.998  35.593  60.175  1.00  0.00
H
ATOM   5246  CE2 TYR   318      20.834  34.213  57.526  1.00  0.00
C
ATOM   5247  HE2 TYR   318      19.782  34.197  57.755  1.00  0.00
H
ATOM   5248  CD2 TYR   318      21.295  33.727  56.294  1.00  0.00
C
ATOM   5249  HD2 TYR   318      20.586  33.355  55.569  1.00  0.00
H
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ATOM   5250  C   TYR   318      24.581  33.972  52.694  1.00  0.00
C
ATOM   5251  O   TYR   318      24.085  33.912  51.570  1.00  0.00
O
ATOM   5252  N   TYR   319      25.789  33.492  52.977  1.00  0.00
N
ATOM   5253  H   TYR   319      26.091  33.504  53.945  1.00  0.00
H
ATOM   5254  CA  TYR   319      26.674  32.857  52.008  1.00  0.00
C
ATOM   5255  HA  TYR   319      26.721  33.506  51.131  1.00  0.00
H
ATOM   5256  CB  TYR   319      28.080  32.758  52.631  1.00  0.00
C
ATOM   5257  HB2 TYR   319      28.421  33.761  52.867  1.00  0.00
H
ATOM   5258  HB3 TYR   319      28.005  32.204  53.568  1.00  0.00
H
ATOM   5259  CG  TYR   319      29.146  32.111  51.767  1.00  0.00
C
ATOM   5260  CD1 TYR   319      29.238  32.442  50.404  1.00  0.00
C
ATOM   5261  HD1 TYR   319      28.573  33.177  49.975  1.00  0.00
H
ATOM   5262  CE1 TYR   319      30.180  31.810  49.581  1.00  0.00
C
ATOM   5263  HE1 TYR   319      30.187  32.027  48.524  1.00  0.00
H
ATOM   5264  CZ  TYR   319      31.099  30.902  50.140  1.00  0.00
C
ATOM   5265  OH  TYR   319      32.016  30.297  49.346  1.00  0.00
O
ATOM   5266  HH  TYR   319      31.828  30.478  48.424  1.00  0.00
H
ATOM   5267  CE2 TYR   319      31.057  30.613  51.521  1.00  0.00
C
ATOM   5268  HE2 TYR   319      31.796  29.944  51.928  1.00  0.00
H
ATOM   5269  CD2 TYR   319      30.067  31.206  52.333  1.00  0.00
C
ATOM   5270  HD2 TYR   319      30.027  31.013  53.395  1.00  0.00
H
ATOM   5271  C   TYR   319      26.158  31.479  51.558  1.00  0.00
C
ATOM   5272  O   TYR   319      25.782  30.636  52.380  1.00  0.00
O
ATOM   5273  N   ASP   320      26.208  31.228  50.250  1.00  0.00
N
ATOM   5274  H   ASP   320      26.451  31.997  49.629  1.00  0.00
H
ATOM   5275  CA  ASP   320      26.071  29.909  49.630  1.00  0.00
C
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ATOM   5276  HA  ASP   320      25.830  29.174  50.394  1.00  0.00
H
ATOM   5277  CB  ASP   320      24.891  29.928  48.646  1.00  0.00
C
ATOM   5278  HB2 ASP   320      23.966  30.087  49.205  1.00  0.00
H
ATOM   5279  HB3 ASP   320      25.014  30.771  47.961  1.00  0.00
H
ATOM   5280  CG  ASP   320      24.761  28.641  47.815  1.00  0.00
C
ATOM   5281  OD1 ASP   320      25.369  27.603  48.180  1.00  0.00
O
ATOM   5282  OD2 ASP   320      24.062  28.704  46.784  1.00  0.00
O
ATOM   5283  C   ASP   320      27.397  29.520  48.937  1.00  0.00
C
ATOM   5284  O   ASP   320      27.819  30.205  48.003  1.00  0.00
O
ATOM   5285  N   PRO   321      28.081  28.433  49.346  1.00  0.00
N
ATOM   5286  CD  PRO   321      27.716  27.518  50.418  1.00  0.00
C
ATOM   5287  HD2 PRO   321      26.688  27.168  50.322  1.00  0.00
H
ATOM   5288  HD3 PRO   321      27.851  28.025  51.372  1.00  0.00
H
ATOM   5289  CG  PRO   321      28.677  26.336  50.293  1.00  0.00
C
ATOM   5290  HG2 PRO   321      28.260  25.602  49.600  1.00  0.00
H
ATOM   5291  HG3 PRO   321      28.886  25.871  51.255  1.00  0.00
H
ATOM   5292  CB  PRO   321      29.923  26.978  49.677  1.00  0.00
C
ATOM   5293  HB2 PRO   321      30.561  26.250  49.175  1.00  0.00
H
ATOM   5294  HB3 PRO   321      30.488  27.509  50.445  1.00  0.00
H
ATOM   5295  CA  PRO   321      29.323  27.996  48.706  1.00  0.00
C
ATOM   5296  HA  PRO   321      30.002  28.841  48.606  1.00  0.00
H
ATOM   5297  C   PRO   321      29.129  27.395  47.300  1.00  0.00
C
ATOM   5298  O   PRO   321      30.114  27.161  46.605  1.00  0.00
O
ATOM   5299  N   SER   322      27.891  27.140  46.873  1.00  0.00
N
ATOM   5300  H   SER   322      27.106  27.350  47.491  1.00  0.00
H
ATOM   5301  CA  SER   322      27.568  26.468  45.607  1.00  0.00
C
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ATOM   5302  HA  SER   322      28.255  25.632  45.485  1.00  0.00
H
ATOM   5303  CB  SER   322      26.137  25.915  45.643  1.00  0.00
C
ATOM   5304  HB2 SER   322      25.426  26.740  45.585  1.00  0.00
H
ATOM   5305  HB3 SER   322      25.978  25.247  44.794  1.00  0.00
H
ATOM   5306  OG  SER   322      25.909  25.230  46.858  1.00  0.00
O
ATOM   5307  HG  SER   322      25.554  25.913  47.466  1.00  0.00
H
ATOM   5308  C   SER   322      27.740  27.354  44.366  1.00  0.00
C
ATOM   5309  O   SER   322      27.638  26.863  43.243  1.00  0.00
O
ATOM   5310  N   LYS   323      28.006  28.654  44.550  1.00  0.00
N
ATOM   5311  H   LYS   323      28.102  28.978  45.507  1.00  0.00
H
ATOM   5312  CA  LYS   323      28.210  29.651  43.490  1.00  0.00
C
ATOM   5313  HA  LYS   323      28.583  29.135  42.603  1.00  0.00
H
ATOM   5314  CB  LYS   323      26.865  30.314  43.089  1.00  0.00
C
ATOM   5315  HB2 LYS   323      27.062  31.282  42.625  1.00  0.00
H
ATOM   5316  HB3 LYS   323      26.415  29.677  42.323  1.00  0.00
H
ATOM   5317  CG  LYS   323      25.814  30.501  44.208  1.00  0.00
C
ATOM   5318  HG2 LYS   323      25.622  29.541  44.690  1.00  0.00
H
ATOM   5319  HG3 LYS   323      26.195  31.200  44.953  1.00  0.00
H
ATOM   5320  CD  LYS   323      24.481  31.012  43.632  1.00  0.00
C
ATOM   5321  HD2 LYS   323      24.595  32.052  43.315  1.00  0.00
H
ATOM   5322  HD3 LYS   323      24.215  30.404  42.767  1.00  0.00
H
ATOM   5323  CE  LYS   323      23.353  30.870  44.662  1.00  0.00
C
ATOM   5324  HE2 LYS   323      23.300  29.817  44.956  1.00  0.00
H
ATOM   5325  HE3 LYS   323      23.600  31.439  45.560  1.00  0.00
H
ATOM   5326  NZ  LYS   323      22.039  31.292  44.119  1.00  0.00
N
ATOM   5327  HZ1 LYS   323      21.812  30.846  43.250  1.00  0.00
H
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ATOM   5328  HZ2 LYS   323      21.300  31.128  44.784  1.00  0.00
H
ATOM   5329  HZ3 LYS   323      21.974  32.306  43.953  1.00  0.00
H
ATOM   5330  C   LYS   323      29.308  30.650  43.872  1.00  0.00
C
ATOM   5331  O   LYS   323      29.595  30.856  45.052  1.00  0.00
O
ATOM   5332  N   ASP   324      29.977  31.232  42.879  1.00  0.00
N
ATOM   5333  H   ASP   324      29.745  30.994  41.921  1.00  0.00
H
ATOM   5334  CA  ASP   324      30.997  32.255  43.108  1.00  0.00
C
ATOM   5335  HA  ASP   324      31.625  31.875  43.908  1.00  0.00
H
ATOM   5336  CB  ASP   324      31.931  32.423  41.889  1.00  0.00
C
ATOM   5337  HB2 ASP   324      32.465  33.375  41.948  1.00  0.00
H
ATOM   5338  HB3 ASP   324      32.678  31.636  41.961  1.00  0.00
H
ATOM   5339  CG  ASP   324      31.264  32.264  40.518  1.00  0.00
C
ATOM   5340  OD1 ASP   324      31.013  33.285  39.851  1.00  0.00
O
ATOM   5341  OD2 ASP   324      31.034  31.100  40.120  1.00  0.00
O
ATOM   5342  C   ASP   324      30.420  33.564  43.680  1.00  0.00
C
ATOM   5343  O   ASP   324      29.210  33.751  43.802  1.00  0.00
O
ATOM   5344  N   LEU   325      31.324  34.427  44.150  1.00  0.00
N
ATOM   5345  H   LEU   325      32.289  34.271  43.914  1.00  0.00
H
ATOM   5346  CA  LEU   325      30.998  35.728  44.725  1.00  0.00
C
ATOM   5347  HA  LEU   325      29.922  35.796  44.894  1.00  0.00
H
ATOM   5348  CB  LEU   325      31.706  35.983  46.069  1.00  0.00
C
ATOM   5349  HB2 LEU   325      32.788  35.980  45.918  1.00  0.00
H
ATOM   5350  HB3 LEU   325      31.426  36.994  46.376  1.00  0.00
H
ATOM   5351  CG  LEU   325      31.352  35.030  47.226  1.00  0.00
C
ATOM   5352  HG  LEU   325      30.285  34.804  47.225  1.00  0.00
H
ATOM   5353  CD1 LEU   325      32.154  33.727  47.158  1.00  0.00
C
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ATOM   5354 HD11 LEU   325      33.197  33.950  46.938  1.00  0.00
H
ATOM   5355 HD12 LEU   325      32.103  33.218  48.119  1.00  0.00
H
ATOM   5356 HD13 LEU   325      31.719  33.084  46.397  1.00  0.00
H
ATOM   5357  CD2 LEU   325      31.712  35.701  48.550  1.00  0.00
C
ATOM   5358 HD21 LEU   325      31.161  36.636  48.655  1.00  0.00
H
ATOM   5359 HD22 LEU   325      31.433  35.052  49.381  1.00  0.00
H
ATOM   5360 HD23 LEU   325      32.782  35.909  48.593  1.00  0.00
H
ATOM   5361  C   LEU   325      31.396  36.817  43.734  1.00  0.00
C
ATOM   5362  O   LEU   325      32.474  36.741  43.141  1.00  0.00
O
ATOM   5363  N   ILE   326      30.558  37.839  43.604  1.00  0.00
N
ATOM   5364  H   ILE   326      29.704  37.842  44.155  1.00  0.00
H
ATOM   5365  CA  ILE   326      30.787  38.997  42.742  1.00  0.00
C
ATOM   5366  HA  ILE   326      31.683  38.838  42.144  1.00  0.00
H
ATOM   5367  CB  ILE   326      29.598  39.196  41.774  1.00  0.00
C
ATOM   5368  HB  ILE   326      28.685  39.335  42.356  1.00  0.00
H
ATOM   5369  CG2 ILE   326      29.812  40.469  40.933  1.00  0.00
C
ATOM   5370 HG21 ILE   326      30.753  40.406  40.386  1.00  0.00
H
ATOM   5371 HG22 ILE   326      28.985  40.592  40.238  1.00  0.00
H
ATOM   5372 HG23 ILE   326      29.822  41.350  41.575  1.00  0.00
H
ATOM   5373  CG1 ILE   326      29.406  37.993  40.815  1.00  0.00
C
ATOM   5374 HG12 ILE   326      28.919  38.335  39.901  1.00  0.00
H
ATOM   5375 HG13 ILE   326      30.379  37.586  40.535  1.00  0.00
H
ATOM   5376  CD1 ILE   326      28.528  36.860  41.368  1.00  0.00
C
ATOM   5377 HD11 ILE   326      27.560  37.257  41.675  1.00  0.00
H
ATOM   5378 HD12 ILE   326      28.375  36.115  40.587  1.00  0.00
H
ATOM   5379 HD13 ILE   326      29.000  36.364  42.214  1.00  0.00
H
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ATOM   5380  C   ILE   326      31.008  40.213  43.639  1.00  0.00
C
ATOM   5381  O   ILE   326      30.216  40.451  44.547  1.00  0.00
O
ATOM   5382  N   ALA   327      32.059  40.988  43.379  1.00  0.00
N
ATOM   5383  H   ALA   327      32.673  40.715  42.618  1.00  0.00
H
ATOM   5384  CA  ALA   327      32.321  42.276  44.012  1.00  0.00
C
ATOM   5385  HA  ALA   327      31.563  42.480  44.769  1.00  0.00
H
ATOM   5386  CB  ALA   327      33.682  42.212  44.715  1.00  0.00
C
ATOM   5387  HB1 ALA   327      34.462  41.983  43.986  1.00  0.00
H
ATOM   5388  HB2 ALA   327      33.896  43.175  45.181  1.00  0.00
H
ATOM   5389  HB3 ALA   327      33.670  41.436  45.479  1.00  0.00
H
ATOM   5390  C   ALA   327      32.253  43.392  42.959  1.00  0.00
C
ATOM   5391  O   ALA   327      33.011  43.391  41.990  1.00  0.00
O
ATOM   5392  N   GLU   328      31.352  44.351  43.146  1.00  0.00
N
ATOM   5393  H   GLU   328      30.782  44.316  43.987  1.00  0.00
H
ATOM   5394  CA  GLU   328      31.160  45.500  42.254  1.00  0.00
C
ATOM   5395  HA  GLU   328      31.811  45.400  41.386  1.00  0.00
H
ATOM   5396  CB  GLU   328      29.708  45.479  41.747  1.00  0.00
C
ATOM   5397  HB2 GLU   328      29.531  44.481  41.342  1.00  0.00
H
ATOM   5398  HB3 GLU   328      29.020  45.633  42.579  1.00  0.00
H
ATOM   5399  CG  GLU   328      29.412  46.499  40.635  1.00  0.00
C
ATOM   5400  HG2 GLU   328      29.435  47.504  41.053  1.00  0.00
H
ATOM   5401  HG3 GLU   328      30.201  46.437  39.885  1.00  0.00
H
ATOM   5402  CD  GLU   328      28.054  46.256  39.950  1.00  0.00
C
ATOM   5403  OE1 GLU   328      27.388  45.225  40.229  1.00  0.00
O
ATOM   5404  OE2 GLU   328      27.646  47.074  39.098  1.00  0.00
O
ATOM   5405  C   GLU   328      31.573  46.786  42.986  1.00  0.00
C
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ATOM   5406  O   GLU   328      31.310  46.917  44.183  1.00  0.00
O
ATOM   5407  N   ILE   329      32.257  47.703  42.291  1.00  0.00
N
ATOM   5408  H   ILE   329      32.399  47.537  41.302  1.00  0.00
H
ATOM   5409  CA  ILE   329      32.845  48.938  42.850  1.00  0.00
C
ATOM   5410  HA  ILE   329      32.482  49.071  43.869  1.00  0.00
H
ATOM   5411  CB  ILE   329      34.402  48.871  42.886  1.00  0.00
C
ATOM   5412  HB  ILE   329      34.760  48.942  41.856  1.00  0.00
H
ATOM   5413  CG2 ILE   329      34.973  50.082  43.660  1.00  0.00
C
ATOM   5414 HG21 ILE   329      34.653  50.045  44.701  1.00  0.00
H
ATOM   5415 HG22 ILE   329      36.061  50.091  43.617  1.00  0.00
H
ATOM   5416 HG23 ILE   329      34.637  51.022  43.224  1.00  0.00
H
ATOM   5417  CG1 ILE   329      34.952  47.546  43.477  1.00  0.00
C
ATOM   5418 HG12 ILE   329      34.582  47.426  44.495  1.00  0.00
H
ATOM   5419 HG13 ILE   329      34.578  46.710  42.886  1.00  0.00
H
ATOM   5420  CD1 ILE   329      36.486  47.449  43.485  1.00  0.00
C
ATOM   5421 HD11 ILE   329      36.903  48.077  44.270  1.00  0.00
H
ATOM   5422 HD12 ILE   329      36.793  46.421  43.667  1.00  0.00
H
ATOM   5423 HD13 ILE   329      36.886  47.763  42.524  1.00  0.00
H
ATOM   5424  C   ILE   329      32.395  50.150  42.016  1.00  0.00
C
ATOM   5425  O   ILE   329      32.451  50.093  40.790  1.00  0.00
O
ATOM   5426  N   GLN   330      32.061  51.282  42.648  1.00  0.00
N
ATOM   5427  H   GLN   330      32.033  51.261  43.664  1.00  0.00
H
ATOM   5428  CA  GLN   330      31.846  52.569  41.968  1.00  0.00
C
ATOM   5429  HA  GLN   330      32.167  52.461  40.933  1.00  0.00
H
ATOM   5430  CB  GLN   330      30.368  53.011  41.943  1.00  0.00
C
ATOM   5431  HB2 GLN   330      30.108  53.457  42.900  1.00  0.00
H
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ATOM   5432  HB3 GLN   330      30.278  53.794  41.190  1.00  0.00
H
ATOM   5433  CG  GLN   330      29.326  51.933  41.621  1.00  0.00
C
ATOM   5434  HG2 GLN   330      28.392  52.432  41.367  1.00  0.00
H
ATOM   5435  HG3 GLN   330      29.651  51.359  40.751  1.00  0.00
H
ATOM   5436  CD  GLN   330      29.060  51.005  42.806  1.00  0.00
C
ATOM   5437  OE1 GLN   330      29.279  49.808  42.746  1.00  0.00
O
ATOM   5438  NE2 GLN   330      28.582  51.497  43.931  1.00  0.00
N
ATOM   5439 HE21 GLN   330      28.387  50.826  44.655  1.00  0.00
H
ATOM   5440 HE22 GLN   330      28.318  52.472  44.025  1.00  0.00
H
ATOM   5441  C   GLN   330      32.703  53.683  42.582  1.00  0.00
C
ATOM   5442  O   GLN   330      32.989  53.690  43.782  1.00  0.00
O
ATOM   5443  N   LYS   331      33.065  54.675  41.763  1.00  0.00
N
ATOM   5444  H   LYS   331      32.777  54.617  40.795  1.00  0.00
H
ATOM   5445  CA  LYS   331      33.700  55.923  42.209  1.00  0.00
C
ATOM   5446  HA  LYS   331      34.432  55.701  42.989  1.00  0.00
H
ATOM   5447  CB  LYS   331      34.450  56.526  41.009  1.00  0.00
C
ATOM   5448  HB2 LYS   331      35.122  55.779  40.586  1.00  0.00
H
ATOM   5449  HB3 LYS   331      33.727  56.779  40.238  1.00  0.00
H
ATOM   5450  CG  LYS   331      35.272  57.772  41.364  1.00  0.00
C
ATOM   5451  HG2 LYS   331      34.667  58.466  41.949  1.00  0.00
H
ATOM   5452  HG3 LYS   331      36.143  57.470  41.949  1.00  0.00
H
ATOM   5453  CD  LYS   331      35.715  58.462  40.064  1.00  0.00
C
ATOM   5454  HD2 LYS   331      36.313  57.769  39.460  1.00  0.00
H
ATOM   5455  HD3 LYS   331      34.834  58.756  39.502  1.00  0.00
H
ATOM   5456  CE  LYS   331      36.503  59.736  40.370  1.00  0.00
C
ATOM   5457  HE2 LYS   331      35.915  60.383  41.031  1.00  0.00
H
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ATOM   5458  HE3 LYS   331      37.406  59.439  40.886  1.00  0.00
H
ATOM   5459  NZ  LYS   331      36.915  60.442  39.140  1.00  0.00
N
ATOM   5460  HZ1 LYS   331      36.102  60.779  38.653  1.00  0.00
H
ATOM   5461  HZ2 LYS   331      37.452  61.261  39.371  1.00  0.00
H
ATOM   5462  HZ3 LYS   331      37.491  59.828  38.540  1.00  0.00
H
ATOM   5463  C   LYS   331      32.624  56.857  42.785  1.00  0.00
C
ATOM   5464  O   LYS   331      31.828  57.421  42.042  1.00  0.00
O
ATOM   5465  N   GLN   332      32.607  57.035  44.107  1.00  0.00
N
ATOM   5466  H   GLN   332      33.336  56.580  44.639  1.00  0.00
H
ATOM   5467  CA  GLN   332      31.650  57.889  44.835  1.00  0.00
C
ATOM   5468  HA  GLN   332      30.644  57.696  44.464  1.00  0.00
H
ATOM   5469  CB  GLN   332      31.733  57.573  46.340  1.00  0.00
C
ATOM   5470  HB2 GLN   332      32.767  57.370  46.601  1.00  0.00
H
ATOM   5471  HB3 GLN   332      31.407  58.432  46.929  1.00  0.00
H
ATOM   5472  CG  GLN   332      30.897  56.373  46.758  1.00  0.00
C
ATOM   5473  HG2 GLN   332      31.103  55.553  46.074  1.00  0.00
H
ATOM   5474  HG3 GLN   332      31.203  56.086  47.761  1.00  0.00
H
ATOM   5475  CD  GLN   332      29.408  56.692  46.767  1.00  0.00
C
ATOM   5476  OE1 GLN   332      28.766  56.813  45.735  1.00  0.00
O
ATOM   5477  NE2 GLN   332      28.814  56.923  47.919  1.00  0.00
N
ATOM   5478 HE21 GLN   332      27.847  57.237  47.876  1.00  0.00
H
ATOM   5479 HE22 GLN   332      29.280  56.809  48.801  1.00  0.00
H
ATOM   5480  C   GLN   332      31.896  59.394  44.670  1.00  0.00
C
ATOM   5481  O   GLN   332      31.016  60.208  44.937  1.00  0.00
O
ATOM   5482  N   GLY   333      33.123  59.771  44.324  1.00  0.00
N
ATOM   5483  H   GLY   333      33.809  59.048  44.146  1.00  0.00
H
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ATOM   5484  CA  GLY   333      33.574  61.156  44.250  1.00  0.00
C
ATOM   5485  HA2 GLY   333      33.161  61.627  43.358  1.00  0.00
H
ATOM   5486  HA3 GLY   333      33.228  61.707  45.127  1.00  0.00
H
ATOM   5487  C   GLY   333      35.096  61.213  44.199  1.00  0.00
C
ATOM   5488  O   GLY   333      35.767  60.181  44.106  1.00  0.00
O
ATOM   5489  N   GLN   334      35.673  62.408  44.303  1.00  0.00
N
ATOM   5490  H   GLN   334      35.082  63.227  44.342  1.00  0.00
H
ATOM   5491  CA  GLN   334      37.117  62.593  44.146  1.00  0.00
C
ATOM   5492  HA  GLN   334      37.412  62.064  43.239  1.00  0.00
H
ATOM   5493  CB  GLN   334      37.443  64.081  43.924  1.00  0.00
C
ATOM   5494  HB2 GLN   334      37.185  64.646  44.819  1.00  0.00
H
ATOM   5495  HB3 GLN   334      38.515  64.172  43.754  1.00  0.00
H
ATOM   5496  CG  GLN   334      36.708  64.700  42.717  1.00  0.00
C
ATOM   5497  HG2 GLN   334      35.649  64.836  42.955  1.00  0.00
H
ATOM   5498  HG3 GLN   334      37.126  65.686  42.521  1.00  0.00
H
ATOM   5499  CD  GLN   334      36.829  63.850  41.449  1.00  0.00
C
ATOM   5500  OE1 GLN   334      35.941  63.083  41.112  1.00  0.00
O
ATOM   5501  NE2 GLN   334      37.940  63.884  40.755  1.00  0.00
N
ATOM   5502 HE21 GLN   334      37.955  63.467  39.844  1.00  0.00
H
ATOM   5503 HE22 GLN   334      38.647  64.582  40.994  1.00  0.00
H
ATOM   5504  C   GLN   334      37.912  61.938  45.295  1.00  0.00
C
ATOM   5505  O   GLN   334      38.073  62.497  46.382  1.00  0.00
O
ATOM   5506  N   GLY   335      38.372  60.705  45.055  1.00  0.00
N
ATOM   5507  H   GLY   335      37.988  60.244  44.240  1.00  0.00
H
ATOM   5508  CA  GLY   335      39.099  59.872  46.021  1.00  0.00
C
ATOM   5509  HA2 GLY   335      39.812  59.249  45.485  1.00  0.00
H
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ATOM   5510  HA3 GLY   335      39.677  60.508  46.690  1.00  0.00
H
ATOM   5511  C   GLY   335      38.224  58.953  46.887  1.00  0.00
C
ATOM   5512  O   GLY   335      38.775  58.288  47.754  1.00  0.00
O
ATOM   5513  N   GLN   336      36.898  58.899  46.684  1.00  0.00
N
ATOM   5514  H   GLN   336      36.503  59.384  45.886  1.00  0.00
H
ATOM   5515  CA  GLN   336      36.014  57.958  47.394  1.00  0.00
C
ATOM   5516  HA  GLN   336      36.562  57.481  48.211  1.00  0.00
H
ATOM   5517  CB  GLN   336      34.790  58.659  48.008  1.00  0.00
C
ATOM   5518  HB2 GLN   336      34.164  59.061  47.213  1.00  0.00
H
ATOM   5519  HB3 GLN   336      34.216  57.907  48.552  1.00  0.00
H
ATOM   5520  CG  GLN   336      35.131  59.796  48.970  1.00  0.00
C
ATOM   5521  HG2 GLN   336      35.989  59.508  49.580  1.00  0.00
H
ATOM   5522  HG3 GLN   336      35.389  60.671  48.377  1.00  0.00
H
ATOM   5523  CD  GLN   336      33.975  60.138  49.907  1.00  0.00
C
ATOM   5524  OE1 GLN   336      33.655  59.399  50.820  1.00  0.00
O
ATOM   5525  NE2 GLN   336      33.338  61.283  49.766  1.00  0.00
N
ATOM   5526 HE21 GLN   336      32.628  61.479  50.455  1.00  0.00
H
ATOM   5527 HE22 GLN   336      33.519  61.914  49.008  1.00  0.00
H
ATOM   5528  C   GLN   336      35.521  56.852  46.457  1.00  0.00
C
ATOM   5529  O   GLN   336      35.142  57.130  45.319  1.00  0.00
O
ATOM   5530  N   TRP   337      35.418  55.631  46.974  1.00  0.00
N
ATOM   5531  H   TRP   337      35.817  55.449  47.889  1.00  0.00
H
ATOM   5532  CA  TRP   337      34.869  54.460  46.293  1.00  0.00
C
ATOM   5533  HA  TRP   337      34.344  54.766  45.393  1.00  0.00
H
ATOM   5534  CB  TRP   337      36.022  53.530  45.884  1.00  0.00
C
ATOM   5535  HB2 TRP   337      36.438  53.083  46.787  1.00  0.00
H
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ATOM   5536  HB3 TRP   337      35.615  52.716  45.281  1.00  0.00
H
ATOM   5537  CG  TRP   337      37.138  54.186  45.117  1.00  0.00
C
ATOM   5538  CD1 TRP   337      38.180  54.862  45.659  1.00  0.00
C
ATOM   5539  HD1 TRP   337      38.342  54.999  46.722  1.00  0.00
H
ATOM   5540  NE1 TRP   337      38.977  55.380  44.659  1.00  0.00
N
ATOM   5541  HE1 TRP   337      39.816  55.913  44.838  1.00  0.00
H
ATOM   5542  CE2 TRP   337      38.500  55.045  43.411  1.00  0.00
C
ATOM   5543  CZ2 TRP   337      38.949  55.314  42.112  1.00  0.00
C
ATOM   5544  HZ2 TRP   337      39.845  55.887  41.939  1.00  0.00
H
ATOM   5545  CH2 TRP   337      38.230  54.804  41.022  1.00  0.00
C
ATOM   5546  HH2 TRP   337      38.584  54.991  40.021  1.00  0.00
H
ATOM   5547  CZ3 TRP   337      37.075  54.032  41.238  1.00  0.00
C
ATOM   5548  HZ3 TRP   337      36.534  53.629  40.393  1.00  0.00
H
ATOM   5549  CE3 TRP   337      36.625  53.778  42.548  1.00  0.00
C
ATOM   5550  HE3 TRP   337      35.737  53.185  42.706  1.00  0.00
H
ATOM   5551  CD2 TRP   337      37.326  54.274  43.669  1.00  0.00
C
ATOM   5552  C   TRP   337      33.896  53.742  47.234  1.00  0.00
C
ATOM   5553  O   TRP   337      34.195  53.604  48.420  1.00  0.00
O
ATOM   5554  N   THR   338      32.764  53.257  46.730  1.00  0.00
N
ATOM   5555  H   THR   338      32.593  53.372  45.735  1.00  0.00
H
ATOM   5556  CA  THR   338      31.897  52.283  47.423  1.00  0.00
C
ATOM   5557  HA  THR   338      32.296  52.072  48.410  1.00  0.00
H
ATOM   5558  CB  THR   338      30.442  52.742  47.627  1.00  0.00
C
ATOM   5559  HB  THR   338      29.804  51.873  47.797  1.00  0.00
H
ATOM   5560  CG2 THR   338      30.338  53.629  48.863  1.00  0.00
C
ATOM   5561 HG21 THR   338      31.220  54.258  48.955  1.00  0.00
H
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ATOM 5562 HG22 THR 338 29.449 54.248 48.806 1.00 0.00
H
ATOM 5563 HG23 THR 338 30.276 52.999 49.747 1.00 0.00
H
ATOM 5564 OG1 THR 338 29.947 53.429 46.503 1.00 0.00
O
ATOM 5565 HG1 THR 338 28.984 53.425 46.518 1.00 0.00
H
ATOM 5566 C THR 338 31.921 50.966 46.679 1.00 0.00
C
ATOM 5567 O THR 338 32.208 50.917 45.485 1.00 0.00
O
ATOM 5568 N TYR 339 31.639 49.891 47.405 1.00 0.00
N
ATOM 5569 H TYR 339 31.414 49.996 48.390 1.00 0.00
H
ATOM 5570 CA TYR 339 31.530 48.557 46.844 1.00 0.00
C
ATOM 5571 HA TYR 339 31.231 48.654 45.801 1.00 0.00
H
ATOM 5572 CB TYR 339 32.896 47.846 46.902 1.00 0.00
C
ATOM 5573 HB2 TYR 339 32.839 46.926 46.318 1.00 0.00
H
ATOM 5574 HB3 TYR 339 33.643 48.475 46.416 1.00 0.00
H
ATOM 5575 CG TYR 339 33.377 47.483 48.296 1.00 0.00
C
ATOM 5576 CD1 TYR 339 34.327 48.287 48.959 1.00 0.00
C
ATOM 5577 HD1 TYR 339 34.705 49.180 48.482 1.00 0.00
H
ATOM 5578 CE1 TYR 339 34.776 47.929 50.244 1.00 0.00
C
ATOM 5579 HE1 TYR 339 35.519 48.528 50.748 1.00 0.00
H
ATOM 5580 CZ TYR 339 34.204 46.816 50.896 1.00 0.00
C
ATOM 5581 OH TYR 339 34.492 46.558 52.194 1.00 0.00
O
ATOM 5582 HH TYR 339 35.295 47.005 52.469 1.00 0.00
H
ATOM 5583 CE2 TYR 339 33.279 45.995 50.224 1.00 0.00
C
ATOM 5584 HE2 TYR 339 32.886 45.120 50.714 1.00 0.00
H
ATOM 5585 CD2 TYR 339 32.876 46.324 48.921 1.00 0.00
C
ATOM 5586 HD2 TYR 339 32.153 45.703 48.412 1.00 0.00
H
ATOM 5587 C TYR 339 30.440 47.743 47.539 1.00 0.00
C

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ATOM   5588  O   TYR   339      30.068  47.994  48.691  1.00  0.00
O
ATOM   5589  N   GLN   340      29.980  46.707  46.850  1.00  0.00
N
ATOM   5590  H   GLN   340      30.319  46.582  45.897  1.00  0.00
H
ATOM   5591  CA  GLN   340      29.118  45.681  47.419  1.00  0.00
C
ATOM   5592  HA  GLN   340      29.355  45.607  48.477  1.00  0.00
H
ATOM   5593  CB  GLN   340      27.628  46.065  47.324  1.00  0.00
C
ATOM   5594  HB2 GLN   340      27.048  45.239  47.734  1.00  0.00
H
ATOM   5595  HB3 GLN   340      27.451  46.930  47.965  1.00  0.00
H
ATOM   5596  CG  GLN   340      27.100  46.387  45.915  1.00  0.00
C
ATOM   5597  HG2 GLN   340      27.350  45.561  45.249  1.00  0.00
H
ATOM   5598  HG3 GLN   340      26.013  46.456  45.953  1.00  0.00
H
ATOM   5599  CD  GLN   340      27.624  47.703  45.340  1.00  0.00
C
ATOM   5600  OE1 GLN   340      27.502  48.776  45.916  1.00  0.00
O
ATOM   5601  NE2 GLN   340      28.249  47.657  44.188  1.00  0.00
N
ATOM   5602 HE21 GLN   340      28.609  48.518  43.788  1.00  0.00
H
ATOM   5603 HE22 GLN   340      28.408  46.786  43.722  1.00  0.00
H
ATOM   5604  C   GLN   340      29.454  44.312  46.833  1.00  0.00
C
ATOM   5605  O   GLN   340      29.799  44.179  45.658  1.00  0.00
O
ATOM   5606  N   ILE   341      29.395  43.303  47.700  1.00  0.00
N
ATOM   5607  H   ILE   341      29.056  43.501  48.635  1.00  0.00
H
ATOM   5608  CA  ILE   341      29.634  41.900  47.376  1.00  0.00
C
ATOM   5609  HA  ILE   341      30.039  41.843  46.372  1.00  0.00
H
ATOM   5610  CB  ILE   341      30.663  41.259  48.337  1.00  0.00
C
ATOM   5611  HB  ILE   341      30.251  41.275  49.348  1.00  0.00
H
ATOM   5612  CG2 ILE   341      30.924  39.790  47.945  1.00  0.00
C
ATOM   5613 HG21 ILE   341      31.375  39.741  46.952  1.00  0.00
H
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ATOM   5614 HG22 ILE   341      31.590  39.313  48.663  1.00  0.00
H
ATOM   5615 HG23 ILE   341      29.996  39.219  47.940  1.00  0.00
H
ATOM   5616  CG1 ILE   341      31.975  42.084  48.331  1.00  0.00
C
ATOM   5617 HG12 ILE   341      32.362  42.142  47.315  1.00  0.00
H
ATOM   5618 HG13 ILE   341      31.766  43.099  48.667  1.00  0.00
H
ATOM   5619  CD1 ILE   341      33.076  41.541  49.242  1.00  0.00
C
ATOM   5620 HD11 ILE   341      33.464  40.600  48.850  1.00  0.00
H
ATOM   5621 HD12 ILE   341      33.890  42.259  49.288  1.00  0.00
H
ATOM   5622 HD13 ILE   341      32.687  41.403  50.248  1.00  0.00
H
ATOM   5623  C   ILE   341      28.280  41.197  47.398  1.00  0.00
C
ATOM   5624  O   ILE   341      27.518  41.379  48.348  1.00  0.00
O
ATOM   5625  N   TYR   342      27.979  40.405  46.373  1.00  0.00
N
ATOM   5626  H   TYR   342      28.665  40.314  45.627  1.00  0.00
H
ATOM   5627  CA  TYR   342      26.725  39.665  46.228  1.00  0.00
C
ATOM   5628  HA  TYR   342      26.322  39.447  47.214  1.00  0.00
H
ATOM   5629  CB  TYR   342      25.672  40.542  45.525  1.00  0.00
C
ATOM   5630  HB2 TYR   342      24.744  39.981  45.420  1.00  0.00
H
ATOM   5631  HB3 TYR   342      25.443  41.380  46.178  1.00  0.00
H
ATOM   5632  CG  TYR   342      26.042  41.106  44.170  1.00  0.00
C
ATOM   5633  CD1 TYR   342      26.346  42.477  44.049  1.00  0.00
C
ATOM   5634  HD1 TYR   342      26.350  43.113  44.925  1.00  0.00
H
ATOM   5635  CE1 TYR   342      26.597  43.032  42.783  1.00  0.00
C
ATOM   5636  HE1 TYR   342      26.799  44.087  42.678  1.00  0.00
H
ATOM   5637  CZ  TYR   342      26.539  42.213  41.640  1.00  0.00
C
ATOM   5638  OH  TYR   342      26.741  42.753  40.413  1.00  0.00
O
ATOM   5639  HH  TYR   342      26.947  43.720  40.488  1.00  0.00
H
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ATOM   5640  CE2 TYR   342      26.251  40.837  41.759  1.00  0.00
C
ATOM   5641  HE2 TYR   342      26.205  40.216  40.881  1.00  0.00
H
ATOM   5642  CD2 TYR   342      26.000  40.284  43.027  1.00  0.00
C
ATOM   5643  HD2 TYR   342      25.755  39.236  43.120  1.00  0.00
H
ATOM   5644  C   TYR   342      26.923  38.306  45.545  1.00  0.00
C
ATOM   5645  O   TYR   342      28.001  37.978  45.043  1.00  0.00
O
ATOM   5646  N   GLN   343      25.854  37.508  45.554  1.00  0.00
N
ATOM   5647  H   GLN   343      25.032  37.859  46.023  1.00  0.00
H
ATOM   5648  CA  GLN   343      25.735  36.250  44.799  1.00  0.00
C
ATOM   5649  HA  GLN   343      26.589  36.153  44.123  1.00  0.00
H
ATOM   5650  CB  GLN   343      25.766  35.042  45.754  1.00  0.00
C
ATOM   5651  HB2 GLN   343      24.922  35.087  46.444  1.00  0.00
H
ATOM   5652  HB3 GLN   343      25.684  34.130  45.162  1.00  0.00
H
ATOM   5653  CG  GLN   343      27.073  34.993  46.558  1.00  0.00
C
ATOM   5654  HG2 GLN   343      27.920  35.116  45.884  1.00  0.00
H
ATOM   5655  HG3 GLN   343      27.081  35.810  47.274  1.00  0.00
H
ATOM   5656  CD  GLN   343      27.223  33.682  47.313  1.00  0.00
C
ATOM   5657  OE1 GLN   343      26.715  33.500  48.408  1.00  0.00
O
ATOM   5658  NE2 GLN   343      27.926  32.724  46.759  1.00  0.00
N
ATOM   5659 HE21 GLN   343      27.937  31.822  47.229  1.00  0.00
H
ATOM   5660 HE22 GLN   343      28.310  32.821  45.829  1.00  0.00
H
ATOM   5661  C   GLN   343      24.481  36.255  43.907  1.00  0.00
C
ATOM   5662  O   GLN   343      24.552  35.825  42.762  1.00  0.00
O
ATOM   5663  N   GLU   344      23.371  36.832  44.384  1.00  0.00
N
ATOM   5664  H   GLU   344      23.375  37.179  45.328  1.00  0.00
H
ATOM   5665  CA  GLU   344      22.184  37.165  43.586  1.00  0.00
C
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ATOM   5666  HA  GLU   344      22.270  36.666  42.623  1.00  0.00
H
ATOM   5667  CB  GLU   344      20.914  36.653  44.298  1.00  0.00
C
ATOM   5668  HB2 GLU   344      21.168  36.285  45.299  1.00  0.00
H
ATOM   5669  HB3 GLU   344      20.225  37.490  44.434  1.00  0.00
H
ATOM   5670  CG  GLU   344      20.173  35.568  43.500  1.00  0.00
C
ATOM   5671  HG2 GLU   344      19.164  35.473  43.912  1.00  0.00
H
ATOM   5672  HG3 GLU   344      20.088  35.892  42.455  1.00  0.00
H
ATOM   5673  CD  GLU   344      20.867  34.203  43.593  1.00  0.00
C
ATOM   5674  OE1 GLU   344      21.046  33.678  44.715  1.00  0.00
O
ATOM   5675  OE2 GLU   344      21.230  33.619  42.554  1.00  0.00
O
ATOM   5676  C   GLU   344      22.112  38.696  43.380  1.00  0.00
C
ATOM   5677  O   GLU   344      22.359  39.418  44.344  1.00  0.00
O
ATOM   5678  N   PRO   345      21.738  39.229  42.195  1.00  0.00
N
ATOM   5679  CD  PRO   345      21.353  38.462  41.016  1.00  0.00
C
ATOM   5680  HD2 PRO   345      20.336  38.086  41.138  1.00  0.00
H
ATOM   5681  HD3 PRO   345      22.042  37.637  40.836  1.00  0.00
H
ATOM   5682  CG  PRO   345      21.419  39.419  39.829  1.00  0.00
C
ATOM   5683  HG2 PRO   345      20.640  39.198  39.099  1.00  0.00
H
ATOM   5684  HG3 PRO   345      22.407  39.364  39.369  1.00  0.00
H
ATOM   5685  CB  PRO   345      21.216  40.787  40.474  1.00  0.00
C
ATOM   5686  HB2 PRO   345      20.147  40.949  40.625  1.00  0.00
H
ATOM   5687  HB3 PRO   345      21.639  41.590  39.869  1.00  0.00
H
ATOM   5688  CA  PRO   345      21.921  40.646  41.827  1.00  0.00
C
ATOM   5689  HA  PRO   345      22.990  40.819  41.690  1.00  0.00
H
ATOM   5690  C   PRO   345      21.408  41.715  42.809  1.00  0.00
C
ATOM   5691  O   PRO   345      22.076  42.721  43.014  1.00  0.00
O
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ATOM   5692  N   PHE   346      20.231  41.523  43.415  1.00  0.00
N
ATOM   5693  H   PHE   346      19.700  40.705  43.168  1.00  0.00
H
ATOM   5694  CA  PHE   346      19.698  42.435  44.444  1.00  0.00
C
ATOM   5695  HA  PHE   346      20.037  43.452  44.238  1.00  0.00
H
ATOM   5696  CB  PHE   346      18.159  42.420  44.362  1.00  0.00
C
ATOM   5697  HB2 PHE   346      17.852  43.058  43.531  1.00  0.00
H
ATOM   5698  HB3 PHE   346      17.827  41.406  44.132  1.00  0.00
H
ATOM   5699  CG  PHE   346      17.436  42.872  45.625  1.00  0.00
C
ATOM   5700  CD1 PHE   346      17.292  44.242  45.919  1.00  0.00
C
ATOM   5701  HD1 PHE   346      17.671  44.987  45.235  1.00  0.00
H
ATOM   5702  CE1 PHE   346      16.666  44.647  47.113  1.00  0.00
C
ATOM   5703  HE1 PHE   346      16.559  45.700  47.337  1.00  0.00
H
ATOM   5704  CZ  PHE   346      16.179  43.686  48.017  1.00  0.00
C
ATOM   5705  HZ  PHE   346      15.683  44.004  48.923  1.00  0.00
H
ATOM   5706  CE2 PHE   346      16.327  42.316  47.732  1.00  0.00
C
ATOM   5707  HE2 PHE   346      15.954  41.575  48.425  1.00  0.00
H
ATOM   5708  CD2 PHE   346      16.950  41.913  46.537  1.00  0.00
C
ATOM   5709  HD2 PHE   346      17.058  40.862  46.321  1.00  0.00
H
ATOM   5710  C   PHE   346      20.186  42.084  45.862  1.00  0.00
C
ATOM   5711  O   PHE   346      20.250  42.943  46.742  1.00  0.00
O
ATOM   5712  N   LYS   347      20.510  40.809  46.111  1.00  0.00
N
ATOM   5713  H   LYS   347      20.681  40.211  45.313  1.00  0.00
H
ATOM   5714  CA  LYS   347      20.812  40.280  47.445  1.00  0.00
C
ATOM   5715  HA  LYS   347      20.231  40.840  48.183  1.00  0.00
H
ATOM   5716  CB  LYS   347      20.395  38.799  47.560  1.00  0.00
C
ATOM   5717  HB2 LYS   347      20.920  38.210  46.808  1.00  0.00
H
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ATOM   5718  HB3 LYS   347      20.697  38.440  48.542  1.00  0.00
H
ATOM   5719  CG  LYS   347      18.876  38.587  47.423  1.00  0.00
C
ATOM   5720  HG2 LYS   347      18.359  39.213  48.152  1.00  0.00
H
ATOM   5721  HG3 LYS   347      18.563  38.886  46.422  1.00  0.00
H
ATOM   5722  CD  LYS   347      18.476  37.119  47.651  1.00  0.00
C
ATOM   5723  HD2 LYS   347      18.978  36.494  46.909  1.00  0.00
H
ATOM   5724  HD3 LYS   347      18.797  36.811  48.648  1.00  0.00
H
ATOM   5725  CE  LYS   347      16.952  36.951  47.526  1.00  0.00
C
ATOM   5726  HE2 LYS   347      16.468  37.553  48.302  1.00  0.00
H
ATOM   5727  HE3 LYS   347      16.627  37.338  46.556  1.00  0.00
H
ATOM   5728  NZ  LYS   347      16.506  35.542  47.665  1.00  0.00
N
ATOM   5729  HZ1 LYS   347      16.829  35.130  48.541  1.00  0.00
H
ATOM   5730  HZ2 LYS   347      15.491  35.493  47.679  1.00  0.00
H
ATOM   5731  HZ3 LYS   347      16.843  34.956  46.917  1.00  0.00
H
ATOM   5732  C   LYS   347      22.283  40.535  47.782  1.00  0.00
C
ATOM   5733  O   LYS   347      23.124  39.638  47.709  1.00  0.00
O
ATOM   5734  N   ASN   348      22.575  41.779  48.169  1.00  0.00
N
ATOM   5735  H   ASN   348      21.847  42.475  48.080  1.00  0.00
H
ATOM   5736  CA  ASN   348      23.853  42.158  48.766  1.00  0.00
C
ATOM   5737  HA  ASN   348      24.636  42.018  48.024  1.00  0.00
H
ATOM   5738  CB  ASN   348      23.837  43.647  49.171  1.00  0.00
C
ATOM   5739  HB2 ASN   348      22.892  43.885  49.659  1.00  0.00
H
ATOM   5740  HB3 ASN   348      24.640  43.829  49.887  1.00  0.00
H
ATOM   5741  CG  ASN   348      24.075  44.592  48.005  1.00  0.00
C
ATOM   5742  OD1 ASN   348      24.701  44.264  47.014  1.00  0.00
O
ATOM   5743  ND2 ASN   348      23.637  45.826  48.105  1.00  0.00
N
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ATOM   5744 HD21 ASN   348      23.788  46.413  47.305  1.00  0.00
H
ATOM   5745 HD22 ASN   348      23.114  46.120  48.908  1.00  0.00
H
ATOM   5746  C   ASN   348      24.187  41.233  49.948  1.00  0.00
C
ATOM   5747  O   ASN   348      23.419  41.090  50.900  1.00  0.00
O
ATOM   5748  N   LEU   349      25.358  40.605  49.874  1.00  0.00
