PDB ID : 6DV3
EMDB ID: EMD-8914
Title : Structure of the Salmonella SPI-1 type III secretion injectisome secretin InvG in the open gate state
Authors : Hu, J.; Worrall, L.J.; Vuckovic, M.; Atkinson, C.E.; Strynadka, N.C.J.
Deposited on : 2018-06-22
Resolution : 4.10 Å (reported)

This is a Full wwPDB/EMDataBank EM Map/Model Validation Report for a publicly released PDB/EMDB entry.

We welcome your comments at validation@mail.wwpdb.org
A user guide is available at https://www.wwpdb.org/validation/2017/EMValidationReportHelp with specific help available everywhere you see the symbol.

MolProbity : 4.02b-467
Percentile statistics : 20171227.v01 (using entries in the PDB archive December 27th 2017)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : rb-20031172
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

**ELECTRON MICROSCOPY**

The reported resolution of this entry is 4.10 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Whole archive (#Entries)</th>
<th>EM structures (#Entries)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clashscore</td>
<td>136327</td>
<td>1886</td>
</tr>
<tr>
<td>Ramachandran outliers</td>
<td>132723</td>
<td>1663</td>
</tr>
<tr>
<td>Sidechain outliers</td>
<td>132532</td>
<td>1531</td>
</tr>
</tbody>
</table>

The table below summarises the geometric issues observed across the polymeric chains. The red, orange, yellow and green segments on the bar indicate the fraction of residues that contain outliers for $\geq 3$, 2, 1 and 0 types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$.
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Length</th>
<th>Quality of chain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>J</td>
<td>562</td>
<td>67%</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>562</td>
<td>65%</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>562</td>
<td>70%</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>562</td>
<td>70%</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>562</td>
<td>69%</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>562</td>
<td>68%</td>
</tr>
</tbody>
</table>
2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 57975 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called Protein InvG.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>500</td>
<td>Total C 2446 N 667 O 739 S 13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>500</td>
<td>Total C 2446 N 667 O 739 S 13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>500</td>
<td>Total C 2446 N 667 O 739 S 13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>500</td>
<td>Total C 2446 N 667 O 739 S 13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>500</td>
<td>Total C 2446 N 667 O 739 S 13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>500</td>
<td>Total C 2446 N 667 O 739 S 13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>500</td>
<td>Total C 2446 N 667 O 739 S 13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>500</td>
<td>Total C 2446 N 667 O 739 S 13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>500</td>
<td>Total C 2446 N 667 O 739 S 13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>500</td>
<td>Total C 2446 N 667 O 739 S 13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>500</td>
<td>Total C 2446 N 667 O 739 S 13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>500</td>
<td>Total C 2446 N 667 O 739 S 13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>500</td>
<td>Total C 2446 N 667 O 739 S 13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>500</td>
<td>Total C 2446 N 667 O 739 S 13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>500</td>
<td>Total C 2446 N 667 O 739 S 13</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
3  Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

- Molecule 1: Protein InvG

Chain A:

- Molecule 1: Protein InvG

Chain B:

- Molecule 1: Protein InvG

Chain C:
• Molecule 1: Protein InvG

Chain D:

• Molecule 1: Protein InvG

Chain E:
• Molecule 1: Protein InvG

Chain F:

• Molecule 1: Protein InvG

Chain G:

• Molecule 1: Protein InvG

Chain H:
• Molecule 1: Protein InvG

Chain I:

• Molecule 1: Protein InvG

Chain J:

• Molecule 1: Protein InvG

Chain K:
• Molecule 1: Protein InvG

Chain L:

Chain M:
• Molecule 1: Protein InvG

Chain N:

• Molecule 1: Protein InvG

Chain O:
## 4 Experimental information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reconstruction method</td>
<td>SINGLE PARTICLE</td>
<td>Depositor</td>
</tr>
<tr>
<td>Imposed symmetry</td>
<td>POINT, C15</td>
<td>Depositor</td>
</tr>
<tr>
<td>Number of particles used</td>
<td>26000</td>
<td>Depositor</td>
</tr>
<tr>
<td>Resolution determination method</td>
<td>FSC 0.143 CUT-OFF</td>
<td>Depositor</td>
</tr>
<tr>
<td>CTF correction method</td>
<td>PHASE FLIPPING AND AMPLITUDE CORRECTION</td>
<td>Depositor</td>
</tr>
<tr>
<td>Microscope</td>
<td>FEI TITAN KRIOS</td>
<td>Depositor</td>
</tr>
<tr>
<td>Voltage (kV)</td>
<td>300</td>
<td>Depositor</td>
</tr>
<tr>
<td>Electron dose (e⁻/Å²)</td>
<td>40</td>
<td>Depositor</td>
</tr>
<tr>
<td>Minimum defocus (nm)</td>
<td>Not provided</td>
<td>Depositor</td>
</tr>
<tr>
<td>Maximum defocus (nm)</td>
<td>Not provided</td>
<td>Depositor</td>
</tr>
<tr>
<td>Magnification</td>
<td>Not provided</td>
<td>Depositor</td>
</tr>
<tr>
<td>Image detector</td>
<td>FEI FALCON III (4k x 4k)</td>
<td>Depositor</td>
</tr>
</tbody>
</table>
5 Model quality

5.1 Standard geometry

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Bond lengths</th>
<th>Bond angles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>RMSZ</td>
<td>#</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>0.41</td>
<td>0/3929</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>0.41</td>
<td>0/3929</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>0.42</td>
<td>0/3929</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>0.42</td>
<td>0/3929</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>0.42</td>
<td>0/3929</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>0.42</td>
<td>0/3929</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>0.42</td>
<td>0/3929</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>0.42</td>
<td>0/3929</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>0.42</td>
<td>0/3929</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>0.42</td>
<td>0/3929</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>0.42</td>
<td>0/3929</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>0.42</td>
<td>0/3929</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>0.42</td>
<td>0/3929</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>0.42</td>
<td>0/3929</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>0.42</td>
<td>0/3929</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>0.42</td>
<td>0/58935</td>
</tr>
</tbody>
</table>

There are no bond length outliers.

All (45) bond angle outliers are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Atoms</th>
<th>Z</th>
<th>Observed(°)</th>
<th>Ideal(°)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I</td>
<td>554</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>8.26</td>
<td>134.30</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>554</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>8.25</td>
<td>134.27</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>554</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>8.25</td>
<td>134.27</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>554</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>8.25</td>
<td>134.27</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>554</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>8.24</td>
<td>134.26</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>554</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>8.24</td>
<td>134.26</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>554</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>8.24</td>
<td>134.25</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>554</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>8.24</td>
<td>134.25</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>554</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>8.24</td>
<td>134.25</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>554</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>8.24</td>
<td>134.25</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>554</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>8.24</td>
<td>134.25</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>554</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>8.23</td>
<td>134.24</td>
<td>115.30</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Atoms</th>
<th>Z</th>
<th>Observed(°)</th>
<th>Ideal(°)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>G</td>
<td>554</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>8.23</td>
<td>134.23</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>554</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>8.23</td>
<td>134.22</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>554</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>8.22</td>
<td>134.20</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>517</td>
<td>GLU</td>
<td>CA-CB-CG</td>
<td>7.39</td>
<td>129.67</td>
<td>113.40</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>517</td>
<td>GLU</td>
<td>CA-CB-CG</td>
<td>7.39</td>
<td>129.66</td>
<td>113.40</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>517</td>
<td>GLU</td>
<td>CA-CB-CG</td>
<td>7.38</td>
<td>129.64</td>
<td>113.40</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>517</td>
<td>GLU</td>
<td>CA-CB-CG</td>
<td>7.38</td>
<td>129.64</td>
<td>113.40</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>517</td>
<td>GLU</td>
<td>CA-CB-CG</td>
<td>7.38</td>
<td>129.64</td>
<td>113.40</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>517</td>
<td>GLU</td>
<td>CA-CB-CG</td>
<td>7.38</td>
<td>129.64</td>
<td>113.40</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>517</td>
<td>GLU</td>
<td>CA-CB-CG</td>
<td>7.38</td>
<td>129.64</td>
<td>113.40</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>517</td>
<td>GLU</td>
<td>CA-CB-CG</td>
<td>7.38</td>
<td>129.64</td>
<td>113.40</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>517</td>
<td>GLU</td>
<td>CA-CB-CG</td>
<td>7.38</td>
<td>129.63</td>
<td>113.40</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>517</td>
<td>GLU</td>
<td>CA-CB-CG</td>
<td>7.38</td>
<td>129.62</td>
<td>113.40</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>517</td>
<td>GLU</td>
<td>CA-CB-CG</td>
<td>7.37</td>
<td>129.62</td>
<td>113.40</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>517</td>
<td>GLU</td>
<td>CA-CB-CG</td>
<td>7.37</td>
<td>129.61</td>
<td>113.40</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>517</td>
<td>GLU</td>
<td>CA-CB-CG</td>
<td>7.37</td>
<td>129.61</td>
<td>113.40</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>517</td>
<td>GLU</td>
<td>CA-CB-CG</td>
<td>7.36</td>
<td>129.60</td>
<td>113.40</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>517</td>
<td>GLU</td>
<td>CA-CB-CG</td>
<td>7.35</td>
<td>129.57</td>
<td>113.40</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>175</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.05</td>
<td>129.21</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>175</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.05</td>
<td>129.21</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>175</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.04</td>
<td>129.20</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>175</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.04</td>
<td>129.20</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>175</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.04</td>
<td>129.19</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>175</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.04</td>
<td>129.18</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>175</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.04</td>
<td>129.18</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>175</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.04</td>
<td>129.18</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>175</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.03</td>
<td>129.18</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>175</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.03</td>
<td>129.17</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>175</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.03</td>
<td>129.17</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>175</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.03</td>
<td>129.16</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>175</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.03</td>
<td>129.16</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>175</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.02</td>
<td>129.15</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>175</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.02</td>
<td>129.15</td>
<td>115.30</td>
</tr>
</tbody>
</table>

There are no chirality outliers.

There are no planarity outliers.

### 5.2 Too-close contacts

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen
Atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry related clashes.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Non-H</th>
<th>H(model)</th>
<th>H(added)</th>
<th>Clashes</th>
<th>Symm-Clashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>3865</td>
<td>0</td>
<td>3886</td>
<td>131</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>3865</td>
<td>0</td>
<td>3886</td>
<td>73</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>3865</td>
<td>0</td>
<td>3886</td>
<td>63</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>3865</td>
<td>0</td>
<td>3886</td>
<td>76</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>3865</td>
<td>0</td>
<td>3886</td>
<td>134</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>3865</td>
<td>0</td>
<td>3886</td>
<td>117</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>3865</td>
<td>0</td>
<td>3886</td>
<td>57</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>3865</td>
<td>0</td>
<td>3886</td>
<td>52</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>3865</td>
<td>0</td>
<td>3886</td>
<td>63</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>3865</td>
<td>0</td>
<td>3886</td>
<td>157</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>3865</td>
<td>0</td>
<td>3886</td>
<td>172</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>3865</td>
<td>0</td>
<td>3886</td>
<td>70</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>3865</td>
<td>0</td>
<td>3886</td>
<td>69</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>3865</td>
<td>0</td>
<td>3886</td>
<td>64</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>3865</td>
<td>0</td>
<td>3886</td>
<td>119</td>
<td>0</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>57975</td>
<td>0</td>
<td>58290</td>
<td>1000</td>
<td>0</td>
</tr>
</tbody>
</table>

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 9.

