;;; MARTINI coarse-grained topology

[moleculetype]
;molname exclusions
PMAL 1

[atoms]
1  Qa  1 MAL  BN0  1  -1.000 ;
2  Nda 1 MAL  SC1  2  0.000 ;
3  Qd  1 MAL  SC2  3  1.000 ;
4  N0   2 MAL  BN0  4  0.000 ;
5  C1   2 MAL  SC1  5  0.000 ;
6  C1   2 MAL  SC2  6  0.000 ;
7  Qa   3 MAL  BN0  7  -0.100 ;
8  Nda  3 MAL  SC1  8  0.000 ;
9  Qd   3 MAL  SC2  9  1.000 ;
10 N0   4 MAL  BN0 10  0.000 ;
11 C1   4 MAL  SC1 11  0.000 ;
12 C1   4 MAL  SC2 12  0.000 ;
13 Qa   5 MAL  BN0 13  -0.100 ;
14 Nda  5 MAL  SC1 14  0.000 ;
15 Qd   5 MAL  SC2 15  1.000 ;
16 N0   6 MAL  BN0 16  0.000 ;
17 C1   6 MAL  SC1 17  0.000 ;
18 C1   6 MAL  SC2 18  0.000 ;
19 Qa   7 MAL  BN0 19  -0.100 ;
20 Nda  7 MAL  SC1 20  0.000 ;
21 Qd   7 MAL  SC2 21  1.000 ;
22 N0   8 MAL  BN0 22  0.000 ;
23 C1   8 MAL  SC1 23  0.000 ;
24 C1   8 MAL  SC2 24  0.000 ;
25 Qa   9 MAL  BN0 25  -0.100 ;
26 Nda  9 MAL  SC1 26  0.000 ;
27 Qd   9 MAL  SC2 27  1.000 ;
28 N0  10 MAL  BN0 28  0.000 ;
29 C1  10 MAL  SC1 29  0.000 ;
30 C1  10 MAL  SC2 30  0.000 ;
31 Qa  11 MAL  BN0 31  -0.100 ;
32 Nda 11 MAL  SC1 32  0.000 ;
33 Qd  11 MAL  SC2 33  1.000 ;
34 N0  12 MAL  BN0 34  0.000 ;
35 C1  12 MAL  SC1 35  0.000 ;
36 C1  12 MAL  SC2 36  0.000 ;
37 Qa  13 MAL  BN0 37  -0.100 ;
38 Nda 13 MAL  SC1 38  0.000 ;
39 Qd  13 MAL  SC2 39  1.000 ;
40 N0  14 MAL  BN0 40  0.000 ;
41 C1  14 MAL  SC1 41  0.000 ;
42 C1  14 MAL  SC2 42  0.000 ;
43 Qa  15 MAL  BN0 43  -0.100 ;
44 Nda 15 MAL  SC1 44  0.000 ;
45 Qd  15 MAL  SC2 45  1.000 ;
46 N0  16 MAL  BN0 46  0.000 ;
<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>C1</td>
<td>16</td>
<td>MAL</td>
<td>SC1</td>
<td>47</td>
<td>0.000</td>
</tr>
<tr>
<td>48</td>
<td>C1</td>
<td>16</td>
<td>MAL</td>
<td>SC2</td>
<td>48</td>
<td>0.000</td>
</tr>
<tr>
<td>49</td>
<td>Qa</td>
<td>17</td>
<td>MAL</td>
<td>BN0</td>
<td>49</td>
<td>-0.100</td>
</tr>
<tr>
<td>50</td>
<td>Nda</td>
<td>17</td>
<td>MAL</td>
<td>SC1</td>
<td>50</td>
<td>0.000</td>
</tr>
<tr>
<td>51</td>
<td>Qd</td>
<td>17</td>
<td>MAL</td>
<td>SC2</td>
<td>51</td>
<td>1.000</td>
</tr>
<tr>
<td>52</td>
<td>N0</td>
<td>18</td>
<td>MAL</td>
<td>BN0</td>
<td>52</td>
<td>0.000</td>
</tr>
<tr>
<td>53</td>
<td>C1</td>
<td>18</td>
<td>MAL</td>
<td>SC1</td>
<td>53</td>
<td>0.000</td>
</tr>
<tr>
<td>54</td>
<td>C1</td>
<td>18</td>
<td>MAL</td>
<td>SC2</td>
<td>54</td>
<td>0.000</td>
</tr>
<tr>
<td>55</td>
<td>Qa</td>
<td>19</td>
<td>MAL</td>
<td>BN0</td>
<td>55</td>
<td>-0.100</td>
</tr>
<tr>
<td>56</td>
<td>Nda</td>
<td>19</td>
<td>MAL</td>
<td>SC1</td>
<td>56</td>
<td>0.000</td>
</tr>
<tr>
<td>57</td>
<td>Qd</td>
<td>19</td>
<td>MAL</td>
<td>SC2</td>
<td>57</td>
<td>1.000</td>
</tr>
<tr>
<td>58</td>
<td>N0</td>
<td>20</td>
<td>MAL</td>
<td>BN0</td>
<td>58</td>
<td>0.000</td>
</tr>
<tr>
<td>59</td>
<td>C1</td>
<td>20</td>
<td>MAL</td>
<td>SC1</td>
<td>59</td>
<td>0.000</td>
</tr>
<tr>
<td>60</td>
<td>C1</td>
<td>20</td>
<td>MAL</td>
<td>SC2</td>
<td>60</td>
<td>0.000</td>
</tr>
<tr>
<td>61</td>
<td>Qa</td>
<td>21</td>
<td>MAL</td>
<td>BN0</td>
<td>61</td>
<td>-0.100</td>
</tr>
<tr>
<td>62</td>
<td>Nda</td>
<td>21</td>
<td>MAL</td>
<td>SC1</td>
<td>62</td>
<td>0.000</td>
</tr>
<tr>
<td>63</td>
<td>Qd</td>
<td>21</td>
<td>MAL</td>
<td>SC2</td>
<td>63</td>
<td>1.000</td>
</tr>
<tr>
<td>64</td>
<td>N0</td>
<td>22</td>
<td>MAL</td>
<td>BN0</td>
<td>64</td>
<td>0.000</td>
</tr>
<tr>
<td>65</td>
<td>C1</td>
<td>22</td>
<td>MAL</td>
<td>SC1</td>
<td>65</td>
<td>0.000</td>
</tr>
<tr>
<td>66</td>
<td>C1</td>
<td>22</td>
<td>MAL</td>
<td>SC2</td>
<td>66</td>
<td>0.000</td>
</tr>
<tr>
<td>67</td>
<td>Qa</td>
<td>23</td>
<td>MAL</td>
<td>BN0</td>
<td>67</td>
<td>-0.100</td>
</tr>
<tr>
<td>68</td>
<td>Nda</td>
<td>23</td>
<td>MAL</td>
<td>SC1</td>
<td>68</td>
<td>0.000</td>
</tr>
<tr>
<td>69</td>
<td>Qd</td>
<td>23</td>
<td>MAL</td>
<td>SC2</td>
<td>69</td>
<td>1.000</td>
</tr>
<tr>
<td>70</td>
<td>N0</td>
<td>24</td>
<td>MAL</td>
<td>BN0</td>
<td>70</td>
<td>0.000</td>
</tr>
<tr>
<td>71</td>
<td>C1</td>
<td>24</td>
<td>MAL</td>
<td>SC1</td>
<td>71</td>
<td>0.000</td>
</tr>
<tr>
<td>72</td>
<td>C1</td>
<td>24</td>
<td>MAL</td>
<td>SC2</td>
<td>72</td>
<td>0.000</td>
</tr>
<tr>
<td>73</td>
<td>Qa</td>
<td>25</td>
<td>MAL</td>
<td>BN0</td>
<td>73</td>
<td>-0.100</td>
</tr>
<tr>
<td>74</td>
<td>Nda</td>
<td>25</td>
<td>MAL</td>
<td>SC1</td>
<td>74</td>
<td>0.000</td>
</tr>
<tr>
<td>75</td>
<td>Qd</td>
<td>25</td>
<td>MAL</td>
<td>SC2</td>
<td>75</td>
<td>1.000</td>
</tr>
<tr>
<td>76</td>
<td>N0</td>
<td>26</td>
<td>MAL</td>
<td>BN0</td>
<td>76</td>
<td>0.000</td>
</tr>
<tr>
<td>77</td>
<td>C1</td>
<td>26</td>
<td>MAL</td>
<td>SC1</td>
<td>77</td>
<td>0.000</td>
</tr>
<tr>
<td>78</td>
<td>C1</td>
<td>26</td>
<td>MAL</td>
<td>SC2</td>
<td>78</td>
<td>0.000</td>
</tr>
<tr>
<td>79</td>
<td>Qa</td>
<td>27</td>
<td>MAL</td>
<td>BN0</td>
<td>79</td>
<td>-0.100</td>
</tr>
<tr>
<td>80</td>
<td>Nda</td>
<td>27</td>
<td>MAL</td>
<td>SC1</td>
<td>80</td>
<td>0.000</td>
</tr>
<tr>
<td>81</td>
<td>Qd</td>
<td>27</td>
<td>MAL</td>
<td>SC2</td>
<td>81</td>
<td>1.000</td>
</tr>
<tr>
<td>82</td>
<td>N0</td>
