May 29, 2020 – 12:48 am BST

PDB ID : 2PKG
Title : Structure of a complex between the A subunit of protein phosphatase 2A and the small t antigen of SV40
Authors : Jeffrey, P.D.; Shi, Y.
Deposited on : 2007-04-17
Resolution : 3.30 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
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) : 1.13
- EDS : 2.11
- Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
- Refmac : 5.8.0158
- CCP4 : 7.0.044 (Gargrove)
- Ideal geometry (proteins) : Engh & Huber (2001)
- Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
- Validation Pipeline (wwPDB-VP) : 2.11
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

\textit{X-RAY DIFFRACTION}

The reported resolution of this entry is 3.30 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>130704</td>
<td>1149 (3.34-3.26)</td>
</tr>
<tr>
<td>Clashscore</td>
<td>141614</td>
<td>1205 (3.34-3.26)</td>
</tr>
<tr>
<td>Ramachandran outliers</td>
<td>138981</td>
<td>1183 (3.34-3.26)</td>
</tr>
<tr>
<td>Sidechain outliers</td>
<td>138945</td>
<td>1182 (3.34-3.26)</td>
</tr>
<tr>
<td>RSRZ outliers</td>
<td>127900</td>
<td>1115 (3.34-3.26)</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 respectively. 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>580</td>
<td>![Quality of chain](red, orange, yellow, green)</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>580</td>
<td>![Quality of chain](red, orange, yellow, green)</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>88</td>
<td>![Quality of chain](red, orange, yellow, green)</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>88</td>
<td>![Quality of chain](red, orange, yellow, green)</td>
</tr>
</tbody>
</table>
2 Entry composition

There are 3 unique types of molecules in this entry. The entry contains 10358 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 Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform.

<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>579</td>
<td>Total C N O S</td>
<td>4515 2871 761 856 27</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>579</td>
<td>Total C N O S</td>
<td>4515 2871 761 856 27</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

- Molecule 2 is a protein called Small T antigen.

<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>2</td>
<td>C</td>
<td>80</td>
<td>Total C N O S</td>
<td>662 427 111 110 14</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>80</td>
<td>Total C N O S</td>
<td>662 427 111 110 14</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

- Molecule 3 is ZINC ION (three-letter code: ZN) (formula: Zn).

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>D</td>
<td>2</td>
<td>Total Zn</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>2</td>
<td>Total Zn</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>
3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry 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: Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform

Chain A:

- Molecule 1: Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform
## 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>C2221</td>
<td>Depositor</td>
</tr>
<tr>
<td>Cell constants</td>
<td>137.70Å 147.79Å 209.65Å</td>
<td>Depositor</td>
</tr>
<tr>
<td>a, b, c, α, β, γ</td>
<td>90.00° 90.00° 90.00°</td>
<td>Depositor</td>
</tr>
<tr>
<td>Resolution (Å)</td>
<td>60.40 – 3.30</td>
<td>Depositor</td>
</tr>
<tr>
<td>% Data completeness (in resolution range)</td>
<td>94.9 (60.40-3.30)</td>
<td>Depositor</td>
</tr>
<tr>
<td>R&lt;sub&gt;merge&lt;/sub&gt;</td>
<td>0.10</td>
<td>Depositor</td>
</tr>
<tr>
<td>R&lt;sub&gt;sym&lt;/sub&gt;</td>
<td>(Not available)</td>
<td>Depositor</td>
</tr>
<tr>
<td>&lt;I/σ(I)&gt;&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4.82 (at 3.33Å)</td>
<td>Xtriage</td>
</tr>
<tr>
<td>R, R&lt;sub&gt;free&lt;/sub&gt;</td>
<td>0.247 , 0.312</td>
<td>Depositor</td>
</tr>
<tr>
<td>R&lt;sub&gt;free&lt;/sub&gt; test set</td>
<td>1561 reflections (5.05%)</td>
<td>wwPDB-VP</td>
</tr>
<tr>
<td>Wilson B-factor (Å&lt;sup&gt;2&lt;/sup&gt;)</td>
<td>88.0</td>
<td>Xtriage</td>
</tr>
<tr>
<td>Anisotropy</td>
<td>0.589</td>
<td>Xtriage</td>
</tr>
<tr>
<td>Bulk solvent k&lt;sub&gt;sol&lt;/sub&gt;(e/Å&lt;sup&gt;3&lt;/sup&gt;) , B&lt;sub&gt;sol&lt;/sub&gt;(Å&lt;sup&gt;2&lt;/sup&gt;)</td>
<td>0.31 , 85.2</td>
<td>EDS</td>
</tr>
<tr>
<td>L-test for twinning&lt;sup&gt;2&lt;/sup&gt;</td>
<td>&lt;L&gt; = 0.49, &lt;L&lt;sup&gt;2&lt;/sup&gt;&gt; = 0.32</td>
<td>Xtriage</td>
</tr>
<tr>
<td>Estimated twinning fraction</td>
<td>No twinning to report.</td>
<td>Xtriage</td>
</tr>
<tr>
<td>F&lt;sub&gt;o&lt;/sub&gt;–F&lt;sub&gt;c&lt;/sub&gt; correlation</td>
<td>0.93</td>
<td>EDS</td>
</tr>
<tr>
<td>Total number of atoms</td>
<td>10358</td>
<td>wwPDB-VP</td>
</tr>
<tr>
<td>Average B, all atoms (Å&lt;sup&gt;2&lt;/sup&gt;)</td>
<td>72.0</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 3.57% of the height of the origin peak. No significant pseudotranslation is detected.*

---

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical values of <L>, <L<sup>2</sup>> 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

Bond lengths and bond angles in the following residue types are not validated in this section: ZN

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>0.44</td>
<td>0/4589</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>0.52</td>
<td>1/4589 (0.0%)</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>0.56</td>
<td>0/679</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>0.52</td>
<td>0/679</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>0.49</td>
<td>1/10536 (0.0%)</td>
</tr>
</tbody>
</table>

All (1) bond length outliers are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Atoms</th>
<th>Z</th>
<th>Observed(Å)</th>
<th>Ideal(Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>174</td>
<td>CYS</td>
<td>CB-SG</td>
<td>-5.23</td>
<td>1.73</td>
<td>1.81</td>
</tr>
</tbody>
</table>

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>4515</td>
<td>0</td>
<td>4623</td>
<td>410</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>4515</td>
<td>0</td>
<td>4623</td>
<td>394</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>662</td>
<td>0</td>
<td>649</td>
<td>48</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>662</td>
<td>0</td>
<td>649</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>D</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Continued on next page...
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 42.

All (886) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:B:278:ILE:H</td>
<td>1:B:278:ILE:HD12</td>
<td>1.10</td>
<td>1.10</td>
</tr>
<tr>
<td>1:B:94:GLU:HB2</td>
<td>1:B:131:LEU:HD11</td>
<td>1.32</td>
<td>1.05</td>
</tr>
<tr>
<td>1:B:356:MET:HE3</td>
<td>1:B:384:ILE:HG23</td>
<td>1.47</td>
<td>0.94</td>
</tr>
<tr>
<td>1:B:77:THR:HG21</td>
<td>1:B:118:GLU:HG3</td>
<td>1.48</td>
<td>0.93</td>
</tr>
<tr>
<td>1:B:338:ASN:HD21</td>
<td>1:B:340:HIS:HB2</td>
<td>1.34</td>
<td>0.92</td>
</tr>
<tr>
<td>1:A:206:ILE:HG21</td>
<td>1:A:243:LEU:HD22</td>
<td>1.50</td>
<td>0.91</td>
</tr>
<tr>
<td>1:B:347:SER:HB3</td>
<td>1:B:383:ASN:HD22</td>
<td>1.35</td>
<td>0.91</td>
</tr>
<tr>
<td>1:B:338:ASN:HD22</td>
<td>1:B:341:VAL:H</td>
<td>1.16</td>
<td>0.90</td>
</tr>
<tr>
<td>1:B:303:SER:O</td>
<td>1:B:306:VAL:HG23</td>
<td>1.68</td>
<td>0.90</td>
</tr>
<tr>
<td>1:A:278:ILE:HD12</td>
<td>1:A:278:ILE:H</td>
<td>1.35</td>
<td>0.89</td>
</tr>
<tr>
<td>1:A:47:THR:O</td>
<td>1:A:51:LEU:HB3</td>
<td>1.71</td>
<td>0.89</td>
</tr>
<tr>
<td>1:A:561:LYS:HD2</td>
<td>1:A:588:LEU:HD22</td>
<td>1.56</td>
<td>0.87</td>
</tr>
<tr>
<td>1:A:334:VAL:HG21</td>
<td>1:A:368:LEU:HD22</td>
<td>1.55</td>
<td>0.87</td>
</tr>
<tr>
<td>1:B:392:ASN:HB2</td>
<td>1:B:400:LEU:HD22</td>
<td>1.56</td>
<td>0.86</td>
</tr>
<tr>
<td>1:A:120:SER:H</td>
<td>1:A:123:ASP:HB2</td>
<td>1.39</td>
<td>0.86</td>
</tr>
<tr>
<td>1:B:58:THR:HG22</td>
<td>1:B:59:ILE:H</td>
<td>1.41</td>
<td>0.86</td>
</tr>
<tr>
<td>1:B:561:LYS:O</td>
<td>1:B:565:GLU:HG2</td>
<td>1.78</td>
<td>0.84</td>
</tr>
<tr>
<td>1:A:561:LYS:O</td>
<td>1:A:565:GLU:HG2</td>
<td>1.77</td>
<td>0.83</td>
</tr>
<tr>
<td>1:B:428:PRO:HD3</td>
<td>1:B:465:ASN:ND2</td>
<td>1.94</td>
<td>0.82</td>
</tr>
<tr>
<td>1:B:47:THR:O</td>
<td>1:B:51:LEU:HB3</td>
<td>1.80</td>
<td>0.82</td>
</tr>
<tr>
<td>1:B:278:ILE:N</td>
<td>1:B:278:ILE:HD12</td>
<td>1.93</td>
<td>0.81</td>
</tr>
<tr>
<td>1:B:373:LEU:HD22</td>
<td>1:B:384:ILE:HG21</td>
<td>1.61</td>
<td>0.81</td>
</tr>
<tr>
<td>1:B:222:LEU:HD22</td>
<td>1:B:223:LEU:CD2</td>
<td>2.11</td>
<td>0.81</td>
</tr>
<tr>
<td>1:A:425:GLU:OE2</td>
<td>1:B:418:ARG:NH1</td>
<td>2.14</td>
<td>0.81</td>
</tr>
<tr>
<td>1:B:537:ARG:O</td>
<td>1:B:540:VAL:HG12</td>
<td>1.82</td>
<td>0.80</td>
</tr>
</tbody>
</table>