N
ATOM   5749  H   LEU   349      25.934  40.794  49.062  1.00  0.00
H
ATOM   5750  CA  LEU   349      25.956  39.779  50.922  1.00  0.00
C
ATOM   5751  HA  LEU   349      25.185  39.147  51.366  1.00  0.00
H
ATOM   5752  CB  LEU   349      27.056  38.900  50.272  1.00  0.00
C
ATOM   5753  HB2 LEU   349      27.015  39.009  49.191  1.00  0.00
H
ATOM   5754  HB3 LEU   349      28.039  39.257  50.584  1.00  0.00
H
ATOM   5755  CG  LEU   349      26.959  37.397  50.553  1.00  0.00
C
ATOM   5756  HG  LEU   349      26.019  37.013  50.159  1.00  0.00
H
ATOM   5757  CD1 LEU   349      28.132  36.696  49.864  1.00  0.00
C
ATOM   5758 HD11 LEU   349      29.074  37.001  50.318  1.00  0.00
H
ATOM   5759 HD12 LEU   349      28.018  35.618  49.962  1.00  0.00
H
ATOM   5760 HD13 LEU   349      28.159  36.962  48.811  1.00  0.00
H
ATOM   5761  CD2 LEU   349      27.055  37.089  52.036  1.00  0.00
C
ATOM   5762 HD21 LEU   349      26.312  37.647  52.599  1.00  0.00
H
ATOM   5763 HD22 LEU   349      26.894  36.026  52.203  1.00  0.00
H
ATOM   5764 HD23 LEU   349      28.041  37.362  52.388  1.00  0.00
H
ATOM   5765  C   LEU   349      26.546  40.683  52.019  1.00  0.00
C
ATOM   5766  O   LEU   349      26.384  40.426  53.207  1.00  0.00
O
ATOM   5767  N   LYS   350      27.240  41.747  51.591  1.00  0.00
N
ATOM   5768  H   LYS   350      27.313  41.850  50.583  1.00  0.00
H
ATOM   5769  CA  LYS   350      27.936  42.754  52.412  1.00  0.00
C
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ATOM   5770  HA  LYS   350      27.307  43.048  53.255  1.00  0.00
H
ATOM   5771  CB  LYS   350      29.239  42.111  52.932  1.00  0.00
C
ATOM   5772  HB2 LYS   350      28.973  41.310  53.619  1.00  0.00
H
ATOM   5773  HB3 LYS   350      29.779  41.670  52.091  1.00  0.00
H
ATOM   5774  CG  LYS   350      30.170  43.087  53.663  1.00  0.00
C
ATOM   5775  HG2 LYS   350      30.433  43.889  52.984  1.00  0.00
H
ATOM   5776  HG3 LYS   350      29.655  43.490  54.535  1.00  0.00
H
ATOM   5777  CD  LYS   350      31.473  42.414  54.103  1.00  0.00
C
ATOM   5778  HD2 LYS   350      31.225  41.588  54.771  1.00  0.00
H
ATOM   5779  HD3 LYS   350      31.981  41.997  53.232  1.00  0.00
H
ATOM   5780  CE  LYS   350      32.410  43.397  54.831  1.00  0.00
C
ATOM   5781  HE2 LYS   350      31.878  43.857  55.667  1.00  0.00
H
ATOM   5782  HE3 LYS   350      33.250  42.831  55.251  1.00  0.00
H
ATOM   5783  NZ  LYS   350      32.938  44.475  53.955  1.00  0.00
N
ATOM   5784  HZ1 LYS   350      32.256  45.211  53.795  1.00  0.00
H
ATOM   5785  HZ2 LYS   350      33.744  44.907  54.410  1.00  0.00
H
ATOM   5786  HZ3 LYS   350      33.290  44.130  53.077  1.00  0.00
H
ATOM   5787  C   LYS   350      28.228  43.993  51.557  1.00  0.00
C
ATOM   5788  O   LYS   350      28.535  43.852  50.373  1.00  0.00
O
ATOM   5789  N   THR   351      28.223  45.191  52.140  1.00  0.00
N
ATOM   5790  H   THR   351      28.012  45.265  53.131  1.00  0.00
H
ATOM   5791  CA  THR   351      28.688  46.417  51.464  1.00  0.00
C
ATOM   5792  HA  THR   351      28.920  46.200  50.426  1.00  0.00
H
ATOM   5793  CB  THR   351      27.602  47.508  51.432  1.00  0.00
C
ATOM   5794  HB  THR   351      27.934  48.318  50.779  1.00  0.00
H
ATOM   5795  CG2 THR   351      26.259  46.990  50.916  1.00  0.00
C
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ATOM   5796 HG21 THR   351      25.809  46.320  51.647  1.00  0.00
H
ATOM   5797 HG22 THR   351      25.586  47.826  50.745  1.00  0.00
H
ATOM   5798 HG23 THR   351      26.400  46.448  49.984  1.00  0.00
H
ATOM   5799  OG1 THR   351      27.402  48.023  52.723  1.00  0.00
O
ATOM   5800  HG1 THR   351      26.817  48.785  52.652  1.00  0.00
H
ATOM   5801  C   THR   351      29.990  46.936  52.075  1.00  0.00
C
ATOM   5802  O   THR   351      30.553  46.347  53.007  1.00  0.00
O
ATOM   5803  N   GLY   352      30.513  48.022  51.518  1.00  0.00
N
ATOM   5804  H   GLY   352      30.116  48.358  50.646  1.00  0.00
H
ATOM   5805  CA  GLY   352      31.604  48.787  52.103  1.00  0.00
C
ATOM   5806  HA2 GLY   352      31.277  49.205  53.052  1.00  0.00
H
ATOM   5807  HA3 GLY   352      32.438  48.122  52.303  1.00  0.00
H
ATOM   5808  C   GLY   352      32.085  49.936  51.222  1.00  0.00
C
ATOM   5809  O   GLY   352      31.425  50.352  50.268  1.00  0.00
O
ATOM   5810  N   LYS   353      33.254  50.473  51.574  1.00  0.00
N
ATOM   5811  H   LYS   353      33.761  50.056  52.342  1.00  0.00
H
ATOM   5812  CA  LYS   353      33.883  51.614  50.905  1.00  0.00
C
ATOM   5813  HA  LYS   353      33.661  51.564  49.843  1.00  0.00
H
ATOM   5814  CB  LYS   353      33.289  52.921  51.467  1.00  0.00
C
ATOM   5815  HB2 LYS   353      33.702  53.774  50.927  1.00  0.00
H
ATOM   5816  HB3 LYS   353      32.210  52.919  51.302  1.00  0.00
H
ATOM   5817  CG  LYS   353      33.574  53.097  52.964  1.00  0.00
C
ATOM   5818  HG2 LYS   353      33.084  52.305  53.532  1.00  0.00
H
ATOM   5819  HG3 LYS   353      34.647  53.038  53.130  1.00  0.00
H
ATOM   5820  CD  LYS   353      33.062  54.453  53.453  1.00  0.00
C
ATOM   5821  HD2 LYS   353      33.551  55.259  52.903  1.00  0.00
H
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ATOM   5822  HD3 LYS   353      31.990  54.499  53.266  1.00  0.00
H
ATOM   5823  CE  LYS   353      33.293  54.619  54.955  1.00  0.00
C
ATOM   5824  HE2 LYS   353      32.818  55.546  55.287  1.00  0.00
H
ATOM   5825  HE3 LYS   353      32.791  53.795  55.474  1.00  0.00
H
ATOM   5826  NZ  LYS   353      34.734  54.624  55.312  1.00  0.00
N
ATOM   5827  HZ1 LYS   353      35.234  55.430  54.967  1.00  0.00
H
ATOM   5828  HZ2 LYS   353      34.837  54.568  56.323  1.00  0.00
H
ATOM   5829  HZ3 LYS   353      35.241  53.835  54.916  1.00  0.00
H
ATOM   5830  C   LYS   353      35.401  51.577  51.007  1.00  0.00
C
ATOM   5831  O   LYS   353      35.963  50.802  51.782  1.00  0.00
O
ATOM   5832  N   TYR   354      36.044  52.425  50.215  1.00  0.00
N
ATOM   5833  H   TYR   354      35.490  52.988  49.581  1.00  0.00
H
ATOM   5834  CA  TYR   354      37.464  52.730  50.302  1.00  0.00
C
ATOM   5835  HA  TYR   354      37.817  52.521  51.313  1.00  0.00
H
ATOM   5836  CB  TYR   354      38.232  51.820  49.327  1.00  0.00
C
ATOM   5837  HB2 TYR   354      38.046  50.772  49.587  1.00  0.00
H
ATOM   5838  HB3 TYR   354      37.845  51.973  48.315  1.00  0.00
H
ATOM   5839  CG  TYR   354      39.726  52.056  49.330  1.00  0.00
C
ATOM   5840  CD1 TYR   354      40.480  51.710  50.459  1.00  0.00
C
ATOM   5841  HD1 TYR   354      40.008  51.259  51.325  1.00  0.00
H
ATOM   5842  CE1 TYR   354      41.867  51.930  50.463  1.00  0.00
C
ATOM   5843  HE1 TYR   354      42.464  51.663  51.313  1.00  0.00
H
ATOM   5844  CZ  TYR   354      42.504  52.507  49.343  1.00  0.00
C
ATOM   5845  OH  TYR   354      43.868  52.669  49.434  1.00  0.00
O
ATOM   5846  HH  TYR   354      44.297  53.104  48.678  1.00  0.00
H
ATOM   5847  CE2 TYR   354      41.735  52.862  48.203  1.00  0.00
C
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ATOM   5848  HE2 TYR   354      42.203  53.288  47.329  1.00  0.00
H
ATOM   5849  CD2 TYR   354      40.343  52.629  48.208  1.00  0.00
C
ATOM   5850  HD2 TYR   354      39.746  52.868  47.339  1.00  0.00
H
ATOM   5851  C   TYR   354      37.681  54.221  50.002  1.00  0.00
C
ATOM   5852  O   TYR   354      37.311  54.700  48.930  1.00  0.00
O
ATOM   5853  N   ALA   355      38.248  54.966  50.951  1.00  0.00
N
ATOM   5854  H   ALA   355      38.350  54.546  51.873  1.00  0.00
H
ATOM   5855  CA  ALA   355      38.522  56.404  50.813  1.00  0.00
C
ATOM   5856  HA  ALA   355      38.413  56.686  49.765  1.00  0.00
H
ATOM   5857  CB  ALA   355      37.468  57.176  51.617  1.00  0.00
C
ATOM   5858  HB1 ALA   355      37.580  56.957  52.680  1.00  0.00
H
ATOM   5859  HB2 ALA   355      37.601  58.246  51.458  1.00  0.00
H
ATOM   5860  HB3 ALA   355      36.469  56.889  51.289  1.00  0.00
H
ATOM   5861  C   ALA   355      39.961  56.809  51.196  1.00  0.00
C
ATOM   5862  O   ALA   355      40.290  57.997  51.201  1.00  0.00
O
ATOM   5863  N   ARG   356      40.825  55.839  51.534  1.00  0.00
N
ATOM   5864  H   ARG   356      40.490  54.886  51.497  1.00  0.00
H
ATOM   5865  CA  ARG   356      42.198  56.088  52.000  1.00  0.00
C
ATOM   5866  HA  ARG   356      42.151  56.865  52.763  1.00  0.00
H
ATOM   5867  CB  ARG   356      42.765  54.815  52.660  1.00  0.00
C
ATOM   5868  HB2 ARG   356      42.025  54.418  53.357  1.00  0.00
H
ATOM   5869  HB3 ARG   356      42.954  54.056  51.900  1.00  0.00
H
ATOM   5870  CG  ARG   356      44.061  55.091  53.443  1.00  0.00
C
ATOM   5871  HG2 ARG   356      44.777  55.619  52.812  1.00  0.00
H
ATOM   5872  HG3 ARG   356      43.824  55.713  54.308  1.00  0.00
H
ATOM   5873  CD  ARG   356      44.691  53.771  53.912  1.00  0.00
C
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ATOM   5874  HD2 ARG   356      43.913  53.159  54.376  1.00  0.00
H
ATOM   5875  HD3 ARG   356      45.069  53.230  53.042  1.00  0.00
H
ATOM   5876  NE  ARG   356      45.772  53.967  54.899  1.00  0.00
N
ATOM   5877  HE  ARG   356      45.562  53.743  55.867  1.00  0.00
H
ATOM   5878  CZ  ARG   356      47.022  54.343  54.693  1.00  0.00
C
ATOM   5879  NH1 ARG   356      47.481  54.722  53.533  1.00  0.00
N
ATOM   5880 HH11 ARG   356      46.852  54.813  52.760  1.00  0.00
H
ATOM   5881 HH12 ARG   356      48.432  55.054  53.472  1.00  0.00
H
ATOM   5882  NH2 ARG   356      47.847  54.340  55.693  1.00  0.00
N
ATOM   5883 HH21 ARG   356      47.511  54.056  56.603  1.00  0.00
H
ATOM   5884 HH22 ARG   356      48.822  54.587  55.550  1.00  0.00
H
ATOM   5885  C   ARG   356      43.082  56.616  50.863  1.00  0.00
C
ATOM   5886  O   ARG   356      43.626  55.846  50.077  1.00  0.00
O
ATOM   5887  N   MET   357      43.247  57.933  50.776  1.00  0.00
N
ATOM   5888  H   MET   357      42.726  58.534  51.397  1.00  0.00
H
ATOM   5889  CA  MET   357      44.118  58.556  49.777  1.00  0.00
C
ATOM   5890  HA  MET   357      43.900  58.095  48.814  1.00  0.00
H
ATOM   5891  CB  MET   357      43.765  60.053  49.694  1.00  0.00
C
ATOM   5892  HB2 MET   357      42.727  60.187  50.002  1.00  0.00
H
ATOM   5893  HB3 MET   357      44.396  60.634  50.368  1.00  0.00
H
ATOM   5894  CG  MET   357      43.856  60.607  48.271  1.00  0.00
C
ATOM   5895  HG2 MET   357      43.215  60.004  47.632  1.00  0.00
H
ATOM   5896  HG3 MET   357      43.446  61.616  48.275  1.00  0.00
H
ATOM   5897  SD  MET   357      45.503  60.669  47.526  1.00  0.00
S
ATOM   5898  CE  MET   357      46.106  62.208  48.286  1.00  0.00
C
ATOM   5899  HE1 MET   357      46.121  62.114  49.372  1.00  0.00
H
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ATOM   5900  HE2 MET   357      47.115  62.424  47.938  1.00  0.00
H
ATOM   5901  HE3 MET   357      45.457  63.038  48.006  1.00  0.00
H
ATOM   5902  C   MET   357      45.590  58.272  50.129  1.00  0.00
C
ATOM   5903  O   MET   357      46.074  58.688  51.179  1.00  0.00
O
ATOM   5904  N   ARG   358      46.284  57.492  49.289  1.00  0.00
N
ATOM   5905  H   ARG   358      45.813  57.139  48.471  1.00  0.00
H
ATOM   5906  CA  ARG   358      47.690  57.092  49.452  1.00  0.00
C
ATOM   5907  HA  ARG   358      48.025  57.360  50.456  1.00  0.00
H
ATOM   5908  CB  ARG   358      47.776  55.561  49.287  1.00  0.00
C
ATOM   5909  HB2 ARG   358      47.156  55.095  50.055  1.00  0.00
H
ATOM   5910  HB3 ARG   358      47.370  55.291  48.309  1.00  0.00
H
ATOM   5911  CG  ARG   358      49.204  55.001  49.392  1.00  0.00
C
ATOM   5912  HG2 ARG   358      49.828  55.478  48.636  1.00  0.00
H
ATOM   5913  HG3 ARG   358      49.611  55.233  50.374  1.00  0.00
H
ATOM   5914  CD  ARG   358      49.271  53.484  49.166  1.00  0.00
C
ATOM   5915  HD2 ARG   358      48.743  53.221  48.246  1.00  0.00
H
ATOM   5916  HD3 ARG   358      50.321  53.228  49.016  1.00  0.00
H
ATOM   5917  NE  ARG   358      48.780  52.703  50.320  1.00  0.00
N
ATOM   5918  HE  ARG   358      49.467  52.436  51.020  1.00  0.00
H
ATOM   5919  CZ  ARG   358      47.594  52.159  50.492  1.00  0.00
C
ATOM   5920  NH1 ARG   358      46.607  52.363  49.682  1.00  0.00
N
ATOM   5921 HH11 ARG   358      46.715  52.938  48.848  1.00  0.00
H
ATOM   5922 HH12 ARG   358      45.683  51.993  49.833  1.00  0.00
H
ATOM   5923  NH2 ARG   358      47.406  51.358  51.499  1.00  0.00
N
ATOM   5924 HH21 ARG   358      48.234  51.095  52.032  1.00  0.00
H
ATOM   5925 HH22 ARG   358      46.585  50.792  51.547  1.00  0.00
H
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ATOM   5926  C   ARG   358      48.568  57.848  48.450  1.00  0.00
C
ATOM   5927  O   ARG   358      48.230  57.913  47.272  1.00  0.00
O
ATOM   5928  N   GLY   359      49.715  58.347  48.913  1.00  0.00
N
ATOM   5929  H   GLY   359      49.909  58.243  49.897  1.00  0.00
H
ATOM   5930  CA  GLY   359      50.681  59.101  48.104  1.00  0.00
C
ATOM   5931  HA2 GLY   359      51.640  59.100  48.621  1.00  0.00
H
ATOM   5932  HA3 GLY   359      50.816  58.605  47.142  1.00  0.00
H
ATOM   5933  C   GLY   359      50.276  60.556  47.834  1.00  0.00
C
ATOM   5934  O   GLY   359      49.127  60.940  48.013  1.00  0.00
O
ATOM   5935  N   ALA   360      51.238  61.377  47.398  1.00  0.00
N
ATOM   5936  H   ALA   360      52.167  61.007  47.291  1.00  0.00
H
ATOM   5937  CA  ALA   360      51.033  62.814  47.164  1.00  0.00
C
ATOM   5938  HA  ALA   360      50.409  63.218  47.965  1.00  0.00
H
ATOM   5939  CB  ALA   360      52.401  63.506  47.234  1.00  0.00
C
ATOM   5940  HB1 ALA   360      53.065  63.111  46.463  1.00  0.00
H
ATOM   5941  HB2 ALA   360      52.271  64.578  47.074  1.00  0.00
H
ATOM   5942  HB3 ALA   360      52.853  63.352  48.216  1.00  0.00
H
ATOM   5943  C   ALA   360      50.327  63.136  45.826  1.00  0.00
C
ATOM   5944  O   ALA   360      49.603  64.128  45.731  1.00  0.00
O
ATOM   5945  N   HIE   361      50.547  62.300  44.800  1.00  0.00
N
ATOM   5946  H   HIE   361      51.163  61.520  44.962  1.00  0.00
H
ATOM   5947  CA  HIE   361      49.970  62.419  43.450  1.00  0.00
C
ATOM   5948  HA  HIE   361      49.050  62.996  43.523  1.00  0.00
H
ATOM   5949  CB  HIE   361      50.912  63.176  42.477  1.00  0.00
C
ATOM   5950  HB2 HIE   361      51.368  62.471  41.779  1.00  0.00
H
ATOM   5951  HB3 HIE   361      50.309  63.864  41.881  1.00  0.00
H
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ATOM   5952  CG  HIE   361      52.029  63.960  43.123  1.00  0.00
C
ATOM   5953  ND1 HIE   361      51.941  65.268  43.600  1.00  0.00
N
ATOM   5954  CE1 HIE   361      53.143  65.544  44.128  1.00  0.00
C
ATOM   5955  HE1 HIE   361      53.410  66.489  44.589  1.00  0.00
H
ATOM   5956  NE2 HIE   361      53.967  64.490  44.005  1.00  0.00
N
ATOM   5957  HE2 HIE   361      54.931  64.461  44.305  1.00  0.00
H
ATOM   5958  CD2 HIE   361      53.280  63.480  43.372  1.00  0.00
C
ATOM   5959  HD2 HIE   361      53.645  62.498  43.115  1.00  0.00
H
ATOM   5960  C   HIE   361      49.620  61.025  42.917  1.00  0.00
C
ATOM   5961  O   HIE   361      50.492  60.157  42.815  1.00  0.00
O
ATOM   5962  N   THR   362      48.354  60.787  42.581  1.00  0.00
N
ATOM   5963  H   THR   362      47.682  61.547  42.627  1.00  0.00
H
ATOM   5964  CA  THR   362      47.872  59.497  42.061  1.00  0.00
C
ATOM   5965  HA  THR   362      48.682  59.013  41.517  1.00  0.00
H
ATOM   5966  CB  THR   362      47.424  58.536  43.186  1.00  0.00
C
ATOM   5967  HB  THR   362      47.096  57.602  42.728  1.00  0.00
H
ATOM   5968  CG2 THR   362      48.535  58.175  44.170  1.00  0.00
C
ATOM   5969 HG21 THR   362      48.762  59.016  44.827  1.00  0.00
H
ATOM   5970 HG22 THR   362      48.220  57.326  44.777  1.00  0.00
H
ATOM   5971 HG23 THR   362      49.443  57.891  43.642  1.00  0.00
H
ATOM   5972  OG1 THR   362      46.359  59.068  43.928  1.00  0.00
O
ATOM   5973  HG1 THR   362      46.639  59.093  44.851  1.00  0.00
H
ATOM   5974  C   THR   362      46.761  59.716  41.029  1.00  0.00
C
ATOM   5975  O   THR   362      46.444  60.851  40.671  1.00  0.00
O
ATOM   5976  N   ASN   363      46.213  58.627  40.488  1.00  0.00
N
ATOM   5977  H   ASN   363      46.433  57.721  40.873  1.00  0.00
H
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ATOM   5978  CA  ASN   363      45.127  58.623  39.515  1.00  0.00
C
ATOM   5979  HA  ASN   363      44.671  59.612  39.487  1.00  0.00
H
ATOM   5980  CB  ASN   363      45.725  58.360  38.113  1.00  0.00
C
ATOM   5981  HB2 ASN   363      44.942  58.391  37.356  1.00  0.00
H
ATOM   5982  HB3 ASN   363      46.408  59.174  37.887  1.00  0.00
H
ATOM   5983  CG  ASN   363      46.477  57.050  37.951  1.00  0.00
C
ATOM   5984  OD1 ASN   363      46.193  56.053  38.595  1.00  0.00
O
ATOM   5985  ND2 ASN   363      47.474  57.016  37.103  1.00  0.00
N
ATOM   5986 HD21 ASN   363      47.948  56.148  36.925  1.00  0.00
H
ATOM   5987 HD22 ASN   363      47.737  57.869  36.615  1.00  0.00
H
ATOM   5988  C   ASN   363      44.028  57.637  39.943  1.00  0.00
C
ATOM   5989  O   ASN   363      44.230  56.815  40.847  1.00  0.00
O
ATOM   5990  N   ASP   364      42.873  57.729  39.284  1.00  0.00
N
ATOM   5991  H   ASP   364      42.802  58.479  38.593  1.00  0.00
H
ATOM   5992  CA  ASP   364      41.718  56.841  39.481  1.00  0.00
C
ATOM   5993  HA  ASP   364      41.373  56.922  40.508  1.00  0.00
H
ATOM   5994  CB  ASP   364      40.518  57.223  38.578  1.00  0.00
C
ATOM   5995  HB2 ASP   364      40.841  57.458  37.574  1.00  0.00
H
ATOM   5996  HB3 ASP   364      39.862  56.359  38.517  1.00  0.00
H
ATOM   5997  CG  ASP   364      39.614  58.326  39.106  1.00  0.00
C
ATOM   5998  OD1 ASP   364      39.502  58.444  40.337  1.00  0.00
O
ATOM   5999  OD2 ASP   364      38.867  58.948  38.330  1.00  0.00
O
ATOM   6000  C   ASP   364      42.105  55.354  39.312  1.00  0.00
C
ATOM   6001  O   ASP   364      41.671  54.530  40.112  1.00  0.00
O
ATOM   6002  N   VAL   365      42.977  55.011  38.355  1.00  0.00
N
ATOM   6003  H   VAL   365      43.371  55.749  37.792  1.00  0.00
H
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ATOM   6004  CA  VAL   365      43.376  53.614  38.070  1.00  0.00
C
ATOM   6005  HA  VAL   365      42.475  53.019  37.944  1.00  0.00
H
ATOM   6006  CB  VAL   365      44.208  53.501  36.775  1.00  0.00
C
ATOM   6007  HB  VAL   365      45.162  54.018  36.892  1.00  0.00
H
ATOM   6008  CG1 VAL   365      44.483  52.027  36.458  1.00  0.00
C
ATOM   6009 HG11 VAL   365      43.549  51.461  36.458  1.00  0.00
H
ATOM   6010 HG12 VAL   365      44.955  51.935  35.478  1.00  0.00
H
ATOM   6011 HG13 VAL   365      45.162  51.603  37.202  1.00  0.00
H
ATOM   6012  CG2 VAL   365      43.487  54.085  35.552  1.00  0.00
C
ATOM   6013 HG21 VAL   365      43.271  55.144  35.701  1.00  0.00
H
ATOM   6014 HG22 VAL   365      44.124  53.991  34.669  1.00  0.00
H
ATOM   6015 HG23 VAL   365      42.561  53.541  35.371  1.00  0.00
H
ATOM   6016  C   VAL   365      44.134  52.999  39.249  1.00  0.00
C
ATOM   6017  O   VAL   365      43.784  51.915  39.714  1.00  0.00
O
ATOM   6018  N   LYS   366      45.134  53.703  39.802  1.00  0.00
N
ATOM   6019  H   LYS   366      45.368  54.601  39.382  1.00  0.00
H
ATOM   6020  CA  LYS   366      45.912  53.243  40.970  1.00  0.00
C
ATOM   6021  HA  LYS   366      46.319  52.251  40.753  1.00  0.00
H
ATOM   6022  CB  LYS   366      47.079  54.210  41.255  1.00  0.00
C
ATOM   6023  HB2 LYS   366      46.710  55.236  41.254  1.00  0.00
H
ATOM   6024  HB3 LYS   366      47.476  53.987  42.244  1.00  0.00
H
ATOM   6025  CG  LYS   366      48.222  54.060  40.233  1.00  0.00
C
ATOM   6026  HG2 LYS   366      48.705  53.092  40.381  1.00  0.00
H
ATOM   6027  HG3 LYS   366      47.811  54.072  39.222  1.00  0.00
H
ATOM   6028  CD  LYS   366      49.279  55.175  40.334  1.00  0.00
C
ATOM   6029  HD2 LYS   366      50.018  55.015  39.545  1.00  0.00
H
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ATOM   6030  HD3 LYS   366      48.792  56.134  40.149  1.00  0.00
H
ATOM   6031  CE  LYS   366      49.991  55.195  41.699  1.00  0.00
C
ATOM   6032  HE2 LYS   366      49.245  55.315  42.492  1.00  0.00
H
ATOM   6033  HE3 LYS   366      50.470  54.223  41.853  1.00  0.00
H
ATOM   6034  NZ  LYS   366      51.010  56.273  41.791  1.00  0.00
N
ATOM   6035  HZ1 LYS   366      50.598  57.188  41.658  1.00  0.00
H
ATOM   6036  HZ2 LYS   366      51.450  56.262  42.705  1.00  0.00
H
ATOM   6037  HZ3 LYS   366      51.730  56.140  41.095  1.00  0.00
H
ATOM   6038  C   LYS   366      45.016  53.070  42.197  1.00  0.00
C
ATOM   6039  O   LYS   366      45.132  52.063  42.890  1.00  0.00
O
ATOM   6040  N   GLN   367      44.085  53.994  42.442  1.00  0.00
N
ATOM   6041  H   GLN   367      44.012  54.788  41.818  1.00  0.00
H
ATOM   6042  CA  GLN   367      43.160  53.875  43.575  1.00  0.00
C
ATOM   6043  HA  GLN   367      43.735  53.611  44.464  1.00  0.00
H
ATOM   6044  CB  GLN   367      42.471  55.214  43.844  1.00  0.00
C
ATOM   6045  HB2 GLN   367      41.980  55.576  42.938  1.00  0.00
H
ATOM   6046  HB3 GLN   367      41.712  55.043  44.609  1.00  0.00
H
ATOM   6047  CG  GLN   367      43.443  56.274  44.376  1.00  0.00
C
ATOM   6048  HG2 GLN   367      44.115  55.811  45.100  1.00  0.00
H
ATOM   6049  HG3 GLN   367      44.044  56.688  43.566  1.00  0.00
H
ATOM   6050  CD  GLN   367      42.671  57.389  45.059  1.00  0.00
C
ATOM   6051  OE1 GLN   367      41.710  57.938  44.533  1.00  0.00
O
ATOM   6052  NE2 GLN   367      43.006  57.725  46.282  1.00  0.00
N
ATOM   6053 HE21 GLN   367      42.450  58.418  46.746  1.00  0.00
H
ATOM   6054 HE22 GLN   367      43.773  57.255  46.730  1.00  0.00
H
ATOM   6055  C   GLN   367      42.113  52.760  43.401  1.00  0.00
C
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ATOM   6056  O   GLN   367      41.741  52.115  44.381  1.00  0.00
O
ATOM   6057  N   LEU   368      41.681  52.490  42.168  1.00  0.00
N
ATOM   6058  H   LEU   368      41.974  53.096  41.408  1.00  0.00
H
ATOM   6059  CA  LEU   368      40.801  51.369  41.832  1.00  0.00
C
ATOM   6060  HA  LEU   368      39.943  51.403  42.504  1.00  0.00
H
ATOM   6061  CB  LEU   368      40.297  51.605  40.393  1.00  0.00
C
ATOM   6062  HB2 LEU   368      39.861  52.604  40.368  1.00  0.00
H
ATOM   6063  HB3 LEU   368      41.147  51.628  39.712  1.00  0.00
H
ATOM   6064  CG  LEU   368      39.227  50.659  39.819  1.00  0.00
C
ATOM   6065  HG  LEU   368      38.781  51.174  38.968  1.00  0.00
H
ATOM   6066  CD1 LEU   368      39.817  49.360  39.276  1.00  0.00
C
ATOM   6067 HD11 LEU   368      40.161  48.717  40.085  1.00  0.00
H
ATOM   6068 HD12 LEU   368      39.047  48.844  38.708  1.00  0.00
H
ATOM   6069 HD13 LEU   368      40.650  49.581  38.609  1.00  0.00
H
ATOM   6070  CD2 LEU   368      38.101  50.340  40.805  1.00  0.00
C
ATOM   6071 HD21 LEU   368      37.718  51.263  41.237  1.00  0.00
H
ATOM   6072 HD22 LEU   368      37.291  49.838  40.280  1.00  0.00
H
ATOM   6073 HD23 LEU   368      38.464  49.693  41.603  1.00  0.00
H
ATOM   6074  C   LEU   368      41.515  50.024  42.070  1.00  0.00
C
ATOM   6075  O   LEU   368      40.941  49.130  42.692  1.00  0.00
O
ATOM   6076  N   THR   369      42.796  49.913  41.700  1.00  0.00
N
ATOM   6077  H   THR   369      43.196  50.647  41.122  1.00  0.00
H
ATOM   6078  CA  THR   369      43.663  48.775  42.069  1.00  0.00
C
ATOM   6079  HA  THR   369      43.228  47.860  41.672  1.00  0.00
H
ATOM   6080  CB  THR   369      45.066  48.945  41.465  1.00  0.00
C
ATOM   6081  HB  THR   369      45.492  49.893  41.784  1.00  0.00
H
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ATOM   6082  CG2 THR   369      46.044  47.827  41.823  1.00  0.00
C
ATOM   6083 HG21 THR   369      45.596  46.856  41.612  1.00  0.00
H
ATOM   6084 HG22 THR   369      46.963  47.934  41.247  1.00  0.00
H
ATOM   6085 HG23 THR   369      46.298  47.886  42.881  1.00  0.00
H
ATOM   6086  OG1 THR   369      44.980  48.946  40.065  1.00  0.00
O
ATOM   6087  HG1 THR   369      45.869  49.045  39.729  1.00  0.00
H
ATOM   6088  C   THR   369      43.776  48.601  43.585  1.00  0.00
C
ATOM   6089  O   THR   369      43.648  47.483  44.085  1.00  0.00
O
ATOM   6090  N   GLU   370      43.975  49.684  44.339  1.00  0.00
N
ATOM   6091  H   GLU   370      44.123  50.578  43.882  1.00  0.00
H
ATOM   6092  CA  GLU   370      44.039  49.626  45.804  1.00  0.00
C
ATOM   6093  HA  GLU   370      44.792  48.892  46.098  1.00  0.00
H
ATOM   6094  CB  GLU   370      44.455  50.998  46.357  1.00  0.00
C
ATOM   6095  HB2 GLU   370      43.789  51.764  45.957  1.00  0.00
H
ATOM   6096  HB3 GLU   370      44.331  50.962  47.439  1.00  0.00
H
ATOM   6097  CG  GLU   370      45.927  51.364  46.079  1.00  0.00
C
ATOM   6098  HG2 GLU   370      46.545  50.686  46.668  1.00  0.00
H
ATOM   6099  HG3 GLU   370      46.178  51.202  45.030  1.00  0.00
H
ATOM   6100  CD  GLU   370      46.287  52.800  46.494  1.00  0.00
C
ATOM   6101  OE1 GLU   370      47.347  53.301  46.051  1.00  0.00
O
ATOM   6102  OE2 GLU   370      45.589  53.369  47.370  1.00  0.00
O
ATOM   6103  C   GLU   370      42.708  49.164  46.428  1.00  0.00
C
ATOM   6104  O   GLU   370      42.717  48.343  47.348  1.00  0.00
O
ATOM   6105  N   ALA   371      41.563  49.607  45.894  1.00  0.00
N
ATOM   6106  H   ALA   371      41.609  50.309  45.162  1.00  0.00
H
ATOM   6107  CA  ALA   371      40.242  49.140  46.325  1.00  0.00
C
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ATOM   6108  HA  ALA   371      40.164  49.293  47.404  1.00  0.00
H
ATOM   6109  CB  ALA   371      39.159  49.991  45.645  1.00  0.00
C
ATOM   6110  HB1 ALA   371      39.175  49.832  44.566  1.00  0.00
H
ATOM   6111  HB2 ALA   371      38.180  49.706  46.031  1.00  0.00
H
ATOM   6112  HB3 ALA   371      39.328  51.047  45.848  1.00  0.00
H
ATOM   6113  C   ALA   371      40.041  47.634  46.051  1.00  0.00
C
ATOM   6114  O   ALA   371      39.612  46.899  46.943  1.00  0.00
O
ATOM   6115  N   VAL   372      40.416  47.147  44.859  1.00  0.00
N
ATOM   6116  H   VAL   372      40.746  47.809  44.160  1.00  0.00
H
ATOM   6117  CA  VAL   372      40.398  45.711  44.508  1.00  0.00
C
ATOM   6118  HA  VAL   372      39.380  45.333  44.599  1.00  0.00
H
ATOM   6119  CB  VAL   372      40.861  45.501  43.051  1.00  0.00
C
ATOM   6120  HB  VAL   372      41.760  46.090  42.875  1.00  0.00
H
ATOM   6121  CG1 VAL   372      41.192  44.036  42.725  1.00  0.00
C
ATOM   6122 HG11 VAL   372      40.302  43.416  42.833  1.00  0.00
H
ATOM   6123 HG12 VAL   372      41.559  43.969  41.709  1.00  0.00
H
ATOM   6124 HG13 VAL   372      41.985  43.652  43.366  1.00  0.00
H
ATOM   6125  CG2 VAL   372      39.768  45.959  42.075  1.00  0.00
C
ATOM   6126 HG21 VAL   372      39.518  47.005  42.247  1.00  0.00
H
ATOM   6127 HG22 VAL   372      40.113  45.854  41.047  1.00  0.00
H
ATOM   6128 HG23 VAL   372      38.873  45.353  42.211  1.00  0.00
H
ATOM   6129  C   VAL   372      41.270  44.885  45.459  1.00  0.00
C
ATOM   6130  O   VAL   372      40.838  43.833  45.937  1.00  0.00
O
ATOM   6131  N   GLN   373      42.490  45.341  45.758  1.00  0.00
N
ATOM   6132  H   GLN   373      42.815  46.194  45.310  1.00  0.00
H
ATOM   6133  CA  GLN   373      43.404  44.622  46.653  1.00  0.00
C
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ATOM   6134  HA  GLN   373      43.474  43.587  46.318  1.00  0.00
H
ATOM   6135  CB  GLN   373      44.810  45.240  46.571  1.00  0.00
C
ATOM   6136  HB2 GLN   373      44.743  46.321  46.696  1.00  0.00
H
ATOM   6137  HB3 GLN   373      45.426  44.834  47.375  1.00  0.00
H
ATOM   6138  CG  GLN   373      45.485  44.907  45.226  1.00  0.00
C
ATOM   6139  HG2 GLN   373      45.634  43.829  45.163  1.00  0.00
H
ATOM   6140  HG3 GLN   373      44.836  45.199  44.402  1.00  0.00
H
ATOM   6141  CD  GLN   373      46.838  45.588  45.026  1.00  0.00
C
ATOM   6142  OE1 GLN   373      47.401  46.238  45.895  1.00  0.00
O
ATOM   6143  NE2 GLN   373      47.431  45.455  43.861  1.00  0.00
N
ATOM   6144 HE21 GLN   373      48.358  45.837  43.778  1.00  0.00
H
ATOM   6145 HE22 GLN   373      46.997  44.931  43.121  1.00  0.00
H
ATOM   6146  C   GLN   373      42.862  44.576  48.090  1.00  0.00
C
ATOM   6147  O   GLN   373      42.878  43.514  48.715  1.00  0.00
O
ATOM   6148  N   LYS   374      42.277  45.680  48.583  1.00  0.00
N
ATOM   6149  H   LYS   374      42.311  46.526  48.016  1.00  0.00
H
ATOM   6150  CA  LYS   374      41.582  45.746  49.884  1.00  0.00
C
ATOM   6151  HA  LYS   374      42.299  45.486  50.664  1.00  0.00
H
ATOM   6152  CB  LYS   374      41.098  47.200  50.107  1.00  0.00
C
ATOM   6153  HB2 LYS   374      41.911  47.868  49.812  1.00  0.00
H
ATOM   6154  HB3 LYS   374      40.253  47.418  49.454  1.00  0.00
H
ATOM   6155  CG  LYS   374      40.735  47.592  51.549  1.00  0.00
C
ATOM   6156  HG2 LYS   374      41.587  47.374  52.194  1.00  0.00
H
ATOM   6157  HG3 LYS   374      40.570  48.670  51.566  1.00  0.00
H
ATOM   6158  CD  LYS   374      39.489  46.908  52.123  1.00  0.00
C
ATOM   6159  HD2 LYS   374      38.634  47.058  51.462  1.00  0.00
H
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ATOM   6160  HD3 LYS   374      39.683  45.845  52.234  1.00  0.00
H
ATOM   6161  CE  LYS   374      39.173  47.485  53.500  1.00  0.00
C
ATOM   6162  HE2 LYS   374      40.112  47.648  54.041  1.00  0.00
H
ATOM   6163  HE3 LYS   374      38.684  48.458  53.388  1.00  0.00
H
ATOM   6164  NZ  LYS   374      38.318  46.554  54.265  1.00  0.00
N
ATOM   6165  HZ1 LYS   374      38.818  45.716  54.515  1.00  0.00
H
ATOM   6166  HZ2 LYS   374      38.046  46.961  55.151  1.00  0.00
H
ATOM   6167  HZ3 LYS   374      37.473  46.262  53.775  1.00  0.00
H
ATOM   6168  C   LYS   374      40.451  44.708  49.952  1.00  0.00
C
ATOM   6169  O   LYS   374      40.398  43.907  50.888  1.00  0.00
O
ATOM   6170  N   ILE   375      39.569  44.695  48.949  1.00  0.00
N
ATOM   6171  H   ILE   375      39.689  45.378  48.207  1.00  0.00
H
ATOM   6172  CA  ILE   375      38.398  43.803  48.903  1.00  0.00
C
ATOM   6173  HA  ILE   375      37.873  43.876  49.857  1.00  0.00
H
ATOM   6174  CB  ILE   375      37.415  44.242  47.793  1.00  0.00
C
ATOM   6175  HB  ILE   375      37.958  44.269  46.847  1.00  0.00
H
ATOM   6176  CG2 ILE   375      36.251  43.235  47.672  1.00  0.00
C
ATOM   6177 HG21 ILE   375      35.811  43.073  48.654  1.00  0.00
H
ATOM   6178 HG22 ILE   375      35.477  43.598  46.998  1.00  0.00
H
ATOM   6179 HG23 ILE   375      36.602  42.279  47.280  1.00  0.00
H
ATOM   6180  CG1 ILE   375      36.849  45.652  48.087  1.00  0.00
C
ATOM   6181 HG12 ILE   375      36.083  45.584  48.858  1.00  0.00
H
ATOM   6182 HG13 ILE   375      37.629  46.308  48.472  1.00  0.00
H
ATOM   6183  CD1 ILE   375      36.250  46.295  46.832  1.00  0.00
C
ATOM   6184 HD11 ILE   375      35.321  45.792  46.571  1.00  0.00
H
ATOM   6185 HD12 ILE   375      36.045  47.348  47.009  1.00  0.00
H
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ATOM   6186 HD13 ILE   375      36.950  46.217  46.002  1.00  0.00
H
ATOM   6187  C   ILE   375      38.822  42.335  48.749  1.00  0.00
C
ATOM   6188  O   ILE   375      38.234  41.470  49.398  1.00  0.00
O
ATOM   6189  N   THR   376      39.857  42.044  47.951  1.00  0.00
N
ATOM   6190  H   THR   376      40.272  42.798  47.413  1.00  0.00
H
ATOM   6191  CA  THR   376      40.430  40.693  47.816  1.00  0.00
C
ATOM   6192  HA  THR   376      39.664  40.024  47.426  1.00  0.00
H
ATOM   6193  CB  THR   376      41.620  40.681  46.835  1.00  0.00
C
ATOM   6194  HB  THR   376      42.370  41.399  47.164  1.00  0.00
H
ATOM   6195  CG2 THR   376      42.270  39.304  46.707  1.00  0.00
C
ATOM   6196 HG21 THR   376      41.508  38.564  46.475  1.00  0.00
H
ATOM   6197 HG22 THR   376      43.004  39.325  45.903  1.00  0.00
H
ATOM   6198 HG23 THR   376      42.774  39.031  47.633  1.00  0.00
H
ATOM   6199  OG1 THR   376      41.215  41.060  45.540  1.00  0.00
O
ATOM   6200  HG1 THR   376      41.112  42.024  45.531  1.00  0.00
H
ATOM   6201  C   THR   376      40.859  40.147  49.182  1.00  0.00
C
ATOM   6202  O   THR   376      40.432  39.057  49.561  1.00  0.00
O
ATOM   6203  N   THR   377      41.630  40.917  49.961  1.00  0.00
N
ATOM   6204  H   THR   377      41.983  41.798  49.597  1.00  0.00
H
ATOM   6205  CA  THR   377      42.051  40.518  51.317  1.00  0.00
C
ATOM   6206  HA  THR   377      42.608  39.580  51.250  1.00  0.00
H
ATOM   6207  CB  THR   377      42.987  41.570  51.932  1.00  0.00
C
ATOM   6208  HB  THR   377      42.499  42.546  51.926  1.00  0.00
H
ATOM   6209  CG2 THR   377      43.422  41.231  53.359  1.00  0.00
C
ATOM   6210 HG21 THR   377      43.864  40.235  53.387  1.00  0.00
H
ATOM   6211 HG22 THR   377      44.155  41.959  53.701  1.00  0.00
H
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ATOM   6212 HG23 THR   377      42.570  41.267  54.038  1.00  0.00
H
ATOM   6213  OG1 THR   377      44.165  41.637  51.168  1.00  0.00
O
ATOM   6214  HG1 THR   377      44.702  42.343  51.535  1.00  0.00
H
ATOM   6215  C   THR   377      40.853  40.282  52.241  1.00  0.00
C
ATOM   6216  O   THR   377      40.748  39.212  52.836  1.00  0.00
O
ATOM   6217  N   GLU   378      39.923  41.239  52.342  1.00  0.00
N
ATOM   6218  H   GLU   378      40.039  42.083  51.789  1.00  0.00
H
ATOM   6219  CA  GLU   378      38.742  41.116  53.209  1.00  0.00
C
ATOM   6220  HA  GLU   378      39.076  40.925  54.232  1.00  0.00
H
ATOM   6221  CB  GLU   378      37.971  42.451  53.163  1.00  0.00
C
ATOM   6222  HB2 GLU   378      38.621  43.244  53.544  1.00  0.00
H
ATOM   6223  HB3 GLU   378      37.699  42.667  52.125  1.00  0.00
H
ATOM   6224  CG  GLU   378      36.688  42.438  54.000  1.00  0.00
C
ATOM   6225  HG2 GLU   378      35.950  41.808  53.504  1.00  0.00
H
ATOM   6226  HG3 GLU   378      36.898  41.996  54.974  1.00  0.00
H
ATOM   6227  CD  GLU   378      36.117  43.846  54.212  1.00  0.00
C
ATOM   6228  OE1 GLU   378      36.398  44.778  53.426  1.00  0.00
O
ATOM   6229  OE2 GLU   378      35.374  44.051  55.196  1.00  0.00
O
ATOM   6230  C   GLU   378      37.863  39.914  52.812  1.00  0.00
C
ATOM   6231  O   GLU   378      37.312  39.233  53.676  1.00  0.00
O
ATOM   6232  N   SER   379      37.773  39.595  51.519  1.00  0.00
N
ATOM   6233  H   SER   379      38.228  40.194  50.838  1.00  0.00
H
ATOM   6234  CA  SER   379      37.018  38.436  51.027  1.00  0.00
C
ATOM   6235  HA  SER   379      36.031  38.468  51.480  1.00  0.00
H
ATOM   6236  CB  SER   379      36.860  38.494  49.508  1.00  0.00
C
ATOM   6237  HB2 SER   379      37.841  38.458  49.031  1.00  0.00
H
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ATOM   6238  HB3 SER   379      36.265  37.643  49.167  1.00  0.00
H
ATOM   6239  OG  SER   379      36.221  39.697  49.139  1.00  0.00
O
ATOM   6240  HG  SER   379      36.883  40.407  49.220  1.00  0.00
H
ATOM   6241  C   SER   379      37.654  37.102  51.414  1.00  0.00
C
ATOM   6242  O   SER   379      36.947  36.157  51.766  1.00  0.00
O
ATOM   6243  N   ILE   380      38.986  37.027  51.435  1.00  0.00
N
ATOM   6244  H   ILE   380      39.525  37.835  51.135  1.00  0.00
H
ATOM   6245  CA  ILE   380      39.702  35.839  51.914  1.00  0.00
C
ATOM   6246  HA  ILE   380      39.249  34.962  51.452  1.00  0.00
H
ATOM   6247  CB  ILE   380      41.183  35.879  51.466  1.00  0.00