<td>28</td>
<td>MAL</td>
<td>BN0</td>
<td>82</td>
<td>0.000</td>
</tr>
<tr>
<td>83</td>
<td>C1</td>
<td>28</td>
<td>MAL</td>
<td>SC1</td>
<td>83</td>
<td>0.000</td>
</tr>
<tr>
<td>84</td>
<td>C1</td>
<td>28</td>
<td>MAL</td>
<td>SC2</td>
<td>84</td>
<td>0.000</td>
</tr>
<tr>
<td>85</td>
<td>Qa</td>
<td>29</td>
<td>MAL</td>
<td>BN0</td>
<td>85</td>
<td>-0.100</td>
</tr>
<tr>
<td>86</td>
<td>Nda</td>
<td>29</td>
<td>MAL</td>
<td>SC1</td>
<td>86</td>
<td>0.000</td>
</tr>
<tr>
<td>87</td>
<td>Qd</td>
<td>29</td>
<td>MAL</td>
<td>SC2</td>
<td>87</td>
<td>1.000</td>
</tr>
<tr>
<td>88</td>
<td>N0</td>
<td>30</td>
<td>MAL</td>
<td>BN0</td>
<td>88</td>
<td>0.000</td>
</tr>
<tr>
<td>89</td>
<td>C1</td>
<td>30</td>
<td>MAL</td>
<td>SC1</td>
<td>89</td>
<td>0.000</td>
</tr>
<tr>
<td>90</td>
<td>C1</td>
<td>30</td>
<td>MAL</td>
<td>SC2</td>
<td>90</td>
<td>0.000</td>
</tr>
<tr>
<td>91</td>
<td>Qa</td>
<td>31</td>
<td>MAL</td>
<td>BN0</td>
<td>91</td>
<td>-0.100</td>
</tr>
<tr>
<td>92</td>
<td>Nda</td>
<td>31</td>
<td>MAL</td>
<td>SC1</td>
<td>92</td>
<td>0.000</td>
</tr>
<tr>
<td>93</td>
<td>Qd</td>
<td>31</td>
<td>MAL</td>
<td>SC2</td>
<td>93</td>
<td>1.000</td>
</tr>
<tr>
<td>94</td>
<td>N0</td>
<td>32</td>
<td>MAL</td>
<td>BN0</td>
<td>94</td>
<td>0.000</td>
</tr>
<tr>
<td>95</td>
<td>C1</td>
<td>32</td>
<td>MAL</td>
<td>SC1</td>
<td>95</td>
<td>0.000</td>
</tr>
<tr>
<td>96</td>
<td>C1</td>
<td>32</td>
<td>MAL</td>
<td>SC2</td>
<td>96</td>
<td>0.000</td>
</tr>
<tr>
<td>97</td>
<td>Qa</td>
<td>33</td>
<td>MAL</td>
<td>BN0</td>
<td>97</td>
<td>-0.100</td>
</tr>
<tr>
<td>98</td>
<td>Nda</td>
<td>33</td>
<td>MAL</td>
<td>SC1</td>
<td>98</td>
<td>0.000</td>
</tr>
<tr>
<td>99</td>
<td>Qd</td>
<td>33</td>
<td>MAL</td>
<td>SC2</td>
<td>99</td>
<td>1.000</td>
</tr>
<tr>
<td>100</td>
<td>N0</td>
<td>34</td>
<td>MAL</td>
<td>BN0</td>
<td>100</td>
<td>0.000</td>
</tr>
</tbody>
</table>
101  C1  34  MAL  SC1  101  0.000 ;
102  C1  34  MAL  SC2  102  0.000 ;
103  Qa  35  MAL  BN0  103  -0.100 ;
104  Nda  35  MAL  SC1  104  0.000 ;
105  Qd  35  MAL  SC2  105  1.000 ;
106  N0  36  MAL  BN0  106  0.000 ;
107  C1  36  MAL  SC1  107  0.000 ;
108  C1  36  MAL  SC2  108  0.000 ;
109  Qa  37  MAL  BN0  109  -0.100 ;
110  Nda  37  MAL  SC1  110  0.000 ;
111  Qd  37  MAL  SC2  111  1.000 ;
112  N0  38  MAL  BN0  112  0.000 ;
113  C1  38  MAL  SC1  113  0.000 ;
114  C1  38  MAL  SC2  114  0.000 ;
115  Qa  39  MAL  BN0  115  -0.100 ;
116  Nda  39  MAL  SC1  116  0.000 ;
117  Qd  39  MAL  SC2  117  1.000 ;
118  N0  40  MAL  BN0  118  0.000 ;
119  C1  40  MAL  SC1  119  0.000 ;
120  C1  40  MAL  SC2  120  0.000 ;
121  Qa  41  MAL  BN0  121  -0.100 ;
122  Nda  41  MAL  SC1  122  0.000 ;
123  Qd  41  MAL  SC2  123  1.000 ;
124  N0  42  MAL  BN0  124  0.000 ;
125  C1  42  MAL  SC1  125  0.000 ;
126  C1  42  MAL  SC2  126  0.000 ;
127  Qa  43  MAL  BN0  127  -0.100 ;
128  Nda  43  MAL  SC1  128  0.000 ;
129  Qd  43  MAL  SC2  129  1.000 ;
130  N0  44  MAL  BN0  130  0.000 ;
131  C1  44  MAL  SC1  131  0.000 ;
132  C1  44  MAL  SC2  132  0.000 ;
133  Qa  45  MAL  BN0  133  -0.100 ;
134  Nda  45  MAL  SC1  134  0.000 ;
135  Qd  45  MAL  SC2  135  1.000 ;
136  N0  46  MAL  BN0  136  0.000 ;
137  C1  46  MAL  SC1  137  0.000 ;
138  C1  46  MAL  SC2  138  0.000 ;
139  Qa  47  MAL  BN0  139  -0.100 ;
140  Nda  47  MAL  SC1  140  0.000 ;
141  Qd  47  MAL  SC2  141  1.000 ;
142  N0  48  MAL  BN0  142  0.000 ;
143  C1  48  MAL  SC1  143  0.000 ;
144  C1  48  MAL  SC2  144  0.000 ;
145  Qa  49  MAL  BN0  145  -0.100 ;
146  Nda  49  MAL  SC1  146  0.000 ;
147  Qd  49  MAL  SC2  147  1.000 ;
148  N0  50  MAL  BN0  148  0.000 ;
149  C1  50  MAL  SC1  149  0.000 ;
150  C1  50  MAL  SC2  150  0.000 ;
151  Qa  51  MAL  BN0  151  -0.100 ;
152  Nda  51  MAL  SC1  152  0.000 ;
153  Qd  51  MAL  SC2  153  1.000 ;
154  N0  52  MAL  BN0  154  0.000 ;
155  C1  52  MAL  SC1  155  0.000  ;
156  C1  52  MAL  SC2  156  0.000  ;
157  Qa  53  MAL  BN0  157  -0.100  ;
158  Nda  53  MAL  SC1  158  0.000  ;
159  Qd  53  MAL  SC2  159  1.000  ;
160  N0  54  MAL  BN0  160  0.000  ;
161  C1  54  MAL  SC1  161  0.000  ;
162  C1  54  MAL  SC2  162  0.000  ;
163  Qa  55  MAL  BN0  163  -0.100  ;
164  Nda  55  MAL  SC1  164  0.000  ;
165  Qd  55  MAL  SC2  165  1.000  ;
166  N0  56  MAL  BN0  166  0.000  ;
167  C1  56  MAL  SC1  167  0.000  ;
168  C1  56  MAL  SC2  168  0.000  ;
169  Qa  57  MAL  BN0  169  -0.100  ;
170  Nda  57  MAL  SC1  170  0.000  ;
171  Qd  57  MAL  SC2  171  1.000  ;
172  N0  58  MAL  BN0  172  0.000  ;
173  C1  58  MAL  SC1  173  0.000  ;
174  C1  58  MAL  SC2  174  0.000  ;
175  Qa  59  MAL  BN0  175  -0.100  ;
176  Nda  59  MAL  SC1  176  0.000  ;
177  Qd  59  MAL  SC2  177  1.000  ;
178  N0  60  MAL  BN0  178  0.000  ;
179  C1  60  MAL  SC1  179  0.000  ;
180  C1  60  MAL  SC2  180  0.000  ;
181  Qa  61  MAL  BN0  181  -0.100  ;
182  Nda  61  MAL  SC1  182  0.000  ;
183  Qd  61  MAL  SC2  183  1.000  ;
184  N0  62  MAL  BN0  184  0.000  ;
185  C1  62  MAL  SC1  185  0.000  ;
186  C1  62  MAL  SC2  186  0.000  ;
187  Qa  63  MAL  BN0  187  -0.100  ;