Continued on next page...
## Interatomic Distances and Overlaps

<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:180:MET:HE3</td>
<td>1:A:180:MET:H</td>
<td>1.47</td>
<td>0.79</td>
</tr>
<tr>
<td>1:B:113:ARG:O</td>
<td>1:B:116:SER:HB3</td>
<td>1.82</td>
<td>0.79</td>
</tr>
<tr>
<td>1:A:102:THR:HG22</td>
<td>1:A:105:ARG:NH2</td>
<td>1.96</td>
<td>0.79</td>
</tr>
<tr>
<td>1:B:20:LEU:O</td>
<td>1:B:28:ARG:HD3</td>
<td>1.83</td>
<td>0.79</td>
</tr>
<tr>
<td>1:A:392:ASN:ND2</td>
<td>1:A:433:GLN:HE21</td>
<td>1.81</td>
<td>0.78</td>
</tr>
<tr>
<td>1:B:178:THR:HG22</td>
<td>1:B:180:MET:HG2</td>
<td>1.64</td>
<td>0.78</td>
</tr>
<tr>
<td>1:A:282:ASP:O</td>
<td>1:A:285:PRO:HD2</td>
<td>1.84</td>
<td>0.78</td>
</tr>
<tr>
<td>1:B:12:PRO:HA</td>
<td>1:B:15:VAL:HB</td>
<td>1.65</td>
<td>0.78</td>
</tr>
<tr>
<td>1:B:63:ASP:HA</td>
<td>1:B:66:LEU:HD12</td>
<td>1.65</td>
<td>0.77</td>
</tr>
<tr>
<td>1:A:444:ASN:C</td>
<td>1:A:444:ASN:HD22</td>
<td>1.87</td>
<td>0.77</td>
</tr>
<tr>
<td>1:A:537:ARG:O</td>
<td>1:A:540:VAL:HG12</td>
<td>1.85</td>
<td>0.77</td>
</tr>
<tr>
<td>1:A:270:LEU:O</td>
<td>1:A:274:VAL:HG23</td>
<td>1.84</td>
<td>0.76</td>
</tr>
<tr>
<td>1:A:127:HIS:C</td>
<td>1:A:130:PRO:HD2</td>
<td>2.05</td>
<td>0.76</td>
</tr>
<tr>
<td>2:D:112:I LE:O</td>
<td>2:D:112:ILE:HG22</td>
<td>1.84</td>
<td>0.76</td>
</tr>
<tr>
<td>1:B:178:THR:HG22</td>
<td>1:B:180:MET:HE3</td>
<td>1.66</td>
<td>0.76</td>
</tr>
<tr>
<td>1:B:347:SER:HB3</td>
<td>1:B:383:ASN:ND2</td>
<td>2.00</td>
<td>0.76</td>
</tr>
<tr>
<td>1:A:358:LYS:O</td>
<td>1:A:362:ILE:HG13</td>
<td>1.87</td>
<td>0.75</td>
</tr>
<tr>
<td>1:B:25:VAL:HG22</td>
<td>1:B:28:ARG:NH2</td>
<td>2.02</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:496:LEU:HA</td>
<td>1:A:499:MET:CE</td>
<td>2.16</td>
<td>0.75</td>
</tr>
<tr>
<td>1:B:94:GLU:CB</td>
<td>1:B:131:LEU:HD11</td>
<td>2.14</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:268:THR:HG23</td>
<td>1:A:305:LYS:HD2</td>
<td>1.68</td>
<td>0.75</td>
</tr>
<tr>
<td>1:B:561:LYS:HB3</td>
<td>1:B:562:PRO:HD3</td>
<td>1.68</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:392:ASN:ND2</td>
<td>1:A:433:GLN:NE2</td>
<td>2.35</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:45:GLU:O</td>
<td>1:A:49:SER:HB3</td>
<td>1.87</td>
<td>0.75</td>
</tr>
<tr>
<td>1:B:537:ARG:HA</td>
<td>1:B:540:VAL:HG12</td>
<td>1.69</td>
<td>0.74</td>
</tr>
<tr>
<td>1:B:25:VAL:HG22</td>
<td>1:B:28:ARG:HH22</td>
<td>1.52</td>
<td>0.74</td>
</tr>
<tr>
<td>2:D:114:LEU:HD12</td>
<td>2:D:114:ILE:HG22</td>
<td>2.03</td>
<td>0.74</td>
</tr>
<tr>
<td>1:A:504:CYS:O</td>
<td>1:A:508:LEU:HD23</td>
<td>1.88</td>
<td>0.74</td>
</tr>
<tr>
<td>1:A:125:GLU:HG2</td>
<td>1:A:162:VAL:HG21</td>
<td>1.70</td>
<td>0.74</td>
</tr>
<tr>
<td>1:A:373:LEU:HD22</td>
<td>1:A:384:ILE:HG21</td>
<td>1.69</td>
<td>0.74</td>
</tr>
<tr>
<td>1:A:107:LYS:HD3</td>
<td>1:A:110:GLU:OE1</td>
<td>1.88</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:155:TYR:HB3</td>
<td>1:A:156:PRO:HD3</td>
<td>1.69</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:452:VAL:HG13</td>
<td>1:A:497:HIS:CE1</td>
<td>2.24</td>
<td>0.73</td>
</tr>
<tr>
<td>1:B:452:VAL:HG12</td>
<td>1:B:452:VAL:O</td>
<td>1.86</td>
<td>0.73</td>
</tr>
<tr>
<td>1:B:526:LEU:HD22</td>
<td>1:B:563:ILE:HG21</td>
<td>1.70</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:206:ILE:HB</td>
<td>1:A:207:PRO:HD3</td>
<td>1.70</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:20:LEU:O</td>
<td>1:A:28:ARG:HD3</td>
<td>1.87</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:490:SER:HB3</td>
<td>1:A:501:THR:HG21</td>
<td>1.70</td>
<td>0.73</td>
</tr>
<tr>
<td>1:B:318:ARG:O</td>
<td>1:B:321:VAL:HG22</td>
<td>1.88</td>
<td>0.73</td>
</tr>
<tr>
<td>2:C:112:ILE:O</td>
<td>2:C:112:ILE:HG22</td>
<td>1.89</td>
<td>0.73</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:206:ILE:HG13</td>
<td>1:A:243:LEU:HD13</td>
<td>1.70</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:420:ARG:HH11</td>
<td>1:A:420:ARG:HG3</td>
<td>1.54</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:47:THR:HG23</td>
<td>1:A:51:LEU:HD23</td>
<td>1.69</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:206:ILE:HD12</td>
<td>1:A:243:LEU:HB3</td>
<td>1.71</td>
<td>0.72</td>
</tr>
<tr>
<td>1:A:467:LYS:O</td>
<td>1:A:471:GLU:HG3</td>
<td>1.89</td>
<td>0.72</td>
</tr>
<tr>
<td>1:B:506:ASN:HD21</td>
<td>1:B:543:SER:HB3</td>
<td>1.54</td>
<td>0.72</td>
</tr>
<tr>
<td>1:A:183:ARG:HG2</td>
<td>1:A:220:VAL:HG22</td>
<td>1.71</td>
<td>0.72</td>
</tr>
<tr>
<td>1:B:459:ARG:O</td>
<td>1:B:462:ALA:HB3</td>
<td>1.89</td>
<td>0.72</td>
</tr>
<tr>
<td>1:B:78:THR:O</td>
<td>1:B:80:VAL:N</td>
<td>2.19</td>
<td>0.72</td>
</tr>
<tr>
<td>1:B:197:GLU:HG2</td>
<td>1:B:200:ASN:HD22</td>
<td>1.54</td>
<td>0.72</td>
</tr>
<tr>
<td>1:B:284:VAL:O</td>
<td>1:B:288:GLN:HG3</td>
<td>1.90</td>
<td>0.72</td>
</tr>
<tr>
<td>1:B:313:LEU:HD13</td>
<td>1:B:321:VAL:HG21</td>
<td>1.71</td>
<td>0.72</td>
</tr>
<tr>
<td>1:B:284:VAL:O</td>
<td>1:B:288:GLN:HG3</td>
<td>1.90</td>
<td>0.72</td>
</tr>
<tr>
<td>1:B:313:LEU:HD13</td>
<td>1:B:321:VAL:HG21</td>
<td>1.71</td>
<td>0.72</td>
</tr>
<tr>
<td>2:D:114:LEU:HB3</td>
<td>2:D:118:LEU:HD12</td>
<td>1.72</td>
<td>0.72</td>
</tr>
<tr>
<td>1:A:262:MET:HE3</td>
<td>1:A:266:LYS:HG3</td>
<td>1.71</td>
<td>0.71</td>
</tr>
<tr>
<td>1:B:365:LEU:HA</td>
<td>1:B:368:LEU:HD12</td>
<td>1.72</td>
<td>0.71</td>
</tr>
<tr>
<td>1:B:38:ILE:H</td>
<td>1:B:38:ILE:HD12</td>
<td>1.56</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:262:MET:CE</td>
<td>1:A:266:LYS:HG3</td>
<td>2.21</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:77:THR:CG2</td>
<td>1:B:118:GLU:HG3</td>
<td>2.21</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:155:TYR:CE1</td>
<td>1:B:163:LYS:HB3</td>
<td>2.26</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:526:LEU:HD22</td>
<td>1:B:563:ILE:CG2</td>
<td>2.21</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:517:THR:HG23</td>
<td>1:A:521:MET:HE2</td>
<td>1.73</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:358:LYS:O</td>
<td>1:B:362:ILE:HG13</td>
<td>1.91</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:77:THR:HG22</td>
<td>1:A:86:VAL:HG23</td>
<td>1.75</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:353:SER:H</td>
<td>1:A:354:PRO:HD2</td>
<td>1.57</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:25:VAL:HG13</td>
<td>1:A:28:ARG:NH2</td>
<td>2.08</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:517:THR:HA</td>
<td>1:A:521:MET:HE2</td>
<td>1.75</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:350:MET:HG3</td>
<td>1:A:387:ASN:HB2</td>
<td>1.74</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:452:VAL:O</td>
<td>1:A:452:VAL:HG12</td>
<td>1.93</td>
<td>0.69</td>
</tr>
<tr>
<td>1:B:11:TYR:HB3</td>
<td>1:B:12:PRO:HD3</td>
<td>1.74</td>
<td>0.69</td>
</tr>
<tr>
<td>1:B:94:GLU:HB2</td>
<td>1:B:131:LEU:CD1</td>
<td>2.19</td>
<td>0.69</td>
</tr>
<tr>
<td>1:B:517:THR:HG23</td>
<td>1:B:521:MET:CE</td>
<td>2.23</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:48:ARG:HB3</td>
<td>1:A:80:VAL:HG23</td>
<td>1.75</td>
<td>0.68</td>
</tr>
<tr>
<td>1:B:109:VAL:HG13</td>
<td>1:B:150:LEU:HD21</td>
<td>1.74</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:401:SER:HA</td>
<td>1:A:405:LEU:HB2</td>
<td>1.76</td>
<td>0.68</td>
</tr>
<tr>
<td>2:D:114:LEU:O</td>
<td>2:D:118:LEU:HB2</td>
<td>1.93</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:34:LYS:NZ</td>
<td>1:A:37:THR:HG21</td>
<td>2.10</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:381:ARG:O</td>
<td>1:A:385:ILE:HG13</td>
<td>1.94</td>
<td>0.67</td>
</tr>
<tr>
<td>1:B:70:ALA:HB2</td>
<td>1:B:96:LEU:HD13</td>
<td>1.75</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:388:LEU:O</td>
<td>1:A:390:CYS:N</td>
<td>2.28</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:264:ALA:O</td>
<td>1:A:267:PHE:HB2</td>
<td>1.94</td>
<td>0.67</td>
</tr>
</tbody>
</table>

Continued on next page...
### Interatomic distance (Å) and Clash overlap (Å)