All (1000) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:H:144:LYS:HZ1</td>
<td>1:K:162:ALA:CA</td>
<td>1.64</td>
<td>1.11</td>
</tr>
<tr>
<td>1:J:144:LYS:HZ2</td>
<td>1:K:162:ALA:CB</td>
<td>1.70</td>
<td>1.05</td>
</tr>
<tr>
<td>1:J:142:ASN:ND2</td>
<td>1:K:128:ARG:HB3</td>
<td>1.74</td>
<td>1.02</td>
</tr>
<tr>
<td>1:A:173:ILE:HD12</td>
<td>1:O:257:ALA:HB1</td>
<td>1.45</td>
<td>0.98</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:188:THR:C</td>
<td>1:O:415:ARG:HH1</td>
<td>1.74</td>
<td>0.90</td>
</tr>
<tr>
<td>1:E:144:LYS:HZ1</td>
<td>1:F:162:ALA:HA</td>
<td>0.83</td>
<td>0.97</td>
</tr>
<tr>
<td>1:A:165:MET:HB2</td>
<td>1:O:144:LYS:CE</td>
<td>1.95</td>
<td>0.97</td>
</tr>
<tr>
<td>1:J:111:VAL:HG11</td>
<td>1:K:161:ASN:HB3</td>
<td>1.44</td>
<td>0.97</td>
</tr>
<tr>
<td>1:A:162:ALA:HA</td>
<td>1:O:144:LYS:HZ2</td>
<td>1.31</td>
<td>0.96</td>
</tr>
<tr>
<td>1:E:139:ARG:HD2</td>
<td>1:F:131:LEU:HD21</td>
<td>1.49</td>
<td>0.95</td>
</tr>
<tr>
<td>1:A:165:MET:HG3</td>
<td>1:O:146:THR:HG21</td>
<td>1.48</td>
<td>0.95</td>
</tr>
<tr>
<td>1:J:137:PRO:HD2</td>
<td>1:K:97:GLN:CG</td>
<td>1.98</td>
<td>0.94</td>
</tr>
<tr>
<td>1:K:506:ASN:ND2</td>
<td>1:M:541:SER:OG</td>
<td>2.00</td>
<td>0.93</td>
</tr>
<tr>
<td>1:J:139:ARG:HD2</td>
<td>1:K:131:LEU:HD21</td>
<td>1.48</td>
<td>0.93</td>
</tr>
<tr>
<td>1:A:165:MET:HB2</td>
<td>1:O:144:LYS:HE3</td>
<td>1.49</td>
<td>0.92</td>
</tr>
<tr>
<td>1:E:111:VAL:HG11</td>
<td>1:F:161:ASN:HB3</td>
<td>1.52</td>
<td>0.90</td>
</tr>
<tr>
<td>1:J:111:VAL:HG11</td>
<td>1:K:161:ASN:CB</td>
<td>2.01</td>
<td>0.90</td>
</tr>
<tr>
<td>1:A:188:THR:C</td>
<td>1:O:415:ARG:HH12</td>
<td>1.74</td>
<td>0.90</td>
</tr>
<tr>
<td>1:A:181:GLY:HA2</td>
<td>1:O:226:VAL:O</td>
<td>1.72</td>
<td>0.89</td>
</tr>
<tr>
<td>1:J:144:LYS:HZ2</td>
<td>1:K:162:ALA:HB1</td>
<td>1.38</td>
<td>0.89</td>
</tr>
<tr>
<td>1:J:87:GLN:HA</td>
<td>1:K:51:LEU:CD2</td>
<td>2.41</td>
<td>0.87</td>
</tr>
<tr>
<td>1:E:144:LYS:HZ1</td>
<td>1:F:162:ALA:CA</td>
<td>1.80</td>
<td>0.87</td>
</tr>
<tr>
<td>1:J:144:LYS:HZ1</td>
<td>1:K:162:ALA:HA</td>
<td>0.75</td>
<td>0.87</td>
</tr>
<tr>
<td>1:D:197:LEU:O</td>
<td>1:D:411:ARG:NH1</td>
<td>2.08</td>
<td>0.86</td>
</tr>
<tr>
<td>1:E:144:LYS:NZ</td>
<td>1:F:162:ALA:CA</td>
<td>2.37</td>
<td>0.86</td>
</tr>
<tr>
<td>1:E:197:LEU:O</td>
<td>1:E:411:ARG:NH1</td>
<td>2.08</td>
<td>0.86</td>
</tr>
<tr>
<td>1:C:197:LEU:O</td>
<td>1:C:411:ARG:NH1</td>
<td>2.08</td>
<td>0.86</td>
</tr>
<tr>
<td>1:J:197:LEU:O</td>
<td>1:J:411:ARG:NH1</td>
<td>2.08</td>
<td>0.86</td>
</tr>
<tr>
<td>1:A:173:ILE:CD1</td>
<td>1:O:257:ALA:HB1</td>
<td>2.04</td>
<td>0.86</td>
</tr>
<tr>
<td>1:M:197:LEU:O</td>
<td>1:M:411:ARG:NH1</td>
<td>2.08</td>
<td>0.86</td>
</tr>
<tr>
<td>1:F:197:LEU:O</td>
<td>1:F:411:ARG:NH1</td>
<td>2.08</td>
<td>0.86</td>
</tr>
<tr>
<td>1:I:197:LEU:O</td>
<td>1:I:411:ARG:NH1</td>
<td>2.08</td>
<td>0.86</td>
</tr>
<tr>
<td>1:L:197:LEU:O</td>
<td>1:L:411:ARG:NH1</td>
<td>2.08</td>
<td>0.86</td>
</tr>
<tr>
<td>1:G:197:LEU:O</td>
<td>1:G:411:ARG:NH1</td>
<td>2.08</td>
<td>0.86</td>
</tr>
<tr>
<td>1:N:197:LEU:O</td>
<td>1:N:411:ARG:NH1</td>
<td>2.08</td>
<td>0.86</td>
</tr>
<tr>
<td>1:K:197:LEU:O</td>
<td>1:K:411:ARG:NH1</td>
<td>2.08</td>
<td>0.85</td>
</tr>
<tr>
<td>1:O:197:LEU:O</td>
<td>1:O:411:ARG:NH1</td>
<td>2.08</td>
<td>0.85</td>
</tr>
<tr>
<td>1:B:197:LEU:O</td>
<td>1:B:411:ARG:NH1</td>
<td>2.08</td>
<td>0.85</td>
</tr>
<tr>
<td>1:H:197:LEU:O</td>
<td>1:H:411:ARG:NH1</td>
<td>2.08</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:197:LEU:O</td>
<td>1:A:411:ARG:NH1</td>
<td>2.08</td>
<td>0.85</td>
</tr>
<tr>
<td>1:D:223:GLY:N</td>
<td>1:E:178:GLN:O</td>
<td>2.09</td>
<td>0.85</td>
</tr>
<tr>
<td>1:J:144:LYS:NZ</td>
<td>1:K:162:ALA:CB</td>
<td>2.37</td>
<td>0.85</td>
</tr>
<tr>
<td>1:E:86:LEU:HD23</td>
<td>1:F:50:ALA:O</td>
<td>1.77</td>
<td>0.82</td>
</tr>
<tr>
<td>1:G:144:LYS:NZ</td>
<td>1:G:148:TYR:OH</td>
<td>2.13</td>
<td>0.82</td>
</tr>
<tr>
<td>1:O:144:LYS:NZ</td>
<td>1:O:148:TYR:OH</td>
<td>2.13</td>
<td>0.82</td>
</tr>
<tr>
<td>1:J:144:LYS:NZ</td>
<td>1:J:148:TYR:OH</td>
<td>2.13</td>
<td>0.82</td>
</tr>
<tr>
<td>1:C:144:LYS:NZ</td>
<td>1:C:148:TYR:OH</td>
<td>2.13</td>
<td>0.82</td>
</tr>
<tr>
<td>1:E:144:LYS:NZ</td>
<td>1:E:148:TYR:OH</td>
<td>2.13</td>
<td>0.82</td>
</tr>
<tr>
<td>1:J:144:LYS:HE3</td>
<td>1:K:162:ALA:O</td>
<td>1.80</td>
<td>0.81</td>
</tr>
<tr>
<td>1:E:224:ASN:O</td>
<td>1:F:179:LYS:HB2</td>
<td>1.81</td>
<td>0.81</td>
</tr>
<tr>
<td>1:B:144:LYS:NZ</td>
<td>1:B:148:TYR:OH</td>
<td>2.13</td>
<td>0.81</td>
</tr>
<tr>
<td>1:L:144:LYS:NZ</td>
<td>1:L:148:TYR:OH</td>
<td>2.13</td>
<td>0.81</td>
</tr>
<tr>
<td>1:I:144:LYS:NZ</td>
<td>1:I:148:TYR:OH</td>
<td>2.13</td>
<td>0.81</td>
</tr>
<tr>
<td>1:M:144:LYS:NZ</td>
<td>1:M:148:TYR:OH</td>
<td>2.13</td>
<td>0.81</td>
</tr>
<tr>
<td>1:A:50:ALA:O</td>
<td>1:O:86:LEU:CD2</td>
<td>2.29</td>
<td>0.80</td>
</tr>
<tr>
<td>1:D:144:LYS:HZ1</td>
<td>1:E:162:ALA:HA</td>
<td>1.46</td>
<td>0.80</td>
</tr>
<tr>
<td>1:J:86:LEU:O</td>
<td>1:K:51:LEU:HD22</td>
<td>1.82</td>
<td>0.80</td>
</tr>
<tr>
<td>1:A:188:THR:CA</td>
<td>1:O:415:ARG:HH22</td>
<td>1.95</td>
<td>0.79</td>
</tr>
<tr>
<td>1:E:485:PRO:HD2</td>
<td>1:F:358:ALA:HB1</td>
<td>1.62</td>
<td>0.79</td>
</tr>
<tr>
<td>1:N:144:LYS:HZ1</td>
<td>1:O:162:ALA:HA</td>
<td>1.45</td>
<td>0.79</td>
</tr>
<tr>
<td>1:A:50:ALA:O</td>
<td>1:O:86:LEU:HD23</td>
<td>1.84</td>
<td>0.78</td>
</tr>
<tr>
<td>1:A:51:LEU:CD2</td>
<td>1:O:86:LEU:O</td>
<td>2.31</td>
<td>0.78</td>
</tr>
<tr>
<td>1:E:415:ARG:HG2</td>
<td>1:F:189:PHE:CE1</td>
<td>2.20</td>
<td>0.76</td>
</tr>
<tr>
<td>1:A:165:MET:HB2</td>
<td>1:O:144:LYS:HE2</td>
<td>1.67</td>
<td>0.75</td>
</tr>
<tr>
<td>1:J:86:LEU:O</td>
<td>1:K:51:LEU:HA</td>
<td>1.85</td>
<td>0.75</td>
</tr>
<tr>
<td>1:J:258:LEU:HD22</td>
<td>1:K:173:ILE:HD11</td>
<td>1.67</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:539:ALA:HB2</td>
<td>1:N:477:ASN:ND2</td>
<td>2.02</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:144:LYS:HZ1</td>
<td>1:B:162:ALA:HA</td>
<td>1.51</td>
<td>0.74</td>
</tr>
<tr>
<td>1:J:139:ARG:CD</td>
<td>1:K:131:LEU:HD21</td>
<td>2.17</td>
<td>0.73</td>
</tr>
<tr>
<td>1:J:140:GLY:O</td>
<td>1:K:129:SER:HB2</td>
<td>1.88</td>
<td>0.73</td>
</tr>
<tr>
<td>1:E:415:ARG:HH12</td>
<td>1:F:188:THR:C</td>
<td>1.91</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:179:LYS:CE</td>
<td>1:O:226:VAL:HG21</td>
<td>2.17</td>
<td>0.73</td>
</tr>
<tr>
<td>1:J:142:ASN:HD22</td>
<td>1:K:128:ARG:CB</td>
<td>2.02</td>
<td>0.72</td>
</tr>
<tr>
<td>1:J:293:LEU:HD11</td>
<td>1:K:180:ILE:HG21</td>
<td>1.69</td>
<td>0.72</td>
</tr>
<tr>
<td>1:F:87:GLN:HA</td>
<td>1:K:51:LEU:CD2</td>
<td>2.19</td>
<td>0.72</td>
</tr>
<tr>
<td>1:K:142:ASN:HD22</td>
<td>1:L:128:ARG:HB3</td>
<td>1.55</td>
<td>0.72</td>
</tr>
<tr>
<td>1:A:180:ILE:GB</td>
<td>1:O:225:ILE:HD12</td>
<td>1.71</td>
<td>0.72</td>
</tr>
<tr>
<td>1:E:226:VAL:O</td>
<td>1:F:181:GLY:HA2</td>
<td>1.91</td>
<td>0.71</td>
</tr>
<tr>
<td>1:I:467:LEU:HA</td>
<td>1:J:522:LEU:HD13</td>
<td>1.72</td>
<td>0.71</td>
</tr>
<tr>
<td>1:E:225:ILE:CD1</td>
<td>1:F:180:ILE:HB</td>
<td>2.21</td>
<td>0.70</td>
</tr>
<tr>
<td>1:D:139:ARG:HD2</td>
<td>1:E:131:LEU:HD21</td>
<td>1.72</td>
<td>0.70</td>
</tr>
<tr>
<td>1:F:537:SER:HB3</td>
<td>1:G:546:LEU:HD21</td>
<td>1.72</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:188:THR:HA</td>
<td>1:O:415:ARG:HH22</td>
<td>1.55</td>
<td>0.70</td>
</tr>
<tr>
<td>1:D:144:LYS:NZ</td>
<td>1:E:162:ALA:HA</td>
<td>2.06</td>
<td>0.70</td>
</tr>
<tr>
<td>1:K:458:ILE:HD12</td>
<td>1:L:376:GLN:HE21</td>
<td>1.56</td>
<td>0.70</td>
</tr>
<tr>
<td>1:E:257:ALA:HB1</td>
<td>1:F:173:ILE:HD12</td>
<td>1.73</td>
<td>0.69</td>
</tr>
<tr>
<td>1:I:143:ARG:HG3</td>
<td>1:K:125:PHE:CE1</td>
<td>2.26</td>
<td>0.69</td>
</tr>
<tr>
<td>1:N:144:LYS:NZ</td>
<td>1:O:162:ALA:HA</td>
<td>2.07</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:188:THR:C</td>
<td>1:O:415:ARG:NH1</td>
<td>2.43</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:188:THR:N</td>
<td>1:O:415:ARG:HH22</td>
<td>1.90</td>
<td>0.68</td>
</tr>
<tr>
<td>1:I:144:LYS:CE</td>
<td>1:K:162:ALA:HA</td>
<td>2.22</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:376:GLN:HE22</td>
<td>1:O:459:ALA:HA</td>
<td>1.58</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:179:LYS:HB2</td>
<td>1:O:224:ASN:C</td>
<td>2.13</td>
<td>0.68</td>
</tr>
<tr>
<td>1:B:539:ALA:HB2</td>
<td>1:O:477:ASN:ND2</td>
<td>2.10</td>
<td>0.67</td>
</tr>
<tr>
<td>1:J:485:PRO:HD2</td>
<td>1:K:358:ALA:HB1</td>
<td>1.74</td>
<td>0.67</td>
</tr>
<tr>
<td>1:K:533:ILE:HD11</td>
<td>1:L:549:TRP:HB2</td>
<td>1.75</td>
<td>0.67</td>
</tr>
<tr>
<td>1:E:137:PRO:HD2</td>
<td>1:F:97:GLN:HG3</td>
<td>1.75</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:162:ALA:CA</td>
<td>1:O:144:LYS:NZ</td>
<td>2.43</td>
<td>0.66</td>
</tr>
<tr>
<td>1:G:477:ASN:ND2</td>
<td>1:I:537:SER:O</td>
<td>2.28</td>
<td>0.66</td>
</tr>
<tr>
<td>1:K:537:SER:HB3</td>
<td>1:L:546:LEU:HD21</td>
<td>1.78</td>
<td>0.66</td>
</tr>
<tr>
<td>1:A:51:LEU:HD23</td>
<td>1:O:86:LEU:O</td>
<td>1.95</td>
<td>0.66</td>
</tr>
<tr>
<td>1:I:485:PRO:HD2</td>
<td>1:J:358:ALA:HB1</td>
<td>1.76</td>
<td>0.66</td>
</tr>
<tr>
<td>1:I:474:ARG:NH1</td>
<td>1:J:406:TYR:CD2</td>
<td>2.63</td>
<td>0.66</td>
</tr>
<tr>
<td>1:J:144:LYS:HG3</td>
<td>1:K:166:MET:HG2</td>
<td>1.78</td>
<td>0.65</td>
</tr>
<tr>
<td>1:J:86:LEU:HD21</td>
<td>1:K:53:LEU:O</td>
<td>1.96</td>
<td>0.65</td>
</tr>
<tr>
<td>1:E:113:SER:HB3</td>
<td>1:F:165:MET:SD</td>
<td>2.36</td>
<td>0.65</td>
</tr>
<tr>
<td>1:E:144:LYS:CE</td>
<td>1:F:165:MET:HB2</td>
<td>2.27</td>
<td>0.65</td>
</tr>
<tr>
<td>1:C:474:ARG:NH1</td>
<td>1:D:406:TYR:CD2</td>
<td>2.65</td>
<td>0.65</td>
</tr>
<tr>
<td>1:I:543:ASP:OD1</td>
<td>1:J:543:ASP:N</td>
<td>2.30</td>
<td>0.65</td>
</tr>
<tr>
<td>1:J:86:LEU:O</td>
<td>1:K:51:LEU:HD23</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>1:E:224:ASN:H</td>
<td>1:F:179:LYS:CB</td>
<td>2.10</td>
<td>0.64</td>
</tr>
</tbody>
</table>

