Feb 14, 2017 – 10:14 pm GMT

PDB ID : 1EWR
Title : CRYSTAL STRUCTURE OF TAQ MUTS
Authors : Obmolova, G.; Ban, C.; Hsieh, P.; Yang, W.
Deposited on : 2000-04-26
Resolution : 3.19 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org
A user guide is available at http://wwpdb.org/validation/2016/XrayValidationReportHelp
with specific help available everywhere you see the symbol.

The following versions of software and data (see references) were used in the production of this report:

MolProbity : 4.02b-467
Xtriage (Phenix) : 1.9-1692
EDS : trunk28620
Percentile statistics : 20161228.v01 (using entries in the PDB archive December 28th 2016)
Refmac : 5.8.0135
CCP4 : 6.5.0
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : recalc28949
1 Overall quality at a glance

The following experimental techniques were used to determine the structure: 
**X-RAY DIFFRACTION**

The reported resolution of this entry is 3.19 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>Similar resolution (#Entries, resolution range(Å))</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R_{free}$</td>
<td>100719</td>
<td>1015 (3.22-3.18)</td>
</tr>
<tr>
<td>Clashscore</td>
<td>112137</td>
<td>1009 (3.20-3.20)</td>
</tr>
<tr>
<td>Ramachandran outliers</td>
<td>110173</td>
<td>1118 (3.22-3.18)</td>
</tr>
<tr>
<td>Sidechain outliers</td>
<td>110143</td>
<td>1117 (3.22-3.18)</td>
</tr>
<tr>
<td>RSRZ outliers</td>
<td>101464</td>
<td>1020 (3.22-3.18)</td>
</tr>
</tbody>
</table>

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower 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 $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

<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>A</td>
<td>649</td>
<td><img src="#" alt="Quality Bar" /></td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>649</td>
<td><img src="#" alt="Quality Bar" /></td>
</tr>
</tbody>
</table>
## 2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 7593 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, 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 DNA MISMATCH REPAIR PROTEIN MUTS.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>447</td>
<td>Total C N O Se</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3468 2209 626 626 7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>529</td>
<td>Total C N O Se</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4125 2623 740 755 7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There are 14 discrepancies between the modelled and reference sequences:

<table>
<thead>
<tr>
<th>Chain</th>
<th>Residue</th>
<th>Modelled</th>
<th>Actual</th>
<th>Comment</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>250</td>
<td>MSE</td>
<td>MET</td>
<td>MODIFIED</td>
<td>UNP Q56215</td>
</tr>
<tr>
<td>A</td>
<td>574</td>
<td>MSE</td>
<td>MET</td>
<td>MODIFIED</td>
<td>UNP Q56215</td>
</tr>
<tr>
<td>A</td>
<td>586</td>
<td>MSE</td>
<td>MET</td>
<td>MODIFIED</td>
<td>UNP Q56215</td>
</tr>
<tr>
<td>A</td>
<td>640</td>
<td>MSE</td>
<td>MET</td>
<td>MODIFIED</td>
<td>UNP Q56215</td>
</tr>
<tr>
<td>A</td>
<td>643</td>
<td>MSE</td>
<td>MET</td>
<td>MODIFIED</td>
<td>UNP Q56215</td>
</tr>
<tr>
<td>A</td>
<td>744</td>
<td>MSE</td>
<td>MET</td>
<td>MODIFIED</td>
<td>UNP Q56215</td>
</tr>
<tr>
<td>A</td>
<td>762</td>
<td>MSE</td>
<td>MET</td>
<td>MODIFIED</td>
<td>UNP Q56215</td>
</tr>
<tr>
<td>B</td>
<td>1250</td>
<td>MSE</td>
<td>MET</td>
<td>MODIFIED</td>
<td>UNP Q56215</td>
</tr>
<tr>
<td>B</td>
<td>1574</td>
<td>MSE</td>
<td>MET</td>
<td>MODIFIED</td>
<td>UNP Q56215</td>
</tr>
<tr>
<td>B</td>
<td>1586</td>
<td>MSE</td>
<td>MET</td>
<td>MODIFIED</td>
<td>UNP Q56215</td>
</tr>
<tr>
<td>B</td>
<td>1640</td>
<td>MSE</td>
<td>MET</td>
<td>MODIFIED</td>
<td>UNP Q56215</td>
</tr>
<tr>
<td>B</td>
<td>1643</td>
<td>MSE</td>
<td>MET</td>
<td>MODIFIED</td>
<td>UNP Q56215</td>
</tr>
<tr>
<td>B</td>
<td>1744</td>
<td>MSE</td>
<td>MET</td>
<td>MODIFIED</td>
<td>UNP Q56215</td>
</tr>
<tr>
<td>B</td>
<td>1762</td>
<td>MSE</td>
<td>MET</td>
<td>MODIFIED</td>
<td>UNP Q56215</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 and electron density. 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. A red dot above a residue indicates a poor fit to the electron density (RSRZ > 2). 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: DNA MISMATCH REPAIR PROTEIN MUTS

Chain A:
• Molecule 1: DNA MISMATCH REPAIR PROTEIN MUTS

Chain B:
4  Data and refinement statistics

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space group</td>
<td>P 3 1 2 1</td>
<td>Depositor</td>
</tr>
<tr>
<td>Cell constants</td>
<td>96.73Å 96.73Å 427.13Å</td>
<td>Depositor</td>
</tr>
<tr>
<td>a, b, c, α, β, γ</td>
<td>90.00° 90.00° 120.00°</td>
<td>Depositor</td>
</tr>
<tr>
<td>Resolution (Å)</td>
<td>19.94 – 3.19</td>
<td>Depositor</td>
</tr>
<tr>
<td>% Data completeness (in resolution range)</td>
<td>93.0 (19.94-3.19)</td>
<td>Depositor</td>
</tr>
<tr>
<td></td>
<td>94.2 (19.94-3.20)</td>
<td>Depositor</td>
</tr>
<tr>
<td>Rmerge</td>
<td>0.07</td>
<td>Depositor</td>
</tr>
<tr>
<td>Rsym</td>
<td>(Not available)</td>
<td>Depositor</td>
</tr>
<tr>
<td>&lt; I/σ(I) &gt;¹</td>
<td>1.47 (at 3.22Å)</td>
<td>Xtriage</td>
</tr>
<tr>
<td>Refinement program</td>
<td>CNS 0.9</td>
<td>Depositor</td>
</tr>
<tr>
<td>R, Rfree</td>
<td>0.331 , 0.361</td>
<td>Depositor</td>
</tr>
<tr>
<td>Rfree test set</td>
<td>1813 reflections (4.87%)</td>
<td>DCC</td>
</tr>
<tr>
<td>Wilson B-factor (Å²)</td>
<td>98.6</td>
<td>Xtriage</td>
</tr>
<tr>
<td>Anisotropy</td>
<td>0.224</td>
<td>Xtriage</td>
</tr>
<tr>
<td>Bulk solvent k_{sol}(e/Å³), B_{sol}(Å²)</td>
<td>0.31 , 52.7</td>
<td>EDS</td>
</tr>
<tr>
<td>L-test for twinning²</td>
<td>&lt;</td>
<td>L</td>
</tr>
<tr>
<td>Estimated twinning fraction</td>
<td>0.058 for -h,-k,l</td>
<td>Xtriage</td>
</tr>
<tr>
<td>F_o-F_c correlation</td>
<td>0.84</td>
<td>EDS</td>
</tr>
<tr>
<td>Total number of atoms</td>
<td>7593</td>
<td>wwPDB-VP</td>
</tr>
<tr>
<td>Average B, all atoms (Å²)</td>
<td>101.0</td>
<td>wwPDB-VP</td>
</tr>
</tbody>
</table>

Xtriage’s analysis on translational NCS is as follows: The largest off-origin peak in the Patterson function is 3.30% of the height of the origin peak. No significant pseudotranslation is detected.

¹Intensities estimated from amplitudes.
²Theoretical values of < |L| >, < L² > for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.
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>0.48</td>
<td>0/3526</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>0.51</td>
<td>0/4192</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>0.50</td>
<td>0/7718</td>
</tr>
</tbody>
</table>

There are no bond length outliers.
There are no bond angle outliers.
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>3468</td>
<td>0</td>
<td>3513</td>
<td>435</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>4125</td>
<td>0</td>
<td>4200</td>
<td>526</td>
<td>0</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>7593</td>
<td>0</td>
<td>7713</td>
<td>949</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 62.