<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:534:ALA:CA</td>
<td>1:A:537:ARG:HH21</td>
<td>2.08</td>
<td>0.67</td>
</tr>
<tr>
<td>1:B:373:LEU:HD22</td>
<td>1:B:384:ILE:CG2</td>
<td>2.25</td>
<td>0.67</td>
</tr>
<tr>
<td>1:B:58:THR:HG22</td>
<td>1:B:59:ILE:N</td>
<td>2.10</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:204:GLU:C</td>
<td>1:A:207:PRO:HD2</td>
<td>2.14</td>
<td>0.67</td>
</tr>
<tr>
<td>1:B:517:THR:HG23</td>
<td>1:B:521:MET:HE1</td>
<td>1.76</td>
<td>0.66</td>
</tr>
<tr>
<td>1:A:378:PRO:O</td>
<td>1:A:382:LEU:HB2</td>
<td>1.96</td>
<td>0.66</td>
</tr>
<tr>
<td>1:A:390:CYS:O</td>
<td>1:A:392:ASN:N</td>
<td>2.29</td>
<td>0.66</td>
</tr>
<tr>
<td>1:B:452:VAL:HG13</td>
<td>1:B:497:HIS:NE2</td>
<td>2.11</td>
<td>0.66</td>
</tr>
<tr>
<td>1:B:506:ASN:HD21</td>
<td>1:B:543:SER:CB</td>
<td>2.09</td>
<td>0.66</td>
</tr>
<tr>
<td>1:A:197:GLU:HG2</td>
<td>1:A:200:ASN:ND2</td>
<td>2.11</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:12:PRO:HA</td>
<td>1:A:15:VAL:HB</td>
<td>1.78</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:179:PRO:HD2</td>
<td>1:B:180:MET:HE3</td>
<td>1.78</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:278:ILE:CD1</td>
<td>1:B:278:ILE:CD1</td>
<td>1.86</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:338:ASN:ND2</td>
<td>1:B:340:HIS:HB2</td>
<td>2.10</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:483:ILE:HB</td>
<td>1:A:484:PRO:HD3</td>
<td>1.78</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:222:LEU:HD23</td>
<td>1:B:222:LEU:C</td>
<td>2.17</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:378:PRO:O</td>
<td>1:B:382:LEU:HB2</td>
<td>1.96</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:35:LEU:HA</td>
<td>1:B:338:ILE:HD13</td>
<td>1.78</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:267:PHE:CE2</td>
<td>1:B:287:PHE:HB2</td>
<td>2.32</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:93:LEU:O</td>
<td>1:A:95:SER:N</td>
<td>2.30</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:333:LEU:O</td>
<td>1:B:336:ASP:HB2</td>
<td>1.97</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:89:LEU:O</td>
<td>1:A:92:PRO:HD2</td>
<td>1.97</td>
<td>0.65</td>
</tr>
<tr>
<td>2:D:154:GLU:O</td>
<td>2:D:158:LEU:HD12</td>
<td>1.96</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:192:PHE:O</td>
<td>1:B:195:VAL:HG22</td>
<td>1.97</td>
<td>0.65</td>
</tr>
<tr>
<td>2:D:114:LEU:HD12</td>
<td>2:D:114:LEU:H</td>
<td>1.61</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:444:ASN:HD22</td>
<td>1:A:445:SER:N</td>
<td>1.95</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:229:VAL:HG22</td>
<td>1:B:270:LEU:HD23</td>
<td>1.79</td>
<td>0.64</td>
</tr>
<tr>
<td>2:D:101:PRO:HG2</td>
<td>2:D:102:GLU:OE1</td>
<td>1.96</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:268:THR:HG21</td>
<td>1:A:308:GLU:OE1</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:346:VAL:HG13</td>
<td>1:A:437:GLU:N</td>
<td>2.12</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:38:ILE:O</td>
<td>1:B:42:LEU:HD23</td>
<td>1.96</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:35:LEU:HG</td>
<td>1:A:35:LEU:O</td>
<td>1.96</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:347:SER:CB</td>
<td>1:B:383:ASN:HD22</td>
<td>2.07</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:535:ASN:O</td>
<td>1:B:539:ASN:HB2</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:362:ILE:HA</td>
<td>1:B:366:LEU:HD13</td>
<td>1.77</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:481:THR:HG22</td>
<td>1:B:482:ILE:HD13</td>
<td>1.78</td>
<td>0.64</td>
</tr>
<tr>
<td>2:C:100:TRP:O</td>
<td>2:C:101:PRO:C</td>
<td>2.35</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:338:ASN:ND2</td>
<td>1:B:341:VAL:H</td>
<td>1.91</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:467:LYS:HB2</td>
<td>1:A:507:VAL:CG1</td>
<td>2.28</td>
<td>0.64</td>
</tr>
</tbody>
</table>

*Continued on next page...*
### Atoms in Contact

<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:316:ASP:O</td>
<td>1:B:318:ARG:N</td>
<td>2.31</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:16:LEU:HD22</td>
<td>1:B:46:ARG:HD2</td>
<td>1.79</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:405:LEU:HB3</td>
<td>1:A:406:PRO:HD3</td>
<td>1.78</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:451:LEU:HD21</td>
<td>1:B:466:LEU:HD11</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:514:GLN:HE22</td>
<td>1:B:552:ASP:HB3</td>
<td>1.63</td>
<td>0.63</td>
</tr>
<tr>
<td>1:B:206:ILE:HG21</td>
<td>1:B:243:LEU:HD22</td>
<td>1.80</td>
<td>0.63</td>
</tr>
<tr>
<td>1:B:401:SER:HA</td>
<td>1:B:405:LEU:HB2</td>
<td>1.79</td>
<td>0.63</td>
</tr>
<tr>
<td>1:B:356:LEU:HD12</td>
<td>1:B:365:LEU:HD11</td>
<td>1.80</td>
<td>0.63</td>
</tr>
<tr>
<td>1:B:222:LEU:CD2</td>
<td>1:B:223:LEU:HD23</td>
<td>2.24</td>
<td>0.63</td>
</tr>
<tr>
<td>1:B:274:VAL:HG12</td>
<td>1:B:278:ILE:HB</td>
<td>1.81</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:353:SER:C</td>
<td>1:A:355:ILE:H</td>
<td>2.01</td>
<td>0.63</td>
</tr>
<tr>
<td>1:B:38:ILE:N</td>
<td>1:B:38:ILE:HD12</td>
<td>2.14</td>
<td>0.63</td>
</tr>
<tr>
<td>1:B:436:VAL:HG13</td>
<td>1:B:437:GLU:H</td>
<td>1.64</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:82:GLY:O</td>
<td>1:B:84:GLU:N</td>
<td>2.33</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:58:THR:HG22</td>
<td>1:A:59:ILE:N</td>
<td>2.10</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:426:TYR:CE2</td>
<td>1:B:430:LEU:HD12</td>
<td>2.35</td>
<td>0.62</td>
</tr>
<tr>
<td>2:D:114:LEU:CD1</td>
<td>2:D:114:LEU:H</td>
<td>2.13</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:229:VAL:HG22</td>
<td>1:A:270:LEU:HD23</td>
<td>1.82</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:284:VAL:HB</td>
<td>1:B:285:PRO:HD3</td>
<td>1.81</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:483:ILE:HB</td>
<td>1:B:484:PRO:HD3</td>
<td>1.82</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:311:GLU:HG3</td>
<td>1:B:355:ILE:HD11</td>
<td>1.82</td>
<td>0.62</td>
</tr>
<tr>
<td>2:D:119:ARG:O</td>
<td>2:D:122:HIS:HB3</td>
<td>2.00</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:373:LEU:HD12</td>
<td>1:B:411:LEU:HD21</td>
<td>1.81</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:405:LEU:HB3</td>
<td>1:B:406:PRO:HD3</td>
<td>1.81</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:564:LEU:O</td>
<td>1:A:567:LEU:HB2</td>
<td>1.99</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:93:LEU:C</td>
<td>1:A:95:SER:H</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:197:GLU:HG2</td>
<td>1:B:200:ASN:ND2</td>
<td>2.14</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:48:ARG:HB3</td>
<td>1:B:80:VAL:CG2</td>
<td>2.30</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:77:THR:HG22</td>
<td>1:B:86:VAL:HG23</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>2:C:112:CYS:C</td>
<td>2:C:112:ILE:HG13</td>
<td>2.21</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:16:LEU:HD12</td>
<td>1:B:19:GLU:HB2</td>
<td>1.83</td>
<td>0.61</td>
</tr>
<tr>
<td>2:C:98:LYS:O</td>
<td>2:C:103:CYS:SG</td>
<td>2.59</td>
<td>0.61</td>
</tr>
<tr>
<td>2:C:102:GLU:CB</td>
<td>2:C:107:MET:HB2</td>
<td>2.31</td>
<td>0.61</td>
</tr>
</tbody>
</table>

