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 https://www.wwpdb.org/validation/2017/XrayValidationReportHelp

with specific help available everywhere you see the symbol.

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

MolProbity : 4.02b-467
Xtriage (Phenix) : 1.13
EDS : trunk30967
Percentile statistics : 20171227.v01 (using entries in the PDB archive December 27th 2017)
Refmac : 5.8.0158
CCP4 : 7.0 (Gargrove)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : trunk30967
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 3.20 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_{\text{free}} )</td>
<td>111664</td>
<td>1121 (3.22-3.18)</td>
</tr>
<tr>
<td>Clashscore</td>
<td>122126</td>
<td>1091 (3.20-3.20)</td>
</tr>
<tr>
<td>Ramachandran outliers</td>
<td>120053</td>
<td>1074 (3.20-3.20)</td>
</tr>
<tr>
<td>Sidechain outliers</td>
<td>120020</td>
<td>1073 (3.20-3.20)</td>
</tr>
<tr>
<td>RSRZ outliers</td>
<td>108989</td>
<td>1083 (3.22-3.18)</td>
</tr>
</tbody>
</table>

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for \( >3, 2, 1 \) and 0 types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions \(<=5\%\). 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>401</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>401</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>401</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>401</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>401</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>401</td>
<td></td>
</tr>
</tbody>
</table>
2 Entry composition

There are 2 unique types of molecules in this entry. The entry contains 15349 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 Calcium uptake protein 1, mitochondrial.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Total</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>310</td>
<td>2472</td>
<td>C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1583</td>
<td>419</td>
<td>454</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>316</td>
<td>2539</td>
<td>C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1622</td>
<td>426</td>
<td>473</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>330</td>
<td>2619</td>
<td>C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1673</td>
<td>442</td>
<td>486</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>326</td>
<td>2604</td>
<td>C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1662</td>
<td>438</td>
<td>487</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>330</td>
<td>2598</td>
<td>C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1657</td>
<td>439</td>
<td>487</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>310</td>
<td>2504</td>
<td>C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1601</td>
<td>422</td>
<td>468</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

There are 126 discrepancies between the modelled and reference sequences:

<table>
<thead>
<tr>
<th>Chain</th>
<th>Residue</th>
<th>Modelled</th>
<th>Actual</th>
<th>Comment</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>76</td>
<td>MET</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>77</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>78</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>79</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>80</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>81</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>82</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>83</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>84</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>85</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>86</td>
<td>LEU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>87</td>
<td>GLU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>88</td>
<td>VAL</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>89</td>
<td>LEU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>90</td>
<td>PHE</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>91</td>
<td>GLN</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>92</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Chain</th>
<th>Residue</th>
<th>Modelled</th>
<th>Actual</th>
<th>Comment</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93</td>
<td>PRO</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>94</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>95</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>A</td>
<td>96</td>
<td>MET</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>76</td>
<td>MET</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>77</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>78</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>79</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>80</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>81</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>82</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>83</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>84</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>85</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>86</td>
<td>LEU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>87</td>
<td>GLU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>88</td>
<td>VAL</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>89</td>
<td>LEU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>90</td>
<td>PHE</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>91</td>
<td>GLN</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>92</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>93</td>
<td>PRO</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>94</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>95</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>B</td>
<td>96</td>
<td>MET</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>76</td>
<td>MET</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>77</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>78</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>79</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>80</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>81</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>82</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>83</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>84</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>85</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>86</td>
<td>LEU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>87</td>
<td>GLU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>88</td>
<td>VAL</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>89</td>
<td>LEU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>90</td>
<td>PHE</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>91</td>
<td>GLN</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>92</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Chain</th>
<th>Residue</th>
<th>Modelled</th>
<th>Actual</th>
<th>Comment</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>93</td>
<td>PRO</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>94</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>95</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>C</td>
<td>96</td>
<td>MET</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>76</td>
<td>MET</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>77</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>78</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>79</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>80</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>81</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>82</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>83</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>84</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>85</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>86</td>
<td>LEU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>87</td>
<td>GLU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>88</td>
<td>VAL</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>89</td>
<td>LEU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>90</td>
<td>PHE</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>91</td>
<td>GLN</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>92</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>93</td>
<td>PRO</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>94</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>95</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>D</td>
<td>96</td>
<td>MET</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>76</td>
<td>MET</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>77</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>78</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>79</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>80</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>81</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>82</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>83</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>84</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>85</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>86</td>
<td>LEU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>87</td>
<td>GLU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>88</td>
<td>VAL</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>89</td>
<td>LEU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>90</td>
<td>PHE</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>91</td>
<td>GLN</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>92</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Chain</th>
<th>Residue</th>
<th>Modelled</th>
<th>Actual</th>
<th>Comment</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>93</td>
<td>PRO</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>94</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>95</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>E</td>
<td>96</td>
<td>MET</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>76</td>
<td>MET</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>77</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>78</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>79</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>80</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>81</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>82</td>
<td>HIS</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>83</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>84</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>85</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>86</td>
<td>LEU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>87</td>
<td>GLU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>88</td>
<td>VAL</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>89</td>
<td>LEU</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>90</td>
<td>PHE</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>91</td>
<td>GLN</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>92</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>93</td>
<td>PRO</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>94</td>
<td>GLY</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>95</td>
<td>SER</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
<tr>
<td>F</td>
<td>96</td>
<td>MET</td>
<td>-</td>
<td>EXPRESSION TAG</td>
<td>UNP Q9BPX6</td>
</tr>
</tbody>
</table>

- Molecule 2 is water.

<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>2</td>
<td>A</td>
<td>4</td>
<td>Total 4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>O 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>3</td>
<td>Total 3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>O 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>1</td>
<td>Total 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>O 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>1</td>
<td>Total 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>O 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>4</td>
<td>Total 4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>O 4</td>
<td></td>
<td></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: Calcium uptake protein 1, mitochondrial

Chain A:

- Molecule 1: Calcium uptake protein 1, mitochondrial

Chain B:
• Molecule 1: Calcium uptake protein 1, mitochondrial

Chain C:

• Molecule 1: Calcium uptake protein 1, mitochondrial

Chain D:
• Molecule 1: Calcium uptake protein 1, mitochondrial

Chain E:

• Molecule 1: Calcium uptake protein 1, mitochondrial

Chain F:
4 Data and refinement statistics

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space group</td>
<td>P 1 21 1</td>
<td>Depositor</td>
</tr>
<tr>
<td>Cell constants</td>
<td>90.88Å 146.82Å 115.87Å</td>
<td>Depositor</td>
</tr>
<tr>
<td>a, b, c, α, β, γ</td>
<td>90.00° 111.08° 90.00°</td>
<td>Depositor</td>
</tr>
<tr>
<td>Resolution (Å)</td>
<td>36.72 – 3.20</td>
<td>Depositor</td>
</tr>
<tr>
<td></td>
<td>36.71 – 3.20</td>
<td>EDS</td>
</tr>
<tr>
<td>% Data completeness (in range)</td>
<td>92.3 (36.72-3.20)</td>
<td>Depositor</td>
</tr>
<tr>
<td></td>
<td>92.4 (36.71-3.20)</td>
<td>EDS</td>
</tr>
<tr>
<td>Rmerge</td>
<td>(Not available)</td>
<td>Depositor</td>
</tr>
<tr>
<td>Rsym</td>
<td>(Not available)</td>
<td>Depositor</td>
</tr>
<tr>
<td>&lt; I/σ(I) &gt;</td>
<td>2.31 (at 3.18Å)</td>
<td>Xtriage</td>
</tr>
<tr>
<td>Refinement program</td>
<td>CNS 1.2</td>
<td>Depositor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R, R_free</td>
<td>0.254 , 0.307</td>
<td>Depositor</td>
</tr>
<tr>
<td></td>
<td>0.254 , 0.301</td>
<td>DCC</td>
</tr>
<tr>
<td>R_free test set</td>
<td>2007 reflections (4.31%)</td>
<td>wwPDB-VP</td>
</tr>
<tr>
<td>Wilson B-factor (Å²)</td>
<td>58.1</td>
<td>Xtriage</td>
</tr>
<tr>
<td>Anisotropy</td>
<td>0.235</td>
<td>Xtriage</td>
</tr>
<tr>
<td>Bulk solvent k_sol(e/Å³), B_sol(Å²)</td>
<td>0.29 , 50.5</td>
<td>EDS</td>
</tr>
<tr>
<td>L-test for twinning</td>
<td>&lt;</td>
<td>L</td>
</tr>
<tr>
<td>Estimated twinning fraction</td>
<td>0.026 for h,-k,-h-l</td>
<td>Xtriage</td>
</tr>
<tr>
<td>F_o,F_c correlation</td>
<td>0.88</td>
<td>EDS</td>
</tr>
<tr>
<td>Total number of atoms</td>
<td>15349</td>
<td>wwPDB-VP</td>
</tr>
<tr>
<td>Average B, all atoms (Å²)</td>
<td>69.0</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 3.12% of the height of the origin peak. No significant pseudotranslation is detected.