Continued on next page...
### Table of Interatomic Distances and Clash Overlap

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:L:543:ASP:N</td>
<td>1:L:543:ASP:OD1</td>
<td>2.30</td>
<td>0.64</td>
</tr>
<tr>
<td>1:N:543:ASP:N</td>
<td>1:N:543:ASP:OD1</td>
<td>2.30</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:162:ALA:HA</td>
<td>1:O:144:LYS:CE</td>
<td>2.28</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:543:ASP:N</td>
<td>1:A:543:ASP:OD1</td>
<td>2.30</td>
<td>0.64</td>
</tr>
<tr>
<td>1:J:458:ILE:HD11</td>
<td>1:K:379:VAL:HG21</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:51:LEU:HD22</td>
<td>1:O:986:LEU:O</td>
<td>1.96</td>
<td>0.64</td>
</tr>
<tr>
<td>1:J:144:LYS:HZ2</td>
<td>1:K:162:ALA:CA</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>1:K:313:LEU:HD23</td>
<td>1:M:550:VAL:HG11</td>
<td>1.78</td>
<td>0.64</td>
</tr>
<tr>
<td>1:E:86:LEU:O</td>
<td>1:F:51:LEU:CD2</td>
<td>2.46</td>
<td>0.63</td>
</tr>
<tr>
<td>1:J:137:PRO:HD2</td>
<td>1:K:97:GLN:CD</td>
<td>2.18</td>
<td>0.63</td>
</tr>
<tr>
<td>1:J:86:LEU:C</td>
<td>1:K:51:LEU:HD23</td>
<td>2.18</td>
<td>0.63</td>
</tr>
<tr>
<td>1:J:543:ASP:N</td>
<td>1:J:543:ASP:OD1</td>
<td>2.30</td>
<td>0.63</td>
</tr>
<tr>
<td>1:J:144:LYS:HG3</td>
<td>1:K:166:MET:CG</td>
<td>2.28</td>
<td>0.63</td>
</tr>
<tr>
<td>1:L:283:THR:H</td>
<td>1:L:286:GLN:HE21</td>
<td>1.47</td>
<td>0.63</td>
</tr>
<tr>
<td>1:M:467:LEU:HA</td>
<td>1:N:522:LEU:HD13</td>
<td>1.80</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:162:ALA:CA</td>
<td>1:O:144:LYS:HZ2</td>
<td>2.10</td>
<td>0.63</td>
</tr>
<tr>
<td>1:J:474:ARG:NH1</td>
<td>1:K:406:TYR:CD2</td>
<td>2.66</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:179:LYS:CE</td>
<td>1:O:226:VAL:CG2</td>
<td>2.77</td>
<td>0.63</td>
</tr>
<tr>
<td>1:M:283:THR:H</td>
<td>1:M:286:GLN:HE21</td>
<td>1.47</td>
<td>0.63</td>
</tr>
<tr>
<td>1:E:144:LYS:HE2</td>
<td>1:F:165:MET:HB2</td>
<td>1.79</td>
<td>0.63</td>
</tr>
<tr>
<td>1:K:283:THR:H</td>
<td>1:L:286:GLN:HE21</td>
<td>1.47</td>
<td>0.63</td>
</tr>
<tr>
<td>1:E:224:ASN:C</td>
<td>1:F:179:LYS:HB2</td>
<td>2.19</td>
<td>0.63</td>
</tr>
<tr>
<td>1:E:144:LYS:HZ2</td>
<td>1:F:162:ALA:HA</td>
<td>1.58</td>
<td>0.62</td>
</tr>
<tr>
<td>1:J:458:ILE:HD11</td>
<td>1:M:538:GLY:C</td>
<td>2.03</td>
<td>0.62</td>
</tr>
<tr>
<td>1:E:224:ASN:C</td>
<td>1:F:179:LYS:HB2</td>
<td>2.19</td>
<td>0.63</td>
</tr>
<tr>
<td>1:E:144:LYS:HZ2</td>
<td>1:F:162:ALA:HA</td>
<td>1.58</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:283:THR:H</td>
<td>1:B:286:GLN:HE21</td>
<td>1.47</td>
<td>0.62</td>
</tr>
<tr>
<td>1:F:477:ASN:ND2</td>
<td>1:H:537:SER:O</td>
<td>2.33</td>
<td>0.62</td>
</tr>
<tr>
<td>1:J:506:ASN:ND2</td>
<td>1:L:541:SER:OG</td>
<td>2.32</td>
<td>0.62</td>
</tr>
<tr>
<td>1:E:146:THR:HG21</td>
<td>1:F:165:MET:HG3</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>1:J:144:LYS:HB2</td>
<td>1:K:166:MET:HE2</td>
<td>1.81</td>
<td>0.61</td>
</tr>
<tr>
<td>1:C:283:THR:H</td>
<td>1:C:286:GLN:HE21</td>
<td>1.47</td>
<td>0.61</td>
</tr>
<tr>
<td>1:I:297:LEU:HD11</td>
<td>1:K:279:LEU:HD21</td>
<td>1.81</td>
<td>0.61</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:M:543:ASP:OD1</td>
<td>1:M:543:ASP:N</td>
<td>2.30</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:161:ASN:HB3</td>
<td>1:O:111:VAL:HG11</td>
<td>1.80</td>
<td>0.61</td>
</tr>
<tr>
<td>1:J:86:LEU:HA</td>
<td>1:K:50:ALA:O</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>1:O:543:ASP:N</td>
<td>1:O:543:ASP:OD1</td>
<td>2.30</td>
<td>0.61</td>
</tr>
<tr>
<td>1:E:86:LEU:O</td>
<td>1:F:51:LEU:HD23</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>1:N:223:GLY:N</td>
<td>1:O:178:GLN:O</td>
<td>2.31</td>
<td>0.61</td>
</tr>
<tr>
<td>1:E:283:THR:H</td>
<td>1:E:286:GLN:HE21</td>
<td>1.47</td>
<td>0.60</td>
</tr>
<tr>
<td>1:E:524:PRO:HD2</td>
<td>1:F:553:TYR:HE1</td>
<td>1.66</td>
<td>0.60</td>
</tr>
<tr>
<td>1:E:297:LEU:HD11</td>
<td>1:F:279:LEU:HD21</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>1:D:214:LEU:HD13</td>
<td>1:E:270:VAL:HG12</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>1:D:283:THR:H</td>
<td>1:D:286:GLN:HE21</td>
<td>1.47</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:543:ASP:OD1</td>
<td>1:B:543:ASP:N</td>
<td>2.30</td>
<td>0.60</td>
</tr>
<tr>
<td>1:J:225:ILE:HD12</td>
<td>1:K:180:ILE:HB</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>1:J:415:ARG:HH12</td>
<td>1:K:188:THR:C</td>
<td>2.05</td>
<td>0.60</td>
</tr>
<tr>
<td>1:K:543:ASP:N</td>
<td>1:K:543:ASP:OD1</td>
<td>2.30</td>
<td>0.60</td>
</tr>
<tr>
<td>1:D:406:TYR:OH</td>
<td>1:D:448:PRO:O</td>
<td>2.20</td>
<td>0.60</td>
</tr>
<tr>
<td>1:G:406:TYR:OH</td>
<td>1:G:448:PRO:O</td>
<td>2.20</td>
<td>0.60</td>
</tr>
<tr>
<td>1:K:144:LYS:HZ1</td>
<td>1:L:162:ALA:HA</td>
<td>1.66</td>
<td>0.60</td>
</tr>
<tr>
<td>1:H:406:TYR:OH</td>
<td>1:H:448:PRO:O</td>
<td>2.20</td>
<td>0.60</td>
</tr>
<tr>
<td>1:C:406:TYR:OH</td>
<td>1:C:448:PRO:O</td>
<td>2.20</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:406:TYR:OH</td>
<td>1:B:448:PRO:O</td>
<td>2.20</td>
<td>0.59</td>
</tr>
<tr>
<td>1:J:86:LEU:CA</td>
<td>1:K:51:LEU:HA</td>
<td>2.32</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:539:ALA:HB2</td>
<td>1:O:477:ASN:HD21</td>
<td>1.68</td>
<td>0.59</td>
</tr>
<tr>
<td>1:I:406:TYR:OH</td>
<td>1:I:448:PRO:O</td>
<td>2.20</td>
<td>0.59</td>
</tr>
<tr>
<td>1:O:406:TYR:OH</td>
<td>1:O:448:PRO:O</td>
<td>2.20</td>
<td>0.59</td>
</tr>
<tr>
<td>1:C:415:ARG:HG2</td>
<td>1:D:189:PHE:CE1</td>
<td>2.38</td>
<td>0.59</td>
</tr>
<tr>
<td>1:J:148:TYR:CE1</td>
<td>1:K:158:MET:HG2</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>1:K:406:TYR:OH</td>
<td>1:K:448:PRO:O</td>
<td>2.20</td>
<td>0.59</td>
</tr>
<tr>
<td>1:L:406:TYR:OH</td>
<td>1:L:448:PRO:O</td>
<td>2.20</td>
<td>0.59</td>
</tr>
<tr>
<td>1:M:223:GLY:N</td>
<td>1:N:178:GLN:O</td>
<td>2.36</td>
<td>0.59</td>
</tr>
<tr>
<td>1:D:388:THR:HG22</td>
<td>1:D:405:THR:HG22</td>
<td>1.85</td>
<td>0.59</td>
</tr>
<tr>
<td>1:J:406:TYR:OH</td>
<td>1:J:448:PRO:O</td>
<td>2.20</td>
<td>0.59</td>
</tr>
<tr>
<td>1:M:406:TYR:OH</td>
<td>1:M:448:PRO:O</td>
<td>2.20</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:539:ALA:HB2</td>
<td>1:N:477:ASN:HD21</td>
<td>1.66</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:196:ASN:ND2</td>
<td>1:O:199:ASP:OD1</td>
<td>2.34</td>
<td>0.59</td>
</tr>
<tr>
<td>1:C:388:THR:HG22</td>
<td>1:C:405:THR:HG22</td>
<td>1.85</td>
<td>0.59</td>
</tr>
<tr>
<td>1:E:388:THR:HG22</td>
<td>1:E:405:THR:HG22</td>
<td>1.85</td>
<td>0.59</td>
</tr>
<tr>
<td>1:K:388:THR:HG22</td>
<td>1:K:405:THR:HG22</td>
<td>1.85</td>
<td>0.59</td>
</tr>
<tr>
<td>1:L:388:THR:HG22</td>
<td>1:L:405:THR:HG22</td>
<td>1.85</td>
<td>0.58</td>
</tr>
<tr>
<td>1:J:388:THR:HG22</td>
<td>1:J:405:THR:HG22</td>
<td>1.85</td>
<td>0.58</td>
</tr>
<tr>
<td>1:N:113:SER:HA</td>
<td>1:N:146:THR:HG22</td>
<td>1.85</td>
<td>0.58</td>
</tr>
<tr>
<td>1:O:113:SER:HA</td>
<td>1:O:146:THR:HG22</td>
<td>1.85</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:113:SER:HA</td>
<td>1:A:146:THR:HG22</td>
<td>1.86</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:388:THR:HG22</td>
<td>1:B:405:THR:HG22</td>
<td>1.85</td>
<td>0.58</td>
</tr>
<tr>
<td>1:M:103:ASP:OD2</td>
<td>1:M:105:SER:OG</td>
<td>2.15</td>
<td>0.58</td>
</tr>
<tr>
<td>1:M:113:SER:HA</td>
<td>1:M:146:THR:HG22</td>
<td>1.86</td>
<td>0.58</td>
</tr>
<tr>
<td>1:M:388:THR:HG22</td>
<td>1:M:405:THR:HG22</td>
<td>1.85</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:113:SER:HA</td>
<td>1:B:146:THR:HG22</td>
<td>1.86</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:361:GLU:OE2</td>
<td>1:B:392:LYS:HD3</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>1:K:388:THR:HG22</td>
<td>1:K:405:THR:HG22</td>
<td>1.85</td>
<td>0.58</td>
</tr>
<tr>
<td>1:D:388:THR:HG22</td>
<td>1:D:405:THR:HG22</td>
<td>1.85</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:189:ASP:OE2</td>
<td>1:A:191:ASP:OE2</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>1:E:144:LYS:HE3</td>
<td>1:E:146:LYS:HE3</td>
<td>2.04</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:128:ASP:HE3</td>
<td>1:B:130:ASP:HE3</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>1:C:113:SER:HA</td>
<td>1:C:146:THR:HG22</td>
<td>1.86</td>
<td>0.57</td>
</tr>
<tr>
<td>1:K:113:SER:HA</td>
<td>1:K:146:THR:HG22</td>
<td>1.85</td>
<td>0.57</td>
</tr>
<tr>
<td>1:G:113:SER:HA</td>
<td>1:G:146:THR:HG22</td>
<td>1.85</td>
<td>0.57</td>
</tr>
<tr>
<td>1:D:543:ASP:N</td>
<td>1:D:545:ASP:N</td>
<td>2.30</td>
<td>0.57</td>
</tr>
<tr>
<td>1:J:224:ASN:H</td>
<td>1:J:226:ASN:H</td>
<td>1.68</td>
<td>0.57</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:E:113:SER:HA</td>
<td>1:E:146:THR:HG22</td>
<td>1.85</td>
<td>0.57</td>
</tr>
<tr>
<td>1:I:113:SER:HA</td>
<td>1:I:146:THR:HG22</td>
<td>1.85</td>
<td>0.57</td>
</tr>
<tr>
<td>1:F:113:SER:HA</td>
<td>1:F:146:THR:HG22</td>
<td>1.86</td>
<td>0.57</td>
</tr>
<tr>
<td>1:K:309:TRP:CT3</td>
<td>1:L:530:VAL:HG21</td>
<td>2.40</td>
<td>0.57</td>
</tr>
<tr>
<td>1:K:477:ASN:ND2</td>
<td>1:M:539:ALA:HB2</td>
<td>2.20</td>
<td>0.57</td>
</tr>
<tr>
<td>1:L:179:LYS:NZ</td>
<td>1:L:284:ALA:O</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>1:M:179:LYS:NZ</td>
<td>1:M:284:ALA:O</td>
<td>2.38</td>
<td>0.56</td>
</tr>
<tr>
<td>1:E:224:ASN:O</td>
<td>1:F:179:LYS:CB</td>
<td>2.51</td>
<td>0.56</td>
</tr>
<tr>
<td>1:I:179:LYS:NZ</td>
<td>1:I:284:ALA:O</td>
<td>2.38</td>
<td>0.56</td>
</tr>
<tr>
<td>1:N:179:LYS:NZ</td>
<td>1:N:284:ALA:O</td>
<td>2.38</td>
<td>0.56</td>
</tr>
<tr>
<td>1:G:220:GLN:O</td>
<td>1:G:264:ALA:N</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>1:J:179:LYS:NZ</td>
<td>1:J:284:ALA:O</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>1:F:179:LYS:HA</td>
<td>1:I:146:THR:HG22</td>
<td>1.86</td>
<td>0.56</td>
</tr>
<tr>
<td>1:K:179:LYS:NZ</td>
<td>1:K:284:ALA:O</td>
<td>2.38</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:186:ASN:CG</td>
<td>1:O:418:ALA:HB2</td>
<td>2.25</td>
<td>0.56</td>
</tr>
<tr>
<td>1:C:179:LYS:NZ</td>
<td>1:C:284:ALA:O</td>
<td>2.38</td>
<td>0.56</td>
</tr>
<tr>
<td>1:E:223:GLY:CA</td>
<td>1:F:178:GLN:O</td>
<td>2.53</td>
<td>0.56</td>
</tr>
<tr>
<td>1:O:179:LYS:NZ</td>
<td>1:O:284:ALA:O</td>
<td>2.38</td>
<td>0.56</td>
</tr>
<tr>
<td>1:C:220:GLN:O</td>
<td>1:C:264:ALA:N</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>1:D:220:GLN:O</td>
<td>1:D:264:ALA:N</td>
<td>2.38</td>
<td>0.56</td>
</tr>
<tr>
<td>1:G:179:LYS:NZ</td>
<td>1:G:284:ALA:O</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>1:K:220:GLN:O</td>
<td>1:K:264:ALA:N</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:162:ALA:CA</td>
<td>1:O:144:LYS:HZ1</td>
<td>2.07</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:179:LYS:NZ</td>
<td>1:B:284:ALA:O</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>1:E:86:LEU:CD2</td>
<td>1:F:50:ALA:O</td>
<td>2.50</td>
<td>0.56</td>
</tr>
<tr>
<td>1:H:179:LYS:NZ</td>
<td>1:H:284:ALA:O</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>1:J:144:LYS:HD2</td>
<td>1:K:166:MET:HE3</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>1:O:103:ASP:OD2</td>
<td>1:O:105:SER:OG</td>
<td>2.15</td>
<td>0.56</td>
</tr>
<tr>
<td>1:D:179:LYS:NZ</td>
<td>1:D:284:ALA:O</td>
<td>2.39</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:97:GLN:HG3</td>
<td>1:O:137:PRO:HD2</td>
<td>1.87</td>
<td>0.55</td>
</tr>
<tr>
<td>1:M:477:ASN:ND2</td>
<td>1:O:537:SER:O</td>
<td>2.40</td>
<td>0.55</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:H:199:ASP:OD1</td>
<td>1:I:196:ASN:ND2</td>
<td>2.39</td>
<td>0.55</td>
</tr>
<tr>
<td>1:K:142:ASN:ND2</td>
<td>1:L:128:ARG:HB3</td>
<td>2.20</td>
<td>0.55</td>
</tr>
<tr>
<td>1:K:204:ILE:HD12</td>
<td>1:L:273:PRO:HB2</td>
<td>1.87</td>
<td>0.55</td>
</tr>
<tr>
<td>1:F:543:ASP:OD1</td>
<td>1:F:543:ASP:N</td>
<td>2.30</td>
<td>0.55</td>
</tr>
<tr>
<td>1:J:86:LEU:HB3</td>
<td>1:K:51:LEU:O</td>
<td>2.05</td>
<td>0.55</td>
</tr>
<tr>
<td>1:K:322:GLY:HA3</td>
<td>1:K:499:TYR:HA</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:322:GLY:HA3</td>
<td>1:B:499:TYR:HA</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>1:E:194:THR:HG22</td>
<td>1:E:203:VAL:HG12</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>1:E:474:ARG:NH2</td>
<td>1:F:406:TYR:CE2</td>
<td>2.74</td>
<td>0.55</td>
</tr>
<tr>
<td>1:L:220:GLN:O</td>
<td>1:L:264:ALA:N</td>
<td>2.39</td>
<td>0.55</td>
</tr>
<tr>
<td>1:C:322:GLY:HA3</td>
<td>1:C:499:TYR:HA</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>1:J:143:ARG:HB2</td>
<td>1:K:125:PHE:CE1</td>
<td>2.41</td>
<td>0.55</td>
</tr>
<tr>
<td>1:E:220:GLN:O</td>
<td>1:E:264:ALA:N</td>
<td>2.38</td>
<td>0.55</td>
</tr>
<tr>
<td>1:L:59:VAL:HG12</td>
<td>1:L:101:ILE:HB</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>1:L:322:GLY:HA3</td>
<td>1:L:499:TYR:HA</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>1:D:59:VAL:HG12</td>
<td>1:D:101:ILE:HB</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:C:524:PRO:HD2</td>
<td>1:D:553:TYR:HE1</td>
<td>1.72</td>
<td>0.54</td>
</tr>
<tr>
<td>1:D:194:THR:HG22</td>
<td>1:D:203:VAL:HG12</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:477:ASN:ND2</td>
<td>1:M:537:SER:O</td>
<td>2.41</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:322:GLY:HA3</td>
<td>1:E:499:TYR:HA</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:293:LEU:HD11</td>
<td>1:F:180:ILE:HG21</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:F:194:THR:HG22</td>
<td>1:F:203:VAL:HG12</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:165:MET:CB</td>
<td>1:O:144:LYS:HE2</td>
<td>2.37</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:180:ILE:HG21</td>
<td>1:O:293:LEU:HD11</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:C:59:VAL:HG12</td>
<td>1:C:101:ILE:HB</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:G:375:THR:OG1</td>
<td>1:G:376:GLN:O</td>
<td>2.25</td>
<td>0.54</td>
</tr>
<tr>
<td>1:G:467:LEU:HA</td>
<td>1:H:522:LEU:HD13</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>Atom-1</td>
<td>Atom-2</td>
<td>Interatomic distance (Å)</td>
<td>Clash overlap (Å)</td>
</tr>
<tr>
<td>----------</td>
<td>----------</td>
<td>--------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>1:J:477:ASN:ND2</td>
<td>1:L:537:SER:O</td>
<td>2.40</td>
<td>0.54</td>
</tr>
<tr>
<td>1:M:59:VAL:HG12</td>
<td>1:M:101:ILE:HB</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:220:GLN:O</td>
<td>1:A:264:ALA:N</td>
<td>2.39</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:224:ASN:H</td>
<td>1:F:179:LYS:HB3</td>
<td>1.72</td>
<td>0.54</td>
</tr>
<tr>
<td>1:F:485:PRO:HD2</td>
<td>1:G:358:ALA:HB1</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:I:320:ARG:HD3</td>
<td>1:J:394:ILE:HD11</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:J:87:GLN:CA</td>
<td>1:K:51:LEU:CD2</td>
<td>2.86</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:59:VAL:HG12</td>
<td>1:A:101:ILE:HB</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:D:322:GLY:HA3</td>
<td>1:D:499:TYR:HA</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:59:VAL:HG12</td>
<td>1:B:101:ILE:HB</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:K:103:ASP:OD2</td>
<td>1:K:105:SER:OG</td>
<td>2.15</td>
<td>0.54</td>
</tr>
<tr>
<td>1:N:59:VAL:HG12</td>
<td>1:N:101:ILE:HB</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:O:59:VAL:HG12</td>
<td>1:O:101:ILE:HB</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:C:103:ASP:OD2</td>
<td>1:C:105:SER:OG</td>
<td>2.15</td>
<td>0.54</td>
</tr>
<tr>
<td>1:I:269:ILE:HG12</td>
<td>1:I:280:VAL:HG12</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>1:C:269:ILE:HG12</td>
<td>1:C:280:VAL:HG12</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>1:D:467:LEU:HA</td>
<td>1:K:522:LEU:HD13</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>1:M:194:THR:HG22</td>
<td>1:M:203:VAL:HG12</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:I:86:LEU:HD22</td>
<td>1:K:51:LEU:C</td>
<td>2.28</td>
<td>0.54</td>
</tr>
<tr>
<td>1:L:194:THR:HG22</td>
<td>1:L:203:VAL:HG12</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:D:478:THR:HB</td>
<td>1:L:503:ASN:HB3</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:269:ILE:HG12</td>
<td>1:B:280:VAL:HG12</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>1:M:220:GLN:O</td>
<td>1:I:264:ALA:N</td>
<td>2.39</td>
<td>0.54</td>
</tr>
<tr>
<td>1:K:194:THR:HG22</td>
<td>1:K:203:VAL:HG12</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:N:220:GLN:O</td>
<td>1:N:264:ALA:N</td>
<td>2.39</td>
<td>0.53</td>
</tr>
<tr>
<td>1:D:224:ASN:H</td>
<td>1:E:179:LYS:HB2</td>
<td>1.73</td>
<td>0.53</td>
</tr>
<tr>
<td>1:E:478:THR:HB</td>
<td>1:E:503:ASN:HB3</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:C:172:GLY:O</td>
<td>1:O:261:ASN:ND2</td>
<td>2.42</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:137:PRO:CD</td>
<td>1:K:97:GLN:HG3</td>
<td>2.26</td>
<td>0.53</td>
</tr>
<tr>
<td>1:E:543:ASP:N</td>
<td>1:E:543:ASP:OD1</td>
<td>2.30</td>
<td>0.53</td>
</tr>
<tr>
<td>1:G:194:THR:HG22</td>
<td>1:G:203:VAL:HG12</td>
<td>1.89</td>
<td>0.53</td>
</tr>
<tr>
<td>1:I:194:THR:HG22</td>
<td>1:I:203:VAL:HG12</td>
<td>1.89</td>
<td>0.53</td>
</tr>
<tr>
<td>Atom-1</td>
<td>Atom-2</td>
<td>Interatomic distance (Å)</td>
<td>Clash overlap (Å)</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------</td>
<td>--------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>1:K:269:ILE:HG12</td>
<td>1:K:280:VAL:HG12</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:J:478:THR:HB</td>
<td>1:J:503:ASN:HB3</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:J:86:LEU:HA</td>
<td>1:K:51:LEU:HA</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:K:478:THR:HB</td>
<td>1:K:503:ASN:HB3</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:N:478:THR:HB</td>
<td>1:N:503:ASN:HB3</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:C:543:ASP:OD1</td>
<td>1:C:543:ASP:N</td>