*Continued on next page...*
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:B:11:TYR:HB3</td>
<td>1:B:12:PRO:CD</td>
<td>2.30</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:390:CYS:O</td>
<td>1:B:393:GLU:HB2</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>2:C:115:LEU:HD13</td>
<td>2:C:141:PHE:HB2</td>
<td>1.81</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:378:PRO:HG3</td>
<td>1:A:381:ARG:NH2</td>
<td>2.15</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:417:TRP:CZ3</td>
<td>1:B:418:ARG:HG2</td>
<td>2.35</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:271:GLN:NE2</td>
<td>1:B:312:ASN:HB2</td>
<td>2.16</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:325:GLN:O</td>
<td>1:A:328:PRO:HD2</td>
<td>2.00</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:206:ILE:HB</td>
<td>1:B:207:PRO:HD3</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:381:ARG:O</td>
<td>1:B:385:ILE:HG13</td>
<td>2.00</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:183:ARG:HG2</td>
<td>1:B:220:VAL:HG22</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:34:LYS:C</td>
<td>1:B:36:SER:H</td>
<td>2.04</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:444:ASN:C</td>
<td>1:A:444:ASN:ND2</td>
<td>2.54</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:522:LEU:HB3</td>
<td>1:B:523:PRO:HD3</td>
<td>1.84</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:420:ARG:NG1</td>
<td>1:A:420:ARG:HG3</td>
<td>2.16</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:77:THR:HG21</td>
<td>1:A:118:GLU:HG3</td>
<td>1.84</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:392:ASN:O</td>
<td>1:B:392:ASN:CG</td>
<td>2.39</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:105:ARG:O</td>
<td>1:A:109:VAL:HG23</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:93:LEU:C</td>
<td>1:A:95:SER:N</td>
<td>2.54</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:109:VAL:O</td>
<td>1:B:113:ARG:HG3</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:349:ILE:HG23</td>
<td>1:B:350:MET:N</td>
<td>2.16</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:534:ALA:HA</td>
<td>1:A:537:ARG:HE</td>
<td>1.65</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:481:THR:HG22</td>
<td>1:B:482:ILE:CD1</td>
<td>2.32</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:431:ALA:O</td>
<td>1:A:432:GLY:C</td>
<td>2.38</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:34:LYS:HZ2</td>
<td>1:A:37:THR:HG21</td>
<td>1.67</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:350:MET:HE2</td>
<td>1:B:384:ILE:HD12</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:427:MET:HE3</td>
<td>1:B:430:LEU:HB3</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>2:D:122:HIS:CE1</td>
<td>2:D:133:LEU:HD12</td>
<td>2.38</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:338:ASN:HD22</td>
<td>1:B:341:VAL:N</td>
<td>1.94</td>
<td>0.59</td>
</tr>
<tr>
<td>2:D:98:LYS:O</td>
<td>2:D:103:CYS:SG</td>
<td>2.61</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:181:VAL:O</td>
<td>1:A:184:ALA:HB3</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:204:GLU:O</td>
<td>1:A:207:PRO:HD2</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:245:MET:O</td>
<td>1:A:249:ARG:HB2</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:495:TYR:CD2</td>
<td>1:B:533:VAL:HG11</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>2:C:115:LEU:HD12</td>
<td>2:C:115:LEU:O</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:353:SER:C</td>
<td>1:A:355:ILE:N</td>
<td>2.56</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:427:MET:CE</td>
<td>1:A:430:LEU:HD13</td>
<td>2.32</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:75:THR:O</td>
<td>1:A:76:PHE:HD1</td>
<td>1.85</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:93:LEU:O</td>
<td>1:A:96:LEU:N</td>
<td>2.36</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:517:THR:HG23</td>
<td>1:A:521:MET:CE</td>
<td>2.33</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:105:ARG:O</td>
<td>1:B:109:VAL:HG23</td>
<td>2.03</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:496:LEU:HD23</td>
<td>1:A:499:MET:HE3</td>
<td>1.85</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:572:ASP:OD1</td>
<td>1:B:574:ASP:HB2</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:52:LEU:HB2</td>
<td>1:B:53:PRO:HD3</td>
<td>1.85</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:96:LEU:O</td>
<td>1:A:99:VAL:HG23</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:327:LEU:HB3</td>
<td>1:B:328:PRO:HD3</td>
<td>1.85</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:563:ILE:HG23</td>
<td>1:A:563:ILE:O</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:52:LEU:HD13</td>
<td>1:A:88:CYS:O</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:528:MET:C</td>
<td>1:A:530:GLY:H</td>
<td>2.06</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:486:VAL:O</td>
<td>1:B:501:THR:HG23</td>
<td>2.04</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:537:ARG:HA</td>
<td>1:A:540:VAL:HG12</td>
<td>1.86</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:358:LYS:HG3</td>
<td>1:A:395:ILE:HA</td>
<td>1.86</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:156:PRO:HG3</td>
<td>1:A:195:VAL:HB</td>
<td>1.84</td>
<td>0.58</td>
</tr>
<tr>
<td>2:C:115:LEU:C</td>
<td>2:C:115:LEU:HD12</td>
<td>2.24</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:179:PRO:HD2</td>
<td>1:A:180:MET:HE3</td>
<td>1.84</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:94:GLU:OE1</td>
<td>1:B:131:LEU:HD12</td>
<td>2.03</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:538:PHE:CD1</td>
<td>1:B:538:PHE:C</td>
<td>2.77</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:180:MET:HE1</td>
<td>2:C:147:TRP:HA</td>
<td>1.85</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:366:LEU:O</td>
<td>1:A:370:LEU:HB2</td>
<td>2.05</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:496:LEU:O</td>
<td>1:A:499:MET:HB2</td>
<td>2.03</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:572:ASP:OD1</td>
<td>1:A:574:ASP:HB2</td>
<td>2.05</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:26:LEU:C</td>
<td>1:A:22:ASN:N</td>
<td>2.55</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:456:TYR:O</td>
<td>1:B:457:ALA:C</td>
<td>2.42</td>
<td>0.57</td>
</tr>
<tr>
<td>2:D:100:TRP:CE3</td>
<td>2:D:157:LEU:HD22</td>
<td>2.39</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:420:ARG:HG3</td>
<td>1:B:420:ARG:HH11</td>
<td>1.70</td>
<td>0.57</td>
</tr>
<tr>
<td>2:D:93:ASP:C</td>
<td>2:D:95:MET:H</td>
<td>2.07</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:475:LYS:NZ</td>
<td>2:C:154:GLU:OE1</td>
<td>2.36</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:365:LEU:HD23</td>
<td>1:A:368:LEU:HD12</td>
<td>1.87</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:178:THR:CG2</td>
<td>1:B:180:MET:HG2</td>
<td>2.35</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:522:LEU:HB3</td>
<td>1:A:523:PRO:HD3</td>
<td>1.87</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:11:TYR:CD2</td>
<td>1:A:12:PRO:HD3</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:11:TYR:HB3</td>
<td>1:A:12:PRO:HD3</td>
<td>1.85</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:99:VAL:HG12</td>
<td>1:B:101:GLU:H</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:377:CYS:SG</td>
<td>1:B:379:GLU:HB2</td>
<td>2.45</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>2:C:101:PRO:HG2</td>
<td>2:C:102:GLU:OE1</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:93:LEU:O</td>
<td>1:B:95:SER:N</td>
<td>2.37</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:303:SER:O</td>
<td>1:A:306:VAL:HG23</td>
<td>2.04</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:77:THR:HG22</td>
<td>1:A:86:VAL:CG2</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:280:LYS:HA</td>
<td>1:B:284:VAL:CG2</td>
<td>2.36</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:421:LEU:O</td>
<td>1:A:421:LEU:HG12</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:538:PHE:O</td>
<td>1:A:542:LYS:HG3</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:556:LEU:O</td>
<td>1:B:556:LEU:HG13</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:268:THR:CG2</td>
<td>1:A:305:LYS:HG2</td>
<td>2.36</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:411:LEU:HB3</td>
<td>1:A:423:ILE:HG13</td>
<td>1.88</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:436:VAL:HG13</td>
<td>1:B:437:GLU:N</td>
<td>2.20</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:201:VAL:O</td>
<td>1:A:206:ILE:HG12</td>
<td>2.04</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:490:SER:HB3</td>
<td>1:B:501:THR:HG21</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:350:MET:HE1</td>
<td>1:A:384:ILE:HG23</td>
<td>1.85</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:287:PHE:O</td>
<td>1:B:291:MET:HG3</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:392:ASN:ND2</td>
<td>1:B:433:GLN:NE2</td>
<td>2.53</td>
<td>0.56</td>
</tr>
<tr>
<td>2:C:100:TRP:CG</td>
<td>2:C:101:PRO:C</td>
<td>2.73</td>
<td>0.56</td>
</tr>
<tr>
<td>2:D:100:TRP:O</td>
<td>2:D:101:PRO:C</td>
<td>2.44</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:15:VAL:O</td>
<td>1:B:19:GLU:HG3</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:313:LEU:HG13</td>
<td>1:B:321:VAL:CG2</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:452:VAL:O</td>
<td>1:B:452:VAL:CG1</td>
<td>2.54</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:16:LEU:O</td>
<td>1:A:20:LEU:HG</td>
<td>2.07</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:561:LYS:HB3</td>
<td>1:A:562:PRO:HG12</td>
<td>1.87</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:20:LEU:C</td>
<td>1:B:22:ASN:N</td>
<td>2.57</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:311:GLU:HA</td>
<td>1:B:355:ILE:HG23</td>
<td>1.87</td>
<td>0.55</td>
</tr>
<tr>
<td>2:C:122:HIS:CE1</td>
<td>2:C:133:LEU:HG23</td>
<td>2.41</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:38:ILE:O</td>
<td>1:A:42:LEU:HG23</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:388:LEU:HG13</td>
<td>1:B:408:ILE:HG11</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:98:THR:HG22</td>
<td>1:B:98:THR:O</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:587:SER:O</td>
<td>1:A:588:LEU:HG23</td>
<td>2.07</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:20:LEU:C</td>
<td>1:B:22:ASN:N</td>
<td>2.09</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:259:VAL:O</td>
<td>1:A:263:VAL:HG23</td>
<td>2.07</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:75:THR:O</td>
<td>1:B:76:PHE:HG12</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>2:C:135:TRP:HB2</td>
<td>2:C:147:TRP:HB2</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>2:D:114:LEU:CD1</td>
<td>2:D:114:LEU:N</td>
<td>2.68</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:10:LEU:HG22</td>
<td>1:A:46:ARG:HG2</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:197:GLU:HG2</td>
<td>1:A:200:ASN:HG2</td>
<td>1.69</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:171:ARG:NH2</td>
<td>1:A:204:GLU:HG2</td>
<td>2.21</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:34:LYS:O</td>
<td>1:A:38:ILE:HG13</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:A:561:LYS:HE3</td>
<td>1:A:588:LEU:HB3</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:275:GLY:HA3</td>
<td>1:B:278:ILE:HD13</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:509:SER:OG</td>
<td>1:B:510:GLU:N</td>
<td>2.40</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:327:LEU:HB3</td>
<td>1:A:328:PRO:HD3</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:534:ALA:HA</td>
<td>1:A:537:ARG:HH21</td>
<td>1.73</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:392:ASN:HD22</td>
<td>1:A:433:GLN:HE21</td>
<td>1.52</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:517:THR:HA</td>
<td>1:A:521:MET:CE</td>
<td>2.38</td>
<td>0.54</td>
</tr>
<tr>
<td>2:C:93:ASP:C</td>
<td>2:C:95:MET:H</td>
<td>2.09</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:26:LEU:C</td>
<td>1:A:22:ASN:H</td>
<td>2.10</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:373:LEU:CD2</td>
<td>1:A:384:ILE:HG21</td>
<td>2.37</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:390:CYS:O</td>
<td>1:A:393:GLU:N</td>
<td>2.32</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:356:LEU:HB3</td>
<td>1:B:360:ASN:HB3</td>
<td>1.87</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:129:VAL:HB</td>
<td>1:B:130:PRO:HD3</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:183:ARG:HD3</td>
<td>1:B:219:SER:HB2</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>2:C:119:ARG:O</td>
<td>2:C:122:HIS:HB3</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:448:MET:HA</td>
<td>1:A:451:LEU:HD23</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:60:TYR:O</td>
<td>1:A:61:ASP:O</td>
<td>2.25</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:78:THR:C</td>
<td>1:B:80:VAL:H</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:453:ASP:OD1</td>
<td>1:A:455:VAL:HG13</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:450:TRP:HB3</td>
<td>1:A:462:ALA:HB2</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:411:LEU:HB3</td>
<td>1:B:423:ILE:HG13</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:198:LEU:HD22</td>
<td>1:A:198:LEU:H</td>
<td>1.73</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:300:ALA:N</td>
<td>1:A:341:VAL:HG22</td>
<td>2.22</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:98:THR:HG23</td>
<td>1:A:143:SER:OG</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:509:SER:O</td>
<td>1:B:511:VAL:N</td>
<td>2.41</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:126:ALA:O</td>
<td>1:A:130:PRO:HG2</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:332:MET:SD</td>
<td>1:A:327:LEU:HD22</td>
<td>2.47</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:20:LEU:O</td>
<td>1:A:22:ASN:N</td>
<td>2.41</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:436:VAL:HG22</td>
<td>1:B:440:ASP:OD2</td>
<td>2.07</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:42:LEU:H</td>
<td>1:B:42:LEU:HD22</td>
<td>1.72</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:49:SER:OG</td>
<td>1:B:50:GLU:N</td>
<td>2.40</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:582:ALA:O</td>
<td>1:B:586:LEU:HG</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:369:PHE:O</td>
<td>1:B:373:LEU:HB2</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>2:D:100:TRP:CG</td>
<td>2:D:101:PRO:N</td>
<td>2.75</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:430:LEU:O</td>
<td>1:A:431:ALA:C</td>
<td>2.47</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:141:PHE:CD1</td>
<td>1:A:142:THR:N</td>
<td>2.76</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:245:MET:HB3</td>
<td>1:A:249:ARG:HH21</td>
<td>1.74</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:282:ASP:C</td>
<td>1:A:285:PRO:HD2</td>
<td>2.28</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:336:ILE:O</td>
<td>1:A:333:LEU:N</td>
<td>2.41</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:427:MET:HE1</td>
<td>1:A:430:LEU:HD13</td>
<td>1.90</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>2:D:93:ASP:C</td>
<td>2:D:95:MET:N</td>
<td>2.61</td>
<td>0.53</td>
</tr>
<tr>
<td>2:C:111:CYS:O</td>
<td>2:C:112:ILE:HG13</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:365:LEU:O</td>
<td>1:A:368:LEU:HB2</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:16:LEU:HG</td>
<td>1:B:20:LEU:HG</td>
<td>1.91</td>
<td>0.53</td>
</tr>
<tr>
<td>2:C:134:VAL:CG1</td>
<td>2:C:147:TRP:CZ3</td>
<td>2.91</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:529:ALA:HA</td>
<td>1:A:540:VAL:HG11</td>
<td>1.91</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:141:PHE:CD1</td>
<td>1:A:141:PHE:C</td>
<td>2.82</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:561:LYS:HD2</td>
<td>1:B:588:LEU:HD22</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:34:LYS:O</td>
<td>1:B:36:SER:N</td>
<td>2.42</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:145:PHE:HA</td>
<td>1:A:144:ARG:NH1</td>
<td>2.24</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:48:ARG:HG3</td>
<td>1:A:50:VAL:CG2</td>
<td>2.39</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:145:THR:HG22</td>
<td>1:A:146:SER:N</td>
<td>2.24</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:310:CYS:O</td>
<td>1:A:313:LEU:HB2</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:192:PHE:CZ</td>
<td>1:B:196:LEU:HD21</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>2:C:102:GLU:HB3</td>
<td>2:C:107:MET:HB2</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:105:ARG:CZ</td>
<td>1:B:142:THR:HG22</td>
<td>2.40</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:28:ARG:O</td>
<td>1:B:31:SER:HB3</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>2:C:122:HIS:NE2</td>
<td>2:C:133:LEU:HD12</td>
<td>2.24</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:180:MET:CE</td>
<td>2:C:147:TRP:HA</td>
<td>2.40</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:492:ASP:O</td>
<td>1:A:498:ARG:HD3</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:452:VAL:HG13</td>
<td>1:B:497:HIS:CE1</td>
<td>2.45</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:564:LEU:HD22</td>
<td>1:A:583:LEU:HD21</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>2:D:135:TRP:HB2</td>
<td>2:D:147:TRP:HB2</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:335:LEU:HD12</td>
<td>1:B:240:LEU:HD23</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:357:ARG:CA</td>
<td>1:B:540:VAL:HG12</td>
<td>2.38</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:556:LEU:O</td>
<td>1:B:560:VAL:HB</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>2:C:134:VAL:O</td>
<td>2:C:136:VAL:N</td>
<td>2.43</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:15:VAL:HG13</td>
<td>1:A:19:GLU:OE2</td>
<td>2.09</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:355:ILE:HG22</td>
<td>1:B:356:LEU:N</td>
<td>2.24</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:481:THR:HG22</td>
<td>1:B:482:ILE:N</td>
<td>2.24</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:221:ARG:O</td>
<td>1:A:224:ALA:HB3</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:111:SER:O</td>
<td>1:B:115:ILE:HG23</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:155:TYR:CZ</td>
<td>1:B:196:LEU:HD22</td>
<td>2.44</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:448:MET:HE2</td>
<td>1:B:451:LEU:HD23</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:182:ARG:NE</td>
<td>1:A:215:ASP:OD2</td>
<td>2.42</td>
<td>0.51</td>
</tr>
<tr>
<td>2:C:114:LEU:HD12</td>
<td>2:C:114:LEU:H</td>
<td>1.75</td>
<td>0.51</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:239:ASP:O</td>
<td>1:A:242:ALA:N</td>
<td>2.43</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:46:ARG:HA</td>
<td>1:A:49:SER:HB3</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:107:LYS:O</td>
<td>1:A:110:GLU:N</td>
<td>2.43</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:317:CYS:O</td>
<td>1:A:320:ASN:HB2</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:576:LYS:O</td>
<td>1:B:577:TYR:C</td>
<td>2.48</td>
<td>0.51</td>
</tr>
<tr>
<td>2:C:125:ARG:HG3</td>
<td>2:C:125:ARG:NH1</td>
<td>2.26</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:372:GLN:O</td>
<td>1:A:374:LYS:N</td>
<td>2.44</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:411:LEU:O</td>
<td>1:A:414:ASP:HB2</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:522:LEU:N</td>
<td>1:A:523:PRO:CD</td>
<td>2.73</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:16:LEU:HD11</td>
<td>1:B:50:GLU:HB3</td>
<td>1.92</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:75:THR:O</td>
<td>1:B:76:PHE:CD1</td>
<td>2.64</td>
<td>0.50</td>
</tr>
<tr>
<td>2:D:134:VAL:O</td>
<td>2:D:136:VAL:N</td>
<td>2.44</td>
<td>0.50</td>
</tr>
<tr>
<td>2:D:169:TYR:O</td>
<td>2:D:170:ARG:HB3</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:217:GLN:HB3</td>
<td>1:A:220:VAL:HG23</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:141:PHE:CD1</td>
<td>1:B:141:PHE:C</td>
<td>2.85</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:222:LEU:CD2</td>
<td>1:B:222:LEU:C</td>
<td>2.80</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:339:GLN:O</td>
<td>1:A:343:SER:HB2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:474:GLY:O</td>
<td>1:A:477:TRP:HB3</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:372:GLN:HB2</td>
<td>1:B:384:ILE:HG13</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:529:ALA:O</td>
<td>1:B:537:ARG:HG2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:274:VAL:CG1</td>
<td>1:A:278:ILE:HB</td>
<td>2.41</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:65:VAL:O</td>
<td>1:A:68:ALA:HB3</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:38:ILE:H</td>
<td>1:B:38:ILE:CD1</td>
<td>2.21</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:448:MET:O</td>
<td>1:B:451:LEU:HB2</td>
<td>2.10</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:325:GLN:HB2</td>
<td>1:A:326:ILE:HD12</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:527:ARG:NH1</td>
<td>1:A:527:ARG:HG2</td>
<td>2.26</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:100:GLU:O</td>
<td>1:B:105:ARG:NH1</td>
<td>2.45</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:267:PHE:HE2</td>
<td>1:B:287:PHE:HB2</td>
<td>1.76</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:535:ASN:HA</td>
<td>1:B:538:PHE:CD2</td>
<td>2.47</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:268:THR:HG23</td>
<td>1:B:305:LYS:HD2</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>2:D:115:LEU:C</td>
<td>2:D:115:LEU:HD12</td>
<td>2.32</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:492:ASP:O</td>
<td>1:B:498:ARG:HD3</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:159:SER:O</td>
<td>1:B:163:LYS:HG3</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:56:THR:C</td>
<td>1:A:58:THR:H</td>
<td>2.14</td>
<td>0.50</td>
</tr>
<tr>
<td>2:C:122:HIS:HE1</td>
<td>2:C:143:CYS:SG</td>
<td>2.35</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:72:GLN:C</td>
<td>1:A:74:GLY:H</td>
<td>2.15</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:86:VAL:HG21</td>
<td>1:B:118:GLU:HB2</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:537:ARG:O</td>
<td>1:B:546:VAL:CG1</td>
<td>2.57</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:587:SER:O</td>
<td>1:B:588:LEU:HD23</td>
<td>2.12</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Continued on next page...
Table containing atom pairs with distances and overlap values: 