C
ATOM   6248  HB  ILE   380      41.627  36.808  51.826  1.00  0.00
H
ATOM   6249  CG2 ILE   380      41.971  34.694  52.058  1.00  0.00
C
ATOM   6250 HG21 ILE   380      41.523  33.750  51.743  1.00  0.00
H
ATOM   6251 HG22 ILE   380      43.009  34.723  51.730  1.00  0.00
H
ATOM   6252 HG23 ILE   380      41.973  34.739  53.147  1.00  0.00
H
ATOM   6253  CG1 ILE   380      41.281  35.832  49.919  1.00  0.00
C
ATOM   6254 HG12 ILE   380      41.052  34.824  49.571  1.00  0.00
H
ATOM   6255 HG13 ILE   380      40.543  36.496  49.475  1.00  0.00
H
ATOM   6256  CD1 ILE   380      42.654  36.256  49.381  1.00  0.00
C
ATOM   6257 HD11 ILE   380      43.418  35.535  49.667  1.00  0.00
H
ATOM   6258 HD12 ILE   380      42.615  36.310  48.294  1.00  0.00
H
ATOM   6259 HD13 ILE   380      42.916  37.239  49.773  1.00  0.00
H
ATOM   6260  C   ILE   380      39.518  35.678  53.435  1.00  0.00
C
ATOM   6261  O   ILE   380      39.361  34.550  53.899  1.00  0.00
O
ATOM   6262  N   VAL   381      39.440  36.772  54.207  1.00  0.00
N
ATOM   6263  H   VAL   381      39.591  37.676  53.770  1.00  0.00
H
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ATOM   6264  CA  VAL   381      39.182  36.715  55.664  1.00  0.00
C
ATOM   6265  HA  VAL   381      39.865  35.983  56.093  1.00  0.00
H
ATOM   6266  CB  VAL   381      39.476  38.074  56.343  1.00  0.00
C
ATOM   6267  HB  VAL   381      38.854  38.845  55.890  1.00  0.00
H
ATOM   6268  CG1 VAL   381      39.203  38.060  57.855  1.00  0.00
C
ATOM   6269 HG11 VAL   381      39.771  37.258  58.329  1.00  0.00
H
ATOM   6270 HG12 VAL   381      39.489  39.015  58.295  1.00  0.00
H
ATOM   6271 HG13 VAL   381      38.142  37.905  58.048  1.00  0.00
H
ATOM   6272  CG2 VAL   381      40.952  38.472  56.191  1.00  0.00
C
ATOM   6273 HG21 VAL   381      41.229  38.522  55.142  1.00  0.00
H
ATOM   6274 HG22 VAL   381      41.120  39.455  56.631  1.00  0.00
H
ATOM   6275 HG23 VAL   381      41.592  37.740  56.682  1.00  0.00
H
ATOM   6276  C   VAL   381      37.763  36.221  55.995  1.00  0.00
C
ATOM   6277  O   VAL   381      37.596  35.518  56.990  1.00  0.00
O
ATOM   6278  N   ILE   382      36.747  36.552  55.183  1.00  0.00
N
ATOM   6279  H   ILE   382      36.942  37.179  54.411  1.00  0.00
H
ATOM   6280  CA  ILE   382      35.347  36.146  55.432  1.00  0.00
C
ATOM   6281  HA  ILE   382      35.222  35.992  56.505  1.00  0.00
H
ATOM   6282  CB  ILE   382      34.360  37.276  55.036  1.00  0.00
C
ATOM   6283  HB  ILE   382      34.484  37.493  53.974  1.00  0.00
H
ATOM   6284  CG2 ILE   382      32.904  36.833  55.280  1.00  0.00
C
ATOM   6285 HG21 ILE   382      32.746  36.621  56.337  1.00  0.00
H
ATOM   6286 HG22 ILE   382      32.202  37.595  54.948  1.00  0.00
H
ATOM   6287 HG23 ILE   382      32.678  35.936  54.705  1.00  0.00
H
ATOM   6288  CG1 ILE   382      34.645  38.564  55.851  1.00  0.00
C
ATOM   6289 HG12 ILE   382      34.523  38.351  56.914  1.00  0.00
H
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ATOM   6290 HG13 ILE   382      35.677  38.871  55.692  1.00  0.00
H
ATOM   6291  CD1 ILE   382      33.756  39.760  55.482  1.00  0.00
C
ATOM   6292 HD11 ILE   382      32.730  39.586  55.802  1.00  0.00
H
ATOM   6293 HD12 ILE   382      34.126  40.653  55.986  1.00  0.00
H
ATOM   6294 HD13 ILE   382      33.781  39.922  54.404  1.00  0.00
H
ATOM   6295  C   ILE   382      34.994  34.793  54.778  1.00  0.00
C
ATOM   6296  O   ILE   382      34.322  33.977  55.408  1.00  0.00
O
ATOM   6297  N   TRP   383      35.428  34.536  53.537  1.00  0.00
N
ATOM   6298  H   TRP   383      35.956  35.259  53.060  1.00  0.00
H
ATOM   6299  CA  TRP   383      34.993  33.373  52.739  1.00  0.00
C
ATOM   6300  HA  TRP   383      34.288  32.785  53.327  1.00  0.00
H
ATOM   6301  CB  TRP   383      34.227  33.865  51.500  1.00  0.00
C
ATOM   6302  HB2 TRP   383      34.917  34.411  50.855  1.00  0.00
H
ATOM   6303  HB3 TRP   383      33.884  32.995  50.938  1.00  0.00
H
ATOM   6304  CG  TRP   383      33.033  34.736  51.787  1.00  0.00
C
ATOM   6305  CD1 TRP   383      31.855  34.318  52.300  1.00  0.00
C
ATOM   6306  HD1 TRP   383      31.625  33.295  52.561  1.00  0.00
H
ATOM   6307  NE1 TRP   383      31.002  35.392  52.462  1.00  0.00
N
ATOM   6308  HE1 TRP   383      30.071  35.324  52.875  1.00  0.00
H
ATOM   6309  CE2 TRP   383      31.600  36.577  52.102  1.00  0.00
C
ATOM   6310  CZ2 TRP   383      31.180  37.916  52.131  1.00  0.00
C
ATOM   6311  HZ2 TRP   383      30.198  38.170  52.491  1.00  0.00
H
ATOM   6312  CH2 TRP   383      32.052  38.914  51.670  1.00  0.00
C
ATOM   6313  HH2 TRP   383      31.742  39.947  51.682  1.00  0.00
H
ATOM   6314  CZ3 TRP   383      33.313  38.556  51.164  1.00  0.00
C
ATOM   6315  HZ3 TRP   383      33.980  39.317  50.783  1.00  0.00
H
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ATOM   6316  CE3 TRP   383      33.714  37.206  51.136  1.00  0.00
C
ATOM   6317  HE3 TRP   383      34.668  36.927  50.724  1.00  0.00
H
ATOM   6318  CD2 TRP   383      32.887  36.183  51.632  1.00  0.00
C
ATOM   6319  C   TRP   383      36.121  32.402  52.341  1.00  0.00
C
ATOM   6320  O   TRP   383      35.835  31.317  51.837  1.00  0.00
O
ATOM   6321  N   GLY   384      37.395  32.754  52.549  1.00  0.00
N
ATOM   6322  H   GLY   384      37.583  33.621  53.040  1.00  0.00
H
ATOM   6323  CA  GLY   384      38.552  31.923  52.165  1.00  0.00
C
ATOM   6324  HA2 GLY   384      39.425  32.262  52.723  1.00  0.00
H
ATOM   6325  HA3 GLY   384      38.356  30.888  52.444  1.00  0.00
H
ATOM   6326  C   GLY   384      38.913  31.949  50.671  1.00  0.00
C
ATOM   6327  O   GLY   384      39.770  31.182  50.223  1.00  0.00
O
ATOM   6328  N   LYS   385      38.273  32.826  49.887  1.00  0.00
N
ATOM   6329  H   LYS   385      37.615  33.453  50.332  1.00  0.00
H
ATOM   6330  CA  LYS   385      38.456  32.960  48.432  1.00  0.00
C
ATOM   6331  HA  LYS   385      39.466  32.631  48.182  1.00  0.00
H
ATOM   6332  CB  LYS   385      37.472  32.041  47.678  1.00  0.00
C
ATOM   6333  HB2 LYS   385      37.624  32.172  46.604  1.00  0.00
H
ATOM   6334  HB3 LYS   385      37.714  31.005  47.920  1.00  0.00
H
ATOM   6335  CG  LYS   385      35.991  32.285  48.030  1.00  0.00
C
ATOM   6336  HG2 LYS   385      35.836  32.023  49.077  1.00  0.00
H
ATOM   6337  HG3 LYS   385      35.739  33.339  47.900  1.00  0.00
H
ATOM   6338  CD  LYS   385      35.033  31.434  47.184  1.00  0.00
C
ATOM   6339  HD2 LYS   385      35.329  30.386  47.246  1.00  0.00
H
ATOM   6340  HD3 LYS   385      34.034  31.531  47.610  1.00  0.00
H
ATOM   6341  CE  LYS   385      35.015  31.894  45.719  1.00  0.00
C
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ATOM   6342  HE2 LYS   385      34.843  32.974  45.688  1.00  0.00
H
ATOM   6343  HE3 LYS   385      35.997  31.703  45.276  1.00  0.00
H
ATOM   6344  NZ  LYS   385      33.971  31.185  44.941  1.00  0.00
N
ATOM   6345  HZ1 LYS   385      33.047  31.362  45.308  1.00  0.00
H
ATOM   6346  HZ2 LYS   385      34.009  31.436  43.962  1.00  0.00
H
ATOM   6347  HZ3 LYS   385      34.114  30.175  44.987  1.00  0.00
H
ATOM   6348  C   LYS   385      38.347  34.413  47.963  1.00  0.00
C
ATOM   6349  O   LYS   385      37.719  35.247  48.609  1.00  0.00
O
ATOM   6350  N   THR   386      38.944  34.686  46.807  1.00  0.00
N
ATOM   6351  H   THR   386      39.382  33.923  46.316  1.00  0.00
H
ATOM   6352  CA  THR   386      38.795  35.958  46.085  1.00  0.00
C
ATOM   6353  HA  THR   386      38.732  36.754  46.824  1.00  0.00
H
ATOM   6354  CB  THR   386      40.054  36.252  45.248  1.00  0.00
C
ATOM   6355  HB  THR   386      40.885  36.378  45.945  1.00  0.00
H
ATOM   6356  CG2 THR   386      40.455  35.164  44.251  1.00  0.00
C
ATOM   6357 HG21 THR   386      39.632  34.942  43.573  1.00  0.00
H
ATOM   6358 HG22 THR   386      41.319  35.499  43.677  1.00  0.00
H
ATOM   6359 HG23 THR   386      40.738  34.256  44.785  1.00  0.00
H
ATOM   6360  OG1 THR   386      39.911  37.457  44.543  1.00  0.00
O
ATOM   6361  HG1 THR   386      39.558  37.274  43.663  1.00  0.00
H
ATOM   6362  C   THR   386      37.493  35.957  45.254  1.00  0.00
C
ATOM   6363  O   THR   386      37.133  34.905  44.718  1.00  0.00
O
ATOM   6364  N   PRO   387      36.752  37.080  45.160  1.00  0.00
N
ATOM   6365  CD  PRO   387      36.917  38.293  45.949  1.00  0.00
C
ATOM   6366  HD2 PRO   387      37.891  38.755  45.794  1.00  0.00
H
ATOM   6367  HD3 PRO   387      36.780  38.031  46.992  1.00  0.00
H
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ATOM   6368  CG  PRO   387      35.801  39.255  45.535  1.00  0.00
C
ATOM   6369  HG2 PRO   387      36.156  39.933  44.757  1.00  0.00
H
ATOM   6370  HG3 PRO   387      35.422  39.816  46.390  1.00  0.00
H
ATOM   6371  CB  PRO   387      34.738  38.318  44.965  1.00  0.00
C
ATOM   6372  HB2 PRO   387      34.073  38.825  44.264  1.00  0.00
H
ATOM   6373  HB3 PRO   387      34.162  37.888  45.786  1.00  0.00
H
ATOM   6374  CA  PRO   387      35.578  37.220  44.301  1.00  0.00
C
ATOM   6375  HA  PRO   387      35.000  36.296  44.272  1.00  0.00
H
ATOM   6376  C   PRO   387      35.971  37.592  42.864  1.00  0.00
C
ATOM   6377  O   PRO   387      37.109  37.984  42.592  1.00  0.00
O
ATOM   6378  N   LYS   388      34.998  37.509  41.954  1.00  0.00
N
ATOM   6379  H   LYS   388      34.088  37.185  42.270  1.00  0.00
H
ATOM   6380  CA  LYS   388      35.076  38.074  40.602  1.00  0.00
C
ATOM   6381  HA  LYS   388      36.097  37.986  40.220  1.00  0.00
H
ATOM   6382  CB  LYS   388      34.111  37.331  39.671  1.00  0.00
C
ATOM   6383  HB2 LYS   388      33.095  37.461  40.049  1.00  0.00
H
ATOM   6384  HB3 LYS   388      34.172  37.779  38.678  1.00  0.00
H
ATOM   6385  CG  LYS   388      34.418  35.828  39.572  1.00  0.00
C
ATOM   6386  HG2 LYS   388      35.382  35.678  39.086  1.00  0.00
H
ATOM   6387  HG3 LYS   388      34.459  35.391  40.570  1.00  0.00
H
ATOM   6388  CD  LYS   388      33.329  35.094  38.791  1.00  0.00
C
ATOM   6389  HD2 LYS   388      33.545  34.026  38.815  1.00  0.00
H
ATOM   6390  HD3 LYS   388      32.373  35.268  39.286  1.00  0.00
H
ATOM   6391  CE  LYS   388      33.237  35.566  37.338  1.00  0.00
C
ATOM   6392  HE2 LYS   388      32.938  36.617  37.303  1.00  0.00
H
ATOM   6393  HE3 LYS   388      34.220  35.490  36.868  1.00  0.00
H
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ATOM   6394  NZ  LYS   388      32.269  34.742  36.593  1.00  0.00
N
ATOM   6395  HZ1 LYS   388      31.423  34.620  37.133  1.00  0.00
H
ATOM   6396  HZ2 LYS   388      32.053  35.216  35.714  1.00  0.00
H
ATOM   6397  HZ3 LYS   388      32.678  33.842  36.394  1.00  0.00
H
ATOM   6398  C   LYS   388      34.704  39.552  40.656  1.00  0.00
C
ATOM   6399  O   LYS   388      33.738  39.909  41.333  1.00  0.00
O
ATOM   6400  N   PHE   389      35.424  40.409  39.941  1.00  0.00
N
ATOM   6401  H   PHE   389      36.182  40.049  39.368  1.00  0.00
H
ATOM   6402  CA  PHE   389      35.220  41.858  40.034  1.00  0.00
C
ATOM   6403  HA  PHE   389      34.651  42.062  40.937  1.00  0.00
H
ATOM   6404  CB  PHE   389      36.562  42.565  40.238  1.00  0.00
C
ATOM   6405  HB2 PHE   389      37.277  42.221  39.492  1.00  0.00
H
ATOM   6406  HB3 PHE   389      36.404  43.628  40.082  1.00  0.00
H
ATOM   6407  CG  PHE   389      37.136  42.385  41.631  1.00  0.00
C
ATOM   6408  CD1 PHE   389      36.697  43.215  42.681  1.00  0.00
C
ATOM   6409  HD1 PHE   389      35.947  43.972  42.494  1.00  0.00
H
ATOM   6410  CE1 PHE   389      37.210  43.046  43.980  1.00  0.00
C
ATOM   6411  HE1 PHE   389      36.864  43.681  44.780  1.00  0.00
H
ATOM   6412  CZ  PHE   389      38.154  42.035  44.236  1.00  0.00
C
ATOM   6413  HZ  PHE   389      38.543  41.891  45.234  1.00  0.00
H
ATOM   6414  CE2 PHE   389      38.584  41.197  43.193  1.00  0.00
C
ATOM   6415  HE2 PHE   389      39.295  40.407  43.396  1.00  0.00
H
ATOM   6416  CD2 PHE   389      38.079  41.372  41.891  1.00  0.00
C
ATOM   6417  HD2 PHE   389      38.397  40.713  41.094  1.00  0.00
H
ATOM   6418  C   PHE   389      34.415  42.441  38.861  1.00  0.00
C
ATOM   6419  O   PHE   389      34.737  42.215  37.699  1.00  0.00
O
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ATOM   6420  N   LYS   390      33.408  43.269  39.152  1.00  0.00
N
ATOM   6421  H   LYS   390      33.200  43.422  40.136  1.00  0.00
H
ATOM   6422  CA  LYS   390      32.762  44.157  38.170  1.00  0.00
C
ATOM   6423  HA  LYS   390      32.999  43.840  37.152  1.00  0.00
H
ATOM   6424  CB  LYS   390      31.241  44.133  38.340  1.00  0.00
C
ATOM   6425  HB2 LYS   390      31.001  44.262  39.395  1.00  0.00
H
ATOM   6426  HB3 LYS   390      30.816  44.972  37.785  1.00  0.00
H
ATOM   6427  CG  LYS   390      30.597  42.839  37.830  1.00  0.00
C
ATOM   6428  HG2 LYS   390      30.831  42.698  36.774  1.00  0.00
H
ATOM   6429  HG3 LYS   390      30.969  41.987  38.401  1.00  0.00
H
ATOM   6430  CD  LYS   390      29.083  42.970  38.015  1.00  0.00
C
ATOM   6431  HD2 LYS   390      28.888  43.118  39.077  1.00  0.00
H
ATOM   6432  HD3 LYS   390      28.731  43.849  37.471  1.00  0.00
H
ATOM   6433  CE  LYS   390      28.323  41.733  37.527  1.00  0.00
C
ATOM   6434  HE2 LYS   390      28.564  41.558  36.474  1.00  0.00
H
ATOM   6435  HE3 LYS   390      28.665  40.868  38.103  1.00  0.00
H
ATOM   6436  NZ  LYS   390      26.861  41.918  37.707  1.00  0.00
N
ATOM   6437  HZ1 LYS   390      26.529  42.715  37.180  1.00  0.00
H
ATOM   6438  HZ2 LYS   390      26.346  41.096  37.427  1.00  0.00
H
ATOM   6439  HZ3 LYS   390      26.663  42.117  38.688  1.00  0.00
H
ATOM   6440  C   LYS   390      33.308  45.565  38.364  1.00  0.00
C
ATOM   6441  O   LYS   390      33.101  46.158  39.424  1.00  0.00
O
ATOM   6442  N   LEU   391      34.030  46.084  37.370  1.00  0.00
N
ATOM   6443  H   LEU   391      34.122  45.547  36.512  1.00  0.00
H
ATOM   6444  CA  LEU   391      34.783  47.337  37.497  1.00  0.00
C
ATOM   6445  HA  LEU   391      34.570  47.759  38.477  1.00  0.00
H
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ATOM   6446  CB  LEU   391      36.297  47.044  37.469  1.00  0.00
C
ATOM   6447  HB2 LEU   391      36.557  46.685  36.472  1.00  0.00
H
ATOM   6448  HB3 LEU   391      36.825  47.981  37.644  1.00  0.00
H
ATOM   6449  CG  LEU   391      36.795  46.020  38.506  1.00  0.00
C
ATOM   6450  HG  LEU   391      36.258  45.083  38.370  1.00  0.00
H
ATOM   6451  CD1 LEU   391      38.282  45.731  38.312  1.00  0.00
C
ATOM   6452 HD11 LEU   391      38.876  46.617  38.518  1.00  0.00
H
ATOM   6453 HD12 LEU   391      38.585  44.932  38.989  1.00  0.00
H
ATOM   6454 HD13 LEU   391      38.465  45.409  37.289  1.00  0.00
H
ATOM   6455  CD2 LEU   391      36.610  46.514  39.944  1.00  0.00
C
ATOM   6456 HD21 LEU   391      35.553  46.625  40.177  1.00  0.00
H
ATOM   6457 HD22 LEU   391      37.035  45.794  40.642  1.00  0.00
H
ATOM   6458 HD23 LEU   391      37.114  47.469  40.078  1.00  0.00
H
ATOM   6459  C   LEU   391      34.375  48.367  36.419  1.00  0.00
C
ATOM   6460  O   LEU   391      34.297  48.013  35.238  1.00  0.00
O
ATOM   6461  N   PRO   392      34.164  49.653  36.772  1.00  0.00
N
ATOM   6462  CD  PRO   392      34.100  50.150  38.137  1.00  0.00
C
ATOM   6463  HD2 PRO   392      35.035  49.983  38.674  1.00  0.00
H
ATOM   6464  HD3 PRO   392      33.279  49.635  38.633  1.00  0.00
H
ATOM   6465  CG  PRO   392      33.789  51.645  38.051  1.00  0.00
C
ATOM   6466  HG2 PRO   392      34.714  52.219  37.988  1.00  0.00
H
ATOM   6467  HG3 PRO   392      33.183  51.982  38.891  1.00  0.00
H
ATOM   6468  CB  PRO   392      33.026  51.743  36.735  1.00  0.00
C
ATOM   6469  HB2 PRO   392      33.028  52.755  36.331  1.00  0.00
H
ATOM   6470  HB3 PRO   392      31.999  51.413  36.894  1.00  0.00
H
ATOM   6471  CA  PRO   392      33.764  50.724  35.853  1.00  0.00
C
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ATOM   6472  HA  PRO   392      33.064  50.333  35.117  1.00  0.00
H
ATOM   6473  C   PRO   392      34.971  51.296  35.083  1.00  0.00
C
ATOM   6474  O   PRO   392      35.188  52.503  35.026  1.00  0.00
O
ATOM   6475  N   ILE   393      35.794  50.421  34.506  1.00  0.00
N
ATOM   6476  H   ILE   393      35.533  49.441  34.546  1.00  0.00
H
ATOM   6477  CA  ILE   393      37.016  50.743  33.759  1.00  0.00
C
ATOM   6478  HA  ILE   393      37.009  51.803  33.499  1.00  0.00
H
ATOM   6479  CB  ILE   393      38.276  50.497  34.630  1.00  0.00
C
ATOM   6480  HB  ILE   393      38.209  51.158  35.490  1.00  0.00
H
ATOM   6481  CG2 ILE   393      38.352  49.076  35.203  1.00  0.00
C
ATOM   6482 HG21 ILE   393      38.558  48.365  34.409  1.00  0.00
H
ATOM   6483 HG22 ILE   393      39.133  49.006  35.961  1.00  0.00
H
ATOM   6484 HG23 ILE   393      37.410  48.816  35.671  1.00  0.00
H
ATOM   6485  CG1 ILE   393      39.559  50.852  33.844  1.00  0.00
C
ATOM   6486 HG12 ILE   393      39.699  50.122  33.047  1.00  0.00
H
ATOM   6487 HG13 ILE   393      39.433  51.833  33.386  1.00  0.00
H
ATOM   6488  CD1 ILE   393      40.835  50.875  34.696  1.00  0.00
C
ATOM   6489 HD11 ILE   393      41.052  49.877  35.073  1.00  0.00
H
ATOM   6490 HD12 ILE   393      41.676  51.201  34.084  1.00  0.00
H
ATOM   6491 HD13 ILE   393      40.718  51.561  35.534  1.00  0.00
H
ATOM   6492  C   ILE   393      37.008  49.948  32.452  1.00  0.00
C
ATOM   6493  O   ILE   393      36.751  48.745  32.452  1.00  0.00
O
ATOM   6494  N   GLN   394      37.286  50.602  31.323  1.00  0.00
N
ATOM   6495  H   GLN   394      37.487  51.588  31.365  1.00  0.00
H
ATOM   6496  CA  GLN   394      37.399  49.890  30.045  1.00  0.00
C
ATOM   6497  HA  GLN   394      36.475  49.336  29.872  1.00  0.00
H
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ATOM   6498  CB  GLN   394      37.611  50.865  28.876  1.00  0.00
C
ATOM   6499  HB2 GLN   394      38.488  51.469  29.082  1.00  0.00
H
ATOM   6500  HB3 GLN   394      37.831  50.288  27.977  1.00  0.00
H
ATOM   6501  CG  GLN   394      36.414  51.789  28.590  1.00  0.00
C
ATOM   6502  HG2 GLN   394      36.180  52.368  29.482  1.00  0.00
H
ATOM   6503  HG3 GLN   394      36.690  52.491  27.802  1.00  0.00
H
ATOM   6504  CD  GLN   394      35.160  51.034  28.152  1.00  0.00
C
ATOM   6505  OE1 GLN   394      35.189  49.876  27.773  1.00  0.00
O
ATOM   6506  NE2 GLN   394      34.000  51.647  28.219  1.00  0.00
N
ATOM   6507 HE21 GLN   394      33.207  51.040  28.103  1.00  0.00
H
ATOM   6508 HE22 GLN   394      33.929  52.567  28.614  1.00  0.00
H
ATOM   6509  C   GLN   394      38.555  48.883  30.090  1.00  0.00
C
ATOM   6510  O   GLN   394      39.654  49.222  30.539  1.00  0.00
O
ATOM   6511  N   LYS   395      38.347  47.673  29.547  1.00  0.00
N
ATOM   6512  H   LYS   395      37.417  47.460  29.213  1.00  0.00
H
ATOM   6513  CA  LYS   395      39.416  46.664  29.378  1.00  0.00
C
ATOM   6514  HA  LYS   395      39.782  46.361  30.357  1.00  0.00
H
ATOM   6515  CB  LYS   395      38.862  45.423  28.641  1.00  0.00
C
ATOM   6516  HB2 LYS   395      38.149  45.744  27.877  1.00  0.00
H
ATOM   6517  HB3 LYS   395      39.673  44.903  28.127  1.00  0.00
H
ATOM   6518  CG  LYS   395      38.166  44.426  29.588  1.00  0.00
C
ATOM   6519  HG2 LYS   395      37.524  44.971  30.282  1.00  0.00
H
ATOM   6520  HG3 LYS   395      37.537  43.761  28.995  1.00  0.00
H
ATOM   6521  CD  LYS   395      39.168  43.559  30.372  1.00  0.00
C
ATOM   6522  HD2 LYS   395      39.730  42.936  29.674  1.00  0.00
H
ATOM   6523  HD3 LYS   395      39.868  44.194  30.910  1.00  0.00
H
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ATOM   6524  CE  LYS   395      38.416  42.665  31.360  1.00  0.00
C
ATOM   6525  HE2 LYS   395      37.757  43.287  31.975  1.00  0.00
H
ATOM   6526  HE3 LYS   395      37.790  41.962  30.802  1.00  0.00
H
ATOM   6527  NZ  LYS   395      39.330  41.916  32.254  1.00  0.00
N
ATOM   6528  HZ1 LYS   395      39.830  42.533  32.876  1.00  0.00
H
ATOM   6529  HZ2 LYS   395      38.762  41.326  32.861  1.00  0.00
H
ATOM   6530  HZ3 LYS   395      40.002  41.331  31.759  1.00  0.00
H
ATOM   6531  C   LYS   395      40.640  47.257  28.663  1.00  0.00
C
ATOM   6532  O   LYS   395      41.763  47.049  29.107  1.00  0.00
O
ATOM   6533  N   GLU   396      40.398  48.096  27.660  1.00  0.00
N
ATOM   6534  H   GLU   396      39.449  48.161  27.334  1.00  0.00
H
ATOM   6535  CA  GLU   396      41.432  48.772  26.867  1.00  0.00
C
ATOM   6536  HA  GLU   396      42.185  48.026  26.603  1.00  0.00
H
ATOM   6537  CB  GLU   396      40.763  49.285  25.576  1.00  0.00
C
ATOM   6538  HB2 GLU   396      39.836  48.741  25.385  1.00  0.00
H
ATOM   6539  HB3 GLU   396      40.493  50.333  25.705  1.00  0.00
H
ATOM   6540  CG  GLU   396      41.657  49.149  24.338  1.00  0.00
C
ATOM   6541  HG2 GLU   396      41.160  49.658  23.509  1.00  0.00
H
ATOM   6542  HG3 GLU   396      42.594  49.675  24.530  1.00  0.00
H
ATOM   6543  CD  GLU   396      41.951  47.694  23.920  1.00  0.00
C
ATOM   6544  OE1 GLU   396      41.395  46.741  24.513  1.00  0.00
O
ATOM   6545  OE2 GLU   396      42.768  47.528  22.990  1.00  0.00
O
ATOM   6546  C   GLU   396      42.166  49.905  27.621  1.00  0.00
C
ATOM   6547  O   GLU   396      43.360  50.128  27.398  1.00  0.00
O
ATOM   6548  N   THR   397      41.498  50.583  28.573  1.00  0.00
N
ATOM   6549  H   THR   397      40.533  50.345  28.745  1.00  0.00
H
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ATOM   6550  CA  THR   397      42.157  51.511  29.516  1.00  0.00
C
ATOM   6551  HA  THR   397      42.725  52.251  28.956  1.00  0.00
H
ATOM   6552  CB  THR   397      41.148  52.236  30.433  1.00  0.00
C
ATOM   6553  HB  THR   397      40.527  51.497  30.934  1.00  0.00
H
ATOM   6554  CG2 THR   397      41.788  53.123  31.507  1.00  0.00
C
ATOM   6555 HG21 THR   397      42.285  53.973  31.040  1.00  0.00
H
ATOM   6556 HG22 THR   397      41.022  53.461  32.201  1.00  0.00
H
ATOM   6557 HG23 THR   397      42.518  52.569  32.094  1.00  0.00
H
ATOM   6558  OG1 THR   397      40.315  53.092  29.691  1.00  0.00
O
ATOM   6559  HG1 THR   397      39.745  53.554  30.310  1.00  0.00
H
ATOM   6560  C   THR   397      43.130  50.743  30.400  1.00  0.00
C
ATOM   6561  O   THR   397      44.279  51.150  30.566  1.00  0.00
O
ATOM   6562  N   TRP   398      42.675  49.628  30.977  1.00  0.00
N
ATOM   6563  H   TRP   398      41.726  49.322  30.790  1.00  0.00
H
ATOM   6564  CA  TRP   398      43.516  48.820  31.855  1.00  0.00
C
ATOM   6565  HA  TRP   398      43.945  49.468  32.620  1.00  0.00
H
ATOM   6566  CB  TRP   398      42.673  47.757  32.553  1.00  0.00
C
ATOM   6567  HB2 TRP   398      41.917  48.253  33.163  1.00  0.00
H
ATOM   6568  HB3 TRP   398      42.163  47.171  31.788  1.00  0.00
H
ATOM   6569  CG  TRP   398      43.508  46.854  33.414  1.00  0.00
C
ATOM   6570  CD1 TRP   398      43.965  45.631  33.059  1.00  0.00
C
ATOM   6571  HD1 TRP   398      43.737  45.140  32.119  1.00  0.00
H
ATOM   6572  NE1 TRP   398      44.866  45.178  34.002  1.00  0.00
N
ATOM   6573  HE1 TRP   398      45.415  44.336  33.887  1.00  0.00
H
ATOM   6574  CE2 TRP   398      45.049  46.097  35.014  1.00  0.00
C
ATOM   6575  CZ2 TRP   398      45.875  46.129  36.149  1.00  0.00
C
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ATOM   6576  HZ2 TRP   398      46.548  45.313  36.361  1.00  0.00
H
ATOM   6577  CH2 TRP   398      45.773  47.214  37.037  1.00  0.00
C
ATOM   6578  HH2 TRP   398      46.338  47.220  37.958  1.00  0.00
H
ATOM   6579  CZ3 TRP   398      44.884  48.266  36.756  1.00  0.00
C
ATOM   6580  HZ3 TRP   398      44.785  49.090  37.450  1.00  0.00
H
ATOM   6581  CE3 TRP   398      44.100  48.248  35.587  1.00  0.00
C
ATOM   6582  HE3 TRP   398      43.428  49.066  35.381  1.00  0.00
H
ATOM   6583  CD2 TRP   398      44.152  47.159  34.691  1.00  0.00
C
ATOM   6584  C   TRP   398      44.689  48.183  31.105  1.00  0.00
C
ATOM   6585  O   TRP   398      45.798  48.180  31.634  1.00  0.00
O
ATOM   6586  N   GLU   399      44.480  47.683  29.880  1.00  0.00
N
ATOM   6587  H   GLU   399      43.534  47.664  29.511  1.00  0.00
H
ATOM   6588  CA  GLU   399      45.563  47.105  29.075  1.00  0.00
C
ATOM   6589  HA  GLU   399      46.036  46.336  29.674  1.00  0.00
H
ATOM   6590  CB  GLU   399      45.027  46.415  27.808  1.00  0.00
C
ATOM   6591  HB2 GLU   399      44.177  45.791  28.087  1.00  0.00
H
ATOM   6592  HB3 GLU   399      44.698  47.161  27.084  1.00  0.00
H
ATOM   6593  CG  GLU   399      46.116  45.512  27.195  1.00  0.00
C
ATOM   6594  HG2 GLU   399      46.982  46.124  26.934  1.00  0.00
H
ATOM   6595  HG3 GLU   399      46.432  44.795  27.957  1.00  0.00
H
ATOM   6596  CD  GLU   399      45.652  44.730  25.956  1.00  0.00
C
ATOM   6597  OE1 GLU   399      46.507  44.436  25.095  1.00  0.00
O
ATOM   6598  OE2 GLU   399      44.454  44.363  25.888  1.00  0.00
O
ATOM   6599  C   GLU   399      46.656  48.139  28.776  1.00  0.00
C
ATOM   6600  O   GLU   399      47.826  47.868  29.040  1.00  0.00
O
ATOM   6601  N   THR   400      46.283  49.352  28.349  1.00  0.00
N
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ATOM   6602  H   THR   400      45.306  49.512  28.136  1.00  0.00
H
ATOM   6603  CA  THR   400      47.239  50.465  28.180  1.00  0.00
C
ATOM   6604  HA  THR   400      47.977  50.181  27.431  1.00  0.00
H
ATOM   6605  CB  THR   400      46.534  51.750  27.705  1.00  0.00
C
ATOM   6606  HB  THR   400      45.919  52.146  28.513  1.00  0.00
H
ATOM   6607  CG2 THR   400      47.541  52.818  27.266  1.00  0.00
C
ATOM   6608 HG21 THR   400      48.186  52.412  26.488  1.00  0.00
H
ATOM   6609 HG22 THR   400      47.014  53.689  26.878  1.00  0.00
H
ATOM   6610 HG23 THR   400      48.157  53.131  28.110  1.00  0.00
H
ATOM   6611  OG1 THR   400      45.694  51.507  26.597  1.00  0.00
O
ATOM   6612  HG1 THR   400      44.929  50.988  26.895  1.00  0.00
H
ATOM   6613  C   THR   400      48.000  50.763  29.478  1.00  0.00
C
ATOM   6614  O   THR   400      49.213  50.950  29.457  1.00  0.00
O
ATOM   6615  N   TRP   401      47.314  50.756  30.627  1.00  0.00
N
ATOM   6616  H   TRP   401      46.318  50.577  30.598  1.00  0.00
H
ATOM   6617  CA  TRP   401      47.943  51.027  31.923  1.00  0.00
C
ATOM   6618  HA  TRP   401      48.498  51.963  31.846  1.00  0.00
H
ATOM   6619  CB  TRP   401      46.873  51.216  33.003  1.00  0.00
C
ATOM   6620  HB2 TRP   401      46.267  52.085  32.748  1.00  0.00
H
ATOM   6621  HB3 TRP   401      46.211  50.351  32.996  1.00  0.00
H
ATOM   6622  CG  TRP   401      47.447  51.398  34.381  1.00  0.00
C
ATOM   6623  CD1 TRP   401      47.387  50.488  35.380  1.00  0.00
C
ATOM   6624  HD1 TRP   401      46.888  49.527  35.305  1.00  0.00
H
ATOM   6625  NE1 TRP   401      48.076  50.960  36.481  1.00  0.00
N
ATOM   6626  HE1 TRP   401      48.178  50.437  37.335  1.00  0.00
H
ATOM   6627  CE2 TRP   401      48.646  52.194  36.239  1.00  0.00
C
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ATOM   6628  CZ2 TRP   401      49.455  53.050  37.008  1.00  0.00
C
ATOM   6629  HZ2 TRP   401      49.761  52.768  38.002  1.00  0.00
H
ATOM   6630  CH2 TRP   401      49.906  54.258  36.447  1.00  0.00
C
ATOM   6631  HH2 TRP   401      50.561  54.917  37.000  1.00  0.00
H
ATOM   6632  CZ3 TRP   401      49.541  54.593  35.133  1.00  0.00
C
ATOM   6633  HZ3 TRP   401      49.912  55.508  34.687  1.00  0.00
H
ATOM   6634  CE3 TRP   401      48.731  53.727  34.372  1.00  0.00
C
ATOM   6635  HE3 TRP   401      48.494  53.993  33.352  1.00  0.00
H
ATOM   6636  CD2 TRP   401      48.256  52.505  34.901  1.00  0.00
C
ATOM   6637  C   TRP   401      48.963  49.959  32.343  1.00  0.00
C
ATOM   6638  O   TRP   401      50.115  50.299  32.613  1.00  0.00
O
ATOM   6639  N   TRP   402      48.584  48.674  32.410  1.00  0.00
N
ATOM   6640  H   TRP   402      47.644  48.415  32.126  1.00  0.00
H
ATOM   6641  CA  TRP   402      49.500  47.646  32.931  1.00  0.00
C
ATOM   6642  HA  TRP   402      49.979  48.064  33.819  1.00  0.00
H
ATOM   6643  CB  TRP   402      48.752  46.382  33.391  1.00  0.00
C
ATOM   6644  HB2 TRP   402      49.381  45.882  34.126  1.00  0.00
H
ATOM   6645  HB3 TRP   402      47.835  46.676  33.905  1.00  0.00
H
ATOM   6646  CG  TRP   402      48.439  45.351  32.347  1.00  0.00
C
ATOM   6647  CD1 TRP   402      47.280  45.248  31.664  1.00  0.00
C
ATOM   6648  HD1 TRP   402      46.439  45.911  31.802  1.00  0.00
H
ATOM   6649  NE1 TRP   402      47.365  44.224  30.741  1.00  0.00
N
ATOM   6650  HE1 TRP   402      46.646  44.026  30.059  1.00  0.00
H
ATOM   6651  CE2 TRP   402      48.588  43.591  30.800  1.00  0.00
C
ATOM   6652  CZ2 TRP   402      49.160  42.540  30.065  1.00  0.00
C
ATOM   6653  HZ2 TRP   402      48.623  42.093  29.243  1.00  0.00
H
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ATOM   6654  CH2 TRP   402      50.461  42.114  30.383  1.00  0.00
C
ATOM   6655  HH2 TRP   402      50.931  41.319  29.818  1.00  0.00
H
ATOM   6656  CZ3 TRP   402      51.168  42.742  31.424  1.00  0.00
C
ATOM   6657  HZ3 TRP   402      52.173  42.422  31.663  1.00  0.00
H
ATOM   6658  CE3 TRP   402      50.590  43.809  32.139  1.00  0.00
C
ATOM   6659  HE3 TRP   402      51.159  44.305  32.913  1.00  0.00
H
ATOM   6660  CD2 TRP   402      49.289  44.270  31.842  1.00  0.00
C
ATOM   6661  C   TRP   402      50.653  47.318  31.972  1.00  0.00
C
ATOM   6662  O   TRP   402      51.679  46.819  32.426  1.00  0.00
O
ATOM   6663  N   THR   403      50.517  47.615  30.673  1.00  0.00
N
ATOM   6664  H   THR   403      49.642  48.008  30.345  1.00  0.00
H
ATOM   6665  CA  THR   403      51.573  47.363  29.682  1.00  0.00
C
ATOM   6666  HA  THR   403      52.161  46.510  30.027  1.00  0.00
H
ATOM   6667  CB  THR   403      50.999  46.969  28.314  1.00  0.00
C
ATOM   6668  HB  THR   403      51.832  46.826  27.628  1.00  0.00
H
ATOM   6669  CG2 THR   403      50.204  45.663  28.373  1.00  0.00
C
ATOM   6670 HG21 THR   403      49.358  45.749  29.052  1.00  0.00
H
ATOM   6671 HG22 THR   403      49.842  45.417  27.376  1.00  0.00
H
ATOM   6672 HG23 THR   403      50.855  44.862  28.723  1.00  0.00
H
ATOM   6673  OG1 THR   403      50.173  47.980  27.789  1.00  0.00
O
ATOM   6674  HG1 THR   403      49.299  47.926  28.216  1.00  0.00
H
ATOM   6675  C   THR   403      52.576  48.513  29.532  1.00  0.00
C
ATOM   6676  O   THR   403      53.673  48.269  29.031  1.00  0.00
O
ATOM   6677  N   GLU   404      52.255  49.729  29.992  1.00  0.00
N
ATOM   6678  H   GLU   404      51.303  49.874  30.307  1.00  0.00
H
ATOM   6679  CA  GLU   404      53.170  50.891  29.941  1.00  0.00
C
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ATOM   6680  HA  GLU   404      54.063  50.610  29.392  1.00  0.00
H
ATOM   6681  CB  GLU   404      52.558  52.059  29.151  1.00  0.00
C
ATOM   6682  HB2 GLU   404      51.624  52.352  29.641  1.00  0.00
H
ATOM   6683  HB3 GLU   404      53.231  52.920  29.209  1.00  0.00
H
ATOM   6684  CG  GLU   404      52.262  51.720  27.674  1.00  0.00
C
ATOM   6685  HG2 GLU   404      51.730  50.773  27.637  1.00  0.00
H
ATOM   6686  HG3 GLU   404      51.597  52.498  27.299  1.00  0.00
H
ATOM   6687  CD  GLU   404      53.454  51.645  26.706  1.00  0.00
C
ATOM   6688  OE1 GLU   404      54.543  51.140  27.047  1.00  0.00
O
ATOM   6689  OE2 GLU   404      53.297  52.080  25.544  1.00  0.00
O
ATOM   6690  C   GLU   404      53.672  51.373  31.316  1.00  0.00
C
ATOM   6691  O   GLU   404      54.683  52.077  31.378  1.00  0.00
O
ATOM   6692  N   TYR   405      53.024  51.005  32.433  1.00  0.00
N
ATOM   6693  H   TYR   405      52.167  50.469  32.350  1.00  0.00
H
ATOM   6694  CA  TYR   405      53.507  51.350  33.782  1.00  0.00
C
ATOM   6695  HA  TYR   405      53.848  52.381  33.728  1.00  0.00
H
ATOM   6696  CB  TYR   405      52.368  51.300  34.823  1.00  0.00
C
ATOM   6697  HB2 TYR   405      51.498  51.817  34.414  1.00  0.00
H
ATOM   6698  HB3 TYR   405      52.080  50.258  34.972  1.00  0.00
H
ATOM   6699  CG  TYR   405      52.679  51.944  36.174  1.00  0.00
C
ATOM   6700  CD1 TYR   405      53.211  53.250  36.230  1.00  0.00
C
ATOM   6701  HD1 TYR   405      53.402  53.801  35.320  1.00  0.00
H
ATOM   6702  CE1 TYR   405      53.466  53.866  37.468  1.00  0.00
C
ATOM   6703  HE1 TYR   405      53.886  54.859  37.492  1.00  0.00
H
ATOM   6704  CZ  TYR   405      53.140  53.201  38.666  1.00  0.00
C
ATOM   6705  OH  TYR   405      53.365  53.822  39.857  1.00  0.00
O
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ATOM   6706  HH  TYR   405      53.940  54.579  39.723  1.00  0.00
H
ATOM   6707  CE2 TYR   405      52.581  51.907  38.619  1.00  0.00
C
ATOM   6708  HE2 TYR   405      52.336  51.399  39.539  1.00  0.00
H
ATOM   6709  CD2 TYR   405      52.375  51.271  37.376  1.00  0.00
C
ATOM   6710  HD2 TYR   405      51.962  50.270  37.338  1.00  0.00
H
ATOM   6711  C   TYR   405      54.717  50.493  34.208  1.00  0.00
C
ATOM   6712  O   TYR   405      54.752  49.281  34.017  1.00  0.00
O
ATOM   6713  N   TRP   406      55.722  51.119  34.832  1.00  0.00
N
ATOM   6714  H   TRP   406      55.635  52.112  34.989  1.00  0.00
H
ATOM   6715  CA  TRP   406      57.008  50.480  35.170  1.00  0.00
C
ATOM   6716  HA  TRP   406      57.225  49.739  34.397  1.00  0.00
H
ATOM   6717  CB  TRP   406      58.117  51.538  35.131  1.00  0.00
C
ATOM   6718  HB2 TRP   406      59.084  51.041  35.221  1.00  0.00
H
ATOM   6719  HB3 TRP   406      58.108  52.036  34.160  1.00  0.00
H
ATOM   6720  CG  TRP   406      57.984  52.571  36.211  1.00  0.00
C
ATOM   6721  CD1 TRP   406      58.511  52.494  37.453  1.00  0.00
C
ATOM   6722  HD1 TRP   406      59.133  51.679  37.805  1.00  0.00
H
ATOM   6723  NE1 TRP   406      58.127  53.595  38.194  1.00  0.00
N
ATOM   6724  HE1 TRP   406      58.430  53.760  39.144  1.00  0.00
H
ATOM   6725  CE2 TRP   406      57.366  54.468  37.442  1.00  0.00
C
ATOM   6726  CZ2 TRP   406      56.805  55.729  37.700  1.00  0.00
C
ATOM   6727  HZ2 TRP   406      56.935  56.210  38.658  1.00  0.00
H
ATOM   6728  CH2 TRP   406      56.126  56.394  36.666  1.00  0.00
C
ATOM   6729  HH2 TRP   406      55.749  57.393  36.822  1.00  0.00
H
ATOM   6730  CZ3 TRP   406      55.975  55.778  35.412  1.00  0.00
C
ATOM   6731  HZ3 TRP   406      55.466  56.293  34.609  1.00  0.00
H
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ATOM   6732  CE3 TRP   406      56.527  54.509  35.168  1.00  0.00
C
ATOM   6733  HE3 TRP   406      56.439  54.076  34.182  1.00  0.00
H
ATOM   6734  CD2 TRP   406      57.252  53.832  36.169  1.00  0.00
C
ATOM   6735  C   TRP   406      57.024  49.731  36.519  1.00  0.00
C
ATOM   6736  O   TRP   406      58.086  49.313  36.982  1.00  0.00
O
ATOM   6737  N   GLN   407      55.881  49.598  37.197  1.00  0.00
N
ATOM   6738  H   GLN   407      55.037  49.930  36.748  1.00  0.00
H
ATOM   6739  CA  GLN   407      55.715  48.733  38.372  1.00  0.00
C
ATOM   6740  HA  GLN   407      56.686  48.375  38.717  1.00  0.00
H
ATOM   6741  CB  GLN   407      55.024  49.478  39.531  1.00  0.00
C
ATOM   6742  HB2 GLN   407      54.009  49.709  39.215  1.00  0.00
H
ATOM   6743  HB3 GLN   407      54.941  48.803  40.385  1.00  0.00
H
ATOM   6744  CG  GLN   407      55.685  50.785  40.000  1.00  0.00
C
ATOM   6745  HG2 GLN   407      55.886  51.428  39.145  1.00  0.00
H