---

1Intensities estimated from amplitudes.
2Theoretical values of < |L| >, < L² > for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.
5 Model quality

5.1 Standard geometry

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Bond lengths</th>
<th>Bond angles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>RMSZ</td>
<td>#</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>0.61</td>
<td>10/2517 (0.4%)</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>0.67</td>
<td>10/2581 (0.4%)</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>0.65</td>
<td>9/2665 (0.3%)</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>0.69</td>
<td>8/2649 (0.3%)</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>0.62</td>
<td>4/2644 (0.2%)</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>0.64</td>
<td>5/2549 (0.2%)</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>0.65</td>
<td>46/15605 (0.3%)</td>
</tr>
</tbody>
</table>

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>#Chirality outliers</th>
<th>#Planarity outliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

All (46) 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>C</td>
<td>147</td>
<td>MET</td>
<td>CG-SD</td>
<td>9.03</td>
<td>2.04</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>147</td>
<td>MET</td>
<td>CG-SD</td>
<td>8.10</td>
<td>2.02</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>229</td>
<td>MET</td>
<td>CG-SD</td>
<td>7.68</td>
<td>2.01</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>442</td>
<td>MET</td>
<td>CG-SD</td>
<td>7.67</td>
<td>2.01</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>256</td>
<td>MET</td>
<td>CG-SD</td>
<td>7.62</td>
<td>2.00</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>442</td>
<td>MET</td>
<td>CG-SD</td>
<td>7.54</td>
<td>2.00</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>147</td>
<td>MET</td>
<td>CG-SD</td>
<td>7.50</td>
<td>2.00</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>460</td>
<td>MET</td>
<td>CG-SD</td>
<td>7.38</td>
<td>2.00</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>147</td>
<td>MET</td>
<td>CG-SD</td>
<td>7.31</td>
<td>2.00</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>258</td>
<td>MET</td>
<td>CG-SD</td>
<td>7.04</td>
<td>1.99</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>147</td>
<td>MET</td>
<td>CG-SD</td>
<td>6.79</td>
<td>1.98</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>396</td>
<td>MET</td>
<td>CG-SD</td>
<td>6.74</td>
<td>1.98</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>229</td>
<td>MET</td>
<td>CG-SD</td>
<td>6.73</td>
<td>1.98</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>457</td>
<td>MET</td>
<td>CG-SD</td>
<td>6.71</td>
<td>1.98</td>
<td>1.81</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Atoms</th>
<th>Z</th>
<th>Observed(Å)</th>
<th>Ideal(Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>457</td>
<td>MET</td>
<td>CG-SD</td>
<td>6.69</td>
<td>1.98</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>442</td>
<td>MET</td>
<td>CG-SD</td>
<td>6.50</td>
<td>1.98</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>330</td>
<td>MET</td>
<td>CG-SD</td>
<td>6.44</td>
<td>1.97</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>147</td>
<td>MET</td>
<td>CG-SD</td>
<td>6.26</td>
<td>1.97</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>396</td>
<td>MET</td>
<td>CG-SD</td>
<td>6.07</td>
<td>1.97</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>437</td>
<td>MET</td>
<td>CG-SD</td>
<td>6.04</td>
<td>1.96</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>386</td>
<td>MET</td>
<td>CG-SD</td>
<td>6.00</td>
<td>1.96</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>229</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.95</td>
<td>1.96</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>229</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.88</td>
<td>1.96</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>442</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.87</td>
<td>1.96</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>396</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.78</td>
<td>1.96</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>457</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.74</td>
<td>1.96</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>345</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.70</td>
<td>1.96</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>256</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.68</td>
<td>1.96</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>396</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.62</td>
<td>1.95</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>345</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.59</td>
<td>1.95</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>330</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.59</td>
<td>1.95</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>229</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.52</td>
<td>1.95</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>330</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.50</td>
<td>1.95</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>345</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.43</td>
<td>1.95</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>112</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.41</td>
<td>1.95</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>112</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.41</td>
<td>1.95</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>229</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.37</td>
<td>1.95</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>258</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.35</td>
<td>1.95</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>437</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.28</td>
<td>1.94</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>442</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.22</td>
<td>1.94</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>330</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.13</td>
<td>1.94</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>437</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.13</td>
<td>1.94</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>112</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.12</td>
<td>1.94</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>386</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.09</td>
<td>1.94</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>460</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.04</td>
<td>1.94</td>
<td>1.81</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>442</td>
<td>MET</td>
<td>CG-SD</td>
<td>5.02</td>
<td>1.94</td>
<td>1.81</td>
</tr>
</tbody>
</table>

All (5) bond angle outliers are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Atoms</th>
<th>Z</th>
<th>Observed(°)</th>
<th>Ideal(°)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C</td>
<td>448</td>
<td>PRO</td>
<td>N-CA-CB</td>
<td>6.02</td>
<td>110.52</td>
<td>103.30</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>356</td>
<td>GLY</td>
<td>N-CA-C</td>
<td>5.90</td>
<td>127.85</td>
<td>113.10</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>278</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>5.53</td>
<td>128.02</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>166</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>-5.36</td>
<td>102.97</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>441</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>5.26</td>
<td>127.39</td>
<td>115.30</td>
</tr>
</tbody>
</table>
There are no chirality outliers.

All (1) planarity outliers are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>196</td>
<td>TYR</td>
<td>Sidechain</td>
</tr>
</tbody>
</table>

### 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>2472</td>
<td>0</td>
<td>2397</td>
<td>221</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>2539</td>
<td>0</td>
<td>2496</td>
<td>197</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>2619</td>
<td>0</td>
<td>2542</td>
<td>230</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>2604</td>
<td>0</td>
<td>2547</td>
<td>208</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>2598</td>
<td>0</td>
<td>2494</td>
<td>184</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>2504</td>
<td>0</td>
<td>2458</td>
<td>197</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>A</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>15349</td>
<td>0</td>
<td>14934</td>
<td>1171</td>
<td>1</td>
</tr>
</tbody>
</table>

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 39.

All (1171) 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:D:147:MET:SD</td>
<td>1:D:147:MET:CG</td>
<td>2.02</td>
<td>1.48</td>
</tr>
<tr>
<td>1:C:147:MET:SD</td>
<td>1:C:147:MET:CG</td>
<td>2.04</td>
<td>1.44</td>
</tr>
<tr>
<td>1:C:323:THR:HB</td>
<td>1:C:326:GLN:HG3</td>
<td>1.23</td>
<td>1.14</td>
</tr>
<tr>
<td>1:B:323:THR:HB</td>
<td>1:B:326:GLN:HG3</td>
<td>1.11</td>
<td>1.08</td>
</tr>
<tr>
<td>1:D:323:THR:HG22</td>
<td>1:D:325:ARG:H</td>
<td>1.20</td>
<td>1.05</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:C:323:THR:HG22</td>
<td>1:C:325:ARG:H</td>
<td>1.18</td>
<td>1.04</td>
</tr>
<tr>
<td>1:C:454:THR:HG21</td>
<td>1:E:460:MET:HB3</td>
<td>1.36</td>
<td>1.03</td>
</tr>
<tr>
<td>1:C:346:GLN:HE22</td>
<td>1:C:355:GLU:HG3</td>
<td>1.20</td>
<td>1.02</td>
</tr>
<tr>
<td>1:A:459:ALA:HB1</td>
<td>1:D:456:LEU:HD22</td>
<td>1.35</td>
<td>1.02</td>
</tr>
<tr>
<td>1:D:431:LYS:HD3</td>
<td>1:D:431:LYS:H</td>
<td>1.25</td>
<td>1.01</td>
</tr>
<tr>
<td>1:C:154:ARG:HH21</td>
<td>1:C:162:GLN:NE2</td>
<td>1.59</td>
<td>0.99</td>
</tr>
<tr>
<td>1:C:174:LYS:HD2</td>
<td>1:C:186:GLU:OE1</td>
<td>1.66</td>
<td>0.96</td>
</tr>
<tr>
<td>1:A:460:MET:HG3</td>
<td>1:B:460:MET:HE1</td>
<td>1.47</td>
<td>0.96</td>
</tr>
<tr>
<td>1:C:293:ILE:H</td>
<td>1:C:293:ILE:HD12</td>
<td>1.28</td>
<td>0.96</td>
</tr>
<tr>
<td>1:B:323:THR:CB</td>
<td>1:B:326:GLN:HG3</td>
<td>1.96</td>
<td>0.94</td>
</tr>
<tr>
<td>1:F:422:CYS:HB2</td>
<td>1:F:425:ASN:ND2</td>
<td>1.82</td>
<td>0.93</td>
</tr>
<tr>
<td>1:F:323:THR:H</td>
<td>1:F:326:GLN:NE2</td>
<td>1.67</td>
<td>0.93</td>
</tr>
<tr>
<td>1:D:154:ARG:HE</td>
<td>1:D:162:GLN:HE21</td>
<td>1.09</td>
<td>0.93</td>
</tr>
<tr>
<td>1:E:315:HIS:HB3</td>
<td>1:E:326:GLN:OE1</td>
<td>1.70</td>
<td>0.92</td>
</tr>
<tr>
<td>1:C:154:ARG:HH21</td>
<td>1:C:162:GLN:HE22</td>
<td>1.12</td>
<td>0.91</td>
</tr>
<tr>
<td>1:E:194:ILE:HD12</td>
<td>1:E:195:PHE:N</td>
<td>1.84</td>
<td>0.91</td>
</tr>
<tr>
<td>1:B:149:PRO:HB3</td>
<td>1:B:310:LEU:HD21</td>
<td>1.54</td>
<td>0.90</td>
</tr>
<tr>
<td>1:E:303:LEU:O</td>
<td>1:E:307:VAL:HG23</td>
<td>1.72</td>
<td>0.89</td>
</tr>
<tr>
<td>1:F:323:THR:H</td>
<td>1:F:326:GLN:HE21</td>
<td>0.99</td>
<td>0.89</td>
</tr>
<tr>
<td>1:D:210:ILE:O</td>
<td>1:D:214:THR:HG23</td>
<td>1.70</td>
<td>0.89</td>
</tr>
<tr>
<td>1:C:454:THR:CG2</td>
<td>1:E:460:MET:HB3</td>
<td>2.01</td>
<td>0.89</td>
</tr>
<tr>
<td>1:B:323:THR:HG22</td>
<td>1:B:325:ARG:H</td>
<td>1.38</td>
<td>0.89</td>
</tr>
<tr>
<td>1:C:357:LYS:HB2</td>
<td>1:C:411:HIS:CE1</td>
<td>2.10</td>
<td>0.87</td>
</tr>
<tr>
<td>1:A:107:ARG:O</td>
<td>1:A:111:VAL:HG23</td>
<td>1.74</td>
<td>0.86</td>
</tr>
<tr>
<td>1:A:457:MET:HE3</td>
<td>1:A:461:TRP:HE1</td>
<td>1.37</td>
<td>0.86</td>
</tr>
<tr>
<td>1:C:119:ARG:HD3</td>
<td>1:C:155:SER:O</td>
<td>1.76</td>
<td>0.86</td>
</tr>
<tr>
<td>1:C:292:THR:HG22</td>
<td>1:C:294:LYS:H</td>
<td>1.41</td>
<td>0.86</td>
</tr>
<tr>
<td>1:D:194:ILE:HD12</td>
<td>1:D:195:PHE:N</td>
<td>1.90</td>
<td>0.85</td>
</tr>
<tr>
<td>1:B:293:ILE:HD12</td>
<td>1:B:294:LYS:H</td>
<td>1.42</td>
<td>0.85</td>
</tr>
<tr>
<td>1:B:190:ASP:O</td>
<td>1:B:196:TYR:HE2</td>
<td>1.58</td>
<td>0.85</td>
</tr>
<tr>
<td>1:C:323:THR:HG22</td>
<td>1:C:325:ARG:N</td>
<td>1.91</td>
<td>0.85</td>
</tr>
<tr>
<td>1:F:323:THR:CB</td>
<td>1:F:326:GLN:HG3</td>
<td>2.06</td>
<td>0.85</td>
</tr>
<tr>
<td>1:A:133:THR:O</td>
<td>1:A:134:LEU:HD23</td>
<td>1.76</td>
<td>0.85</td>
</tr>
<tr>
<td>1:F:346:GLN:O</td>
<td>1:F:350:LYS:HG3</td>
<td>1.76</td>
<td>0.85</td>
</tr>
</tbody>
</table>
### Atom-1