<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>2:C:129:ARG:HG2</td>
<td>2:C:130:LYS:N</td>
<td>2.27</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:388:LEU:C</td>
<td>1:A:390:CYS:N</td>
<td>2.63</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:16:LEU:HD22</td>
<td>1:B:46:ARG:CD</td>
<td>2.42</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:476:GLU:O</td>
<td>1:B:479:His:HB3</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>2:C:122:His:CD2</td>
<td>2:C:133:LEU:HD12</td>
<td>2.48</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:16:LEU:HA</td>
<td>1:A:19:GLU:OE2</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:170:PHD:HA</td>
<td>1:B:173:LEU:HD12</td>
<td>1.93</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:12:PRO:HG3</td>
<td>1:B:38:ILE:HG23</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:274:VAL:HG12</td>
<td>1:A:278:ILE:HD13</td>
<td>1.93</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:534:ALA:N</td>
<td>1:A:537:ARG:HH21</td>
<td>2.10</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:58:THR:CG2</td>
<td>1:A:59:IIE:H</td>
<td>2.10</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:378:PRO:HG3</td>
<td>1:B:381:ARG:NH2</td>
<td>2.28</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:350:MET:CE</td>
<td>1:B:384:ILE:HD12</td>
<td>2.42</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:519:LYS:HG3</td>
<td>1:B:519:LYS:O</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:29:LEU:CE</td>
<td>1:B:31:SER:H</td>
<td>2.15</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:318:ARG:O</td>
<td>1:B:322:ILE:HG13</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:354:ALA:O</td>
<td>1:B:537:ARG:N</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:412:ALA:HB2</td>
<td>1:A:423:ILE:HG21</td>
<td>1.93</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:115:ILE:O</td>
<td>1:B:119:HIS:HD2</td>
<td>1.96</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:82:GLY:C</td>
<td>1:B:84:GLU:H</td>
<td>2.16</td>
<td>0.49</td>
</tr>
<tr>
<td>2:D:93:ASP:HB2</td>
<td>2:D:96:TYR:HD1</td>
<td>1.77</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:90:LEU:HB2</td>
<td>1:B:91:PRO:HD3</td>
<td>1.95</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:404:LEU:O</td>
<td>1:A:405:LEU:C</td>
<td>2.51</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:535:ASN:HA</td>
<td>1:A:538:PHD:CD2</td>
<td>2.48</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:361:THR:O</td>
<td>1:B:365:LEU:HB2</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:147:ALA:O</td>
<td>1:A:149:GLY:N</td>
<td>2.46</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:43:GLY:N</td>
<td>1:A:46:ARG:HB2</td>
<td>2.27</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:392:ASN:CB</td>
<td>1:B:400:LEU:HD22</td>
<td>2.38</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:537:ARG:HA</td>
<td>1:B:540:VAL:CG1</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>2:D:145:ARG:HG2</td>
<td>2:D:156:THR:HG21</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:222:LEU:HD23</td>
<td>1:A:222:LEU:C</td>
<td>2.33</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:91:PRO:N</td>
<td>1:A:92:PRO:HD2</td>
<td>2.28</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:391:VAL:C</td>
<td>1:B:393:GLU:H</td>
<td>2.17</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:276:LEU:O</td>
<td>1:A:271:GLN:C</td>
<td>2.50</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:559:GLU:O</td>
<td>1:A:563:ILE:HG22</td>
<td>2.12</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:77:THR:HG23</td>
<td>1:A:115:ILE:HG22</td>
<td>1.94</td>
<td>0.48</td>
</tr>
<tr>
<td>2:C:100:TRP:CG3</td>
<td>2:C:104:ALA:HB2</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:16:LEU:HA</td>
<td>1:A:19:GLU:CD</td>
<td>2.33</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:307:LYS:HG2</td>
<td>1:A:311:GLU:OE1</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:42:LEU:HD12</td>
<td>1:A:46:ARG:HB3</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:204:GLU:C</td>
<td>1:B:207:PRO:HD2</td>
<td>2.33</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:365:LEU:O</td>
<td>1:B:368:LEU:HB2</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:420:ARG:O</td>
<td>1:B:421:LEU:C</td>
<td>2.51</td>
<td>0.48</td>
</tr>
<tr>
<td>2:D:129:ARG:HD3</td>
<td>2:D:131:ASP:CB</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:136:ALA:O</td>
<td>1:A:144:ARG:HG2</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:326:ILE:O</td>
<td>1:B:329:CYS:N</td>
<td>2.41</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:527:ARG:HH11</td>
<td>1:B:527:ARG:HG2</td>
<td>1.77</td>
<td>0.48</td>
</tr>
<tr>
<td>2:D:94:ALA:HB1</td>
<td>2:D:98:LYS:HG3</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:194:LYS:HG2</td>
<td>1:A:234:LEU:HD11</td>
<td>1.94</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:556:LEU:C</td>
<td>1:B:556:LEU:HD23</td>
<td>2.33</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:262:MET:HE1</td>
<td>1:A:266:LYS:HG3</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:392:ASN:HD22</td>
<td>1:A:433:GLN:NE2</td>
<td>2.09</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:39:ALA:O</td>
<td>1:A:42:LEU:O</td>
<td>2.32</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:542:LYS:O</td>
<td>1:A:545:GLN:HB3</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:29:LEU:HD23</td>
<td>1:B:33:LYS:HG3</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:517:THR:HG23</td>
<td>1:B:521:MET:HE2</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:256:SER:HB3</td>
<td>1:B:259:VAL:HG23</td>
<td>1.94</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:436:GLU:CD</td>
<td>1:B:437:GLU:N</td>
<td>2.67</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:89:LEU:C</td>
<td>1:A:92:PRO:HD2</td>
<td>2.35</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:349:ILE:CG2</td>
<td>1:B:350:MET:N</td>
<td>2.77</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:93:LEU:O</td>
<td>1:B:96:LEU:N</td>
<td>2.46</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:78:THR:HG23</td>
<td>1:A:79:LEU:HD12</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:420:ARG:HG3</td>
<td>1:B:420:ARG:NH1</td>
<td>2.27</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:576:LYS:HA</td>
<td>1:B:579:ALA:HB3</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:144:ARG:O</td>
<td>1:A:147:ALA:HB3</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:452:VAL:O</td>
<td>1:A:452:VAL:CG1</td>
<td>2.62</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:448:MET:HE2</td>
<td>1:B:451:LEU:CD2</td>
<td>2.43</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:561:LYS:CE</td>
<td>1:B:588:LEU:HD22</td>
<td>2.44</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:96:LEU:HD12</td>
<td>1:B:131:LEU:HD13</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:405:LEU:HD23</td>
<td>1:A:434:LEU:HD11</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:275:GLY:CA</td>
<td>1:B:278:ILE:HD13</td>
<td>2.43</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:298:VAL:O</td>
<td>1:B:301:ALA:HB3</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:564:LEU:HD22</td>
<td>1:B:583:LEU:HD21</td>
<td>1.95</td>
<td>0.47</td>
</tr>
</tbody>
</table>

*Continued on next page...*
## Interatomic distance (Å) and Clash overlap (Å)