ATOM   6746  HG3 GLN   407      54.983  51.313  40.644  1.00  0.00
H
ATOM   6747  CD  GLN   407      56.968  50.561  40.793  1.00  0.00
C
ATOM   6748  OE1 GLN   407      56.975  50.456  42.011  1.00  0.00
O
ATOM   6749  NE2 GLN   407      58.110  50.474  40.149  1.00  0.00
N
ATOM   6750 HE21 GLN   407      58.941  50.322  40.696  1.00  0.00
H
ATOM   6751 HE22 GLN   407      58.123  50.467  39.140  1.00  0.00
H
ATOM   6752  C   GLN   407      54.868  47.518  37.981  1.00  0.00
C
ATOM   6753  O   GLN   407      53.869  47.667  37.278  1.00  0.00
O
ATOM   6754  N   ALA   408      55.210  46.333  38.494  1.00  0.00
N
ATOM   6755  H   ALA   408      56.017  46.268  39.089  1.00  0.00
H
ATOM   6756  CA  ALA   408      54.361  45.152  38.350  1.00  0.00
C
ATOM   6757  HA  ALA   408      54.230  44.951  37.284  1.00  0.00
H
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ATOM   6758  CB  ALA   408      55.061  43.945  38.988  1.00  0.00
C
ATOM   6759  HB1 ALA   408      55.212  44.120  40.055  1.00  0.00
H
ATOM   6760  HB2 ALA   408      54.442  43.055  38.861  1.00  0.00
H
ATOM   6761  HB3 ALA   408      56.026  43.773  38.507  1.00  0.00
H
ATOM   6762  C   ALA   408      52.972  45.410  38.968  1.00  0.00
C
ATOM   6763  O   ALA   408      52.864  45.902  40.091  1.00  0.00
O
ATOM   6764  N   THR   409      51.908  45.098  38.225  1.00  0.00
N
ATOM   6765  H   THR   409      52.054  44.706  37.305  1.00  0.00
H
ATOM   6766  CA  THR   409      50.519  45.389  38.611  1.00  0.00
C
ATOM   6767  HA  THR   409      50.431  45.295  39.694  1.00  0.00
H
ATOM   6768  CB  THR   409      50.158  46.838  38.242  1.00  0.00
C
ATOM   6769  HB  THR   409      50.869  47.505  38.728  1.00  0.00
H
ATOM   6770  CG2 THR   409      50.144  47.149  36.746  1.00  0.00
C
ATOM   6771 HG21 THR   409      49.349  46.590  36.255  1.00  0.00
H
ATOM   6772 HG22 THR   409      49.989  48.215  36.586  1.00  0.00
H
ATOM   6773 HG23 THR   409      51.101  46.874  36.298  1.00  0.00
H
ATOM   6774  OG1 THR   409      48.866  47.152  38.702  1.00  0.00
O
ATOM   6775  HG1 THR   409      48.427  47.571  37.958  1.00  0.00
H
ATOM   6776  C   THR   409      49.560  44.385  37.972  1.00  0.00
C
ATOM   6777  O   THR   409      49.774  43.953  36.841  1.00  0.00
O
ATOM   6778  N   TRP   410      48.510  43.985  38.691  1.00  0.00
N
ATOM   6779  H   TRP   410      48.340  44.412  39.592  1.00  0.00
H
ATOM   6780  CA  TRP   410      47.541  42.981  38.241  1.00  0.00
C
ATOM   6781  HA  TRP   410      47.349  43.131  37.178  1.00  0.00
H
ATOM   6782  CB  TRP   410      48.144  41.577  38.433  1.00  0.00
C
ATOM   6783  HB2 TRP   410      49.073  41.516  37.862  1.00  0.00
H
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ATOM   6784  HB3 TRP   410      48.405  41.455  39.484  1.00  0.00
H
ATOM   6785  CG  TRP   410      47.288  40.413  38.025  1.00  0.00
C
ATOM   6786  CD1 TRP   410      46.974  40.069  36.755  1.00  0.00
C
ATOM   6787  HD1 TRP   410      47.299  40.606  35.869  1.00  0.00
H
ATOM   6788  NE1 TRP   410      46.160  38.951  36.764  1.00  0.00
N
ATOM   6789  HE1 TRP   410      45.696  38.594  35.938  1.00  0.00
H
ATOM   6790  CE2 TRP   410      45.926  38.500  38.048  1.00  0.00
C
ATOM   6791  CZ2 TRP   410      45.193  37.423  38.574  1.00  0.00
C
ATOM   6792  HZ2 TRP   410      44.673  36.742  37.917  1.00  0.00
H
ATOM   6793  CH2 TRP   410      45.135  37.249  39.968  1.00  0.00
C
ATOM   6794  HH2 TRP   410      44.572  36.428  40.391  1.00  0.00
H
ATOM   6795  CZ3 TRP   410      45.800  38.153  40.815  1.00  0.00
C
ATOM   6796  HZ3 TRP   410      45.752  38.017  41.887  1.00  0.00
H
ATOM   6797  CE3 TRP   410      46.529  39.232  40.276  1.00  0.00
C
ATOM   6798  HE3 TRP   410      47.026  39.924  40.939  1.00  0.00
H
ATOM   6799  CD2 TRP   410      46.620  39.430  38.880  1.00  0.00
C
ATOM   6800  C   TRP   410      46.210  43.125  38.996  1.00  0.00
C
ATOM   6801  O   TRP   410      46.175  43.642  40.113  1.00  0.00
O
ATOM   6802  N   ILE   411      45.132  42.643  38.375  1.00  0.00
N
ATOM   6803  H   ILE   411      45.285  42.136  37.514  1.00  0.00
H
ATOM   6804  CA  ILE   411      43.765  42.549  38.909  1.00  0.00
C
ATOM   6805  HA  ILE   411      43.778  42.772  39.973  1.00  0.00
H
ATOM   6806  CB  ILE   411      42.834  43.564  38.194  1.00  0.00
C
ATOM   6807  HB  ILE   411      42.884  43.347  37.125  1.00  0.00
H
ATOM   6808  CG2 ILE   411      41.354  43.441  38.601  1.00  0.00
C
ATOM   6809 HG21 ILE   411      41.223  43.626  39.659  1.00  0.00
H
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ATOM   6810 HG22 ILE   411      40.759  44.164  38.043  1.00  0.00
H
ATOM   6811 HG23 ILE   411      40.968  42.449  38.378  1.00  0.00
H
ATOM   6812  CG1 ILE   411      43.292  45.029  38.367  1.00  0.00
C
ATOM   6813 HG12 ILE   411      44.306  45.116  37.989  1.00  0.00
H
ATOM   6814 HG13 ILE   411      42.664  45.668  37.745  1.00  0.00
H
ATOM   6815  CD1 ILE   411      43.277  45.597  39.791  1.00  0.00
C
ATOM   6816 HD11 ILE   411      43.859  44.976  40.471  1.00  0.00
H
ATOM   6817 HD12 ILE   411      43.714  46.593  39.768  1.00  0.00
H
ATOM   6818 HD13 ILE   411      42.255  45.680  40.149  1.00  0.00
H
ATOM   6819  C   ILE   411      43.296  41.100  38.669  1.00  0.00
C
ATOM   6820  O   ILE   411      43.606  40.576  37.595  1.00  0.00
O
ATOM   6821  N   PRO   412      42.561  40.455  39.604  1.00  0.00
N
ATOM   6822  CD  PRO   412      42.337  40.883  40.978  1.00  0.00
C
ATOM   6823  HD2 PRO   412      41.460  41.529  41.017  1.00  0.00
H
ATOM   6824  HD3 PRO   412      43.205  41.385  41.404  1.00  0.00
H
ATOM   6825  CG  PRO   412      42.063  39.602  41.758  1.00  0.00
C
ATOM   6826  HG2 PRO   412      41.486  39.790  42.662  1.00  0.00
H
ATOM   6827  HG3 PRO   412      43.005  39.105  41.997  1.00  0.00
H
ATOM   6828  CB  PRO   412      41.287  38.774  40.738  1.00  0.00
C
ATOM   6829  HB2 PRO   412      40.243  39.095  40.735  1.00  0.00
H
ATOM   6830  HB3 PRO   412      41.356  37.708  40.955  1.00  0.00
H
ATOM   6831  CA  PRO   412      41.960  39.127  39.401  1.00  0.00
C
ATOM   6832  HA  PRO   412      42.756  38.410  39.210  1.00  0.00
H
ATOM   6833  C   PRO   412      40.964  39.062  38.229  1.00  0.00
C
ATOM   6834  O   PRO   412      40.826  40.005  37.458  1.00  0.00
O
ATOM   6835  N   GLU   413      40.239  37.951  38.084  1.00  0.00
N
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ATOM   6836  H   GLU   413      40.329  37.217  38.767  1.00  0.00
H
ATOM   6837  CA  GLU   413      39.156  37.835  37.097  1.00  0.00
C
ATOM   6838  HA  GLU   413      39.585  37.882  36.094  1.00  0.00
H
ATOM   6839  CB  GLU   413      38.479  36.473  37.265  1.00  0.00
C
ATOM   6840  HB2 GLU   413      39.256  35.707  37.267  1.00  0.00
H
ATOM   6841  HB3 GLU   413      37.955  36.448  38.222  1.00  0.00
H
ATOM   6842  CG  GLU   413      37.493  36.150  36.139  1.00  0.00
C
ATOM   6843  HG2 GLU   413      36.751  36.946  36.070  1.00  0.00
H
ATOM   6844  HG3 GLU   413      38.042  36.107  35.194  1.00  0.00
H
ATOM   6845  CD  GLU   413      36.784  34.811  36.382  1.00  0.00
C
ATOM   6846  OE1 GLU   413      37.228  34.011  37.240  1.00  0.00
O
ATOM   6847  OE2 GLU   413      35.782  34.518  35.693  1.00  0.00
O
ATOM   6848  C   GLU   413      38.152  38.991  37.252  1.00  0.00
C
ATOM   6849  O   GLU   413      37.564  39.187  38.323  1.00  0.00
O
ATOM   6850  N   TRP   414      38.002  39.789  36.189  1.00  0.00
N
ATOM   6851  H   TRP   414      38.455  39.551  35.324  1.00  0.00
H
ATOM   6852  CA  TRP   414      37.212  41.012  36.213  1.00  0.00
C
ATOM   6853  HA  TRP   414      36.399  40.836  36.910  1.00  0.00
H
ATOM   6854  CB  TRP   414      38.059  42.194  36.722  1.00  0.00
C
ATOM   6855  HB2 TRP   414      37.364  42.958  37.074  1.00  0.00
H
ATOM   6856  HB3 TRP   414      38.634  41.869  37.590  1.00  0.00
H
ATOM   6857  CG  TRP   414      38.988  42.871  35.748  1.00  0.00
C
ATOM   6858  CD1 TRP   414      40.299  42.598  35.563  1.00  0.00
C
ATOM   6859  HD1 TRP   414      40.849  41.839  36.102  1.00  0.00
H
ATOM   6860  NE1 TRP   414      40.854  43.489  34.670  1.00  0.00
N
ATOM   6861  HE1 TRP   414      41.852  43.548  34.507  1.00  0.00
H
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ATOM   6862  CE2 TRP   414      39.910  44.375  34.200  1.00  0.00
C
ATOM   6863  CZ2 TRP   414      39.963  45.439  33.293  1.00  0.00
C
ATOM   6864  HZ2 TRP   414      40.897  45.712  32.836  1.00  0.00
H
ATOM   6865  CH2 TRP   414      38.788  46.148  32.998  1.00  0.00
C
ATOM   6866  HH2 TRP   414      38.809  46.993  32.324  1.00  0.00
H
ATOM   6867  CZ3 TRP   414      37.583  45.793  33.624  1.00  0.00
C
ATOM   6868  HZ3 TRP   414      36.686  46.362  33.422  1.00  0.00
H
ATOM   6869  CE3 TRP   414      37.546  44.734  34.547  1.00  0.00
C
ATOM   6870  HE3 TRP   414      36.623  44.496  35.053  1.00  0.00
H
ATOM   6871  CD2 TRP   414      38.702  43.990  34.854  1.00  0.00
C
ATOM   6872  C   TRP   414      36.583  41.347  34.862  1.00  0.00
C
ATOM   6873  O   TRP   414      37.238  41.270  33.822  1.00  0.00
O
ATOM   6874  N   GLU   415      35.344  41.830  34.904  1.00  0.00
N
ATOM   6875  H   GLU   415      34.924  41.912  35.824  1.00  0.00
H
ATOM   6876  CA  GLU   415      34.554  42.263  33.749  1.00  0.00
C
ATOM   6877  HA  GLU   415      35.143  42.118  32.844  1.00  0.00
H
ATOM   6878  CB  GLU   415      33.280  41.406  33.603  1.00  0.00
C
ATOM   6879  HB2 GLU   415      32.764  41.309  34.560  1.00  0.00
H
ATOM   6880  HB3 GLU   415      32.606  41.927  32.921  1.00  0.00
H
ATOM   6881  CG  GLU   415      33.532  40.019  32.988  1.00  0.00
C
ATOM   6882  HG2 GLU   415      32.570  39.610  32.671  1.00  0.00
H
ATOM   6883  HG3 GLU   415      34.139  40.139  32.087  1.00  0.00
H
ATOM   6884  CD  GLU   415      34.188  39.014  33.945  1.00  0.00
C
ATOM   6885  OE1 GLU   415      33.459  38.502  34.830  1.00  0.00
O
ATOM   6886  OE2 GLU   415      35.381  38.701  33.746  1.00  0.00
O
ATOM   6887  C   GLU   415      34.219  43.766  33.826  1.00  0.00
C
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ATOM   6888  O   GLU   415      34.036  44.338  34.905  1.00  0.00
O
ATOM   6889  N   PHE   416      34.136  44.420  32.663  1.00  0.00
N
ATOM   6890  H   PHE   416      34.217  43.897  31.807  1.00  0.00
H
ATOM   6891  CA  PHE   416      33.743  45.828  32.562  1.00  0.00
C
ATOM   6892  HA  PHE   416      34.254  46.387  33.345  1.00  0.00
H
ATOM   6893  CB  PHE   416      34.185  46.410  31.206  1.00  0.00
C
ATOM   6894  HB2 PHE   416      35.271  46.505  31.198  1.00  0.00
H
ATOM   6895  HB3 PHE   416      33.905  45.706  30.420  1.00  0.00
H
ATOM   6896  CG  PHE   416      33.572  47.766  30.884  1.00  0.00
C
ATOM   6897  CD1 PHE   416      33.734  48.845  31.772  1.00  0.00
C
ATOM   6898  HD1 PHE   416      34.333  48.724  32.661  1.00  0.00
H
ATOM   6899  CE1 PHE   416      33.086  50.068  31.535  1.00  0.00
C
ATOM   6900  HE1 PHE   416      33.188  50.874  32.247  1.00  0.00
H
ATOM   6901  CZ  PHE   416      32.280  50.225  30.396  1.00  0.00
C
ATOM   6902  HZ  PHE   416      31.787  51.170  30.214  1.00  0.00
H
ATOM   6903  CE2 PHE   416      32.126  49.157  29.494  1.00  0.00
C
ATOM   6904  HE2 PHE   416      31.510  49.266  28.613  1.00  0.00
H
ATOM   6905  CD2 PHE   416      32.771  47.930  29.738  1.00  0.00
C
ATOM   6906  HD2 PHE   416      32.642  47.111  29.044  1.00  0.00
H
ATOM   6907  C   PHE   416      32.232  45.995  32.776  1.00  0.00
C
ATOM   6908  O   PHE   416      31.432  45.259  32.198  1.00  0.00
O
ATOM   6909  N   VAL   417      31.842  47.010  33.552  1.00  0.00
N
ATOM   6910  H   VAL   417      32.561  47.555  34.015  1.00  0.00
H
ATOM   6911  CA  VAL   417      30.448  47.444  33.723  1.00  0.00
C
ATOM   6912  HA  VAL   417      29.828  46.888  33.020  1.00  0.00
H
ATOM   6913  CB  VAL   417      29.932  47.088  35.135  1.00  0.00
C
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ATOM   6914  HB  VAL   417      29.925  46.000  35.207  1.00  0.00
H
ATOM   6915  CG1 VAL   417      30.819  47.602  36.278  1.00  0.00
C
ATOM   6916 HG11 VAL   417      30.956  48.679  36.216  1.00  0.00
H
ATOM   6917 HG12 VAL   417      30.360  47.364  37.238  1.00  0.00
H
ATOM   6918 HG13 VAL   417      31.790  47.119  36.231  1.00  0.00
H
ATOM   6919  CG2 VAL   417      28.489  47.558  35.342  1.00  0.00
C
ATOM   6920 HG21 VAL   417      27.843  47.127  34.576  1.00  0.00
H
ATOM   6921 HG22 VAL   417      28.137  47.226  36.321  1.00  0.00
H
ATOM   6922 HG23 VAL   417      28.426  48.644  35.305  1.00  0.00
H
ATOM   6923  C   VAL   417      30.300  48.929  33.368  1.00  0.00
C
ATOM   6924  O   VAL   417      30.976  49.788  33.933  1.00  0.00
O
ATOM   6925  N   ASN   418      29.397  49.253  32.435  1.00  0.00
N
ATOM   6926  H   ASN   418      28.861  48.516  32.007  1.00  0.00
H
ATOM   6927  CA  ASN   418      29.142  50.635  32.015  1.00  0.00
C
ATOM   6928  HA  ASN   418      30.083  51.184  32.103  1.00  0.00
H
ATOM   6929  CB  ASN   418      28.746  50.685  30.524  1.00  0.00
C
ATOM   6930  HB2 ASN   418      29.374  49.997  29.959  1.00  0.00
H
ATOM   6931  HB3 ASN   418      27.707  50.387  30.391  1.00  0.00
H
ATOM   6932  CG  ASN   418      28.931  52.080  29.945  1.00  0.00
C
ATOM   6933  OD1 ASN   418      29.008  53.076  30.641  1.00  0.00
O
ATOM   6934  ND2 ASN   418      29.062  52.201  28.645  1.00  0.00
N
ATOM   6935 HD21 ASN   418      29.197  53.135  28.298  1.00  0.00
H
ATOM   6936 HD22 ASN   418      29.022  51.400  28.041  1.00  0.00
H
ATOM   6937  C   ASN   418      28.164  51.338  32.977  1.00  0.00
C
ATOM   6938  O   ASN   418      26.993  51.564  32.658  1.00  0.00
O
ATOM   6939  N   THR   419      28.673  51.649  34.172  1.00  0.00
N
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ATOM   6940  H   THR   419      29.633  51.369  34.350  1.00  0.00
H
ATOM   6941  CA  THR   419      27.992  52.403  35.234  1.00  0.00
C
ATOM   6942  HA  THR   419      27.005  52.701  34.884  1.00  0.00
H
ATOM   6943  CB  THR   419      27.715  51.497  36.449  1.00  0.00
C
ATOM   6944  HB  THR   419      27.115  50.658  36.095  1.00  0.00
H
ATOM   6945  CG2 THR   419      28.930  50.908  37.166  1.00  0.00
C
ATOM   6946 HG21 THR   419      29.424  51.664  37.775  1.00  0.00
H
ATOM   6947 HG22 THR   419      28.609  50.087  37.807  1.00  0.00
H
ATOM   6948 HG23 THR   419      29.636  50.525  36.434  1.00  0.00
H
ATOM   6949  OG1 THR   419      26.953  52.193  37.400  1.00  0.00
O
ATOM   6950  HG1 THR   419      26.927  51.647  38.190  1.00  0.00
H
ATOM   6951  C   THR   419      28.783  53.689  35.543  1.00  0.00
C
ATOM   6952  O   THR   419      29.768  53.654  36.281  1.00  0.00
O
ATOM   6953  N   PRO   420      28.452  54.827  34.895  1.00  0.00
N
ATOM   6954  CD  PRO   420      27.550  54.940  33.755  1.00  0.00
C
ATOM   6955  HD2 PRO   420      26.525  55.069  34.109  1.00  0.00
H
ATOM   6956  HD3 PRO   420      27.610  54.071  33.098  1.00  0.00
H
ATOM   6957  CG  PRO   420      28.006  56.187  32.996  1.00  0.00
C
ATOM   6958  HG2 PRO   420      27.187  56.649  32.443  1.00  0.00
H
ATOM   6959  HG3 PRO   420      28.835  55.941  32.330  1.00  0.00
H
ATOM   6960  CB  PRO   420      28.507  57.088  34.123  1.00  0.00
C
ATOM   6961  HB2 PRO   420      27.653  57.575  34.600  1.00  0.00
H
ATOM   6962  HB3 PRO   420      29.219  57.832  33.764  1.00  0.00
H
ATOM   6963  CA  PRO   420      29.159  56.095  35.093  1.00  0.00
C
ATOM   6964  HA  PRO   420      30.190  55.933  34.788  1.00  0.00
H
ATOM   6965  C   PRO   420      29.110  56.614  36.546  1.00  0.00
C
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ATOM   6966  O   PRO   420      28.077  56.461  37.200  1.00  0.00
O
ATOM   6967  N   PRO   421      30.158  57.307  37.041  1.00  0.00
N
ATOM   6968  CD  PRO   421      30.170  57.822  38.404  1.00  0.00
C
ATOM   6969  HD2 PRO   421      29.930  57.037  39.123  1.00  0.00
H
ATOM   6970  HD3 PRO   421      29.456  58.641  38.491  1.00  0.00
H
ATOM   6971  CG  PRO   421      31.588  58.333  38.636  1.00  0.00
C
ATOM   6972  HG2 PRO   421      32.210  57.496  38.943  1.00  0.00
H
ATOM   6973  HG3 PRO   421      31.623  59.136  39.372  1.00  0.00
H
ATOM   6974  CB  PRO   421      32.018  58.789  37.242  1.00  0.00
C
ATOM   6975  HB2 PRO   421      33.105  58.819  37.147  1.00  0.00
H
ATOM   6976  HB3 PRO   421      31.589  59.770  37.027  1.00  0.00
H
ATOM   6977  CA  PRO   421      31.381  57.723  36.340  1.00  0.00
C
ATOM   6978  HA  PRO   421      31.120  58.179  35.385  1.00  0.00
H
ATOM   6979  C   PRO   421      32.371  56.572  36.085  1.00  0.00
C
ATOM   6980  O   PRO   421      32.595  55.721  36.942  1.00  0.00
O
ATOM   6981  N   LEU   422      33.009  56.591  34.909  1.00  0.00
N
ATOM   6982  H   LEU   422      32.862  57.373  34.294  1.00  0.00
H
ATOM   6983  CA  LEU   422      33.991  55.579  34.498  1.00  0.00
C
ATOM   6984  HA  LEU   422      33.839  54.683  35.102  1.00  0.00
H
ATOM   6985  CB  LEU   422      33.797  55.179  33.022  1.00  0.00
C
ATOM   6986  HB2 LEU   422      34.074  56.027  32.393  1.00  0.00
H
ATOM   6987  HB3 LEU   422      34.494  54.366  32.806  1.00  0.00
H
ATOM   6988  CG  LEU   422      32.381  54.722  32.626  1.00  0.00
C
ATOM   6989  HG  LEU   422      31.701  55.572  32.696  1.00  0.00
H
ATOM   6990  CD1 LEU   422      32.414  54.241  31.174  1.00  0.00
C
ATOM   6991 HD11 LEU   422      33.049  53.361  31.085  1.00  0.00
H
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ATOM   6992 HD12 LEU   422      31.404  53.994  30.852  1.00  0.00
H
ATOM   6993 HD13 LEU   422      32.795  55.036  30.532  1.00  0.00
H
ATOM   6994  CD2 LEU   422      31.839  53.586  33.494  1.00  0.00
C
ATOM   6995 HD21 LEU   422      31.727  53.920  34.525  1.00  0.00
H
ATOM   6996 HD22 LEU   422      30.858  53.286  33.129  1.00  0.00
H
ATOM   6997 HD23 LEU   422      32.516  52.734  33.477  1.00  0.00
H
ATOM   6998  C   LEU   422      35.433  56.040  34.740  1.00  0.00
C
ATOM   6999  O   LEU   422      35.763  57.219  34.604  1.00  0.00
O
ATOM   7000  N   VAL   423      36.308  55.082  35.033  1.00  0.00
N
ATOM   7001  H   VAL   423      35.951  54.133  35.092  1.00  0.00
H
ATOM   7002  CA  VAL   423      37.749  55.280  35.204  1.00  0.00
C
ATOM   7003  HA  VAL   423      37.913  56.254  35.670  1.00  0.00
H
ATOM   7004  CB  VAL   423      38.336  54.210  36.136  1.00  0.00
C
ATOM   7005  HB  VAL   423      38.130  53.237  35.706  1.00  0.00
H
ATOM   7006  CG1 VAL   423      39.856  54.354  36.279  1.00  0.00
C
ATOM   7007 HG11 VAL   423      40.125  55.388  36.479  1.00  0.00
H
ATOM   7008 HG12 VAL   423      40.224  53.723  37.087  1.00  0.00
H
ATOM   7009 HG13 VAL   423      40.334  54.038  35.353  1.00  0.00
H
ATOM   7010  CG2 VAL   423      37.679  54.267  37.518  1.00  0.00
C
ATOM   7011 HG21 VAL   423      36.625  54.002  37.442  1.00  0.00
H
ATOM   7012 HG22 VAL   423      38.160  53.554  38.186  1.00  0.00
H
ATOM   7013 HG23 VAL   423      37.762  55.275  37.922  1.00  0.00
H
ATOM   7014  C   VAL   423      38.455  55.257  33.848  1.00  0.00
C
ATOM   7015  O   VAL   423      38.331  54.303  33.073  1.00  0.00
O
ATOM   7016  N   LYS   424      39.256  56.293  33.591  1.00  0.00
N
ATOM   7017  H   LYS   424      39.324  57.023  34.289  1.00  0.00
H
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ATOM   7018  CA  LYS   424      40.124  56.430  32.417  1.00  0.00
C
ATOM   7019  HA  LYS   424      40.410  55.443  32.073  1.00  0.00
H
ATOM   7020  CB  LYS   424      39.363  57.108  31.266  1.00  0.00
C
ATOM   7021  HB2 LYS   424      39.992  57.103  30.373  1.00  0.00
H
ATOM   7022  HB3 LYS   424      38.476  56.511  31.047  1.00  0.00
H
ATOM   7023  CG  LYS   424      38.936  58.557  31.558  1.00  0.00
C
ATOM   7024  HG2 LYS   424      38.395  58.602  32.505  1.00  0.00
H
ATOM   7025  HG3 LYS   424      39.822  59.190  31.622  1.00  0.00
H
ATOM   7026  CD  LYS   424      38.015  59.055  30.437  1.00  0.00
C
ATOM   7027  HD2 LYS   424      38.517  58.958  29.471  1.00  0.00
H
ATOM   7028  HD3 LYS   424      37.123  58.426  30.419  1.00  0.00
H
ATOM   7029  CE  LYS   424      37.567  60.504  30.640  1.00  0.00
C
ATOM   7030  HE2 LYS   424      36.745  60.702  29.945  1.00  0.00
H
ATOM   7031  HE3 LYS   424      37.185  60.632  31.657  1.00  0.00
H
ATOM   7032  NZ  LYS   424      38.654  61.473  30.370  1.00  0.00
N
ATOM   7033  HZ1 LYS   424      39.080  61.286  29.471  1.00  0.00
H
ATOM   7034  HZ2 LYS   424      38.249  62.406  30.314  1.00  0.00
H
ATOM   7035  HZ3 LYS   424      39.348  61.459  31.105  1.00  0.00
H
ATOM   7036  C   LYS   424      41.407  57.166  32.786  1.00  0.00
C
ATOM   7037  O   LYS   424      41.406  57.977  33.707  1.00  0.00
O
ATOM   7038  N   LEU   425      42.481  56.910  32.042  1.00  0.00
N
ATOM   7039  H   LEU   425      42.386  56.255  31.284  1.00  0.00
H
ATOM   7040  CA  LEU   425      43.631  57.813  32.014  1.00  0.00
C
ATOM   7041  HA  LEU   425      43.902  58.089  33.035  1.00  0.00
H
ATOM   7042  CB  LEU   425      44.838  57.118  31.350  1.00  0.00
C
ATOM   7043  HB2 LEU   425      44.567  56.849  30.327  1.00  0.00
H
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ATOM   7044  HB3 LEU   425      45.667  57.825  31.294  1.00  0.00
H
ATOM   7045  CG  LEU   425      45.321  55.850  32.089  1.00  0.00
C
ATOM   7046  HG  LEU   425      44.478  55.175  32.240  1.00  0.00
H
ATOM   7047  CD1 LEU   425      46.356  55.107  31.247  1.00  0.00
C
ATOM   7048 HD11 LEU   425      47.242  55.726  31.104  1.00  0.00
H
ATOM   7049 HD12 LEU   425      46.647  54.184  31.743  1.00  0.00
H
ATOM   7050 HD13 LEU   425      45.934  54.857  30.274  1.00  0.00
H
ATOM   7051  CD2 LEU   425      45.937  56.168  33.454  1.00  0.00
C
ATOM   7052 HD21 LEU   425      45.200  56.632  34.108  1.00  0.00
H
ATOM   7053 HD22 LEU   425      46.280  55.247  33.926  1.00  0.00
H
ATOM   7054 HD23 LEU   425      46.789  56.838  33.332  1.00  0.00
H
ATOM   7055  C   LEU   425      43.190  59.091  31.282  1.00  0.00
C
ATOM   7056  O   LEU   425      42.503  59.022  30.262  1.00  0.00
O
ATOM   7057  N   TRP   426      43.516  60.258  31.832  1.00  0.00
N
ATOM   7058  H   TRP   426      44.041  60.264  32.693  1.00  0.00
H
ATOM   7059  CA  TRP   426      42.979  61.533  31.341  1.00  0.00
C
ATOM   7060  HA  TRP   426      41.982  61.362  30.939  1.00  0.00
H
ATOM   7061  CB  TRP   426      42.819  62.485  32.525  1.00  0.00
C
ATOM   7062  HB2 TRP   426      43.769  62.571  33.055  1.00  0.00
H
ATOM   7063  HB3 TRP   426      42.564  63.466  32.132  1.00  0.00
H
ATOM   7064  CG  TRP   426      41.721  62.084  33.462  1.00  0.00
C
ATOM   7065  CD1 TRP   426      41.815  61.188  34.473  1.00  0.00
C
ATOM   7066  HD1 TRP   426      42.711  60.654  34.772  1.00  0.00
H
ATOM   7067  NE1 TRP   426      40.582  61.015  35.063  1.00  0.00
N
ATOM   7068  HE1 TRP   426      40.451  60.394  35.857  1.00  0.00
H
ATOM   7069  CE2 TRP   426      39.609  61.765  34.435  1.00  0.00
C
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ATOM   7070  CZ2 TRP   426      38.224  61.897  34.617  1.00  0.00
C
ATOM   7071  HZ2 TRP   426      37.724  61.327  35.386  1.00  0.00
H
ATOM   7072  CH2 TRP   426      37.505  62.792  33.805  1.00  0.00
C
ATOM   7073  HH2 TRP   426      36.439  62.920  33.947  1.00  0.00
H
ATOM   7074  CZ3 TRP   426      38.178  63.549  32.830  1.00  0.00
C
ATOM   7075  HZ3 TRP   426      37.624  64.265  32.234  1.00  0.00
H
ATOM   7076  CE3 TRP   426      39.569  63.403  32.647  1.00  0.00
C
ATOM   7077  HE3 TRP   426      40.082  64.014  31.916  1.00  0.00
H
ATOM   7078  CD2 TRP   426      40.318  62.497  33.434  1.00  0.00
C
ATOM   7079  C   TRP   426      43.795  62.144  30.195  1.00  0.00
C
ATOM   7080  O   TRP   426      43.283  62.990  29.468  1.00  0.00
O
ATOM   7081  N   TYR   427      45.045  61.706  30.045  1.00  0.00
N
ATOM   7082  H   TYR   427      45.380  61.018  30.704  1.00  0.00
H
ATOM   7083  CA  TYR   427      45.999  62.065  28.997  1.00  0.00
C
ATOM   7084  HA  TYR   427      45.489  62.102  28.034  1.00  0.00
H
ATOM   7085  CB  TYR   427      46.627  63.448  29.277  1.00  0.00
C
ATOM   7086  HB2 TYR   427      47.332  63.693  28.480  1.00  0.00
H
ATOM   7087  HB3 TYR   427      45.841  64.205  29.238  1.00  0.00
H
ATOM   7088  CG  TYR   427      47.334  63.542  30.618  1.00  0.00
C
ATOM   7089  CD1 TYR   427      46.569  63.702  31.787  1.00  0.00
C
ATOM   7090  HD1 TYR   427      45.501  63.827  31.712  1.00  0.00
H
ATOM   7091  CE1 TYR   427      47.180  63.661  33.049  1.00  0.00
C
ATOM   7092  HE1 TYR   427      46.587  63.753  33.945  1.00  0.00
H
ATOM   7093  CZ  TYR   427      48.572  63.481  33.143  1.00  0.00
C
ATOM   7094  OH  TYR   427      49.136  63.382  34.371  1.00  0.00
O
ATOM   7095  HH  TYR   427      48.448  63.357  35.052  1.00  0.00
H
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ATOM   7096  CE2 TYR   427      49.355  63.372  31.973  1.00  0.00
C
ATOM   7097  HE2 TYR   427      50.423  63.247  32.060  1.00  0.00
H
ATOM   7098  CD2 TYR   427      48.733  63.399  30.708  1.00  0.00
C
ATOM   7099  HD2 TYR   427      49.325  63.286  29.809  1.00  0.00
H
ATOM   7100  C   TYR   427      47.078  60.973  28.930  1.00  0.00
C
ATOM   7101  O   TYR   427      47.276  60.209  29.881  1.00  0.00
O
ATOM   7102  N   GLN   428      47.788  60.916  27.808  1.00  0.00
N
ATOM   7103  H   GLN   428      47.611  61.602  27.086  1.00  0.00
H
ATOM   7104  CA  GLN   428      48.947  60.054  27.596  1.00  0.00
C
ATOM   7105  HA  GLN   428      49.244  59.598  28.541  1.00  0.00
H
ATOM   7106  CB  GLN   428      48.559  58.941  26.602  1.00  0.00
C
ATOM   7107  HB2 GLN   428      47.704  58.395  27.005  1.00  0.00
H
ATOM   7108  HB3 GLN   428      48.247  59.401  25.663  1.00  0.00
H
ATOM   7109  CG  GLN   428      49.675  57.931  26.297  1.00  0.00
C
ATOM   7110  HG2 GLN   428      49.281  57.163  25.636  1.00  0.00
H
ATOM   7111  HG3 GLN   428      50.476  58.441  25.767  1.00  0.00
H
ATOM   7112  CD  GLN   428      50.214  57.244  27.544  1.00  0.00
C
ATOM   7113  OE1 GLN   428      49.465  56.727  28.358  1.00  0.00
O
ATOM   7114  NE2 GLN   428      51.512  57.259  27.758  1.00  0.00
N
ATOM   7115 HE21 GLN   428      51.845  56.733  28.566  1.00  0.00
H
ATOM   7116 HE22 GLN   428      52.149  57.606  27.054  1.00  0.00
H
ATOM   7117  C   GLN   428      50.100  60.938  27.106  1.00  0.00
C
ATOM   7118  O   GLN   428      49.865  61.917  26.398  1.00  0.00
O
ATOM   7119  N   LEU   429      51.336  60.610  27.485  1.00  0.00
N
ATOM   7120  H   LEU   429      51.473  59.769  28.026  1.00  0.00
H
ATOM   7121  CA  LEU   429      52.518  61.263  26.916  1.00  0.00
C
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ATOM   7122  HA  LEU   429      52.268  62.293  26.652  1.00  0.00
H
ATOM   7123  CB  LEU   429      53.678  61.315  27.928  1.00  0.00
C
ATOM   7124  HB2 LEU   429      54.075  60.306  28.056  1.00  0.00
H
ATOM   7125  HB3 LEU   429      54.469  61.930  27.493  1.00  0.00
H
ATOM   7126  CG  LEU   429      53.318  61.877  29.319  1.00  0.00
C
ATOM   7127  HG  LEU   429      52.634  61.187  29.814  1.00  0.00
H
ATOM   7128  CD1 LEU   429      54.585  61.977  30.168  1.00  0.00
C
ATOM   7129 HD11 LEU   429      55.235  62.757  29.776  1.00  0.00
H
ATOM   7130 HD12 LEU   429      54.313  62.206  31.195  1.00  0.00
H
ATOM   7131 HD13 LEU   429      55.112  61.024  30.155  1.00  0.00
H
ATOM   7132  CD2 LEU   429      52.660  63.259  29.268  1.00  0.00
C
ATOM   7133 HD21 LEU   429      51.694  63.188  28.770  1.00  0.00
H
ATOM   7134 HD22 LEU   429      52.498  63.627  30.281  1.00  0.00
H
ATOM   7135 HD23 LEU   429      53.291  63.958  28.720  1.00  0.00
H
ATOM   7136  C   LEU   429      52.903  60.539  25.621  1.00  0.00
C
ATOM   7137  O   LEU   429      52.895  59.304  25.584  1.00  0.00
O
ATOM   7138  N   GLU   430      53.230  61.295  24.572  1.00  0.00
N
ATOM   7139  H   GLU   430      53.294  62.299  24.700  1.00  0.00
H
ATOM   7140  CA  GLU   430      53.637  60.722  23.287  1.00  0.00
C
ATOM   7141  HA  GLU   430      52.869  60.013  22.972  1.00  0.00
H
ATOM   7142  CB  GLU   430      53.765  61.798  22.199  1.00  0.00
C
ATOM   7143  HB2 GLU   430      54.330  62.640  22.601  1.00  0.00
H
ATOM   7144  HB3 GLU   430      54.329  61.393  21.359  1.00  0.00
H
ATOM   7145  CG  GLU   430      52.414  62.295  21.669  1.00  0.00
C
ATOM   7146  HG2 GLU   430      51.771  62.588  22.502  1.00  0.00
H
ATOM   7147  HG3 GLU   430      52.619  63.195  21.090  1.00  0.00
H
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ATOM   7148  CD  GLU   430      51.697  61.283  20.750  1.00  0.00
C
ATOM   7149  OE1 GLU   430      51.832  61.422  19.511  1.00  0.00
O
ATOM   7150  OE2 GLU   430      50.975  60.385  21.242  1.00  0.00
O
ATOM   7151  C   GLU   430      54.953  59.946  23.436  1.00  0.00
C
ATOM   7152  O   GLU   430      55.836  60.307  24.217  1.00  0.00
O
ATOM   7153  N   LYS   431      55.086  58.858  22.672  1.00  0.00
N
ATOM   7154  H   LYS   431      54.320  58.623  22.058  1.00  0.00
H
ATOM   7155  CA  LYS   431      56.209  57.911  22.803  1.00  0.00
C
ATOM   7156  HA  LYS   431      56.434  57.801  23.867  1.00  0.00
H
ATOM   7157  CB  LYS   431      55.788  56.531  22.259  1.00  0.00
C
ATOM   7158  HB2 LYS   431      55.689  56.583  21.172  1.00  0.00
H
ATOM   7159  HB3 LYS   431      56.574  55.812  22.495  1.00  0.00
H
ATOM   7160  CG  LYS   431      54.446  56.059  22.861  1.00  0.00
C
ATOM   7161  HG2 LYS   431      54.478  56.154  23.948  1.00  0.00
H
ATOM   7162  HG3 LYS   431      53.651  56.707  22.490  1.00  0.00
H
ATOM   7163  CD  LYS   431      54.060  54.621  22.499  1.00  0.00
C
ATOM   7164  HD2 LYS   431      53.018  54.474  22.791  1.00  0.00
H
ATOM   7165  HD3 LYS   431      54.140  54.486  21.421  1.00  0.00
H
ATOM   7166  CE  LYS   431      54.937  53.601  23.233  1.00  0.00
C
ATOM   7167  HE2 LYS   431      55.951  53.634  22.827  1.00  0.00
H
ATOM   7168  HE3 LYS   431      54.975  53.880  24.291  1.00  0.00
H
ATOM   7169  NZ  LYS   431      54.370  52.237  23.147  1.00  0.00
N
ATOM   7170  HZ1 LYS   431      54.049  52.001  22.220  1.00  0.00
H
ATOM   7171  HZ2 LYS   431      55.019  51.551  23.504  1.00  0.00
H
ATOM   7172  HZ3 LYS   431      53.599  52.177  23.825  1.00  0.00
H
ATOM   7173  C   LYS   431      57.497  58.433  22.151  1.00  0.00
C
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ATOM   7174  O   LYS   431      58.590  58.124  22.624  1.00  0.00
O
ATOM   7175  N   GLU   432      57.349  59.263  21.122  1.00  0.00
N
ATOM   7176  H   GLU   432      56.406  59.558  20.919  1.00  0.00
H
ATOM   7177  CA  GLU   432      58.378  59.861  20.260  1.00  0.00
C
ATOM   7178  HA  GLU   432      59.357  59.742  20.724  1.00  0.00
H
ATOM   7179  CB  GLU   432      58.342  59.122  18.894  1.00  0.00
C
ATOM   7180  HB2 GLU   432      57.588  58.334  18.920  1.00  0.00
H
ATOM   7181  HB3 GLU   432      58.031  59.820  18.117  1.00  0.00
H
ATOM   7182  CG  GLU   432      59.645  58.469  18.421  1.00  0.00
C
ATOM   7183  HG2 GLU   432      59.411  57.811  17.585  1.00  0.00
H
ATOM   7184  HG3 GLU   432      60.305  59.239  18.028  1.00  0.00
H
ATOM   7185  CD  GLU   432      60.355  57.652  19.504  1.00  0.00
C
ATOM   7186  OE1 GLU   432      59.813  56.615  19.934  1.00  0.00
O
ATOM   7187  OE2 GLU   432      61.453  58.066  19.945  1.00  0.00
O
ATOM   7188  C   GLU   432      58.078  61.377  20.108  1.00  0.00
C
ATOM   7189  O   GLU   432      56.917  61.770  20.256  1.00  0.00
O
ATOM   7190  N   PRO   433      59.073  62.246  19.835  1.00  0.00
N
ATOM   7191  CD  PRO   433      60.478  61.922  19.647  1.00  0.00
C
ATOM   7192  HD2 PRO   433      60.614  61.055  19.012  1.00  0.00
H
ATOM   7193  HD3 PRO   433      60.948  61.738  20.612  1.00  0.00
H
ATOM   7194  CG  PRO   433      61.090  63.158  18.990  1.00  0.00
C
ATOM   7195  HG2 PRO   433      60.917  63.133  17.910  1.00  0.00
H
ATOM   7196  HG3 PRO   433      62.155  63.240  19.213  1.00  0.00
H
ATOM   7197  CB  PRO   433      60.280  64.300  19.609  1.00  0.00
C
ATOM   7198  HB2 PRO   433      60.283  65.192  18.981  1.00  0.00
H
ATOM   7199  HB3 PRO   433      60.671  64.538  20.598  1.00  0.00
H
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ATOM   7200  CA  PRO   433      58.876  63.700  19.742  1.00  0.00
C
ATOM   7201  HA  PRO   433      58.429  64.071  20.664  1.00  0.00
H
ATOM   7202  C   PRO   433      57.976  64.119  18.569  1.00  0.00
C
ATOM   7203  O   PRO   433      58.048  63.550  17.478  1.00  0.00
O
ATOM   7204  N   ILE   434      57.182  65.178  18.762  1.00  0.00
N
ATOM   7205  H   ILE   434      57.240  65.658  19.655  1.00  0.00
H
ATOM   7206  CA  ILE   434      56.275  65.712  17.738  1.00  0.00
C
ATOM   7207  HA  ILE   434      55.903  64.859  17.168  1.00  0.00
H
ATOM   7208  CB  ILE   434      55.037  66.439  18.326  1.00  0.00
C
ATOM   7209  HB  ILE   434      55.356  67.380  18.777  1.00  0.00
H
ATOM   7210  CG2 ILE   434      54.073  66.760  17.164  1.00  0.00
C
ATOM   7211 HG21 ILE   434      53.810  65.850  16.623  1.00  0.00
H
ATOM   7212 HG22 ILE   434      53.159  67.218  17.534  1.00  0.00
H
ATOM   7213 HG23 ILE   434      54.523  67.472  16.472  1.00  0.00
H
ATOM   7214  CG1 ILE   434      54.236  65.635  19.378  1.00  0.00
C
ATOM   7215 HG12 ILE   434      53.225  66.035  19.424  1.00  0.00
H
ATOM   7216 HG13 ILE   434      54.172  64.588  19.076  1.00  0.00
H
ATOM   7217  CD1 ILE   434      54.787  65.728  20.806  1.00  0.00
C
ATOM   7218 HD11 ILE   434      54.886  66.772  21.102  1.00  0.00
H
ATOM   7219 HD12 ILE   434      54.103  65.231  21.493  1.00  0.00
H
ATOM   7220 HD13 ILE   434      55.754  65.239  20.872  1.00  0.00
H
ATOM   7221  C   ILE   434      57.042  66.618  16.764  1.00  0.00
C
ATOM   7222  O   ILE   434      57.720  67.571  17.167  1.00  0.00
O
ATOM   7223  N   VAL   435      56.890  66.340  15.467  1.00  0.00
N
ATOM   7224  H   VAL   435      56.312  65.547  15.229  1.00  0.00
H
ATOM   7225  CA  VAL   435      57.471  67.124  14.363  1.00  0.00
C
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ATOM   7226  HA  VAL   435      58.515  67.311  14.614  1.00  0.00
H
ATOM   7227  CB  VAL   435      57.426  66.345  13.028  1.00  0.00
C
ATOM   7228  HB  VAL   435      56.413  66.370  12.627  1.00  0.00
H
ATOM   7229  CG1 VAL   435      58.376  66.975  11.998  1.00  0.00
C
ATOM   7230 HG11 VAL   435      59.404  66.946  12.362  1.00  0.00
H
ATOM   7231 HG12 VAL   435      58.313  66.420  11.061  1.00  0.00
H
ATOM   7232 HG13 VAL   435      58.086  68.004  11.793  1.00  0.00
H
ATOM   7233  CG2 VAL   435      57.836  64.872  13.178  1.00  0.00
C
ATOM   7234 HG21 VAL   435      57.101  64.336  13.780  1.00  0.00
H
ATOM   7235 HG22 VAL   435      57.865  64.392  12.199  1.00  0.00
H
ATOM   7236 HG23 VAL   435      58.815  64.795  13.653  1.00  0.00
H
ATOM   7237  C   VAL   435      56.739  68.466  14.209  1.00  0.00
C
ATOM   7238  O   VAL   435      55.513  68.510  14.249  1.00  0.00
O
ATOM   7239  N   GLY   436      57.473  69.569  14.015  1.00  0.00
N
ATOM   7240  H   GLY   436      58.474  69.475  13.955  1.00  0.00
H
ATOM   7241  CA  GLY   436      56.886  70.899  13.780  1.00  0.00
C
ATOM   7242  HA2 GLY   436      57.664  71.566  13.419  1.00  0.00
H
ATOM   7243  HA3 GLY   436      56.123  70.813  13.009  1.00  0.00
H
ATOM   7244  C   GLY   436      56.255  71.582  15.003  1.00  0.00