<td>2.31</td>
<td>0.53</td>
</tr>
<tr>
<td>1:D:269:ILE:HG12</td>
<td>1:D:280:VAL:HG12</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:D:478:THR:HB</td>
<td>1:D:503:ASN:HB3</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:224:ASN:O</td>
<td>1:C:179:LYS:HB2</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>1:I:311:VAL:HG23</td>
<td>1:I:368:VAL:HG22</td>
<td>1.91</td>
<td>0.53</td>
</tr>
<tr>
<td>1:O:220:GLN:O</td>
<td>1:O:264:ALA:N</td>
<td>2.39</td>
<td>0.53</td>
</tr>
<tr>
<td>1:J:311:VAL:HG23</td>
<td>1:I:368:VAL:HG22</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>1:J:224:ASN:H</td>
<td>1:K:179:LYS:CB</td>
<td>2.21</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:458:ILE:HD11</td>
<td>1:E:479:VAL:HG21</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:194:THR:HG22</td>
<td>1:B:203:VAL:HG12</td>
<td>1.89</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:311:VAL:HG23</td>
<td>1:C:368:VAL:HG22</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>1:J:86:LEU:O</td>
<td>1:K:51:LEU:CA</td>
<td>2.55</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:379:VAL:CG1</td>
<td>1:O:458:ILE:HD11</td>
<td>2.30</td>
<td>0.52</td>
</tr>
<tr>
<td>1:D:311:VAL:HG23</td>
<td>1:D:368:VAL:HG22</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>1:F:220:GLN:O</td>
<td>1:F:264:ALA:N</td>
<td>2.39</td>
<td>0.52</td>
</tr>
<tr>
<td>1:K:311:VAL:HG23</td>
<td>1:K:368:VAL:HG22</td>
<td>1.92</td>
<td>0.52</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:M:269:ILE:HG12</td>
<td>1:M:280:VAL:HG12</td>
<td>1.90</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:311:VAL:HG23</td>
<td>1:A:368:VAL:HG22</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:478:THR:HB</td>
<td>1:B:503:ASN:HB3</td>
<td>1.90</td>
<td>0.52</td>
</tr>
<tr>
<td>1:F:533:ILE:HD11</td>
<td>1:G:549:TRP:HB2</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>1:J:261:ASN:ND2</td>
<td>1:K:172:GLY:O</td>
<td>2.42</td>
<td>0.52</td>
</tr>
<tr>
<td>1:K:137:PRO:HD2</td>
<td>1:L:97:GLN:CD</td>
<td>2.30</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:387:ARG:HE</td>
<td>1:A:389:PHE:HE1</td>
<td>1.58</td>
<td>0.52</td>
</tr>
<tr>
<td>1:H:387:ARG:HE</td>
<td>1:H:389:PHE:HE1</td>
<td>1.58</td>
<td>0.52</td>
</tr>
<tr>
<td>1:J:220:GLN:O</td>
<td>1:J:264:ALA:N</td>
<td>2.38</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:220:GLN:O</td>
<td>1:B:264:ALA:N</td>
<td>2.39</td>
<td>0.52</td>
</tr>
<tr>
<td>1:C:478:THR:HB</td>
<td>1:C:503:ASN:HB3</td>
<td>1.90</td>
<td>0.52</td>
</tr>
<tr>
<td>1:G:387:ARG:HE</td>
<td>1:G:389:PHE:HE1</td>
<td>1.58</td>
<td>0.52</td>
</tr>
<tr>
<td>1:J:387:ARG:HE</td>
<td>1:J:389:PHE:HE1</td>
<td>1.58</td>
<td>0.52</td>
</tr>
<tr>
<td>1:O:387:ARG:HE</td>
<td>1:O:389:PHE:HE1</td>
<td>1.58</td>
<td>0.52</td>
</tr>
<tr>
<td>1:O:81:LEU:HD23</td>
<td>1:O:84:LEU:HD12</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:387:ARG:HE</td>
<td>1:B:389:PHE:HE1</td>
<td>1.58</td>
<td>0.52</td>
</tr>
<tr>
<td>1:K:387:ARG:HE</td>
<td>1:K:389:PHE:HE1</td>
<td>1.58</td>
<td>0.52</td>
</tr>
<tr>
<td>1:C:102:TYR:HD2</td>
<td>1:C:153:PRO:HD2</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:E:311:VAL:HG23</td>
<td>1:E:368:VAL:HG22</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:G:311:VAL:HG23</td>
<td>1:G:368:VAL:HG22</td>
<td>1.91</td>
<td>0.51</td>
</tr>
<tr>
<td>1:H:478:THR:HB</td>
<td>1:H:503:ASN:HB3</td>
<td>1.90</td>
<td>0.51</td>
</tr>
<tr>
<td>1:J:387:ARG:HE</td>
<td>1:J:389:PHE:HE1</td>
<td>1.58</td>
<td>0.51</td>
</tr>
<tr>
<td>1:K:458:ILE:C</td>
<td>1:L:376:GLN:HE22</td>
<td>2.14</td>
<td>0.51</td>
</tr>
<tr>
<td>1:L:387:ARG:HE</td>
<td>1:L:389:PHE:HE1</td>
<td>1.58</td>
<td>0.51</td>
</tr>
<tr>
<td>1:M:102:TYR:HD2</td>
<td>1:M:153:PRO:HD2</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:O:311:VAL:HG23</td>
<td>1:O:368:VAL:HG22</td>
<td>1.91</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:553:TYR:HE1</td>
<td>1:O:524:PRO:HD2</td>
<td>1.74</td>
<td>0.51</td>
</tr>
<tr>
<td>1:C:387:ARG:HE</td>
<td>1:C:389:PHE:HE1</td>
<td>1.58</td>
<td>0.51</td>
</tr>
<tr>
<td>1:F:474:ARG:NH1</td>
<td>1:G:406:TYR:CD2</td>
<td>2.78</td>
<td>0.51</td>
</tr>
<tr>
<td>1:G:81:LEU:HD23</td>
<td>1:G:84:LEU:HD12</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:L:311:VAL:HG23</td>
<td>1:L:368:VAL:HG22</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:N:102:TYR:HD2</td>
<td>1:N:153:PRO:HD2</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:137:PRO:HD2</td>
<td>1:B:97:GLN:CD</td>
<td>2.31</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:142:ASN:ND2</td>
<td>1:B:128:ARG:HB3</td>
<td>2.25</td>
<td>0.51</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:E:387:ARG:HE</td>
<td>1:E:389:PHE:HE1</td>
<td>1.58</td>
<td>0.51</td>
</tr>
<tr>
<td>1:G:309:TRP:CE3</td>
<td>1:H:530:VAL:HG21</td>
<td>2.46</td>
<td>0.51</td>
</tr>
<tr>
<td>1:D:387:ARG:HE</td>
<td>1:D:389:PHE:HE1</td>
<td>1.58</td>
<td>0.51</td>
</tr>
<tr>
<td>1:L:102:TYR:HD2</td>
<td>1:L:153:PRO:HD2</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:N:103:ASP:OD2</td>
<td>1:N:105:SER:OG</td>
<td>2.15</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:223:GLY:N</td>
<td>1:B:178:GLN:O</td>
<td>2.41</td>
<td>0.51</td>
</tr>
<tr>
<td>1:M:387:ARG:HE</td>
<td>1:M:389:PHE:HE1</td>
<td>1.58</td>
<td>0.51</td>
</tr>
<tr>
<td>1:M:338:SER:O</td>
<td>1:N:356:VAL:HG12</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:102:TYR:HD2</td>
<td>1:A:153:PRO:HD2</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:K:102:TYR:HD2</td>
<td>1:K:153:PRO:HD2</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:O:102:TYR:HD2</td>
<td>1:O:153:PRO:HD2</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:81:LEU:HD23</td>
<td>1:B:84:LEU:HD12</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:C:199:ASP:HB2</td>
<td>1:C:411:ARG:NH1</td>
<td>2.26</td>
<td>0.51</td>
</tr>
<tr>
<td>1:J:81:LEU:HD23</td>
<td>1:J:84:LEU:HD12</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:K:81:LEU:HD23</td>
<td>1:K:84:LEU:HD12</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:E:102:TYR:HD2</td>
<td>1:E:153:PRO:HD2</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:E:139:ARG:HD2</td>
<td>1:F:131:LEU:CD2</td>
<td>2.32</td>
<td>0.51</td>
</tr>
<tr>
<td>1:E:81:LEU:HD23</td>
<td>1:E:84:LEU:HD12</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:G:458:ILE:HD12</td>
<td>1:H:376:GLN:HE21</td>
<td>1.75</td>
<td>0.51</td>
</tr>
<tr>
<td>1:M:311:VAL:HG23</td>
<td>1:M:368:VAL:HG22</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:M:81:LEU:HD23</td>
<td>1:M:84:LEU:HD12</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:O:199:ASP:HB2</td>
<td>1:O:411:ARG:NH1</td>
<td>2.26</td>
<td>0.51</td>
</tr>
<tr>
<td>1:F:311:VAL:HG23</td>
<td>1:F:368:VAL:HG22</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:I:102:TYR:HD2</td>
<td>1:I:153:PRO:HD2</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:N:311:VAL:HG23</td>
<td>1:N:368:VAL:HG22</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:C:81:LEU:HD23</td>
<td>1:C:84:LEU:HD12</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:G:199:ASP:HB2</td>
<td>1:G:411:ARG:NH1</td>
<td>2.26</td>
<td>0.51</td>
</tr>
<tr>
<td>1:J:102:TYR:HD2</td>
<td>1:J:153:PRO:HD2</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:J:143:ARG:HG3</td>
<td>1:K:125:PHE:HE1</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:J:144:LYS:HD2</td>
<td>1:K:166:MET:CE</td>
<td>2.41</td>
<td>0.51</td>
</tr>
<tr>
<td>1:C:224:ASN:O</td>
<td>1:D:179:LYS:HB2</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>1:E:199:ASP:HB2</td>
<td>1:E:411:ARG:NH1</td>
<td>2.26</td>
<td>0.50</td>
</tr>
<tr>
<td>1:I:199:ASP:HB2</td>
<td>1:I:411:ARG:NH1</td>
<td>2.26</td>
<td>0.50</td>
</tr>
<tr>
<td>1:J:143:ARG:CG</td>
<td>1:K:125:PHE:CE1</td>
<td>2.94</td>
<td>0.50</td>
</tr>
<tr>
<td>1:M:199:ASP:HB2</td>
<td>1:M:411:ARG:NH1</td>
<td>2.26</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:D:102:TYR:HD2</td>
<td>1:D:153:PRO:HD2</td>
<td>1.76</td>
<td>0.50</td>
</tr>
<tr>
<td>1:E:141:ASP:OD2</td>
<td>1:F:166:MET:HE2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:G:102:TYR:HD2</td>
<td>1:G:153:PRO:HD2</td>
<td>1.76</td>
<td>0.50</td>
</tr>
<tr>
<td>1:H:458:ILE:HD12</td>
<td>1:I:376:GLN:HE21</td>
<td>1.75</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:165:MET:HG3</td>
<td>1:O:146:THR:CG2</td>
<td>2.33</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:199:ASP:HB2</td>
<td>1:B:411:ARG:NH1</td>
<td>2.26</td>
<td>0.50</td>
</tr>
<tr>
<td>1:J:113:SER:CB</td>
<td>1:K:165:MET:SD</td>
<td>2.87</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:102:TYR:HD2</td>
<td>1:B:153:PRO:HD2</td>
<td>1.76</td>
<td>0.50</td>
</tr>
<tr>
<td>1:D:81:LEU:HD23</td>
<td>1:D:84:LEU:HD12</td>
<td>1.92</td>
<td>0.50</td>
</tr>
<tr>
<td>1:F:467:LEU:HA</td>
<td>1:G:522:LEU:HD13</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:103:ASP:OD2</td>
<td>1:B:105:SER:OG</td>
<td>2.15</td>
<td>0.50</td>
</tr>
<tr>
<td>1:E:318:LEU:HD23</td>
<td>1:E:361:GLU:OE2</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>1:L:199:ASP:HB2</td>
<td>1:L:411:ARG:NH1</td>
<td>2.26</td>
<td>0.50</td>
</tr>
<tr>
<td>1:L:458:ILE:HD12</td>
<td>1:M:376:GLN:HE21</td>
<td>1.76</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:318:LEU:HD23</td>
<td>1:B:361:GLU:OE2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:C:318:LEU:HD23</td>
<td>1:C:361:GLU:OE2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:L:81:LEU:HD23</td>
<td>1:L:84:LEU:HD12</td>
<td>1.92</td>
<td>0.50</td>
</tr>
<tr>
<td>1:N:375:THR:OG1</td>
<td>1:N:376:GLN:O</td>
<td>2.25</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:187:ASN:C</td>
<td>1:O:415:ARG:HH22</td>
<td>2.15</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:415:ARG:HG2</td>
<td>1:C:189:PHE:CE1</td>
<td>2.47</td>
<td>0.50</td>
</tr>
<tr>
<td>1:D:103:ASP:OD2</td>
<td>1:D:105:SER:OG</td>
<td>2.15</td>
<td>0.50</td>
</tr>
<tr>
<td>1:C:524:PRO:HD2</td>
<td>1:D:553:TYR:CE1</td>
<td>2.47</td>
<td>0.50</td>
</tr>
<tr>
<td>1:L:199:ASP:HB2</td>
<td>1:J:411:ARG:NH1</td>
<td>2.26</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:273:PRO:O</td>
<td>1:O:378:ASN:ND2</td>
<td>2.45</td>
<td>0.50</td>
</tr>
<tr>
<td>1:G:318:LEU:HD23</td>
<td>1:G:361:GLU:OE2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:J:318:LEU:HD23</td>
<td>1:K:361:GLU:OE2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:J:111:VAL:CG1</td>
<td>1:K:161:ASN:HB3</td>
<td>2.30</td>
<td>0.50</td>
</tr>
<tr>
<td>1:D:537:SER:HB3</td>
<td>1:E:546:LEU:HD21</td>
<td>1.93</td>
<td>0.49</td>
</tr>
<tr>
<td>1:L:318:LEU:HD23</td>
<td>1:L:361:GLU:OE2</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>1:D:439:ASP:OD1</td>
<td>1:E:399:VAL:HG22</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>1:F:527:SER:O</td>
<td>1:F:531:ASN:ND2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:H:527:SER:O</td>
<td>1:H:531:ASN:ND2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:N:527:SER:O</td>
<td>1:N:531:ASN:ND2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:E:527:SER:O</td>
<td>1:E:531:ASN:ND2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:G:527:SER:O</td>
<td>1:G:531:ASN:ND2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>Atom-1</td>
<td>Atom-2</td>
<td>Interatomic distance (Å)</td>
<td>Clash overlap (Å)</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------</td>
<td>--------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>1:K:199:ASP:HB2</td>
<td>1:K:411:ARG:NH1</td>
<td>2.26</td>
<td>0.49</td>
</tr>
<tr>
<td>1:M:527:SER:O</td>
<td>1:M:531:ASN:ND2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:K:508:VAL:HG11</td>
<td>1:M:551:ARG:HG2</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:458:ILE:HD11</td>
<td>1:C:379:VAL:HG11</td>
<td>1.93</td>
<td>0.49</td>
</tr>
<tr>
<td>1:D:199:ASP:HB2</td>
<td>1:D:411:ARG:NH1</td>
<td>2.26</td>
<td>0.49</td>
</tr>
<tr>
<td>1:D:527:SER:O</td>
<td>1:D:531:ASN:ND2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:O:527:SER:O</td>
<td>1:O:531:ASN:ND2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:C:527:SER:O</td>
<td>1:C:531:ASN:ND2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:D:318:LEU:HD23</td>
<td>1:D:361:GLU:OE2</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>1:D:466:SER:O</td>
<td>1:E:522:LEU:HB2</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>1:J:318:LEU:HD23</td>
<td>1:J:361:GLU:OE2</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>1:L:527:SER:O</td>
<td>1:L:531:ASN:ND2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:N:318:LEU:HD23</td>
<td>1:N:361:GLU:OE2</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>1:F:309:TRP:CZ3</td>
<td>1:G:530:VAL:HG21</td>
<td>2.47</td>
<td>0.49</td>
</tr>
<tr>
<td>1:E:485:PRO:CD</td>
<td>1:F:358:ALA:HB1</td>
<td>2.38</td>
<td>0.49</td>
</tr>
<tr>
<td>1:C:68:ILE:HD12</td>
<td>1:C:88:LEU:HD11</td>
<td>1.95</td>
<td>0.49</td>
</tr>
<tr>
<td>1:E:68:ILE:HD12</td>
<td>1:E:88:LEU:HD11</td>
<td>1.95</td>
<td>0.49</td>
</tr>
<tr>
<td>1:G:537:SER:HB3</td>
<td>1:H:546:LEU:HD21</td>
<td>1.95</td>
<td>0.49</td>
</tr>
<tr>
<td>1:K:205:PRO:HD2</td>
<td>1:L:273:PRO:HD2</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>1:M:477:ASN:HD21</td>
<td>1:O:538:GLY:C</td>
<td>2.16</td>
<td>0.49</td>
</tr>
<tr>
<td>1:M:454:LEU:HB3</td>
<td>1:N:384:ASP:OD1</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:527:SER:O</td>
<td>1:B:531:ASN:ND2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:C:477:ASN:ND2</td>
<td>1:E:537:SER:O</td>
<td>2.45</td>
<td>0.49</td>
</tr>
<tr>
<td>1:D:508:VAL:HG13</td>
<td>1:F:547:GLN:HE21</td>
<td>1.78</td>
<td>0.49</td>
</tr>
<tr>
<td>1:K:467:LEU:HA</td>
<td>1:L:522:LEU:HD13</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>1:O:458:ILE:HG13</td>
<td>1:O:458:ILE:H</td>
<td>1.43</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:527:SER:O</td>
<td>1:A:531:ASN:ND2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:J:66:LYS:HE2</td>
<td>1:K:43:ARG:HH22</td>
<td>1.76</td>
<td>0.49</td>
</tr>
<tr>
<td>1:J:415:ARG:NH1</td>
<td>1:K:188:THR:O</td>
<td>2.46</td>
<td>0.48</td>
</tr>
<tr>
<td>1:K:527:SER:O</td>
<td>1:K:531:ASN:ND2</td>
<td>2.46</td>
<td>0.48</td>
</tr>
<tr>
<td>1:L:537:SER:HB3</td>
<td>1:M:546:LEU:HD21</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:E:86:LEU:O</td>
<td>1:F:51:LEU:HD22</td>
<td>2.12</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:173:ILE:HD11</td>
<td>1:O:257:ALA:HB1</td>
<td>1.92</td>
<td>0.48</td>
</tr>
<tr>
<td>1:G:68:ILE:HD12</td>
<td>1:G:88:LEU:HD11</td>
<td>1.95</td>
<td>0.48</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:I:214:LEU:HD13</td>
<td>1:J:270:VAL:HG12</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:J:415:ARG:HH22</td>
<td>1:K:187:ASN:C</td>
<td>2.16</td>
<td>0.48</td>
</tr>
<tr>
<td>1:O:318:LEU:HD23</td>
<td>1:O:361:GLU:OE2</td>
<td>2.11</td>
<td>0.48</td>
</tr>
<tr>
<td>1:J:141:ASP:OD2</td>
<td>1:K:166:MET:CE</td>
<td>2.61</td>
<td>0.48</td>
</tr>
<tr>
<td>1:K:375:THR:OG1</td>
<td>1:K:376:GLN:O</td>
<td>2.25</td>
<td>0.48</td>
</tr>
<tr>
<td>1:M:41:SER:HA</td>
<td>1:M:67:LYS:HG2</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>1:D:68:ILE:HD12</td>
<td>1:D:88:LEU:HD11</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:G:477:ASN:HD21</td>
<td>1:I:538:GLY:C</td>
<td>2.18</td>
<td>0.48</td>
</tr>
<tr>
<td>1:J:458:ILE:CD1</td>
<td>1:K:379:VAL:HG21</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:50:ALA:O</td>
<td>1:O:86:LEU:HD22</td>
<td>2.10</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:144:LYS:HZ1</td>
<td>1:B:162:ALA:CA</td>
<td>2.25</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:41:SER:HA</td>
<td>1:A:67:LYS:HG2</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>1:E:141:ASP:OD2</td>
<td>1:F:166:MET:CE</td>
<td>2.62</td>
<td>0.48</td>
</tr>
<tr>
<td>1:J:86:LEU:CD2</td>
<td>1:K:53:LEU:O</td>
<td>2.62</td>
<td>0.48</td>
</tr>
<tr>
<td>1:J:86:LEU:C</td>
<td>1:K:51:LEU:CD2</td>
<td>2.78</td>
<td>0.48</td>
</tr>
<tr>
<td>1:N:41:SER:HA</td>
<td>1:N:67:LYS:HG2</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>1:O:41:SER:HA</td>
<td>1:O:67:LYS:HG2</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>1:J:143:ARG:CB</td>
<td>1:K:125:PHE:CE1</td>
<td>2.97</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:41:SER:HA</td>
<td>1:B:67:LYS:HG2</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:I:68:ILE:HD12</td>
<td>1:I:88:LEU:HD11</td>
<td>1.95</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:108:ARG:NH1</td>
<td>1:B:157:ASP:OD2</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:144:LYS:HD2</td>
<td>1:B:166:MET:CE</td>
<td>2.44</td>
<td>0.47</td>
</tr>
<tr>
<td>1:C:41:SER:HA</td>
<td>1:C:67:LYS:HG2</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:J:108:ARG:NH1</td>
<td>1:J:157:ASP:OD2</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>1:L:68:ILE:HD12</td>
<td>1:L:88:LEU:HD11</td>
<td>1.95</td>
<td>0.47</td>
</tr>
<tr>
<td>1:O:108:ARG:NH1</td>
<td>1:O:157:ASP:OD2</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:320:ARG:HD3</td>
<td>1:B:394:ILE:HD11</td>
<td>1.94</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:68:ILE:HD12</td>
<td>1:B:88:LEU:HD11</td>
<td>1.95</td>
<td>0.47</td>
</tr>
<tr>
<td>1:G:543:ASP:OD1</td>
<td>1:G:543:ASP:N</td>
<td>2.30</td>
<td>0.47</td>
</tr>
<tr>
<td>1:H:477:ASN:ND2</td>
<td>1:J:537:SER:O</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>1:K:108:ARG:NH1</td>
<td>1:K:157:ASP:OD2</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>1:J:86:LEU:CD2</td>
<td>1:K:50:ALA:O</td>
<td>2.44</td>
<td>0.47</td>
</tr>
<tr>
<td>1:K:41:SER:HA</td>
<td>1:K:67:LYS:HG2</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:M:108:ARG:NH1</td>
<td>1:M:157:ASP:OD2</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>1:D:108:ARG:NH1</td>
<td>1:D:157:ASP:OD2</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>1:E:415:ARG:HH22</td>
<td>1:F:188:THR:HA</td>
<td>1.80</td>
<td>0.47</td>
</tr>
</tbody>
</table>