<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:93:LEU:C</td>
<td>1:B:95:SER:N</td>
<td>2.65</td>
<td>0.47</td>
</tr>
<tr>
<td>2:C:106:LYS:HG2</td>
<td>2:C:119:ARG:NH2</td>
<td>2.29</td>
<td>0.47</td>
</tr>
<tr>
<td>2:C:100:TRP:CE3</td>
<td>2:C:157:LEU:HD22</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>2:D:112:ILE:O</td>
<td>2:D:112:ILE:CG2</td>
<td>2.57</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:189:LEU:HD22</td>
<td>1:B:212:LEU:HD12</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:264:ALA:O</td>
<td>1:B:267:PHE:HB2</td>
<td>2.13</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:120:SER:O</td>
<td>1:A:123:ASP:HB2</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:180:MET:CE</td>
<td>1:A:180:MET:H</td>
<td>2.20</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:508:LEU:CD2</td>
<td>1:A:508:LEU:H</td>
<td>2.27</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:77:THR:O</td>
<td>1:B:82:GLY:HA2</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:388:LEU:C</td>
<td>1:A:390:CYS:H</td>
<td>2.18</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:450:TRP:C</td>
<td>1:A:452:VAL:H</td>
<td>2.17</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:586:LEU:O</td>
<td>1:A:587:SER:HB2</td>
<td>2.13</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:222:LEU:HD23</td>
<td>1:B:222:LEU:O</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:321:VAL:HG23</td>
<td>1:B:322:ILE:N</td>
<td>2.29</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:36:SER:O</td>
<td>1:B:40:LEU:HD23</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:11:TYR:CB</td>
<td>1:A:12:PRO:HD3</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:46:ARG:HA</td>
<td>1:A:49:SER:CB</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:179:PRO:CB</td>
<td>1:B:183:ARG:HG3</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:15:VAL:HG12</td>
<td>1:B:19:GLU:OE2</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:453:ASP:OD1</td>
<td>1:B:455:VAL:HG13</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:218:ASP:HA</td>
<td>1:A:221:ARG:NH1</td>
<td>2.30</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:54:PHE:C</td>
<td>1:A:56:THR:H</td>
<td>2.18</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:213:ALA:HA</td>
<td>1:B:224:ALA:CB</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:581:GLU:HG3</td>
<td>1:B:581:GLU:O</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>2:D:134:VAL:HG12</td>
<td>2:D:136:VAL:H</td>
<td>1.80</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:413:GLU:O</td>
<td>1:B:414:ASP:O</td>
<td>2.33</td>
<td>0.47</td>
</tr>
<tr>
<td>2:C:114:LEU:O</td>
<td>2:C:115:LEU:C</td>
<td>2.52</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:283:LEU:O</td>
<td>1:A:286:ALA:HB3</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:564:LEU:HD23</td>
<td>1:B:564:LEU:O</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:60:TYR:O</td>
<td>1:B:61:ASP:O</td>
<td>2.33</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:82:GLY:C</td>
<td>1:B:84:GLU:N</td>
<td>2.68</td>
<td>0.47</td>
</tr>
<tr>
<td>2:C:112:ILE:CG2</td>
<td>2:C:112:ILE:O</td>
<td>2.61</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:11:TYR:HB3</td>
<td>1:A:12:PRO:CD</td>
<td>2.45</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:531:ASP:OD1</td>
<td>1:A:532:PRO:HD2</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:533:ASP:OD2</td>
<td>1:A:532:PRO:HD2</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:495:TYR:HB3</td>
<td>1:B:533:VAL:HG1</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:80:VAL:HG2</td>
<td>1:B:80:VAL:O</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>2:C:125:ARG:HG3</td>
<td>2:C:125:ARG:HG2</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:118:GLU:HA</td>
<td>1:A:118:GLU:OE2</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:257:TRP:HA</td>
<td>1:A:260:ARG:NH1</td>
<td>2.30</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:370:LEU:CD2</td>
<td>1:A:404:LEU:HD12</td>
<td>2.45</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:438:PHE:CD1</td>
<td>1:A:438:PHE:C</td>
<td>2.89</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:176:ASP:HB3</td>
<td>1:B:181:VAL:HB</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:392:ASN:HD21</td>
<td>1:B:433:GLN:NE2</td>
<td>2.12</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:559:GLU:O</td>
<td>1:B:563:ILE:HG22</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:225:VAL:O</td>
<td>1:A:226:GLU:C</td>
<td>2.54</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:405:LEU:CD2</td>
<td>1:A:434:LEU:HD11</td>
<td>2.46</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:456:TYR:C</td>
<td>1:A:456:TYR:CD1</td>
<td>2.88</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:82:GLY:O</td>
<td>1:A:84:GLU:N</td>
<td>2.48</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:318:ARG:O</td>
<td>1:B:319:GLU:C</td>
<td>2.53</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:42:LEU:N</td>
<td>1:B:42:LEU:HD22</td>
<td>2.31</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:197:GLU:H</td>
<td>1:B:197:GLU:CD</td>
<td>2.17</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:296:ALA:O</td>
<td>1:B:297:GLU:C</td>
<td>2.54</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:495:TYR:HA</td>
<td>1:B:498:ARG:CZ</td>
<td>2.46</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:537:ARG:C</td>
<td>1:B:540:VAL:HG12</td>
<td>2.35</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:245:MET:CB</td>
<td>1:A:249:ARG:HH21</td>
<td>2.28</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:353:SER:CB</td>
<td>1:A:394:VAL:HG21</td>
<td>2.29</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:358:LYS:HE3</td>
<td>1:A:396:GLY:H</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:452:VAL:HG13</td>
<td>1:A:497:HIS:HE1</td>
<td>1.79</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:418:ARG:NH1</td>
<td>1:B:425:GLU:OE2</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:93:LEU:C</td>
<td>1:B:95:SER:H</td>
<td>2.19</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:534:ALA:O</td>
<td>1:B:536:VAL:N</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:159:SER:OG</td>
<td>1:A:162:VAL:HG23</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:314:SER:O</td>
<td>1:A:316:ASP:N</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:218:ASP:N</td>
<td>1:B:218:ASP:OD1</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:84:GLU:HB3</td>
<td>1:B:85:TYR:HD1</td>
<td>1.81</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:127:HIS:O</td>
<td>1:A:130:PRO:HD2</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:171:ARG:HH21</td>
<td>1:A:204:GLU:HG2</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:102:THR:O</td>
<td>1:A:103:VAL:C</td>
<td>2.54</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:165:GLU:O</td>
<td>1:A:166:LEU:C</td>
<td>2.52</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:209:PHE:CD1</td>
<td>1:A:231:ILE:HD12</td>
<td>2.52</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:479:HIS:ND1</td>
<td>1:A:479:HIS:C</td>
<td>2.70</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Continued on next page...
## Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å)
---|---|---|---
1:B:48:ARG:HB3 | 1:B:80:VAL:HG23 | 1.98 | 0.45
1:A:280:LYS:HA | 1:A:284:VAL:CG2 | 2.46 | 0.45
1:A:296:ALA:C | 1:A:298:VAL:N | 2.68 | 0.45
1:A:427:MET:CE | 1:A:427:MET:HA | 2.46 | 0.45
1:B:316:ASP:O | 1:B:317:CYC:C | 2.55 | 0.45
1:B:413:GLU:C | 1:B:414:ASP:O | 2.52 | 0.45
1:B:411:LEU:HB3 | 1:B:423:ILE:CG1 | 2.47 | 0.45
1:B:430:LEU:HD23 | 1:B:430:LEU:O | 2.15 | 0.45
2:C:100:TRP:O | 2:C:102:GLU:N | 2.49 | 0.45
2:C:114:LEU:HD12 | 2:C:114:LEU:N | 2.31 | 0.45
2:D:122:HIS:CD2 | 2:D:133:LEU:HD12 | 2.51 | 0.45
1:A:120:SER:O | 1:A:123:ASP:N | 2.50 | 0.45
1:A:151:PHE:CD1 | 1:A:151:PHE:N | 2.84 | 0.45
1:A:280:LYS:O | 1:A:280:LYS:HG2 | 2.15 | 0.45
1:B:116:SER:O | 1:B:119:HIS:HB2 | 2.17 | 0.45
1:B:16:LEU:HD11 | 1:B:31:SER:OG | 2.16 | 0.45
1:B:271:GLN:HE22 | 1:B:312:ASN:HB2 | 1.80 | 0.45
1:B:421:LEU:O | 1:B:425:GLU:HG3 | 2.17 | 0.45
1:A:70:ALA:HB2 | 1:A:96:LEU:HD13 | 1.98 | 0.45
1:B:248:LEU:O | 1:B:251:ALA:HB3 | 2.17 | 0.45
1:B:409:VAL:HG13 | 1:B:446:LEU:CD2 | 2.46 | 0.45
2:D:115:LEU:O | 2:D:115:LEU:HD12 | 2.16 | 0.45
1:A:405:LEU:O | 1:A:409:VAL:HG23 | 2.17 | 0.45
1:A:496:LEU:HD23 | 1:A:499:MET:CE | 2.45 | 0.45
1:B:245:MET:CE | 1:B:278:ILE:HG22 | 2.47 | 0.45
1:A:528:MET:C | 1:A:530:GLY:N | 2.70 | 0.45
1:B:539:ASN:HA | 1:B:542:LYS:HD3 | 1.97 | 0.45
1:B:102:THR:O | 1:B:103:VAL:C | 2.54 | 0.45
1:B:35:LEU:HG | 1:B:35:LEU:O | 2.16 | 0.45
1:B:481:THR:CG2 | 1:B:482:ILE:HD13 | 2.47 | 0.45
2:C:93:ASP:C | 2:C:95:MET:N | 2.70 | 0.45
1:A:176:ASP:O | 1:A:182:ARG:NH1 | 2.47 | 0.44
1:A:372:GLN:C | 1:A:374:LYS:N | 2.71 | 0.44
1:B:101:GLU:O | 1:B:104:VAL:HB | 2.17 | 0.44
1:B:400:LEU:HD12 | 1:B:404:LEU:HD22 | 1.99 | 0.44