C
ATOM   7245  O   GLY   436      55.619  72.628  14.869  1.00  0.00
O
ATOM   7246  N   ALA   437      56.453  71.019  16.193  1.00  0.00
N
ATOM   7247  H   ALA   437      57.011  70.182  16.226  1.00  0.00
H
ATOM   7248  CA  ALA   437      56.009  71.570  17.475  1.00  0.00
C
ATOM   7249  HA  ALA   437      55.167  72.248  17.311  1.00  0.00
H
ATOM   7250  CB  ALA   437      55.516  70.396  18.330  1.00  0.00
C
ATOM   7251  HB1 ALA   437      56.313  69.663  18.468  1.00  0.00
H
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ATOM   7252  HB2 ALA   437      55.204  70.758  19.305  1.00  0.00
H
ATOM   7253  HB3 ALA   437      54.666  69.917  17.842  1.00  0.00
H
ATOM   7254  C   ALA   437      57.124  72.373  18.178  1.00  0.00
C
ATOM   7255  O   ALA   437      58.309  72.174  17.901  1.00  0.00
O
ATOM   7256  N   GLU   438      56.768  73.266  19.111  1.00  0.00
N
ATOM   7257  H   GLU   438      55.792  73.358  19.348  1.00  0.00
H
ATOM   7258  CA  GLU   438      57.778  73.988  19.898  1.00  0.00
C
ATOM   7259  HA  GLU   438      58.581  74.263  19.212  1.00  0.00
H
ATOM   7260  CB  GLU   438      57.247  75.297  20.522  1.00  0.00
C
ATOM   7261  HB2 GLU   438      56.254  75.149  20.946  1.00  0.00
H
ATOM   7262  HB3 GLU   438      57.932  75.607  21.313  1.00  0.00
H
ATOM   7263  CG  GLU   438      57.214  76.368  19.426  1.00  0.00
C
ATOM   7264  HG2 GLU   438      58.138  76.288  18.860  1.00  0.00
H
ATOM   7265  HG3 GLU   438      56.382  76.152  18.755  1.00  0.00
H
ATOM   7266  CD  GLU   438      57.128  77.825  19.886  1.00  0.00
C
ATOM   7267  OE1 GLU   438      56.332  78.579  19.273  1.00  0.00
O
ATOM   7268  OE2 GLU   438      57.940  78.275  20.732  1.00  0.00
O
ATOM   7269  C   GLU   438      58.437  73.074  20.932  1.00  0.00
C
ATOM   7270  O   GLU   438      57.764  72.398  21.715  1.00  0.00
O
ATOM   7271  N   THR   439      59.772  73.089  20.932  1.00  0.00
N
ATOM   7272  H   THR   439      60.250  73.631  20.219  1.00  0.00
H
ATOM   7273  CA  THR   439      60.611  72.388  21.903  1.00  0.00
C
ATOM   7274  HA  THR   439      60.027  71.611  22.378  1.00  0.00
H
ATOM   7275  CB  THR   439      61.807  71.702  21.228  1.00  0.00
C
ATOM   7276  HB  THR   439      62.455  72.455  20.777  1.00  0.00
H
ATOM   7277  CG2 THR   439      62.611  70.834  22.195  1.00  0.00
C
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ATOM   7278 HG21 THR   439      61.979  70.036  22.586  1.00  0.00
H
ATOM   7279 HG22 THR   439      63.459  70.396  21.670  1.00  0.00
H
ATOM   7280 HG23 THR   439      62.981  71.433  23.028  1.00  0.00
H
ATOM   7281  OG1 THR   439      61.349  70.823  20.225  1.00  0.00
O
ATOM   7282  HG1 THR   439      62.095  70.623  19.655  1.00  0.00
H
ATOM   7283  C   THR   439      61.034  73.369  22.986  1.00  0.00
C
ATOM   7284  O   THR   439      61.953  74.169  22.795  1.00  0.00
O
ATOM   7285  N   PHE   440      60.325  73.319  24.111  1.00  0.00
N
ATOM   7286  H   PHE   440      59.607  72.601  24.182  1.00  0.00
H
ATOM   7287  CA  PHE   440      60.616  74.085  25.315  1.00  0.00
C
ATOM   7288  HA  PHE   440      60.945  75.085  25.039  1.00  0.00
H
ATOM   7289  CB  PHE   440      59.341  74.222  26.163  1.00  0.00
C
ATOM   7290  HB2 PHE   440      58.901  73.236  26.310  1.00  0.00
H
ATOM   7291  HB3 PHE   440      59.635  74.583  27.149  1.00  0.00
H
ATOM   7292  CG  PHE   440      58.278  75.163  25.614  1.00  0.00
C
ATOM   7293  CD1 PHE   440      57.451  74.771  24.542  1.00  0.00
C
ATOM   7294  HD1 PHE   440      57.573  73.796  24.090  1.00  0.00
H
ATOM   7295  CE1 PHE   440      56.462  75.647  24.057  1.00  0.00
C
ATOM   7296  HE1 PHE   440      55.819  75.335  23.250  1.00  0.00
H
ATOM   7297  CZ  PHE   440      56.304  76.924  24.624  1.00  0.00
C
ATOM   7298  HZ  PHE   440      55.569  77.613  24.230  1.00  0.00
H
ATOM   7299  CE2 PHE   440      57.095  77.300  25.722  1.00  0.00
C
ATOM   7300  HE2 PHE   440      56.931  78.254  26.203  1.00  0.00
H
ATOM   7301  CD2 PHE   440      58.086  76.427  26.205  1.00  0.00
C
ATOM   7302  HD2 PHE   440      58.698  76.729  27.039  1.00  0.00
H
ATOM   7303  C   PHE   440      61.734  73.399  26.109  1.00  0.00
C
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ATOM   7304  O   PHE   440      61.577  72.270  26.572  1.00  0.00
O
ATOM   7305  N   TYR   441      62.849  74.095  26.307  1.00  0.00
N
ATOM   7306  H   TYR   441      62.942  75.010  25.881  1.00  0.00
H
ATOM   7307  CA  TYR   441      63.866  73.732  27.291  1.00  0.00
C
ATOM   7308  HA  TYR   441      63.820  72.666  27.509  1.00  0.00
H
ATOM   7309  CB  TYR   441      65.263  74.070  26.739  1.00  0.00
C
ATOM   7310  HB2 TYR   441      65.310  75.137  26.520  1.00  0.00
H
ATOM   7311  HB3 TYR   441      65.998  73.869  27.520  1.00  0.00
H
ATOM   7312  CG  TYR   441      65.662  73.300  25.487  1.00  0.00
C
ATOM   7313  CD1 TYR   441      65.163  73.672  24.221  1.00  0.00
C
ATOM   7314  HD1 TYR   441      64.486  74.512  24.134  1.00  0.00
H
ATOM   7315  CE1 TYR   441      65.520  72.942  23.069  1.00  0.00
C
ATOM   7316  HE1 TYR   441      65.113  73.221  22.109  1.00  0.00
H
ATOM   7317  CZ  TYR   441      66.395  71.840  23.179  1.00  0.00
C
ATOM   7318  OH  TYR   441      66.752  71.123  22.081  1.00  0.00
O
ATOM   7319  HH  TYR   441      66.330  71.445  21.283  1.00  0.00
H
ATOM   7320  CE2 TYR   441      66.917  71.482  24.438  1.00  0.00
C
ATOM   7321  HE2 TYR   441      67.573  70.628  24.514  1.00  0.00
H
ATOM   7322  CD2 TYR   441      66.555  72.216  25.585  1.00  0.00
C
ATOM   7323  HD2 TYR   441      66.945  71.932  26.552  1.00  0.00
H
ATOM   7324  C   TYR   441      63.538  74.481  28.585  1.00  0.00
C
ATOM   7325  O   TYR   441      63.355  75.702  28.542  1.00  0.00
O
ATOM   7326  N   VAL   442      63.407  73.761  29.704  1.00  0.00
N
ATOM   7327  H   VAL   442      63.529  72.754  29.668  1.00  0.00
H
ATOM   7328  CA  VAL   442      62.882  74.321  30.960  1.00  0.00
C
ATOM   7329  HA  VAL   442      62.941  75.404  30.895  1.00  0.00
H
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ATOM   7330  CB  VAL   442      61.391  73.977  31.187  1.00  0.00
C
ATOM   7331  HB  VAL   442      60.966  74.764  31.804  1.00  0.00
H
ATOM   7332  CG1 VAL   442      60.564  73.913  29.897  1.00  0.00
C
ATOM   7333 HG11 VAL   442      60.916  73.103  29.258  1.00  0.00
H
ATOM   7334 HG12 VAL   442      59.525  73.714  30.146  1.00  0.00
H
ATOM   7335 HG13 VAL   442      60.631  74.857  29.360  1.00  0.00
H
ATOM   7336  CG2 VAL   442      61.123  72.673  31.937  1.00  0.00
C
ATOM   7337 HG21 VAL   442      61.551  72.728  32.938  1.00  0.00
H
ATOM   7338 HG22 VAL   442      60.049  72.553  32.041  1.00  0.00
H
ATOM   7339 HG23 VAL   442      61.547  71.828  31.395  1.00  0.00
H
ATOM   7340  C   VAL   442      63.729  73.940  32.173  1.00  0.00
C
ATOM   7341  O   VAL   442      64.179  72.802  32.300  1.00  0.00
O
ATOM   7342  N   ASP   443      63.892  74.896  33.081  1.00  0.00
N
ATOM   7343  H   ASP   443      63.428  75.791  32.962  1.00  0.00
H
ATOM   7344  CA  ASP   443      64.590  74.714  34.351  1.00  0.00
C
ATOM   7345  HA  ASP   443      64.391  73.708  34.728  1.00  0.00
H
ATOM   7346  CB  ASP   443      66.111  74.839  34.148  1.00  0.00
C
ATOM   7347  HB2 ASP   443      66.484  74.090  33.446  1.00  0.00
H
ATOM   7348  HB3 ASP   443      66.288  75.806  33.691  1.00  0.00
H
ATOM   7349  CG  ASP   443      66.885  74.798  35.472  1.00  0.00
C
ATOM   7350  OD1 ASP   443      66.375  74.203  36.443  1.00  0.00
O
ATOM   7351  OD2 ASP   443      67.933  75.468  35.549  1.00  0.00
O
ATOM   7352  C   ASP   443      64.079  75.791  35.334  1.00  0.00
C
ATOM   7353  O   ASP   443      63.513  76.808  34.914  1.00  0.00
O
ATOM   7354  N   GLY   444      64.278  75.631  36.636  1.00  0.00
N
ATOM   7355  H   GLY   444      64.926  74.884  36.903  1.00  0.00
H
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ATOM   7356  CA  GLY   444      64.166  76.688  37.592  1.00  0.00
C
ATOM   7357  HA2 GLY   444      64.484  77.608  37.117  1.00  0.00
H
ATOM   7358  HA3 GLY   444      63.124  76.763  37.877  1.00  0.00
H
ATOM   7359  C   GLY   444      65.042  76.425  38.817  1.00  0.00
C
ATOM   7360  O   GLY   444      64.980  75.361  39.429  1.00  0.00
O
ATOM   7361  N   ALA   445      65.754  77.452  39.268  1.00  0.00
N
ATOM   7362  H   ALA   445      65.646  78.337  38.796  1.00  0.00
H
ATOM   7363  CA  ALA   445      66.619  77.370  40.445  1.00  0.00
C
ATOM   7364  HA  ALA   445      66.623  76.342  40.824  1.00  0.00
H
ATOM   7365  CB  ALA   445      68.044  77.697  40.000  1.00  0.00
C
ATOM   7366  HB1 ALA   445      68.080  78.716  39.610  1.00  0.00
H
ATOM   7367  HB2 ALA   445      68.721  77.595  40.846  1.00  0.00
H
ATOM   7368  HB3 ALA   445      68.349  76.999  39.215  1.00  0.00
H
ATOM   7369  C   ALA   445      66.140  78.277  41.590  1.00  0.00
C
ATOM   7370  O   ALA   445      65.580  79.356  41.376  1.00  0.00
O
ATOM   7371  N   ALA   446      66.410  77.865  42.831  1.00  0.00
N
ATOM   7372  H   ALA   446      66.887  76.984  42.938  1.00  0.00
H
ATOM   7373  CA  ALA   446      66.058  78.598  44.049  1.00  0.00
C
ATOM   7374  HA  ALA   446      65.849  79.636  43.792  1.00  0.00
H
ATOM   7375  CB  ALA   446      64.801  77.973  44.659  1.00  0.00
C
ATOM   7376  HB1 ALA   446      65.031  76.971  45.017  1.00  0.00
H
ATOM   7377  HB2 ALA   446      64.454  78.584  45.494  1.00  0.00
H
ATOM   7378  HB3 ALA   446      64.018  77.909  43.906  1.00  0.00
H
ATOM   7379  C   ALA   446      67.197  78.591  45.076  1.00  0.00
C
ATOM   7380  O   ALA   446      67.926  77.601  45.176  1.00  0.00
O
ATOM   7381  N   ASN   447      67.307  79.663  45.867  1.00  0.00
N
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ATOM   7382  H   ASN   447      66.626  80.410  45.749  1.00  0.00
H
ATOM   7383  CA  ASN   447      68.265  79.766  46.961  1.00  0.00
C
ATOM   7384  HA  ASN   447      69.118  79.138  46.710  1.00  0.00
H
ATOM   7385  CB  ASN   447      68.749  81.220  47.109  1.00  0.00
C
ATOM   7386  HB2 ASN   447      69.176  81.593  46.178  1.00  0.00
H
ATOM   7387  HB3 ASN   447      67.894  81.845  47.366  1.00  0.00
H
ATOM   7388  CG  ASN   447      69.770  81.327  48.226  1.00  0.00
C
ATOM   7389  OD1 ASN   447      69.551  81.999  49.212  1.00  0.00
O
ATOM   7390  ND2 ASN   447      70.850  80.584  48.182  1.00  0.00
N
ATOM   7391 HD21 ASN   447      71.335  80.434  49.070  1.00  0.00
H
ATOM   7392 HD22 ASN   447      71.114  80.050  47.377  1.00  0.00
H
ATOM   7393  C   ASN   447      67.707  79.195  48.270  1.00  0.00
C
ATOM   7394  O   ASN   447      66.637  79.578  48.738  1.00  0.00
O
ATOM   7395  N   ARG   448      68.475  78.310  48.910  1.00  0.00
N
ATOM   7396  H   ARG   448      69.385  78.099  48.527  1.00  0.00
H
ATOM   7397  CA  ARG   448      68.079  77.625  50.150  1.00  0.00
C
ATOM   7398  HA  ARG   448      67.015  77.408  50.051  1.00  0.00
H
ATOM   7399  CB  ARG   448      68.777  76.248  50.257  1.00  0.00
C
ATOM   7400  HB2 ARG   448      68.577  75.815  51.237  1.00  0.00
H
ATOM   7401  HB3 ARG   448      68.306  75.594  49.523  1.00  0.00
H
ATOM   7402  CG  ARG   448      70.295  76.229  49.990  1.00  0.00
C
ATOM   7403  HG2 ARG   448      70.512  76.775  49.072  1.00  0.00
H
ATOM   7404  HG3 ARG   448      70.825  76.712  50.807  1.00  0.00
H
ATOM   7405  CD  ARG   448      70.832  74.807  49.784  1.00  0.00
C
ATOM   7406  HD2 ARG   448      70.166  74.277  49.099  1.00  0.00
H
ATOM   7407  HD3 ARG   448      71.814  74.880  49.309  1.00  0.00
H
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ATOM   7408  NE  ARG   448      70.977  74.051  51.043  1.00  0.00
N
ATOM   7409  HE  ARG   448      70.959  74.581  51.898  1.00  0.00
H
ATOM   7410  CZ  ARG   448      71.345  72.783  51.124  1.00  0.00
C
ATOM   7411  NH1 ARG   448      71.511  72.018  50.085  1.00  0.00
N
ATOM   7412 HH11 ARG   448      71.370  72.386  49.144  1.00  0.00
H
ATOM   7413 HH12 ARG   448      71.827  71.074  50.204  1.00  0.00
H
ATOM   7414  NH2 ARG   448      71.594  72.223  52.268  1.00  0.00
N
ATOM   7415 HH21 ARG   448      71.541  72.740  53.138  1.00  0.00
H
ATOM   7416 HH22 ARG   448      72.082  71.337  52.257  1.00  0.00
H
ATOM   7417  C   ARG   448      68.139  78.507  51.408  1.00  0.00
C
ATOM   7418  O   ARG   448      67.572  78.101  52.422  1.00  0.00
O
ATOM   7419  N   GLU   449      68.680  79.725  51.325  1.00  0.00
N
ATOM   7420  H   GLU   449      69.254  79.916  50.511  1.00  0.00
H
ATOM   7421  CA  GLU   449      68.739  80.723  52.402  1.00  0.00
C
ATOM   7422  HA  GLU   449      68.513  80.237  53.351  1.00  0.00
H
ATOM   7423  CB  GLU   449      70.169  81.292  52.520  1.00  0.00
C
ATOM   7424  HB2 GLU   449      70.466  81.774  51.589  1.00  0.00
H
ATOM   7425  HB3 GLU   449      70.151  82.068  53.287  1.00  0.00
H
ATOM   7426  CG  GLU   449      71.243  80.268  52.937  1.00  0.00
C
ATOM   7427  HG2 GLU   449      72.133  80.825  53.236  1.00  0.00
H
ATOM   7428  HG3 GLU   449      70.879  79.738  53.821  1.00  0.00
H
ATOM   7429  CD  GLU   449      71.662  79.244  51.865  1.00  0.00
C
ATOM   7430  OE1 GLU   449      71.404  79.470  50.654  1.00  0.00
O
ATOM   7431  OE2 GLU   449      72.237  78.209  52.263  1.00  0.00
O
ATOM   7432  C   GLU   449      67.689  81.845  52.247  1.00  0.00
C
ATOM   7433  O   GLU   449      66.851  82.019  53.129  1.00  0.00
O
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ATOM   7434  N   THR   450      67.661  82.583  51.130  1.00  0.00
N
ATOM   7435  H   THR   450      68.377  82.421  50.430  1.00  0.00
H
ATOM   7436  CA  THR   450      66.672  83.653  50.863  1.00  0.00
C
ATOM   7437  HA  THR   450      66.540  84.235  51.772  1.00  0.00
H
ATOM   7438  CB  THR   450      67.124  84.632  49.764  1.00  0.00
C
ATOM   7439  HB  THR   450      66.391  85.436  49.704  1.00  0.00
H
ATOM   7440  CG2 THR   450      68.489  85.276  50.005  1.00  0.00
C
ATOM   7441 HG21 THR   450      69.269  84.519  50.100  1.00  0.00
H
ATOM   7442 HG22 THR   450      68.731  85.940  49.175  1.00  0.00
H
ATOM   7443 HG23 THR   450      68.451  85.866  50.921  1.00  0.00
H
ATOM   7444  OG1 THR   450      67.164  83.993  48.513  1.00  0.00
O
ATOM   7445  HG1 THR   450      67.925  84.338  48.038  1.00  0.00
H
ATOM   7446  C   THR   450      65.292  83.122  50.469  1.00  0.00
C
ATOM   7447  O   THR   450      64.312  83.857  50.566  1.00  0.00
O
ATOM   7448  N   LYS   451      65.211  81.859  50.018  1.00  0.00
N
ATOM   7449  H   LYS   451      66.087  81.358  49.934  1.00  0.00
H
ATOM   7450  CA  LYS   451      64.025  81.181  49.452  1.00  0.00
C
ATOM   7451  HA  LYS   451      64.341  80.185  49.150  1.00  0.00
H
ATOM   7452  CB  LYS   451      62.930  80.980  50.520  1.00  0.00
C
ATOM   7453  HB2 LYS   451      62.437  81.937  50.696  1.00  0.00
H
ATOM   7454  HB3 LYS   451      62.180  80.295  50.126  1.00  0.00
H
ATOM   7455  CG  LYS   451      63.416  80.438  51.878  1.00  0.00
C
ATOM   7456  HG2 LYS   451      64.110  81.152  52.325  1.00  0.00
H
ATOM   7457  HG3 LYS   451      62.551  80.363  52.540  1.00  0.00
H
ATOM   7458  CD  LYS   451      64.089  79.060  51.805  1.00  0.00
C
ATOM   7459  HD2 LYS   451      63.374  78.334  51.412  1.00  0.00
H
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ATOM   7460  HD3 LYS   451      64.959  79.107  51.147  1.00  0.00
H
ATOM   7461  CE  LYS   451      64.530  78.674  53.225  1.00  0.00
C
ATOM   7462  HE2 LYS   451      65.292  79.390  53.552  1.00  0.00
H
ATOM   7463  HE3 LYS   451      63.674  78.768  53.898  1.00  0.00
H
ATOM   7464  NZ  LYS   451      65.082  77.301  53.299  1.00  0.00
N
ATOM   7465  HZ1 LYS   451      65.969  77.275  52.799  1.00  0.00
H
ATOM   7466  HZ2 LYS   451      65.278  77.049  54.259  1.00  0.00
H
ATOM   7467  HZ3 LYS   451      64.438  76.615  52.931  1.00  0.00
H
ATOM   7468  C   LYS   451      63.500  81.772  48.134  1.00  0.00
C
ATOM   7469  O   LYS   451      62.576  81.207  47.550  1.00  0.00
O
ATOM   7470  N   LEU   452      64.125  82.832  47.621  1.00  0.00
N
ATOM   7471  H   LEU   452      64.906  83.211  48.133  1.00  0.00
H
ATOM   7472  CA  LEU   452      63.850  83.364  46.288  1.00  0.00
C
ATOM   7473  HA  LEU   452      62.779  83.556  46.205  1.00  0.00
H
ATOM   7474  CB  LEU   452      64.630  84.673  46.063  1.00  0.00
C
ATOM   7475  HB2 LEU   452      65.693  84.449  46.164  1.00  0.00
H
ATOM   7476  HB3 LEU   452      64.459  85.013  45.039  1.00  0.00
H
ATOM   7477  CG  LEU   452      64.267  85.816  47.026  1.00  0.00
C
ATOM   7478  HG  LEU   452      64.290  85.455  48.053  1.00  0.00
H
ATOM   7479  CD1 LEU   452      65.291  86.945  46.895  1.00  0.00
C
ATOM   7480 HD11 LEU   452      65.277  87.352  45.884  1.00  0.00
H
ATOM   7481 HD12 LEU   452      65.053  87.735  47.607  1.00  0.00
H
ATOM   7482 HD13 LEU   452      66.285  86.560  47.115  1.00  0.00
H
ATOM   7483  CD2 LEU   452      62.887  86.401  46.725  1.00  0.00
C
ATOM   7484 HD21 LEU   452      62.129  85.624  46.810  1.00  0.00
H
ATOM   7485 HD22 LEU   452      62.660  87.186  47.445  1.00  0.00
H
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ATOM   7486 HD23 LEU   452      62.862  86.810  45.715  1.00  0.00
H
ATOM   7487  C   LEU   452      64.254  82.340  45.222  1.00  0.00
C
ATOM   7488  O   LEU   452      65.247  81.622  45.376  1.00  0.00
O
ATOM   7489  N   GLY   453      63.523  82.317  44.112  1.00  0.00
N
ATOM   7490  H   GLY   453      62.709  82.920  44.065  1.00  0.00
H
ATOM   7491  CA  GLY   453      63.860  81.508  42.940  1.00  0.00
C
ATOM   7492  HA2 GLY   453      64.935  81.333  42.904  1.00  0.00
H
ATOM   7493  HA3 GLY   453      63.352  80.547  43.011  1.00  0.00
H
ATOM   7494  C   GLY   453      63.469  82.171  41.625  1.00  0.00
C
ATOM   7495  O   GLY   453      62.774  83.188  41.614  1.00  0.00
O
ATOM   7496  N   LYS   454      63.899  81.579  40.511  1.00  0.00
N
ATOM   7497  H   LYS   454      64.489  80.752  40.607  1.00  0.00
H
ATOM   7498  CA  LYS   454      63.417  81.894  39.163  1.00  0.00
C
ATOM   7499  HA  LYS   454      62.509  82.494  39.228  1.00  0.00
H
ATOM   7500  CB  LYS   454      64.473  82.684  38.366  1.00  0.00
C
ATOM   7501  HB2 LYS   454      65.375  82.080  38.297  1.00  0.00
H
ATOM   7502  HB3 LYS   454      64.096  82.854  37.356  1.00  0.00
H
ATOM   7503  CG  LYS   454      64.807  84.042  39.007  1.00  0.00
C
ATOM   7504  HG2 LYS   454      63.889  84.628  39.083  1.00  0.00
H
ATOM   7505  HG3 LYS   454      65.194  83.879  40.014  1.00  0.00
H
ATOM   7506  CD  LYS   454      65.847  84.857  38.222  1.00  0.00
C
ATOM   7507  HD2 LYS   454      66.786  84.302  38.164  1.00  0.00
H
ATOM   7508  HD3 LYS   454      65.475  85.058  37.216  1.00  0.00
H
ATOM   7509  CE  LYS   454      66.047  86.173  38.987  1.00  0.00
C
ATOM   7510  HE2 LYS   454      65.067  86.641  39.118  1.00  0.00
H
ATOM   7511  HE3 LYS   454      66.417  85.943  39.991  1.00  0.00
H
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ATOM   7512  NZ  LYS   454      66.954  87.144  38.325  1.00  0.00
N
ATOM   7513  HZ1 LYS   454      66.565  87.506  37.460  1.00  0.00
H
ATOM   7514  HZ2 LYS   454      67.045  87.974  38.903  1.00  0.00
H
ATOM   7515  HZ3 LYS   454      67.869  86.762  38.146  1.00  0.00
H
ATOM   7516  C   LYS   454      63.068  80.578  38.477  1.00  0.00
C
ATOM   7517  O   LYS   454      63.820  79.616  38.584  1.00  0.00
O
ATOM   7518  N   ALA   455      61.948  80.547  37.771  1.00  0.00
N
ATOM   7519  H   ALA   455      61.382  81.386  37.743  1.00  0.00
H
ATOM   7520  CA  ALA   455      61.573  79.453  36.877  1.00  0.00
C
ATOM   7521  HA  ALA   455      62.363  78.700  36.845  1.00  0.00
H
ATOM   7522  CB  ALA   455      60.294  78.794  37.402  1.00  0.00
C
ATOM   7523  HB1 ALA   455      59.477  79.518  37.409  1.00  0.00
H
ATOM   7524  HB2 ALA   455      60.030  77.960  36.753  1.00  0.00
H
ATOM   7525  HB3 ALA   455      60.463  78.417  38.411  1.00  0.00
H
ATOM   7526  C   ALA   455      61.411  80.013  35.463  1.00  0.00
C
ATOM   7527  O   ALA   455      60.981  81.160  35.305  1.00  0.00
O
ATOM   7528  N   GLY   456      61.779  79.248  34.438  1.00  0.00
N
ATOM   7529  H   GLY   456      62.185  78.329  34.611  1.00  0.00
H
ATOM   7530  CA  GLY   456      61.838  79.780  33.079  1.00  0.00
C
ATOM   7531  HA2 GLY   456      60.963  80.407  32.896  1.00  0.00
H
ATOM   7532  HA3 GLY   456      62.730  80.399  32.989  1.00  0.00
H
ATOM   7533  C   GLY   456      61.896  78.734  31.973  1.00  0.00
C
ATOM   7534  O   GLY   456      62.037  77.538  32.214  1.00  0.00
O
ATOM   7535  N   TYR   457      61.785  79.217  30.739  1.00  0.00
N
ATOM   7536  H   TYR   457      61.714  80.221  30.614  1.00  0.00
H
ATOM   7537  CA  TYR   457      61.941  78.403  29.542  1.00  0.00
C
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ATOM   7538  HA  TYR   457      62.622  77.590  29.790  1.00  0.00
H
ATOM   7539  CB  TYR   457      60.589  77.785  29.132  1.00  0.00
C
ATOM   7540  HB2 TYR   457      60.771  77.058  28.339  1.00  0.00
H
ATOM   7541  HB3 TYR   457      60.187  77.232  29.983  1.00  0.00
H
ATOM   7542  CG  TYR   457      59.542  78.771  28.638  1.00  0.00
C
ATOM   7543  CD1 TYR   457      59.693  79.392  27.381  1.00  0.00
C
ATOM   7544  HD1 TYR   457      60.525  79.137  26.742  1.00  0.00
H
ATOM   7545  CE1 TYR   457      58.776  80.364  26.955  1.00  0.00
C
ATOM   7546  HE1 TYR   457      58.932  80.855  26.014  1.00  0.00
H
ATOM   7547  CZ  TYR   457      57.659  80.677  27.754  1.00  0.00
C
ATOM   7548  OH  TYR   457      56.810  81.663  27.366  1.00  0.00
O
ATOM   7549  HH  TYR   457      57.088  82.091  26.559  1.00  0.00
H
ATOM   7550  CE2 TYR   457      57.448  79.982  28.963  1.00  0.00
C
ATOM   7551  HE2 TYR   457      56.554  80.178  29.537  1.00  0.00
H
ATOM   7552  CD2 TYR   457      58.400  79.047  29.415  1.00  0.00
C
ATOM   7553  HD2 TYR   457      58.251  78.533  30.355  1.00  0.00
H
ATOM   7554  C   TYR   457      62.573  79.204  28.400  1.00  0.00
C
ATOM   7555  O   TYR   457      62.506  80.440  28.353  1.00  0.00
O
ATOM   7556  N   VAL   458      63.118  78.485  27.422  1.00  0.00
N
ATOM   7557  H   VAL   458      63.185  77.477  27.555  1.00  0.00
H
ATOM   7558  CA  VAL   458      63.544  79.008  26.119  1.00  0.00
C
ATOM   7559  HA  VAL   458      62.933  79.877  25.885  1.00  0.00
H
ATOM   7560  CB  VAL   458      65.020  79.496  26.140  1.00  0.00
C
ATOM   7561  HB  VAL   458      64.994  80.565  26.351  1.00  0.00
H
ATOM   7562  CG1 VAL   458      65.896  78.861  27.231  1.00  0.00
C
ATOM   7563 HG11 VAL   458      65.891  77.777  27.123  1.00  0.00
H
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ATOM   7564 HG12 VAL   458      66.918  79.228  27.159  1.00  0.00
H
ATOM   7565 HG13 VAL   458      65.520  79.133  28.218  1.00  0.00
H
ATOM   7566  CG2 VAL   458      65.753  79.334  24.805  1.00  0.00
C
ATOM   7567 HG21 VAL   458      65.183  79.802  24.002  1.00  0.00
H
ATOM   7568 HG22 VAL   458      66.724  79.825  24.870  1.00  0.00
H
ATOM   7569 HG23 VAL   458      65.905  78.276  24.586  1.00  0.00
H
ATOM   7570  C   VAL   458      63.225  77.947  25.055  1.00  0.00
C
ATOM   7571  O   VAL   458      63.411  76.755  25.295  1.00  0.00
O
ATOM   7572  N   THR   459      62.699  78.368  23.901  1.00  0.00
N
ATOM   7573  H   THR   459      62.536  79.361  23.788  1.00  0.00
H
ATOM   7574  CA  THR   459      62.305  77.476  22.786  1.00  0.00
C
ATOM   7575  HA  THR   459      62.456  76.455  23.128  1.00  0.00
H
ATOM   7576  CB  THR   459      60.809  77.580  22.381  1.00  0.00
C
ATOM   7577  HB  THR   459      60.541  76.653  21.875  1.00  0.00
H
ATOM   7578  CG2 THR   459      59.873  77.777  23.567  1.00  0.00
C
ATOM   7579 HG21 THR   459      60.010  78.770  23.993  1.00  0.00
H
ATOM   7580 HG22 THR   459      58.842  77.670  23.231  1.00  0.00
H
ATOM   7581 HG23 THR   459      60.080  77.028  24.326  1.00  0.00
H
ATOM   7582  OG1 THR   459      60.486  78.608  21.471  1.00  0.00
O
ATOM   7583  HG1 THR   459      59.545  78.437  21.219  1.00  0.00
H
ATOM   7584  C   THR   459      63.199  77.625  21.562  1.00  0.00
C
ATOM   7585  O   THR   459      63.821  78.665  21.336  1.00  0.00
O
ATOM   7586  N   ASN   460      63.227  76.598  20.708  1.00  0.00
N
ATOM   7587  H   ASN   460      62.700  75.763  20.942  1.00  0.00
H
ATOM   7588  CA  ASN   460      63.962  76.616  19.438  1.00  0.00
C
ATOM   7589  HA  ASN   460      65.005  76.856  19.656  1.00  0.00
H
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ATOM   7590  CB  ASN   460      63.916  75.206  18.826  1.00  0.00
C
ATOM   7591  HB2 ASN   460      64.600  75.172  17.978  1.00  0.00
H
ATOM   7592  HB3 ASN   460      64.257  74.473  19.557  1.00  0.00
H
ATOM   7593  CG  ASN   460      62.519  74.819  18.367  1.00  0.00
C
ATOM   7594  OD1 ASN   460      61.607  74.657  19.164  1.00  0.00
O
ATOM   7595  ND2 ASN   460      62.301  74.692  17.080  1.00  0.00
N
ATOM   7596 HD21 ASN   460      61.378  74.416  16.794  1.00  0.00
H
ATOM   7597 HD22 ASN   460      63.033  74.857  16.410  1.00  0.00
H
ATOM   7598  C   ASN   460      63.463  77.691  18.440  1.00  0.00
C
ATOM   7599  O   ASN   460      64.184  78.024  17.503  1.00  0.00
O
ATOM   7600  N   LYS   461      62.267  78.263  18.657  1.00  0.00
N
ATOM   7601  H   LYS   461      61.734  77.933  19.452  1.00  0.00
H
ATOM   7602  CA  LYS   461      61.735  79.432  17.927  1.00  0.00
C
ATOM   7603  HA  LYS   461      62.156  79.431  16.919  1.00  0.00
H
ATOM   7604  CB  LYS   461      60.201  79.308  17.793  1.00  0.00
C
ATOM   7605  HB2 LYS   461      59.780  78.870  18.700  1.00  0.00
H
ATOM   7606  HB3 LYS   461      59.769  80.300  17.667  1.00  0.00
H
ATOM   7607  CG  LYS   461      59.812  78.460  16.568  1.00  0.00
C
ATOM   7608  HG2 LYS   461      60.191  78.944  15.668  1.00  0.00
H
ATOM   7609  HG3 LYS   461      60.287  77.479  16.651  1.00  0.00
H
ATOM   7610  CD  LYS   461      58.295  78.259  16.419  1.00  0.00
C
ATOM   7611  HD2 LYS   461      58.096  77.699  15.504  1.00  0.00
H
ATOM   7612  HD3 LYS   461      57.961  77.643  17.241  1.00  0.00
H
ATOM   7613  CE  LYS   461      57.468  79.553  16.420  1.00  0.00
C
ATOM   7614  HE2 LYS   461      57.782  80.179  17.259  1.00  0.00
H
ATOM   7615  HE3 LYS   461      57.649  80.094  15.487  1.00  0.00
H
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ATOM   7616  NZ  LYS   461      56.028  79.251  16.576  1.00  0.00
N
ATOM   7617  HZ1 LYS   461      55.861  78.806  17.480  1.00  0.00
H
ATOM   7618  HZ2 LYS   461      55.461  80.084  16.531  1.00  0.00
H
ATOM   7619  HZ3 LYS   461      55.706  78.633  15.831  1.00  0.00
H
ATOM   7620  C   LYS   461      62.181  80.784  18.518  1.00  0.00
C
ATOM   7621  O   LYS   461      61.694  81.826  18.084  1.00  0.00
O
ATOM   7622  N   GLY   462      63.087  80.795  19.498  1.00  0.00
N
ATOM   7623  H   GLY   462      63.435  79.908  19.846  1.00  0.00
H
ATOM   7624  CA  GLY   462      63.633  82.019  20.096  1.00  0.00
C
ATOM   7625  HA2 GLY   462      64.551  81.768  20.625  1.00  0.00
H
ATOM   7626  HA3 GLY   462      63.883  82.723  19.303  1.00  0.00
H
ATOM   7627  C   GLY   462      62.702  82.727  21.087  1.00  0.00
C
ATOM   7628  O   GLY   462      62.988  83.853  21.490  1.00  0.00
O
ATOM   7629  N   ARG   463      61.595  82.088  21.495  1.00  0.00
N
ATOM   7630  H   ARG   463      61.449  81.151  21.144  1.00  0.00
H
ATOM   7631  CA  ARG   463      60.716  82.556  22.578  1.00  0.00
C
ATOM   7632  HA  ARG   463      60.603  83.640  22.496  1.00  0.00
H
ATOM   7633  CB  ARG   463      59.341  81.877  22.416  1.00  0.00
C
ATOM   7634  HB2 ARG   463      58.938  82.131  21.434  1.00  0.00
H
ATOM   7635  HB3 ARG   463      59.496  80.800  22.454  1.00  0.00
H
ATOM   7636  CG  ARG   463      58.303  82.258  23.488  1.00  0.00
C
ATOM   7637  HG2 ARG   463      58.800  82.325  24.451  1.00  0.00
H
ATOM   7638  HG3 ARG   463      57.896  83.247  23.269  1.00  0.00
H
ATOM   7639  CD  ARG   463      57.166  81.220  23.613  1.00  0.00
C
ATOM   7640  HD2 ARG   463      57.525  80.222  23.347  1.00  0.00
H
ATOM   7641  HD3 ARG   463      56.858  81.170  24.658  1.00  0.00
H
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ATOM   7642  NE  ARG   463      55.975  81.568  22.815  1.00  0.00
N
ATOM   7643  HE  ARG   463      55.183  81.923  23.324  1.00  0.00
H
ATOM   7644  CZ  ARG   463      55.789  81.342  21.527  1.00  0.00
C
ATOM   7645  NH1 ARG   463      56.678  80.760  20.790  1.00  0.00
N
ATOM   7646 HH11 ARG   463      57.443  80.271  21.233  1.00  0.00
H
ATOM   7647 HH12 ARG   463      56.374  80.237  19.971  1.00  0.00
H
ATOM   7648  NH2 ARG   463      54.672  81.684  20.953  1.00  0.00
N
ATOM   7649 HH21 ARG   463      53.945  82.125  21.481  1.00  0.00
H
ATOM   7650 HH22 ARG   463      54.567  81.553  19.960  1.00  0.00
H
ATOM   7651  C   ARG   463      61.375  82.238  23.925  1.00  0.00
C
ATOM   7652  O   ARG   463      61.845  81.122  24.127  1.00  0.00
O
ATOM   7653  N   GLN   464      61.372  83.193  24.852  1.00  0.00
N
ATOM   7654  H   GLN   464      60.956  84.081  24.618  1.00  0.00
H
ATOM   7655  CA  GLN   464      62.094  83.110  26.128  1.00  0.00
C
ATOM   7656  HA  GLN   464      62.274  82.064  26.379  1.00  0.00
H
ATOM   7657  CB  GLN   464      63.448  83.812  25.915  1.00  0.00
C
ATOM   7658  HB2 GLN   464      63.894  83.408  25.004  1.00  0.00
H
ATOM   7659  HB3 GLN   464      63.283  84.880  25.759  1.00  0.00
H
ATOM   7660  CG  GLN   464      64.460  83.633  27.055  1.00  0.00
C
ATOM   7661  HG2 GLN   464      64.123  84.193  27.927  1.00  0.00
H
ATOM   7662  HG3 GLN   464      64.532  82.583  27.332  1.00  0.00
H
ATOM   7663  CD  GLN   464      65.846  84.118  26.629  1.00  0.00
C
ATOM   7664  OE1 GLN   464      66.430  83.670  25.657  1.00  0.00
O
ATOM   7665  NE2 GLN   464      66.435  85.070  27.321  1.00  0.00
N
ATOM   7666 HE21 GLN   464      67.347  85.335  26.990  1.00  0.00
H
ATOM   7667 HE22 GLN   464      66.007  85.453  28.141  1.00  0.00
H
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ATOM   7668  C   GLN   464      61.276  83.747  27.264  1.00  0.00
C
ATOM   7669  O   GLN   464      60.632  84.775  27.046  1.00  0.00
O
ATOM   7670  N   LYS   465      61.294  83.161  28.469  1.00  0.00
N
ATOM   7671  H   LYS   465      61.793  82.277  28.565  1.00  0.00
H
ATOM   7672  CA  LYS   465      60.593  83.681  29.663  1.00  0.00
C
ATOM   7673  HA  LYS   465      60.567  84.771  29.617  1.00  0.00
H
ATOM   7674  CB  LYS   465      59.145  83.153  29.659  1.00  0.00
C
ATOM   7675  HB2 LYS   465      58.714  83.368  28.680  1.00  0.00
H
ATOM   7676  HB3 LYS   465      59.166  82.070  29.793  1.00  0.00
H
ATOM   7677  CG  LYS   465      58.222  83.774  30.727  1.00  0.00
C
ATOM   7678  HG2 LYS   465      58.569  83.500  31.724  1.00  0.00
H
ATOM   7679  HG3 LYS   465      58.241  84.860  30.630  1.00  0.00
H
ATOM   7680  CD  LYS   465      56.783  83.267  30.529  1.00  0.00
C
ATOM   7681  HD2 LYS   465      56.460  83.502  29.513  1.00  0.00
H
ATOM   7682  HD3 LYS   465      56.777  82.184  30.647  1.00  0.00
H
ATOM   7683  CE  LYS   465      55.777  83.868  31.520  1.00  0.00
C
ATOM   7684  HE2 LYS   465      56.055  83.549  32.529  1.00  0.00
H
ATOM   7685  HE3 LYS   465      55.835  84.958  31.475  1.00  0.00
H
ATOM   7686  NZ  LYS   465      54.396  83.424  31.194  1.00  0.00
N
ATOM   7687  HZ1 LYS   465      54.370  82.432  30.932  1.00  0.00
H
ATOM   7688  HZ2 LYS   465      53.718  83.582  31.924  1.00  0.00
H
ATOM   7689  HZ3 LYS   465      54.026  83.861  30.356  1.00  0.00
H
ATOM   7690  C   LYS   465      61.308  83.268  30.948  1.00  0.00
C
ATOM   7691  O   LYS   465      61.769  82.135  31.055  1.00  0.00
O
ATOM   7692  N   VAL   466      61.340  84.158  31.941  1.00  0.00
N
ATOM   7693  H   VAL   466      60.895  85.054  31.796  1.00  0.00
H
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ATOM   7694  CA  VAL   466      61.638  83.808  33.340  1.00  0.00
C
ATOM   7695  HA  VAL   466      61.489  82.734  33.454  1.00  0.00
H
ATOM   7696  CB  VAL   466      63.093  84.109  33.783  1.00  0.00
C
ATOM   7697  HB  VAL   466      63.304  83.471  34.642  1.00  0.00
H
ATOM   7698  CG1 VAL   466      64.133  83.783  32.705  1.00  0.00
C
ATOM   7699 HG11 VAL   466      64.018  84.453  31.852  1.00  0.00
H
ATOM   7700 HG12 VAL   466      65.133  83.903  33.120  1.00  0.00
H
ATOM   7701 HG13 VAL   466      64.015  82.751  32.376  1.00  0.00
H
ATOM   7702  CG2 VAL   466      63.344  85.556  34.234  1.00  0.00
C
ATOM   7703 HG21 VAL   466      62.805  85.754  35.161  1.00  0.00
H
ATOM   7704 HG22 VAL   466      64.405  85.710  34.425  1.00  0.00
H
ATOM   7705 HG23 VAL   466      63.001  86.252  33.470  1.00  0.00
H
ATOM   7706  C   VAL   466      60.629  84.520  34.240  1.00  0.00
C
ATOM   7707  O   VAL   466      60.215  85.631  33.915  1.00  0.00
O
ATOM   7708  N   VAL   467      60.262  83.918  35.369  1.00  0.00
N
ATOM   7709  H   VAL   467      60.609  82.979  35.545  1.00  0.00
H
ATOM   7710  CA  VAL   467      59.400  84.531  36.397  1.00  0.00
C
ATOM   7711  HA  VAL   467      59.285  85.587  36.162  1.00  0.00
H
ATOM   7712  CB  VAL   467      57.983  83.910  36.402  1.00  0.00
C
ATOM   7713  HB  VAL   467      58.045  82.865  36.712  1.00  0.00
H
ATOM   7714  CG1 VAL   467      57.041  84.646  37.366  1.00  0.00
C
ATOM   7715 HG11 VAL   467      56.948  85.694  37.082  1.00  0.00
H
ATOM   7716 HG12 VAL   467      56.054  84.185  37.344  1.00  0.00
H
ATOM   7717 HG13 VAL   467      57.413  84.580  38.388  1.00  0.00
H
ATOM   7718  CG2 VAL   467      57.327  83.969  35.014  1.00  0.00
C
ATOM   7719 HG21 VAL   467      57.903  83.374  34.309  1.00  0.00
H
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ATOM   7720 HG22 VAL   467      56.317  83.562  35.062  1.00  0.00
H
ATOM   7721 HG23 VAL   467      57.289  85.003  34.667  1.00  0.00
H
ATOM   7722  C   VAL   467      60.071  84.373  37.771  1.00  0.00
C
ATOM   7723  O   VAL   467      60.540  83.271  38.065  1.00  0.00
O
ATOM   7724  N   PRO   468      60.164  85.427  38.611  1.00  0.00
N
ATOM   7725  CD  PRO   468      59.824  86.813  38.306  1.00  0.00
C
ATOM   7726  HD2 PRO   468      58.786  86.905  37.986  1.00  0.00
H
ATOM   7727  HD3 PRO   468      60.490  87.185  37.525  1.00  0.00
H
ATOM   7728  CG  PRO   468      60.052  87.613  39.594  1.00  0.00
C
ATOM   7729  HG2 PRO   468      59.129  87.667  40.174  1.00  0.00
H
ATOM   7730  HG3 PRO   468      60.429  88.616  39.390  1.00  0.00
H
ATOM   7731  CB  PRO   468      61.086  86.771  40.344  1.00  0.00
C
ATOM   7732  HB2 PRO   468      61.058  86.946  41.421  1.00  0.00
H
ATOM   7733  HB3 PRO   468      62.082  86.985  39.952  1.00  0.00
H
ATOM   7734  CA  PRO   468      60.689  85.338  39.976  1.00  0.00
C
ATOM   7735  HA  PRO   468      61.579  84.711  39.993  1.00  0.00
H
ATOM   7736  C   PRO   468      59.655  84.765  40.964  1.00  0.00
C
ATOM   7737  O   PRO   468      58.452  84.951  40.798  1.00  0.00
O
ATOM   7738  N   LEU   469      60.127  84.105  42.026  1.00  0.00
N
ATOM   7739  H   LEU   469      61.132  83.984  42.090  1.00  0.00
H
ATOM   7740  CA  LEU   469      59.307  83.458  43.058  1.00  0.00
C
ATOM   7741  HA  LEU   469      58.267  83.766  42.931  1.00  0.00
H
ATOM   7742  CB  LEU   469      59.363  81.925  42.905  1.00  0.00
C
ATOM   7743  HB2 LEU   469      60.396  81.586  42.993  1.00  0.00