All (949) 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>
</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:B:1557:ARG:HH21</td>
<td>1:B:1610:PRO:HA</td>
<td>1.23</td>
<td>0.99</td>
</tr>
<tr>
<td>1:B:1117:THR:HG22</td>
<td>1:B:1119:GLY:H</td>
<td>1.28</td>
<td>0.98</td>
</tr>
<tr>
<td>1:B:1698:PHE:O</td>
<td>1:B:1701:THR:HG22</td>
<td>1.63</td>
<td>0.97</td>
</tr>
<tr>
<td>1:B:1160:LEU:O</td>
<td>1:B:1166:LEU:HA</td>
<td>1.43</td>
<td>0.97</td>
</tr>
<tr>
<td>1:B:1129:ARG:H</td>
<td>1:B:1129:ARG:HE</td>
<td>1.11</td>
<td>0.96</td>
</tr>
<tr>
<td>1:A:677:ALA:HB1</td>
<td>1:A:700:LEU:HD11</td>
<td>1.47</td>
<td>0.95</td>
</tr>
<tr>
<td>1:A:290:SER:HA</td>
<td>1:A:293:ARG:HH12</td>
<td>1.31</td>
<td>0.94</td>
</tr>
<tr>
<td>1:B:1296:LEU:HD12</td>
<td>1:B:1302:LEU:HG</td>
<td>1.49</td>
<td>0.94</td>
</tr>
<tr>
<td>1:A:722:LEU:HB2</td>
<td>1:A:744:MSE:SE</td>
<td>2.18</td>
<td>0.94</td>
</tr>
<tr>
<td>1:B:1674:VAL:HG13</td>
<td>1:B:1699:GLU:HG3</td>
<td>1.50</td>
<td>0.94</td>
</tr>
<tr>
<td>1:A:698:PHE:O</td>
<td>1:A:701:THR:HG22</td>
<td>1.68</td>
<td>0.93</td>
</tr>
<tr>
<td>1:B:1717:GLU:HA</td>
<td>1:B:1722:LEU:HA</td>
<td>1.51</td>
<td>0.92</td>
</tr>
<tr>
<td>1:A:674:VAL:HG13</td>
<td>1:A:699:GLU:HG3</td>
<td>1.50</td>
<td>0.92</td>
</tr>
<tr>
<td>1:A:250:MSE:HE3</td>
<td>1:A:604:GLN:OE1</td>
<td>1.70</td>
<td>0.91</td>
</tr>
<tr>
<td>1:B:1590:SER:HA</td>
<td>1:B:1593:LEU:HD12</td>
<td>1.53</td>
<td>0.91</td>
</tr>
<tr>
<td>1:B:1122:LEU:HD21</td>
<td>1:B:1341:LEU:HD13</td>
<td>1.51</td>
<td>0.90</td>
</tr>
<tr>
<td>1:B:1354:ARG:HH2</td>
<td>1:B:1354:ARG:HG2</td>
<td>1.32</td>
<td>0.90</td>
</tr>
<tr>
<td>1:B:1366:LEU:HD11</td>
<td>1:B:1527:LEU:HD21</td>
<td>1.52</td>
<td>0.90</td>
</tr>
<tr>
<td>1:B:1674:VAL:CG1</td>
<td>1:B:1699:GLU:HG3</td>
<td>2.02</td>
<td>0.89</td>
</tr>
<tr>
<td>1:B:1129:ARG:HB2</td>
<td>1:B:1285:ARG:HD2</td>
<td>1.54</td>
<td>0.89</td>
</tr>
<tr>
<td>1:B:1677:ALA:HB1</td>
<td>1:B:1700:LEU:HD11</td>
<td>1.53</td>
<td>0.89</td>
</tr>
<tr>
<td>1:B:1290:SER:HA</td>
<td>1:B:1293:ARG:HH12</td>
<td>1.37</td>
<td>0.89</td>
</tr>
<tr>
<td>1:B:1325:LEU:HD12</td>
<td>1:B:1362:LEU:HD23</td>
<td>1.54</td>
<td>0.89</td>
</tr>
<tr>
<td>1:A:674:VAL:CG1</td>
<td>1:A:699:GLU:HG3</td>
<td>2.04</td>
<td>0.88</td>
</tr>
<tr>
<td>1:B:1129:ARG:HB3</td>
<td>1:B:1282:ALA:HA</td>
<td>1.55</td>
<td>0.88</td>
</tr>
<tr>
<td>1:A:263:PHE:HE2</td>
<td>1:A:292:LEU:HD12</td>
<td>1.36</td>
<td>0.87</td>
</tr>
<tr>
<td>1:A:590:SER:HA</td>
<td>1:A:593:LEU:HD12</td>
<td>1.53</td>
<td>0.87</td>
</tr>
<tr>
<td>1:B:1335:LEU:HD11</td>
<td>1:B:1352:LEU:HB2</td>
<td>1.55</td>
<td>0.87</td>
</tr>
<tr>
<td>1:B:1557:ARG:HH21</td>
<td>1:B:1610:PRO:CA</td>
<td>1.86</td>
<td>0.87</td>
</tr>
<tr>
<td>1:B:1209:PRO:HB2</td>
<td>1:B:1218:ARG:HH21</td>
<td>1.39</td>
<td>0.87</td>
</tr>
<tr>
<td>1:A:639:PHE:CZ</td>
<td>1:A:643:MSE:HE3</td>
<td>2.11</td>
<td>0.86</td>
</tr>
<tr>
<td>1:A:345:SER:HB2</td>
<td>1:A:346:PRO:HD2</td>
<td>1.55</td>
<td>0.86</td>
</tr>
<tr>
<td>1:B:1718:GLU:HB2</td>
<td>1:B:1723:VAL:CG2</td>
<td>2.07</td>
<td>0.84</td>
</tr>
<tr>
<td>1:B:1639:PHE:CZ</td>
<td>1:B:1643:MSE:HE3</td>
<td>2.12</td>
<td>0.84</td>
</tr>
<tr>
<td>1:A:557:ARG:HH21</td>
<td>1:A:610:PRO:CA</td>
<td>1.91</td>
<td>0.83</td>
</tr>
<tr>
<td>1:B:1161:LYS:H</td>
<td>1:B:1161:LYS:HE2</td>
<td>1.39</td>
<td>0.83</td>
</tr>
<tr>
<td>1:B:1280:ARG:HG3</td>
<td>1:B:1280:ARG:HH11</td>
<td>1.43</td>
<td>0.82</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:B:1154:GLU:HA</td>
<td>1:B:1239:GLN:NE2</td>
<td>1.95</td>
<td>0.81</td>
</tr>
<tr>
<td>1:A:148:LEU:HB3</td>
<td>1:A:224:LEU:HD13</td>
<td>1.60</td>
<td>0.81</td>
</tr>
<tr>
<td>1:B:1568:VAL:HG11</td>
<td>1:B:1727:GLN:HE22</td>
<td>1.43</td>
<td>0.81</td>
</tr>
<tr>
<td>1:B:1646:VAL:HA</td>
<td>1:B:1649:ILE:CD1</td>
<td>2.11</td>
<td>0.80</td>
</tr>
<tr>
<td>1:B:1354:ARG:NH1</td>
<td>1:B:1354:ARG:HG2</td>
<td>1.94</td>
<td>0.80</td>
</tr>
<tr>
<td>1:A:143:TRP:CE3</td>
<td>1:A:166:LEU:HD22</td>
<td>2.16</td>
<td>0.79</td>
</tr>
<tr>
<td>1:B:1563:ARG:HA</td>
<td>1:B:1563:ARG:HE</td>
<td>1.44</td>
<td>0.79</td>
</tr>
<tr>
<td>1:A:597:ALA:HB2</td>
<td>1:A:660:LEU:HD11</td>
<td>1.64</td>
<td>0.79</td>
</tr>
<tr>
<td>1:B:1597:ALA:HB2</td>
<td>1:B:1660:LEU:HD11</td>
<td>1.64</td>
<td>0.79</td>
</tr>
<tr>
<td>1:A:519:GLU:HA</td>
<td>1:A:522:ARG:NH1</td>
<td>1.97</td>
<td>0.79</td>
</tr>
<tr>
<td>1:B:1366:LEU:HD11</td>
<td>1:B:1527:LEU:CD2</td>
<td>2.14</td>
<td>0.78</td>
</tr>
<tr>
<td>1:B:1715:ALA:HA</td>
<td>1:B:1724:PHE:HA</td>
<td>1.64</td>
<td>0.78</td>
</tr>
<tr>
<td>1:A:161:LYS:HE2</td>
<td>1:A:161:LYS:H</td>
<td>1.48</td>
<td>0.78</td>
</tr>
<tr>
<td>1:B:1209:PRO:HB2</td>
<td>1:B:1218:ARG:NH2</td>
<td>1.99</td>
<td>0.78</td>
</tr>
<tr>
<td>1:A:697:TYR:HB2</td>
<td>1:A:700:LEU:HD12</td>
<td>1.66</td>
<td>0.77</td>
</tr>
<tr>
<td>1:B:1508:GLU:O</td>
<td>1:B:1512:ARG:HG3</td>
<td>1.84</td>
<td>0.77</td>
</tr>
<tr>
<td>1:B:1279:THR:HG21</td>
<td>1:B:1285:ARG:HB2</td>
<td>1.66</td>
<td>0.77</td>
</tr>
<tr>
<td>1:B:1352:LEU:O</td>
<td>1:B:1352:LEU:HD12</td>
<td>1.84</td>
<td>0.77</td>
</tr>
<tr>
<td>1:A:718:GLU:HB2</td>
<td>1:A:723:VAL:HG21</td>
<td>1.67</td>
<td>0.77</td>
</tr>
<tr>
<td>1:B:1331:ASP:OD2</td>
<td>1:B:1334:ARG:HD2</td>
<td>1.83</td>
<td>0.76</td>
</tr>
<tr>
<td>1:A:143:TRP:HE3</td>
<td>1:A:166:LEU:HD22</td>
<td>1.50</td>
<td>0.76</td>
</tr>
<tr>
<td>1:B:1122:LEU:CD2</td>
<td>1:B:1341:LEU:HD13</td>
<td>2.15</td>
<td>0.76</td>
</tr>
<tr>
<td>1:B:1544:ARG:HB2</td>
<td>1:B:1608:PHE:CZ</td>
<td>2.20</td>
<td>0.76</td>
</tr>
<tr>
<td>1:A:322:VAL:O</td>
<td>1:A:326:LEU:HG</td>
<td>1.86</td>
<td>0.76</td>
</tr>
<tr>
<td>1:A:568:VAL:HG12</td>
<td>1:A:727:GLN:HE22</td>
<td>1.51</td>
<td>0.76</td>
</tr>
<tr>
<td>1:B:1143:TRP:CE3</td>
<td>1:B:1166:LEU:HD22</td>
<td>2.20</td>
<td>0.76</td>
</tr>
<tr>
<td>1:B:1160:LEU:HD22</td>
<td>1:B:1166:LEU:CA</td>
<td>2.16</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:261:GLU:CG</td>
<td>1:A:266:LEU:HG</td>
<td>2.16</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:646:VAL:HA</td>
<td>1:A:649:ILE:CD1</td>
<td>2.15</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:742:ALA:HA</td>
<td>1:A:1643:MSE:HG3</td>
<td>1.66</td>
<td>0.75</td>
</tr>
<tr>
<td>1:B:1296:LEU:HD13</td>
<td>1:B:1301:PRO:HB2</td>
<td>1.67</td>
<td>0.74</td>
</tr>
<tr>
<td>1:B:1129:ARG:O</td>
<td>1:B:1286:ARG:HG3</td>
<td>1.86</td>
<td>0.74</td>
</tr>
<tr>
<td>1:B:1117:THR:HG22</td>
<td>1:B:1119:GLY:N</td>
<td>2.00</td>
<td>0.74</td>
</tr>
<tr>
<td>1:B:1298:ASP:O</td>
<td>1:B:1301:PRO:HD2</td>
<td>1.86</td>
<td>0.74</td>
</tr>
<tr>
<td>1:B:1718:GLU:HB2</td>
<td>1:B:1723:VAL:HG21</td>
<td>1.69</td>
<td>0.74</td>
</tr>
<tr>
<td>1:B:1718:GLU:OE1</td>
<td>1:B:1723:VAL:HG21</td>
<td>1.87</td>
<td>0.74</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:A:672:ASP:O</td>
<td>1:A:676:ILE:HG12</td>
<td>1.88</td>
<td>0.74</td>
</tr>
<tr>
<td>1:B:1143:TRP:HE3</td>
<td>1:B:1166:LEU:HD22</td>
<td>1.51</td>
<td>0.74</td>
</tr>
<tr>
<td>1:B:1144:GLY:HA3</td>
<td>1:B:1216:ALA:O</td>
<td>1.87</td>
<td>0.74</td>
</tr>
<tr>
<td>1:B:1222:GLY:HA2</td>
<td>1:B:1225:LEU:HD12</td>
<td>1.69</td>
<td>0.74</td>
</tr>
<tr>
<td>1:B:1118:PRO:HD2</td>
<td>1:B:1177:GLU:OE1</td>
<td>1.87</td>
<td>0.73</td>
</tr>
<tr>
<td>1:B:1339:LEU:O</td>
<td>1:B:1511:LYS:HD2</td>
<td>1.89</td>
<td>0.73</td>
</tr>
<tr>
<td>1:B:1693:PHE:HE2</td>
<td>1:B:1695:THR:HB</td>
<td>1.52</td>
<td>0.73</td>
</tr>
<tr>
<td>1:B:1710:ASN:O</td>
<td>1:B:1711:LEU:HD23</td>
<td>1.88</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:710:ASN:O</td>
<td>1:A:711:LEU:HD23</td>
<td>1.87</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:557:ARG:HA</td>
<td>1:A:567:PHE:HE2</td>
<td>1.52</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:568:VAL:CG1</td>
<td>1:A:727:GLN:HE22</td>
<td>2.01</td>
<td>0.73</td>
</tr>
<tr>
<td>1:B:1366:LEU:CD1</td>
<td>1:B:1527:LEU:HD21</td>
<td>2.18</td>
<td>0.73</td>
</tr>
<tr>
<td>1:B:1715:ALA:O</td>
<td>1:B:1716:ARG:HG2</td>
<td>1.87</td>
<td>0.72</td>
</tr>
<tr>
<td>1:A:290:SER:HA</td>
<td>1:A:293:ARG:NH1</td>
<td>2.02</td>
<td>0.72</td>
</tr>
<tr>
<td>1:B:1228:ALA:HB3</td>
<td>1:B:1236:LEU:HD11</td>
<td>1.72</td>
<td>0.72</td>
</tr>
<tr>
<td>1:B:1250:MSE:HE3</td>
<td>1:B:1604:GLN:OE1</td>
<td>1.90</td>
<td>0.72</td>
</tr>
<tr>
<td>1:B:1557:ARG:NH2</td>
<td>1:B:1610:PRO:HA</td>
<td>2.01</td>
<td>0.72</td>
</tr>
<tr>
<td>1:B:1708:LEU:HG</td>
<td>1:B:1709:LYS:H</td>
<td>1.54</td>
<td>0.71</td>
</tr>
<tr>
<td>1:B:1217:LEU:HD23</td>
<td>1:B:1218:ARG:N</td>
<td>2.05</td>
<td>0.71</td>
</tr>
<tr>
<td>1:B:1290:SER:HA</td>
<td>1:B:1293:ARG:NH1</td>
<td>2.05</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:280:ARG:HB2</td>
<td>1:A:528:ASP:OD1</td>
<td>1.90</td>
<td>0.71</td>
</tr>
<tr>
<td>1:B:1697:TYR:HB2</td>
<td>1:B:1700:LEU:HD12</td>
<td>1.72</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:572:LEU:HD13</td>
<td>1:A:592:PHE:HZ</td>
<td>1.55</td>
<td>0.71</td>
</tr>
<tr>
<td>1:B:1557:ARG:HA</td>
<td>1:B:1567:PHE:HE2</td>
<td>1.53</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:250:MSE:HB3</td>
<td>1:A:295:PRO:HB2</td>
<td>1.71</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:752:VAL:O</td>
<td>1:A:755:ALA:HB3</td>
<td>1.90</td>
<td>0.71</td>
</tr>
<tr>
<td>1:B:1261:GLU:CG</td>
<td>1:B:1266:LEU:HG</td>
<td>2.20</td>
<td>0.71</td>
</tr>
<tr>
<td>1:B:1161:LYS:HD2</td>
<td>1:B:1162:SER:H</td>
<td>1.56</td>
<td>0.71</td>
</tr>
<tr>
<td>1:B:1532:ALA:O</td>
<td>1:B:1535:GLU:HB3</td>
<td>1.90</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:600:ALA:HA</td>
<td>1:A:616:LEU:HD13</td>
<td>1.73</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:548:GLY:O</td>
<td>1:A:617:PRO:HA</td>
<td>1.91</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:584:PRO:HG3</td>
<td>1:A:715:ALA:HB2</td>
<td>1.72</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:1739:VAL:HG21</td>
<td>1:B:1759:LEU:HD12</td>
<td>1.72</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:1122:LEU:HD12</td>
<td>1:B:1122:LEU:O</td>
<td>1.91</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:557:ARG:NH2</td>
<td>1:A:610:PRO:HA</td>
<td>2.05</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:716:ARG:O</td>
<td>1:A:723:VAL:N</td>
<td>2.24</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:1132:ASN:O</td>
<td>1:B:1149:ASP:HB2</td>
<td>1.90</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:708:LEU:HG</td>
<td>1:A:709:LYS:H</td>
<td>1.54</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:1717:GLU:HG</td>
<td>1:B:1722:LEU:HA</td>
<td>2.20</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:1563:ARG:CA</td>
<td>1:B:1563:ARG:HE</td>
<td>2.05</td>
<td>0.70</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:B:1589:LYS:HZ2</td>
<td>1:B:1696:HIS:CE1</td>
<td>2.09</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:250:MSE:HA</td>
<td>1:A:620:ASP:O</td>
<td>1.90</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:1672:ASP:O</td>
<td>1:B:1676:ILE:HG12</td>
<td>1.90</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:1120:THR:O</td>
<td>1:B:1150:VAL:HG21</td>
<td>1.92</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:1646:VAL:HA</td>
<td>1:B:1649:ILE:HD12</td>
<td>1.74</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:1723:VAL:O</td>
<td>1:B:1723:VAL:HG12</td>
<td>1.91</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:698:PHE:O</td>
<td>1:A:701:THR:CG2</td>
<td>2.39</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:1192:ASP:O</td>
<td>1:B:1196:LYS:HG2</td>
<td>1.92</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:170:LEU:O</td>
<td>1:A:170:LEU:HD13</td>
<td>1.91</td>
<td>0.69</td>
</tr>
<tr>
<td>1:B:1161:LYS:CE</td>
<td>1:B:1161:LYS:H</td>
<td>2.04</td>
<td>0.69</td>
</tr>
<tr>
<td>1:B:1716:ARG:H</td>
<td>1:B:1723:VAL:H</td>
<td>1.39</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:174:ARG:HH11</td>
<td>1:A:174:ARG:HB3</td>
<td>1.57</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:696:HIS:O</td>
<td>1:B:1669:SER:HB3</td>
<td>1.94</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:563:ARG:CA</td>
<td>1:A:563:ARG:HE</td>
<td>2.07</td>
<td>0.68</td>
</tr>
<tr>
<td>1:B:1718:GLU:HB2</td>
<td>1:B:1723:VAL:HG23</td>
<td>1.73</td>
<td>0.68</td>
</tr>
<tr>
<td>1:B:1171:PHE:CE2</td>
<td>1:B:1254:GLU:HG3</td>
<td>2.28</td>
<td>0.68</td>
</tr>
<tr>
<td>1:B:1322:VAL:O</td>
<td>1:B:1326:LEU:HG</td>
<td>1.94</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:693:PHE:CE2</td>
<td>1:A:695:THR:HB</td>
<td>2.30</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:161:LYS:HD2</td>
<td>1:A:162:SER:H</td>
<td>1.60</td>
<td>0.67</td>
</tr>
<tr>
<td>1:B:1228:ALA:O</td>
<td>1:B:1232:GLN:HB2</td>
<td>1.93</td>
<td>0.67</td>
</tr>
<tr>
<td>1:B:1352:LEU:HD12</td>
<td>1:B:1356:LEU:HG</td>
<td>1.76</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:742:ALA:HB1</td>
<td>1:A:747:LEU:CD1</td>
<td>2.25</td>
<td>0.67</td>
</tr>
<tr>
<td>1:B:1232:GLN:HG3</td>
<td>1:B:1236:LEU:HD23</td>
<td>1.76</td>
<td>0.67</td>
</tr>
<tr>
<td>1:B:1290:SER:CA</td>
<td>1:B:1293:ARG:HH12</td>
<td>2.08</td>
<td>0.67</td>
</tr>
<tr>
<td>1:B:1378:LEU:HG</td>
<td>1:B:1510:ALA:HA</td>
<td>1.77</td>
<td>0.67</td>
</tr>
<tr>
<td>1:B:1263:PHE:HE2</td>
<td>1:B:1292:LEU:HD12</td>
<td>1.60</td>
<td>0.66</td>
</tr>
<tr>
<td>1:B:1600:ALA:HA</td>
<td>1:B:1616:LEU:HD13</td>
<td>1.75</td>
<td>0.66</td>
</tr>
<tr>
<td>1:B:1332:LEU:H</td>
<td>1:B:1332:LEU:HD12</td>
<td>1.60</td>
<td>0.66</td>
</tr>
<tr>
<td>1:B:1698:PHE:O</td>
<td>1:B:1701:THR:CG2</td>
<td>2.40</td>
<td>0.66</td>
</tr>
<tr>
<td>1:A:625:ARG:HG3</td>
<td>1:A:625:ARG:HH11</td>
<td>1.60</td>
<td>0.66</td>
</tr>
<tr>
<td>1:B:1313:VAL:HG13</td>
<td>1:B:1538:VAL:CG2</td>
<td>2.24</td>
<td>0.66</td>
</tr>
<tr>
<td>1:B:1313:VAL:HG23</td>
<td>1:B:1534:ALA:HB1</td>
<td>1.78</td>
<td>0.66</td>
</tr>
<tr>
<td>1:B:1593:LEU:HD21</td>
<td>1:B:1694:ALA:HB2</td>
<td>1.78</td>
<td>0.66</td>
</tr>
<tr>
<td>1:A:712:HIS:ND1</td>
<td>1:A:731:GLY:O</td>
<td>2.29</td>
<td>0.66</td>
</tr>
<tr>
<td>1:B:1366:LEU:HD12</td>
<td>1:B:1370:VAL:HG21</td>
<td>1.77</td>
<td>0.66</td>
</tr>
<tr>
<td>1:B:1522:ARG:HH11</td>
<td>1:B:1522:ARG:HG2</td>
<td>1.61</td>
<td>0.66</td>
</tr>
<tr>
<td>1:B:1313:VAL:HG13</td>
<td>1:B:1538:VAL:HG22</td>
<td>1.77</td>
<td>0.66</td>
</tr>
<tr>
<td>1:B:1536:VAL:HG12</td>
<td>1:B:1537:ALA:N</td>
<td>2.11</td>
<td>0.65</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:535:GLU:HG3</td>
<td>1:A:539:ARG:HH12</td>
<td>1.61</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:192:ASP:O</td>
<td>1:A:196:LYS:HG2</td>
<td>1.96</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:1752:VAL:O</td>
<td>1:B:1755:ALA:HB3</td>
<td>1.95</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:1247:GLY:HA2</td>
<td>1:B:1251:ARG:NH1</td>
<td>2.12</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:758:LEU:HB3</td>
<td>1:A:762:MSE:CE</td>
<td>2.26</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:1117:THR:HB</td>
<td>1:B:1120:THR:OG1</td>
<td>1.96</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:1174:ARG:HH11</td>
<td>1:B:1174:ARG:HB3</td>
<td>1.62</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:1210:GLU:O</td>
<td>1:B:1218:ARG:HB3</td>
<td>1.97</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:293:ARG:NH1</td>
<td>1:A:293:ARG:HB2</td>
<td>2.12</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:1272:LEU:HD11</td>
<td>1:B:1602:LEU:HD21</td>
<td>1.77</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:715:ALA:HB1</td>
<td>1:A:722:LEU:HD22</td>
<td>1.78</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:260:LEU:HD21</td>
<td>1:A:597:ALA:HB1</td>
<td>1.78</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:625:ARG:NH2</td>
<td>1:A:627:GLY:O</td>
<td>2.30</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:132:ASN:O</td>
<td>1:A:149:ASP:HB2</td>
<td>1.98</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:1299:ARG:NH2</td>
<td>1:B:1547:PHE:HB2</td>
<td>2.12</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:1693:PHE:CE2</td>
<td>1:B:1695:THR:HB</td>
<td>2.30</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:148:LEU:HD12</td>
<td>1:A:155:PHE:CD1</td>
<td>2.31</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:581:ILE:HG22</td>
<td>1:A:589:LYS:HG2</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:1315:GLU:HB3</td>
<td>1:B:1318:LEU:HB3</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:646:VAL:HA</td>
<td>1:A:649:ILE:HD12</td>
<td>1.79</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:1580:LEU:HA</td>
<td>1:B:1693:PHE:O</td>
<td>1.98</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:1742:ALA:HB1</td>
<td>1:B:1747:LEU:CD1</td>
<td>2.28</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:284:GLY:HA2</td>
<td>1:A:525:ALA:HB1</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:647:ALA:O</td>
<td>1:A:651:LYS:HG3</td>
<td>1.98</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:290:SER:CA</td>
<td>1:A:293:ARG:HH12</td>
<td>2.09</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:1129:ARG:N</td>
<td>1:B:1129:ARG:HE</td>
<td>1.90</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:1250:MSE:SE</td>
<td>1:B:1622:ILE:HG13</td>
<td>2.47</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:1280:ARG:HG3</td>
<td>1:B:1280:ARG:NH1</td>