<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:292:THR:HG22</td>
<td>1:B:293:ILE:HD12</td>
<td>1.59</td>
<td>0.85</td>
</tr>
<tr>
<td>1:B:436:ILE:H</td>
<td>1:B:436:ILE:HD12</td>
<td>1.42</td>
<td>0.84</td>
</tr>
<tr>
<td>1:C:335:SER:HA</td>
<td>1:C:439:GLN:OE1</td>
<td>1.78</td>
<td>0.84</td>
</tr>
<tr>
<td>1:A:119:ARG:HH21</td>
<td>1:A:158:PRO:HA</td>
<td>1.42</td>
<td>0.84</td>
</tr>
<tr>
<td>1:D:218:THR:HG21</td>
<td>1:D:250:ILE:CG2</td>
<td>2.07</td>
<td>0.84</td>
</tr>
<tr>
<td>1:A:218:THR:HG21</td>
<td>1:A:250:ILE:CG2</td>
<td>2.08</td>
<td>0.83</td>
</tr>
<tr>
<td>1:B:323:THR:HB</td>
<td>1:B:326:GLN:CG</td>
<td>2.05</td>
<td>0.83</td>
</tr>
<tr>
<td>1:D:217:SER:HB2</td>
<td>1:D:445:LEU:HD23</td>
<td>1.61</td>
<td>0.82</td>
</tr>
<tr>
<td>1:E:388:GLY:O</td>
<td>1:F:337:VAL:HG23</td>
<td>1.80</td>
<td>0.82</td>
</tr>
<tr>
<td>1:C:412:VAL:O</td>
<td>1:C:416:VAL:HG23</td>
<td>1.78</td>
<td>0.81</td>
</tr>
<tr>
<td>1:E:148:THR:OG1</td>
<td>1:E:150:GLU:HG2</td>
<td>1.80</td>
<td>0.81</td>
</tr>
<tr>
<td>1:F:323:THR:N</td>
<td>1:F:326:GLN:HE21</td>
<td>1.78</td>
<td>0.81</td>
</tr>
<tr>
<td>1:C:431:LYS:HG2</td>
<td>1:C:432:GLU:H</td>
<td>1.45</td>
<td>0.81</td>
</tr>
<tr>
<td>1:F:412:VAL:O</td>
<td>1:F:416:VAL:HG23</td>
<td>1.80</td>
<td>0.80</td>
</tr>
<tr>
<td>1:D:117:ARG:HD2</td>
<td>1:D:461:TRP:CH2</td>
<td>2.16</td>
<td>0.80</td>
</tr>
<tr>
<td>1:D:231:ASP:HB2</td>
<td>1:D:237:GLU:H</td>
<td>1.45</td>
<td>0.80</td>
</tr>
<tr>
<td>1:D:160:GLU:HB3</td>
<td>1:D:314:ARG:HH12</td>
<td>1.45</td>
<td>0.80</td>
</tr>
<tr>
<td>1:C:346:GLN:NE2</td>
<td>1:C:355:GLU:HG3</td>
<td>1.97</td>
<td>0.80</td>
</tr>
<tr>
<td>1:D:374:ILE:HD12</td>
<td>1:D:375:ASN:H</td>
<td>1.46</td>
<td>0.80</td>
</tr>
<tr>
<td>1:F:252:SER:O</td>
<td>1:F:253:GLN:HG3</td>
<td>1.82</td>
<td>0.79</td>
</tr>
<tr>
<td>1:A:293:ILE:H</td>
<td>1:A:293:ILE:HD12</td>
<td>1.48</td>
<td>0.79</td>
</tr>
<tr>
<td>1:B:292:THR:HG22</td>
<td>1:B:294:LYS:H</td>
<td>1.46</td>
<td>0.79</td>
</tr>
<tr>
<td>1:B:350:LYS:HG2</td>
<td>1:B:355:GLU:OE1</td>
<td>1.82</td>
<td>0.78</td>
</tr>
<tr>
<td>1:C:154:ARG:HD3</td>
<td>1:C:314:ARG:HH21</td>
<td>1.47</td>
<td>0.78</td>
</tr>
<tr>
<td>1:B:166:LEU:HD21</td>
<td>1:B:172:ILE:HG13</td>
<td>1.66</td>
<td>0.78</td>
</tr>
<tr>
<td>1:B:221:ARG:HB2</td>
<td>1:B:221:ARG:HH11</td>
<td>1.46</td>
<td>0.78</td>
</tr>
<tr>
<td>1:C:374:ILE:HD13</td>
<td>1:C:438:LYS:HE2</td>
<td>1.64</td>
<td>0.78</td>
</tr>
<tr>
<td>1:E:153:VAL:HG22</td>
<td>1:E:307:VAL:HG13</td>
<td>1.64</td>
<td>0.78</td>
</tr>
<tr>
<td>1:B:187:LYS:HA</td>
<td>1:B:201:CYS:HB3</td>
<td>1.65</td>
<td>0.78</td>
</tr>
<tr>
<td>1:C:154:ARG:NH2</td>
<td>1:C:162:GLN:NE2</td>
<td>2.32</td>
<td>0.78</td>
</tr>
<tr>
<td>1:A:103:ARG:HE</td>
<td>1:D:241:GLU:HG3</td>
<td>1.49</td>
<td>0.77</td>
</tr>
<tr>
<td>1:C:392:ASP:OD2</td>
<td>1:C:395:THR:HG23</td>
<td>1.83</td>
<td>0.77</td>
</tr>
<tr>
<td>1:D:154:ARG:NE</td>
<td>1:D:162:GLN:HE21</td>
<td>1.81</td>
<td>0.77</td>
</tr>
<tr>
<td>1:C:210:ILE:O</td>
<td>1:C:214:THR:HG23</td>
<td>1.85</td>
<td>0.77</td>
</tr>
<tr>
<td>1:C:220:GLN:HG3</td>
<td>1:C:297:LEU:HD22</td>
<td>1.67</td>
<td>0.77</td>
</tr>
<tr>
<td>1:D:206:PHE:O</td>
<td>1:D:210:ILE:HD13</td>
<td>1.83</td>
<td>0.77</td>
</tr>
<tr>
<td>1:F:367:PHE:O</td>
<td>1:F:370:PHE:HB3</td>
<td>1.85</td>
<td>0.77</td>
</tr>
<tr>
<td>Atom-1</td>
<td>Atom-2</td>
<td>Interatomic distance (Å)</td>
<td>Clash overlap (Å)</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
<td>--------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>1:B:154:ARG:HD3</td>
<td>1:B:314:ARG:NH2</td>
<td>1.99</td>
<td>0.76</td>
</tr>
<tr>
<td>1:C:194:ILE:HD12</td>
<td>1:C:195:PHE:H</td>
<td>1.49</td>
<td>0.76</td>
</tr>
<tr>
<td>1:D:166:LEU:HD21</td>
<td>1:D:172:ILE:HG13</td>
<td>1.68</td>
<td>0.76</td>
</tr>
<tr>
<td>1:F:337:VAL:O</td>
<td>1:F:337:VAL:HG12</td>
<td>1.84</td>
<td>0.76</td>
</tr>
<tr>
<td>1:C:357:LYS:HB2</td>
<td>1:C:411:HIS:HE1</td>
<td>1.51</td>
<td>0.76</td>
</tr>
<tr>
<td>1:F:409:SER:HB3</td>
<td>1:F:412:VAL:HG23</td>
<td>1.67</td>
<td>0.76</td>
</tr>
<tr>
<td>1:B:154:ARG:HH11</td>
<td>1:B:314:ARG:HH21</td>
<td>1.32</td>
<td>0.76</td>
</tr>
<tr>
<td>1:B:430:ASN:N</td>
<td>1:B:430:ASN:HD22</td>
<td>1.83</td>
<td>0.75</td>
</tr>
<tr>
<td>1:F:345:MET:CE</td>
<td>1:F:419:LEU:HG</td>
<td>2.16</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:222:ASN:HD22</td>
<td>1:B:383:PHE:HZ</td>
<td>1.34</td>
<td>0.75</td>
</tr>
<tr>
<td>1:B:315:HIS:O</td>
<td>1:B:316:ASP:HB2</td>
<td>1.86</td>
<td>0.75</td>
</tr>
<tr>
<td>1:B:366:ASN:ND2</td>
<td>1:B:406:VAL:HG23</td>
<td>2.02</td>
<td>0.74</td>
</tr>
<tr>
<td>1:E:238:VAL:HG13</td>
<td>1:E:242:GLU:HB2</td>
<td>1.69</td>
<td>0.74</td>
</tr>
<tr>
<td>1:A:278:LEU:O</td>
<td>1:A:281:TYR:HB3</td>
<td>1.86</td>
<td>0.74</td>
</tr>
<tr>
<td>1:B:325:ARG:HA</td>
<td>1:B:345:MET:HE1</td>
<td>1.70</td>
<td>0.74</td>
</tr>
<tr>
<td>1:C:315:HIS:HB3</td>
<td>1:C:322:ILE:HD11</td>
<td>1.70</td>
<td>0.74</td>
</tr>
<tr>
<td>1:D:454:THR:C</td>
<td>1:D:456:ILE:HE1</td>
<td>1.91</td>
<td>0.74</td>
</tr>
<tr>
<td>1:F:132:ALA:HB2</td>
<td>1:F:147:MET:HB3</td>
<td>1.67</td>
<td>0.74</td>
</tr>
<tr>
<td>1:C:315:HIS:CB</td>
<td>1:C:322:ILE:HD11</td>
<td>2.17</td>
<td>0.74</td>
</tr>
<tr>
<td>1:C:137:ILE:CD1</td>
<td>1:C:175:ARG:HA</td>
<td>2.17</td>
<td>0.74</td>
</tr>
<tr>
<td>1:B:107:ARG:O</td>
<td>1:B:111:VAL:HG23</td>
<td>1.87</td>
<td>0.73</td>
</tr>
<tr>
<td>1:D:240:MET:HG3</td>