H
ATOM   7744  HB3 LEU   469      58.804  81.493  43.737  1.00  0.00
H
ATOM   7745  CG  LEU   469      58.753  81.424  41.580  1.00  0.00
C
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ATOM   7746  HG  LEU   469      58.024  82.147  41.215  1.00  0.00
H
ATOM   7747  CD1 LEU   469      59.815  81.188  40.502  1.00  0.00
C
ATOM   7748 HD11 LEU   469      60.502  80.404  40.806  1.00  0.00
H
ATOM   7749 HD12 LEU   469      59.330  80.907  39.567  1.00  0.00
H
ATOM   7750 HD13 LEU   469      60.383  82.097  40.329  1.00  0.00
H
ATOM   7751  CD2 LEU   469      58.033  80.093  41.784  1.00  0.00
C
ATOM   7752 HD21 LEU   469      57.280  80.187  42.567  1.00  0.00
H
ATOM   7753 HD22 LEU   469      57.519  79.837  40.860  1.00  0.00
H
ATOM   7754 HD23 LEU   469      58.741  79.309  42.049  1.00  0.00
H
ATOM   7755  C   LEU   469      59.733  83.894  44.469  1.00  0.00
C
ATOM   7756  O   LEU   469      60.917  84.114  44.720  1.00  0.00
O
ATOM   7757  N   THR   470      58.762  84.003  45.381  1.00  0.00
N
ATOM   7758  H   THR   470      57.816  83.779  45.104  1.00  0.00
H
ATOM   7759  CA  THR   470      58.914  84.575  46.735  1.00  0.00
C
ATOM   7760  HA  THR   470      59.524  85.475  46.664  1.00  0.00
H
ATOM   7761  CB  THR   470      57.541  84.968  47.316  1.00  0.00
C
ATOM   7762  HB  THR   470      57.637  85.129  48.391  1.00  0.00
H
ATOM   7763  CG2 THR   470      56.980  86.240  46.687  1.00  0.00
C
ATOM   7764 HG21 THR   470      56.832  86.106  45.615  1.00  0.00
H
ATOM   7765 HG22 THR   470      56.027  86.489  47.154  1.00  0.00
H
ATOM   7766 HG23 THR   470      57.670  87.067  46.856  1.00  0.00
H
ATOM   7767  OG1 THR   470      56.605  83.935  47.080  1.00  0.00
O
ATOM   7768  HG1 THR   470      55.742  84.243  47.382  1.00  0.00
H
ATOM   7769  C   THR   470      59.617  83.651  47.732  1.00  0.00
C
ATOM   7770  O   THR   470      60.660  84.009  48.272  1.00  0.00
O
ATOM   7771  N   ASN   471      59.037  82.483  48.014  1.00  0.00
N
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ATOM   7772  H   ASN   471      58.128  82.304  47.604  1.00  0.00
H
ATOM   7773  CA  ASN   471      59.580  81.496  48.947  1.00  0.00
C
ATOM   7774  HA  ASN   471      60.664  81.587  48.934  1.00  0.00
H
ATOM   7775  CB  ASN   471      59.135  81.810  50.392  1.00  0.00
C
ATOM   7776  HB2 ASN   471      59.353  80.957  51.032  1.00  0.00
H
ATOM   7777  HB3 ASN   471      59.729  82.653  50.743  1.00  0.00
H
ATOM   7778  CG  ASN   471      57.665  82.154  50.569  1.00  0.00
C
ATOM   7779  OD1 ASN   471      56.785  81.338  50.372  1.00  0.00
O
ATOM   7780  ND2 ASN   471      57.346  83.340  51.026  1.00  0.00
N
ATOM   7781 HD21 ASN   471      56.367  83.505  51.209  1.00  0.00
H
ATOM   7782 HD22 ASN   471      58.056  84.004  51.281  1.00  0.00
H
ATOM   7783  C   ASN   471      59.283  80.071  48.455  1.00  0.00
C
ATOM   7784  O   ASN   471      58.250  79.470  48.744  1.00  0.00
O
ATOM   7785  N   THR   472      60.211  79.542  47.663  1.00  0.00
N
ATOM   7786  H   THR   472      61.072  80.067  47.522  1.00  0.00
H
ATOM   7787  CA  THR   472      60.062  78.292  46.914  1.00  0.00
C
ATOM   7788  HA  THR   472      59.126  77.816  47.203  1.00  0.00
H
ATOM   7789  CB  THR   472      59.935  78.621  45.420  1.00  0.00
C
ATOM   7790  HB  THR   472      59.153  79.371  45.289  1.00  0.00
H
ATOM   7791  CG2 THR   472      61.219  79.163  44.805  1.00  0.00
C
ATOM   7792 HG21 THR   472      61.999  78.408  44.868  1.00  0.00
H
ATOM   7793 HG22 THR   472      61.041  79.425  43.766  1.00  0.00
H
ATOM   7794 HG23 THR   472      61.545  80.057  45.334  1.00  0.00
H
ATOM   7795  OG1 THR   472      59.553  77.472  44.708  1.00  0.00
O
ATOM   7796  HG1 THR   472      59.616  77.678  43.771  1.00  0.00
H
ATOM   7797  C   THR   472      61.187  77.298  47.239  1.00  0.00
C
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ATOM   7798  O   THR   472      62.157  77.628  47.923  1.00  0.00
O
ATOM   7799  N   THR   473      61.054  76.060  46.762  1.00  0.00
N
ATOM   7800  H   THR   473      60.300  75.897  46.108  1.00  0.00
H
ATOM   7801  CA  THR   473      62.104  75.030  46.830  1.00  0.00
C
ATOM   7802  HA  THR   473      62.904  75.381  47.479  1.00  0.00
H
ATOM   7803  CB  THR   473      61.608  73.695  47.411  1.00  0.00
C
ATOM   7804  HB  THR   473      62.475  73.051  47.557  1.00  0.00
H
ATOM   7805  CG2 THR   473      60.887  73.841  48.748  1.00  0.00
C
ATOM   7806 HG21 THR   473      59.977  74.429  48.629  1.00  0.00
H
ATOM   7807 HG22 THR   473      60.624  72.854  49.130  1.00  0.00
H
ATOM   7808 HG23 THR   473      61.542  74.333  49.467  1.00  0.00
H
ATOM   7809  OG1 THR   473      60.722  73.046  46.534  1.00  0.00
O
ATOM   7810  HG1 THR   473      60.680  72.127  46.822  1.00  0.00
H
ATOM   7811  C   THR   473      62.712  74.811  45.448  1.00  0.00
C
ATOM   7812  O   THR   473      62.054  75.052  44.437  1.00  0.00
O
ATOM   7813  N   ASN   474      63.946  74.304  45.400  1.00  0.00
N
ATOM   7814  H   ASN   474      64.414  74.079  46.263  1.00  0.00
H
ATOM   7815  CA  ASN   474      64.654  73.996  44.150  1.00  0.00
C
ATOM   7816  HA  ASN   474      64.762  74.915  43.569  1.00  0.00
H
ATOM   7817  CB  ASN   474      66.062  73.515  44.571  1.00  0.00
C
ATOM   7818  HB2 ASN   474      66.406  74.090  45.431  1.00  0.00
H
ATOM   7819  HB3 ASN   474      66.026  72.465  44.861  1.00  0.00
H
ATOM   7820  CG  ASN   474      67.122  73.679  43.499  1.00  0.00
C
ATOM   7821  OD1 ASN   474      67.504  72.743  42.831  1.00  0.00
O
ATOM   7822  ND2 ASN   474      67.728  74.841  43.374  1.00  0.00
N
ATOM   7823 HD21 ASN   474      68.458  74.834  42.678  1.00  0.00
H
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ATOM   7824 HD22 ASN   474      67.633  75.560  44.070  1.00  0.00
H
ATOM   7825  C   ASN   474      63.847  72.999  43.272  1.00  0.00
C
ATOM   7826  O   ASN   474      63.841  73.092  42.054  1.00  0.00
O
ATOM   7827  N   GLN   475      63.045  72.130  43.906  1.00  0.00
N
ATOM   7828  H   GLN   475      63.088  72.118  44.914  1.00  0.00
H
ATOM   7829  CA  GLN   475      62.147  71.162  43.259  1.00  0.00
C
ATOM   7830  HA  GLN   475      62.661  70.719  42.409  1.00  0.00
H
ATOM   7831  CB  GLN   475      61.800  70.048  44.262  1.00  0.00
C
ATOM   7832  HB2 GLN   475      61.245  70.465  45.104  1.00  0.00
H
ATOM   7833  HB3 GLN   475      61.142  69.347  43.762  1.00  0.00
H
ATOM   7834  CG  GLN   475      63.011  69.253  44.776  1.00  0.00
C
ATOM   7835  HG2 GLN   475      62.649  68.349  45.264  1.00  0.00
H
ATOM   7836  HG3 GLN   475      63.623  68.953  43.924  1.00  0.00
H
ATOM   7837  CD  GLN   475      63.861  70.023  45.784  1.00  0.00
C
ATOM   7838  OE1 GLN   475      63.378  70.835  46.566  1.00  0.00
O
ATOM   7839  NE2 GLN   475      65.160  69.839  45.787  1.00  0.00
N
ATOM   7840 HE21 GLN   475      65.698  70.318  46.484  1.00  0.00
H
ATOM   7841 HE22 GLN   475      65.592  69.254  45.088  1.00  0.00
H
ATOM   7842  C   GLN   475      60.840  71.785  42.734  1.00  0.00
C
ATOM   7843  O   GLN   475      60.262  71.338  41.742  1.00  0.00
O
ATOM   7844  N   LYS   476      60.339  72.822  43.416  1.00  0.00
N
ATOM   7845  H   LYS   476      60.871  73.170  44.204  1.00  0.00
H
ATOM   7846  CA  LYS   476      59.163  73.580  42.966  1.00  0.00
C
ATOM   7847  HA  LYS   476      58.405  72.894  42.587  1.00  0.00
H
ATOM   7848  CB  LYS   476      58.571  74.425  44.104  1.00  0.00
C
ATOM   7849  HB2 LYS   476      59.388  74.900  44.647  1.00  0.00
H
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ATOM   7850  HB3 LYS   476      57.949  75.210  43.666  1.00  0.00
H
ATOM   7851  CG  LYS   476      57.705  73.643  45.099  1.00  0.00
C
ATOM   7852  HG2 LYS   476      56.854  73.200  44.580  1.00  0.00
H
ATOM   7853  HG3 LYS   476      58.295  72.848  45.550  1.00  0.00
H
ATOM   7854  CD  LYS   476      57.207  74.614  46.181  1.00  0.00
C
ATOM   7855  HD2 LYS   476      58.066  75.094  46.654  1.00  0.00
H
ATOM   7856  HD3 LYS   476      56.594  75.382  45.705  1.00  0.00
H
ATOM   7857  CE  LYS   476      56.372  73.897  47.247  1.00  0.00
C
ATOM   7858  HE2 LYS   476      55.553  73.370  46.749  1.00  0.00
H
ATOM   7859  HE3 LYS   476      56.993  73.152  47.755  1.00  0.00
H
ATOM   7860  NZ  LYS   476      55.809  74.854  48.233  1.00  0.00
N
ATOM   7861  HZ1 LYS   476      55.280  75.584  47.777  1.00  0.00
H
ATOM   7862  HZ2 LYS   476      55.150  74.370  48.846  1.00  0.00
H
ATOM   7863  HZ3 LYS   476      56.520  75.271  48.817  1.00  0.00
H
ATOM   7864  C   LYS   476      59.500  74.483  41.788  1.00  0.00
C
ATOM   7865  O   LYS   476      58.623  74.696  40.961  1.00  0.00
O
ATOM   7866  N   THR   477      60.714  75.017  41.677  1.00  0.00
N
ATOM   7867  H   THR   477      61.440  74.854  42.372  1.00  0.00
H
ATOM   7868  CA  THR   477      61.074  75.857  40.536  1.00  0.00
C
ATOM   7869  HA  THR   477      60.263  76.576  40.381  1.00  0.00
H
ATOM   7870  CB  THR   477      62.361  76.622  40.844  1.00  0.00
C
ATOM   7871  HB  THR   477      62.792  76.955  39.911  1.00  0.00
H
ATOM   7872  CG2 THR   477      62.087  77.777  41.805  1.00  0.00
C
ATOM   7873 HG21 THR   477      61.829  77.359  42.776  1.00  0.00
H
ATOM   7874 HG22 THR   477      62.982  78.379  41.906  1.00  0.00
H
ATOM   7875 HG23 THR   477      61.267  78.406  41.470  1.00  0.00
H
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ATOM   7876  OG1 THR   477      63.297  75.820  41.529  1.00  0.00
O
ATOM   7877  HG1 THR   477      63.908  75.415  40.892  1.00  0.00
H
ATOM   7878  C   THR   477      61.182  75.050  39.235  1.00  0.00
C
ATOM   7879  O   THR   477      60.719  75.524  38.199  1.00  0.00
O
ATOM   7880  N   GLU   478      61.668  73.804  39.290  1.00  0.00
N
ATOM   7881  H   GLU   478      62.181  73.524  40.118  1.00  0.00
H
ATOM   7882  CA  GLU   478      61.630  72.826  38.187  1.00  0.00
C
ATOM   7883  HA  GLU   478      62.165  73.221  37.326  1.00  0.00
H
ATOM   7884  CB  GLU   478      62.321  71.528  38.640  1.00  0.00
C
ATOM   7885  HB2 GLU   478      61.784  71.162  39.508  1.00  0.00
H
ATOM   7886  HB3 GLU   478      62.211  70.784  37.857  1.00  0.00
H
ATOM   7887  CG  GLU   478      63.814  71.700  38.984  1.00  0.00
C
ATOM   7888  HG2 GLU   478      64.377  71.778  38.051  1.00  0.00
H
ATOM   7889  HG3 GLU   478      63.958  72.638  39.518  1.00  0.00
H
ATOM   7890  CD  GLU   478      64.385  70.509  39.791  1.00  0.00
C
ATOM   7891  OE1 GLU   478      63.613  69.773  40.459  1.00  0.00
O
ATOM   7892  OE2 GLU   478      65.584  70.204  39.649  1.00  0.00
O
ATOM   7893  C   GLU   478      60.176  72.535  37.742  1.00  0.00
C
ATOM   7894  O   GLU   478      59.839  72.634  36.558  1.00  0.00
O
ATOM   7895  N   LEU   479      59.263  72.246  38.690  1.00  0.00
N
ATOM   7896  H   LEU   479      59.585  72.132  39.645  1.00  0.00
H
ATOM   7897  CA  LEU   479      57.828  72.061  38.390  1.00  0.00
C
ATOM   7898  HA  LEU   479      57.736  71.280  37.638  1.00  0.00
H
ATOM   7899  CB  LEU   479      57.039  71.660  39.653  1.00  0.00
C
ATOM   7900  HB2 LEU   479      57.410  72.254  40.488  1.00  0.00
H
ATOM   7901  HB3 LEU   479      56.006  71.967  39.492  1.00  0.00
H
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ATOM   7902  CG  LEU   479      57.006  70.165  40.036  1.00  0.00
C
ATOM   7903  HG  LEU   479      58.013  69.812  40.262  1.00  0.00
H
ATOM   7904  CD1 LEU   479      56.121  70.012  41.278  1.00  0.00
C
ATOM   7905 HD11 LEU   479      55.105  70.331  41.049  1.00  0.00
H
ATOM   7906 HD12 LEU   479      56.104  68.972  41.594  1.00  0.00
H
ATOM   7907 HD13 LEU   479      56.517  70.618  42.090  1.00  0.00
H
ATOM   7908  CD2 LEU   479      56.381  69.290  38.943  1.00  0.00
C
ATOM   7909 HD21 LEU   479      56.997  69.297  38.049  1.00  0.00
H
ATOM   7910 HD22 LEU   479      56.298  68.261  39.284  1.00  0.00
H
ATOM   7911 HD23 LEU   479      55.391  69.659  38.684  1.00  0.00
H
ATOM   7912  C   LEU   479      57.185  73.322  37.782  1.00  0.00
C
ATOM   7913  O   LEU   479      56.427  73.225  36.815  1.00  0.00
O
ATOM   7914  N   GLN   480      57.480  74.504  38.334  1.00  0.00
N
ATOM   7915  H   GLN   480      58.123  74.523  39.119  1.00  0.00
H
ATOM   7916  CA  GLN   480      56.975  75.770  37.804  1.00  0.00
C
ATOM   7917  HA  GLN   480      55.882  75.736  37.805  1.00  0.00
H
ATOM   7918  CB  GLN   480      57.440  76.955  38.667  1.00  0.00
C
ATOM   7919  HB2 GLN   480      58.507  76.838  38.856  1.00  0.00
H
ATOM   7920  HB3 GLN   480      57.304  77.881  38.106  1.00  0.00
H
ATOM   7921  CG  GLN   480      56.686  77.085  40.002  1.00  0.00
C
ATOM   7922  HG2 GLN   480      56.588  76.117  40.471  1.00  0.00
H
ATOM   7923  HG3 GLN   480      57.300  77.665  40.681  1.00  0.00
H
ATOM   7924  CD  GLN   480      55.305  77.742  39.922  1.00  0.00
C
ATOM   7925  OE1 GLN   480      54.769  78.187  40.919  1.00  0.00
O
ATOM   7926  NE2 GLN   480      54.646  77.841  38.785  1.00  0.00
N
ATOM   7927 HE21 GLN   480      53.734  78.259  38.858  1.00  0.00
H
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ATOM   7928 HE22 GLN   480      55.035  77.535  37.912  1.00  0.00
H
ATOM   7929  C   GLN   480      57.440  75.974  36.362  1.00  0.00
C
ATOM   7930  O   GLN   480      56.635  76.433  35.561  1.00  0.00
O
ATOM   7931  N   ALA   481      58.682  75.620  36.015  1.00  0.00
N
ATOM   7932  H   ALA   481      59.309  75.252  36.723  1.00  0.00
H
ATOM   7933  CA  ALA   481      59.215  75.772  34.665  1.00  0.00
C
ATOM   7934  HA  ALA   481      59.106  76.819  34.374  1.00  0.00
H
ATOM   7935  CB  ALA   481      60.703  75.382  34.717  1.00  0.00
C
ATOM   7936  HB1 ALA   481      60.794  74.307  34.858  1.00  0.00
H
ATOM   7937  HB2 ALA   481      61.232  75.652  33.810  1.00  0.00
H
ATOM   7938  HB3 ALA   481      61.202  75.879  35.548  1.00  0.00
H
ATOM   7939  C   ALA   481      58.420  74.924  33.648  1.00  0.00
C
ATOM   7940  O   ALA   481      58.037  75.439  32.594  1.00  0.00
O
ATOM   7941  N   ILE   482      58.070  73.674  33.993  1.00  0.00
N
ATOM   7942  H   ILE   482      58.422  73.292  34.866  1.00  0.00
H
ATOM   7943  CA  ILE   482      57.165  72.842  33.174  1.00  0.00
C
ATOM   7944  HA  ILE   482      57.549  72.830  32.155  1.00  0.00
H
ATOM   7945  CB  ILE   482      57.128  71.375  33.676  1.00  0.00
C
ATOM   7946  HB  ILE   482      56.798  71.370  34.716  1.00  0.00
H
ATOM   7947  CG2 ILE   482      56.126  70.545  32.845  1.00  0.00
C
ATOM   7948 HG21 ILE   482      56.399  70.579  31.788  1.00  0.00
H
ATOM   7949 HG22 ILE   482      56.114  69.510  33.179  1.00  0.00
H
ATOM   7950 HG23 ILE   482      55.113  70.931  32.962  1.00  0.00
H
ATOM   7951  CG1 ILE   482      58.536  70.734  33.591  1.00  0.00
C
ATOM   7952 HG12 ILE   482      58.872  70.753  32.556  1.00  0.00
H
ATOM   7953 HG13 ILE   482      59.234  71.328  34.179  1.00  0.00
H
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ATOM   7954  CD1 ILE   482      58.618  69.287  34.090  1.00  0.00
C
ATOM   7955 HD11 ILE   482      58.218  68.608  33.338  1.00  0.00
H
ATOM   7956 HD12 ILE   482      59.658  69.021  34.277  1.00  0.00
H
ATOM   7957 HD13 ILE   482      58.046  69.184  35.009  1.00  0.00
H
ATOM   7958  C   ILE   482      55.760  73.464  33.099  1.00  0.00
C
ATOM   7959  O   ILE   482      55.155  73.460  32.029  1.00  0.00
O
ATOM   7960  N   TYR   483      55.243  74.052  34.187  1.00  0.00
N
ATOM   7961  H   TYR   483      55.755  74.005  35.060  1.00  0.00
H
ATOM   7962  CA  TYR   483      53.939  74.727  34.149  1.00  0.00
C
ATOM   7963  HA  TYR   483      53.239  74.009  33.727  1.00  0.00
H
ATOM   7964  CB  TYR   483      53.425  75.093  35.550  1.00  0.00
C
ATOM   7965  HB2 TYR   483      53.438  74.212  36.185  1.00  0.00
H
ATOM   7966  HB3 TYR   483      54.107  75.816  35.991  1.00  0.00
H
ATOM   7967  CG  TYR   483      52.016  75.675  35.548  1.00  0.00
C
ATOM   7968  CD1 TYR   483      50.970  75.045  34.837  1.00  0.00
C
ATOM   7969  HD1 TYR   483      51.141  74.116  34.314  1.00  0.00
H
ATOM   7970  CE1 TYR   483      49.694  75.637  34.774  1.00  0.00
C
ATOM   7971  HE1 TYR   483      48.904  75.167  34.209  1.00  0.00
H
ATOM   7972  CZ  TYR   483      49.446  76.852  35.441  1.00  0.00
C
ATOM   7973  OH  TYR   483      48.226  77.444  35.323  1.00  0.00
O
ATOM   7974  HH  TYR   483      47.637  76.884  34.807  1.00  0.00
H
ATOM   7975  CE2 TYR   483      50.470  77.451  36.202  1.00  0.00
C
ATOM   7976  HE2 TYR   483      50.261  78.355  36.753  1.00  0.00
H
ATOM   7977  CD2 TYR   483      51.754  76.873  36.241  1.00  0.00
C
ATOM   7978  HD2 TYR   483      52.537  77.355  36.805  1.00  0.00
H
ATOM   7979  C   TYR   483      53.928  75.947  33.212  1.00  0.00
C
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ATOM   7980  O   TYR   483      53.064  76.012  32.339  1.00  0.00
O
ATOM   7981  N   LEU   484      54.906  76.863  33.309  1.00  0.00
N
ATOM   7982  H   LEU   484      55.619  76.722  34.016  1.00  0.00
H
ATOM   7983  CA  LEU   484      55.032  78.001  32.380  1.00  0.00
C
ATOM   7984  HA  LEU   484      54.150  78.643  32.474  1.00  0.00
H
ATOM   7985  CB  LEU   484      56.288  78.844  32.697  1.00  0.00
C
ATOM   7986  HB2 LEU   484      57.164  78.213  32.534  1.00  0.00
H
ATOM   7987  HB3 LEU   484      56.327  79.658  31.970  1.00  0.00
H
ATOM   7988  CG  LEU   484      56.406  79.465  34.102  1.00  0.00
C
ATOM   7989  HG  LEU   484      56.468  78.678  34.841  1.00  0.00
H
ATOM   7990  CD1 LEU   484      57.700  80.276  34.184  1.00  0.00
C
ATOM   7991 HD11 LEU   484      57.670  81.102  33.478  1.00  0.00
H
ATOM   7992 HD12 LEU   484      57.827  80.659  35.194  1.00  0.00
H
ATOM   7993 HD13 LEU   484      58.545  79.632  33.950  1.00  0.00
H
ATOM   7994  CD2 LEU   484      55.234  80.366  34.481  1.00  0.00
C
ATOM   7995 HD21 LEU   484      54.317  79.777  34.505  1.00  0.00
H
ATOM   7996 HD22 LEU   484      55.399  80.779  35.475  1.00  0.00
H
ATOM   7997 HD23 LEU   484      55.122  81.170  33.757  1.00  0.00
H
ATOM   7998  C   LEU   484      55.113  77.500  30.918  1.00  0.00
C
ATOM   7999  O   LEU   484      54.419  78.013  30.043  1.00  0.00
O
ATOM   8000  N   ALA   485      55.909  76.450  30.668  1.00  0.00
N
ATOM   8001  H   ALA   485      56.504  76.120  31.426  1.00  0.00
H
ATOM   8002  CA  ALA   485      56.078  75.835  29.348  1.00  0.00
C
ATOM   8003  HA  ALA   485      56.245  76.641  28.635  1.00  0.00
H
ATOM   8004  CB  ALA   485      57.335  74.978  29.403  1.00  0.00
C
ATOM   8005  HB1 ALA   485      57.229  74.189  30.150  1.00  0.00
H
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ATOM   8006  HB2 ALA   485      57.505  74.522  28.431  1.00  0.00
H
ATOM   8007  HB3 ALA   485      58.174  75.624  29.660  1.00  0.00
H
ATOM   8008  C   ALA   485      54.863  75.029  28.844  1.00  0.00
C
ATOM   8009  O   ALA   485      54.824  74.643  27.682  1.00  0.00
O
ATOM   8010  N   LEU   486      53.874  74.797  29.705  1.00  0.00
N
ATOM   8011  H   LEU   486      54.057  75.072  30.663  1.00  0.00
H
ATOM   8012  CA  LEU   486      52.547  74.261  29.358  1.00  0.00
C
ATOM   8013  HA  LEU   486      52.606  73.784  28.379  1.00  0.00
H
ATOM   8014  CB  LEU   486      52.127  73.157  30.349  1.00  0.00
C
ATOM   8015  HB2 LEU   486      52.209  73.517  31.378  1.00  0.00
H
ATOM   8016  HB3 LEU   486      51.083  72.933  30.171  1.00  0.00
H
ATOM   8017  CG  LEU   486      52.866  71.820  30.183  1.00  0.00
C
ATOM   8018  HG  LEU   486      53.940  71.965  30.217  1.00  0.00
H
ATOM   8019  CD1 LEU   486      52.440  70.947  31.355  1.00  0.00
C
ATOM   8020 HD11 LEU   486      51.357  70.817  31.338  1.00  0.00
H
ATOM   8021 HD12 LEU   486      52.933  69.977  31.303  1.00  0.00
H
ATOM   8022 HD13 LEU   486      52.726  71.443  32.282  1.00  0.00
H
ATOM   8023  CD2 LEU   486      52.487  71.082  28.888  1.00  0.00
C
ATOM   8024 HD21 LEU   486      52.837  71.631  28.016  1.00  0.00
H
ATOM   8025 HD22 LEU   486      52.961  70.101  28.878  1.00  0.00
H
ATOM   8026 HD23 LEU   486      51.408  70.947  28.827  1.00  0.00
H
ATOM   8027  C   LEU   486      51.480  75.366  29.222  1.00  0.00
C
ATOM   8028  O   LEU   486      50.573  75.213  28.400  1.00  0.00
O
ATOM   8029  N   GLN   487      51.586  76.474  29.967  1.00  0.00
N
ATOM   8030  H   GLN   487      52.340  76.503  30.644  1.00  0.00
H
ATOM   8031  CA  GLN   487      50.722  77.656  29.858  1.00  0.00
C
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ATOM   8032  HA  GLN   487      49.671  77.366  29.919  1.00  0.00
H
ATOM   8033  CB  GLN   487      51.007  78.667  30.985  1.00  0.00
C
ATOM   8034  HB2 GLN   487      52.077  78.871  31.035  1.00  0.00
H
ATOM   8035  HB3 GLN   487      50.507  79.607  30.736  1.00  0.00
H
ATOM   8036  CG  GLN   487      50.512  78.273  32.378  1.00  0.00
C
ATOM   8037  HG2 GLN   487      49.439  78.084  32.332  1.00  0.00
H
ATOM   8038  HG3 GLN   487      51.007  77.367  32.722  1.00  0.00
H
ATOM   8039  CD  GLN   487      50.793  79.408  33.363  1.00  0.00
C
ATOM   8040  OE1 GLN   487      51.854  80.012  33.396  1.00  0.00
O
ATOM   8041  NE2 GLN   487      49.845  79.775  34.191  1.00  0.00
N
ATOM   8042 HE21 GLN   487      50.089  80.498  34.836  1.00  0.00
H
ATOM   8043 HE22 GLN   487      49.024  79.201  34.288  1.00  0.00
H
ATOM   8044  C   GLN   487      50.936  78.386  28.517  1.00  0.00
C
ATOM   8045  O   GLN   487      49.996  78.533  27.735  1.00  0.00
O
ATOM   8046  N   ASP   488      52.179  78.824  28.259  1.00  0.00
N
ATOM   8047  H   ASP   488      52.900  78.629  28.966  1.00  0.00
H
ATOM   8048  CA  ASP   488      52.587  79.597  27.075  1.00  0.00
C
ATOM   8049  HA  ASP   488      51.783  80.311  26.848  1.00  0.00
H
ATOM   8050  CB  ASP   488      53.821  80.440  27.451  1.00  0.00
C
ATOM   8051  HB2 ASP   488      54.660  79.776  27.683  1.00  0.00
H
ATOM   8052  HB3 ASP   488      54.115  81.061  26.600  1.00  0.00
H
ATOM   8053  CG  ASP   488      53.603  81.397  28.652  1.00  0.00
C
ATOM   8054  OD1 ASP   488      52.759  82.327  28.554  1.00  0.00
O
ATOM   8055  OD2 ASP   488      54.313  81.247  29.681  1.00  0.00
O
ATOM   8056  C   ASP   488      52.828  78.698  25.843  1.00  0.00
C
ATOM   8057  O   ASP   488      53.275  79.181  24.818  1.00  0.00
O
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ATOM   8058  N   SER   489      52.527  77.406  25.951  1.00  0.00
N
ATOM   8059  H   SER   489      52.123  77.120  26.842  1.00  0.00
H
ATOM   8060  CA  SER   489      52.650  76.362  24.934  1.00  0.00
C
ATOM   8061  HA  SER   489      53.560  76.550  24.358  1.00  0.00
H
ATOM   8062  CB  SER   489      52.717  74.999  25.661  1.00  0.00
C
ATOM   8063  HB2 SER   489      53.707  74.585  25.549  1.00  0.00
H
ATOM   8064  HB3 SER   489      52.566  75.171  26.686  1.00  0.00
H
ATOM   8065  OG  SER   489      51.841  73.979  25.285  1.00  0.00
O
ATOM   8066  HG  SER   489      52.276  73.122  25.495  1.00  0.00
H
ATOM   8067  C   SER   489      51.486  76.430  23.936  1.00  0.00
C
ATOM   8068  O   SER   489      50.415  77.008  24.171  1.00  0.00
O
ATOM   8069  N   GLY   490      51.700  75.765  22.806  1.00  0.00
N
ATOM   8070  H   GLY   490      52.602  75.326  22.702  1.00  0.00
H
ATOM   8071  CA  GLY   490      50.692  75.496  21.801  1.00  0.00
C
ATOM   8072  HA2 GLY   490      50.077  76.369  21.633  1.00  0.00
H
ATOM   8073  HA3 GLY   490      51.192  75.230  20.873  1.00  0.00
H
ATOM   8074  C   GLY   490      49.765  74.342  22.214  1.00  0.00
C
ATOM   8075  O   GLY   490      49.364  74.209  23.377  1.00  0.00
O
ATOM   8076  N   LEU   491      49.414  73.486  21.241  1.00  0.00
N
ATOM   8077  H   LEU   491      49.744  73.692  20.302  1.00  0.00
H
ATOM   8078  CA  LEU   491      48.523  72.313  21.417  1.00  0.00
C
ATOM   8079  HA  LEU   491      48.100  72.355  22.425  1.00  0.00
H
ATOM   8080  CB  LEU   491      47.382  72.437  20.385  1.00  0.00
C
ATOM   8081  HB2 LEU   491      47.277  73.482  20.080  1.00  0.00
H
ATOM   8082  HB3 LEU   491      47.654  71.870  19.497  1.00  0.00
H
ATOM   8083  CG  LEU   491      46.024  71.963  20.909  1.00  0.00
C
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ATOM   8084  HG  LEU   491      46.103  70.945  21.272  1.00  0.00
H
ATOM   8085  CD1 LEU   491      45.481  72.857  22.030  1.00  0.00
C
ATOM   8086 HD11 LEU   491      45.507  73.906  21.729  1.00  0.00
H
ATOM   8087 HD12 LEU   491      44.450  72.580  22.255  1.00  0.00
H
ATOM   8088 HD13 LEU   491      46.059  72.726  22.944  1.00  0.00
H
ATOM   8089  CD2 LEU   491      45.036  72.017  19.752  1.00  0.00
C
ATOM   8090 HD21 LEU   491      45.378  71.372  18.939  1.00  0.00
H
ATOM   8091 HD22 LEU   491      44.069  71.651  20.085  1.00  0.00
H
ATOM   8092 HD23 LEU   491      44.932  73.038  19.380  1.00  0.00
H
ATOM   8093  C   LEU   491      49.295  70.988  21.317  1.00  0.00
C
ATOM   8094  O   LEU   491      48.967  70.029  22.009  1.00  0.00
O
ATOM   8095  N   GLU   492      50.340  70.996  20.498  1.00  0.00
N
ATOM   8096  H   GLU   492      50.505  71.847  19.996  1.00  0.00
H
ATOM   8097  CA  GLU   492      51.390  69.986  20.418  1.00  0.00
C
ATOM   8098  HA  GLU   492      51.159  69.158  21.079  1.00  0.00
H
ATOM   8099  CB  GLU   492      51.524  69.447  18.976  1.00  0.00
C
ATOM   8100  HB2 GLU   492      51.933  70.228  18.328  1.00  0.00
H
ATOM   8101  HB3 GLU   492      52.238  68.622  18.997  1.00  0.00
H
ATOM   8102  CG  GLU   492      50.210  68.947  18.347  1.00  0.00
C
ATOM   8103  HG2 GLU   492      49.773  68.174  18.978  1.00  0.00
H
ATOM   8104  HG3 GLU   492      49.499  69.772  18.298  1.00  0.00
H
ATOM   8105  CD  GLU   492      50.423  68.410  16.926  1.00  0.00
C
ATOM   8106  OE1 GLU   492      50.804  69.190  16.028  1.00  0.00
O
ATOM   8107  OE2 GLU   492      50.146  67.217  16.658  1.00  0.00
O
ATOM   8108  C   GLU   492      52.707  70.625  20.895  1.00  0.00
C
ATOM   8109  O   GLU   492      53.078  71.689  20.392  1.00  0.00
O
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ATOM   8110  N   VAL   493      53.402  70.019  21.866  1.00  0.00
N
ATOM   8111  H   VAL   493      53.058  69.133  22.227  1.00  0.00
H
ATOM   8112  CA  VAL   493      54.695  70.536  22.367  1.00  0.00
C
ATOM   8113  HA  VAL   493      55.180  71.003  21.513  1.00  0.00
H
ATOM   8114  CB  VAL   493      54.565  71.602  23.491  1.00  0.00
C
ATOM   8115  HB  VAL   493      55.565  71.786  23.893  1.00  0.00
H
ATOM   8116  CG1 VAL   493      54.041  72.944  22.951  1.00  0.00
C
ATOM   8117 HG11 VAL   493      52.979  72.866  22.713  1.00  0.00
H
ATOM   8118 HG12 VAL   493      54.184  73.732  23.681  1.00  0.00
H
ATOM   8119 HG13 VAL   493      54.601  73.220  22.061  1.00  0.00
H
ATOM   8120  CG2 VAL   493      53.663  71.154  24.656  1.00  0.00
C
ATOM   8121 HG21 VAL   493      54.015  70.205  25.054  1.00  0.00
H
ATOM   8122 HG22 VAL   493      53.702  71.884  25.463  1.00  0.00
H
ATOM   8123 HG23 VAL   493      52.636  71.032  24.313  1.00  0.00
H
ATOM   8124  C   VAL   493      55.663  69.450  22.832  1.00  0.00
C
ATOM   8125  O   VAL   493      55.258  68.416  23.365  1.00  0.00
O
ATOM   8126  N   ASN   494      56.962  69.723  22.682  1.00  0.00
N
ATOM   8127  H   ASN   494      57.231  70.625  22.294  1.00  0.00
H
ATOM   8128  CA  ASN   494      58.031  68.928  23.279  1.00  0.00
C
ATOM   8129  HA  ASN   494      57.626  67.980  23.640  1.00  0.00
H
ATOM   8130  CB  ASN   494      59.102  68.636  22.209  1.00  0.00
C
ATOM   8131  HB2 ASN   494      59.597  69.566  21.956  1.00  0.00
H
ATOM   8132  HB3 ASN   494      59.850  67.963  22.625  1.00  0.00
H
ATOM   8133  CG  ASN   494      58.565  68.021  20.925  1.00  0.00
C
ATOM   8134  OD1 ASN   494      58.123  66.886  20.892  1.00  0.00
O
ATOM   8135  ND2 ASN   494      58.613  68.731  19.817  1.00  0.00
N
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ATOM   8136 HD21 ASN   494      58.266  68.300  18.966  1.00  0.00
H
ATOM   8137 HD22 ASN   494      59.002  69.662  19.822  1.00  0.00
H
ATOM   8138  C   ASN   494      58.607  69.702  24.480  1.00  0.00
C
ATOM   8139  O   ASN   494      58.869  70.899  24.364  1.00  0.00
O
ATOM   8140  N   ILE   495      58.828  69.048  25.620  1.00  0.00
N
ATOM   8141  H   ILE   495      58.558  68.068  25.679  1.00  0.00
H
ATOM   8142  CA  ILE   495      59.419  69.651  26.824  1.00  0.00
C
ATOM   8143  HA  ILE   495      59.752  70.662  26.602  1.00  0.00
H
ATOM   8144  CB  ILE   495      58.371  69.752  27.963  1.00  0.00
C
ATOM   8145  HB  ILE   495      57.996  68.750  28.185  1.00  0.00
H
ATOM   8146  CG2 ILE   495      59.009  70.321  29.247  1.00  0.00
C
ATOM   8147 HG21 ILE   495      59.366  71.334  29.067  1.00  0.00
H
ATOM   8148 HG22 ILE   495      58.284  70.336  30.060  1.00  0.00
H
ATOM   8149 HG23 ILE   495      59.842  69.702  29.578  1.00  0.00
H
ATOM   8150  CG1 ILE   495      57.180  70.637  27.515  1.00  0.00
C
ATOM   8151 HG12 ILE   495      57.547  71.627  27.247  1.00  0.00
H
ATOM   8152 HG13 ILE   495      56.722  70.201  26.627  1.00  0.00
H
ATOM   8153  CD1 ILE   495      56.060  70.810  28.548  1.00  0.00
C
ATOM   8154 HD11 ILE   495      56.408  71.393  29.401  1.00  0.00
H
ATOM   8155 HD12 ILE   495      55.238  71.351  28.082  1.00  0.00
H
ATOM   8156 HD13 ILE   495      55.706  69.834  28.883  1.00  0.00
H
ATOM   8157  C   ILE   495      60.648  68.835  27.223  1.00  0.00
C
ATOM   8158  O   ILE   495      60.561  67.613  27.335  1.00  0.00
O
ATOM   8159  N   VAL   496      61.783  69.492  27.466  1.00  0.00
N
ATOM   8160  H   VAL   496      61.794  70.502  27.348  1.00  0.00
H
ATOM   8161  CA  VAL   496      62.962  68.847  28.074  1.00  0.00
C
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ATOM   8162  HA  VAL   496      62.687  67.817  28.284  1.00  0.00
H
ATOM   8163  CB  VAL   496      64.201  68.728  27.152  1.00  0.00
C
ATOM   8164  HB  VAL   496      64.665  67.766  27.372  1.00  0.00
H
ATOM   8165  CG1 VAL   496      63.854  68.738  25.658  1.00  0.00
C
ATOM   8166 HG11 VAL   496      63.484  69.723  25.371  1.00  0.00
H
ATOM   8167 HG12 VAL   496      64.741  68.508  25.072  1.00  0.00
H
ATOM   8168 HG13 VAL   496      63.087  67.994  25.451  1.00  0.00
H
ATOM   8169  CG2 VAL   496      65.273  69.794  27.381  1.00  0.00
C
ATOM   8170 HG21 VAL   496      65.661  69.735  28.398  1.00  0.00
H
ATOM   8171 HG22 VAL   496      66.102  69.631  26.695  1.00  0.00
H
ATOM   8172 HG23 VAL   496      64.840  70.777  27.213  1.00  0.00
H
ATOM   8173  C   VAL   496      63.269  69.478  29.430  1.00  0.00
C
ATOM   8174  O   VAL   496      63.169  70.696  29.595  1.00  0.00
O
ATOM   8175  N   THR   497      63.654  68.637  30.388  1.00  0.00
N
ATOM   8176  H   THR   497      63.707  67.648  30.166  1.00  0.00
H
ATOM   8177  CA  THR   497      63.970  68.995  31.781  1.00  0.00
C
ATOM   8178  HA  THR   497      64.275  70.042  31.830  1.00  0.00
H
ATOM   8179  CB  THR   497      62.707  68.814  32.652  1.00  0.00
C
ATOM   8180  HB  THR   497      61.915  69.449  32.248  1.00  0.00
H
ATOM   8181  CG2 THR   497      62.182  67.374  32.703  1.00  0.00
C
ATOM   8182 HG21 THR   497      62.945  66.710  33.109  1.00  0.00
H
ATOM   8183 HG22 THR   497      61.304  67.332  33.346  1.00  0.00
H
ATOM   8184 HG23 THR   497      61.906  67.040  31.702  1.00  0.00
H
ATOM   8185  OG1 THR   497      62.921  69.210  33.987  1.00  0.00
O
ATOM   8186  HG1 THR   497      63.009  70.169  33.996  1.00  0.00
H
ATOM   8187  C   THR   497      65.129  68.131  32.290  1.00  0.00
C
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ATOM   8188  O   THR   497      65.360  67.039  31.767  1.00  0.00
O
ATOM   8189  N   ASP   498      65.856  68.587  33.307  1.00  0.00
N
ATOM   8190  H   ASP   498      65.683  69.514  33.690  1.00  0.00
H
ATOM   8191  CA  ASP   498      66.837  67.789  34.049  1.00  0.00
C
ATOM   8192  HA  ASP   498      67.112  66.923  33.441  1.00  0.00
H
ATOM   8193  CB  ASP   498      68.117  68.621  34.233  1.00  0.00
C
ATOM   8194  HB2 ASP   498      68.884  67.964  34.641  1.00  0.00
H
ATOM   8195  HB3 ASP   498      68.444  68.972  33.259  1.00  0.00
H
ATOM   8196  CG  ASP   498      67.964  69.834  35.147  1.00  0.00
C
ATOM   8197  OD1 ASP   498      66.821  70.208  35.464  1.00  0.00
O
ATOM   8198  OD2 ASP   498      69.021  70.366  35.557  1.00  0.00
O
ATOM   8199  C   ASP   498      66.263  67.242  35.376  1.00  0.00
C
ATOM   8200  O   ASP   498      66.847  66.351  36.005  1.00  0.00
O
ATOM   8201  N   SER   499      65.076  67.702  35.768  1.00  0.00
N
ATOM   8202  H   SER   499      64.705  68.477  35.244  1.00  0.00
H
ATOM   8203  CA  SER   499      64.438  67.313  37.023  1.00  0.00
C
ATOM   8204  HA  SER   499      65.211  67.325  37.791  1.00  0.00
H
ATOM   8205  CB  SER   499      63.369  68.312  37.443  1.00  0.00
C
ATOM   8206  HB2 SER   499      63.821  69.287  37.546  1.00  0.00
H
ATOM   8207  HB3 SER   499      62.638  68.360  36.629  1.00  0.00
H
ATOM   8208  OG  SER   499      62.751  67.962  38.681  1.00  0.00
O
ATOM   8209  HG  SER   499      63.087  68.581  39.366  1.00  0.00
H
ATOM   8210  C   SER   499      63.815  65.930  36.946  1.00  0.00
C
ATOM   8211  O   SER   499      62.702  65.712  36.455  1.00  0.00
O
ATOM   8212  N   GLN   500      64.513  64.966  37.540  1.00  0.00
N
ATOM   8213  H   GLN   500      65.458  65.182  37.839  1.00  0.00
H
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ATOM   8214  CA  GLN   500      63.963  63.628  37.745  1.00  0.00
C
ATOM   8215  HA  GLN   500      63.650  63.248  36.773  1.00  0.00
H
ATOM   8216  CB  GLN   500      65.031  62.701  38.337  1.00  0.00
C
ATOM   8217  HB2 GLN   500      65.248  63.025  39.355  1.00  0.00
H
ATOM   8218  HB3 GLN   500      64.596  61.704  38.375  1.00  0.00
H
ATOM   8219  CG  GLN   500      66.336  62.641  37.519  1.00  0.00
C
ATOM   8220  HG2 GLN   500      66.077  62.479  36.474  1.00  0.00
H
ATOM   8221  HG3 GLN   500      66.883  63.582  37.598  1.00  0.00
H
ATOM   8222  CD  GLN   500      67.263  61.515  37.977  1.00  0.00
C
ATOM   8223  OE1 GLN   500      67.513  61.310  39.157  1.00  0.00
O
ATOM   8224  NE2 GLN   500      67.809  60.743  37.060  1.00  0.00
N
ATOM   8225 HE21 GLN   500      68.393  59.994  37.387  1.00  0.00
H
ATOM   8226 HE22 GLN   500      67.670  60.934  36.081  1.00  0.00
H
ATOM   8227  C   GLN   500      62.729  63.640  38.664  1.00  0.00
C
ATOM   8228  O   GLN   500      61.868  62.771  38.551  1.00  0.00
O
ATOM   8229  N   TYR   501      62.632  64.630  39.556  1.00  0.00
N
ATOM   8230  H   TYR   501      63.344  65.345  39.545  1.00  0.00
H
ATOM   8231  CA  TYR   501      61.494  64.806  40.461  1.00  0.00
C
ATOM   8232  HA  TYR   501      61.260  63.844  40.925  1.00  0.00
H
ATOM   8233  CB  TYR   501      61.870  65.813  41.562  1.00  0.00
C
ATOM   8234  HB2 TYR   501      62.613  65.358  42.218  1.00  0.00
H
ATOM   8235  HB3 TYR   501      62.335  66.691  41.109  1.00  0.00
H
ATOM   8236  CG  TYR   501      60.687  66.272  42.398  1.00  0.00
C
ATOM   8237  CD1 TYR   501      60.122  65.407  43.354  1.00  0.00
C
ATOM   8238  HD1 TYR   501      60.530  64.415  43.490  1.00  0.00
H
ATOM   8239  CE1 TYR   501      59.019  65.825  44.123  1.00  0.00
C
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ATOM   8240  HE1 TYR   501      58.588  65.158  44.852  1.00  0.00
H
ATOM   8241  CZ  TYR   501      58.469  67.112  43.927  1.00  0.00