188  Nda  63  MAL  SC1  188  0.000  ;
189  Qd  63  MAL  SC2  189  1.000  ;
190  N0  64  MAL  BN0  190  0.000  ;
191  C1  64  MAL  SC1  191  0.000  ;
192  C1  64  MAL  SC2  192  0.000  ;
193  Qa  65  MAL  BN0  193  -0.100  ;
194  Nda  65  MAL  SC1  194  0.000  ;
195  Qd  65  MAL  SC2  195  1.000  ;
196  N0  66  MAL  BN0  196  0.000  ;
197  C1  66  MAL  SC1  197  0.000  ;
198  C1  66  MAL  SC2  198  0.000  ;
199  Qa  67  MAL  BN0  199  -0.100  ;
200  Nda  67  MAL  SC1  200  0.000  ;
201  Qd  67  MAL  SC2  201  1.000  ;
202  N0  68  MAL  BN0  202  0.000  ;
203  C1  68  MAL  SC1  203  0.000  ;
204  C1  68  MAL  SC2  204  0.000  ;
205  Qa  69  MAL  BN0  205  -0.100  ;
206  Nda  69  MAL  SC1  206  0.000  ;
207  Qd  69  MAL  SC2  207  1.000  ;
208  N0  70  MAL  BN0  208  0.000  ;
| C1 | 70 | MAL | SC1 | 209 | 0.000 |
| C1 | 70 | MAL | SC2 | 210 | 0.000 |
| Qa | 71 | MAL | BN0 | 211 | -0.100 |
| Nda| 71 | MAL | SC1 | 212 | 0.000 |
| Qd | 71 | MAL | SC2 | 213 | 1.000 |
| N0 | 72 | MAL | BN0 | 214 | 0.000 |
| C1 | 72 | MAL | SC1 | 215 | 0.000 |
| C1 | 72 | MAL | SC2 | 216 | 0.000 |
| Qa | 73 | MAL | BN0 | 217 | -0.100 |
| Nda| 73 | MAL | SC1 | 218 | 0.000 |
| Qd | 73 | MAL | SC2 | 219 | 1.000 |
| N0 | 74 | MAL | BN0 | 220 | 0.000 |
| C1 | 74 | MAL | SC1 | 221 | 0.000 |
| C1 | 74 | MAL | SC2 | 222 | 0.000 |
| Qa | 75 | MAL | BN0 | 223 | -0.100 |
| Nda| 75 | MAL | SC1 | 224 | 0.000 |
| Qd | 75 | MAL | SC2 | 225 | 1.000 |
| N0 | 76 | MAL | BN0 | 226 | 0.000 |
| C1 | 76 | MAL | SC1 | 227 | 0.000 |
| C1 | 76 | MAL | SC2 | 228 | 0.000 |
| Qa | 77 | MAL | BN0 | 229 | -0.100 |
| Nda| 77 | MAL | SC1 | 230 | 0.000 |
| Qd | 77 | MAL | SC2 | 231 | 1.000 |
| N0 | 78 | MAL | BN0 | 232 | 0.000 |
| C1 | 78 | MAL | SC1 | 233 | 0.000 |
| C1 | 78 | MAL | SC2 | 234 | 0.000 |
| Qa | 79 | MAL | BN0 | 235 | -0.100 |
| Nda| 79 | MAL | SC1 | 236 | 0.000 |
| Qd | 79 | MAL | SC2 | 237 | 1.000 |
| N0 | 80 | MAL | BN0 | 238 | 0.000 |
| C1 | 80 | MAL | SC1 | 239 | 0.000 |
| C1 | 80 | MAL | SC2 | 240 | 0.000 |
| Qa | 81 | MAL | BN0 | 241 | -0.100 |
| Nda| 81 | MAL | SC1 | 242 | 0.000 |
| Qd | 81 | MAL | SC2 | 243 | 1.000 |
| N0 | 82 | MAL | BN0 | 244 | 0.000 |
| C1 | 82 | MAL | SC1 | 245 | 0.000 |
| C1 | 82 | MAL | SC2 | 246 | 0.000 |
| Qa | 83 | MAL | BN0 | 247 | -0.100 |
| Nda| 83 | MAL | SC1 | 248 | 0.000 |
| Qd | 83 | MAL | SC2 | 249 | 1.000 |
| N0 | 84 | MAL | BN0 | 250 | 0.000 |
| C1 | 84 | MAL | SC1 | 251 | 0.000 |
| C1 | 84 | MAL | SC2 | 252 | 0.000 |
| Qa | 85 | MAL | BN0 | 253 | -0.100 |
| Nda| 85 | MAL | SC1 | 254 | 0.000 |
| Qd | 85 | MAL | SC2 | 255 | 1.000 |
| N0 | 86 | MAL | BN0 | 256 | 0.000 |
| C1 | 86 | MAL | SC1 | 257 | 0.000 |
| C1 | 86 | MAL | SC2 | 258 | 0.000 |
| Qa | 87 | MAL | BN0 | 259 | -0.100 |
| Nda| 87 | MAL | SC1 | 260 | 0.000 |
| Qd | 87 | MAL | SC2 | 261 | 1.000 |
| N0 | 88 | MAL | BN0 | 262 | 0.000 |
[ bonds ]
; backbone-backbone bonds
1 4 1 0.355 3800 ;
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>7</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>10</td>
<td>13</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>13</td>
<td>16</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>16</td>
<td>19</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>19</td>
<td>22</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>22</td>
<td>25</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>25</td>
<td>28</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>28</td>
<td>31</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>31</td>
<td>34</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>34</td>
<td>37</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>37</td>
<td>40</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>40</td>
<td>43</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>43</td>
<td>46</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>46</td>
<td>49</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>49</td>
<td>52</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>52</td>
<td>55</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>55</td>
<td>58</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>58</td>
<td>61</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>61</td>
<td>64</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>64</td>
<td>67</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>67</td>
<td>70</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>70</td>
<td>73</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>73</td>
<td>76</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>76</td>
<td>79</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>79</td>
<td>82</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>82</td>
<td>85</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>85</td>
<td>88</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>88</td>
<td>91</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>91</td>
<td>94</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>94</td>
<td>97</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>97</td>
<td>100</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>100</td>