<td>1:D:283:PHE:CD2</td>
<td>2.24</td>
<td>0.73</td>
</tr>
<tr>
<td>1:C:376:ASP:OD1</td>
<td>1:E:221:ARG:HD3</td>
<td>1.88</td>
<td>0.73</td>
</tr>
<tr>
<td>1:D:338:GLN:HE21</td>
<td>1:D:341:LYS:HE2</td>
<td>1.54</td>
<td>0.73</td>
</tr>
<tr>
<td>1:C:436:ILE:O</td>
<td>1:C:439:GLN:HG2</td>
<td>1.89</td>
<td>0.73</td>
</tr>
<tr>
<td>1:F:194:ILE:HG12</td>
<td>1:F:303:LEU:HA</td>
<td>1.70</td>
<td>0.73</td>
</tr>
<tr>
<td>1:E:210:ILE:O</td>
<td>1:E:214:THR:HG23</td>
<td>1.87</td>
<td>0.73</td>
</tr>
<tr>
<td>1:F:154:ARG:HD3</td>
<td>1:F:314:ARG:NH2</td>
<td>2.05</td>
<td>0.72</td>
</tr>
<tr>
<td>1:A:103:ARG:HG2</td>
<td>1:A:103:ARG:HH11</td>
<td>1.54</td>
<td>0.72</td>
</tr>
<tr>
<td>1:D:431:LYS:CD</td>
<td>1:D:431:LYS:H</td>
<td>2.02</td>
<td>0.72</td>
</tr>
<tr>
<td>1:E:357:LYS:HB2</td>
<td>1:E:411:HIS:CE1</td>
<td>2.24</td>
<td>0.72</td>
</tr>
<tr>
<td>1:B:154:ARG:HH11</td>
<td>1:B:314:ARG:NH2</td>
<td>1.86</td>
<td>0.72</td>
</tr>
<tr>
<td>1:A:115:GLU:HA</td>
<td>1:A:118:ILE:HD12</td>
<td>1.71</td>
<td>0.72</td>
</tr>
<tr>
<td>1:A:166:LEU:O</td>
<td>1:A:170:GLN:HB2</td>
<td>1.90</td>
<td>0.72</td>
</tr>
<tr>
<td>1:A:153:VAL:HG21</td>
<td>1:A:310:LEU:HB3</td>
<td>1.70</td>
<td>0.72</td>
</tr>
<tr>
<td>1:B:435:SER:O</td>
<td>1:B:438:LYS:HB2</td>
<td>1.90</td>
<td>0.71</td>
</tr>
<tr>
<td>1:D:336:GLY:C</td>
<td>1:D:338:GLN:H</td>
<td>1.91</td>
<td>0.71</td>
</tr>
<tr>
<td>1:B:429:SER:HB2</td>
<td>1:B:431:LYS:HE2</td>
<td>1.71</td>
<td>0.71</td>
</tr>
<tr>
<td>1:C:137:ILE:HD11</td>
<td>1:C:175:ARG:HA</td>
<td>1.72</td>
<td>0.71</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:C:420:PHE:HE2</td>
<td>1:C:436:ILE:HD12</td>
<td>1.56</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:409:SER:OG</td>
<td>1:A:412:VAL:HG23</td>
<td>1.89</td>
<td>0.71</td>
</tr>
<tr>
<td>1:F:189:ALA:HB2</td>
<td>1:F:202:GLY:HA3</td>
<td>1.70</td>
<td>0.71</td>
</tr>
<tr>
<td>1:D:323:THR:H</td>
<td>1:D:326:GLN:NE2</td>
<td>1.87</td>
<td>0.71</td>
</tr>
<tr>
<td>1:E:247:GLN:HE21</td>
<td>1:E:251:ARG:HH12</td>
<td>1.36</td>
<td>0.71</td>
</tr>
<tr>
<td>1:F:189:ALA:HB3</td>
<td>1:F:196:TYR:CZ</td>
<td>2.26</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:293:ILE:N</td>
<td>1:A:293:ILE:HD12</td>
<td>2.05</td>
<td>0.71</td>
</tr>
<tr>
<td>1:B:367:PHE:O</td>
<td>1:B:370:PHE:HB3</td>
<td>1.91</td>
<td>0.71</td>
</tr>
<tr>
<td>1:B:315:HIS:HB3</td>
<td>1:B:322:ILE:HD11</td>
<td>1.73</td>
<td>0.70</td>
</tr>
<tr>
<td>1:C:303:LEU:O</td>
<td>1:C:307:VAL:HG23</td>
<td>1.91</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:366:ASN:HD22</td>
<td>1:B:406:VAL:CG2</td>
<td>2.05</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:456:LEU:HB2</td>
<td>1:D:463:CYT:SG</td>
<td>2.31</td>
<td>0.70</td>
</tr>
<tr>
<td>1:F:422:CYS:CB</td>
<td>1:F:425:ASN:HD22</td>
<td>1.99</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:194:ILE:HG23</td>
<td>1:A:306:ASP:OD1</td>
<td>1.92</td>
<td>0.70</td>
</tr>
<tr>
<td>1:E:323:THR:CB</td>
<td>1:E:326:GLN:HG3</td>
<td>2.17</td>
<td>0.70</td>
</tr>
<tr>
<td>1:C:154:ARG:NH2</td>
<td>1:C:162:GLN:HE22</td>
<td>1.88</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:366:ASN:HD22</td>
<td>1:B:406:VAL:HG23</td>
<td>1.54</td>
<td>0.70</td>
</tr>
<tr>
<td>1:E:293:ILE:HD12</td>
<td>1:E:293:ILE:H</td>
<td>1.56</td>
<td>0.69</td>
</tr>
<tr>
<td>1:F:315:HIS:HB2</td>
<td>1:F:322:ILE:HD11</td>
<td>1.74</td>
<td>0.69</td>
</tr>
<tr>
<td>1:B:373:ASN:O</td>
<td>1:B:375:ASN:N</td>
<td>2.24</td>
<td>0.69</td>
</tr>
<tr>
<td>1:C:239:ASP:CG</td>
<td>1:C:242:GLU:HG3</td>
<td>2.13</td>
<td>0.69</td>
</tr>
<tr>
<td>1:C:420:PHE:CE2</td>
<td>1:C:436:ILE:HD12</td>
<td>2.27</td>
<td>0.69</td>
</tr>
<tr>
<td>1:E:412:VAL:O</td>
<td>1:E:416:VAL:HG23</td>
<td>1.91</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:459:ALA:CB</td>
<td>1:D:456:LEU:HD22</td>
<td>2.18</td>
<td>0.69</td>
</tr>
<tr>
<td>1:F:182:SER:C</td>
<td>1:F:184:GLU:H</td>
<td>1.95</td>
<td>0.69</td>
</tr>
<tr>
<td>1:D:117:ARG:HD2</td>
<td>1:D:461:TRP:HH2</td>
<td>1.56</td>
<td>0.69</td>
</tr>
<tr>
<td>1:F:111:VAL:O</td>
<td>1:F:115:GLU:HG3</td>
<td>1.93</td>
<td>0.69</td>
</tr>
<tr>
<td>1:B:113:GLU:O</td>
<td>1:B:117:ARG:HG2</td>
<td>1.93</td>
<td>0.69</td>
</tr>
<tr>
<td>1:C:166:LEU:HD21</td>
<td>1:C:172:ILE:HD11</td>
<td>1.74</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:237:GLU:HB3</td>
<td>1:A:290:LYS:HE3</td>
<td>1.75</td>
<td>0.68</td>
</tr>
<tr>
<td>1:D:386:MET:C</td>
<td>1:D:388:GLY:H</td>
<td>1.95</td>
<td>0.68</td>
</tr>
<tr>
<td>1:F:431:LYS:HG2</td>
<td>1:F:432:GLU:H</td>
<td>1.59</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:198:LEU:HD13</td>
<td>1:A:204:ILE:HG12</td>
<td>1.74</td>
<td>0.68</td>
</tr>
<tr>
<td>1:B:323:THR:H</td>
<td>1:B:326:GLN:HE21</td>
<td>1.41</td>
<td>0.68</td>
</tr>
<tr>
<td>1:E:323:THR:HG22</td>
<td>1:E:324:GLU:N</td>
<td>2.07</td>
<td>0.68</td>
</tr>
<tr>
<td>1:E:453:PHE:O</td>
<td>1:E:457:MET:HB2</td>
<td>1.94</td>
<td>0.68</td>
</tr>
<tr>
<td>1:B:360:THR:HG23</td>
<td>1:B:363:GLU:HG3</td>
<td>1.76</td>
<td>0.68</td>
</tr>
<tr>
<td>1:D:338:GLN:HE21</td>
<td>1:D:341:LYS:CE</td>
<td>2.06</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:431:LYS:H</td>
<td>1:A:431:LYS:HD3</td>
<td>1.57</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:414:ASP:O</td>
<td>1:A:418:ALA:HB2</td>
<td>1.93</td>
<td>0.68</td>
</tr>
<tr>
<td>1:E:193:SER:O</td>
<td>1:E:195:PHE:N</td>
<td>2.26</td>
<td>0.68</td>
</tr>
</tbody>
</table>