<td>2.11</td>
<td>0.63</td>
</tr>
<tr>
<td>1:B:1313:VAL:CG2</td>
<td>1:B:1534:ALA:HB1</td>
<td>2.28</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:263:PHE:HE2</td>
<td>1:A:292:LEU:CD1</td>
<td>2.08</td>
<td>0.63</td>
</tr>
<tr>
<td>1:B:1625:ARG:HG3</td>
<td>1:B:1625:ARG:HH11</td>
<td>1.63</td>
<td>0.63</td>
</tr>
<tr>
<td>1:B:1647:ALA:O</td>
<td>1:B:1651:LYS:HG3</td>
<td>1.99</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:319:ARG:HD2</td>
<td>1:A:534:ALA:HB3</td>
<td>1.80</td>
<td>0.63</td>
</tr>
<tr>
<td>1:B:1534:ALA:O</td>
<td>1:B:1538:VAL:HG23</td>
<td>1.98</td>
<td>0.63</td>
</tr>
<tr>
<td>1:B:1581:ILE:O</td>
<td>1:B:1589:LYS:HD3</td>
<td>1.99</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:743:ALA:HB2</td>
<td>1:A:752:VAL:HG11</td>
<td>1.79</td>
<td>0.62</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:B:1742:ALA:C</td>
<td>1:B:1747:LEU:HD12</td>
<td>2.19</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:1717:GLU:N</td>
<td>1:B:1722:LEU:HD23</td>
<td>2.13</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:1722:LEU:HB2</td>
<td>1:B:1744:MSE:SE</td>
<td>2.49</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:1568:VAL:CG1</td>
<td>1:B:1727:GLN:HE22</td>
<td>2.11</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:539:ARG:HB2</td>
<td>1:A:539:ARG:NH1</td>
<td>2.14</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:1117:THR:HG23</td>
<td>1:B:1177:GLU:CD</td>
<td>2.20</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:1130:GLU:HG3</td>
<td>1:B:1285:ARG:HD3</td>
<td>1.80</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:1346:PRO:HG3</td>
<td>1:B:1503:PHE:CZ</td>
<td>2.35</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:1712:HIS:ND1</td>
<td>1:B:1731:GLY:O</td>
<td>2.32</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:181:ALA:O</td>
<td>1:A:185:LEU:HG</td>
<td>1.98</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:1743:ALA:HB2</td>
<td>1:B:1752:VAL:CG1</td>
<td>2.29</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:750:GLU:CD</td>
<td>1:A:750:GLU:H</td>
<td>2.02</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:743:ALA:HB2</td>
<td>1:A:752:VAL:CG1</td>
<td>2.29</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:1717:GLU:HA</td>
<td>1:B:1722:LEU:CA</td>
<td>2.29</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:297:LEU:O</td>
<td>1:A:618:LEU:HD13</td>
<td>2.00</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:1698:PHE:O</td>
<td>1:B:1701:THR:N</td>
<td>2.33</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:1367:GLY:C</td>
<td>1:B:1369:GLU:H</td>
<td>2.04</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:1578:LEU:HD23</td>
<td>1:B:1578:LEU:C</td>
<td>2.19</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:1743:ALA:HB2</td>
<td>1:B:1752:VAL:HG11</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:1129:ARG:HZ</td>
<td>1:B:1285:ARG:NH1</td>
<td>2.63</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:1373:PRO:HG2</td>
<td>1:B:1519:GLU:HG2</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:1609:VAL:HB</td>
<td>1:B:1610:PRO:HD2</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:1292:LEU:HD23</td>
<td>1:B:1605:VAL:HG21</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:654:THR:O</td>
<td>1:A:689:ALA:HB2</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:1261:GLU:HG3</td>
<td>1:B:1266:LEU:HG</td>
<td>1.81</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:1250:MSE:HB3</td>
<td>1:B:1295:PRO:HB2</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:1129:ARG:H</td>
<td>1:B:1129:ARG:NE</td>
<td>1.91</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:581:ILE:O</td>
<td>1:A:589:LYS:HD3</td>
<td>2.00</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:1211:GLY:O</td>
<td>1:B:1218:ARG:HD2</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:1587:ALA:HB3</td>
<td>1:B:1713:VAL:HG21</td>
<td>1.83</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:1174:ARG:HB3</td>
<td>1:B:1174:ARG:NH1</td>
<td>2.16</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:1572:LEU:HD13</td>
<td>1:B:1592:PHE:HZ</td>
<td>1.65</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:589:LYS:HZ2</td>
<td>1:A:696:HIS:CE1</td>
<td>2.19</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:1178:VAL:O</td>
<td>1:B:1202:LEU:HA</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:1170:LEU:HD13</td>
<td>1:B:1170:LEU:O</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:1574:MSE:HE3</td>
<td>1:B:1579:VAL:HG23</td>
<td>1.82</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:586:MSE:HB2</td>
<td>1:A:724:PHE:CE2</td>
<td>2.36</td>
<td>0.60</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:A:581:ILE:CG2</td>
<td>1:A:589:LYS:HG2</td>
<td>2.31</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:1722:LEU:HD12</td>
<td>1:B:1744:MSE:SE</td>
<td>2.51</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:580:LEU:HA</td>
<td>1:A:693:PHE:O</td>
<td>2.00</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:1570:GLU:H</td>
<td>1:B:1750:GLU:CD</td>
<td>2.03</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:1581:ILE:HG22</td>
<td>1:B:1589:LYS:HG2</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:1654:THR:O</td>
<td>1:B:1689:ALA:HB2</td>
<td>2.02</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:221:ARG:HD3</td>
<td>1:A:241:PHE:CE1</td>
<td>2.37</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:578:LEU:HD22</td>
<td>1:A:708:LEU:HD12</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:578:LEU:HD23</td>
<td>1:A:578:LEU:C</td>
<td>2.22</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:1685:HIS:CD2</td>
<td>1:B:1705:LEU:HD13</td>
<td>2.37</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:1674:VAL:HG11</td>
<td>1:B:1699:GLU:HG3</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:209:PRO:HB2</td>
<td>1:A:218:ARG:NH2</td>
<td>2.01</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:698:PHE:O</td>
<td>1:A:701:THR:N</td>
<td>2.35</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:171:PHE:CE2</td>
<td>1:A:254:GLU:HG3</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:315:GLU:HB3</td>
<td>1:A:318:LEU:HB3</td>
<td>1.83</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:302:LEU:HD22</td>
<td>1:A:547:PHE:CZ</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:1716:ARG:O</td>
<td>1:B:1723:VAL:N</td>
<td>2.35</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:160:LEU:HD13</td>
<td>1:A:166:LEU:HD12</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:1578:LEU:HD22</td>
<td>1:B:1708:LEU:HD12</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:283:PRO:HB2</td>
<td>1:A:525:ALA:HB2</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:1161:LYS:CD</td>
<td>1:B:1161:LYS:H</td>
<td>2.15</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:1599:ILE:HG23</td>
<td>1:B:1609:VAL:HG21</td>
<td>1.85</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:1579:VAL:HB</td>
<td>1:B:1692:LEU:HD23</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:221:ARG:NH1</td>
<td>1:A:241:PHE:CD2</td>
<td>2.71</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:1166:LEU:HD23</td>
<td>1:B:1167:TYR:CD1</td>
<td>2.38</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:1117:THR:HG23</td>
<td>1:B:1177:GLU:OE1</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:578:LEU:HD22</td>
<td>1:A:708:LEU:CD1</td>
<td>2.33</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:1602:LEU:O</td>
<td>1:B:1605:VAL:HG12</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:321:GLY:O</td>
<td>1:A:325:LEU:HG</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:1342:GLY:O</td>
<td>1:B:1343:ARG:HG3</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:1291:TRP:CZ3</td>
<td>1:B:1305:ARG:HD3</td>
<td>2.37</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:1312:PHE:HD2</td>
<td>1:B:1319:ARG:HA</td>
<td>1.69</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:552:GLN:HG2</td>
<td>1:A:573:GLU:HG2</td>
<td>1.85</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:1578:LEU:HD22</td>
<td>1:B:1708:LEU:CD1</td>
<td>2.34</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:302:LEU:CD2</td>
<td>1:A:604:GLN:HA</td>
<td>2.34</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:685:HIS:CE1</td>
<td>1:A:707:ARG:HB2</td>
<td>2.39</td>
<td>0.58</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:B:1172:ARG:O</td>
<td>1:B:1293:ARG:HD2</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:261:GLU:HG</td>
<td>1:A:266:LEU:HG</td>
<td>1.86</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:1715:ALA:HB1</td>
<td>1:B:1722:LEU:HD22</td>
<td>1.86</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:587:ALA:HB3</td>
<td>1:A:713:VAL:HG21</td>
<td>1.85</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:1716:ARG:N</td>
<td>1:B:1723:VAL:H</td>
<td>2.01</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:558:HIS:HD2</td>
<td>1:A:561:VAL:HG23</td>
<td>1.69</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:593:LEU:HD21</td>
<td>1:A:694:ALA:HB2</td>
<td>1.84</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:722:LEU:HB2</td>
<td>1:A:744:MSE:CE</td>
<td>2.34</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:1658:LEU:HD12</td>
<td>1:B:1659:VAL:N</td>
<td>2.19</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:1716:ARG:O</td>
<td>1:B:1718:GLU:N</td>
<td>2.38</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:1120:THR:HG21</td>
<td>1:B:1231:THR:OG1</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:1321:GLY:O</td>
<td>1:B:1325:LEU:HG</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:1581:ILE:CG2</td>
<td>1:B:1589:LYS:HG2</td>
<td>2.35</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:137:ILE:HA</td>
<td>1:A:144:GLY:O</td>
<td>2.05</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:263:PHE:CE2</td>
<td>1:A:292:LEU:HD12</td>
<td>2.28</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:1533:LEU:O</td>
<td>1:B:1536:VAL:N</td>
<td>2.38</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:1564:ARG:O</td>
<td>1:B:1565:THR:HG23</td>
<td>2.05</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:713:VAL:HG12</td>
<td>1:A:728:VAL:HG22</td>
<td>1.86</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:1354:ARG:HG</td>
<td>1:B:1354:ARG:CG</td>
<td>2.08</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:282:ALA:N</td>
<td>1:A:283:PRO:CD</td>
<td>2.68</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:150:VAL:HG23</td>
<td>1:A:151:SER:N</td>
<td>2.20</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1317:ALA:O</td>
<td>1:B:1320:GLU:HB2</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1716:ARG:HB2</td>
<td>1:B:1723:VAL:HB</td>
<td>1.86</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1589:LYS:O</td>
<td>1:B:1592:PHE:HB3</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:261:GLU:HG3</td>
<td>1:A:266:LEU:HG</td>
<td>1.86</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:604:GLN:HE22</td>
<td>1:A:618:LEU:HA</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1501:GLU:O</td>
<td>1:B:1505:GLU:HG3</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1309:VAL:HG13</td>
<td>1:B:1534:ALA:HB2</td>
<td>1.88</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1685:HIS:CE1</td>
<td>1:B:1707:ARG:HB2</td>
<td>2.40</td>
<td>0.56</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:232:GLN:HG3</td>
<td>1:A:236:LEU:HD23</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:281:THR:HB</td>
<td>1:A:283:PRO:HD2</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:284:GLY:N</td>
<td>1:A:525:ALA:HB1</td>
<td>2.20</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1282:ALA:N</td>
<td>1:B:1283:PRO:CD</td>
<td>2.69</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1357:GLN:O</td>
<td>1:B:1360:PRO:HD2</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1379:LYS:O</td>
<td>1:B:1383:GLU:HG3</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1680:VAL:O</td>
<td>1:B:1683:ALA:HB3</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:581:ILE:HD13</td>
<td>1:A:711:LEU:HB2</td>
<td>1.88</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1376:SER:OG</td>
<td>1:B:1377:PRO:HD3</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1581:ILE:HD13</td>
<td>1:B:1711:LEU:HB2</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1542:TYR:CE1</td>
<td>1:B:1610:PRO:HB3</td>
<td>2.41</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1263:PHE:O</td>
<td>1:B:1271:THR:HG21</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1282:ALA:HB3</td>
<td>1:B:1283:PRO:HD3</td>
<td>1.88</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1520:ALA:O</td>
<td>1:B:1524:LEU:HG</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1533:LEU:O</td>
<td>1:B:1536:VAL:HB</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1587:ALA:HB3</td>
<td>1:B:1713:VAL:CG2</td>
<td>2.36</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:1205:ALA:HB2</td>
<td>1:B:1227:TYR:HD1</td>
<td>1.71</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:160:LEU:HD22</td>
<td>1:A:166:LEU:CA</td>
<td>2.31</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:211:GLY:O</td>
<td>1:A:218:ARG:HD2</td>
<td>2.05</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:625:ARG:HG3</td>
<td>1:A:625:ARG:NH1</td>
<td>2.18</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:602:LEU:O</td>
<td>1:A:605:VAL:HG12</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:1551:LEU:O</td>
<td>1:B:1573:GLU:HA</td>
<td>2.07</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:1552:GLN:HG2</td>
<td>1:B:1573:GLU:HG2</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:1710:ASN:C</td>
<td>1:B:1711:LEU:HD23</td>
<td>2.27</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:609:VAL:HB</td>
<td>1:A:610:PRO:HD2</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:713:VAL:CG1</td>
<td>1:A:728:VAL:HG22</td>
<td>2.36</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:1296:LEU:HB2</td>
<td>1:B:1302:LEU:HD11</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:540:TYR:CE2</td>
<td>1:A:563:ARG:HD3</td>
<td>2.41</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:1137:ILE:HA</td>
<td>1:B:1144:GLY:O</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:643:MSE:HG3</td>
<td>1:B:1742:ALA:HA</td>
<td>1.87</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:1698:PHE:O</td>
<td>1:B:1699:GLU:C</td>
<td>2.44</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:1131:ALA:HB2</td>
<td>1:B:1286:ARG:HD2</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:710:ASN:C</td>
<td>1:A:711:LEU:HD23</td>
<td>2.28</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:1182:PRO:O</td>
<td>1:B:1186:GLU:HG3</td>
<td>2.07</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:1625:ARG:HA</td>
<td>1:B:1645:GLU:OE1</td>
<td>2.07</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:B:1643:MSE:HE1</td>
<td>1:B:1665:GLY:HA2</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:1712:HIS:CD2</td>
<td>1:B:1733:ALA:HA</td>
<td>2.42</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:625:ARG:HG3</td>
<td>1:A:625:ARG:O</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:166:LEU:O</td>
<td>1:A:168:ASP:N</td>
<td>2.41</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:237:SER:OG</td>
<td>1:A:340:GLU:HB2</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:658:LEU:HD12</td>
<td>1:A:659:VAL:N</td>
<td>2.22</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:587:ALA:HB3</td>
<td>1:A:713:VAL:CG2</td>
<td>2.38</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:599:ILE:HG23</td>
<td>1:A:609:VAL:HG21</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:551:LEU:O</td>
<td>1:A:573:GLU:HA</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:685:HIS:NE2</td>
<td>1:A:705:LEU:HB3</td>
<td>2.22</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:651:LYS:HE2</td>
<td>1:B:1748:PRO:HG3</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:161:LYS:CD</td>
<td>1:A:161:LYS:H</td>
<td>2.21</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:589:LYS:O</td>
<td>1:A:592:PHE:HB3</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:1298:ASP:O</td>
<td>1:B:1302:LEU:HD12</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:1721:GLY:O</td>
<td>1:B:1722:LEU:HG</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:1503:PHE:CD2</td>
<td>1:B:1504:LEU:HD12</td>
<td>2.43</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:1270:ASP:HB2</td>
<td>1:B:1564:ARG:HH12</td>
<td>1.73</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:1619:PHE:CE1</td>
<td>1:B:1658:LEU:HD22</td>
<td>2.43</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:276:LEU:HD11</td>
<td>1:A:602:LEU:HD21</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:604:GLN:NE2</td>
<td>1:A:618:LEU:HA</td>
<td>2.23</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:278:GLU:C</td>
<td>1:A:532:ALA:HB1</td>
<td>2.28</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:1171:PHE:CD2</td>
<td>1:B:1254:GLU:HG3</td>
<td>2.42</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:1663:GLU:HB3</td>
<td>1:B:1666:ARG:HD3</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:674:VAL:HA</td>
<td>1:A:697:TYR:CE1</td>
<td>2.43</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:1354:ARG:HH12</td>
<td>1:B:1358:ILE:CD1</td>