C
ATOM   8242  OH  TYR   501      57.410  67.522  44.678  1.00  0.00
O
ATOM   8243  HH  TYR   501      57.189  66.874  45.348  1.00  0.00
H
ATOM   8244  CE2 TYR   501      59.014  67.965  42.944  1.00  0.00
C
ATOM   8245  HE2 TYR   501      58.592  68.945  42.787  1.00  0.00
H
ATOM   8246  CD2 TYR   501      60.124  67.546  42.184  1.00  0.00
C
ATOM   8247  HD2 TYR   501      60.553  68.214  41.444  1.00  0.00
H
ATOM   8248  C   TYR   501      60.240  65.258  39.702  1.00  0.00
C
ATOM   8249  O   TYR   501      59.211  64.582  39.764  1.00  0.00
O
ATOM   8250  N   ALA   502      60.329  66.358  38.944  1.00  0.00
N
ATOM   8251  H   ALA   502      61.212  66.860  38.898  1.00  0.00
H
ATOM   8252  CA  ALA   502      59.214  66.895  38.176  1.00  0.00
C
ATOM   8253  HA  ALA   502      58.394  67.096  38.863  1.00  0.00
H
ATOM   8254  CB  ALA   502      59.667  68.218  37.542  1.00  0.00
C
ATOM   8255  HB1 ALA   502      60.477  68.034  36.835  1.00  0.00
H
ATOM   8256  HB2 ALA   502      58.843  68.674  37.002  1.00  0.00
H
ATOM   8257  HB3 ALA   502      60.013  68.912  38.312  1.00  0.00
H
ATOM   8258  C   ALA   502      58.728  65.883  37.123  1.00  0.00
C
ATOM   8259  O   ALA   502      57.530  65.618  37.012  1.00  0.00
O
ATOM   8260  N   LEU   503      59.669  65.245  36.419  1.00  0.00
N
ATOM   8261  H   LEU   503      60.641  65.500  36.567  1.00  0.00
H
ATOM   8262  CA  LEU   503      59.381  64.200  35.439  1.00  0.00
C
ATOM   8263  HA  LEU   503      58.699  64.617  34.696  1.00  0.00
H
ATOM   8264  CB  LEU   503      60.701  63.832  34.749  1.00  0.00
C
ATOM   8265  HB2 LEU   503      61.130  64.739  34.315  1.00  0.00
H
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ATOM   8266  HB3 LEU   503      61.387  63.452  35.508  1.00  0.00
H
ATOM   8267  CG  LEU   503      60.557  62.775  33.640  1.00  0.00
C
ATOM   8268  HG  LEU   503      60.119  61.859  34.036  1.00  0.00
H
ATOM   8269  CD1 LEU   503      59.704  63.285  32.480  1.00  0.00
C
ATOM   8270 HD11 LEU   503      60.095  64.238  32.124  1.00  0.00
H
ATOM   8271 HD12 LEU   503      59.721  62.568  31.661  1.00  0.00
H
ATOM   8272 HD13 LEU   503      58.674  63.408  32.807  1.00  0.00
H
ATOM   8273  CD2 LEU   503      61.943  62.460  33.098  1.00  0.00
C
ATOM   8274 HD21 LEU   503      62.563  62.045  33.892  1.00  0.00
H
ATOM   8275 HD22 LEU   503      61.869  61.731  32.291  1.00  0.00
H
ATOM   8276 HD23 LEU   503      62.395  63.380  32.726  1.00  0.00
H
ATOM   8277  C   LEU   503      58.716  62.966  36.075  1.00  0.00
C
ATOM   8278  O   LEU   503      57.720  62.477  35.545  1.00  0.00
O
ATOM   8279  N   GLY   504      59.233  62.474  37.209  1.00  0.00
N
ATOM   8280  H   GLY   504      60.070  62.903  37.591  1.00  0.00
H
ATOM   8281  CA  GLY   504      58.734  61.262  37.869  1.00  0.00
C
ATOM   8282  HA2 GLY   504      58.781  60.431  37.166  1.00  0.00
H
ATOM   8283  HA3 GLY   504      59.371  61.036  38.723  1.00  0.00
H
ATOM   8284  C   GLY   504      57.300  61.377  38.386  1.00  0.00
C
ATOM   8285  O   GLY   504      56.578  60.379  38.420  1.00  0.00
O
ATOM   8286  N   ILE   505      56.856  62.594  38.728  1.00  0.00
N
ATOM   8287  H   ILE   505      57.524  63.358  38.718  1.00  0.00
H
ATOM   8288  CA  ILE   505      55.441  62.875  39.020  1.00  0.00
C
ATOM   8289  HA  ILE   505      55.091  62.139  39.743  1.00  0.00
H
ATOM   8290  CB  ILE   505      55.243  64.287  39.631  1.00  0.00
C
ATOM   8291  HB  ILE   505      55.678  65.029  38.959  1.00  0.00
H
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ATOM   8292  CG2 ILE   505      53.737  64.605  39.786  1.00  0.00
C
ATOM   8293 HG21 ILE   505      53.249  63.840  40.391  1.00  0.00
H
ATOM   8294 HG22 ILE   505      53.586  65.578  40.250  1.00  0.00
H
ATOM   8295 HG23 ILE   505      53.250  64.647  38.811  1.00  0.00
H
ATOM   8296  CG1 ILE   505      55.957  64.380  40.996  1.00  0.00
C
ATOM   8297 HG12 ILE   505      55.471  63.712  41.704  1.00  0.00
H
ATOM   8298 HG13 ILE   505      56.985  64.040  40.892  1.00  0.00
H
ATOM   8299  CD1 ILE   505      56.010  65.797  41.580  1.00  0.00
C
ATOM   8300 HD11 ILE   505      55.011  66.176  41.785  1.00  0.00
H
ATOM   8301 HD12 ILE   505      56.563  65.769  42.515  1.00  0.00
H
ATOM   8302 HD13 ILE   505      56.520  66.462  40.884  1.00  0.00
H
ATOM   8303  C   ILE   505      54.599  62.700  37.751  1.00  0.00
C
ATOM   8304  O   ILE   505      53.624  61.952  37.761  1.00  0.00
O
ATOM   8305  N   ILE   506      54.972  63.379  36.662  1.00  0.00
N
ATOM   8306  H   ILE   506      55.820  63.932  36.711  1.00  0.00
H
ATOM   8307  CA  ILE   506      54.161  63.471  35.436  1.00  0.00
C
ATOM   8308  HA  ILE   506      53.133  63.704  35.721  1.00  0.00
H
ATOM   8309  CB  ILE   506      54.671  64.637  34.550  1.00  0.00
C
ATOM   8310  HB  ILE   506      55.709  64.437  34.277  1.00  0.00
H
ATOM   8311  CG2 ILE   506      53.829  64.738  33.265  1.00  0.00
C
ATOM   8312 HG21 ILE   506      52.783  64.911  33.519  1.00  0.00
H
ATOM   8313 HG22 ILE   506      54.183  65.547  32.628  1.00  0.00
H
ATOM   8314 HG23 ILE   506      53.899  63.818  32.690  1.00  0.00
H
ATOM   8315  CG1 ILE   506      54.602  65.987  35.312  1.00  0.00
C
ATOM   8316 HG12 ILE   506      53.558  66.272  35.453  1.00  0.00
H
ATOM   8317 HG13 ILE   506      55.044  65.883  36.301  1.00  0.00
H
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ATOM   8318  CD1 ILE   506      55.346  67.131  34.614  1.00  0.00
C
ATOM   8319 HD11 ILE   506      54.845  67.403  33.686  1.00  0.00
H
ATOM   8320 HD12 ILE   506      55.364  68.004  35.266  1.00  0.00
H
ATOM   8321 HD13 ILE   506      56.373  66.831  34.403  1.00  0.00
H
ATOM   8322  C   ILE   506      54.106  62.122  34.698  1.00  0.00
C
ATOM   8323  O   ILE   506      53.044  61.728  34.216  1.00  0.00
O
ATOM   8324  N   GLN   507      55.206  61.360  34.672  1.00  0.00
N
ATOM   8325  H   GLN   507      56.058  61.726  35.087  1.00  0.00
H
ATOM   8326  CA  GLN   507      55.243  60.029  34.051  1.00  0.00
C
ATOM   8327  HA  GLN   507      54.869  60.116  33.030  1.00  0.00
H
ATOM   8328  CB  GLN   507      56.689  59.502  33.994  1.00  0.00
C
ATOM   8329  HB2 GLN   507      57.151  59.581  34.982  1.00  0.00
H
ATOM   8330  HB3 GLN   507      56.656  58.447  33.714  1.00  0.00
H
ATOM   8331  CG  GLN   507      57.530  60.230  32.931  1.00  0.00
C
ATOM   8332  HG2 GLN   507      56.986  60.197  31.990  1.00  0.00
H
ATOM   8333  HG3 GLN   507      57.656  61.274  33.202  1.00  0.00
H
ATOM   8334  CD  GLN   507      58.906  59.597  32.703  1.00  0.00
C
ATOM   8335  OE1 GLN   507      59.497  58.949  33.552  1.00  0.00
O
ATOM   8336  NE2 GLN   507      59.480  59.756  31.530  1.00  0.00
N
ATOM   8337 HE21 GLN   507      60.372  59.313  31.402  1.00  0.00
H
ATOM   8338 HE22 GLN   507      59.019  60.233  30.776  1.00  0.00
H
ATOM   8339  C   GLN   507      54.323  59.011  34.746  1.00  0.00
C
ATOM   8340  O   GLN   507      53.876  58.069  34.099  1.00  0.00
O
ATOM   8341  N   ALA   508      53.974  59.198  36.026  1.00  0.00
N
ATOM   8342  H   ALA   508      54.338  60.004  36.518  1.00  0.00
H
ATOM   8343  CA  ALA   508      53.008  58.336  36.717  1.00  0.00
C
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ATOM   8344  HA  ALA   508      53.204  57.306  36.412  1.00  0.00
H
ATOM   8345  CB  ALA   508      53.245  58.425  38.230  1.00  0.00
C
ATOM   8346  HB1 ALA   508      53.010  59.430  38.584  1.00  0.00
H
ATOM   8347  HB2 ALA   508      52.604  57.705  38.735  1.00  0.00
H
ATOM   8348  HB3 ALA   508      54.286  58.198  38.459  1.00  0.00
H
ATOM   8349  C   ALA   508      51.537  58.617  36.332  1.00  0.00
C
ATOM   8350  O   ALA   508      50.632  58.032  36.933  1.00  0.00
O
ATOM   8351  N   GLN   509      51.309  59.521  35.369  1.00  0.00
N
ATOM   8352  H   GLN   509      52.119  59.971  34.959  1.00  0.00
H
ATOM   8353  CA  GLN   509      50.011  59.965  34.850  1.00  0.00
C
ATOM   8354  HA  GLN   509      50.184  60.912  34.335  1.00  0.00
H
ATOM   8355  CB  GLN   509      49.465  58.959  33.811  1.00  0.00
C
ATOM   8356  HB2 GLN   509      49.201  58.031  34.321  1.00  0.00
H
ATOM   8357  HB3 GLN   509      48.557  59.377  33.369  1.00  0.00
H
ATOM   8358  CG  GLN   509      50.456  58.625  32.692  1.00  0.00
C
ATOM   8359  HG2 GLN   509      50.714  59.528  32.142  1.00  0.00
H
ATOM   8360  HG3 GLN   509      51.365  58.211  33.126  1.00  0.00
H
ATOM   8361  CD  GLN   509      49.893  57.591  31.732  1.00  0.00
C
ATOM   8362  OE1 GLN   509      50.289  56.438  31.744  1.00  0.00
O
ATOM   8363  NE2 GLN   509      48.986  57.950  30.856  1.00  0.00
N
ATOM   8364 HE21 GLN   509      48.834  57.295  30.091  1.00  0.00
H
ATOM   8365 HE22 GLN   509      48.599  58.881  30.827  1.00  0.00
H
ATOM   8366  C   GLN   509      48.991  60.266  35.966  1.00  0.00
C
ATOM   8367  O   GLN   509      47.946  59.608  36.010  1.00  0.00
O
ATOM   8368  N   PRO   510      49.263  61.196  36.909  1.00  0.00
N
ATOM   8369  CD  PRO   510      50.434  62.048  37.057  1.00  0.00
C
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ATOM   8370  HD2 PRO   510      50.281  62.969  36.501  1.00  0.00
H
ATOM   8371  HD3 PRO   510      51.361  61.577  36.738  1.00  0.00
H
ATOM   8372  CG  PRO   510      50.492  62.371  38.546  1.00  0.00
C
ATOM   8373  HG2 PRO   510      51.018  63.312  38.721  1.00  0.00
H
ATOM   8374  HG3 PRO   510      50.980  61.551  39.078  1.00  0.00
H
ATOM   8375  CB  PRO   510      49.017  62.425  38.959  1.00  0.00
C
ATOM   8376  HB2 PRO   510      48.633  63.438  38.899  1.00  0.00
H
ATOM   8377  HB3 PRO   510      48.885  62.063  39.973  1.00  0.00
H
ATOM   8378  CA  PRO   510      48.301  61.503  37.962  1.00  0.00
C
ATOM   8379  HA  PRO   510      48.057  60.575  38.478  1.00  0.00
H
ATOM   8380  C   PRO   510      47.019  62.132  37.386  1.00  0.00
C
ATOM   8381  O   PRO   510      47.031  62.704  36.293  1.00  0.00
O
ATOM   8382  N   ASP   511      45.936  62.086  38.163  1.00  0.00
N
ATOM   8383  H   ASP   511      45.992  61.521  39.003  1.00  0.00
H
ATOM   8384  CA  ASP   511      44.735  62.926  37.992  1.00  0.00
C
ATOM   8385  HA  ASP   511      45.015  63.743  37.331  1.00  0.00
H
ATOM   8386  CB  ASP   511      43.610  62.163  37.249  1.00  0.00
C
ATOM   8387  HB2 ASP   511      42.784  62.846  37.050  1.00  0.00
H
ATOM   8388  HB3 ASP   511      44.003  61.855  36.277  1.00  0.00
H
ATOM   8389  CG  ASP   511      43.036  60.930  37.963  1.00  0.00
C
ATOM   8390  OD1 ASP   511      42.687  61.019  39.157  1.00  0.00
O
ATOM   8391  OD2 ASP   511      42.934  59.849  37.339  1.00  0.00
O
ATOM   8392  C   ASP   511      44.304  63.663  39.285  1.00  0.00
C
ATOM   8393  O   ASP   511      43.342  64.432  39.285  1.00  0.00
O
ATOM   8394  N   LYS   512      45.074  63.511  40.378  1.00  0.00
N
ATOM   8395  H   LYS   512      45.826  62.836  40.321  1.00  0.00
H
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ATOM   8396  CA  LYS   512      44.869  64.143  41.698  1.00  0.00
C
ATOM   8397  HA  LYS   512      44.312  65.078  41.575  1.00  0.00
H
ATOM   8398  CB  LYS   512      44.092  63.197  42.652  1.00  0.00
C
ATOM   8399  HB2 LYS   512      44.808  62.563  43.182  1.00  0.00
H
ATOM   8400  HB3 LYS   512      43.564  63.806  43.384  1.00  0.00
H
ATOM   8401  CG  LYS   512      43.092  62.279  41.935  1.00  0.00
C
ATOM   8402  HG2 LYS   512      42.406  62.895  41.348  1.00  0.00
H
ATOM   8403  HG3 LYS   512      43.672  61.639  41.271  1.00  0.00
H
ATOM   8404  CD  LYS   512      42.266  61.344  42.819  1.00  0.00
C
ATOM   8405  HD2 LYS   512      42.921  60.702  43.412  1.00  0.00
H
ATOM   8406  HD3 LYS   512      41.590  61.922  43.450  1.00  0.00
H
ATOM   8407  CE  LYS   512      41.485  60.493  41.821  1.00  0.00
C
ATOM   8408  HE2 LYS   512      40.850  61.136  41.211  1.00  0.00
H
ATOM   8409  HE3 LYS   512      42.194  60.055  41.118  1.00  0.00
H
ATOM   8410  NZ  LYS   512      40.709  59.412  42.449  1.00  0.00
N
ATOM   8411  HZ1 LYS   512      40.008  59.750  43.073  1.00  0.00
H
ATOM   8412  HZ2 LYS   512      40.242  58.904  41.698  1.00  0.00
H
ATOM   8413  HZ3 LYS   512      41.301  58.756  42.943  1.00  0.00
H
ATOM   8414  C   LYS   512      46.217  64.473  42.336  1.00  0.00
C
ATOM   8415  O   LYS   512      47.149  63.667  42.253  1.00  0.00
O
ATOM   8416  N   SER   513      46.296  65.593  43.051  1.00  0.00
N
ATOM   8417  H   SER   513      45.540  66.262  42.999  1.00  0.00
H
ATOM   8418  CA  SER   513      47.432  65.910  43.922  1.00  0.00
C
ATOM   8419  HA  SER   513      47.841  64.973  44.294  1.00  0.00
H
ATOM   8420  CB  SER   513      48.513  66.633  43.114  1.00  0.00
C
ATOM   8421  HB2 SER   513      48.786  66.034  42.244  1.00  0.00
H
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ATOM   8422  HB3 SER   513      48.117  67.595  42.777  1.00  0.00
H
ATOM   8423  OG  SER   513      49.662  66.858  43.914  1.00  0.00
O
ATOM   8424  HG  SER   513      50.300  66.133  43.794  1.00  0.00
H
ATOM   8425  C   SER   513      47.039  66.777  45.124  1.00  0.00
C
ATOM   8426  O   SER   513      46.177  67.651  45.027  1.00  0.00
O
ATOM   8427  N   GLU   514      47.736  66.595  46.249  1.00  0.00
N
ATOM   8428  H   GLU   514      48.423  65.846  46.255  1.00  0.00
H
ATOM   8429  CA  GLU   514      47.721  67.549  47.375  1.00  0.00
C
ATOM   8430  HA  GLU   514      46.689  67.807  47.614  1.00  0.00
H
ATOM   8431  CB  GLU   514      48.368  66.936  48.630  1.00  0.00
C
ATOM   8432  HB2 GLU   514      49.423  66.735  48.431  1.00  0.00
H
ATOM   8433  HB3 GLU   514      48.314  67.676  49.431  1.00  0.00
H
ATOM   8434  CG  GLU   514      47.704  65.649  49.137  1.00  0.00
C
ATOM   8435  HG2 GLU   514      46.621  65.799  49.179  1.00  0.00
H
ATOM   8436  HG3 GLU   514      47.915  64.832  48.444  1.00  0.00
H
ATOM   8437  CD  GLU   514      48.243  65.301  50.533  1.00  0.00
C
ATOM   8438  OE1 GLU   514      49.483  65.185  50.682  1.00  0.00
O
ATOM   8439  OE2 GLU   514      47.437  65.224  51.486  1.00  0.00
O
ATOM   8440  C   GLU   514      48.441  68.872  47.047  1.00  0.00
C
ATOM   8441  O   GLU   514      48.276  69.866  47.752  1.00  0.00
O
ATOM   8442  N   SER   515      49.248  68.900  45.982  1.00  0.00
N
ATOM   8443  H   SER   515      49.282  68.075  45.390  1.00  0.00
H
ATOM   8444  CA  SER   515      50.019  70.064  45.554  1.00  0.00
C
ATOM   8445  HA  SER   515      50.234  70.689  46.422  1.00  0.00
H
ATOM   8446  CB  SER   515      51.359  69.598  44.984  1.00  0.00
C
ATOM   8447  HB2 SER   515      51.873  68.983  45.724  1.00  0.00
H
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ATOM   8448  HB3 SER   515      51.178  68.994  44.095  1.00  0.00
H
ATOM   8449  OG  SER   515      52.175  70.707  44.651  1.00  0.00
O
ATOM   8450  HG  SER   515      52.981  70.368  44.251  1.00  0.00
H
ATOM   8451  C   SER   515      49.243  70.893  44.528  1.00  0.00
C
ATOM   8452  O   SER   515      49.063  70.475  43.384  1.00  0.00
O
ATOM   8453  N   GLU   516      48.837  72.099  44.937  1.00  0.00
N
ATOM   8454  H   GLU   516      48.960  72.299  45.917  1.00  0.00
H
ATOM   8455  CA  GLU   516      48.200  73.149  44.118  1.00  0.00
C
ATOM   8456  HA  GLU   516      47.132  72.948  44.018  1.00  0.00
H
ATOM   8457  CB  GLU   516      48.383  74.485  44.872  1.00  0.00
C
ATOM   8458  HB2 GLU   516      47.871  74.423  45.833  1.00  0.00
H
ATOM   8459  HB3 GLU   516      49.443  74.627  45.087  1.00  0.00
H
ATOM   8460  CG  GLU   516      47.899  75.733  44.115  1.00  0.00
C
ATOM   8461  HG2 GLU   516      48.068  76.610  44.745  1.00  0.00
H
ATOM   8462  HG3 GLU   516      48.512  75.859  43.222  1.00  0.00
H
ATOM   8463  CD  GLU   516      46.418  75.676  43.727  1.00  0.00
C
ATOM   8464  OE1 GLU   516      46.064  76.251  42.677  1.00  0.00
O
ATOM   8465  OE2 GLU   516      45.634  75.075  44.493  1.00  0.00
O
ATOM   8466  C   GLU   516      48.792  73.244  42.701  1.00  0.00
C
ATOM   8467  O   GLU   516      48.084  73.103  41.707  1.00  0.00
O
ATOM   8468  N   LEU   517      50.116  73.407  42.623  1.00  0.00
N
ATOM   8469  H   LEU   517      50.624  73.456  43.491  1.00  0.00
H
ATOM   8470  CA  LEU   517      50.871  73.558  41.377  1.00  0.00
C
ATOM   8471  HA  LEU   517      50.498  74.433  40.840  1.00  0.00
H
ATOM   8472  CB  LEU   517      52.346  73.781  41.771  1.00  0.00
C
ATOM   8473  HB2 LEU   517      52.382  74.389  42.677  1.00  0.00
H
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ATOM   8474  HB3 LEU   517      52.761  72.805  42.029  1.00  0.00
H
ATOM   8475  CG  LEU   517      53.264  74.484  40.747  1.00  0.00
C
ATOM   8476  HG  LEU   517      53.126  75.562  40.831  1.00  0.00
H
ATOM   8477  CD1 LEU   517      54.706  74.127  41.114  1.00  0.00
C
ATOM   8478 HD11 LEU   517      54.809  73.054  41.260  1.00  0.00
H
ATOM   8479 HD12 LEU   517      55.372  74.408  40.304  1.00  0.00
H
ATOM   8480 HD13 LEU   517      54.990  74.655  42.023  1.00  0.00
H
ATOM   8481  CD2 LEU   517      53.054  74.109  39.286  1.00  0.00
C
ATOM   8482 HD21 LEU   517      52.075  74.452  38.951  1.00  0.00
H
ATOM   8483 HD22 LEU   517      53.801  74.599  38.664  1.00  0.00
H
ATOM   8484 HD23 LEU   517      53.129  73.031  39.167  1.00  0.00
H
ATOM   8485  C   LEU   517      50.705  72.324  40.470  1.00  0.00
C
ATOM   8486  O   LEU   517      50.486  72.454  39.268  1.00  0.00
O
ATOM   8487  N   VAL   518      50.756  71.111  41.035  1.00  0.00
N
ATOM   8488  H   VAL   518      50.748  71.046  42.044  1.00  0.00
H
ATOM   8489  CA  VAL   518      50.593  69.881  40.246  1.00  0.00
C
ATOM   8490  HA  VAL   518      51.282  69.919  39.402  1.00  0.00
H
ATOM   8491  CB  VAL   518      50.918  68.611  41.053  1.00  0.00
C
ATOM   8492  HB  VAL   518      50.258  68.567  41.915  1.00  0.00
H
ATOM   8493  CG1 VAL   518      50.731  67.334  40.220  1.00  0.00
C
ATOM   8494 HG11 VAL   518      51.344  67.381  39.319  1.00  0.00
H
ATOM   8495 HG12 VAL   518      51.020  66.462  40.806  1.00  0.00
H
ATOM   8496 HG13 VAL   518      49.687  67.218  39.933  1.00  0.00
H
ATOM   8497  CG2 VAL   518      52.378  68.625  41.534  1.00  0.00
C
ATOM   8498 HG21 VAL   518      52.571  69.502  42.147  1.00  0.00
H
ATOM   8499 HG22 VAL   518      52.572  67.732  42.128  1.00  0.00
H
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ATOM   8500 HG23 VAL   518      53.050  68.636  40.677  1.00  0.00
H
ATOM   8501  C   VAL   518      49.188  69.835  39.655  1.00  0.00
C
ATOM   8502  O   VAL   518      49.073  69.593  38.463  1.00  0.00
O
ATOM   8503  N   ASN   519      48.133  70.165  40.405  1.00  0.00
N
ATOM   8504  H   ASN   519      48.283  70.437  41.371  1.00  0.00
H
ATOM   8505  CA  ASN   519      46.769  70.192  39.854  1.00  0.00
C
ATOM   8506  HA  ASN   519      46.528  69.195  39.482  1.00  0.00
H
ATOM   8507  CB  ASN   519      45.764  70.536  40.963  1.00  0.00
C
ATOM   8508  HB2 ASN   519      45.976  71.533  41.350  1.00  0.00
H
ATOM   8509  HB3 ASN   519      44.760  70.549  40.538  1.00  0.00
H
ATOM   8510  CG  ASN   519      45.770  69.520  42.089  1.00  0.00
C
ATOM   8511  OD1 ASN   519      45.626  68.323  41.888  1.00  0.00
O
ATOM   8512  ND2 ASN   519      45.949  69.957  43.312  1.00  0.00
N
ATOM   8513 HD21 ASN   519      46.017  69.251  44.035  1.00  0.00
H
ATOM   8514 HD22 ASN   519      46.131  70.929  43.478  1.00  0.00
H
ATOM   8515  C   ASN   519      46.634  71.157  38.655  1.00  0.00
C
ATOM   8516  O   ASN   519      45.920  70.846  37.701  1.00  0.00
O
ATOM   8517  N   GLN   520      47.368  72.278  38.652  1.00  0.00
N
ATOM   8518  H   GLN   520      47.930  72.486  39.470  1.00  0.00
H
ATOM   8519  CA  GLN   520      47.430  73.205  37.514  1.00  0.00
C
ATOM   8520  HA  GLN   520      46.412  73.430  37.188  1.00  0.00
H
ATOM   8521  CB  GLN   520      48.093  74.524  37.937  1.00  0.00
C
ATOM   8522  HB2 GLN   520      49.116  74.327  38.248  1.00  0.00
H
ATOM   8523  HB3 GLN   520      48.132  75.170  37.065  1.00  0.00
H
ATOM   8524  CG  GLN   520      47.345  75.281  39.048  1.00  0.00
C
ATOM   8525  HG2 GLN   520      46.395  75.640  38.650  1.00  0.00
H
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ATOM   8526  HG3 GLN   520      47.127  74.611  39.879  1.00  0.00
H
ATOM   8527  CD  GLN   520      48.133  76.478  39.582  1.00  0.00
C
ATOM   8528  OE1 GLN   520      49.141  76.910  39.048  1.00  0.00
O
ATOM   8529  NE2 GLN   520      47.721  77.088  40.664  1.00  0.00
N
ATOM   8530 HE21 GLN   520      48.288  77.835  40.990  1.00  0.00
H
ATOM   8531 HE22 GLN   520      46.943  76.723  41.226  1.00  0.00
H
ATOM   8532  C   GLN   520      48.168  72.598  36.305  1.00  0.00
C
ATOM   8533  O   GLN   520      47.697  72.737  35.178  1.00  0.00
O
ATOM   8534  N   ILE   521      49.283  71.881  36.515  1.00  0.00
N
ATOM   8535  H   ILE   521      49.629  71.822  37.468  1.00  0.00
H
ATOM   8536  CA  ILE   521      49.981  71.116  35.455  1.00  0.00
C
ATOM   8537  HA  ILE   521      50.227  71.799  34.641  1.00  0.00
H
ATOM   8538  CB  ILE   521      51.305  70.494  35.977  1.00  0.00
C
ATOM   8539  HB  ILE   521      51.072  69.871  36.841  1.00  0.00
H
ATOM   8540  CG2 ILE   521      52.006  69.604  34.927  1.00  0.00
C
ATOM   8541 HG21 ILE   521      52.431  70.219  34.138  1.00  0.00
H
ATOM   8542 HG22 ILE   521      52.804  69.026  35.391  1.00  0.00
H
ATOM   8543 HG23 ILE   521      51.317  68.890  34.482  1.00  0.00
H
ATOM   8544  CG1 ILE   521      52.288  71.603  36.407  1.00  0.00
C
ATOM   8545 HG12 ILE   521      52.567  72.186  35.530  1.00  0.00
H
ATOM   8546 HG13 ILE   521      51.800  72.276  37.108  1.00  0.00
H
ATOM   8547  CD1 ILE   521      53.562  71.076  37.076  1.00  0.00
C
ATOM   8548 HD11 ILE   521      54.181  70.539  36.358  1.00  0.00
H
ATOM   8549 HD12 ILE   521      54.144  71.912  37.458  1.00  0.00
H
ATOM   8550 HD13 ILE   521      53.295  70.417  37.902  1.00  0.00
H
ATOM   8551  C   ILE   521      49.053  70.034  34.876  1.00  0.00
C
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ATOM   8552  O   ILE   521      49.002  69.867  33.661  1.00  0.00
O
ATOM   8553  N   ILE   522      48.300  69.330  35.726  1.00  0.00
N
ATOM   8554  H   ILE   522      48.421  69.519  36.715  1.00  0.00
H
ATOM   8555  CA  ILE   522      47.344  68.278  35.340  1.00  0.00
C
ATOM   8556  HA  ILE   522      47.870  67.531  34.745  1.00  0.00
H
ATOM   8557  CB  ILE   522      46.767  67.583  36.600  1.00  0.00
C
ATOM   8558  HB  ILE   522      46.305  68.366  37.200  1.00  0.00
H
ATOM   8559  CG2 ILE   522      45.640  66.589  36.260  1.00  0.00
C
ATOM   8560 HG21 ILE   522      45.993  65.841  35.550  1.00  0.00
H
ATOM   8561 HG22 ILE   522      45.301  66.098  37.172  1.00  0.00
H
ATOM   8562 HG23 ILE   522      44.781  67.106  35.828  1.00  0.00
H
ATOM   8563  CG1 ILE   522      47.872  66.910  37.462  1.00  0.00
C
ATOM   8564 HG12 ILE   522      48.761  67.525  37.466  1.00  0.00
H
ATOM   8565 HG13 ILE   522      47.510  66.847  38.490  1.00  0.00
H
ATOM   8566  CD1 ILE   522      48.341  65.530  37.001  1.00  0.00
C
ATOM   8567 HD11 ILE   522      48.517  65.531  35.928  1.00  0.00
H
ATOM   8568 HD12 ILE   522      49.263  65.240  37.498  1.00  0.00
H
ATOM   8569 HD13 ILE   522      47.574  64.813  37.258  1.00  0.00
H
ATOM   8570  C   ILE   522      46.247  68.875  34.447  1.00  0.00
C
ATOM   8571  O   ILE   522      46.069  68.413  33.322  1.00  0.00
O
ATOM   8572  N   GLU   523      45.558  69.938  34.888  1.00  0.00
N
ATOM   8573  H   GLU   523      45.740  70.279  35.828  1.00  0.00
H
ATOM   8574  CA  GLU   523      44.574  70.660  34.061  1.00  0.00
C
ATOM   8575  HA  GLU   523      43.734  69.998  33.852  1.00  0.00
H
ATOM   8576  CB  GLU   523      44.063  71.900  34.827  1.00  0.00
C
ATOM   8577  HB2 GLU   523      43.656  71.584  35.788  1.00  0.00
H
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ATOM   8578  HB3 GLU   523      44.900  72.575  35.009  1.00  0.00
H
ATOM   8579  CG  GLU   523      42.967  72.647  34.047  1.00  0.00
C
ATOM   8580  HG2 GLU   523      43.286  72.779  33.012  1.00  0.00
H
ATOM   8581  HG3 GLU   523      42.064  72.034  34.030  1.00  0.00
H
ATOM   8582  CD  GLU   523      42.631  74.043  34.589  1.00  0.00
C
ATOM   8583  OE1 GLU   523      42.079  74.827  33.777  1.00  0.00
O
ATOM   8584  OE2 GLU   523      42.899  74.359  35.767  1.00  0.00
O
ATOM   8585  C   GLU   523      45.180  71.081  32.711  1.00  0.00
C
ATOM   8586  O   GLU   523      44.581  70.875  31.652  1.00  0.00
O
ATOM   8587  N   GLN   524      46.393  71.639  32.738  1.00  0.00
N
ATOM   8588  H   GLN   524      46.840  71.789  33.637  1.00  0.00
H
ATOM   8589  CA  GLN   524      47.070  72.120  31.542  1.00  0.00
C
ATOM   8590  HA  GLN   524      46.371  72.774  31.020  1.00  0.00
H
ATOM   8591  CB  GLN   524      48.296  72.941  31.967  1.00  0.00
C
ATOM   8592  HB2 GLN   524      48.059  73.500  32.868  1.00  0.00
H
ATOM   8593  HB3 GLN   524      49.123  72.265  32.195  1.00  0.00
H
ATOM   8594  CG  GLN   524      48.743  73.965  30.922  1.00  0.00
C
ATOM   8595  HG2 GLN   524      49.701  74.372  31.236  1.00  0.00
H
ATOM   8596  HG3 GLN   524      48.865  73.477  29.956  1.00  0.00
H
ATOM   8597  CD  GLN   524      47.787  75.141  30.795  1.00  0.00
C
ATOM   8598  OE1 GLN   524      47.786  76.060  31.595  1.00  0.00
O
ATOM   8599  NE2 GLN   524      46.947  75.171  29.784  1.00  0.00
N
ATOM   8600 HE21 GLN   524      46.373  75.995  29.729  1.00  0.00
H
ATOM   8601 HE22 GLN   524      46.911  74.420  29.123  1.00  0.00
H
ATOM   8602  C   GLN   524      47.436  70.981  30.576  1.00  0.00
C
ATOM   8603  O   GLN   524      47.404  71.224  29.372  1.00  0.00
O
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ATOM   8604  N   LEU   525      47.733  69.771  31.079  1.00  0.00
N
ATOM   8605  H   LEU   525      47.765  69.688  32.091  1.00  0.00
H
ATOM   8606  CA  LEU   525      47.998  68.551  30.298  1.00  0.00
C
ATOM   8607  HA  LEU   525      48.640  68.815  29.459  1.00  0.00
H
ATOM   8608  CB  LEU   525      48.731  67.498  31.164  1.00  0.00
C
ATOM   8609  HB2 LEU   525      48.223  67.415  32.126  1.00  0.00
H
ATOM   8610  HB3 LEU   525      48.654  66.522  30.680  1.00  0.00
H
ATOM   8611  CG  LEU   525      50.224  67.792  31.401  1.00  0.00
C
ATOM   8612  HG  LEU   525      50.342  68.823  31.721  1.00  0.00
H
ATOM   8613  CD1 LEU   525      50.787  66.882  32.491  1.00  0.00
C
ATOM   8614 HD11 LEU   525      50.729  65.841  32.179  1.00  0.00
H
ATOM   8615 HD12 LEU   525      51.825  67.147  32.688  1.00  0.00
H
ATOM   8616 HD13 LEU   525      50.211  67.012  33.407  1.00  0.00
H
ATOM   8617  CD2 LEU   525      51.070  67.573  30.142  1.00  0.00
C
ATOM   8618 HD21 LEU   525      50.759  68.263  29.361  1.00  0.00
H
ATOM   8619 HD22 LEU   525      52.119  67.756  30.367  1.00  0.00
H
ATOM   8620 HD23 LEU   525      50.954  66.548  29.786  1.00  0.00
H
ATOM   8621  C   LEU   525      46.726  67.959  29.674  1.00  0.00
C
ATOM   8622  O   LEU   525      46.771  67.601  28.500  1.00  0.00
O
ATOM   8623  N   ILE   526      45.587  67.922  30.386  1.00  0.00
N
ATOM   8624  H   ILE   526      45.621  68.222  31.357  1.00  0.00
H
ATOM   8625  CA  ILE   526      44.293  67.515  29.788  1.00  0.00
C
ATOM   8626  HA  ILE   526      44.423  66.526  29.344  1.00  0.00
H
ATOM   8627  CB  ILE   526      43.155  67.416  30.849  1.00  0.00
C
ATOM   8628  HB  ILE   526      43.207  68.279  31.516  1.00  0.00
H
ATOM   8629  CG2 ILE   526      41.749  67.413  30.205  1.00  0.00
C
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ATOM   8630 HG21 ILE   526      41.666  66.596  29.486  1.00  0.00
H
ATOM   8631 HG22 ILE   526      40.977  67.305  30.965  1.00  0.00
H
ATOM   8632 HG23 ILE   526      41.556  68.357  29.696  1.00  0.00
H
ATOM   8633  CG1 ILE   526      43.229  66.110  31.678  1.00  0.00
C
ATOM   8634 HG12 ILE   526      42.260  65.919  32.141  1.00  0.00
H
ATOM   8635 HG13 ILE   526      43.448  65.277  31.009  1.00  0.00
H
ATOM   8636  CD1 ILE   526      44.244  66.104  32.819  1.00  0.00
C
ATOM   8637 HD11 ILE   526      44.033  66.938  33.488  1.00  0.00
H
ATOM   8638 HD12 ILE   526      44.153  65.178  33.387  1.00  0.00
H
ATOM   8639 HD13 ILE   526      45.256  66.173  32.424  1.00  0.00
H
ATOM   8640  C   ILE   526      43.907  68.457  28.629  1.00  0.00
C
ATOM   8641  O   ILE   526      43.313  68.015  27.647  1.00  0.00
O
ATOM   8642  N   LYS   527      44.271  69.747  28.710  1.00  0.00
N
ATOM   8643  H   LYS   527      44.681  70.054  29.586  1.00  0.00
H
ATOM   8644  CA  LYS   527      44.063  70.740  27.639  1.00  0.00
C
ATOM   8645  HA  LYS   527      43.070  70.575  27.216  1.00  0.00
H
ATOM   8646  CB  LYS   527      44.108  72.160  28.228  1.00  0.00
C
ATOM   8647  HB2 LYS   527      44.992  72.268  28.855  1.00  0.00
H
ATOM   8648  HB3 LYS   527      44.193  72.873  27.407  1.00  0.00
H
ATOM   8649  CG  LYS   527      42.856  72.547  29.026  1.00  0.00
C
ATOM   8650  HG2 LYS   527      41.978  72.427  28.387  1.00  0.00
H
ATOM   8651  HG3 LYS   527      42.754  71.901  29.898  1.00  0.00
H
ATOM   8652  CD  LYS   527      42.977  74.019  29.461  1.00  0.00
C
ATOM   8653  HD2 LYS   527      43.760  74.113  30.215  1.00  0.00
H
ATOM   8654  HD3 LYS   527      43.261  74.614  28.592  1.00  0.00
H
ATOM   8655  CE  LYS   527      41.668  74.612  29.992  1.00  0.00
C
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ATOM   8656  HE2 LYS   527      41.790  75.693  30.115  1.00  0.00
H
ATOM   8657  HE3 LYS   527      40.880  74.448  29.251  1.00  0.00
H
ATOM   8658  NZ  LYS   527      41.249  74.019  31.279  1.00  0.00
N
ATOM   8659  HZ1 LYS   527      41.890  74.211  32.048  1.00  0.00
H
ATOM   8660  HZ2 LYS   527      40.370  74.440  31.564  1.00  0.00
H
ATOM   8661  HZ3 LYS   527      41.073  73.020  31.179  1.00  0.00
H
ATOM   8662  C   LYS   527      45.034  70.630  26.446  1.00  0.00
C
ATOM   8663  O   LYS   527      44.902  71.425  25.512  1.00  0.00
O
ATOM   8664  N   LYS   528      46.021  69.723  26.449  1.00  0.00
N
ATOM   8665  H   LYS   528      46.050  69.048  27.207  1.00  0.00
H
ATOM   8666  CA  LYS   528      46.915  69.495  25.293  1.00  0.00
C
ATOM   8667  HA  LYS   528      46.850  70.343  24.614  1.00  0.00
H
ATOM   8668  CB  LYS   528      48.386  69.352  25.714  1.00  0.00
C
ATOM   8669  HB2 LYS   528      48.484  68.460  26.337  1.00  0.00
H
ATOM   8670  HB3 LYS   528      48.988  69.194  24.821  1.00  0.00
H
ATOM   8671  CG  LYS   528      48.976  70.553  26.467  1.00  0.00
C
ATOM   8672  HG2 LYS   528      48.546  70.558  27.457  1.00  0.00
H
ATOM   8673  HG3 LYS   528      50.048  70.399  26.595  1.00  0.00
H
ATOM   8674  CD  LYS   528      48.748  71.926  25.810  1.00  0.00
C
ATOM   8675  HD2 LYS   528      49.360  71.999  24.910  1.00  0.00
H
ATOM   8676  HD3 LYS   528      47.700  72.058  25.542  1.00  0.00
H
ATOM   8677  CE  LYS   528      49.130  73.032  26.798  1.00  0.00
C
ATOM   8678  HE2 LYS   528      48.457  72.984  27.659  1.00  0.00
H
ATOM   8679  HE3 LYS   528      50.147  72.847  27.159  1.00  0.00
H
ATOM   8680  NZ  LYS   528      49.093  74.375  26.171  1.00  0.00
N
ATOM   8681  HZ1 LYS   528      48.172  74.657  25.865  1.00  0.00
H
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ATOM   8682  HZ2 LYS   528      49.493  75.058  26.812  1.00  0.00
H
ATOM   8683  HZ3 LYS   528      49.696  74.374  25.348  1.00  0.00
H
ATOM   8684  C   LYS   528      46.462  68.304  24.459  1.00  0.00
C
ATOM   8685  O   LYS   528      45.762  67.416  24.931  1.00  0.00
O
ATOM   8686  N   GLU   529      46.881  68.302  23.199  1.00  0.00
N
ATOM   8687  H   GLU   529      47.482  69.054  22.885  1.00  0.00
H
ATOM   8688  CA  GLU   529      46.541  67.249  22.245  1.00  0.00
C
ATOM   8689  HA  GLU   529      45.634  66.740  22.581  1.00  0.00
H
ATOM   8690  CB  GLU   529      46.221  67.922  20.898  1.00  0.00
C
ATOM   8691  HB2 GLU   529      45.529  68.737  21.114  1.00  0.00
H
ATOM   8692  HB3 GLU   529      47.130  68.361  20.479  1.00  0.00
H
ATOM   8693  CG  GLU   529      45.553  67.002  19.864  1.00  0.00
C
ATOM   8694  HG2 GLU   529      46.306  66.659  19.150  1.00  0.00
H
ATOM   8695  HG3 GLU   529      45.143  66.124  20.368  1.00  0.00
H
ATOM   8696  CD  GLU   529      44.420  67.732  19.118  1.00  0.00
C
ATOM   8697  OE1 GLU   529      44.721  68.663  18.334  1.00  0.00
O
ATOM   8698  OE2 GLU   529      43.235  67.381  19.330  1.00  0.00
O
ATOM   8699  C   GLU   529      47.646  66.185  22.198  1.00  0.00
C
ATOM   8700  O   GLU   529      47.352  65.001  22.332  1.00  0.00
O
ATOM   8701  N   LYS   530      48.919  66.608  22.109  1.00  0.00
N
ATOM   8702  H   LYS   530      49.069  67.607  22.027  1.00  0.00
H
ATOM   8703  CA  LYS   530      50.113  65.736  22.119  1.00  0.00
C
ATOM   8704  HA  LYS   530      49.877  64.794  22.621  1.00  0.00
H
ATOM   8705  CB  LYS   530      50.515  65.423  20.660  1.00  0.00
C
ATOM   8706  HB2 LYS   530      50.491  66.345  20.079  1.00  0.00
H
ATOM   8707  HB3 LYS   530      51.537  65.053  20.644  1.00  0.00
H
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ATOM   8708  CG  LYS   530      49.619  64.355  20.001  1.00  0.00
C
ATOM   8709  HG2 LYS   530      49.960  63.366  20.299  1.00  0.00
H
ATOM   8710  HG3 LYS   530      48.596  64.458  20.342  1.00  0.00
H
ATOM   8711  CD  LYS   530      49.558  64.444  18.475  1.00  0.00
C
ATOM   8712  HD2 LYS   530      48.843  63.700  18.121  1.00  0.00
H
ATOM   8713  HD3 LYS   530      49.170  65.430  18.214  1.00  0.00
H
ATOM   8714  CE  LYS   530      50.897  64.209  17.773  1.00  0.00
C
ATOM   8715  HE2 LYS   530      51.665  64.831  18.238  1.00  0.00
H
ATOM   8716  HE3 LYS   530      51.187  63.159  17.895  1.00  0.00
H
ATOM   8717  NZ  LYS   530      50.774  64.564  16.341  1.00  0.00
N
ATOM   8718  HZ1 LYS   530      50.599  65.568  16.251  1.00  0.00
H
ATOM   8719  HZ2 LYS   530      51.607  64.325  15.808  1.00  0.00
H
ATOM   8720  HZ3 LYS   530      50.012  64.073  15.902  1.00  0.00
H
ATOM   8721  C   LYS   530      51.268  66.400  22.882  1.00  0.00
C
ATOM   8722  O   LYS   530      51.721  67.478  22.501  1.00  0.00
O
ATOM   8723  N   VAL   531      51.767  65.769  23.947  1.00  0.00
N
ATOM   8724  H   VAL   531      51.365  64.883  24.216  1.00  0.00
H
ATOM   8725  CA  VAL   531      52.906  66.275  24.738  1.00  0.00
C
ATOM   8726  HA  VAL   531      53.348  67.124  24.218  1.00  0.00
H
ATOM   8727  CB  VAL   531      52.482  66.776  26.135  1.00  0.00
C
ATOM   8728  HB  VAL   531      52.100  65.938  26.720  1.00  0.00
H
ATOM   8729  CG1 VAL   531      53.658  67.400  26.892  1.00  0.00
C
ATOM   8730 HG11 VAL   531      54.077  68.235  26.330  1.00  0.00
H
ATOM   8731 HG12 VAL   531      53.328  67.748  27.870  1.00  0.00
H
ATOM   8732 HG13 VAL   531      54.430  66.652  27.044  1.00  0.00
H
ATOM   8733  CG2 VAL   531      51.398  67.851  26.040  1.00  0.00
C
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ATOM   8734 HG21 VAL   531      50.491  67.411  25.631  1.00  0.00
H
ATOM   8735 HG22 VAL   531      51.173  68.241  27.032  1.00  0.00
H
ATOM   8736 HG23 VAL   531      51.733  68.665  25.396  1.00  0.00
H
ATOM   8737  C   VAL   531      53.981  65.203  24.866  1.00  0.00
C
ATOM   8738  O   VAL   531      53.688  64.076  25.260  1.00  0.00
O
ATOM   8739  N   TYR   532      55.228  65.577  24.583  1.00  0.00
N