*Continued on next page...*
### Atomic Interactions

<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:414:ASP:OD1</td>
<td>1:B:415:ALA:N</td>
<td>2.47</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:42:LEU:H</td>
<td>1:B:42:LEU:CD2</td>
<td>2.29</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:466:LEU:O</td>
<td>1:B:467:LYS:C</td>
<td>2.56</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:182:ARG:NE</td>
<td>1:B:215:ASP:OD2</td>
<td>2.43</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:317:CYT:O</td>
<td>1:B:318:ARG:C</td>
<td>2.56</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:347:LYS:O</td>
<td>1:B:471:GLU:HG3</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>2:D:98:LYS:O</td>
<td>2:D:99:GLN:HB2</td>
<td>2.16</td>
<td>0.44</td>
</tr>
<tr>
<td>2:C:115:LEU:HD13</td>
<td>2:C:141:PHE:CB</td>
<td>2.45</td>
<td>0.44</td>
</tr>
<tr>
<td>2:C:162:ASP:O</td>
<td>2:C:166:GLN:HG3</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:352:LEU:HA</td>
<td>1:A:353:ILE:CD2</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:178:THR:HG22</td>
<td>1:B:180:MET:CG</td>
<td>2.39</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:100:GLU:O</td>
<td>1:A:105:ARG:NH1</td>
<td>2.42</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:154:CYT:O</td>
<td>1:A:156:PRO:N</td>
<td>2.51</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:326:ILE:H</td>
<td>1:A:326:ILE:CD1</td>
<td>2.29</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:538:PHE:C</td>
<td>1:A:538:PHE:CD1</td>
<td>2.90</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:322:ILE:HG21</td>
<td>1:B:356:LEU:HD21</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:84:GLU:HB3</td>
<td>1:B:85:TYR:CD1</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>2:D:100:TRP:O</td>
<td>2:D:102:GLU:N</td>
<td>2.51</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:133:LYS:HG2</td>
<td>1:A:169:TYR:CE1</td>
<td>2.53</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:439:PHE:CD1</td>
<td>1:A:443:LEU:HB3</td>
<td>2.53</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:198:LEU:HD12</td>
<td>1:B:202:LYS:HE3</td>
<td>1.99</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:368:LEU:O</td>
<td>1:B:372:GLN:HG3</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:316:ASP:OD1</td>
<td>1:B:317:CYT:N</td>
<td>2.51</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:366:LEU:O</td>
<td>1:B:367:PRO:C</td>
<td>2.56</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:556:LEU:O</td>
<td>1:A:560:VAL:HB</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:268:THR:HG21</td>
<td>1:B:308:GLU:HG2</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:372:GLN:C</td>
<td>1:B:374:LYS:N</td>
<td>2.71</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:405:LEU:O</td>
<td>1:B:409:VAL:HG23</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:560:VAL:HG12</td>
<td>1:B:561:LYS:N</td>
<td>2.33</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:42:LEU:HB3</td>
<td>1:A:46:ARG:CB</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:52:LEU:HB2</td>
<td>1:A:53:PRO:HD3</td>
<td>1.99</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:17:ILE:O</td>
<td>1:B:21:ARG:HG2</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:552:ASP:OD1</td>
<td>1:B:554:SER:HB3</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:565:GLU:C</td>
<td>1:B:567:LEU:N</td>
<td>2.72</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:179:PRO:HD2</td>
<td>1:A:180:MET:CE</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:265:ASP:O</td>
<td>1:A:305:LYS:NZ</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:35:LEU:CG</td>
<td>1:A:35:LEU:O</td>
<td>2.65</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:495:TYR:CD2</td>
<td>1:A:533:VAL:HG11</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:21:ARG:O</td>
<td>1:B:22:ASN:C</td>
<td>2.57</td>
<td>0.43</td>
</tr>
<tr>
<td>2:D:93:ASP:HB2</td>
<td>2:D:96:TYR:CD1</td>
<td>2.53</td>
<td>0.43</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:504:CYS:C</td>
<td>1:A:508:LEU:HD23</td>
<td>2.37</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:539:ASN:HA</td>
<td>1:A:542:LYS:HD3</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:584:THR:HG22</td>
<td>1:A:584:THR:O</td>
<td>2.17</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:300:ALA:O</td>
<td>1:B:301:ALA:C</td>
<td>2.56</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:427:MET:CE</td>
<td>1:B:430:LEU:HB3</td>
<td>2.46</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:521:MET:O</td>
<td>1:B:525:VAL:HG23</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:99:VAL:HG12</td>
<td>1:B:101:GLU:N</td>
<td>2.31</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:380:VAL:O</td>
<td>1:A:381:ARG:C</td>
<td>2.56</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:540:VAL:O</td>
<td>1:A:544:LEU:HG</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:565:GLU:C</td>
<td>1:A:567:LEU:N</td>
<td>2.70</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:519:LYS:O</td>
<td>1:B:519:LYS:CG</td>
<td>2.65</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:61:ASP:HB3</td>
<td>1:B:65:VAL:HG21</td>
<td>1.98</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:282:ASP:O</td>
<td>1:B:285:PRO:HD2</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:58:THR:CG2</td>
<td>1:B:59:ILE:E</td>
<td>2.11</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:78:THR:C</td>
<td>1:B:80:VAL:N</td>
<td>2.70</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:45:GLU:OE1</td>
<td>1:A:48:ARG:NH2</td>
<td>2.52</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:317:CYS:O</td>
<td>1:B:320:ASN:N</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:487:LEU:HD22</td>
<td>1:B:524:THR:HG21</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:180:MET:CE</td>
<td>2:D:147:TRP:HA</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:331:LYS:HG3</td>
<td>1:A:368:LEU:HD21</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:166:LEU:O</td>
<td>1:A:169:TYR:N</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:487:LEU:HD22</td>
<td>1:A:524:THR:CB</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:26:LEU:O</td>
<td>1:B:22:ASN:N</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:47:THR:HG23</td>
<td>1:B:51:LEU:HD23</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>2:C:134:VAL:HG11</td>
<td>2:C:147:TRP:HZ3</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:279:THR:HA</td>
<td>1:B:283:LEU:HG</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>2:C:126:MET:O</td>
<td>2:C:121:LYS:C</td>
<td>2.57</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:120:SER:OG</td>
<td>1:A:123:ASP:CG</td>
<td>2.57</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:154:CYS:O</td>
<td>1:A:156:PRO:HD2</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:390:CYS:SG</td>
<td>1:A:391:VAL:N</td>
<td>2.92</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:508:LEU:HD22</td>
<td>1:A:508:LEU:N</td>
<td>2.34</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:58:THR:O</td>
<td>1:B:59:ILE:E</td>
<td>2.37</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:359:ASP:O</td>
<td>1:A:360:ASN:C</td>
<td>2.56</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:500:THR:O</td>
<td>1:A:503:PHE:HB2</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:535:ASN:HA</td>
<td>1:A:538:PHE:HD2</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:138:GLY:O</td>
<td>1:B:144:ARG:HD2</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:409:VAL:HG13</td>
<td>1:B:446:LEU:HD22</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:77:THR:O</td>
<td>1:A:82:GLY:HA2</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:206:ILE:HG13</td>
<td>1:B:243:LEU:HD13</td>
<td>2.01</td>
<td>0.42</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:358:LYS:HG3</td>
<td>1:B:362:ILE:HD11</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:383:ASN:O</td>
<td>1:B:386:SER:HB3</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>2:C:96:TYR:HA</td>
<td>2:C:114:LEU:HD13</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:577:TYR:O</td>
<td>1:A:577:TYR:HD1</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:267:PHE:HA</td>
<td>1:B:270:LEU:HD12</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:439:PHE:CD1</td>
<td>1:B:443:LEU:HB3</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:51:LEU:O</td>
<td>1:B:54:PHE:HB3</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:178:THR:HB</td>
<td>1:A:180:MET:HG2</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:405:LEU:N</td>
<td>1:A:406:PRO:CD</td>
<td>2.81</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:518:THR:HG23</td>
<td>1:A:555:THR:HG21</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:561:LYS:CD</td>
<td>1:A:588:LEU:HD22</td>
<td>2.40</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:245:MET:O</td>
<td>1:B:246:PRO:C</td>
<td>2.55</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:46:ARG:O</td>
<td>1:B:47:THR:C</td>
<td>2.56</td>
<td>0.42</td>
</tr>
<tr>
<td>2:C:102:GLU:O</td>
<td>2:C:103:CYS:C</td>
<td>2.58</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:67:LEU:HD12</td>
<td>1:A:107:LYS:HG3</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:177:ASP:OD1</td>
<td>1:A:177:ASP:N</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:224:ALA:O</td>
<td>1:A:227:ALA:N</td>
<td>2.52</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:368:LEU:HD23</td>
<td>1:A:368:LEU:HA</td>
<td>1.83</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:107:LYS:HD3</td>
<td>1:B:110:GLU:OE1</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:43:GLY:H</td>
<td>1:B:46:ARG:HB2</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:193:ALA:HB2</td>
<td>1:A:205:ILE:HD12</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:561:LYS:CG</td>
<td>1:A:588:LEU:HD13</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:317:CYS:SG</td>
<td>1:B:318:ARG:N</td>
<td>2.93</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:291:MET:HB3</td>
<td>1:B:333:LEU:HD11</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:11:TYR:CB</td>
<td>1:A:12:PRO:CD</td>
<td>2.97</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:436:VAL:CG1</td>
<td>1:A:437:GLU:N</td>
<td>2.81</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:128:PHE:O</td>
<td>1:B:131:LEU:N</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:338:ILE:N</td>
<td>1:B:383:ILE:CD1</td>
<td>2.82</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:412:ALA:HB1</td>
<td>1:A:456:TRP:CZ2</td>
<td>2.55</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:506:ASN:HD22</td>
<td>1:A:546:LYS:HG2</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:564:LEU:O</td>
<td>1:A:564:LEU:HD23</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:197:GLU:O</td>
<td>1:B:198:LEU:C</td>
<td>2.58</td>
<td>0.42</td>
</tr>
<tr>
<td>2:D:100:TRP:CZ3</td>
<td>2:D:104:ALA:HB2</td>
<td>2.54</td>
<td>0.42</td>
</tr>
<tr>
<td>2:D:95:MET:O</td>
<td>2:D:114:LEU:HD13</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:49:SER:OG</td>
<td>1:A:50:GLU:N</td>
<td>2.52</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:568:THR:HG22</td>
<td>1:A:580:GLN:HB2</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:317:CYS:O</td>
<td>1:B:320:ASN:HB2</td>
<td>2.20</td>
<td>0.42</td>
</tr>
</tbody>
</table>

Continued on next page...
### Interatomic distance (Å)

<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:34:LYS:C</td>
<td>1:B:36:SER:N</td>
<td>2.70</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:89:LEU:O</td>
<td>1:B:92:PRO:HD2</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:140:TRP:CD1</td>
<td>1:A:140:TRP:N</td>
<td>2.85</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:310:CY5:HB3</td>
<td>1:A:322:ILE:HD11</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:222:LEU:HD23</td>
<td>1:B:262:MET:HG3</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:237:GLN:HE21</td>
<td>1:B:237:GLN:HB3</td>
<td>1.57</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:29:LEU:C</td>
<td>1:B:31:SER:N</td>
<td>2.72</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:365:LEU:HD23</td>
<td>1:B:368:LEU:HD12</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:552:ASP:O</td>
<td>1:B:554:SER:N</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:562:PRO:C</td>
<td>1:B:564:LEU:H</td>
<td>2.23</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:412:ALA:HB1</td>
<td>1:A:450:TRP:HZ2</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:178:THR:CG2</td>
<td>1:B:180:MET:CG</td>
<td>2.98</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:352:LEU:O</td>
<td>1:B:355:ILE:HB</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:474:GLY:O</td>
<td>1:B:477:TRP:HB3</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:133:LYS:HE2</td>
<td>1:A:169:TYR:CE1</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:333:LEU:HD22</td>
<td>1:A:341:VAL:CG1</td>
<td>2.49</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:456:TYR:HD1</td>
<td>1:A:457:ALA:N</td>
<td>2.17</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:508:LEU:CD2</td>
<td>1:A:508:LEU:N</td>
<td>2.83</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:353:SER:HB3</td>
<td>1:B:394:VAL:HG21</td>
<td>2.01</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:571:GLN:O</td>
<td>1:B:572:ASP:C</td>
<td>2.59</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:112:LEU:HD13</td>
<td>1:A:150:LEU:CD1</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:427:MET:HE3</td>
<td>1:A:430:LEU:CD1</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:502:LEU:HD13</td>
<td>1:B:540:VAL:HA</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:561:LYS:CD</td>
<td>1:B:558:LEU:HD22</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:224:ALA:O</td>
<td>1:A:227:ALA:HB3</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:180:MET:HG2</td>
<td>1:B:180:MET:H</td>
<td>1.63</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:257:TRP:CB</td>
<td>1:B:295:GLU:HG3</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:284:VAL:O</td>
<td>1:B:285:PRO:C</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>2:C:134:VAL:HG11</td>
<td>2:C:147:TRP:CZ3</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:214:SER:HA</td>
<td>1:A:221:ARG:HD2</td>
<td>2.00</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:284:VAL:HB</td>
<td>1:A:285:PRO:HD3</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:369:PHE:O</td>
<td>1:A:373:LEU:HD22</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:565:GLU:O</td>
<td>1:A:567:LEU:N</td>
<td>2.53</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:282:ASP:C</td>
<td>1:B:285:PRO:HD2</td>
<td>2.41</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:336:ASP:O</td>
<td>1:B:342:LYS:HE2</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>2:C:135:TRP:CZ3</td>
<td>2:C:139:TYR:HA</td>
<td>2.55</td>
<td>0.41</td>
</tr>
</tbody>
</table>