Continued from previous page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:K:68:ILE:HD12</td>
<td>1:K:88:LEU:HD11</td>
<td>1.95</td>
<td>0.47</td>
</tr>
<tr>
<td>1:L:41:SER:HA</td>
<td>1:L:67:LYS:HG2</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:N:108:ARG:NH1</td>
<td>1:N:157:ASP:OD2</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:173:ILE:CD1</td>
<td>1:O:257:ALA:CB</td>
<td>2.85</td>
<td>0.47</td>
</tr>
<tr>
<td>1:E:108:ARG:NH1</td>
<td>1:E:157:ASP:OD2</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>1:G:103:ASP:OD2</td>
<td>1:G:105:SER:OG</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:H:467:LEU:HA</td>
<td>1:I:522:LEU:HD13</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>1:N:199:ASP:OD1</td>
<td>1:O:196:ASN:ND2</td>
<td>2.46</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:108:ARG:NH1</td>
<td>1:A:157:ASP:OD2</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>1:G:41:SER:HA</td>
<td>1:G:67:LYS:HG2</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:H:41:SER:HA</td>
<td>1:H:67:LYS:HG2</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:L:108:ARG:NH1</td>
<td>1:L:157:ASP:OD2</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>1:F:41:SER:HA</td>
<td>1:F:67:LYS:HG2</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:107:MET:HB3</td>
<td>1:B:58:ILE:HD13</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:C:108:ARG:NH1</td>
<td>1:C:157:ASP:OD2</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>1:D:216:GLN:HE21</td>
<td>1:D:216:GLN:HA</td>
<td>1.80</td>
<td>0.47</td>
</tr>
<tr>
<td>1:E:41:SER:HA</td>
<td>1:E:67:LYS:HG2</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:J:221:PRO:HG2</td>
<td>1:K:176:GLY:O</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:K:419:ASP:OD1</td>
<td>1:K:419:ASP:N</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>1:K:458:ILE:HE</td>
<td>1:K:458:ILE:HG13</td>
<td>1.43</td>
<td>0.47</td>
</tr>
<tr>
<td>1:I:108:ARG:NH1</td>
<td>1:I:157:ASP:OD2</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:216:GLN:HA</td>
<td>1:A:216:GLN:HE21</td>
<td>1.80</td>
<td>0.47</td>
</tr>
<tr>
<td>1:C:216:GLN:HE21</td>
<td>1:C:216:GLN:HA</td>
<td>1.80</td>
<td>0.47</td>
</tr>
<tr>
<td>1:E:144:LYS:HZ2</td>
<td>1:F:162:ALA:CA</td>
<td>2.20</td>
<td>0.47</td>
</tr>
<tr>
<td>1:J:41:SER:HA</td>
<td>1:J:67:LYS:HG2</td>
<td>1.96</td>
<td>0.46</td>
</tr>
<tr>
<td>1:K:216:GLN:HA</td>
<td>1:I:216:GLN:HE21</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:M:68:ILE:HD12</td>
<td>1:M:88:LEU:HD11</td>
<td>1.95</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:419:ASP:OD1</td>
<td>1:B:419:ASP:N</td>
<td>2.48</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:309:TRP:HB2</td>
<td>1:B:512:MET:HB2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:41:SER:HA</td>
<td>1:D:67:LYS:HG2</td>
<td>1.96</td>
<td>0.46</td>
</tr>
<tr>
<td>1:G:108:ARG:NH1</td>
<td>1:G:157:ASP:OD2</td>
<td>2.48</td>
<td>0.46</td>
</tr>
<tr>
<td>1:I:309:TRP:HB2</td>
<td>1:I:512:MET:HB2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:N:216:GLN:HA</td>
<td>1:N:216:GLN:HE21</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:E:467:LEU:HA</td>
<td>1:F:522:LEU:HD13</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>1:J:216:GLN:HE21</td>
<td>1:J:216:GLN:HA</td>
<td>1.80</td>
<td>0.46</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:J:258:LEU:HD22</td>
<td>1:K:173:ILE:CD1</td>
<td>2.40</td>
<td>0.46</td>
</tr>
<tr>
<td>1:J:86:LEU:O</td>
<td>1:K:51:LEU:CB</td>
<td>2.64</td>
<td>0.46</td>
</tr>
<tr>
<td>1:K:214:LEU:HD21</td>
<td>1:L:180:ILE:HD12</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:274:ASP:HB2</td>
<td>1:O:301:LYS:NZ</td>
<td>2.30</td>
<td>0.46</td>
</tr>
<tr>
<td>1:O:309:TRP:HB2</td>
<td>1:O:512:MET:HB2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:392:LYS:HD3</td>
<td>1:O:361:GLU:OE2</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:111:VAL:HG11</td>
<td>1:E:161:ASN:HB3</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:309:TRP:HB2</td>
<td>1:D:512:MET:HB2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:E:216:GLN:HA</td>
<td>1:E:216:GLN:HE21</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:E:224:ASN:H</td>
<td>1:F:179:LYS:HB2</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:K:309:TRP:HB2</td>
<td>1:K:512:MET:HB2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:M:216:GLN:HE21</td>
<td>1:M:216:GLN:HA</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:O:467:LEU:HD21</td>
<td>1:O:467:LEU:HD21</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>1:O:512:MET:HB2</td>
<td>1:O:512:MET:HB2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:O:53:LEU:HD13</td>
<td>1:O:77:PRO:HB2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:J:301:LYS:HE2</td>
<td>1:K:274:ASP:O</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:K:517:GLU:OE1</td>
<td>1:K:518:ILE:N</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:M:458:ILE:HG13</td>
<td>1:M:458:ILE:HG13</td>
<td>1.44</td>
<td>0.46</td>
</tr>
<tr>
<td>1:J:297:LEU:HD21</td>
<td>1:N:272:TYR:CG1</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:419:ASP:N</td>
<td>1:A:419:ASP:OD1</td>
<td>2.48</td>
<td>0.46</td>
</tr>
<tr>
<td>1:E:142:ASN:ND2</td>
<td>1:F:128:ARG:HB3</td>
<td>2.30</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:224:ASN:H</td>
<td>1:E:179:LYS:CB</td>
<td>2.29</td>
<td>0.46</td>
</tr>
<tr>
<td>1:F:309:TRP:HB2</td>
<td>1:F:512:MET:HB2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:G:517:GLU:OE1</td>
<td>1:G:518:ILE:N</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:H:517:GLU:OE1</td>
<td>1:H:518:ILE:N</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:I:103:ASP:OD2</td>
<td>1:I:105:SER:OG</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:I:53:LEU:HD13</td>
<td>1:I:77:PRO:HG2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:J:224:ASN:NO</td>
<td>1:K:179:LYS:HB2</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:K:517:GLU:OE1</td>
<td>1:A:518:ILE:N</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:J:419:ASP:OD1</td>
<td>1:J:419:ASP:N</td>
<td>2.48</td>
<td>0.46</td>
</tr>
<tr>
<td>1:L:216:GLN:HA</td>
<td>1:L:216:GLN:HE21</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:M:309:TRP:HB2</td>
<td>1:M:512:MET:HB2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:N:553:TYR:OH</td>
<td>1:N:553:TYR:OH</td>
<td>2.30</td>
<td>0.46</td>
</tr>
<tr>
<td>1:K:473:THR:CG2</td>
<td>1:M:554:LEU:HD11</td>
<td>2.46</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:53:LEU:HD13</td>
<td>1:D:77:PRO:HG2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:223:GLY:N</td>
<td>1:D:178:GLN:O</td>
<td>2.48</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:485:PRO:HD2</td>
<td>1:D:358:ALA:HB1</td>
<td>1.98</td>
<td>0.46</td>
</tr>
</tbody>
</table>
### Interatomic distances and Clash overlap