*Continued on next page...*
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:E:317:PRO:HG3</td>
<td>1:E:322:ILE:CD1</td>
<td>2.24</td>
<td>0.68</td>
</tr>
<tr>
<td>1:B:278:LEU:O</td>
<td>1:B:281:TYR:HB3</td>
<td>1.95</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:149:PRO:HB3</td>
<td>1:A:310:LEU:HD11</td>
<td>1.76</td>
<td>0.67</td>
</tr>
<tr>
<td>1:C:292:THR:HG22</td>
<td>1:C:294:LYS:N</td>
<td>2.09</td>
<td>0.67</td>
</tr>
<tr>
<td>1:C:436:ILE:HA</td>
<td>1:C:439:GLN:HE21</td>
<td>1.60</td>
<td>0.67</td>
</tr>
<tr>
<td>1:C:327:PHE:CE1</td>
<td>1:C:364:VAL:HG22</td>
<td>2.29</td>
<td>0.67</td>
</tr>
<tr>
<td>1:B:242:GLU:O</td>
<td>1:B:246:VAL:HG12</td>
<td>1.94</td>
<td>0.67</td>
</tr>
<tr>
<td>1:B:431:LYS:H</td>
<td>1:B:431:LYS:HD3</td>
<td>1.59</td>
<td>0.67</td>
</tr>
<tr>
<td>1:F:115:GLU:OE2</td>
<td>1:F:162:GLN:HB2</td>
<td>1.95</td>
<td>0.67</td>
</tr>
<tr>
<td>1:D:293:ILE:H</td>
<td>1:D:293:ILE:HD12</td>
<td>1.58</td>
<td>0.67</td>
</tr>
<tr>
<td>1:D:374:ILE:HD12</td>
<td>1:D:375:ASN:N</td>
<td>2.09</td>
<td>0.67</td>
</tr>
<tr>
<td>1:E:293:ILE:HD12</td>
<td>1:E:293:ILE:N</td>
<td>2.08</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:119:ARG:NH2</td>
<td>1:A:158:PRO:HA</td>
<td>2.11</td>
<td>0.66</td>
</tr>
<tr>
<td>1:C:130:TYR:CE2</td>
<td>1:C:162:GLN:HG3</td>
<td>2.30</td>
<td>0.66</td>
</tr>
<tr>
<td>1:A:323:THR:HB</td>
<td>1:A:326:GLN:HG3</td>
<td>1.76</td>
<td>0.66</td>
</tr>
<tr>
<td>1:B:442:MET:O</td>
<td>1:B:443:ARG:HB2</td>
<td>1.95</td>
<td>0.66</td>
</tr>
<tr>
<td>1:E:323:THR:HG22</td>
<td>1:E:325:ARG:H</td>
<td>1.61</td>
<td>0.66</td>
</tr>
<tr>
<td>1:D:313:GLU:C</td>
<td>1:D:315:HIS:H</td>
<td>1.99</td>
<td>0.66</td>
</tr>
<tr>
<td>1:C:402:THR:HB</td>
<td>1:E:228:LYS:HG2</td>
<td>1.78</td>
<td>0.66</td>
</tr>
<tr>
<td>1:D:111:VAL:O</td>
<td>1:D:114:TYR:HB3</td>
<td>1.95</td>
<td>0.66</td>
</tr>
<tr>
<td>1:D:154:ARG:HH21</td>
<td>1:D:162:GLN:NE2</td>
<td>1.94</td>
<td>0.66</td>
</tr>
<tr>
<td>1:A:436:ILE:O</td>
<td>1:A:439:GLN:HG2</td>
<td>1.96</td>
<td>0.65</td>
</tr>
<tr>
<td>1:D:386:MET:O</td>
<td>1:D:388:GLY:N</td>
<td>2.30</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:373:ASN:C</td>
<td>1:A:377:VAL:HG23</td>
<td>2.17</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:456:LEU:HD13</td>
<td>1:D:460:MET:HA</td>
<td>1.77</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:190:ASP:CG</td>
<td>1:B:191:GLU:N</td>
<td>2.50</td>
<td>0.65</td>
</tr>
<tr>
<td>1:F:345:MET:HE2</td>
<td>1:F:419:LEU:HG</td>
<td>1.76</td>
<td>0.65</td>
</tr>
<tr>
<td>1:F:437:MET:CE</td>
<td>1:F:437:MET:HA</td>
<td>2.27</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:412:VAL:O</td>
<td>1:A:416:VAL:HG23</td>
<td>1.97</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:456:LEU:HD11</td>
<td>1:D:460:MET:HE2</td>
<td>1.78</td>
<td>0.65</td>
</tr>
<tr>
<td>1:F:107:ARG:O</td>
<td>1:F:111:VAL:HG23</td>
<td>1.96</td>
<td>0.65</td>
</tr>
<tr>
<td>1:D:350:LYS:HD3</td>
<td>1:D:355:GLU:OE1</td>
<td>1.96</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:346:GLN:HE21</td>
<td>1:B:346:GLN:CA</td>
<td>2.09</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:153:VAL:HG22</td>
<td>1:B:307:VAL:HG13</td>
<td>1.79</td>
<td>0.65</td>
</tr>
<tr>
<td>1:D:445:LEU:HD13</td>
<td>1:D:445:LEU:O</td>
<td>1.96</td>
<td>0.65</td>
</tr>
<tr>
<td>1:D:215:VAL:HG12</td>
<td>1:D:215:VAL:O</td>
<td>1.97</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:398:GLN:HE22</td>
<td>1:B:232:LEU:HD21</td>
<td>1.61</td>
<td>0.65</td>
</tr>
<tr>
<td>1:D:115:GLU:OE1</td>
<td>1:D:161:LYS:HA</td>
<td>1.97</td>
<td>0.65</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:D:375:ASN:O</td>
<td>1:D:379:THR:HG22</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>1:E:376:PHE:O</td>
<td>1:E:370:PHE:HB3</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:323:THR:HG22</td>
<td>1:A:325:ARG:H</td>
<td>1.63</td>
<td>0.64</td>
</tr>
<tr>
<td>1:C:220:GLN:HG3</td>
<td>1:C:297:LEU:CD2</td>
<td>2.27</td>
<td>0.64</td>
</tr>
<tr>
<td>1:E:194:ILE:O</td>
<td>1:E:196:TYR:N</td>
<td>2.30</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:190:ASP:O</td>
<td>1:B:196:TYR:CE2</td>
<td>2.47</td>
<td>0.64</td>
</tr>
<tr>
<td>1:F:417:PHE:HE1</td>
<td>1:F:426:GLY:O</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>1:D:338:GLN:HE21</td>
<td>1:D:341:LYS:NZ</td>
<td>1.95</td>
<td>0.64</td>
</tr>
<tr>
<td>1:F:350:LYS:O</td>
<td>1:F:355:GLU:CD</td>
<td>2.18</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:441:LEU:HD13</td>
<td>1:A:441:LEU:O</td>
<td>1.98</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:460:MET:HG3</td>
<td>1:B:460:MET:CE</td>
<td>2.27</td>
<td>0.64</td>
</tr>
<tr>
<td>1:F:171:TYR:CD1</td>
<td>1:F:171:TYR:N</td>
<td>2.65</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:240:MET:HG3</td>
<td>1:A:283:PHE:CD2</td>
<td>2.33</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:149:PRO:CB</td>
<td>1:A:310:LEU:HD11</td>
<td>2.28</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:438:LYS:O</td>
<td>1:A:442:MET:HG2</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>1:F:132:ALA:CB</td>
<td>1:F:147:MET:HB3</td>
<td>2.28</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:394:VAL:O</td>
<td>1:A:397:GLN:HB2</td>
<td>1.98</td>
<td>0.64</td>
</tr>
<tr>
<td>1:B:377:VAL:O</td>
<td>1:B:381:LEU:HG</td>
<td>1.97</td>
<td>0.63</td>
</tr>
<tr>
<td>1:D:253:GLN:HE22</td>
<td>1:F:383:PHE:HE1</td>
<td>1.44</td>
<td>0.63</td>
</tr>
<tr>
<td>1:C:154:ARG:HE</td>
<td>1:C:162:GLN:HE21</td>
<td>1.46</td>
<td>0.63</td>
</tr>
<tr>
<td>1:D:300:GLN:O</td>
<td>1:D:304:GLN:HG3</td>
<td>1.99</td>
<td>0.63</td>
</tr>
<tr>
<td>1:D:363:GLU:HG2</td>
<td>1:D:409:SER:HB2</td>
<td>1.80</td>
<td>0.63</td>
</tr>
<tr>
<td>1:E:187:LYS:HB3</td>
<td>1:E:196:TYR:OH</td>
<td>1.97</td>
<td>0.63</td>
</tr>
<tr>
<td>1:B:436:ILE:HD12</td>
<td>1:B:436:ILE:N</td>
<td>2.13</td>
<td>0.63</td>
</tr>
<tr>
<td>1:C:353:PHE:N</td>
<td>1:C:353:PHE:CD2</td>
<td>2.66</td>
<td>0.63</td>
</tr>
<tr>
<td>1:D:166:LEU:HD21</td>
<td>1:D:172:ILE:CG1</td>