<td>103</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>103</td>
<td>106</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>106</td>
<td>109</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>109</td>
<td>112</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>112</td>
<td>115</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>115</td>
<td>118</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>118</td>
<td>121</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>121</td>
<td>124</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>124</td>
<td>127</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>127</td>
<td>130</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>130</td>
<td>133</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>133</td>
<td>136</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>136</td>
<td>139</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>139</td>
<td>142</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>142</td>
<td>145</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>145</td>
<td>148</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>148</td>
<td>151</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>151</td>
<td>154</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>154</td>
<td>157</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>157</td>
<td>160</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>160</td>
<td>163</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>163</td>
<td>166</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>166</td>
<td>169</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>169</td>
<td>172</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>172</td>
<td>175</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>175</td>
<td>178</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>178</td>
<td>181</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>181</td>
<td>184</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>184</td>
<td>187</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>187</td>
<td>190</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>190</td>
<td>193</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>193</td>
<td>196</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>196</td>
<td>199</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>199</td>
<td>202</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>202</td>
<td>205</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>205</td>
<td>208</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>208</td>
<td>211</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>211</td>
<td>214</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>214</td>
<td>217</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>217</td>
<td>220</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>220</td>
<td>223</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>223</td>
<td>226</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>226</td>
<td>229</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>229</td>
<td>232</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>232</td>
<td>235</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>235</td>
<td>238</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>238</td>
<td>241</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>241</td>
<td>244</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>244</td>
<td>247</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>247</td>
<td>250</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>250</td>
<td>253</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>253</td>
<td>256</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>256</td>
<td>259</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>259</td>
<td>262</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>262</td>
<td>265</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>265</td>
<td>268</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>268</td>
<td>271</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>271</td>
<td>274</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>274</td>
<td>277</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>277</td>
<td>280</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>280</td>
<td>283</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>283</td>
<td>286</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>286</td>
<td>289</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>289</td>
<td>292</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>292</td>
<td>295</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>295</td>
<td>298</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>298</td>
<td>301</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>301</td>
<td>304</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>304</td>
<td>307</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
<tr>
<td>307</td>
<td>310</td>
<td>1</td>
<td>0.355</td>
<td>3800</td>
</tr>
</tbody>
</table>