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:C:361:GLU:OE2</td>
<td>1:D:392:LYS:HD3</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:517:GLU:OE1</td>
<td>1:D:518:ILE:N</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:K:458:ILE:HD12</td>
<td>1:L:376:GLN:NE2</td>
<td>2.26</td>
<td>0.46</td>
</tr>
<tr>
<td>1:N:224:ASN:HA</td>
<td>1:N:289:PHE:HZ</td>
<td>1.81</td>
<td>0.46</td>
</tr>
<tr>
<td>1:O:517:GLU:OE1</td>
<td>1:O:518:ILE:N</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:148:TYR:CD2</td>
<td>1:B:131:LEU:HD11</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:517:GLU:OE1</td>
<td>1:C:518:ILE:N</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:E:53:LEU:HD13</td>
<td>1:E:77:PRO:HG2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:I:216:GLN:HE21</td>
<td>1:I:216:GLN:HA</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:415:ARG:HH12</td>
<td>1:C:188:THR:C</td>
<td>2.18</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:517:GLU:OE1</td>
<td>1:B:518:ILE:N</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:144:LYS:HZ2</td>
<td>1:F:162:ALA:CB</td>
<td>2.29</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:517:GLU:OE1</td>
<td>1:E:518:ILE:N</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:J:506:ASN:N</td>
<td>1:I:506:ASN:OD1</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>1:J:517:GLU:OE1</td>
<td>1:J:518:ILE:N</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:K:224:ASN:HA</td>
<td>1:K:289:PHE:HZ</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:L:458:ILE:HG13</td>
<td>1:L:458:ILE:H</td>
<td>1.43</td>
<td>0.45</td>
</tr>
<tr>
<td>1:L:517:GLU:OE1</td>
<td>1:L:518:ILE:N</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:F:216:GLN:HA</td>
<td>1:F:216:GLN:HE21</td>
<td>1.80</td>
<td>0.45</td>
</tr>
<tr>
<td>1:F:53:LEU:HD13</td>
<td>1:F:77:PRO:HG2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:J:53:LEU:HD13</td>
<td>1:J:77:PRO:HG2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:K:53:LEU:HD13</td>
<td>1:K:77:PRO:HG2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:L:53:LEU:HD13</td>
<td>1:L:77:PRO:HG2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:J:313:LEU:HD23</td>
<td>1:L:550:VAL:HG11</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:M:224:ASN:HA</td>
<td>1:M:289:PHE:HZ</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:O:216:GLN:HA</td>
<td>1:O:216:GLN:HE21</td>
<td>1.80</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:224:ASN:HA</td>
<td>1:B:289:PHE:HZ</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:J:506:ASN:OD1</td>
<td>1:J:506:ASN:N</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:J:257:ALA:HB1</td>
<td>1:K:173:ILE:HD12</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>1:N:517:GLU:OE1</td>
<td>1:N:518:ILE:N</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:309:TRP:HB2</td>
<td>1:E:512:MET:HB2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:F:517:GLU:OE1</td>
<td>1:F:518:ILE:N</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:G:419:ASP:OD1</td>
<td>1:G:419:ASP:N</td>
<td>2.48</td>
<td>0.45</td>
</tr>
<tr>
<td>1:H:216:GLN:HA</td>
<td>1:H:216:GLN:HE21</td>
<td>1.80</td>
<td>0.45</td>
</tr>
<tr>
<td>1:J:524:PRO:HD2</td>
<td>1:K:553:TYR:HE1</td>
<td>1.82</td>
<td>0.45</td>
</tr>
<tr>
<td>1:O:224:ASN:HA</td>
<td>1:O:289:PHE:HZ</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:127:LYS:HZ2</td>
<td>1:A:134:LYS:HE2</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:309:TRP:HB2</td>
<td>1:A:512:MET:HB2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:309:TRP:HB2</td>
<td>1:C:512:MET:HB2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:327:GLY:HA3</td>
<td>1:C:352:PHE:HA</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:415:ARG:NH1</td>
<td>1:F:188:THR:O</td>
<td>2.47</td>
<td>0.45</td>
</tr>
<tr>
<td>Atom-1</td>
<td>Atom-2</td>
<td>Interatomic distance (Å)</td>
<td>Clash overlap (Å)</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>--------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>1:E:467:LEU:HD21</td>
<td>1:F:374:LEU:HD11</td>
<td>1.97</td>
<td>0.45</td>
</tr>
<tr>
<td>1:F:419:ASP:N</td>
<td>1:F:419:ASP:OD1</td>
<td>2.48</td>
<td>0.45</td>
</tr>
<tr>
<td>1:H:419:ASP:OD1</td>
<td>1:H:419:ASP:N</td>
<td>2.48</td>
<td>0.45</td>
</tr>
<tr>
<td>1:H:506:ASN:OD1</td>
<td>1:H:506:ASN:N</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:I:220:GLN:HG2</td>
<td>1:J:178:GLN:HG2</td>
<td>1.97</td>
<td>0.45</td>
</tr>
<tr>
<td>1:I:517:GLU:OE1</td>
<td>1:I:518:ILE:N</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:J:224:ASN:HA</td>
<td>1:J:289:PHE:HZ</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:L:327:GLY:HA3</td>
<td>1:L:352:PHE:HA</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:458:ILE:HD12</td>
<td>1:B:376:GLN:HE21</td>
<td>1.80</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:327:GLY:HA3</td>
<td>1:B:352:PHE:HA</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:53:LEU:HD13</td>
<td>1:B:77:PRO:HG2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:D:327:GLY:HA3</td>
<td>1:D:352:PHE:HA</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:419:ASP:N</td>
<td>1:E:419:ASP:OD1</td>
<td>2.48</td>
<td>0.45</td>
</tr>
<tr>
<td>1:H:53:LEU:HD13</td>
<td>1:H:77:PRO:HG2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:K:144:LYS:NZ</td>
<td>1:L:162:ALA:HA</td>
<td>2.32</td>
<td>0.45</td>
</tr>
<tr>
<td>1:L:477:ASN:ND2</td>
<td>1:N:537:SER:O</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:165:MET:CG</td>
<td>1:O:146:THR:HG21</td>
<td>2.33</td>
<td>0.45</td>
</tr>
<tr>
<td>1:O:419:ASP:N</td>
<td>1:O:419:ASP:OD1</td>
<td>2.48</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:224:ASN:HA</td>
<td>1:E:289:PHE:HZ</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:383:PHE:HB3</td>
<td>1:E:410:ILE:HG23</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>1:H:309:TRP:HB2</td>
<td>1:H:512:MET:HB2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:K:327:GLY:HA3</td>
<td>1:K:352:PHE:HA</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:L:127:LYS:HZ2</td>
<td>1:L:134:LYS:HE2</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:M:517:GLU:OE1</td>
<td>1:M:518:ILE:N</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:K:364:GLN:HE21</td>
<td>1:M:546:LEU:HD12</td>
<td>1.82</td>
<td>0.45</td>
</tr>
<tr>
<td>1:N:309:TRP:HB2</td>
<td>1:N:512:MET:HB2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:N:419:ASP:OD1</td>
<td>1:N:419:ASP:N</td>
<td>2.48</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:506:ASN:OD1</td>
<td>1:C:506:ASN:N</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:53:LEU:HD13</td>
<td>1:C:77:PRO:HG2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:G:224:ASN:HA</td>
<td>1:G:289:PHE:HZ</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:I:220:GLN:HG2</td>
<td>1:J:178:GLN:CG</td>
<td>2.47</td>
<td>0.45</td>
</tr>
<tr>
<td>1:J:309:TRP:HB2</td>
<td>1:J:512:MET:HB2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:M:419:ASP:OD1</td>
<td>1:M:419:ASP:N</td>
<td>2.48</td>
<td>0.45</td>
</tr>
<tr>
<td>1:O:53:LEU:HD13</td>
<td>1:O:77:PRO:HG2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:D:383:PHE:HB3</td>
<td>1:D:410:ILE:HG23</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:327:GLY:HA3</td>
<td>1:E:352:PHE:HA</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:F:508:VAL:HG22</td>
<td>1:H:547:GLN:HE21</td>
<td>1.82</td>
<td>0.45</td>
</tr>
</tbody>
</table>
### Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å)
---|---|---|---
1:E:86:LEU:O | 1:F:51:LEU:HA | 2.17 | 0.45
1:K:506:ASN:OD1 | 1:K:506:ASN:N | 2.49 | 0.45
1:L:506:ASN:N | 1:L:506:ASN:OD1 | 2.49 | 0.45
1:L:309:TRP:HB2 | 1:L:512:MET:HB2 | 1.98 | 0.45
1:M:327:GLY:HA3 | 1:M:352:PHE:HA | 1.98 | 0.45
1:C:224:ASN:HA | 1:C:289:PHE:HZ | 1.81 | 0.45
1:A:53:LEU:HD13 | 1:A:77:PRO:HG2 | 1.98 | 0.44
1:C:415:ARG:HH12 | 1:D:188:THR:C | 2.20 | 0.44
1:G:216:GLN:HE21 | 1:G:216:GLN:HA | 1.80 | 0.44
1:H:224:ASN:HA | 1:H:289:PHE:HZ | 1.81 | 0.44
1:I:419:ASP:OD1 | 1:I:419:ASP:N | 2.48 | 0.44
1:K:529:SER:HB3 | 1:L:553:TYR:OH | 2.17 | 0.44
1:M:53:LEU:HD13 | 1:M:77:PRO:HG2 | 1.98 | 0.44
1:N:53:LEU:HD13 | 1:N:77:PRO:HG2 | 1.98 | 0.44
1:A:224:ASN:HA | 1:A:289:PHE:HZ | 1.81 | 0.44
1:D:224:ASN:HA | 1:D:289:PHE:HZ | 1.81 | 0.44
1:D:419:ASP:OD1 | 1:D:419:ASP:N | 2.48 | 0.44
1:L:224:ASN:HA | 1:L:289:PHE:HZ | 1.81 | 0.44
1:K:508:VAL:HG11 | 1:M:551:ARG:CG | 2.47 | 0.44
1:A:327:GLY:HA3 | 1:A:352:PHE:HA | 1.98 | 0.44
1:C:383:PHE:HB3 | 1:C:410:ILE:HG23 | 1.99 | 0.44
1:E:146:THR:CG2 | 1:F:165:MET:HB3 | 2.46 | 0.44
1:E:146:THR:HG21 | 1:F:165:MET:CG | 2.47 | 0.44
1:G:506:ASN:OD1 | 1:G:506:ASN:N | 2.49 | 0.44
1:I:375:THR:OG1 | 1:I:376:GLN:O | 2.25 | 0.44
1:J:327:GLY:HA3 | 1:J:352:PHE:HA | 1.99 | 0.44
1:J:225:ILE:CD1 | 1:K:180:ILE:HB | 2.47 | 0.44
1:M:508:VAL:HG13 | 1:O:547:GLN:HE21 | 1.83 | 0.44
1:D:474:ARG:NH1 | 1:E:406:TYR:CD2 | 2.81 | 0.44
1:K:221:PRO:HG2 | 1:L:177:ARG:HD2 | 1.98 | 0.44
1:K:218:GLU:OE2 | 1:L:178:GLN:HG3 | 2.17 | 0.44
1:F:224:ASN:HA | 1:F:289:PHE:HZ | 1.81 | 0.44
1:I:127:LYS:HZ2 | 1:I:134:LYS:HE2 | 1.82 | 0.44
1:A:506:ASN:OD1 | 1:A:506:ASN:N | 2.49 | 0.44