<td>2.28</td>
<td>0.63</td>
</tr>
<tr>
<td>1:E:359:LEU:HD23</td>
<td>1:E:363:GLU:OE1</td>
<td>1.98</td>
<td>0.63</td>
</tr>
<tr>
<td>1:F:137:ILE:HG22</td>
<td>1:F:143:ALA:HB2</td>
<td>1.80</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:227:PHE:C</td>
<td>1:A:229:MET:H</td>
<td>2.01</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:154:ARG:HH1</td>
<td>1:A:314:ARG:NH2</td>
<td>1.96</td>
<td>0.63</td>
</tr>
<tr>
<td>1:C:332:LEU:H</td>
<td>1:C:332:LEU:HD12</td>
<td>1.62</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:103:ARG:NE</td>
<td>1:D:241:GLU:HG3</td>
<td>2.14</td>
<td>0.63</td>
</tr>
<tr>
<td>1:C:431:LYS:HD3</td>
<td>1:C:431:LYS:H</td>
<td>1.64</td>
<td>0.63</td>
</tr>
<tr>
<td>1:C:295:ASN:O</td>
<td>1:C:298:GLU:HB3</td>
<td>1.98</td>
<td>0.63</td>
</tr>
<tr>
<td>1:C:457:MET:SD</td>
<td>1:E:460:MET:HE1</td>
<td>2.39</td>
<td>0.63</td>
</tr>
<tr>
<td>1:C:237:GLU:O</td>
<td>1:C:238:VAL:HG23</td>
<td>1.99</td>
<td>0.62</td>
</tr>
<tr>
<td>1:D:199:GLY:HA3</td>
<td>1:D:277:ALA:HB1</td>
<td>1.80</td>
<td>0.62</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:D:190:ASP:O</td>
<td>1:D:196:TYR:HE2</td>
<td>1.82</td>
<td>0.62</td>
</tr>
<tr>
<td>1:C:252:SER:HB2</td>
<td>1:E:386:MET:HE3</td>
<td>1.80</td>
<td>0.62</td>
</tr>
<tr>
<td>1:C:462:LYS:O</td>
<td>1:C:462:LYS:HG2</td>
<td>2.00</td>
<td>0.62</td>
</tr>
<tr>
<td>1:D:194:ILE:HD12</td>
<td>1:D:194:ILE:C</td>
<td>2.20</td>
<td>0.62</td>
</tr>
<tr>
<td>1:E:218:THR:HG21</td>
<td>1:E:250:ILE:CG2</td>
<td>2.29</td>
<td>0.62</td>
</tr>
<tr>
<td>1:C:215:VAL:HG13</td>
<td>1:C:300:GLN:HG3</td>
<td>1.81</td>
<td>0.62</td>
</tr>
<tr>
<td>1:C:318:VAL:O</td>
<td>1:C:319:ASP:HB2</td>
<td>2.00</td>
<td>0.62</td>
</tr>
<tr>
<td>1:D:146:PHE:HD1</td>
<td>1:D:203:LEU:HB3</td>
<td>1.64</td>
<td>0.62</td>
</tr>
<tr>
<td>1:E:214:THR:HG21</td>
<td>1:E:251:ARG:HD3</td>
<td>1.80</td>
<td>0.62</td>
</tr>
<tr>
<td>1:E:390:SER:HB2</td>
<td>1:F:337:VAL:CG1</td>
<td>2.19</td>
<td>0.62</td>
</tr>
<tr>
<td>1:C:293:ILE:HD12</td>
<td>1:C:293:ILE:N</td>
<td>2.09</td>
<td>0.62</td>
</tr>
<tr>
<td>1:D:293:ILE:N</td>
<td>1:D:293:ILE:HD12</td>
<td>2.14</td>
<td>0.62</td>
</tr>
<tr>
<td>1:F:293:ILE:HD12</td>
<td>1:F:293:ILE:H</td>
<td>1.63</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:347:ARG:NH1</td>
<td>1:F:425:ASN:HA</td>
<td>2.15</td>
<td>0.61</td>
</tr>
<tr>
<td>1:D:119:ARG:NH1</td>
<td>1:D:154:ARG:O</td>
<td>2.33</td>
<td>0.61</td>
</tr>
<tr>
<td>1:C:332:LEU:HD11</td>
<td>1:C:419:LEU:HD22</td>
<td>1.81</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:195:PHE:O</td>
<td>1:A:198:LEU:HD12</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>1:C:327:PHE:CD2</td>
<td>1:C:359:LEU:HD22</td>
<td>2.35</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:147:MET:HE2</td>
<td>1:A:151:ASP:HB3</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>1:C:303:LEU:HD23</td>
<td>1:C:303:LEU:O</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>1:C:380:ALA:HB2</td>
<td>1:C:403:VAL:HG21</td>
<td>1.81</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:324:GLU:OE1</td>
<td>1:B:411:HIS:NE2</td>
<td>2.33</td>
<td>0.61</td>
</tr>
<tr>
<td>1:C:353:PHE:N</td>
<td>1:C:353:PHE:HD2</td>
<td>1.98</td>
<td>0.61</td>
</tr>
<tr>
<td>1:F:345:MET:HG3</td>
<td>1:F:418:ALA:CB</td>
<td>2.30</td>
<td>0.61</td>
</tr>
<tr>
<td>1:C:292:THR:HG22</td>
<td>1:C:293:ILE:N</td>
<td>2.16</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:346:GLN:HE21</td>
<td>1:B:346:GLN:HA</td>
<td>1.65</td>
<td>0.61</td>
</tr>
<tr>
<td>1:C:113:GLU:HB3</td>
<td>1:C:117:ARG:HH21</td>
<td>1.65</td>
<td>0.61</td>
</tr>
<tr>
<td>1:C:337:VAL:O</td>
<td>1:C:339:SER:N</td>
<td>2.32</td>
<td>0.61</td>
</tr>
<tr>
<td>1:F:206:PHE:O</td>
<td>1:F:209:TYR:HB3</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>1:D:386:MET:C</td>
<td>1:D:388:GLY:N</td>
<td>2.53</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:428:LEU:HD13</td>
<td>1:A:429:SER:N</td>
<td>2.16</td>
<td>0.60</td>
</tr>
<tr>
<td>1:D:214:THR:HG21</td>
<td>1:D:251:ARG:HG2</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>1:F:345:MET:HG3</td>
<td>1:F:418:ALA:HB3</td>
<td>1.82</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:231:ASP:CB</td>
<td>1:A:237:GLU:H</td>
<td>2.15</td>
<td>0.60</td>
</tr>
<tr>
<td>1:E:431:LYS:HD3</td>
<td>1:E:431:LYS:H</td>
<td>1.65</td>
<td>0.60</td>
</tr>
<tr>
<td>1:F:375:ASN:O</td>
<td>1:F:379:THR:HG23</td>
<td>2.00</td>
<td>0.60</td>
</tr>
<tr>
<td>Atom-1</td>
<td>Atom-2</td>
<td>Interatomic distance (Å)</td>
<td>Clash overlap (Å)</td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td>--------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>1:C:113:GLU:HB3</td>
<td>1:C:117:ARG:NH2</td>
<td>2.16</td>
<td>0.60</td>
</tr>
<tr>
<td>1:D:286:ASP:O</td>
<td>1:D:287:LEU:HB2</td>
<td>2.00</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:342:LEU:HD12</td>
<td>1:A:342:LEU:N</td>
<td>2.17</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:122:SER:HB3</td>
<td>1:A:126:LYS:HB3</td>
<td>1.82</td>
<td>0.60</td>
</tr>
<tr>
<td>1:C:359:LEU:OE1</td>
<td>1:B:114:TYR:HB3</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:111:VAL:O</td>
<td>1:B:166:LEU:HD12</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>1:F:351:PRO:HB2</td>
<td>1:F:352:HIS:CE1</td>
<td>2.37</td>
<td>0.60</td>
</tr>
<tr>
<td>1:B:162:GLN:NE2</td>
<td>1:B:163:PRO:HD2</td>
<td>2.16</td>
<td>0.59</td>
</tr>
<tr>
<td>1:F:324:GLU:OE1</td>
<td>1:F:411:HIS:CE1</td>
<td>2.55</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:123:THR:O</td>
<td>1:A:127:ILE:HG13</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:210:ILE:CD1</td>
<td>1:A:210:ILE:H</td>
<td>2.15</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:346:GLN:NE2</td>
<td>1:B:346:GLN:HA</td>
<td>2.17</td>
<td>0.59</td>
</tr>
<tr>
<td>1:C:119:ARG:CD</td>
<td>1:C:155:SER:O</td>
<td>2.50</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:373:ASN:O</td>
<td>1:A:377:VAL:HG23</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>1:E:318:VAL:O</td>
<td>1:E:319:ASP:HB2</td>
<td>2.01</td>