<td>2.21</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:1625:ARG:O</td>
<td>1:B:1625:ARG:HG3</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:1143:TRP:CH2</td>
<td>1:B:1163:LYS:HD3</td>
<td>2.42</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1356:LEU:HA</td>
<td>1:B:1359:LEU:HD22</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1597:ALA:O</td>
<td>1:B:1600:ALA:HB3</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1698:PHE:HA</td>
<td>1:B:1701:THR:HG22</td>
<td>1.89</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:143:TRP:N</td>
<td>1:A:160:LEU:O</td>
<td>2.41</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:748:PRO:HB2</td>
<td>1:A:751:VAL:HG23</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:524:LEU:O</td>
<td>1:A:528:ASP:N</td>
<td>2.37</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:696:HIS:CD2</td>
<td>1:B:1668:THR:HA</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1320:GLU:O</td>
<td>1:B:1324:ARG:HG3</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1625:ARG:NH2</td>
<td>1:B:1627:GLY:O</td>
<td>2.41</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:237:SER:O</td>
<td>1:A:238:LEU:HD23</td>
<td>2.08</td>
<td>0.53</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:B:1322:VAL:HG13</td>
<td>1:B:1362:LEU:HD22</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1595:GLN:O</td>
<td>1:B:1599:ILE:HG13</td>
<td>2.07</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1625:ARG:NH1</td>
<td>1:B:1625:ARG:HG3</td>
<td>2.21</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:143:TRP:CH2</td>
<td>1:A:163:LYS:HD3</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1247:GLY:CH</td>
<td>1:B:1251:ARG:HH12</td>
<td>1.70</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1327:TYR:O</td>
<td>1:B:1328:ARG:HB2</td>
<td>2.07</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1353:ARG:O</td>
<td>1:B:1357:GLN:HG3</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1319:ARG:NH1</td>
<td>1:B:1319:ARG:HB3</td>
<td>2.24</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1685:HIS:NE2</td>
<td>1:B:1705:LEU:HB3</td>
<td>2.23</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:171:PHE:CD2</td>
<td>1:A:254:GLU:HG3</td>
<td>2.44</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1129:ARG:CB</td>
<td>1:B:1285:ARG:HD2</td>
<td>2.35</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1352:LEU:C</td>
<td>1:B:1352:LEU:HD12</td>
<td>2.28</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:228:ALA:HB3</td>
<td>1:A:236:LEU:HD11</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:718:GLU:HB2</td>
<td>1:A:723:VAL:CG2</td>
<td>2.37</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1352:LEU:HD11</td>
<td>1:B:1356:LEU:HD11</td>
<td>1.91</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1148:LEU:HD12</td>
<td>1:B:1155:PHE:CD1</td>
<td>2.44</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:139:THR:CG2</td>
<td>1:A:184:LEU:HD21</td>
<td>2.38</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:552:GLN:O</td>
<td>1:A:614:ALA:HA</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:1542:TYR:HA</td>
<td>1:B:1609:VAL:O</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:249:PHE:HA</td>
<td>1:A:297:LEU:HG</td>
<td>1.90</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:646:VAL:O</td>
<td>1:A:650:LEU:HG</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:323:ARG:CG</td>
<td>1:A:531:ALA:HB1</td>
<td>2.38</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:1273:PHE:HE1</td>
<td>1:B:1288:LEU:HD23</td>
<td>1.75</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:1323:ARG:HH11</td>
<td>1:B:1323:ARG:HG2</td>
<td>1.73</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:1552:GLN:O</td>
<td>1:B:1614:ALA:HA</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:296:LEU:HD21</td>
<td>1:A:305:ARG:NH2</td>
<td>2.24</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:250:MSE:HG2</td>
<td>1:A:621:GLY:HA2</td>
<td>1.90</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:1604:GLN:HE22</td>
<td>1:B:1618:LEU:HA</td>
<td>1.73</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:1723:VAL:HG12</td>
<td>1:B:1725:TYR:CE1</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:299:ARG:CA</td>
<td>1:A:618:LEU:HD11</td>
<td>2.40</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:619:PHE:CE1</td>
<td>1:A:658:LEU:HD22</td>
<td>2.43</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:1698:PHE:C</td>
<td>1:B:1701:THR:HG22</td>
<td>2.27</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:1166:LEU:O</td>
<td>1:B:1168:ASP:N</td>
<td>2.43</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:1557:ARG:CA</td>
<td>1:B:1567:PHE:HE2</td>
<td>2.21</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:1646:VAL:O</td>
<td>1:B:1650:LEU:HG</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:228:ALA:O</td>
<td>1:A:232:GLN:HB2</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:1183:GLU:CD</td>
<td>1:B:1219:ARG:HH22</td>
<td>2.13</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:1273:PHE:CE1</td>
<td>1:B:1288:LEU:HD23</td>
<td>2.45</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:1284:GLY:CE1</td>
<td>1:B:1525:ALA:HB1</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:251:ARG:HG2</td>
<td>1:A:251:ARG:HH11</td>
<td>1.75</td>
<td>0.52</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:166:LEU:HD23</td>
<td>1:A:167:TYR:CD1</td>
<td>2.45</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:557:ARG:CA</td>
<td>1:A:567:PHE:HE2</td>
<td>2.19</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:1620:ASP:OD1</td>
<td>1:B:1657:SER:HA</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:1674:VAL:HA</td>
<td>1:B:1697:TYR:CE1</td>
<td>2.45</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:1250:MSE:HA</td>
<td>1:B:1297:LEU:HD21</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:625:ARG:NE</td>
<td>1:A:642:GLU:HG2</td>
<td>2.24</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:758:LEU:O</td>
<td>1:A:762:MSE:HE3</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1270:ASP:HB2</td>
<td>1:B:1564:ARG:NH1</td>
<td>2.25</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1604:GLN:NE2</td>
<td>1:B:1618:LEU:HA</td>
<td>2.24</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:760:GLN:O</td>
<td>1:A:763:ALA:HB3</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1335:LEU:CD1</td>
<td>1:B:1352:LEU:HB2</td>
<td>2.32</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:317:ALA:O</td>
<td>1:A:320:GLU:HB2</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1718:GLU:CB</td>
<td>1:B:1723:VAL:HG21</td>
<td>2.38</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:263:PHE:CE1</td>
<td>1:A:293:ARG:HG3</td>
<td>2.44</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:625:ARG:HA</td>
<td>1:A:645:GLU:OE1</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:742:ALA:HB1</td>
<td>1:A:747:LEU:HD12</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1151:SER:O</td>
<td>1:B:1337:THR:HG21</td>
<td>2.09</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1505:GLU:O</td>
<td>1:B:1509:ARG:HG3</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:228:ALA:HA</td>
<td>1:A:231:THR:OG1</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:298:ASP:O</td>
<td>1:A:302:LEU:HD12</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1366:LEU:HD12</td>
<td>1:B:1370:VAL:CG2</td>
<td>2.41</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1654:THR:HG23</td>
<td>1:B:1656:ASN:H</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1202:LEU:N</td>
<td>1:B:1202:LEU:HD12</td>
<td>2.26</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1544:ARG:HD3</td>
<td>1:B:1546:ARG:NH2</td>
<td>2.25</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1558:HIS:CE1</td>
<td>1:B:1598:LEU:HD11</td>
<td>2.45</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:518:ARG:HB3</td>
<td>1:A:522:ARG:CY</td>
<td>2.41</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:281:THR:N</td>
<td>1:A:528:ASP:OD2</td>
<td>2.44</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1228:ALA:HB3</td>
<td>1:B:1236:LEU:CD1</td>
<td>2.40</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1331:ASP:O</td>
<td>1:B:1331:ASP:OD1</td>
<td>2.29</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1645:GLU:O</td>
<td>1:B:1649:ILE:HG13</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1722:LEU:HB2</td>
<td>1:B:1744:MSE:CE</td>
<td>2.40</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:182:PRO:O</td>
<td>1:A:186:GLU:HG3</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:281:THR:HG23</td>
<td>1:A:528:ASP:CG</td>
<td>2.31</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:574:MSE:SE</td>
<td>1:A:692:LEU:HD21</td>
<td>2.60</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1129:ARG:HB2</td>
<td>1:B:1285:ARG:CD</td>
<td>2.32</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1143:TRP:N</td>
<td>1:B:1160:LEU:O</td>
<td>2.42</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1558:HIS:HD2</td>
<td>1:B:1561:VAL:HG23</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:1139:THR:C</td>
<td>1:B:1216:ALA:HB2</td>
<td>2.32</td>
<td>0.50</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:135:ALA:HA</td>
<td>1:A:146:ALA:O</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:244:TYR:CD1</td>
<td>1:A:246:PRO:HD3</td>
<td>2.46</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:556:GLY:O</td>
<td>1:A:557:ARG:HG3</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:523:ILE:O</td>
<td>1:A:527:LEU:HG</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:643:MSE:HE1</td>
<td>1:A:665:GLY:HA2</td>
<td>1.92</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:698:PHI:O</td>
<td>1:A:699:GLU:C</td>
<td>2.49</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:758:LEU:HB3</td>
<td>1:A:762:MSE:HE3</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:1148:LEU:HB3</td>
<td>1:B:1224:LEU:HD13</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:139:THR:C</td>
<td>1:A:216:ALA:HB2</td>
<td>2.32</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:1214:PRO:O</td>
<td>1:B:1217:LEU:HB3</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:581:ILE:HG22</td>
<td>1:A:589:LYS:HD3</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:1263:PHI:CE2</td>
<td>1:B:1292:LEU:HD12</td>
<td>2.43</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:1270:ASP:OD2</td>
<td>1:B:1564:ARG:NH1</td>
<td>2.44</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:213:GLY:O</td>
<td>1:A:218:ARG:HD3</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:557:ARG:HA</td>
<td>1:A:567:PHI:CE2</td>
<td>2.41</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:723:VAL:O</td>
<td>1:A:725:TYR:CD1</td>
<td>2.64</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:1624:THR:HB</td>
<td>1:B:1626:ILE:HG13</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:715:ALA:CB</td>
<td>1:A:722:LEU:HD22</td>
<td>2.41</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:1145:LEU:O</td>
<td>1:B:1158:THR:N</td>
<td>2.42</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:1279:THR:HG21</td>
<td>1:B:1285:ARG:CB</td>
<td>2.40</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:1760:GLN:C</td>
<td>1:B:1762:MSE:H</td>
<td>2.15</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:1642:GLU:O</td>
<td>1:B:1645:GLU:HB2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:1717:GLU:N</td>
<td>1:B:1722:LEU:HA</td>
<td>2.26</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:558:HIS:HD2</td>
<td>1:A:561:VAL:CG2</td>
<td>2.25</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:540:TYR:CD2</td>
<td>1:A:563:ARG:NH1</td>
<td>2.79</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:1332:LEU:H</td>
<td>1:B:1332:LEU:CD1</td>
<td>2.25</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:1577:GLU:OE1</td>
<td>1:B:1709:LYS:HE3</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:1299:ARG:O</td>
<td>1:B:1303:GLU:HG2</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:273:PHI:CE1</td>
<td>1:A:288:LEU:HD23</td>
<td>2.47</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:319:ARG:CD</td>
<td>1:A:534:ALA:HB3</td>
<td>2.41</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:1123:GLN:NE2</td>
<td>1:B:1123:GLN:H</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:1148:LEU:C</td>
<td>1:B:1148:LEU:HD23</td>
<td>2.33</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:518:ARG:CB</td>
<td>1:A:522:ARG:NH2</td>
<td>2.75</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:1120:THR:C</td>
<td>1:B:1150:VAL:HG21</td>
<td>2.32</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:1325:LEU:HB2</td>
<td>1:B:1362:LEU:HD21</td>
<td>1.93</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:1676:ILE:O</td>
<td>1:B:1680:VAL:HG23</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:210:GLU:O</td>
<td>1:A:218:ARG:HB3</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:1171:PHI:CEZ</td>
<td>1:B:1254:GLU:HG3</td>
<td>2.46</td>
<td>0.49</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:B:1273:PHE:O</td>
<td>1:B:1277:ASP:N</td>
<td>2.40</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:1340:GLU:OE2</td>
<td>1:B:1515:GLU:OE2</td>
<td>2.30</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:737:TYR:O</td>
<td>1:A:740:GLU:HB2</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:1332:LEU:HD12</td>
<td>1:B:1332:LEU:N</td>
<td>2.27</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:1572:LEU:HD13</td>
<td>1:B:1592:PHE:CZ</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:166:LEU:C</td>
<td>1:A:168:ASP:N</td>
<td>2.65</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:1182:PRO:HG2</td>
<td>1:B:1183:GLU:OE1</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:1568:VAL:HG11</td>
<td>1:B:1727:GLN:NE2</td>
<td>2.21</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:263:PHE:O</td>
<td>1:A:271:THR:HG21</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:1166:LEU:C</td>
<td>1:B:1168:ASP:N</td>
<td>2.65</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:214:PRO:O</td>
<td>1:A:217:LEU:HB3</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:250:MSE:HE2</td>
<td>1:A:619:PHE:HB2</td>
<td>1.95</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:279:THR:HA</td>
<td>1:A:532:ALA:HB2</td>
<td>1.93</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:558:HIS:CD2</td>
<td>1:A:561:VAL:HG23</td>
<td>2.47</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:663:GLU:CB</td>
<td>1:A:666:ARG:HD3</td>
<td>2.42</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:1638:THR:HG22</td>
<td>1:B:1642:GLU:OE2</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:159:VAL:CG2</td>
<td>1:A:217:LEU:HB2</td>
<td>2.42</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:539:ARG:CZ</td>
<td>1:A:539:ARG:HB2</td>
<td>2.43</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:1117:THR:CG2</td>
<td>1:B:1119:GLY:H</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:586:MSE:HB2</td>
<td>1:A:724:PHE:CD2</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1584:PRO:HG3</td>
<td>1:B:1715:ALA:HB2</td>
<td>1.94</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:586:MSE:HE1</td>
<td>1:B:1640:MSE:CE</td>
<td>2.42</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:716:ARG:H</td>
<td>1:A:723:VAL:H</td>
<td>1.60</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1209:PRO:CB</td>
<td>1:B:1218:ARG:HH21</td>
<td>2.18</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1698:PHE:CA</td>
<td>1:B:1701:THR:HG22</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:279:THR:CG2</td>
<td>1:A:285:ARG:HB2</td>
<td>2.41</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:654:THR:HG23</td>
<td>1:A:656:ASN:H</td>
<td>1.78</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:697:TYR:CB</td>
<td>1:A:700:LEU:HD12</td>
<td>2.41</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:753:ALA:C</td>
<td>1:A:755:ALA:N</td>
<td>2.66</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1558:HIS:CE1</td>
<td>1:B:1598:LEU:CD1</td>
<td>2.97</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1693:PHE:C</td>
<td>1:B:1693:PHE:CD2</td>
<td>2.86</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:754:ARG:NH2</td>
<td>1:A:758:LEU:HD21</td>
<td>2.28</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1352:LEU:CD1</td>
<td>1:B:1356:LEU:HG</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1693:PHE:HD2</td>
<td>1:B:1693:PHE:C</td>
<td>2.15</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:620:ASP:OD1</td>
<td>1:A:657:SER:HA</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:638:THR:HG22</td>
<td>1:A:642:GLU:OE2</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1293:ARG:HH3</td>
<td>1:B:1293:ARG:HG3</td>
<td>1.78</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1703:LEU:O</td>
<td>1:B:1704:GLY:C</td>
<td>2.51</td>
<td>0.48</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:322:VAL:HG12</td>
<td>1:A:326:LEU:CD1</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:708:LEU:HG</td>
<td>1:A:709:LYS:N</td>
<td>2.25</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1378:LEU:O</td>
<td>1:B:1378:LEU:HD23</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1574:MSE:HG2</td>
<td>1:B:1579:VAL:HG21</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1685:HIS:HE1</td>
<td>1:B:1707:ARG:HB2</td>