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:D:291:GLU:HA</td>
<td>1:D:294:VAL:HG12</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:E:86:LEU:CD2</td>
<td>1:F:53:LEU:O</td>
<td>2.65</td>
<td>0.44</td>
</tr>
<tr>
<td>1:F:327:GLY:HA3</td>
<td>1:F:352:PHE:HA</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>1:G:291:GLU:HA</td>
<td>1:G:294:VAL:HG12</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:J:415:ARG:HG2</td>
<td>1:K:189:PHE:CE2</td>
<td>2.53</td>
<td>0.44</td>
</tr>
<tr>
<td>1:J:320:ARG:HD3</td>
<td>1:K:394:ILE:HD11</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:L:224:ASN:HA</td>
<td>1:L:289:PHE:HZ</td>
<td>1.81</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:279:LEU:HD21</td>
<td>1:O:297:LEU:HD11</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:E:142:ASN:HD22</td>
<td>1:F:128:ARG:HB3</td>
<td>1.82</td>
<td>0.44</td>
</tr>
<tr>
<td>1:G:327:GLY:HA3</td>
<td>1:G:352:PHE:HA</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>1:L:419:ASP:OD1</td>
<td>1:L:419:ASP:N</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>1:O:327:GLY:HA3</td>
<td>1:O:352:PHE:HA</td>
<td>1.99</td>
<td>0.44</td>
</tr>
<tr>
<td>1:C:419:ASP:N</td>
<td>1:C:419:ASP:OD1</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>1:E:291:GLU:HA</td>
<td>1:E:294:VAL:HG12</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:F:291:GLU:HA</td>
<td>1:F:294:VAL:HG12</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:N:327:GLY:HA3</td>
<td>1:N:352:PHE:HA</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:383:PHE:HB3</td>
<td>1:B:410:ILE:HG23</td>
<td>1.99</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:361:GLU:OE2</td>
<td>1:C:392:LYS:HD3</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:D:139:ARG:CD</td>
<td>1:E:131:LEU:HD21</td>
<td>2.44</td>
<td>0.43</td>
</tr>
<tr>
<td>1:H:327:GLY:HA3</td>
<td>1:H:352:PHE:HA</td>
<td>1.98</td>
<td>0.43</td>
</tr>
<tr>
<td>1:I:291:GLU:HA</td>
<td>1:I:294:VAL:HG12</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:K:504:LYS:HD2</td>
<td>1:M:539:ALA:HA</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:291:GLU:HA</td>
<td>1:B:294:VAL:HG12</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:D:460:ARG:HG2</td>
<td>1:E:303:HIS:CE1</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>1:J:327:GLY:HA3</td>
<td>1:J:352:PHE:HA</td>
<td>1.98</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:188:THR:HA</td>
<td>1:O:415:ARG:NH2</td>
<td>2.28</td>
<td>0.43</td>
</tr>
<tr>
<td>1:D:506:ASN:OD1</td>
<td>1:D:506:ASN:N</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>1:J:258:LEU:CD2</td>
<td>1:K:173:ILE:HD11</td>
<td>2.43</td>
<td>0.43</td>
</tr>
<tr>
<td>1:K:383:PHE:HB3</td>
<td>1:K:410:ILE:HG23</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>1:L:383:PHE:HB3</td>
<td>1:L:410:ILE:HG23</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>1:O:383:PHE:HB3</td>
<td>1:O:410:ILE:HG23</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:161:ASN:HD22</td>
<td>1:O:111:VAL:HG21</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:J:146:THR:HG21</td>
<td>1:K:165:MET:HG3</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:N:127:LYS:HZ2</td>
<td>1:N:134:LYS:HE2</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:291:GLU:HA</td>
<td>1:C:294:VAL:HG12</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:J:341:ARG:HH12</td>
<td>1:K:188:THR:N</td>
<td>2.16</td>
<td>0.43</td>
</tr>
<tr>
<td>1:M:291:GLU:HA</td>
<td>1:M:294:VAL:HG12</td>
<td>2.00</td>
<td>0.43</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:C:508:VAL:HG13</td>
<td>1:E:547:GLN:HE21</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:H:291:GLU:HA</td>
<td>1:H:294:VAL:HG12</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:O:506:ASN:OD1</td>
<td>1:O:506:ASN:N</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>1:E:144:LYS:HE3</td>
<td>1:F:165:MET:HB2</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>1:N:506:ASN:N</td>
<td>1:N:506:ASN:OD1</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:506:ASN:N</td>
<td>1:B:506:ASN:OD1</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>1:H:375:THR:OG1</td>
<td>1:H:376:GLN:O</td>
<td>2.25</td>
<td>0.43</td>
</tr>
<tr>
<td>1:L:291:GLU:HA</td>
<td>1:L:294:VAL:HG12</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:144:LYS:HD2</td>
<td>1:B:166:MET:HE3</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:258:LEU:HD22</td>
<td>1:B:173:ILE:HD11</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:472:TYR:CG</td>
<td>1:C:385:ASN:ND2</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>1:E:146:THR:HG21</td>
<td>1:F:165:MET:CB</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>1:E:475:ASP:O</td>
<td>1:F:367:VAL:HA</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:J:361:GLU:OE2</td>
<td>1:K:392:LYS:HD3</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:M:383:PHE:HB3</td>
<td>1:M:410:ILE:HG23</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>1:J:224:ASN:C</td>
<td>1:K:179:LYS:HB2</td>
<td>2.38</td>
<td>0.43</td>
</tr>
<tr>
<td>1:J:375:THR:OG1</td>
<td>1:J:376:GLN:O</td>
<td>2.25</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:179:LYS:HE3</td>
<td>1:O:226:VAL:HG23</td>
<td>1.96</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:199:ASP:OD1</td>
<td>1:B:196:ASN:ND2</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>1:O:291:GLU:HA</td>
<td>1:O:294:VAL:HG12</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:506:ASN:OD1</td>
<td>1:E:506:ASN:N</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:508:VAL:HG22</td>
<td>1:G:547:GLN:HE21</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>1:L:533:ILE:HD11</td>
<td>1:M:549:TRP:HB2</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:N:291:GLU:HA</td>
<td>1:N:294:VAL:HG12</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>1:G:152:PRO:HA</td>
<td>1:G:153:PRO:HD3</td>
<td>1.94</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:524:PRO:HD2</td>
<td>1:F:553:TYR:CE1</td>
<td>2.52</td>
<td>0.42</td>
</tr>
<tr>
<td>1:I:522:LEU:HD23</td>
<td>1:J:553:TYR:CD2</td>
<td>2.55</td>
<td>0.42</td>
</tr>
<tr>
<td>1:J:103:ASP:OD2</td>
<td>1:J:105:SER:OG</td>
<td>2.15</td>
<td>0.42</td>
</tr>
<tr>
<td>1:J:111:VAL:HG21</td>
<td>1:K:161:ASN:HD22</td>
<td>1.83</td>
<td>0.42</td>
</tr>
<tr>
<td>1:L:477:ASN:HD21</td>
<td>1:N:538:GLY:C</td>
<td>2.22</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:291:GLU:HA</td>
<td>1:A:294:VAL:HG12</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:474:ARG:O</td>
<td>1:E:389:PHE:HE2</td>
<td>2.32</td>
<td>0.42</td>
</tr>
<tr>
<td>1:J:433:ASP:OD1</td>
<td>1:J:433:ASP:N</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>1:K:291:GLU:HA</td>
<td>1:K:294:VAL:HG12</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>1:L:458:ILE:O</td>
<td>1:M:376:GLN:NE2</td>
<td>2.52</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:433:ASP:OD1</td>
<td>1:B:433:ASP:N</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:415:ARG:NH1</td>
<td>1:F:188:THR:C</td>
<td>2.67</td>
<td>0.42</td>
</tr>
<tr>
<td>Atom-1</td>
<td>Atom-2</td>
<td>Interatomic distance (Å)</td>
<td>Clash overlap (Å)</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------</td>
<td>-------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>1:H:474:ARG:NH2</td>
<td>1:I:367:VAL:HG21</td>
<td>2.35</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:175:LEU:HD11</td>
<td>1:B:258:LEU:HB3</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:I:175:LEU:HD11</td>
<td>1:I:258:LEU:HB3</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:J:291:GLU:HA</td>
<td>1:J:294:VAL:HG12</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>1:N:467:LEU:HA</td>
<td>1:O:522:LEU:HD13</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:175:LEU:HD11</td>
<td>1:A:258:LEU:HB3</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:C:175:LEU:HD11</td>
<td>1:C:258:LEU:HB3</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:224:ASN:O</td>
<td>1:F:179:LYS:CG</td>
<td>2.67</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:274:ASP:O</td>
<td>1:O:301:LYS:HE2</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:406:TYR:CD2</td>
<td>1:O:474:ARG:NH1</td>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:175:LEU:HD11</td>
<td>1:D:258:LEU:HB3</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:454:LEU:HB3</td>
<td>1:F:384:ASP:OD1</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>1:I:175:LEU:HD11</td>
<td>1:I:258:LEU:HB3</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:K:175:LEU:HD11</td>
<td>1:K:258:LEU:HB3</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:J:137:PRO:CD</td>
<td>1:K:97:GLN:CD</td>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>1:M:433:ASP:N</td>
<td>1:M:433:ASP:OD1</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>1:O:433:ASP:OD1</td>
<td>1:O:433:ASP:N</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>1:I:433:ASP:N</td>
<td>1:I:433:ASP:OD1</td>
<td>2.53</td>
<td>0.41</td>
</tr>
<tr>
<td>1:M:492:LEU:HD22</td>
<td>1:M:492:LEU:HA</td>
<td>1.93</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:370:ARG:HG2</td>
<td>1:O:473:THR:OG1</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:152:PRO:HA</td>
<td>1:C:153:PRO:HD3</td>
<td>1.94</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:482:GLN:HB3</td>
<td>1:D:499:TYR:HB3</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:H:175:LEU:HD11</td>
<td>1:H:258:LEU:HB3</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:G:506:ASN:ND2</td>
<td>1:I:541:SER:OG</td>
<td>2.39</td>
<td>0.41</td>
</tr>
<tr>
<td>1:O:175:LEU:HD11</td>
<td>1:O:258:LEU:HB3</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:482:GLN:HB3</td>
<td>1:B:499:TYR:HB3</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:467:LEU:HA</td>
<td>1:B:522:LEU:HD13</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:L:433:ASP:OD1</td>
<td>1:L:433:ASP:N</td>
<td>2.53</td>
<td>0.41</td>
</tr>
<tr>
<td>1:N:474:ARG:NH1</td>
<td>1:O:406:TYR:CD2</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>1:F:482:GLN:HB3</td>
<td>1:F:499:TYR:HB3</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:N:433:ASP:OD1</td>
<td>1:N:433:ASP:N</td>
<td>2.53</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:221:PRO:HG2</td>
<td>1:B:177:ARG:HD2</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:220:GLN:HG2</td>
<td>1:E:178:GLN:CG</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>1:H:103:ASP:OD2</td>
<td>1:H:105:SER:OG</td>
<td>2.15</td>
<td>0.41</td>
</tr>
<tr>
<td>1:L:175:LEU:HD11</td>
<td>1:L:258:LEU:HB3</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:M:506:ASN:N</td>
<td>1:M:506:ASN:OD1</td>
<td>2.49</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:524:PRO:HG2</td>
<td>1:D:553:TYR:OH</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:G:482:GLN:HB3</td>
<td>1:G:499:TYR:HB3</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:I:141:ASP:OD2</td>
<td>1:K:166:MET:HE2</td>
<td>2.21</td>
<td>0.41</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:J:225:ILE:HD13</td>
<td>1:K:180:ILE:H</td>
<td>1.85</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:482:GLN:HB3</td>
<td>1:A:499:TYR:HB3</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:226:VAL:O</td>
<td>1:C:181:GLY:HA2</td>
<td>2.19</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:175:LEU:HD11</td>
<td>1:E:258:LEU:HB3</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:G:175:LEU:HD11</td>
<td>1:G:258:LEU:HB3</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:M:458:ILE:HD12</td>
<td>1:N:376:GLN:HE21</td>
<td>1.84</td>
<td>0.41</td>
</tr>
<tr>
<td>1:N:175:LEU:HD11</td>
<td>1:N:258:LEU:HB3</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:J:458:ILE:HD11</td>
<td>1:K:379:VAL:CG2</td>
<td>2.49</td>
<td>0.41</td>
</tr>
<tr>
<td>1:N:482:GLN:HB3</td>
<td>1:N:499:TYR:HB3</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:O:482:GLN:HB3</td>
<td>1:O:499:TYR:HB3</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:139:ARG:HE</td>
<td>1:B:131:LEU:HD21</td>
<td>1.86</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:144:LYS:NZ</td>
<td>1:B:162:ALA:CB</td>
<td>2.84</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:372:VAL:HG21</td>
<td>1:E:554:LEU:CD2</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:379:VAL:HA</td>
<td>1:D:380:PRO:HD3</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:226:VAL:O</td>
<td>1:D:181:GLY:HA2</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>1:C:482:GLN:HB3</td>
<td>1:C:499:TYR:HB3</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:D:113:SER:HB3</td>
<td>1:E:165:MET:SD</td>
<td>2.61</td>
<td>0.40</td>
</tr>
<tr>
<td>1:E:482:GLN:HB3</td>
<td>1:E:499:TYR:HB3</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:E:139:ARG:CD</td>
<td>1:F:131:LEU:HD21</td>
<td>2.36</td>
<td>0.40</td>
</tr>
<tr>
<td>1:J:482:GLN:HB3</td>
<td>1:J:499:TYR:HB3</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:M:175:LEU:HD11</td>
<td>1:M:258:LEU:HB3</td>
<td>2.02</td>
<td>0.40</td>
</tr>
<tr>
<td>1:D:449:GLU:HG3</td>
<td>1:D:449:GLU:H</td>
<td>1.80</td>
<td>0.40</td>
</tr>
<tr>
<td>1:D:309:TRP:CH2</td>
<td>1:E:530:VAL:HG21</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>1:I:454:LEU:HB3</td>
<td>1:J:384:ASP:OD1</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:137:PRO:HD2</td>
<td>1:B:97:GLN:NE2</td>
<td>1.86</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:433:ASP:OD1</td>
<td>1:C:433:ASP:N</td>
<td>2.53</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:524:PRO:HD2</td>
<td>1:C:553:TYR:HE1</td>
<td>1.86</td>
<td>0.40</td>
</tr>
<tr>
<td>1:D:297:LEU:HD21</td>
<td>1:E:272:TYR:CZ</td>
<td>2.57</td>
<td>0.40</td>
</tr>
<tr>
<td>1:I:379:ILE:CG1</td>
<td>1:K:379:VAL:CG1</td>
<td>2.48</td>
<td>0.40</td>
</tr>
<tr>
<td>1:E:492:LEU:HA</td>
<td>1:E:492:LEU:HD22</td>
<td>1.93</td>
<td>0.40</td>
</tr>
<tr>
<td>1:G:449:GLU:H</td>
<td>1:G:449:GLU:HG3</td>
<td>1.80</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:144:LYS:HC3</td>
<td>1:C:165:MET:HB2</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:D:372:VAL:HG21</td>
<td>1:E:554:LEU:HD21</td>
<td>2.02</td>
<td>0.40</td>
</tr>
<tr>
<td>1:E:477:ASN:ND2</td>
<td>1:G:537:SER:O</td>
<td>2.54</td>
<td>0.40</td>
</tr>
</tbody>
</table>
There are no symmetry-related clashes.