ATOM   8740  H   TYR   532      55.378  66.528  24.260  1.00  0.00
H
ATOM   8741  CA  TYR   532      56.415  64.737  24.764  1.00  0.00
C
ATOM   8742  HA  TYR   532      56.117  63.724  25.039  1.00  0.00
H
ATOM   8743  CB  TYR   532      57.158  64.665  23.426  1.00  0.00
C
ATOM   8744  HB2 TYR   532      56.487  64.225  22.691  1.00  0.00
H
ATOM   8745  HB3 TYR   532      57.393  65.678  23.100  1.00  0.00
H
ATOM   8746  CG  TYR   532      58.428  63.841  23.427  1.00  0.00
C
ATOM   8747  CD1 TYR   532      58.337  62.441  23.374  1.00  0.00
C
ATOM   8748  HD1 TYR   532      57.364  61.972  23.341  1.00  0.00
H
ATOM   8749  CE1 TYR   532      59.499  61.650  23.336  1.00  0.00
C
ATOM   8750  HE1 TYR   532      59.415  60.576  23.305  1.00  0.00
H
ATOM   8751  CZ  TYR   532      60.765  62.270  23.320  1.00  0.00
C
ATOM   8752  OH  TYR   532      61.892  61.516  23.242  1.00  0.00
O
ATOM   8753  HH  TYR   532      61.683  60.579  23.227  1.00  0.00
H
ATOM   8754  CE2 TYR   532      60.858  63.677  23.344  1.00  0.00
C
ATOM   8755  HE2 TYR   532      61.829  64.138  23.301  1.00  0.00
H
ATOM   8756  CD2 TYR   532      59.691  64.463  23.415  1.00  0.00
C
ATOM   8757  HD2 TYR   532      59.762  65.541  23.436  1.00  0.00
H
ATOM   8758  C   TYR   532      57.303  65.308  25.877  1.00  0.00
C
ATOM   8759  O   TYR   532      57.628  66.495  25.841  1.00  0.00
O
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ATOM   8760  N   LEU   533      57.702  64.479  26.849  1.00  0.00
N
ATOM   8761  H   LEU   533      57.448  63.504  26.774  1.00  0.00
H
ATOM   8762  CA  LEU   533      58.651  64.847  27.912  1.00  0.00
C
ATOM   8763  HA  LEU   533      58.891  65.905  27.831  1.00  0.00
H
ATOM   8764  CB  LEU   533      58.058  64.617  29.321  1.00  0.00
C
ATOM   8765  HB2 LEU   533      57.382  63.762  29.310  1.00  0.00
H
ATOM   8766  HB3 LEU   533      58.884  64.361  29.984  1.00  0.00
H
ATOM   8767  CG  LEU   533      57.360  65.842  29.944  1.00  0.00
C
ATOM   8768  HG  LEU   533      58.030  66.700  29.892  1.00  0.00
H
ATOM   8769  CD1 LEU   533      56.061  66.196  29.230  1.00  0.00
C
ATOM   8770 HD11 LEU   533      55.399  65.331  29.201  1.00  0.00
H
ATOM   8771 HD12 LEU   533      55.565  67.020  29.741  1.00  0.00
H
ATOM   8772 HD13 LEU   533      56.299  66.517  28.219  1.00  0.00
H
ATOM   8773  CD2 LEU   533      57.030  65.585  31.415  1.00  0.00
C
ATOM   8774 HD21 LEU   533      57.954  65.490  31.982  1.00  0.00
H
ATOM   8775 HD22 LEU   533      56.472  66.428  31.822  1.00  0.00
H
ATOM   8776 HD23 LEU   533      56.440  64.674  31.516  1.00  0.00
H
ATOM   8777  C   LEU   533      59.961  64.068  27.742  1.00  0.00
C
ATOM   8778  O   LEU   533      59.963  62.839  27.785  1.00  0.00
O
ATOM   8779  N   ALA   534      61.073  64.791  27.616  1.00  0.00
N
ATOM   8780  H   ALA   534      60.979  65.802  27.604  1.00  0.00
H
ATOM   8781  CA  ALA   534      62.427  64.248  27.567  1.00  0.00
C
ATOM   8782  HA  ALA   534      62.378  63.157  27.552  1.00  0.00
H
ATOM   8783  CB  ALA   534      63.100  64.711  26.271  1.00  0.00
C
ATOM   8784  HB1 ALA   534      63.130  65.799  26.246  1.00  0.00
H
ATOM   8785  HB2 ALA   534      64.116  64.320  26.211  1.00  0.00
H
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ATOM   8786  HB3 ALA   534      62.531  64.346  25.420  1.00  0.00
H
ATOM   8787  C   ALA   534      63.247  64.650  28.800  1.00  0.00
C
ATOM   8788  O   ALA   534      62.991  65.676  29.435  1.00  0.00
O
ATOM   8789  N   TRP   535      64.277  63.855  29.097  1.00  0.00
N
ATOM   8790  H   TRP   535      64.466  63.062  28.504  1.00  0.00
H
ATOM   8791  CA  TRP   535      65.203  64.093  30.200  1.00  0.00
C
ATOM   8792  HA  TRP   535      64.916  65.004  30.717  1.00  0.00
H
ATOM   8793  CB  TRP   535      65.111  62.953  31.212  1.00  0.00
C
ATOM   8794  HB2 TRP   535      64.064  62.779  31.443  1.00  0.00
H
ATOM   8795  HB3 TRP   535      65.492  62.037  30.757  1.00  0.00
H
ATOM   8796  CG  TRP   535      65.877  63.240  32.468  1.00  0.00
C
ATOM   8797  CD1 TRP   535      65.485  64.079  33.453  1.00  0.00
C
ATOM   8798  HD1 TRP   535      64.556  64.638  33.469  1.00  0.00
H
ATOM   8799  NE1 TRP   535      66.503  64.208  34.371  1.00  0.00
N
ATOM   8800  HE1 TRP   535      66.501  64.914  35.104  1.00  0.00
H
ATOM   8801  CE2 TRP   535      67.618  63.486  34.029  1.00  0.00
C
ATOM   8802  CZ2 TRP   535      68.887  63.336  34.612  1.00  0.00
C
ATOM   8803  HZ2 TRP   535      69.131  63.853  35.530  1.00  0.00
H
ATOM   8804  CH2 TRP   535      69.835  62.515  33.978  1.00  0.00
C
ATOM   8805  HH2 TRP   535      70.820  62.382  34.407  1.00  0.00
H
ATOM   8806  CZ3 TRP   535      69.500  61.869  32.773  1.00  0.00
C
ATOM   8807  HZ3 TRP   535      70.226  61.235  32.284  1.00  0.00
H
ATOM   8808  CE3 TRP   535      68.224  62.039  32.197  1.00  0.00
C
ATOM   8809  HE3 TRP   535      67.984  61.554  31.263  1.00  0.00
H
ATOM   8810  CD2 TRP   535      67.244  62.843  32.815  1.00  0.00
C
ATOM   8811  C   TRP   535      66.642  64.263  29.708  1.00  0.00
C
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ATOM   8812  O   TRP   535      67.077  63.528  28.820  1.00  0.00
O
ATOM   8813  N   VAL   536      67.391  65.194  30.303  1.00  0.00
N
ATOM   8814  H   VAL   536      66.965  65.771  31.025  1.00  0.00
H
ATOM   8815  CA  VAL   536      68.827  65.392  30.039  1.00  0.00
C
ATOM   8816  HA  VAL   536      69.212  64.472  29.607  1.00  0.00
H
ATOM   8817  CB  VAL   536      69.079  66.517  29.015  1.00  0.00
C
ATOM   8818  HB  VAL   536      70.155  66.678  28.956  1.00  0.00
H
ATOM   8819  CG1 VAL   536      68.612  66.116  27.610  1.00  0.00
C
ATOM   8820 HG11 VAL   536      67.528  65.999  27.590  1.00  0.00
H
ATOM   8821 HG12 VAL   536      68.899  66.883  26.893  1.00  0.00
H
ATOM   8822 HG13 VAL   536      69.074  65.170  27.326  1.00  0.00
H
ATOM   8823  CG2 VAL   536      68.422  67.857  29.373  1.00  0.00
C
ATOM   8824 HG21 VAL   536      68.774  68.199  30.347  1.00  0.00
H
ATOM   8825 HG22 VAL   536      68.682  68.601  28.624  1.00  0.00
H
ATOM   8826 HG23 VAL   536      67.337  67.753  29.413  1.00  0.00
H
ATOM   8827  C   VAL   536      69.601  65.670  31.337  1.00  0.00
C
ATOM   8828  O   VAL   536      69.061  66.319  32.225  1.00  0.00
O
ATOM   8829  N   PRO   537      70.867  65.234  31.478  1.00  0.00
N
ATOM   8830  CD  PRO   537      71.520  64.206  30.682  1.00  0.00
C
ATOM   8831  HD2 PRO   537      71.950  64.658  29.790  1.00  0.00
H
ATOM   8832  HD3 PRO   537      70.823  63.415  30.405  1.00  0.00
H
ATOM   8833  CG  PRO   537      72.624  63.626  31.570  1.00  0.00
C
ATOM   8834  HG2 PRO   537      73.477  63.284  30.985  1.00  0.00
H
ATOM   8835  HG3 PRO   537      72.227  62.811  32.176  1.00  0.00
H
ATOM   8836  CB  PRO   537      72.995  64.804  32.467  1.00  0.00
C
ATOM   8837  HB2 PRO   537      73.690  65.446  31.929  1.00  0.00
H
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ATOM   8838  HB3 PRO   537      73.425  64.484  33.417  1.00  0.00
H
ATOM   8839  CA  PRO   537      71.660  65.526  32.670  1.00  0.00
C
ATOM   8840  HA  PRO   537      71.149  65.073  33.521  1.00  0.00
H
ATOM   8841  C   PRO   537      71.864  67.025  32.956  1.00  0.00
C
ATOM   8842  O   PRO   537      72.321  67.792  32.099  1.00  0.00
O
ATOM   8843  N   ALA   538      71.603  67.406  34.209  1.00  0.00
N
ATOM   8844  H   ALA   538      71.146  66.744  34.815  1.00  0.00
H
ATOM   8845  CA  ALA   538      71.896  68.720  34.781  1.00  0.00
C
ATOM   8846  HA  ALA   538      71.301  69.469  34.253  1.00  0.00
H
ATOM   8847  CB  ALA   538      71.464  68.716  36.253  1.00  0.00
C
ATOM   8848  HB1 ALA   538      72.138  68.101  36.846  1.00  0.00
H
ATOM   8849  HB2 ALA   538      71.479  69.738  36.634  1.00  0.00
H
ATOM   8850  HB3 ALA   538      70.446  68.342  36.359  1.00  0.00
H
ATOM   8851  C   ALA   538      73.391  69.087  34.671  1.00  0.00
C
ATOM   8852  O   ALA   538      74.261  68.211  34.663  1.00  0.00
O
ATOM   8853  N   HIE   539      73.698  70.390  34.591  1.00  0.00
N
ATOM   8854  H   HIE   539      72.925  71.034  34.718  1.00  0.00
H
ATOM   8855  CA  HIE   539      75.065  70.961  34.580  1.00  0.00
C
ATOM   8856  HA  HIE   539      74.958  72.015  34.325  1.00  0.00
H
ATOM   8857  CB  HIE   539      75.661  70.920  36.005  1.00  0.00
C
ATOM   8858  HB2 HIE   539      75.814  69.878  36.291  1.00  0.00
H
ATOM   8859  HB3 HIE   539      76.629  71.421  36.018  1.00  0.00
H
ATOM   8860  CG  HIE   539      74.764  71.585  37.019  1.00  0.00
C
ATOM   8861  ND1 HIE   539      73.766  70.930  37.739  1.00  0.00
N
ATOM   8862  CE1 HIE   539      72.991  71.897  38.258  1.00  0.00
C
ATOM   8863  HE1 HIE   539      72.051  71.724  38.774  1.00  0.00
H
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ATOM   8864  NE2 HIE   539      73.494  73.108  37.955  1.00  0.00
N
ATOM   8865  HE2 HIE   539      73.011  73.981  38.114  1.00  0.00
H
ATOM   8866  CD2 HIE   539      74.612  72.933  37.171  1.00  0.00
C
ATOM   8867  HD2 HIE   539      75.167  73.702  36.654  1.00  0.00
H
ATOM   8868  C   HIE   539      76.021  70.393  33.507  1.00  0.00
C
ATOM   8869  O   HIE   539      77.233  70.571  33.602  1.00  0.00
O
ATOM   8870  N   LYS   540      75.486  69.723  32.476  1.00  0.00
N
ATOM   8871  H   LYS   540      74.493  69.539  32.541  1.00  0.00
H
ATOM   8872  CA  LYS   540      76.256  68.962  31.469  1.00  0.00
C
ATOM   8873  HA  LYS   540      77.270  68.847  31.853  1.00  0.00
H
ATOM   8874  CB  LYS   540      75.627  67.557  31.330  1.00  0.00
C
ATOM   8875  HB2 LYS   540      75.056  67.325  32.230  1.00  0.00
H
ATOM   8876  HB3 LYS   540      74.923  67.562  30.497  1.00  0.00
H
ATOM   8877  CG  LYS   540      76.641  66.418  31.122  1.00  0.00
C
ATOM   8878  HG2 LYS   540      76.089  65.521  30.837  1.00  0.00
H
ATOM   8879  HG3 LYS   540      77.321  66.671  30.309  1.00  0.00
H
ATOM   8880  CD  LYS   540      77.447  66.103  32.395  1.00  0.00
C
ATOM   8881  HD2 LYS   540      78.036  66.976  32.681  1.00  0.00
H
ATOM   8882  HD3 LYS   540      76.760  65.862  33.209  1.00  0.00
H
ATOM   8883  CE  LYS   540      78.391  64.916  32.151  1.00  0.00
C
ATOM   8884  HE2 LYS   540      77.797  64.015  31.963  1.00  0.00
H
ATOM   8885  HE3 LYS   540      78.979  65.127  31.255  1.00  0.00
H
ATOM   8886  NZ  LYS   540      79.310  64.694  33.294  1.00  0.00
N
ATOM   8887  HZ1 LYS   540      78.827  64.349  34.123  1.00  0.00
H
ATOM   8888  HZ2 LYS   540      79.993  63.983  33.077  1.00  0.00
H
ATOM   8889  HZ3 LYS   540      79.815  65.552  33.522  1.00  0.00
H
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ATOM   8890  C   LYS   540      76.440  69.674  30.119  1.00  0.00
C
ATOM   8891  O   LYS   540      77.068  69.122  29.219  1.00  0.00
O
ATOM   8892  N   GLY   541      75.917  70.897  29.971  1.00  0.00
N
ATOM   8893  H   GLY   541      75.458  71.295  30.773  1.00  0.00
H
ATOM   8894  CA  GLY   541      76.110  71.740  28.781  1.00  0.00
C
ATOM   8895  HA2 GLY   541      75.696  72.724  28.985  1.00  0.00
H
ATOM   8896  HA3 GLY   541      77.174  71.881  28.597  1.00  0.00
H
ATOM   8897  C   GLY   541      75.466  71.186  27.499  1.00  0.00
C
ATOM   8898  O   GLY   541      76.117  71.135  26.461  1.00  0.00
O
ATOM   8899  N   ILE   542      74.218  70.709  27.588  1.00  0.00
N
ATOM   8900  H   ILE   542      73.745  70.801  28.471  1.00  0.00
H
ATOM   8901  CA  ILE   542      73.481  70.047  26.494  1.00  0.00
C
ATOM   8902  HA  ILE   542      74.182  69.705  25.730  1.00  0.00
H
ATOM   8903  CB  ILE   542      72.741  68.799  27.047  1.00  0.00
C
ATOM   8904  HB  ILE   542      72.147  69.108  27.911  1.00  0.00
H
ATOM   8905  CG2 ILE   542      71.775  68.196  26.005  1.00  0.00
C
ATOM   8906 HG21 ILE   542      72.321  67.914  25.104  1.00  0.00
H
ATOM   8907 HG22 ILE   542      71.276  67.316  26.407  1.00  0.00
H
ATOM   8908 HG23 ILE   542      70.993  68.910  25.745  1.00  0.00
H
ATOM   8909  CG1 ILE   542      73.763  67.734  27.514  1.00  0.00
C
ATOM   8910 HG12 ILE   542      74.268  67.313  26.645  1.00  0.00
H
ATOM   8911 HG13 ILE   542      74.521  68.203  28.140  1.00  0.00
H
ATOM   8912  CD1 ILE   542      73.145  66.596  28.335  1.00  0.00
C
ATOM   8913 HD11 ILE   542      72.476  65.996  27.720  1.00  0.00
H
ATOM   8914 HD12 ILE   542      73.938  65.948  28.709  1.00  0.00
H
ATOM   8915 HD13 ILE   542      72.597  67.005  29.184  1.00  0.00
H
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ATOM   8916  C   ILE   542      72.511  71.038  25.833  1.00  0.00
C
ATOM   8917  O   ILE   542      71.584  71.502  26.495  1.00  0.00
O
ATOM   8918  N   GLY   543      72.666  71.309  24.531  1.00  0.00
N
ATOM   8919  H   GLY   543      73.471  70.915  24.052  1.00  0.00
H
ATOM   8920  CA  GLY   543      71.688  72.048  23.713  1.00  0.00
C
ATOM   8921  HA2 GLY   543      72.167  72.368  22.788  1.00  0.00
H
ATOM   8922  HA3 GLY   543      70.880  71.368  23.445  1.00  0.00
H
ATOM   8923  C   GLY   543      71.086  73.292  24.389  1.00  0.00
C
ATOM   8924  O   GLY   543      71.801  74.165  24.876  1.00  0.00
O
ATOM   8925  N   GLY   544      69.751  73.361  24.447  1.00  0.00
N
ATOM   8926  H   GLY   544      69.204  72.617  24.040  1.00  0.00
H
ATOM   8927  CA  GLY   544      69.034  74.448  25.123  1.00  0.00
C
ATOM   8928  HA2 GLY   544      69.470  75.401  24.826  1.00  0.00
H
ATOM   8929  HA3 GLY   544      68.000  74.452  24.786  1.00  0.00
H
ATOM   8930  C   GLY   544      69.041  74.384  26.659  1.00  0.00
C
ATOM   8931  O   GLY   544      68.840  75.419  27.286  1.00  0.00
O
ATOM   8932  N   ASN   545      69.326  73.226  27.277  1.00  0.00
N
ATOM   8933  H   ASN   545      69.648  72.453  26.713  1.00  0.00
H
ATOM   8934  CA  ASN   545      69.360  73.052  28.740  1.00  0.00
C
ATOM   8935  HA  ASN   545      68.401  73.344  29.168  1.00  0.00
H
ATOM   8936  CB  ASN   545      69.553  71.555  29.063  1.00  0.00
C
ATOM   8937  HB2 ASN   545      68.683  70.996  28.725  1.00  0.00
H
ATOM   8938  HB3 ASN   545      70.428  71.166  28.560  1.00  0.00
H
ATOM   8939  CG  ASN   545      69.703  71.298  30.549  1.00  0.00
C
ATOM   8940  OD1 ASN   545      68.918  71.755  31.347  1.00  0.00
O
ATOM   8941  ND2 ASN   545      70.699  70.546  30.962  1.00  0.00
N
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ATOM   8942 HD21 ASN   545      70.679  70.348  31.949  1.00  0.00
H
ATOM   8943 HD22 ASN   545      71.292  70.051  30.328  1.00  0.00
H
ATOM   8944  C   ASN   545      70.433  73.949  29.391  1.00  0.00
C
ATOM   8945  O   ASN   545      70.168  74.632  30.376  1.00  0.00
O
ATOM   8946  N   GLU   546      71.612  74.055  28.765  1.00  0.00
N
ATOM   8947  H   GLU   546      71.745  73.522  27.915  1.00  0.00
H
ATOM   8948  CA  GLU   546      72.665  74.999  29.179  1.00  0.00
C
ATOM   8949  HA  GLU   546      72.998  74.748  30.187  1.00  0.00
H
ATOM   8950  CB  GLU   546      73.842  74.865  28.200  1.00  0.00
C
ATOM   8951  HB2 GLU   546      74.106  73.814  28.108  1.00  0.00
H
ATOM   8952  HB3 GLU   546      73.526  75.219  27.218  1.00  0.00
H
ATOM   8953  CG  GLU   546      75.069  75.663  28.668  1.00  0.00
C
ATOM   8954  HG2 GLU   546      74.810  76.719  28.742  1.00  0.00
H
ATOM   8955  HG3 GLU   546      75.358  75.314  29.663  1.00  0.00
H
ATOM   8956  CD  GLU   546      76.261  75.555  27.715  1.00  0.00
C
ATOM   8957  OE1 GLU   546      76.096  75.745  26.489  1.00  0.00
O
ATOM   8958  OE2 GLU   546      77.408  75.402  28.202  1.00  0.00
O
ATOM   8959  C   GLU   546      72.188  76.463  29.191  1.00  0.00
C
ATOM   8960  O   GLU   546      72.627  77.264  30.018  1.00  0.00
O
ATOM   8961  N   GLN   547      71.291  76.824  28.269  1.00  0.00
N
ATOM   8962  H   GLN   547      70.885  76.113  27.675  1.00  0.00
H
ATOM   8963  CA  GLN   547      70.793  78.188  28.161  1.00  0.00
C
ATOM   8964  HA  GLN   547      71.635  78.855  28.331  1.00  0.00
H
ATOM   8965  CB  GLN   547      70.219  78.472  26.757  1.00  0.00
C
ATOM   8966  HB2 GLN   547      69.218  78.044  26.717  1.00  0.00
H
ATOM   8967  HB3 GLN   547      70.107  79.550  26.637  1.00  0.00
H
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ATOM   8968  CG  GLN   547      71.005  77.914  25.548  1.00  0.00
C
ATOM   8969  HG2 GLN   547      71.100  76.835  25.647  1.00  0.00
H
ATOM   8970  HG3 GLN   547      70.402  78.101  24.661  1.00  0.00
H
ATOM   8971  CD  GLN   547      72.397  78.485  25.269  1.00  0.00
C
ATOM   8972  OE1 GLN   547      72.959  78.259  24.207  1.00  0.00
O
ATOM   8973  NE2 GLN   547      73.012  79.273  26.128  1.00  0.00
N
ATOM   8974 HE21 GLN   547      74.004  79.396  25.971  1.00  0.00
H
ATOM   8975 HE22 GLN   547      72.599  79.499  27.014  1.00  0.00
H
ATOM   8976  C   GLN   547      69.779  78.506  29.265  1.00  0.00
C
ATOM   8977  O   GLN   547      69.752  79.650  29.706  1.00  0.00
O
ATOM   8978  N   VAL   548      68.979  77.537  29.733  1.00  0.00
N
ATOM   8979  H   VAL   548      69.054  76.606  29.342  1.00  0.00
H
ATOM   8980  CA  VAL   548      67.995  77.784  30.805  1.00  0.00
C
ATOM   8981  HA  VAL   548      67.499  78.721  30.542  1.00  0.00
H
ATOM   8982  CB  VAL   548      66.883  76.719  30.929  1.00  0.00
C
ATOM   8983  HB  VAL   548      67.134  76.053  31.750  1.00  0.00
H
ATOM   8984  CG1 VAL   548      65.548  77.429  31.212  1.00  0.00
C
ATOM   8985 HG11 VAL   548      65.288  78.087  30.384  1.00  0.00
H
ATOM   8986 HG12 VAL   548      64.756  76.694  31.328  1.00  0.00
H
ATOM   8987 HG13 VAL   548      65.616  78.008  32.134  1.00  0.00
H
ATOM   8988  CG2 VAL   548      66.676  75.831  29.703  1.00  0.00
C
ATOM   8989 HG21 VAL   548      67.581  75.262  29.523  1.00  0.00
H
ATOM   8990 HG22 VAL   548      65.877  75.122  29.912  1.00  0.00
H
ATOM   8991 HG23 VAL   548      66.429  76.428  28.830  1.00  0.00
H
ATOM   8992  C   VAL   548      68.670  78.026  32.158  1.00  0.00
C
ATOM   8993  O   VAL   548      68.395  79.085  32.724  1.00  0.00
O
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ATOM   8994  N   ASP   549      69.611  77.166  32.607  1.00  0.00
N
ATOM   8995  H   ASP   549      69.731  76.293  32.106  1.00  0.00
H
ATOM   8996  CA  ASP   549      70.399  77.357  33.856  1.00  0.00
C
ATOM   8997  HA  ASP   549      69.746  77.203  34.714  1.00  0.00
H
ATOM   8998  CB  ASP   549      71.576  76.341  33.951  1.00  0.00
C
ATOM   8999  HB2 ASP   549      71.168  75.377  34.218  1.00  0.00
H
ATOM   9000  HB3 ASP   549      72.010  76.225  32.969  1.00  0.00
H
ATOM   9001  CG  ASP   549      72.754  76.632  34.916  1.00  0.00
C
ATOM   9002  OD1 ASP   549      72.555  77.328  35.940  1.00  0.00
O
ATOM   9003  OD2 ASP   549      73.897  76.172  34.674  1.00  0.00
O
ATOM   9004  C   ASP   549      70.916  78.791  33.921  1.00  0.00
C
ATOM   9005  O   ASP   549      70.628  79.532  34.863  1.00  0.00
O
ATOM   9006  N   LYS   550      71.603  79.223  32.856  1.00  0.00
N
ATOM   9007  H   LYS   550      71.745  78.567  32.094  1.00  0.00
H
ATOM   9008  CA  LYS   550      72.230  80.549  32.774  1.00  0.00
C
ATOM   9009  HA  LYS   550      72.986  80.587  33.559  1.00  0.00
H
ATOM   9010  CB  LYS   550      72.919  80.653  31.401  1.00  0.00
C
ATOM   9011  HB2 LYS   550      73.621  79.823  31.289  1.00  0.00
H
ATOM   9012  HB3 LYS   550      72.166  80.571  30.614  1.00  0.00
H
ATOM   9013  CG  LYS   550      73.681  81.974  31.234  1.00  0.00
C
ATOM   9014  HG2 LYS   550      72.978  82.804  31.306  1.00  0.00
H
ATOM   9015  HG3 LYS   550      74.418  82.056  32.035  1.00  0.00
H
ATOM   9016  CD  LYS   550      74.378  82.045  29.871  1.00  0.00
C
ATOM   9017  HD2 LYS   550      75.195  81.322  29.841  1.00  0.00
H
ATOM   9018  HD3 LYS   550      73.658  81.791  29.090  1.00  0.00
H
ATOM   9019  CE  LYS   550      74.910  83.453  29.589  1.00  0.00
C
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ATOM   9020  HE2 LYS   550      75.384  83.451  28.604  1.00  0.00
H
ATOM   9021  HE3 LYS   550      74.062  84.141  29.541  1.00  0.00
H
ATOM   9022  NZ  LYS   550      75.867  83.896  30.624  1.00  0.00
N
ATOM   9023  HZ1 LYS   550      76.616  83.218  30.754  1.00  0.00
H
ATOM   9024  HZ2 LYS   550      76.293  84.791  30.412  1.00  0.00
H
ATOM   9025  HZ3 LYS   550      75.407  84.011  31.520  1.00  0.00
H
ATOM   9026  C   LYS   550      71.252  81.715  33.023  1.00  0.00
C
ATOM   9027  O   LYS   550      71.676  82.752  33.548  1.00  0.00
O
ATOM   9028  N   LEU   551      69.968  81.555  32.674  1.00  0.00
N
ATOM   9029  H   LEU   551      69.700  80.636  32.339  1.00  0.00
H
ATOM   9030  CA  LEU   551      68.893  82.529  32.913  1.00  0.00
C
ATOM   9031  HA  LEU   551      69.301  83.537  32.839  1.00  0.00
H
ATOM   9032  CB  LEU   551      67.771  82.391  31.862  1.00  0.00
C
ATOM   9033  HB2 LEU   551      67.290  81.420  31.991  1.00  0.00
H
ATOM   9034  HB3 LEU   551      67.022  83.151  32.080  1.00  0.00
H
ATOM   9035  CG  LEU   551      68.189  82.551  30.391  1.00  0.00
C
ATOM   9036  HG  LEU   551      68.945  81.820  30.147  1.00  0.00
H
ATOM   9037  CD1 LEU   551      66.964  82.311  29.512  1.00  0.00
C
ATOM   9038 HD11 LEU   551      66.204  83.065  29.705  1.00  0.00
H
ATOM   9039 HD12 LEU   551      67.263  82.334  28.466  1.00  0.00
H
ATOM   9040 HD13 LEU   551      66.555  81.323  29.726  1.00  0.00
H
ATOM   9041  CD2 LEU   551      68.760  83.934  30.073  1.00  0.00
C
ATOM   9042 HD21 LEU   551      69.687  84.083  30.625  1.00  0.00
H
ATOM   9043 HD22 LEU   551      68.992  83.984  29.010  1.00  0.00
H
ATOM   9044 HD23 LEU   551      68.044  84.713  30.331  1.00  0.00
H
ATOM   9045  C   LEU   551      68.286  82.399  34.319  1.00  0.00
C
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ATOM   9046  O   LEU   551      68.069  83.422  34.975  1.00  0.00
O
ATOM   9047  N   VAL   552      67.983  81.183  34.787  1.00  0.00
N
ATOM   9048  H   VAL   552      68.177  80.364  34.209  1.00  0.00
H
ATOM   9049  CA  VAL   552      67.269  81.003  36.066  1.00  0.00
C
ATOM   9050  HA  VAL   552      66.583  81.847  36.160  1.00  0.00
H
ATOM   9051  CB  VAL   552      66.384  79.748  36.071  1.00  0.00
C
ATOM   9052  HB  VAL   552      65.939  79.680  37.059  1.00  0.00
H
ATOM   9053  CG1 VAL   552      65.242  79.901  35.061  1.00  0.00
C
ATOM   9054 HG11 VAL   552      65.636  79.976  34.047  1.00  0.00
H
ATOM   9055 HG12 VAL   552      64.607  79.021  35.116  1.00  0.00
H
ATOM   9056 HG13 VAL   552      64.645  80.780  35.298  1.00  0.00
H
ATOM   9057  CG2 VAL   552      67.113  78.431  35.815  1.00  0.00
C
ATOM   9058 HG21 VAL   552      67.991  78.322  36.451  1.00  0.00
H
ATOM   9059 HG22 VAL   552      66.445  77.599  36.021  1.00  0.00
H
ATOM   9060 HG23 VAL   552      67.412  78.335  34.778  1.00  0.00
H
ATOM   9061  C   VAL   552      68.187  81.053  37.292  1.00  0.00
C
ATOM   9062  O   VAL   552      67.820  81.627  38.316  1.00  0.00
O
ATOM   9063  N   SER   553      69.433  80.573  37.179  1.00  0.00
N
ATOM   9064  H   SER   553      69.686  80.131  36.289  1.00  0.00
H
ATOM   9065  CA  SER   553      70.447  80.627  38.246  1.00  0.00
C
ATOM   9066  HA  SER   553      69.892  80.403  39.141  1.00  0.00
H
ATOM   9067  CB  SER   553      71.470  79.494  38.170  1.00  0.00
C
ATOM   9068  HB2 SER   553      71.899  79.374  39.171  1.00  0.00
H
ATOM   9069  HB3 SER   553      70.965  78.580  37.906  1.00  0.00
H
ATOM   9070  OG  SER   553      72.491  79.640  37.230  1.00  0.00
O
ATOM   9071  HG  SER   553      72.341  78.922  36.590  1.00  0.00
H
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ATOM   9072  C   SER   553      71.054  82.025  38.469  1.00  0.00
C
ATOM   9073  O   SER   553      71.816  82.255  39.414  1.00  0.00
O
ATOM   9074  N   ALA   554      70.642  83.006  37.659  1.00  0.00
N
ATOM   9075  H   ALA   554      70.018  82.739  36.911  1.00  0.00
H
ATOM   9076  CA  ALA   554      71.161  84.366  37.628  1.00  0.00
C
ATOM   9077  HA  ALA   554      72.184  84.333  37.256  1.00  0.00
H
ATOM   9078  CB  ALA   554      70.302  85.151  36.634  1.00  0.00
C
ATOM   9079  HB1 ALA   554      69.251  85.105  36.933  1.00  0.00
H
ATOM   9080  HB2 ALA   554      70.623  86.197  36.611  1.00  0.00
H
ATOM   9081  HB3 ALA   554      70.404  84.724  35.634  1.00  0.00
H
ATOM   9082  C   ALA   554      71.160  85.113  38.981  1.00  0.00
C
ATOM   9083  O   ALA   554      72.072  85.892  39.251  1.00  0.00
O
ATOM   9084  N   GLY   555      70.132  84.903  39.817  1.00  0.00
N
ATOM   9085  H   GLY   555      69.451  84.206  39.544  1.00  0.00
H
ATOM   9086  CA  GLY   555      69.968  85.569  41.127  1.00  0.00
C
ATOM   9087  HA2 GLY   555      70.630  86.437  41.177  1.00  0.00
H
ATOM   9088  HA3 GLY   555      68.942  85.926  41.232  1.00  0.00
H
ATOM   9089  C   GLY   555      70.285  84.691  42.340  1.00  0.00
C
ATOM   9090  O   GLY   555      69.868  85.018  43.447  1.00  0.00
O
ATOM   9091  N   ILE   556      70.964  83.559  42.135  1.00  0.00
N
ATOM   9092  H   ILE   556      71.272  83.362  41.190  1.00  0.00
H
ATOM   9093  CA  ILE   556      71.292  82.567  43.173  1.00  0.00
C
ATOM   9094  HA  ILE   556      71.076  82.996  44.152  1.00  0.00
H
ATOM   9095  CB  ILE   556      70.410  81.280  43.057  1.00  0.00
C
ATOM   9096  HB  ILE   556      69.511  81.447  43.652  1.00  0.00
H
ATOM   9097  CG2 ILE   556      69.933  80.970  41.632  1.00  0.00
C
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ATOM   9098 HG21 ILE   556      70.796  80.664  41.044  1.00  0.00
H
ATOM   9099 HG22 ILE   556      69.211  80.153  41.651  1.00  0.00
H
ATOM   9100 HG23 ILE   556      69.435  81.823  41.170  1.00  0.00
H
ATOM   9101  CG1 ILE   556      71.056  79.950  43.520  1.00  0.00
C
ATOM   9102 HG12 ILE   556      70.336  79.151  43.359  1.00  0.00
H
ATOM   9103 HG13 ILE   556      71.914  79.713  42.897  1.00  0.00
H
ATOM   9104  CD1 ILE   556      71.457  79.879  44.989  1.00  0.00
C
ATOM   9105 HD11 ILE   556      70.562  80.033  45.561  1.00  0.00
H
ATOM   9106 HD12 ILE   556      71.859  78.892  45.220  1.00  0.00
H
ATOM   9107 HD13 ILE   556      72.181  80.640  45.264  1.00  0.00
H
ATOM   9108  C   ILE   556      72.797  82.283  43.174  1.00  0.00
C
ATOM   9109  O   ILE   556      73.462  82.448  44.192  1.00  0.00
O
ATOM   9110  N   ARG   557      73.337  81.843  42.038  1.00  0.00
N
ATOM   9111  H   ARG   557      72.764  81.850  41.200  1.00  0.00
H
ATOM   9112  CA  ARG   557      74.641  81.175  41.960  1.00  0.00
C
ATOM   9113  HA  ARG   557      74.828  80.661  42.907  1.00  0.00
H
ATOM   9114  CB  ARG   557      74.500  80.125  40.849  1.00  0.00
C
ATOM   9115  HB2 ARG   557      73.788  79.370  41.195  1.00  0.00
H
ATOM   9116  HB3 ARG   557      74.077  80.613  39.967  1.00  0.00
H
ATOM   9117  CG  ARG   557      75.775  79.406  40.407  1.00  0.00
C
ATOM   9118  HG2 ARG   557      76.481  80.127  39.992  1.00  0.00
H
ATOM   9119  HG3 ARG   557      76.231  78.882  41.248  1.00  0.00
H
ATOM   9120  CD  ARG   557      75.355  78.402  39.325  1.00  0.00
C
ATOM   9121  HD2 ARG   557      74.699  77.652  39.770  1.00  0.00
H
ATOM   9122  HD3 ARG   557      74.799  78.926  38.544  1.00  0.00
H
ATOM   9123  NE  ARG   557      76.515  77.728  38.735  1.00  0.00
N
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ATOM   9124  HE  ARG   557      77.388  77.774  39.254  1.00  0.00
H
ATOM   9125  CZ  ARG   557      76.535  77.036  37.612  1.00  0.00
C
ATOM   9126  NH1 ARG   557      75.470  76.883  36.868  1.00  0.00
N
ATOM   9127 HH11 ARG   557      74.587  77.318  37.103  1.00  0.00
H
ATOM   9128 HH12 ARG   557      75.433  76.402  35.974  1.00  0.00
H
ATOM   9129  NH2 ARG   557      77.660  76.491  37.243  1.00  0.00
N
ATOM   9130 HH21 ARG   557      78.481  76.610  37.823  1.00  0.00
H
ATOM   9131 HH22 ARG   557      77.708  75.983  36.384  1.00  0.00
H
ATOM   9132  C   ARG   557      75.787  82.175  41.762  1.00  0.00
C
ATOM   9133  O   ARG   557      75.638  83.149  41.024  1.00  0.00
O
ATOM   9134  N   LYS   558      76.945  81.931  42.389  1.00  0.00
N
ATOM   9135  H   LYS   558      77.012  81.091  42.949  1.00  0.00
H
ATOM   9136  CA  LYS   558      78.180  82.729  42.234  1.00  0.00
C
ATOM   9137  HA  LYS   558      78.182  83.132  41.228  1.00  0.00
H
ATOM   9138  CB  LYS   558      78.222  83.874  43.280  1.00  0.00
C
ATOM   9139  HB2 LYS   558      77.780  83.509  44.210  1.00  0.00
H
ATOM   9140  HB3 LYS   558      79.255  84.139  43.514  1.00  0.00
H
ATOM   9141  CG  LYS   558      77.500  85.174  42.881  1.00  0.00
C
ATOM   9142  HG2 LYS   558      76.491  84.954  42.544  1.00  0.00
H
ATOM   9143  HG3 LYS   558      77.393  85.764  43.792  1.00  0.00
H
ATOM   9144  CD  LYS   558      78.230  86.073  41.857  1.00  0.00
C
ATOM   9145  HD2 LYS   558      77.695  87.022  41.795  1.00  0.00
H
ATOM   9146  HD3 LYS   558      79.221  86.300  42.255  1.00  0.00
H
ATOM   9147  CE  LYS   558      78.413  85.534  40.428  1.00  0.00
C
ATOM   9148  HE2 LYS   558      78.915  86.302  39.832  1.00  0.00
H
ATOM   9149  HE3 LYS   558      79.081  84.671  40.453  1.00  0.00
H
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ATOM   9150  NZ  LYS   558      77.132  85.171  39.775  1.00  0.00
N
ATOM   9151  HZ1 LYS   558      76.487  85.943  39.749  1.00  0.00
H
ATOM   9152  HZ2 LYS   558      77.294  84.865  38.811  1.00  0.00
H
ATOM   9153  HZ3 LYS   558      76.671  84.384  40.231  1.00  0.00
H
ATOM   9154  C   LYS   558      79.449  81.872  42.311  1.00  0.00
C
ATOM   9155  O   LYS   558      79.408  80.705  42.679  1.00  0.00
O
ATOM   9156  N   VAL   559      80.568  82.499  41.950  1.00  0.00
N
ATOM   9157  H   VAL   559      80.505  83.490  41.779  1.00  0.00
H
ATOM   9158  CA  VAL   559      81.941  81.981  41.929  1.00  0.00
C
ATOM   9159  HA  VAL   559      82.004  81.095  42.563  1.00  0.00
H
ATOM   9160  CB  VAL   559      82.330  81.579  40.487  1.00  0.00
C
ATOM   9161  HB  VAL   559      81.634  80.801  40.167  1.00  0.00
H
ATOM   9162  CG1 VAL   559      82.218  82.732  39.473  1.00  0.00
C
ATOM   9163 HG11 VAL   559      82.896  83.543  39.741  1.00  0.00
H
ATOM   9164 HG12 VAL   559      82.483  82.368  38.480  1.00  0.00
H
ATOM   9165 HG13 VAL   559      81.197  83.108  39.436  1.00  0.00
H
ATOM   9166  CG2 VAL   559      83.740  80.987  40.399  1.00  0.00
C
ATOM   9167 HG21 VAL   559      83.845  80.173  41.116  1.00  0.00
H
ATOM   9168 HG22 VAL   559      83.907  80.597  39.395  1.00  0.00
H
ATOM   9169 HG23 VAL   559      84.492  81.751  40.603  1.00  0.00
H
ATOM   9170  C   VAL   559      82.861  83.070  42.503  1.00  0.00
C
ATOM   9171  O   VAL   559      82.537  84.252  42.362  1.00  0.00
O
ATOM   9172  N   LEU   560      83.965  82.678  43.149  1.00  0.00
N
ATOM   9173  H   LEU   560      84.161  81.689  43.199  1.00  0.00
H
ATOM   9174  CA  LEU   560      84.961  83.557  43.786  1.00  0.00
C
ATOM   9175  HA  LEU   560      84.775  84.591  43.491  1.00  0.00
H
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ATOM   9176  CB  LEU   560      84.785  83.431  45.325  1.00  0.00
C
ATOM   9177  HB2 LEU   560      83.718  83.411  45.545  1.00  0.00
H
ATOM   9178  HB3 LEU   560      85.200  82.478  45.654  1.00  0.00
H
ATOM   9179  CG  LEU   560      85.388  84.550  46.190  1.00  0.00
C
ATOM   9180  HG  LEU   560      84.883  85.489  45.957  1.00  0.00
H
ATOM   9181  CD1 LEU   560      85.142  84.214  47.663  1.00  0.00
C
ATOM   9182 HD11 LEU   560      85.662  83.291  47.924  1.00  0.00
H
ATOM   9183 HD12 LEU   560      85.509  85.023  48.293  1.00  0.00
H
ATOM   9184 HD13 LEU   560      84.073  84.090  47.839  1.00  0.00
H
ATOM   9185  CD2 LEU   560      86.891  84.738  46.007  1.00  0.00
C
ATOM   9186 HD21 LEU   560      87.095  85.126  45.010  1.00  0.00
H
ATOM   9187 HD22 LEU   560      87.273  85.452  46.735  1.00  0.00
H
ATOM   9188 HD23 LEU   560      87.403  83.783  46.131  1.00  0.00
H
ATOM   9189  C   LEU   560      86.366  83.209  43.269  1.00  0.00
C
ATOM   9190  O   LEU   560      86.968  84.029  42.551  1.00  0.00
O
ATOM   9191  OXT LEU   560      86.837  82.091  43.601  1.00  0.00
O
TER    9192      LEU   560
HETATM 9193  S1  UNX   561      35.903  37.447  77.501  1.00  0.00
S
HETATM 9194  C1  UNX   561      34.768  37.237  78.913  1.00  0.00
C
HETATM 9195  O1  UNX   561      34.541  38.569  79.457  1.00  0.00
O
HETATM 9196  C2  UNX   561      35.740  39.373  79.301  1.00  0.00
C
HETATM 9197  N1  UNX   561      35.583  40.800  79.631  1.00  0.00
N
HETATM 9198  C3  UNX   561      34.449  41.458  79.152  1.00  0.00
C
HETATM 9199  C4  UNX   561      34.369  42.828  79.295  1.00  0.00
C
HETATM 9200  C5  UNX   561      35.439  43.530  79.960  1.00  0.00
C
HETATM 9201  N2  UNX   561      36.492  42.825  80.386  1.00  0.00
N
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HETATM 9202  C6  UNX   561      36.617  41.460  80.220  1.00  0.00
C
HETATM 9203  O2  UNX   561      37.639  40.892  80.564  1.00  0.00
O
HETATM 9204  N3  UNX   561      35.391  44.881  80.139  1.00  0.00
N
HETATM 9205  H1  UNX   561      36.148  45.360  80.614  1.00  0.00
H
HETATM 9206  H2  UNX   561      34.602  45.417  79.799  1.00  0.00
H
HETATM 9207  H3  UNX   561      33.512  43.379  78.923  1.00  0.00
H
HETATM 9208  H4  UNX   561      33.709  40.835  78.661  1.00  0.00
H
HETATM 9209  C7  UNX   561      36.142  39.188  77.845  1.00  0.00
C
HETATM 9210  H5  UNX   561      37.179  39.492  77.683  1.00  0.00
H
HETATM 9211  H6  UNX   561      35.481  39.762  77.191  1.00  0.00
H
HETATM 9212  H7  UNX   561      36.503  38.940  79.963  1.00  0.00
H
HETATM 9213  C8  UNX   561      33.447  36.543  78.518  1.00  0.00
C
HETATM 9214  O3  UNX   561      32.561  37.468  77.850  1.00  0.00
O
HETATM 9215  P1  UNX   561      31.110  37.751  78.480  1.00  0.00
P
HETATM 9216  O4  UNX   561      31.454  38.183  79.987  1.00  0.00
O
HETATM 9217  P2  UNX   561      31.047  37.475  81.366  1.00  0.00
P
HETATM 9218  O5  UNX   561      31.326  38.664  82.402  1.00  0.00
O
HETATM 9219  P3  UNX   561      31.684  38.514  83.952  1.00  0.00
P
HETATM 9220  O6  UNX   561      30.272  38.102  84.624  1.00  0.00
O
HETATM 9221  H8  UNX   561      30.340  38.109  85.596  1.00  0.00
H
HETATM 9222  O7  UNX   561      31.841  40.052  84.435  1.00  0.00
O
HETATM 9223  H9  UNX   561      31.976  40.095  85.398  1.00  0.00
H
HETATM 9224  O8  UNX   561      32.822  37.620  84.252  1.00  0.00
O
HETATM 9225  O9  UNX   561      32.284  36.451  81.635  1.00  0.00
O
HETATM 9226  H10 UNX   561      32.318  35.758  80.951  1.00  0.00
H
HETATM 9227  O10 UNX   561      29.691  36.889  81.435  1.00  0.00
O
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HETATM 9228  O11 UNX   561      30.728  39.184  77.822  1.00  0.00
O
HETATM 9229  H11 UNX   561      30.582  39.081  76.866  1.00  0.00
H
HETATM 9230  O12 UNX   561      30.084  36.699  78.296  1.00  0.00
O
HETATM 9231  H12 UNX   561      32.957  36.111  79.384  1.00  0.00
H
HETATM 9232  H13 UNX   561      33.651  35.712  77.847  1.00  0.00
H
HETATM 9233  H14 UNX   561      35.284  36.647  79.685  1.00  0.00
H
CONECT 9194 9193 9195 9213 9233
CONECT 9196 9195 9197 9209 9212
CONECT 9198 9197 9199 9208
CONECT 9199 9198 9200 9207
CONECT 9200 9199 9201 9204
CONECT 9202 9197 9201 9203
CONECT 9209 9193 9196 9210 9211
CONECT 9213 9194 9214 9231 9232
CONECT 9205 9204
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CONECT 9193 9194 9209
END
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