<td>1.79</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1716:ARG:C</td>
<td>1:B:1722:LEU:HA</td>
<td>2.34</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:723:VAL:HG12</td>
<td>1:A:723:VAL:O</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1169:GLU:OE2</td>
<td>1:B:1246:PRO:HB3</td>
<td>2.14</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1351:ALA:O</td>
<td>1:B:1354:ARG:HB3</td>
<td>2.14</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1553:ILE:HD13</td>
<td>1:B:1599:ILE:HD12</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1289:GLN:O</td>
<td>1:B:1293:ARG:NH1</td>
<td>2.46</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:654:THR:H</td>
<td>1:A:657:SER:HB2</td>
<td>1.79</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1247:GLY:HA2</td>
<td>1:B:1251:ARG:HZ</td>
<td>2.44</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:1697:TYR:CB</td>
<td>1:B:1700:LEU:HD12</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:180:LEU:HB2</td>
<td>1:A:185:LEU:HD21</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:306:LEU:HD12</td>
<td>1:A:547:PHE:HE1</td>
<td>1.77</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:302:LEU:HD22</td>
<td>1:A:547:PHE:HZ</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1146:ALA:HB1</td>
<td>1:B:1224:LEU:HD11</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1754:ARG:NH2</td>
<td>1:B:1758:LEU:HD21</td>
<td>2.28</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:221:ARG:HD3</td>
<td>1:A:241:PHE:CD1</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:270:ASP:OD2</td>
<td>1:A:564:ARG:NH1</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:642:GLU:O</td>
<td>1:A:645:GLU:HB2</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:580:LEU:CD1</td>
<td>1:A:701:THR:HA</td>
<td>2.44</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1129:ARG:HZ</td>
<td>1:B:1285:ARG:HH12</td>
<td>2.25</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1528:ASP:O</td>
<td>1:B:1532:ALA:HB2</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1753:ALA:C</td>
<td>1:B:1755:ALA:N</td>
<td>2.68</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1148:LEU:HD12</td>
<td>1:B:1155:PHE:CE1</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1171:PHE:O</td>
<td>1:B:1174:ARG:HG2</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1519:GLU:OE2</td>
<td>1:B:1522:ARG:NH2</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:698:PHE:C</td>
<td>1:A:701:THR:HG22</td>
<td>2.32</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1245:ASP:C</td>
<td>1:B:1247:GLY:H</td>
<td>2.18</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1376:SER:N</td>
<td>1:B:1377:PRO:CD</td>
<td>2.77</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:345:SER:CB</td>
<td>1:A:346:PRO:HD2</td>
<td>2.36</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:625:ARG:HZ</td>
<td>1:A:642:GLU:HG2</td>
<td>2.44</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:639:PHE:CE1</td>
<td>1:A:643:MSE:HE3</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:703:LEU:O</td>
<td>1:A:705:LEU:HG</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1302:LEU:HD21</td>
<td>1:B:1604:GLN:HA</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1563:ARG:CA</td>
<td>1:B:1563:ARG:NE</td>
<td>2.77</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1625:ARG:NE</td>
<td>1:B:1642:GLU:HG2</td>
<td>2.29</td>
<td>0.47</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:145:LEU:O</td>
<td>1:A:158:THR:N</td>
<td>2.40</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1135:ALA:HA</td>
<td>1:B:1146:ALA:O</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1580:LEU:CD1</td>
<td>1:B:1701:THR:HA</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1542:TYR:HB3</td>
<td>1:B:1608:PHE:C</td>
<td>2.35</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:542:TYR:HB3</td>
<td>1:A:609:VAL:O</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1161:LYS:HD2</td>
<td>1:B:1162:SER:N</td>
<td>2.28</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1363:ARG:HH11</td>
<td>1:B:1363:ARG:HG2</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:273:PHE:HE1</td>
<td>1:A:288:LEU:HD23</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:588:GLY:O</td>
<td>1:A:592:PHE:N</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1217:LEU:HD23</td>
<td>1:B:1217:LEU:C</td>
<td>2.36</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:1303:GLU:HA</td>
<td>1:B:1303:GLU:OE2</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:323:ARG:HH11</td>
<td>1:A:323:ARG:HG2</td>
<td>1.81</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:678:THR:O</td>
<td>1:A:682:GLU:HG3</td>
<td>2.14</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:577:GLU:OE1</td>
<td>1:A:709:LYS:HE3</td>
<td>2.14</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1537:ALA:O</td>
<td>1:B:1541:GLY:N</td>
<td>2.48</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1723:VAL:O</td>
<td>1:B:1725:TYR:CD1</td>
<td>2.68</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1737:TYR:O</td>
<td>1:B:1740:GLU:HB2</td>
<td>2.14</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:312:PHE:HD2</td>
<td>1:A:319:ARG:HA</td>
<td>1.79</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:685:HIS:HE1</td>
<td>1:A:707:ARG:HB2</td>
<td>1.79</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1338:ARG:NH2</td>
<td>1:B:1348:ASP:OD2</td>
<td>2.48</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1553:ILE:O</td>
<td>1:B:1571:ASP:HA</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1748:PRO:HB2</td>
<td>1:B:1751:VAL:HG23</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1258:ARG:O</td>
<td>1:B:1266:LEU:HD21</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1293:ARG:HH11</td>
<td>1:B:1293:ARG:CG</td>
<td>2.28</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1355:SER:O</td>
<td>1:B:1357:GLN:N</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1544:ARG:HB2</td>
<td>1:B:1608:PHE:CE2</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:554:ARG:HB3</td>
<td>1:A:613:GLU:H</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:682:GLU:HA</td>
<td>1:A:685:HIS:HB3</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1117:THR:HG21</td>
<td>1:B:1134:LEU:HD13</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:224:LEU:O</td>
<td>1:A:225:LEU:C</td>
<td>2.53</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:287:LEU:CD2</td>
<td>1:A:526:GLU:HA</td>
<td>2.46</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1313:VAL:HG13</td>
<td>1:B:1538:VAL:HG21</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1625:ARG:CZ</td>
<td>1:B:1642:GLU:HG2</td>
<td>2.46</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1715:ALA:CZ</td>
<td>1:B:1722:LEU:HD22</td>
<td>2.45</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1743:ALA:CB</td>
<td>1:B:1752:VAL:HG11</td>
<td>2.45</td>
<td>0.46</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:597:ALA:O</td>
<td>1:A:600:ALA:HB3</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:696:His:O</td>
<td>1:B:1263:PHEN</td>
<td>2.31</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1181:ALA:H</td>
<td>1:B:1184:LEU:HD12</td>
<td>1.81</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1262:VAL:HG12</td>
<td>1:B:1263:PHEN</td>
<td>2.31</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:207:PHE:CD2</td>
<td>1:A:220:ALA:HA</td>
<td>2.51</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:743:ALA:CB</td>
<td>1:A:752:VAL:HG11</td>
<td>2.45</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1574:SER:HE3</td>
<td>1:B:1579:VAL:CG2</td>
<td>2.46</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:182:PRO:HD2</td>
<td>1:A:183:GLU:O</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:574:SER:HE3</td>
<td>1:A:579:VAL:CG2</td>
<td>2.43</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:558:His:N</td>
<td>1:A:567:PHE:CE2</td>
<td>2.78</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1279:THR:CG2</td>
<td>1:B:1285:ARG:HB2</td>
<td>2.42</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1715:ALA:HA</td>
<td>1:B:1724:PHE:CA</td>
<td>2.41</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:1716:ARG:O</td>
<td>1:B:1722:LEU:C</td>
<td>2.54</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:624:THR:HB</td>
<td>1:A:626:ILE:HG13</td>
<td>1.97</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:718:GLU:O</td>
<td>1:A:723:VAL:HG11</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1126:LEU:O</td>
<td>1:B:1127:LEU:HD23</td>
<td>2.15</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1313:VAL:CG1</td>
<td>1:B:1538:VAL:HG22</td>
<td>2.44</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1546:ARG:O</td>
<td>1:B:1615:HIS:HA</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1558:His:HD2</td>
<td>1:B:1561:VAL:CG2</td>
<td>2.28</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1581:ILE:HA</td>
<td>1:B:1711:LEU:O</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1184:LEU:HB3</td>
<td>1:B:1190:PHE:CE2</td>
<td>2.52</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1544:ARG:HD3</td>
<td>1:B:1546:ARG:HH21</td>
<td>1.80</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1557:ARG:HA</td>
<td>1:B:1567:PHE:CE2</td>
<td>2.43</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1580:LEU:HD12</td>
<td>1:B:1701:THR:HA</td>
<td>1.96</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1703:LEU:O</td>
<td>1:B:1705:LEU:HG</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:167:TYR:CD2</td>
<td>1:A:197:ARG:HD3</td>
<td>2.52</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:240:PRO:O</td>
<td>1:A:241:PHE:C</td>
<td>2.55</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:558:His:CE1</td>
<td>1:A:598:LEU:HG11</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:278:GLU:OE1</td>
<td>1:A:536:VAL:HG22</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1120:THR:HA</td>
<td>1:B:1150:VAL:CG1</td>
<td>2.47</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1380:GLU:HA</td>
<td>1:B:1383:GLU:O</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1522:ARG:NH1</td>
<td>1:B:1522:ARG:HG2</td>
<td>2.28</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1623:TYR:CD1</td>
<td>1:B:1623:TYR:N</td>
<td>2.84</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1711:LEU:HD22</td>
<td>1:B:1730:PRO:HA</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:260:LEU:N</td>
<td>1:A:260:LEU:HG12</td>
<td>2.32</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:534:ALA:O</td>
<td>1:A:538:VAL:HG23</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:544:ARG:HB2</td>
<td>1:A:608:PHE:C</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1318:LEU:HD11</td>
<td>1:B:1366:LEU:HG23</td>
<td>1.99</td>
<td>0.45</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:B:1387:VAL:O</td>
<td>1:B:1389:ASP:N</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:693:PHE:HD2</td>
<td>1:A:693:PHE:C</td>
<td>2.20</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:280:ARG:NH1</td>
<td>1:A:280:ARG:HG3</td>
<td>2.30</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:556:GLY:C</td>
<td>1:A:557:ARG:HG3</td>
<td>2.37</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:578:LEU:C</td>
<td>1:A:578:LEU:CD2</td>
<td>2.85</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1298:ASP:C</td>
<td>1:B:1301:PRO:HD2</td>
<td>2.37</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1578:LEU:C</td>
<td>1:B:1578:LEU:CD2</td>
<td>2.83</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1710:ASN:O</td>
<td>1:B:1731:GLY:N</td>
<td>2.46</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:581:ILE:HB</td>
<td>1:A:694:ALA:HA</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1161:LYS:HE2</td>
<td>1:B:1161:LYS:N</td>
<td>2.19</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1281:THR:HB</td>
<td>1:B:1283:PRO:HD2</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1537:ALA:HA</td>
<td>1:B:1542:TYR:HB2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1563:ARG:HA</td>
<td>1:B:1563:ARG:NE</td>
<td>2.23</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1555:ALA:HA</td>
<td>1:B:1570:ASN:O</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1250:MSE:CE</td>
<td>1:B:1604:GLN:OE1</td>
<td>2.63</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1301:PRO:O</td>
<td>1:B:1304:ALA:HB3</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1574:MSE:SE</td>
<td>1:B:1692:LEU:HD21</td>
<td>2.67</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1692:LEU:HD23</td>
<td>1:B:1692:LEU:HA</td>
<td>1.77</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:232:GLN:HG3</td>
<td>1:A:236:LEU:CD2</td>
<td>2.46</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:250:MSE:HE1</td>
<td>1:A:622:ILE:HD11</td>
<td>2.00</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:296:LEU:HB2</td>
<td>1:A:302:LEU:HD11</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:518:ARG:HD2</td>
<td>1:A:522:ARG:HH21</td>
<td>1.82</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:703:LEU:O</td>
<td>1:A:704:GLY:C</td>
<td>2.55</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1207:PHE:CD2</td>
<td>1:B:1220:ALA:HA</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1678:THR:O</td>
<td>1:B:1682:GLU:HG3</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:1708:LEU:HG</td>
<td>1:B:1709:LYS:N</td>
<td>2.26</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:138:ALA:HB3</td>
<td>1:A:216:ALA:O</td>
<td>2.16</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:590:SER:HA</td>
<td>1:A:593:LEU:CD1</td>
<td>2.38</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1180:LEU:HD11</td>
<td>1:B:1194:PHE:CD2</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1263:PHE:HE1</td>
<td>1:B:1293:ARG:HG2</td>
<td>1.82</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1722:LEU:O</td>
<td>1:B:1723:VAL:HG23</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:247:GLY:HA2</td>
<td>1:A:251:ARG:NH2</td>
<td>2.31</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:654:THR:H</td>
<td>1:A:657:SER:CB</td>
<td>2.31</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1291:TRP:HH2</td>
<td>1:B:1530:TYR:CE2</td>
<td>2.35</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1558:HIS:N</td>
<td>1:B:1567:PHE:CE2</td>
<td>2.78</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1589:LYS:NZ</td>
<td>1:B:1696:HIS:HD1</td>
<td>2.15</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:746:GLY:O</td>
<td>1:B:1651:LYS:NZ</td>
<td>2.44</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1557:ARG:HB2</td>
<td>1:B:1610:PRO:HB2</td>
<td>1.99</td>
<td>0.44</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:748:PRO:O</td>
<td>1:A:752:VAL:HG23</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:750:GLU:O</td>
<td>1:A:753:ALA:HB3</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1540:TYR:CD1</td>
<td>1:B:1563:ARG:NH1</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1639:PHE:CE1</td>
<td>1:B:1643:MSE:HE3</td>
<td>2.51</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:693:PHE:CD2</td>
<td>1:A:693:PHE:C</td>
<td>2.91</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1120:THR:HA</td>
<td>1:B:1150:VAL:HG13</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1179:LEU:HD22</td>
<td>1:B:1203:SER:O</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1373:PRO:CG</td>
<td>1:B:1519:GLU:HG2</td>
<td>2.45</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1536:VAL:CG1</td>
<td>1:B:1537:ALA:N</td>
<td>2.80</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:251:ARG:NH1</td>
<td>1:A:251:ARG:HG2</td>
<td>2.33</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1117:THR:C</td>
<td>1:B:1119:GLY:N</td>
<td>2.71</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1581:ILE:HB</td>
<td>1:B:1694:ALA:HA</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1143:TRP:HH2</td>
<td>1:B:1163:LYS:HD3</td>
<td>1.80</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1220:ALA:O</td>
<td>1:B:1223:ALA:HB3</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1363:ARG:NH2</td>
<td>1:B:1368:GLU:HG3</td>
<td>2.33</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1535:GLU:O</td>
<td>1:B:1536:VAL:C</td>
<td>2.55</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:739:VAL:HA</td>
<td>1:B:1676:ILE:HD11</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1682:GLU:HA</td>
<td>1:B:1685:HIS:HB3</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1742:ALA:O</td>
<td>1:B:1747:LEU:HD12</td>
<td>2.16</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:281:THR:CB</td>
<td>1:A:283:PRO:HD2</td>
<td>2.47</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:282:ALA:HB3</td>
<td>1:A:283:PRO:HD3</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1554:ARG:HB3</td>
<td>1:B:1613:GLU:H</td>
<td>1.81</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:171:PHE:HZ</td>
<td>1:A:254:GLU:HG3</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:262:VAL:HG12</td>
<td>1:A:263:PHE:CD2</td>
<td>2.53</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:580:LEU:HD12</td>
<td>1:A:701:THR:HA</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:753:ALA:C</td>
<td>1:A:755:ALA:H</td>
<td>2.20</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1148:LEU:CB</td>
<td>1:B:1224:LEU:HD13</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:1654:THR:HG22</td>