; backbone-sidechain and sidechain-sidechain bonds

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td>;</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td>;</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td>;</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td>;</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td>;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>11</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>12</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>14</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>15</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>17</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>18</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>20</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>21</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>23</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>24</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>26</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>27</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>29</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>30</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>32</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>33</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>35</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>36</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>38</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>39</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>41</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>42</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>44</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>45</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>47</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>48</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>50</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>51</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>53</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>54</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>56</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>57</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>59</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>60</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>62</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>63</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>65</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>66</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>68</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>69</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>71</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>71</td>
<td>72</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>73</td>
<td>74</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>75</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>76</td>
<td>77</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>77</td>
<td>78</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>80</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>81</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>82</td>
<td>83</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>84</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>86</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>86</td>
<td>87</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>89</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>90</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>91</td>
<td>92</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>93</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>94</td>
<td>95</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>95</td>
<td>96</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>97</td>
<td>98</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>98</td>
<td>99</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>101</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>101</td>
<td>102</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>104</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>105</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>106</td>
<td>107</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>107</td>
<td>108</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>109</td>
<td>110</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>111</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>112</td>
<td>113</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>113</td>
<td>114</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>115</td>
<td>116</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>116</td>
<td>117</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>118</td>
<td>119</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>119</td>
<td>120</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>121</td>
<td>122</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>122</td>
<td>123</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>124</td>
<td>125</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>125</td>
<td>126</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>127</td>
<td>128</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>128</td>
<td>129</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>130</td>
<td>131</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>131</td>
<td>132</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>133</td>
<td>134</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>134</td>
<td>135</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>136</td>
<td>137</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>137</td>
<td>138</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>139</td>
<td>140</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>140</td>
<td>141</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>142</td>
<td>143</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>143</td>
<td>144</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>145</td>
<td>146</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>146</td>
<td>147</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>148</td>
<td>149</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>149</td>
<td>150</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>151</td>
<td>152</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>152</td>
<td>153</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>154</td>
<td>155</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>155</td>
<td>156</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>157</td>
<td>158</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>158</td>
<td>159</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>160</td>
<td>161</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>161</td>
<td>162</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>163</td>
<td>164</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>164</td>
<td>165</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>166</td>
<td>167</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>167</td>
<td>168</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>169</td>
<td>170</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>170</td>
<td>171</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>172</td>
<td>173</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>173</td>
<td>174</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>175</td>
<td>176</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>176</td>
<td>177</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>178</td>
<td>179</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>179</td>
<td>180</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>181</td>
<td>182</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>182</td>
<td>183</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>184</td>
<td>185</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>185</td>
<td>186</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>187</td>
<td>188</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>188</td>
<td>189</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>190</td>
<td>191</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>191</td>
<td>192</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>193</td>
<td>194</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>194</td>
<td>195</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>196</td>
<td>197</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>197</td>
<td>198</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>199</td>
<td>200</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>201</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>202</td>
<td>203</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>203</td>
<td>204</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>205</td>
<td>206</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>206</td>
<td>207</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>208</td>
<td>209</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>209</td>
<td>210</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>211</td>
<td>212</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>212</td>
<td>213</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>214</td>
<td>215</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>215</td>
<td>216</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>217</td>
<td>218</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>218</td>
<td>219</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>220</td>
<td>221</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>221</td>
<td>222</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>223</td>
<td>224</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>224</td>
<td>225</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>226</td>
<td>227</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>227</td>
<td>228</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>229</td>
<td>230</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>230</td>
<td>231</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>232</td>
<td>233</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>233</td>
<td>234</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>235</td>
<td>236</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>236</td>
<td>237</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>238</td>
<td>239</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>239</td>
<td>240</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>241</td>
<td>242</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>242</td>
<td>243</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>244</td>
<td>245</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>245</td>
<td>246</td>
<td>1</td>
<td>0.375</td>
<td>4900</td>
<td></td>
</tr>
<tr>
<td>247</td>
<td>248</td>
<td>1</td>
<td>0.395</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>248</td>
<td>249</td>
<td>1</td>
<td>0.485</td>
<td>4100</td>
<td></td>
</tr>
<tr>
<td>250</td>
<td>251</td>
<td>1</td>
<td>0.375</td>
<td>4100</td>
<td></td>
</tr>
</tbody>
</table>
251 252 1 0.375 4900 ;
253 254 1 0.395 4100 ;
254 255 1 0.485 4100 ;
256 257 1 0.375 4100 ;
257 258 1 0.375 4900 ;
259 260 1 0.395 4100 ;
260 261 1 0.485 4100 ;
262 263 1 0.375 4100 ;
263 264 1 0.375 4900 ;
265 266 1 0.395 4100 ;
266 267 1 0.485 4100 ;
268 269 1 0.375 4100 ;
269 270 1 0.375 4900 ;
271 272 1 0.395 4100 ;
272 273 1 0.485 4100 ;
274 275 1 0.375 4100 ;
275 276 1 0.375 4900 ;
277 278 1 0.395 4100 ;
278 279 1 0.485 4100 ;
280 281 1 0.375 4100 ;
281 282 1 0.375 4900 ;
283 284 1 0.395 4100 ;
284 285 1 0.485 4100 ;
286 287 1 0.375 4100 ;
287 288 1 0.375 4900 ;
289 290 1 0.395 4100 ;
290 291 1 0.485 4100 ;
292 293 1 0.375 4100 ;
293 294 1 0.375 4900 ;
295 296 1 0.395 4100 ;
296 297 1 0.485 4100 ;
298 299 1 0.375 4100 ;
299 300 1 0.375 4900 ;
301 302 1 0.395 4100 ;
302 303 1 0.485 4100 ;
304 305 1 0.375 4100 ;
305 306 1 0.375 4900 ;
307 308 1 0.395 4100 ;
308 309 1 0.485 4100 ;
310 311 1 0.375 4100 ;
311 312 1 0.375 4900 ;