<td>0.59</td>
</tr>
<tr>
<td>1:F:286:ASP:O</td>
<td>1:F:287:LEU:HB2</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>1:C:148:THR:O</td>
<td>1:C:151:ASP:N</td>
<td>2.35</td>
<td>0.59</td>
</tr>
<tr>
<td>1:C:337:VAL:C</td>
<td>1:C:339:SER:H</td>
<td>2.06</td>
<td>0.59</td>
</tr>
<tr>
<td>1:F:390:SER:O</td>
<td>1:F:395:THR:HG21</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:112:MET:HG2</td>
<td>1:B:161:LYS:HG2</td>
<td>1.85</td>
<td>0.59</td>
</tr>
<tr>
<td>1:F:136:VAL:O</td>
<td>1:F:143:ALA:HA</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:322:ILE:CG1</td>
<td>1:A:326:GLN:HE21</td>
<td>2.16</td>
<td>0.59</td>
</tr>
<tr>
<td>1:C:419:LEU:H</td>
<td>1:C:419:LEU:HD12</td>
<td>1.67</td>
<td>0.59</td>
</tr>
<tr>
<td>1:C:332:LEU:N</td>
<td>1:C:332:LEU:HD12</td>
<td>2.17</td>
<td>0.59</td>
</tr>
<tr>
<td>1:D:214:THR:HB</td>
<td>1:D:254:THR:HG21</td>
<td>1.82</td>
<td>0.59</td>
</tr>
<tr>
<td>1:D:221:ARG:HA</td>
<td>1:D:221:ARG:HE</td>
<td>1.68</td>
<td>0.59</td>
</tr>
<tr>
<td>1:E:293:ILE:CD1</td>
<td>1:E:293:ILE:H</td>
<td>2.14</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:371:LEU:CD2</td>
<td>1:B:437:MET:HB3</td>
<td>2.33</td>
<td>0.59</td>
</tr>
<tr>
<td>1:C:316:ASP:N</td>
<td>1:C:317:PRO:HD3</td>
<td>2.18</td>
<td>0.59</td>
</tr>
<tr>
<td>1:F:374:ILE:O</td>
<td>1:F:378:ASP:N</td>
<td>2.31</td>
<td>0.59</td>
</tr>
<tr>
<td>1:B:437:MET:O</td>
<td>1:B:441:LEU:HB2</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:461:TRP:O</td>
<td>1:B:465:GLN:HG3</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>1:C:168:LEU:HD13</td>
<td>1:C:168:LEU:H</td>
<td>1.66</td>
<td>0.58</td>
</tr>
<tr>
<td>1:E:392:ASP:OD2</td>
<td>1:E:395:THR:HG23</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:149:PRO:CB</td>
<td>1:B:310:LEU:HD21</td>
<td>2.30</td>
<td>0.58</td>
</tr>
<tr>
<td>1:C:163:PRO:HB3</td>
<td>1:C:165:HIS:CE1</td>
<td>2.38</td>
<td>0.58</td>
</tr>
<tr>
<td>Atom-1</td>
<td>Atom-2</td>
<td>Interatomic distance (Å)</td>
<td>Clash overlap (Å)</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>--------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>1:E:460:MET:C</td>
<td>1:E:462:LYS:H</td>
<td>2.07</td>
<td>0.58</td>
</tr>
<tr>
<td>1:F:431:LYS:HG2</td>
<td>1:F:432:GLU:N</td>
<td>2.17</td>
<td>0.58</td>
</tr>
<tr>
<td>1:D:305:His:CD2</td>
<td>1:D:365:GLU:OE2</td>
<td>2.57</td>
<td>0.58</td>
</tr>
<tr>
<td>1:F:399:VAL:O</td>
<td>1:F:403:VAL:HB</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:220:GLN:HG2</td>
<td>1:B:297:LEU:HD22</td>
<td>1.85</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:323:THR:HG22</td>
<td>1:B:325:ARG:N</td>
<td>2.12</td>
<td>0.58</td>
</tr>
<tr>
<td>1:E:194:ILE:O</td>
<td>1:E:197:THR:N</td>
<td>2.36</td>
<td>0.58</td>
</tr>
<tr>
<td>1:F:189:ALA:O</td>
<td>1:F:190:ASP:HB2</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>1:B:430:ASN:N</td>
<td>1:B:430:ASN:ND2</td>
<td>2.51</td>
<td>0.58</td>
</tr>
<tr>
<td>1:E:231:ASP:OD2</td>
<td>1:E:234:GLY:HA3</td>
<td>2.04</td>
<td>0.58</td>
</tr>
<tr>
<td>1:E:321:ARG:HG2</td>
<td>1:E:359:LEU:N</td>
<td>2.19</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:401:ARG:HD2</td>
<td>1:B:232:LEU:CD2</td>
<td>2.33</td>
<td>0.58</td>
</tr>
<tr>
<td>1:E:340:LYS:HD2</td>
<td>1:E:340:LYS:N</td>
<td>2.19</td>
<td>0.58</td>
</tr>
<tr>
<td>1:F:395:THR:O</td>
<td>1:F:399:VAL:HG23</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:456:LEU:HD21</td>
<td>1:D:460:MET:HE2</td>
<td>1.87</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:190:ASP:OD1</td>
<td>1:B:191:GLU:N</td>
<td>2.37</td>
<td>0.57</td>
</tr>
<tr>
<td>1:C:154:ARG:CD</td>
<td>1:C:314:ARG:HH21</td>
<td>2.15</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:148:THR:OG1</td>
<td>1:B:150:GLU:HG2</td>
<td>2.03</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:154:ARG:NH1</td>
<td>1:B:314:ARG:HH21</td>
<td>2.02</td>
<td>0.57</td>
</tr>
<tr>
<td>1:E:388:GLY:O</td>
<td>1:F:337:VAL:CG2</td>
<td>2.52</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:119:ARG:NH1</td>
<td>1:A:131:PHE:CE1</td>
<td>2.73</td>
<td>0.57</td>
</tr>
<tr>
<td>1:D:313:GLU:C</td>
<td>1:D:315:HIS:N</td>
<td>2.37</td>
<td>0.57</td>
</tr>
<tr>
<td>1:F:434:VAL:O</td>
<td>1:F:438:LYS:HG3</td>
<td>2.05</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:134:LEU:O</td>
<td>1:A:145:VAL:HG13</td>
<td>2.05</td>
<td>0.57</td>
</tr>
<tr>
<td>1:C:154:ARG:NE</td>
<td>1:C:162:GLN:HE21</td>
<td>2.03</td>
<td>0.57</td>
</tr>
<tr>
<td>1:C:346:GLN:HE22</td>
<td>1:C:355:GLU:CG</td>
<td>2.06</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:246:VAL:O</td>
<td>1:A:250:ILE:HG12</td>
<td>2.05</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:434:VAL:O</td>
<td>1:A:438:LYS:HG3</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:133:THR:HG22</td>
<td>1:B:166:LEU:HD13</td>
<td>1.85</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:293:ILE:HD12</td>
<td>1:B:294:LYS:N</td>
<td>2.16</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:313:GLU:C</td>
<td>1:B:315:HIS:H</td>
<td>2.08</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:442:MET:C</td>
<td>1:B:443:ARG:CB</td>
<td>2.52</td>
<td>0.57</td>
</tr>
<tr>
<td>1:D:252:SER:O</td>
<td>1:D:253:GLN:HG3</td>
<td>2.05</td>
<td>0.57</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:C:286:ASP:OD2</td>
<td>1:C:288:LYS:HB2</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>1:C:315:HIS:HB2</td>
<td>1:C:322:ILE:HD11</td>
<td>1.85</td>
<td>0.57</td>
</tr>
<tr>
<td>1:C:346:GLN:CA</td>
<td>1:C:346:GLN:HE21</td>
<td>2.17</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:148:THR:HB</td>
<td>1:A:149:PRO:CD</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:210:ILE:CD1</td>
<td>1:A:210:ILE:N</td>
<td>2.68</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:309:LYS:HA</td>
<td>1:A:361:PHE:HE1</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:210:ILE:O</td>
<td>1:B:214:THR:HG23</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>1:C:416:VAL:O</td>
<td>1:C:420:PHE:HB2</td>
<td>2.04</td>
<td>0.56</td>
</tr>
<tr>