<td>1:B:1657:SER:OG</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:557:ARG:HZ</td>
<td>1:A:562:GLU:OE2</td>
<td>2.65</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:595:GLN:O</td>
<td>1:A:599:ILE:HG13</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:581:ILE:HA</td>
<td>1:A:711:LEU:O</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1558:HIS:CD2</td>
<td>1:B:1561:VAL:HG23</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:143:TRP:HH2</td>
<td>1:A:163:LYS:HD3</td>
<td>1.82</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:559:PRO:HB3</td>
<td>1:A:610:PRO:HG3</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:724:PHE:HD1</td>
<td>1:A:724:PHE:H</td>
<td>1.64</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1181:ALA:HB1</td>
<td>1:B:1219:ARG:NH2</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1252:LEU:HA</td>
<td>1:B:1252:LEU:HD23</td>
<td>1.80</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1359:LEU:CB</td>
<td>1:B:1360:PRO:HD3</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1659:VAL:C</td>
<td>1:B:1660:LEU:HD23</td>
<td>2.39</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:B:1685:HIS:HE1</td>
<td>1:B:1707:ARG:H</td>
<td>1.66</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:540:TYR:CD2</td>
<td>1:A:563:ARG:HD3</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1578:LEU:HD23</td>
<td>1:B:1579:VAL:N</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1599:ILE:HG22</td>
<td>1:B:1616:LEU:HD11</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1663:GLU:CB</td>
<td>1:B:1666:ARG:HD3</td>
<td>2.47</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1718:GLU:CG</td>
<td>1:B:1723:VAL:HG21</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:553:ILE:O</td>
<td>1:A:571:ASP:HA</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1579:VAL:HG13</td>
<td>1:B:1709:LYS:HG2</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1753:ALA:C</td>
<td>1:B:1755:ALA:H</td>
<td>2.21</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:581:ILE:HG22</td>
<td>1:A:589:LYS:CG</td>
<td>2.47</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:757:ALA:O</td>
<td>1:A:759:LEU:N</td>
<td>2.52</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1125:SER:O</td>
<td>1:B:1126:LEU:HD23</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1138:ALA:O</td>
<td>1:B:1216:ALA:HB1</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1244:TYR:CE1</td>
<td>1:B:1246:PRO:HG3</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1345:SER:HB2</td>
<td>1:B:1346:PRO:CD</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1673:GLY:HA3</td>
<td>1:B:1697:TYR:OH</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1717:GLU:HA</td>
<td>1:B:1721:GLY:O</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1743:ALA:HB2</td>
<td>1:B:1752:VAL:HG13</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:296:LEU:O</td>
<td>1:A:297:LEU:HD23</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:558:HIS:CE1</td>
<td>1:A:598:LEU:CD1</td>
<td>3.02</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1252:LEU:HD21</td>
<td>1:B:1256:THR:CG2</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1331:ASP:O</td>
<td>1:B:1333:GLU:N</td>
<td>2.52</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1592:PHE:CD1</td>
<td>1:B:1728:VAL:HG21</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:760:GLN:O</td>
<td>1:A:761:ALA:C</td>
<td>2.56</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1152:THR:O</td>
<td>1:B:1239:GLN:OE1</td>
<td>2.37</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1714:ALA:O</td>
<td>1:B:1724:PHE:HA</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:299:ARG:O</td>
<td>1:A:303:GLU:HG2</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:578:LEU:HD23</td>
<td>1:A:579:VAL:N</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:659:VAL:C</td>
<td>1:A:660:LEU:HD23</td>
<td>2.39</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1150:VAL:CG2</td>
<td>1:B:1151:SER:N</td>
<td>2.82</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1130:GLU:HG2</td>
<td>1:B:1289:GLN:NE2</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1354:ARG:HH12</td>
<td>1:B:1358:ILE:HD12</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1367:GLY:C</td>
<td>1:B:1369:GLU:N</td>
<td>2.71</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:263:PHE:CE2</td>
<td>1:A:292:LEU:CD1</td>
<td>2.96</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1183:GLU:OE2</td>
<td>1:B:1219:ARG:NH1</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1557:ARG:CZ</td>
<td>1:B:1562:GLU:OE2</td>
<td>2.66</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1654:THR:H</td>
<td>1:B:1657:SER:HB2</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:1717:GLU:H</td>
<td>1:B:1717:GLU:HG3</td>
<td>1.63</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:547:PHE:CD2</td>
<td>1:A:618:LEU:HD21</td>
<td>2.54</td>
<td>0.42</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:138:ALA:HB2</td>
<td>1:A:207:PHE:CD2</td>
<td>2.54</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:180:LEU:HD22</td>
<td>1:A:184:LEU:CD1</td>
<td>2.48</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:743:ALA:HB2</td>
<td>1:A:752:VAL:HG13</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1127:LEU:HD13</td>
<td>1:B:1151:SER:CB</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1518:ARG:HG2</td>
<td>1:B:1518:ARG:HH11</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1568:VAL:CG1</td>
<td>1:B:1727:GLN:NE2</td>
<td>2.79</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:256:THR:HA</td>
<td>1:A:624:THR:OG1</td>
<td>2.18</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:586:MSE:HE1</td>
<td>1:B:1640:MSE:HE1</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:669:SER:HB3</td>
<td>1:B:1696:HIS:O</td>
<td>2.18</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1748:PRO:O</td>
<td>1:B:1752:VAL:HG23</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:236:LEU:HB3</td>
<td>1:A:238:LEU:HD21</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:278:GLU:HB2</td>
<td>1:A:536:VAL:CG2</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:289:GLN:O</td>
<td>1:A:293:ARG:NH1</td>
<td>2.52</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1355:SER:C</td>
<td>1:B:1357:GLN:N</td>
<td>2.73</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1367:GLY:O</td>
<td>1:B:1369:GLU:N</td>
<td>2.51</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1552:GLN:HA</td>
<td>1:B:1572:LEU:O</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1588:GLY:O</td>
<td>1:B:1592:PHE:N</td>
<td>2.44</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:299:ARG:HB2</td>
<td>1:A:618:LEU:HD11</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:765:ARG:HH11</td>
<td>1:A:765:ARG:HG2</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:150:VAL:CG2</td>
<td>1:A:151:SER:N</td>
<td>2.83</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:143:TRP:CZ3</td>
<td>1:A:166:LEU:HD22</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1296:LEU:CD1</td>
<td>1:B:1301:PRO:HB2</td>
<td>2.42</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1750:GLU:O</td>
<td>1:B:1753:ALA:HB3</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1757:ALA:O</td>
<td>1:B:1758:LEU:C</td>
<td>2.57</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:299:ARG:NH2</td>
<td>1:A:547:PHE:O</td>
<td>2.52</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1117:THR:HG22</td>
<td>1:B:1119:GLY:CA</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1135:ALA:O</td>
<td>1:B:1178:VAL:HA</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1222:GLY:HA2</td>
<td>1:B:1225:LEU:CD1</td>
<td>2.44</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1542:TYR:C</td>
<td>1:B:1608:PHE:HB3</td>
<td>2.40</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1556:GLY:C</td>
<td>1:B:1557:ARG:HG3</td>
<td>2.40</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:345:SER:HB2</td>
<td>1:A:346:PRO:CD</td>
<td>2.39</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:710:ASN:HB2</td>
<td>1:A:732:PRO:HD3</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1603:ALA:CB</td>
<td>1:B:1616:LEU:HD12</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1742:ALA:HB1</td>
<td>1:B:1747:LEU:HD12</td>
<td>1.99</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:236:LEU:CB</td>
<td>1:A:238:LEU:HD21</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1261:GLU:HG2</td>
<td>1:B:1266:LEU:HG</td>
<td>1.98</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1250:MSE:CA</td>
<td>1:B:1297:LEU:HD21</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1354:ARG:HA</td>
<td>1:B:1357:GLN:OE1</td>
<td>2.19</td>
<td>0.42</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:B:1533:LEU:O</td>
<td>1:B:1534:ALA:C</td>
<td>2.58</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:135:ALA:HB2</td>
<td>1:A:147:PHE:CE2</td>
<td>2.55</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:600:ALA:HA</td>
<td>1:A:616:LEU:CD1</td>
<td>2.47</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:663:GLU:OE1</td>
<td>1:A:666:ARG:HD3</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:1515:GLU:C</td>
<td>1:B:1517:LEU:N</td>
<td>2.73</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:133:TYR:CD2</td>
<td>1:A:147:PHE:HB3</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:243:PHE:C</td>
<td>1:A:243:PHE:CD2</td>
<td>2.93</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:563:ARG:CD</td>
<td>1:A:563:ARG:NE</td>
<td>2.79</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1312:PHE:HB3</td>
<td>1:B:1319:ARG:HB2</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1699:GLU:CD</td>
<td>1:B:1699:GLU:H</td>
<td>2.22</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1710:ASN:HB2</td>
<td>1:B:1732:PRO:HD3</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:190:PHE:C</td>
<td>1:A:190:PHE:CD2</td>
<td>2.93</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:637:SER:O</td>
<td>1:A:638:THR:C</td>
<td>2.57</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1117:THR:C</td>
<td>1:B:1119:GLY:H</td>
<td>2.22</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:555:ALA:HA</td>
<td>1:A:570:ASN:O</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:757:ALA:O</td>
<td>1:A:758:LEU:C</td>
<td>2.57</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1293:ARG:NH1</td>
<td>1:B:1293:ARG:HB2</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1581:ILE:HG22</td>
<td>1:B:1589:LYS:HD3</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1637:SER:O</td>
<td>1:B:1638:THR:C</td>
<td>2.58</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1659:VAL:O</td>
<td>1:B:1691:THR:HA</td>
<td>2.19</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:262:VAL:HG12</td>
<td>1:A:263:PHE:N</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:265:PRO:HB3</td>
<td>1:A:270:ASP:O</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:279:THR:HG21</td>
<td>1:A:285:ARG:CA</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:716:ARG:C</td>
<td>1:A:722:LEU:HD23</td>
<td>2.40</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:710:ASN:O</td>
<td>1:A:731:GLY:N</td>
<td>2.49</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1291:TRP:CH2</td>
<td>1:B:1530:TYR:CE2</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1124:GLU:HB2</td>
<td>1:B:1338:ARG:NH1</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1345:SER:HB2</td>
<td>1:B:1346:PRO:HD2</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1537:ALA:CB</td>
<td>1:B:1542:TYR:HB2</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1554:ARG:HB3</td>
<td>1:B:1613:GLU:HB3</td>
<td>2.01</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1578:LEU:HD21</td>
<td>1:B:1580:LEU:CD2</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1620:ASP:OD1</td>
<td>1:B:1657:SER:CA</td>
<td>2.68</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1658:LEU:HD12</td>
<td>1:B:1659:VAL:H</td>
<td>1.83</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:253:PRO:HD2</td>
<td>1:A:256:THR:OG1</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1740:GLU:O</td>
<td>1:B:1741:VAL:C</td>
<td>2.58</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1685:HIS:CE1</td>
<td>1:B:1707:ARG:CZ</td>
<td>3.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:161:LYS:HD2</td>
<td>1:A:162:SER:N</td>
<td>2.32</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:557:ARG:HB2</td>
<td>1:A:610:PRO:HB2</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:575:ALA:O</td>
<td>1:A:576:HIS:HB2</td>
<td>2.19</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:716:ARG:HB2</td>
<td>1:A:725:TYR:HE1</td>
<td>1.86</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:A:711:LEU:HD22</td>
<td>1:A:730:PRO:HA</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1129:ARG:HA</td>
<td>1:B:1282:ALA:HB1</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1618:LEU:HA</td>
<td>1:B:1618:LEU:HD23</td>
<td>1.83</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:603:ALA:CB</td>
<td>1:A:616:LEU:HD12</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:693:PHE:HD2</td>
<td>1:A:694:ALA:N</td>
<td>2.19</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:758:LEU:C</td>
<td>1:A:762:MSE:HE3</td>
<td>2.40</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1160:LEU:HD22</td>
<td>1:B:1166:LEU:N</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1261:GLU:HG2</td>
<td>1:B:1266:LEU:H</td>
<td>1.86</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1287:LEU:O</td>
<td>1:B:1290:SER:HB3</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1387:VAL:HG12</td>
<td>1:B:1389:ASP:H</td>
<td>1.86</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1718:GLU:HB3</td>
<td>1:B:1719:ALA:H</td>
<td>1.46</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:222:GLY:HA2</td>
<td>1:A:225:LEU:HD12</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:589:LYS:NZ</td>
<td>1:A:696:HIS:HD1</td>
<td>2.19</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:718:GLU:O</td>
<td>1:A:719:ALA:C</td>
<td>2.60</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1140:GLY:N</td>
<td>1:B:1216:ALA:HB2</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1639:PHE:O</td>
<td>1:B:1640:MSE:C</td>
<td>2.58</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1594:ARG:O</td>
<td>1:B:1596:THR:N</td>
<td>2.54</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:1693:PHE:HD2</td>
<td>1:B:1694:ALA:N</td>
<td>2.19</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:326:LEU:CD1</td>
<td>1:A:528:ASP:HA</td>
<td>2.50</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:552:GLN:HA</td>
<td>1:A:572:LEU:O</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:725:TYR:C</td>
<td>1:A:727:GLN:H</td>
<td>2.24</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:1232:GLN:HE22</td>
<td>1:B:1343:ARG:CZ</td>
<td>2.34</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:320:GLU:O</td>
<td>1:A:324:ARG:HG3</td>
<td>2.20</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:1145:LEU:HD22</td>
<td>1:B:1147:PHE:CE1</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:1685:HIS:CE1</td>
<td>1:B:1707:ARG:NH2</td>
<td>2.90</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:301:PRO:O</td>
<td>1:A:304:ALA:HB3</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:554:ARG:HB3</td>
<td>1:A:613:GLU:HB3</td>
<td>2.02</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:1168:ASP:OD2</td>
<td>1:B:1253:PRO:HA</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:1250:MSE:HE1</td>
<td>1:B:1622:ILE:HD11</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:1547:PHE:HA</td>
<td>1:B:1616:LEU:O</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:225:LEU:O</td>
<td>1:A:227:TYR:N</td>
<td>2.55</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:312:PHE:HB3</td>
<td>1:A:319:ARG:HG3</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:589:LYS:HZ2</td>
<td>1:A:696:HIS:HD1</td>
<td>1.70</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:1232:GLN:C</td>
<td>1:B:1234:GLY:H</td>
<td>2.25</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:1575:ALA:O</td>
<td>1:B:1576:HIS:HB2</td>
<td>2.20</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:1247:GLY:HA2</td>
<td>1:B:1251:ARG:NH2</td>
<td>2.37</td>
<td>0.40</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:B:1246:PRO:O</td>
<td>1:B:1251:ARG:CZ</td>
<td>2.70</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:1339:LEU:HD22</td>
<td>1:B:1511:LYS:HB2</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:1382:LEU:HD23</td>
<td>1:B:1506:VAL:CG1</td>
<td>2.52</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:1556:GLY:O</td>
<td>1:B:1557:ARG:HG3</td>
<td>2.21</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 X-ray entries followed by that with respect to entries of similar resolution. 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>437/649 (67%)</td>
<td>344 (79%)</td>
<td>69 (16%)</td>
<td>24 (6%)</td>
<td>2 16</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>521/649 (80%)</td>
<td>406 (78%)</td>
<td>87 (17%)</td>
<td>28 (5%)</td>
<td>2 17</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>958/1298 (74%)</td>
<td>750 (78%)</td>
<td>156 (16%)</td>
<td>52 (5%)</td>
<td>2 17</td>
</tr>
</tbody>
</table>