[ constraints ]
;iso backbone-sidechain

[angles]
;backbone-sidechain-sidechain angles
1 2 3 2 110 30 ;
4 5 6 2 160 30 ;
7 8 9 2 110 30 ;
10 11 12 2 160 30 ;
13 14 15 2 110 30 ;
16 17 18 2 160 30 ;
19 20 21 2 110 30 ;
<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>23</td>
<td>24</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>25</td>
<td>26</td>
<td>27</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>28</td>
<td>29</td>
<td>30</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>31</td>
<td>32</td>
<td>33</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>34</td>
<td>35</td>
<td>36</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>37</td>
<td>38</td>
<td>39</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>40</td>
<td>41</td>
<td>42</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>43</td>
<td>44</td>
<td>45</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>46</td>
<td>47</td>
<td>48</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>49</td>
<td>50</td>
<td>51</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>52</td>
<td>53</td>
<td>54</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>55</td>
<td>56</td>
<td>57</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>58</td>
<td>59</td>
<td>60</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>61</td>
<td>62</td>
<td>63</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>64</td>
<td>65</td>
<td>66</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>67</td>
<td>68</td>
<td>69</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>70</td>
<td>71</td>
<td>72</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>73</td>
<td>74</td>
<td>75</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>76</td>
<td>77</td>
<td>78</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>79</td>
<td>80</td>
<td>81</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>82</td>
<td>83</td>
<td>84</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>85</td>
<td>86</td>
<td>87</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>88</td>
<td>89</td>
<td>90</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>91</td>
<td>92</td>
<td>93</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>94</td>
<td>95</td>
<td>96</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>97</td>
<td>98</td>
<td>99</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>100</td>
<td>101</td>
<td>102</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>103</td>
<td>104</td>
<td>105</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>106</td>
<td>107</td>
<td>108</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>109</td>
<td>110</td>
<td>111</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>112</td>
<td>113</td>
<td>114</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>115</td>
<td>116</td>
<td>117</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>118</td>
<td>119</td>
<td>120</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>121</td>
<td>122</td>
<td>123</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>124</td>
<td>125</td>
<td>126</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>127</td>
<td>128</td>
<td>129</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>130</td>
<td>131</td>
<td>132</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>133</td>
<td>134</td>
<td>135</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>136</td>
<td>137</td>
<td>138</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>139</td>
<td>140</td>
<td>141</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>142</td>
<td>143</td>
<td>144</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>145</td>
<td>146</td>
<td>147</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>148</td>
<td>149</td>
<td>150</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>151</td>
<td>152</td>
<td>153</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>154</td>
<td>155</td>
<td>156</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>157</td>
<td>158</td>
<td>159</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>160</td>
<td>161</td>
<td>162</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>163</td>
<td>164</td>
<td>165</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>166</td>
<td>167</td>
<td>168</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>169</td>
<td>170</td>
<td>171</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>172</td>
<td>173</td>
<td>174</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>175</td>
<td>176</td>
<td>177</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>178</td>
<td>179</td>
<td>180</td>
<td>2</td>
<td>160</td>
<td>30</td>
<td>;</td>
</tr>
<tr>
<td>181</td>
<td>182</td>
<td>183</td>
<td>2</td>
<td>110</td>
<td>30</td>
<td>;</td>
</tr>
</tbody>
</table>
184 185 186 2 160 30 ;
187 188 189 2 110 30 ;
190 191 192 2 160 30 ;
193 194 195 2 110 30 ;
196 197 198 2 160 30 ;
199 200 201 2 110 30 ;
202 203 204 2 160 30 ;
205 206 207 2 110 30 ;
208 209 210 2 160 30 ;
211 212 213 2 110 30 ;
214 215 216 2 160 30 ;
217 218 219 2 110 30 ;
220 221 222 2 160 30 ;
223 224 225 2 110 30 ;
226 227 228 2 160 30 ;
229 230 231 2 110 30 ;
232 233 234 2 160 30 ;
235 236 237 2 110 30 ;
238 239 240 2 160 30 ;
241 242 243 2 110 30 ;
244 245 246 2 160 30 ;
247 248 249 2 110 30 ;
250 251 252 2 160 30 ;
253 254 255 2 110 30 ;
256 257 258 2 160 30 ;
259 260 261 2 110 30 ;
262 263 264 2 160 30 ;
265 266 267 2 110 30 ;
268 269 270 2 160 30 ;
271 272 273 2 110 30 ;
274 275 276 2 160 30 ;
277 278 279 2 110 30 ;
280 281 282 2 160 30 ;
283 284 285 2 110 30 ;
286 287 288 2 160 30 ;
289 290 291 2 110 30 ;
292 293 294 2 160 30 ;
295 296 297 2 110 30 ;
298 299 300 2 160 30 ;
301 302 303 2 110 30 ;
304 305 306 2 160 30 ;
307 308 309 2 110 30 ;
310 311 312 2 160 30 ;