### 5.3 Torsion angles

#### 5.3.1 Protein backbone

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Analysed</th>
<th>Favoured</th>
<th>Allowed</th>
<th>Outliers</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>496/562 (88%)</td>
<td>470 (95%)</td>
<td>26 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>496/562 (88%)</td>
<td>470 (95%)</td>
<td>26 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>496/562 (88%)</td>
<td>470 (95%)</td>
<td>26 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>496/562 (88%)</td>
<td>470 (95%)</td>
<td>26 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>496/562 (88%)</td>
<td>470 (95%)</td>
<td>26 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>496/562 (88%)</td>
<td>470 (95%)</td>
<td>26 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>496/562 (88%)</td>
<td>470 (95%)</td>
<td>26 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>496/562 (88%)</td>
<td>470 (95%)</td>
<td>26 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>496/562 (88%)</td>
<td>470 (95%)</td>
<td>26 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>496/562 (88%)</td>
<td>470 (95%)</td>
<td>26 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>496/562 (88%)</td>
<td>470 (95%)</td>
<td>26 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>496/562 (88%)</td>
<td>470 (95%)</td>
<td>26 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>496/562 (88%)</td>
<td>470 (95%)</td>
<td>26 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>496/562 (88%)</td>
<td>470 (95%)</td>
<td>26 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>496/562 (88%)</td>
<td>470 (95%)</td>
<td>26 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>7440/8430 (88%)</td>
<td>7050 (95%)</td>
<td>390 (5%)</td>
<td>0</td>
<td>100 100</td>
</tr>
</tbody>
</table>

There are no Ramachandran outliers to report.

#### 5.3.2 Protein sidechains

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.
The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Analysed</th>
<th>Rotameric</th>
<th>Outliers</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>423/477 (89%)</td>
<td>396 (94%)</td>
<td>27 (6%)</td>
<td>19 52</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>423/477 (89%)</td>
<td>396 (94%)</td>
<td>27 (6%)</td>
<td>19 52</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>423/477 (89%)</td>
<td>396 (94%)</td>
<td>27 (6%)</td>
<td>19 52</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>423/477 (89%)</td>
<td>396 (94%)</td>
<td>27 (6%)</td>
<td>19 52</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>423/477 (89%)</td>
<td>396 (94%)</td>
<td>27 (6%)</td>
<td>19 52</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>423/477 (89%)</td>
<td>396 (94%)</td>
<td>27 (6%)</td>
<td>19 52</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>423/477 (89%)</td>
<td>396 (94%)</td>
<td>27 (6%)</td>
<td>19 52</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>423/477 (89%)</td>
<td>396 (94%)</td>
<td>27 (6%)</td>
<td>19 52</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>423/477 (89%)</td>
<td>396 (94%)</td>
<td>27 (6%)</td>
<td>19 52</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>423/477 (89%)</td>
<td>396 (94%)</td>
<td>27 (6%)</td>
<td>19 52</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>423/477 (89%)</td>
<td>396 (94%)</td>
<td>27 (6%)</td>
<td>19 52</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>423/477 (89%)</td>
<td>396 (94%)</td>
<td>27 (6%)</td>
<td>19 52</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>423/477 (89%)</td>
<td>396 (94%)</td>
<td>27 (6%)</td>
<td>19 52</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>423/477 (89%)</td>
<td>396 (94%)</td>
<td>27 (6%)</td>
<td>19 52</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>423/477 (89%)</td>
<td>396 (94%)</td>
<td>27 (6%)</td>
<td>19 52</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>6345/7155 (89%)</td>
<td>5940 (94%)</td>
<td>405 (6%)</td>
<td>23 52</td>
</tr>
</tbody>
</table>

All (405) residues with a non-rotameric sidechain are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>168</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>175</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>179</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>222</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>254</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>287</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>291</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>304</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>305</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>335</td>
<td>LEU</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>415</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>419</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>427</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>447</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>453</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>458</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>492</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>517</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>528</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>543</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>548</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>168</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>175</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>179</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>222</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>254</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>287</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>291</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>304</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>305</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>335</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>415</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>419</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>427</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>447</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>453</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>458</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>492</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>517</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>528</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>543</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>548</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>168</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>175</td>
<td>LEU</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C</td>
<td>179</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>222</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>254</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>287</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>291</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>304</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>305</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>335</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>415</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>419</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>427</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>447</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>453</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>458</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>492</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>517</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>528</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>543</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>548</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>175</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>179</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>222</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>254</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>287</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>291</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>304</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>305</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>335</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>415</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>419</td>
<td>ASP</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>D</td>
<td>427</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>447</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>453</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>458</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>492</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>517</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>528</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>543</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>548</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>168</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>175</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>179</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>222</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>254</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>287</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>291</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>304</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>305</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>335</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>415</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>419</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>427</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>447</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>453</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>458</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>492</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>517</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>528</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>543</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>548</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>168</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>175</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>179</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>222</td>
<td>LEU</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F</td>
<td>254</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>287</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>291</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>304</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>305</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>335</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>415</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>419</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>427</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>447</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>453</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>458</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>492</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>517</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>528</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>543</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>548</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>168</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>175</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>179</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>222</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>254</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>287</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>291</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>304</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>305</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>335</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>415</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>419</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>427</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>447</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>453</td>
<td>THR</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>G</td>
<td>458</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>492</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>517</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>528</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>543</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>548</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>168</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>175</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>179</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>222</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>254</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>287</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>291</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>304</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>305</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>335</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>415</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>419</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>427</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>447</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>453</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>458</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>492</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>517</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>528</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>543</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>548</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>168</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>175</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>179</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>222</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>254</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>276</td>
<td>ASN</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I</td>
<td>287</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>291</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>304</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>305</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>335</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>415</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>419</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>427</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>447</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>453</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>458</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>492</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>517</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>528</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>543</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>548</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>168</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>175</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>179</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>222</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>254</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>287</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>291</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>304</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>305</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>335</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>415</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>419</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>427</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>447</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>453</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>458</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>492</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>517</td>
<td>GLU</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>J</td>
<td>528</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>543</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>548</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>168</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>175</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>179</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>222</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>254</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>287</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>291</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>304</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>305</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>335</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>415</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>419</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>427</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>447</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>453</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>458</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>492</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>517</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>528</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>543</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>548</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>168</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>175</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>179</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>222</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>254</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>287</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>291</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>304</td>
<td>VAL</td>
</tr>
</tbody>
</table>

Continued on next page...
**Continued from previous page...**

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>L</td>
<td>305</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>335</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>415</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>419</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>427</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>447</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>453</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>458</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>492</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>517</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>528</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>543</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>548</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>168</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>175</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>179</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>222</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>254</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>287</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>291</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>304</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>305</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>335</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>415</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>419</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>427</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>447</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>453</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>458</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>492</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>517</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>528</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>543</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>548</td>
<td>LYS</td>
</tr>
</tbody>
</table>

*Continued on next page...*
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>N</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>168</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>175</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>179</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>222</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>254</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>287</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>291</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>304</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>305</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>335</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>415</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>419</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>427</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>447</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>453</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>458</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>492</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>517</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>528</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>543</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>548</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>168</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>175</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>179</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>222</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>254</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>287</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>291</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>304</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>305</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>335</td>
<td>LEU</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>O</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>415</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>419</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>427</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>447</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>453</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>458</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>492</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>517</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>528</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>543</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>548</td>
<td>LYS</td>
</tr>
</tbody>
</table>

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (109) such sidechains are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>142</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>161</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>286</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>340</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>376</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>286</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>340</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>378</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>286</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>378</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>477</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>266</td>
<td>ASN</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>D</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>286</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>286</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>547</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>161</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>286</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>477</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>532</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>547</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>286</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>378</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>477</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>286</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>477</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>547</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>286</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>357</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>376</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>142</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>266</td>
<td>ASN</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>J</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>286</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>477</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>547</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>142</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>161</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>286</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>364</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>477</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>506</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>286</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>376</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>477</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>286</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>303</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>376</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>477</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>286</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>477</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>216</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>266</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>276</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>286</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>477</td>
<td>ASN</td>
</tr>
</tbody>
</table>
5.3.3 RNA

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates

There are no carbohydrates in this entry.

5.6 Ligand geometry

There are no ligands in this entry.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.