All (52) Ramachandran outliers 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>187</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>235</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>519</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>670</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>704</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>719</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1670</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1717</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>167</td>
<td>TYR</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>226</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>277</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>625</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>738</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1167</td>
<td>TYR</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>B</td>
<td>1277</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1332</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1388</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1625</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1704</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1738</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1761</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>215</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>225</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>721</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>761</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1187</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1356</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1368</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1385</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1718</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>166</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>183</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>681</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1589</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1681</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1723</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>589</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>723</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1124</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1166</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1343</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1511</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1536</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1675</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1532</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1740</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1627</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>345</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>627</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>240</td>
<td>PRO</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1209</td>
<td>PRO</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>209</td>
<td>PRO</td>
</tr>
</tbody>
</table>
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 X-ray entries followed by that with respect to entries of similar resolution.

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>346/515 (67%)</td>
<td>316 (91%)</td>
<td>30 (9%)</td>
<td>12 42</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>419/515 (81%)</td>
<td>385 (92%)</td>
<td>34 (8%)</td>
<td>14 48</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>765/1030 (74%)</td>
<td>701 (92%)</td>
<td>64 (8%)</td>
<td>13 45</td>
</tr>
</tbody>
</table>

All (64) 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>141</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>145</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>161</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>168</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>174</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>195</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>230</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>232</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>243</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>252</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>278</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>293</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>302</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>315</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>549</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>551</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>554</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>563</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>565</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>596</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>625</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>636</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>660</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>662</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>670</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>693</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>739</td>
<td>VAL</td>
</tr>
</tbody>
</table>