; backbone-backbone-sidechain angles
1 4 5 2 5 50 ;
4 7 8 2 170 20 ;
7 10 11 2 5 50 ;
10 13 14 2 170 20 ;
13 16 17 2 5 50 ;
16 19 20 2 170 20 ;
19 22 23 2 5 50 ;
22 25 26 2 170 20 ;
25 28 29 2 5 50 ;
28 31 32 2 170 20 ;
<table>
<thead>
<tr>
<th>31</th>
<th>34</th>
<th>35</th>
<th>2</th>
<th>5</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>37</td>
<td>38</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>37</td>
<td>40</td>
<td>41</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>40</td>
<td>43</td>
<td>44</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>43</td>
<td>46</td>
<td>47</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>46</td>
<td>49</td>
<td>50</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>49</td>
<td>52</td>
<td>53</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>52</td>
<td>55</td>
<td>56</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>55</td>
<td>58</td>
<td>59</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>58</td>
<td>61</td>
<td>62</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>61</td>
<td>64</td>
<td>65</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>64</td>
<td>67</td>
<td>68</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>67</td>
<td>70</td>
<td>71</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>70</td>
<td>73</td>
<td>74</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>73</td>
<td>76</td>
<td>77</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>76</td>
<td>79</td>
<td>80</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>79</td>
<td>82</td>
<td>83</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>82</td>
<td>85</td>
<td>86</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>85</td>
<td>88</td>
<td>89</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>88</td>
<td>91</td>
<td>92</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>91</td>
<td>94</td>
<td>95</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>94</td>
<td>97</td>
<td>98</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>97</td>
<td>100</td>
<td>101</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>100</td>
<td>103</td>
<td>104</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>103</td>
<td>106</td>
<td>107</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>106</td>
<td>109</td>
<td>110</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>109</td>
<td>112</td>
<td>113</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>112</td>
<td>115</td>
<td>116</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>115</td>
<td>118</td>
<td>119</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>118</td>
<td>121</td>
<td>122</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>121</td>
<td>124</td>
<td>125</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>124</td>
<td>127</td>
<td>128</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>127</td>
<td>130</td>
<td>131</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>130</td>
<td>133</td>
<td>134</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>133</td>
<td>136</td>
<td>137</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>136</td>
<td>139</td>
<td>140</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>139</td>
<td>142</td>
<td>143</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>142</td>
<td>145</td>
<td>146</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>145</td>
<td>148</td>
<td>149</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>148</td>
<td>151</td>
<td>152</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>151</td>
<td>154</td>
<td>155</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>154</td>
<td>157</td>
<td>158</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>157</td>
<td>160</td>
<td>161</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>160</td>
<td>163</td>
<td>164</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>163</td>
<td>166</td>
<td>167</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>166</td>
<td>169</td>
<td>170</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>169</td>
<td>172</td>
<td>173</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>172</td>
<td>175</td>
<td>176</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>175</td>
<td>178</td>
<td>179</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>178</td>
<td>181</td>
<td>182</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>181</td>
<td>184</td>
<td>185</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>184</td>
<td>187</td>
<td>188</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td>187</td>
<td>190</td>
<td>191</td>
<td>2</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>190</td>
<td>193</td>
<td>194</td>
<td>2</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>193</td>
<td>196</td>
<td>197</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>196</td>
<td>199</td>
<td>200</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>199</td>
<td>202</td>
<td>203</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>202</td>
<td>205</td>
<td>206</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>205</td>
<td>208</td>
<td>209</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>208</td>
<td>211</td>
<td>212</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>211</td>
<td>214</td>
<td>215</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>214</td>
<td>217</td>
<td>218</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>217</td>
<td>220</td>
<td>221</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>220</td>
<td>223</td>
<td>224</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>223</td>
<td>226</td>
<td>227</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>226</td>
<td>229</td>
<td>230</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>229</td>
<td>232</td>
<td>233</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>232</td>
<td>235</td>
<td>236</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>235</td>
<td>238</td>
<td>239</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>238</td>
<td>241</td>
<td>242</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>241</td>
<td>244</td>
<td>245</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>244</td>
<td>247</td>
<td>248</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>247</td>
<td>250</td>
<td>251</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>250</td>
<td>253</td>
<td>254</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>253</td>
<td>256</td>
<td>257</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>256</td>
<td>259</td>
<td>260</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>259</td>
<td>262</td>
<td>263</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>262</td>
<td>265</td>
<td>266</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>265</td>
<td>268</td>
<td>269</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>268</td>
<td>271</td>
<td>272</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>271</td>
<td>274</td>
<td>275</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>274</td>
<td>277</td>
<td>278</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>277</td>
<td>280</td>
<td>281</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>280</td>
<td>283</td>
<td>284</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>283</td>
<td>286</td>
<td>287</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>286</td>
<td>289</td>
<td>290</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>289</td>
<td>292</td>
<td>293</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>292</td>
<td>295</td>
<td>296</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>295</td>
<td>298</td>
<td>299</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>298</td>
<td>301</td>
<td>302</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>301</td>
<td>304</td>
<td>305</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>304</td>
<td>307</td>
<td>308</td>
<td></td>
<td>2</td>
<td>170</td>
</tr>
<tr>
<td>307</td>
<td>310</td>
<td>311</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

; backbone-backbone-backbone angles

<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>7</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>10</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td>13</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>13</td>
<td>16</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>16</td>
<td>19</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>19</td>
<td>22</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>22</td>
<td>25</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>25</td>
<td>28</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>28</td>
<td>31</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>31</td>
<td>34</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>34</td>
<td>37</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>37</td>
<td>40</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>40</td>
<td>43</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>43</td>
<td>46</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>46</td>
<td>49</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>49</td>
<td>52</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>52</td>
<td>55</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>55</td>
<td>58</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>58</td>
<td>61</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>61</td>
<td>64</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>64</td>
<td>67</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>67</td>
<td>70</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>70</td>
<td>73</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>73</td>
<td>76</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>73</td>
<td>76</td>
<td>79</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>76</td>
<td>79</td>
<td>82</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>82</td>
<td>85</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>82</td>
<td>85</td>
<td>88</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>88</td>
<td>91</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>91</td>
<td>94</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>91</td>
<td>94</td>
<td>97</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>94</td>
<td>97</td>
<td>100</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>97</td>
<td>100</td>
<td>103</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>103</td>
<td>106</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>106</td>
<td>109</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>106</td>
<td>109</td>
<td>112</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>109</td>
<td>112</td>
<td>115</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>112</td>
<td>115</td>
<td>118</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>115</td>
<td>118</td>
<td>121</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>118</td>
<td>121</td>
<td>124</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>121</td>
<td>124</td>
<td>127</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>124</td>
<td>127</td>
<td>130</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>127</td>
<td>130</td>
<td>133</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130</td>
<td>133</td>
<td>136</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>133</td>
<td>136</td>
<td>139</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>136</td>
<td>139</td>
<td>142</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>139</td>
<td>142</td>
<td>145</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>142</td>
<td>145</td>
<td>148</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>145</td>
<td>148</td>
<td>151</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>148</td>
<td>151</td>
<td>154</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>151</td>
<td>154</td>
<td>157</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>154</td>
<td>157</td>
<td>160</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>157</td>
<td>160</td>
<td>163</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>160</td>
<td>163</td>
<td>166</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>163</td>
<td>166</td>
<td>169</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>166</td>
<td>169</td>
<td>172</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>169</td>
<td>172</td>
<td>175</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>172</td>
<td>175</td>
<td>178</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>175</td>
<td>178</td>
<td>181</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>178</td>
<td>181</td>
<td>184</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>181</td>
<td>184</td>
<td>187</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>184</td>
<td>187</td>
<td>190</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>187</td>
<td>190</td>
<td>193</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>190</td>
<td>193</td>
<td>196</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>193</td>
<td>196</td>
<td>199</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>196</td>
<td>199</td>
<td>202</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>199</td>
<td>202</td>
<td>205</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>202</td>
<td>205</td>
<td>208</td>
<td>1</td>
<td>100</td>
<td>30</td>
<td>;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
dihedrals