*Continued on next page...*
### Interatomic distances and clash overlaps

<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:102:THR:HG22</td>
<td>1:A:105:ARG:HZ</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:417:TRP:HZ2</td>
<td>1:A:455:VAL:HG11</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:16:LEU:O</td>
<td>1:B:20:LEU:N</td>
<td>2.53</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:179:PRO:HG3</td>
<td>1:B:182:ARG:HH22</td>
<td>1.86</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:323:MET:HE2</td>
<td>1:B:323:MET:HE2</td>
<td>1.94</td>
<td>0.41</td>
</tr>
<tr>
<td>2:D:122:HIS:NE2</td>
<td>2:D:133:LEU:HD12</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:546:LYS:C</td>
<td>1:A:548:GLY:H</td>
<td>2.24</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:377:CYS:HA</td>
<td>1:B:378:PRO:HD3</td>
<td>1.86</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:522:LEU:N</td>
<td>1:B:523:PRO:CD</td>
<td>2.83</td>
<td>0.41</td>
</tr>
<tr>
<td>2:D:129:ARG:HD3</td>
<td>2:D:131:ASP:HB2</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:119:HIS:ND1</td>
<td>1:A:123:ASP:HB3</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:16:LEU:O</td>
<td>1:A:19:GLU:HB2</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:272:LYS:HG2</td>
<td>1:A:272:LYS:O</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:439:PHE:HZ</td>
<td>1:A:447:CYS:HG</td>
<td>1.65</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:59:ILE:CD1</td>
<td>1:B:69:LEU:HD22</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:437:GLU:CD</td>
<td>1:A:437:GLU:N</td>
<td>2.73</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:63:ASP:HA</td>
<td>1:B:66:LEU:HD12</td>
<td>2.01</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:16:LEU:O</td>
<td>1:B:19:GLU:N</td>
<td>2.54</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:186:MET:HE1</td>
<td>2:D:147:TRP:HA</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:587:SER:C</td>
<td>1:B:588:LEU:HG</td>
<td>2.41</td>
<td>0.41</td>
</tr>
<tr>
<td>2:D:134:VAL:CG1</td>
<td>2:D:147:TRP:CZ3</td>
<td>3.04</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:482:ILE:CD1</td>
<td>1:A:484:PRO:HD2</td>
<td>2.41</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:47:THR:CG2</td>
<td>1:A:51:LEU:HD23</td>
<td>2.45</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:29:LEU:CD2</td>
<td>1:B:33:LYS:HG3</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:537:ARG:HE2</td>
<td>1:B:537:ARG:HE</td>
<td>1.71</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:544:LEU:HD23</td>
<td>1:B:544:LEU:HA</td>
<td>1.93</td>
<td>0.41</td>
</tr>
<tr>
<td>2:D:102:GLU:CB</td>
<td>2:D:107:MET:HB2</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:405:LEU:CD1</td>
<td>1:B:409:VAL:HG23</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:427:MET:CE</td>
<td>1:B:427:MET:CE</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:527:ARG:HE2</td>
<td>1:B:527:ARG:HE</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:580:GLN:HE21</td>
<td>1:B:580:GLN:HB2</td>
<td>1.60</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:23:GLU:N</td>
<td>1:B:23:GLU:OE1</td>
<td>2.54</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:451:LEU:HA</td>
<td>1:B:451:LEU:HD12</td>
<td>1.85</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:482:ILE:O</td>
<td>1:B:483:ILE:C</td>
<td>2.60</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:560:VAL:O</td>
<td>1:B:561:LYS:C</td>
<td>2.59</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:565:GLU:O</td>
<td>1:B:568:THR:N</td>
<td>2.49</td>
<td>0.41</td>
</tr>
<tr>
<td>2:C:144:PHE:CD1</td>
<td>2:C:160:TRP:HB2</td>
<td>2.56</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:450:TRP:C</td>
<td>1:A:452:VAL:N</td>
<td>2.74</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:179:PRO:O</td>
<td>1:B:180:MET:C</td>
<td>2.59</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:270:LEU:O</td>
<td>1:B:274:VAL:HG23</td>
<td>2.22</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:516:ILE:HD13</td>
<td>2:C:101:PRO:HG3</td>
<td>2.02</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:565:GLU:O</td>
<td>1:B:567:LEU:N</td>
<td>2.54</td>
<td>0.40</td>
</tr>
<tr>
<td>2:D:115:LEU:HD13</td>
<td>2:D:141:PHE:HB2</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:29:LEU:HD23</td>
<td>1:B:33:LYS:CG</td>
<td>2.51</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:42:LEU:HB3</td>
<td>1:B:46:ARG:HB2</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:52:LEU:C</td>
<td>1:B:54:PHE:N</td>
<td>2.74</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:535:ASN:HA</td>
<td>1:B:538:PHE:CE2</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:538:PHE:CD1</td>
<td>1:B:542:LYS:HD2</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:178:THR:HA</td>
<td>1:A:179:PRO:HD3</td>
<td>1.95</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:231:ILE:O</td>
<td>1:A:234:LEU:N</td>
<td>2.53</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:13:ILE:O</td>
<td>1:B:17:ILE:HG13</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:372:GLN:NO</td>
<td>1:B:374:LYS:N</td>
<td>2.54</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:487:LEU:HD11</td>
<td>1:B:526:HIS:O</td>
<td>2.22</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:552:ASP:C</td>
<td>1:B:554:SER:N</td>
<td>2.75</td>
<td>0.40</td>
</tr>
<tr>
<td>2:C:148:PHE:O</td>
<td>2:C:149:GLY:C</td>
<td>2.59</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:151:PHE:CD2</td>
<td>1:A:176:PHE:HB2</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:168:GLN:NO</td>
<td>1:A:171:ARG:HB3</td>
<td>2.22</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:362:ILE:HD13</td>
<td>1:A:399:GLN:HG3</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:561:LYS:HB2</td>
<td>1:A:588:LEU:HD13</td>
<td>2.04</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:370:LEU:HD13</td>
<td>1:B:370:LEU:HA</td>
<td>1.83</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:372:GLN:C</td>
<td>1:B:374:LYS:H</td>
<td>2.24</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:529:ALA:HA</td>
<td>1:B:540:VAL:HG11</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:552:ASP:C</td>
<td>1:B:554:SER:H</td>
<td>2.24</td>
<td>0.40</td>
</tr>
<tr>
<td>2:C:102:GLU:CG</td>
<td>2:C:107:MET:HB2</td>
<td>2.52</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:186:ALA:C</td>
<td>1:A:188:LYS:N</td>
<td>2.74</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:522:LEU:HD22</td>
<td>1:A:551:LEU:CD2</td>
<td>2.51</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:11:TYR:CB</td>
<td>1:B:12:PRO:HD3</td>
<td>2.48</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:437:GLU:CD</td>
<td>1:B:437:GLU:H</td>
<td>2.24</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>577/580 (100%)</td>
<td>417 (72%)</td>
<td>111 (19%)</td>
<td>49 (8%)</td>
<td>1 5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>577/580 (100%)</td>
<td>446 (77%)</td>
<td>90 (16%)</td>
<td>41 (7%)</td>
<td>1 7</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>78/88 (89%)</td>
<td>59 (76%)</td>
<td>14 (18%)</td>
<td>5 (6%)</td>
<td>1 9</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>78/88 (89%)</td>
<td>65 (83%)</td>
<td>8 (10%)</td>
<td>5 (6%)</td>
<td>1 9</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>1310/1336 (98%)</td>
<td>987 (75%)</td>
<td>223 (17%)</td>
<td>100 (8%)</td>
<td>1 6</td>
</tr>
</tbody>
</table>

All (100) 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>61</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>155</td>
<td>TYR</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>198</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>274</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>318</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>389</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>391</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>59</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>61</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>76</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>79</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>80</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>317</td>
<td>CYS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>318</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>358</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>414</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>510</td>
<td>GLU</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>100</td>
<td>TRP</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>135</td>
<td>TRP</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>100</td>
<td>TRP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>80</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>94</td>
<td>GLU</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>128</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>138</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>148</td>
<td>CYS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>254</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>315</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>394</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>441</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>551</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>22</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>35</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>94</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>254</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>389</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>535</td>
<td>ASN</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>135</td>
<td>TRP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>11</td>
<td>TYR</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>22</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>59</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>79</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>176</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>353</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>440</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>484</td>
<td>PRO</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>515</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>523</td>
<td>PRO</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>547</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>560</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>571</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>11</td>
<td>TYR</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>148</td>
<td>CYS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>198</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>316</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>456</td>
<td>TYR</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>571</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>587</td>
<td>SER</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>99</td>
<td>GLN</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>102</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>21</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>41</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>76</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>83</td>
<td>PRO</td>
</tr>
</tbody>
</table>

Continued on next page...
### 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>507/507 (100%)</td>
<td>467 (92%)</td>
<td>40 (8%)</td>
<td>12 37</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>507/507 (100%)</td>
<td>462 (91%)</td>
<td>45 (9%)</td>
<td>9 32</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>73/81 (90%)</td>
<td>68 (93%)</td>
<td>5 (7%)</td>
<td>16 44</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>73/81 (90%)</td>
<td>64 (88%)</td>
<td>9 (12%)</td>
<td>4 20</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>1160/1176 (99%)</td>
<td>1061 (92%)</td>
<td>99 (8%)</td>
<td>10 35</td>
</tr>
</tbody>
</table>

All (99) 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>23</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>40</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>76</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>84</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>90</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>131</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>145</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>146</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>153</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>175</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>177</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>178</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>180</td>
<td>MET</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>214</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>237</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>278</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>294</td>
<td>CYS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>297</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>313</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>316</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>370</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>382</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>389</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>395</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>399</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>403</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>411</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>418</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>429</td>
<td>LEU</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>430</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>437</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>438</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>443</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>444</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>455</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>476</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>508</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>538</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>577</td>
<td>TYR</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>23</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>36</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>76</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>84</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>101</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>106</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>115</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>116</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>141</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>142</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>175</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>176</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>180</td>
<td>MET</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>198</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>217</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>219</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>222</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>237</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>263</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>278</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>294</td>
<td>CYS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>297</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>320</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>332</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>370</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>373</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>389</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>390</td>
<td>CYS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>399</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>405</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>411</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>413</td>
<td>GLU</td>
</tr>
</tbody>
</table>

Continued on next page...
Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (27) 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>200</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>211</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>271</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>392</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>399</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>444</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>465</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>497</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>506</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>580</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>119</td>
<td>HIS</td>
</tr>
</tbody>
</table>

Continued on next page...
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

Of 4 ligands modelled in this entry, 4 are monoatomic - leaving 0 for Mogul analysis.
There are no bond length outliers.
There are no bond angle outliers.
There are no chirality outliers.
There are no torsion outliers.
There are no ring outliers.
No monomer is involved in short contacts.

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>579/580 (99%)</td>
<td>0.16</td>
<td>36 (6%)</td>
<td>20</td>
<td>17, 77, 147, 180</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>579/580 (99%)</td>
<td>-0.10</td>
<td>6 (1%)</td>
<td>82</td>
<td>15, 55, 142, 175</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>80/88 (90%)</td>
<td>-0.11</td>
<td>0 (0%)</td>
<td>100</td>
<td>29, 54, 97, 117</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>80/88 (90%)</td>
<td>0.03</td>
<td>1 (1%)</td>
<td>77</td>
<td>28, 60, 98, 111</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>1318/1336 (98%)</td>
<td>0.02</td>
<td>43 (3%)</td>
<td>46</td>
<td>15, 65, 143, 180</td>
</tr>
</tbody>
</table>

All (43) 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>13</td>
<td>ILE</td>
<td>8.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>11</td>
<td>TYR</td>
<td>8.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>12</td>
<td>PRO</td>
<td>6.9</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>14</td>
<td>ALA</td>
<td>6.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>10</td>
<td>LEU</td>
<td>6.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>14</td>
<td>ALA</td>
<td>6.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>13</td>
<td>ILE</td>
<td>5.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>35</td>
<td>LEU</td>
<td>5.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>32</td>
<td>ILE</td>
<td>4.1</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>17</td>
<td>ILE</td>
<td>3.9</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>57</td>
<td>ASP</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>23</td>
<td>GLU</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>164</td>
<td>ALA</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>192</td>
<td>PHE</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>165</td>
<td>GLU</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>18</td>
<td>ASP</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>17</td>
<td>ILE</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>161</td>
<td>ALA</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>53</td>
<td>PRO</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>36</td>
<td>SER</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>11</td>
<td>TYR</td>
<td>2.8</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>30</td>
<td>ASN</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>31</td>
<td>SER</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>12</td>
<td>PRO</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>150</td>
<td>LEU</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>15</td>
<td>VAL</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>66</td>
<td>LEU</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>544</td>
<td>LEU</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>52</td>
<td>LEU</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>151</td>
<td>PHE</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>502</td>
<td>LEU</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>89</td>
<td>LEU</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>168</td>
<td>GLN</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>38</td>
<td>ILE</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>16</td>
<td>LEU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>29</td>
<td>LEU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>59</td>
<td>ILE</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>132</td>
<td>VAL</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>566</td>
<td>LYS</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>50</td>
<td>GLU</td>
<td>2.1</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>94</td>
<td>ALA</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>535</td>
<td>ASN</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>23</td>
<td>GLU</td>
<td>2.0</td>
</tr>
</tbody>
</table>

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

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled ‘Q< 0.9’ lists the number of atoms with occupancy less than 0.9.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Type</th>
<th>Chain</th>
<th>Res</th>
<th>Atoms</th>
<th>RSCC</th>
<th>RSR</th>
<th>B-factors(Å²)</th>
<th>Q&lt;0.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>ZN</td>
<td>D</td>
<td>176</td>
<td>1/1</td>
<td>0.99</td>
<td>0.10</td>
<td>38,38,38,38</td>
<td>0</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Type</th>
<th>Chain</th>
<th>Res</th>
<th>Atoms</th>
<th>RCC</th>
<th>RSR</th>
<th>B-factors (Å²)</th>
<th>Q &lt; 0.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>ZN</td>
<td>D</td>
<td>175</td>
<td>1/1</td>
<td>0.99</td>
<td>0.13</td>
<td>57,57,57,57</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>ZN</td>
<td>C</td>
<td>175</td>
<td>1/1</td>
<td>0.99</td>
<td>0.12</td>
<td>37,37,37,37</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>ZN</td>
<td>C</td>
<td>176</td>
<td>1/1</td>
<td>1.00</td>
<td>0.12</td>
<td>40,40,40,40</td>
<td>0</td>
</tr>
</tbody>
</table>

6.5 Other polymers

There are no such residues in this entry.