Continued on next page...
Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (18) 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>173</td>
<td>HIS</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>232</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>239</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>558</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>585</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>604</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>685</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>727</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1123</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1173</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1232</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1239</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1558</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1585</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1604</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1615</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1685</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1727</td>
<td>GLN</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.
6  Fit of model and data

6.1  Protein, DNA and RNA chains

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Analysed</th>
<th>&lt;RSRZ&gt;</th>
<th>#RSRZ&gt;2</th>
<th>OWAB(Å²)</th>
<th>Q&lt;0.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>440/649 (67%)</td>
<td>1.82</td>
<td>156 (35%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>522/649 (80%)</td>
<td>1.68</td>
<td>155 (29%)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>962/1298 (74%)</td>
<td>1.74</td>
<td>311 (32%)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

All (311) RSRZ outliers are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>1142</td>
<td>GLY</td>
<td>13.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>530</td>
<td>TYR</td>
<td>8.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>216</td>
<td>ALA</td>
<td>8.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1726</td>
<td>HIS</td>
<td>8.1</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1719</td>
<td>ALA</td>
<td>8.0</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>279</td>
<td>THR</td>
<td>7.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>726</td>
<td>HIS</td>
<td>7.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>725</td>
<td>TYR</td>
<td>7.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>549</td>
<td>ASP</td>
<td>7.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>236</td>
<td>LEU</td>
<td>7.0</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>533</td>
<td>LEU</td>
<td>6.9</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1267</td>
<td>ARG</td>
<td>6.9</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>550</td>
<td>ARG</td>
<td>6.7</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1235</td>
<td>ALA</td>
<td>6.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>280</td>
<td>ARG</td>
<td>6.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1362</td>
<td>LEU</td>
<td>6.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>720</td>
<td>GLY</td>
<td>6.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1140</td>
<td>GLY</td>
<td>6.1</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1223</td>
<td>ALA</td>
<td>6.1</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1143</td>
<td>TRP</td>
<td>6.0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1344</td>
<td>ALA</td>
<td>6.0</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>525</td>
<td>ALA</td>
<td>5.9</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1231</td>
<td>THR</td>
<td>5.9</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1718</td>
<td>GLU</td>
<td>5.9</td>
</tr>
</tbody>
</table>
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>1337</td>
<td>THR</td>
<td>5.8</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1720</td>
<td>GLY</td>
<td>5.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>192</td>
<td>ASP</td>
<td>5.7</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1241</td>
<td>PHE</td>
<td>5.7</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1149</td>
<td>ASP</td>
<td>5.7</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1220</td>
<td>ALA</td>
<td>5.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>188</td>
<td>GLY</td>
<td>5.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1378</td>
<td>LEU</td>
<td>5.5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1737</td>
<td>TYR</td>
<td>5.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>719</td>
<td>ALA</td>
<td>5.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>210</td>
<td>GLU</td>
<td>5.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>302</td>
<td>LEU</td>
<td>5.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>544</td>
<td>ARG</td>
<td>5.1</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1148</td>
<td>LEU</td>
<td>5.0</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>240</td>
<td>PRO</td>
<td>4.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>690</td>
<td>TYR</td>
<td>4.8</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1345</td>
<td>SER</td>
<td>4.8</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1191</td>
<td>LEU</td>
<td>4.8</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1244</td>
<td>TYR</td>
<td>4.7</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1725</td>
<td>TYR</td>
<td>4.7</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1188</td>
<td>GLY</td>
<td>4.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>179</td>
<td>LEU</td>
<td>4.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1178</td>
<td>VAL</td>
<td>4.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1192</td>
<td>ASP</td>
<td>4.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>159</td>
<td>VAL</td>
<td>4.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>571</td>
<td>ASP</td>
<td>4.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>283</td>
<td>PRO</td>
<td>4.5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1180</td>
<td>LEU</td>
<td>4.5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1152</td>
<td>THR</td>
<td>4.5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1269</td>
<td>GLN</td>
<td>4.5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1224</td>
<td>LEU</td>
<td>4.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>284</td>
<td>GLY</td>
<td>4.5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1373</td>
<td>PRO</td>
<td>4.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>223</td>
<td>ALA</td>
<td>4.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1173</td>
<td>HIS</td>
<td>4.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1635</td>
<td>GLY</td>
<td>4.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1363</td>
<td>ARG</td>
<td>4.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1330</td>
<td>ALA</td>
<td>4.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1587</td>
<td>ALA</td>
<td>4.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>133</td>
<td>TYR</td>
<td>4.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1379</td>
<td>LYS</td>
<td>4.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1277</td>
<td>ASP</td>
<td>4.3</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>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>1202</td>
<td>LEU</td>
<td>4.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1134</td>
<td>LEU</td>
<td>4.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>716</td>
<td>ARG</td>
<td>4.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1203</td>
<td>SER</td>
<td>4.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>345</td>
<td>SER</td>
<td>4.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>310</td>
<td>GLU</td>
<td>4.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>149</td>
<td>ASP</td>
<td>4.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>265</td>
<td>PRO</td>
<td>4.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>584</td>
<td>PRO</td>
<td>4.0</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>178</td>
<td>VAL</td>
<td>4.0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1146</td>
<td>ALA</td>
<td>4.0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1139</td>
<td>THR</td>
<td>4.0</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>570</td>
<td>ASN</td>
<td>4.0</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>290</td>
<td>SER</td>
<td>3.9</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>721</td>
<td>GLY</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>617</td>
<td>PRO</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>524</td>
<td>LEU</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>206</td>
<td>PRO</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>715</td>
<td>ALA</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>160</td>
<td>LEU</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1215</td>
<td>LEU</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>295</td>
<td>PRO</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>177</td>
<td>GLU</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1189</td>
<td>ALA</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>722</td>
<td>LEU</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1243</td>
<td>PHE</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1505</td>
<td>GLU</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>241</td>
<td>PHE</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>614</td>
<td>ALA</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>244</td>
<td>TYR</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1375</td>
<td>LEU</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1185</td>
<td>LEU</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1721</td>
<td>GLY</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>143</td>
<td>TRP</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1525</td>
<td>ALA</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1368</td>
<td>GLU</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1553</td>
<td>ILE</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1153</td>
<td>GLY</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1504</td>
<td>LEU</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>275</td>
<td>VAL</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1662</td>
<td>ASP</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>323</td>
<td>ARG</td>
<td>3.5</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>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>1279</td>
<td>THR</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>545</td>
<td>PRO</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>217</td>
<td>LEU</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>727</td>
<td>GLN</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1186</td>
<td>GLU</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>534</td>
<td>ALA</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>605</td>
<td>VAL</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1327</td>
<td>TYR</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1221</td>
<td>ARG</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>237</td>
<td>SER</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1150</td>
<td>VAL</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>677</td>
<td>ALA</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1172</td>
<td>ARG</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>175</td>
<td>PRO</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>186</td>
<td>GLU</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>737</td>
<td>TYR</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>207</td>
<td>PHE</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>745</td>
<td>ALA</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>203</td>
<td>SER</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>344</td>
<td>ALA</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1580</td>
<td>LEU</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1144</td>
<td>GLY</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>138</td>
<td>ALA</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>292</td>
<td>LEU</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>536</td>
<td>VAL</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>142</td>
<td>GLY</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>547</td>
<td>PHE</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>618</td>
<td>LEU</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>155</td>
<td>PHE</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>611</td>
<td>ALA</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>765</td>
<td>ARG</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1736</td>
<td>SER</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>529</td>
<td>VAL</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>184</td>
<td>LEU</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1390</td>
<td>PRO</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1160</td>
<td>LEU</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>582</td>
<td>THR</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1677</td>
<td>ALA</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1151</td>
<td>SER</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>312</td>
<td>PHE</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1289</td>
<td>GLN</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1506</td>
<td>VAL</td>
<td>3.0</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>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>1207</td>
<td>PHE</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>606</td>
<td>GLY</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>341</td>
<td>LEU</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1752</td>
<td>VAL</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1372</td>
<td>LEU</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>596</td>
<td>THR</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>156</td>
<td>LYS</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1210</td>
<td>GLU</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>616</td>
<td>LEU</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1690</td>
<td>TYR</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1622</td>
<td>ILE</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>555</td>
<td>ALA</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>577</td>
<td>GLU</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>718</td>
<td>GLU</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>561</td>
<td>VAL</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1123</td>
<td>GLN</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>286</td>
<td>ARG</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1727</td>
<td>GLN</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>193</td>
<td>GLU</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>131</td>
<td>ALA</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>251</td>
<td>ARG</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1127</td>
<td>LEU</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>608</td>
<td>PHE</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>624</td>
<td>THR</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1182</td>
<td>PRO</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>209</td>
<td>PRO</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1147</td>
<td>PHE</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1558</td>
<td>HIS</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>560</td>
<td>VAL</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>327</td>
<td>TYR</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>293</td>
<td>ARG</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>669</td>
<td>SER</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>587</td>
<td>ALA</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1237</td>
<td>SER</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>180</td>
<td>LEU</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>628</td>
<td>ALA</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>134</td>
<td>LEU</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>196</td>
<td>LYS</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1669</td>
<td>SER</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1219</td>
<td>ARG</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>543</td>
<td>VAL</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1272</td>
<td>LEU</td>
<td>2.6</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>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>1168</td>
<td>ASP</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>145</td>
<td>LEU</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>554</td>
<td>ARG</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1167</td>
<td>TYR</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>601</td>
<td>LEU</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1213</td>
<td>GLY</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1242</td>
<td>ARG</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>585</td>
<td>ASN</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1179</td>
<td>LEU</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1530</td>
<td>TYR</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>573</td>
<td>GLU</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>518</td>
<td>ARG</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1226</td>
<td>ALA</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1306</td>
<td>LEU</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>172</td>
<td>ARG</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>711</td>
<td>LEU</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1581</td>
<td>ILE</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1607</td>
<td>SER</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>622</td>
<td>ILE</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1689</td>
<td>ALA</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>559</td>
<td>PRO</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1131</td>
<td>ALA</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>144</td>
<td>GLY</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1512</td>
<td>ARG</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1564</td>
<td>ARG</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1724</td>
<td>PHE</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>657</td>
<td>SER</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>137</td>
<td>ILE</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1686</td>
<td>GLU</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1668</td>
<td>THR</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1702</td>
<td>ALA</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>222</td>
<td>GLY</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1130</td>
<td>GLU</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1287</td>
<td>LEU</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>285</td>
<td>ARG</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1353</td>
<td>ARG</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>150</td>
<td>VAL</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1268</td>
<td>GLY</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>269</td>
<td>GLN</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1387</td>
<td>VAL</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1209</td>
<td>PRO</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1546</td>
<td>ARG</td>
<td>2.4</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>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>182</td>
<td>PRO</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>245</td>
<td>ASP</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1137</td>
<td>ILE</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1308</td>
<td>ARG</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1584</td>
<td>PRO</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>539</td>
<td>ARG</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1240</td>
<td>PRO</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1305</td>
<td>ARG</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>346</td>
<td>PRO</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1547</td>
<td>PHE</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>197</td>
<td>ARG</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1624</td>
<td>THR</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1163</td>
<td>LYS</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1293</td>
<td>ARG</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1551</td>
<td>LEU</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>609</td>
<td>VAL</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>658</td>
<td>LEU</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>659</td>
<td>VAL</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1322</td>
<td>VAL</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>132</td>
<td>ASN</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1266</td>
<td>LEU</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>161</td>
<td>LYS</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1285</td>
<td>ARG</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>597</td>
<td>ALA</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1613</td>
<td>GLU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1616</td>
<td>LEU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1194</td>
<td>PHE</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1333</td>
<td>GLU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>257</td>
<td>LEU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1593</td>
<td>LEU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>270</td>
<td>ASP</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>732</td>
<td>PRO</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1623</td>
<td>TYR</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1733</td>
<td>ALA</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>318</td>
<td>LEU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1298</td>
<td>ASP</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1758</td>
<td>LEU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1665</td>
<td>GLY</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>553</td>
<td>ILE</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1340</td>
<td>GLU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>306</td>
<td>LEU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>1248</td>
<td>ALA</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Continued on next page...
\textit{Continued from previous page...}

\begin{center}
\begin{tabular}{|c|c|c|c|c|}
\hline
Mol & Chain & Res & Type & RSRZ \\
\hline
1 & B & 1391 & PRO & 2.2 \\
1 & A & 319 & ARG & 2.2 \\
1 & B & 1329 & LEU & 2.1 \\
1 & B & 1154 & GLU & 2.1 \\
1 & A & 691 & THR & 2.1 \\
1 & B & 1304 & ALA & 2.1 \\
1 & B & 1312 & PHE & 2.1 \\
1 & A & 263 & PHE & 2.1 \\
1 & A & 147 & PHE & 2.1 \\
1 & A & 226 & ALA & 2.1 \\
1 & A & 674 & VAL & 2.1 \\
1 & B & 1559 & PRO & 2.1 \\
1 & A & 537 & ALA & 2.1 \\
1 & A & 595 & GLN & 2.1 \\
1 & B & 1246 & PRO & 2.1 \\
1 & B & 1706 & PRO & 2.1 \\
1 & B & 1222 & GLY & 2.1 \\
1 & B & 1284 & GLY & 2.1 \\
1 & B & 1567 & PHE & 2.1 \\
1 & A & 148 & LEU & 2.1 \\
1 & A & 578 & LEU & 2.1 \\
1 & A & 694 & ALA & 2.1 \\
1 & A & 590 & SER & 2.1 \\
1 & B & 1355 & SER & 2.1 \\
1 & A & 644 & GLU & 2.0 \\
1 & B & 1694 & ALA & 2.0 \\
1 & B & 1710 & ASN & 2.0 \\
1 & B & 1302 & LEU & 2.0 \\
1 & A & 171 & PHE & 2.0 \\
1 & B & 1693 & PHE & 2.0 \\
1 & A & 305 & ARG & 2.0 \\
1 & A & 531 & ALA & 2.0 \\
1 & A & 219 & ARG & 2.0 \\
1 & B & 1654 & THR & 2.0 \\
1 & A & 266 & LEU & 2.0 \\
\hline
\end{tabular}
\end{center}

\subsection*{6.2 Non-standard residues in protein, DNA, RNA chains}

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

There are no carbohydrates in this entry.

6.4 Ligands

There are no ligands in this entry.

6.5 Other polymers

There are no such residues in this entry.