;proper dihedrals angles
1 4 7 10 1 80 1.5 1

; 4 7 10 13 1 80 1.5 1

; 7 10 13 16 1 80 1.5 1

; 10 13 16 19 1 80 1.5 1

; 13 16 19 22 1 80 1.5 1

; 16 19 22 25 1 80 1.5 1

; 19 22 25 28 1 80 1.5 1

; 22 25 28 31 1 80 1.5 1

; 25 28 31 34 1 80 1.5 1
<table>
<thead>
<tr>
<th>28</th>
<th>31</th>
<th>34</th>
<th>37</th>
<th>1</th>
<th>80</th>
<th>1.5</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>34</td>
<td>37</td>
<td>40</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>34</td>
<td>37</td>
<td>40</td>
<td>43</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>37</td>
<td>40</td>
<td>43</td>
<td>46</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>40</td>
<td>43</td>
<td>46</td>
<td>49</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>43</td>
<td>46</td>
<td>49</td>
<td>52</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>46</td>
<td>49</td>
<td>52</td>
<td>55</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>49</td>
<td>52</td>
<td>55</td>
<td>58</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>52</td>
<td>55</td>
<td>58</td>
<td>61</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>55</td>
<td>58</td>
<td>61</td>
<td>64</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>58</td>
<td>61</td>
<td>64</td>
<td>67</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>61</td>
<td>64</td>
<td>67</td>
<td>70</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>64</td>
<td>67</td>
<td>70</td>
<td>73</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>67</td>
<td>70</td>
<td>73</td>
<td>76</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>70</td>
<td>73</td>
<td>76</td>
<td>79</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>73</td>
<td>76</td>
<td>79</td>
<td>82</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>76</td>
<td>79</td>
<td>82</td>
<td>85</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>79</td>
<td>82</td>
<td>85</td>
<td>88</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>82</td>
<td>85</td>
<td>88</td>
<td>91</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>85</td>
<td>88</td>
<td>91</td>
<td>94</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>88</td>
<td>91</td>
<td>94</td>
<td>97</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>91</td>
<td>94</td>
<td>97</td>
<td>100</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>94</td>
<td>97</td>
<td>100</td>
<td>103</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>97</td>
<td>100</td>
<td>103</td>
<td>106</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>100</td>
<td>103</td>
<td>106</td>
<td>109</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>103</td>
<td>106</td>
<td>109</td>
<td>112</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>106</td>
<td>109</td>
<td>112</td>
<td>115</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>109</td>
<td>112</td>
<td>115</td>
<td>118</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>112</td>
<td>115</td>
<td>118</td>
<td>121</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>115</td>
<td>118</td>
<td>121</td>
<td>124</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>118</td>
<td>121</td>
<td>124</td>
<td>127</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>121</td>
<td>124</td>
<td>127</td>
<td>130</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>124</td>
<td>127</td>
<td>130</td>
<td>133</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>127</td>
<td>130</td>
<td>133</td>
<td>136</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>130</td>
<td>133</td>
<td>136</td>
<td>139</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>133</td>
<td>136</td>
<td>139</td>
<td>142</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>136</td>
<td>139</td>
<td>142</td>
<td>145</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>139</td>
<td>142</td>
<td>145</td>
<td>148</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>142</td>
<td>145</td>
<td>148</td>
<td>151</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>145</td>
<td>148</td>
<td>151</td>
<td>154</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>148</td>
<td>151</td>
<td>154</td>
<td>157</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>151</td>
<td>154</td>
<td>157</td>
<td>160</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>154</td>
<td>157</td>
<td>160</td>
<td>163</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>157</td>
<td>160</td>
<td>163</td>
<td>166</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>160</td>
<td>163</td>
<td>166</td>
<td>169</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>163</td>
<td>166</td>
<td>169</td>
<td>172</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>166</td>
<td>169</td>
<td>172</td>
<td>175</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>169</td>
<td>172</td>
<td>175</td>
<td>178</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>172</td>
<td>175</td>
<td>178</td>
<td>181</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>175</td>
<td>178</td>
<td>181</td>
<td>184</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>178</td>
<td>181</td>
<td>184</td>
<td>187</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>181</td>
<td>184</td>
<td>187</td>
<td>190</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>184</td>
<td>187</td>
<td>190</td>
<td>193</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>187</td>
<td>190</td>
<td>193</td>
<td>196</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>190</td>
<td>193</td>
<td>196</td>
<td>199</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>193</td>
<td>196</td>
<td>199</td>
<td>202</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>196</td>
<td>199</td>
<td>202</td>
<td>205</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>199</td>
<td>202</td>
<td>205</td>
<td>208</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>202</td>
<td>205</td>
<td>208</td>
<td>211</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>205</td>
<td>208</td>
<td>211</td>
<td>214</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>208</td>
<td>211</td>
<td>214</td>
<td>217</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>211</td>
<td>214</td>
<td>217</td>
<td>220</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>214</td>
<td>217</td>
<td>220</td>
<td>223</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>217</td>
<td>220</td>
<td>223</td>
<td>226</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>220</td>
<td>223</td>
<td>226</td>
<td>229</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>223</td>
<td>226</td>
<td>229</td>
<td>232</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>226</td>
<td>229</td>
<td>232</td>
<td>235</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>229</td>
<td>232</td>
<td>235</td>
<td>238</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>232</td>
<td>235</td>
<td>238</td>
<td>241</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>235</td>
<td>238</td>
<td>241</td>
<td>244</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>238</td>
<td>241</td>
<td>244</td>
<td>247</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>241</td>
<td>244</td>
<td>247</td>
<td>250</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>244</td>
<td>247</td>
<td>250</td>
<td>253</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>247</td>
<td>250</td>
<td>253</td>
<td>256</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>250</td>
<td>253</td>
<td>256</td>
<td>259</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>253</td>
<td>256</td>
<td>259</td>
<td>262</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>256</td>
<td>259</td>
<td>262</td>
<td>265</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>259</td>
<td>262</td>
<td>265</td>
<td>268</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>262</td>
<td>265</td>
<td>268</td>
<td>271</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>265</td>
<td>268</td>
<td>271</td>
<td>274</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>268</td>
<td>271</td>
<td>274</td>
<td>277</td>
<td>1</td>
<td>80</td>
<td>1.5</td>
<td>1</td>
</tr>
</tbody>
</table>
#ifdef POSRES
#include "./posre-pmal.itp"
#endif