<td>1:D:323:THR:H</td>
<td>1:D:326:GLN:HE21</td>
<td>1.49</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:327:PHE:HA</td>
<td>1:A:330:MET:HE2</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:119:ARG:HD3</td>
<td>1:B:155:SER:O</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>1:D:228:LYS:HE3</td>
<td>1:F:402:THR:O</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>1:F:293:ILE:HD12</td>
<td>1:F:293:ILE:N</td>
<td>2.20</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:278:LEU:HD12</td>
<td>1:A:278:LEU:H</td>
<td>1.71</td>
<td>0.56</td>
</tr>
<tr>
<td>1:B:293:ILE:CD1</td>
<td>1:B:294:LYS:H</td>
<td>2.17</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:416:VAL:O</td>
<td>1:A:420:PHE:HB2</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>1:D:194:ILE:HG23</td>
<td>1:D:302:LYS:HG2</td>
<td>1.88</td>
<td>0.56</td>
</tr>
<tr>
<td>1:E:194:ILE:HG23</td>
<td>1:E:302:LYS:HD3</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>1:E:292:THR:CG2</td>
<td>1:E:293:ILE:HD12</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>1:F:345:MET:HE3</td>
<td>1:F:419:LEU:HG</td>
<td>1.86</td>
<td>0.56</td>
</tr>
<tr>
<td>1:F:371:LEU:HG</td>
<td>1:F:437:MET:HG3</td>
<td>1.88</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:132:ALA:O</td>
<td>1:A:171:TYR:HD2</td>
<td>1.89</td>
<td>0.56</td>
</tr>
<tr>
<td>1:C:119:ARG:NH1</td>
<td>1:C:154:ARG:O</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>1:C:166:LEU:HD21</td>
<td>1:C:172:ILE:CD1</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>1:E:158:PRO:O</td>
<td>1:E:159:ASN:HB2</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:323:THR:HB</td>
<td>1:A:326:GLN:CG</td>
<td>2.36</td>
<td>0.56</td>
</tr>
<tr>
<td>1:D:332:LEU:HD11</td>
<td>1:D:419:LEU:HD22</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>1:F:425:ASN:HB3</td>
<td>1:F:427:GLU:HB2</td>
<td>1.88</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:396:MET:O</td>
<td>1:A:396:MET:HG3</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:457:MET:CE</td>
<td>1:B:463:CYS:HB3</td>
<td>2.36</td>
<td>0.56</td>
</tr>
<tr>
<td>1:D:218:THR:HG21</td>
<td>1:D:250:ILE:HG23</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>1:C:152:PHE:HE1</td>
<td>1:C:213:THR:HG22</td>
<td>1.70</td>
<td>0.55</td>
</tr>
<tr>
<td>1:F:197:THR:O</td>
<td>1:F:278:LEU:HB3</td>
<td>2.05</td>
<td>0.55</td>
</tr>
<tr>
<td>1:D:122:SER:HB3</td>
<td>1:D:126:LYS:HB3</td>
<td>1.89</td>
<td>0.55</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:PHE:O</td>
<td>1:A:210:ILE:HD13</td>
<td>2.05</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:276:SER:OG</td>
<td>1:B:278:LEU:HB2</td>
<td>2.07</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:293:ILE:N</td>
<td>1:B:293:ILE:HD12</td>
<td>2.21</td>
<td>0.55</td>
</tr>
<tr>
<td>1:D:378:ASP:HB2</td>
<td>1:D:434:VAL:HG11</td>
<td>1.87</td>
<td>0.55</td>
</tr>
<tr>
<td>1:D:411:HIS:HD2</td>
<td>1:D:414:ASP:OD2</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>1:E:342:LEU:O</td>
<td>1:E:345:MET:HB3</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>1:E:292:THR:HG23</td>
<td>1:E:293:ILE:HD12</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>1:C:124:PRO:HD3</td>
<td>1:C:259:ARG:HB2</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>1:E:431:LYS:HG2</td>
<td>1:E:432:GLU:H</td>
<td>1.72</td>
<td>0.55</td>
</tr>
<tr>
<td>1:F:149:PRO:HD3</td>
<td>1:F:202:GLY:O</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>1:D:337:VAL:C</td>
<td>1:D:339:SER:H</td>
<td>2.09</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:317:PRO:HG3</td>
<td>1:B:322:ILE:HD13</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:436:ILE:H</td>
<td>1:B:436:ILE:CD1</td>
<td>2.16</td>
<td>0.55</td>
</tr>
<tr>
<td>1:D:345:MET:O</td>
<td>1:D:349:LEU:HB2</td>
<td>2.07</td>
<td>0.55</td>
</tr>
<tr>
<td>1:E:305:HIS:HD2</td>
<td>1:E:365:GLU:OE2</td>
<td>1.90</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:166:LEU:O</td>
<td>1:B:170:GLN:NE2</td>
<td>2.37</td>
<td>0.55</td>
</tr>
<tr>
<td>1:E:147:MET:HB2</td>
<td>1:E:151:ASP:HB2</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>1:D:456:LEU:HB2</td>
<td>1:D:457:MET:HE3</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:198:LEU:O</td>
<td>1:E:277:ALA:HB3</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:421:ASP:OD1</td>
<td>1:E:424:GLY:HA2</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:377:VAL:O</td>
<td>1:A:381:LEU:HD12</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>1:C:238:VAL:HG13</td>
<td>1:C:242:GLU:HB2</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:393:LYS:HA</td>
<td>1:E:417:PHE:CE2</td>
<td>2.42</td>
<td>0.54</td>
</tr>
<tr>
<td>1:F:151:ASP:OD1</td>
<td>1:F:154:ARG:NH2</td>
<td>2.39</td>
<td>0.54</td>
</tr>
<tr>
<td>1:F:337:VAL:C</td>
<td>1:F:339:SER:H</td>
<td>2.11</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:460:MET:HA</td>
<td>1:E:463:CYS:CB</td>
<td>2.37</td>
<td>0.54</td>
</tr>
<tr>
<td>1:C:314:ARG:HG2</td>
<td>1:C:314:ARG:HH11</td>
<td>1.72</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:456:LEU:HD11</td>
<td>1:D:460:MET:CE</td>
<td>2.36</td>
<td>0.54</td>
</tr>
<tr>
<td>1:C:235:ASP:HB2</td>
<td>1:C:293:ILE:HD11</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:353:PHE:CD2</td>
<td>1:E:353:PHE:N</td>
<td>2.73</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:111:VAL:O</td>
<td>1:E:115:GLU:HG3</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:194:ILE:CD1</td>
<td>1:E:195:PHE:N</td>
<td>2.66</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:374:ILE:HD12</td>
<td>1:E:375:ASN:H</td>
<td>1.73</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:442:MET:O</td>
<td>1:E:443:ARG:HB2</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:360:THR:HG23</td>
<td>1:A:363:GLU:CG</td>
<td>2.36</td>
<td>0.54</td>
</tr>
<tr>
<td>1:C:232:LEU:N</td>
<td>1:C:232:LEU:HD12</td>
<td>2.22</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:390:SER:O</td>
<td>1:E:395:THR:HG21</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:286:ASP:OD2</td>
<td>1:B:288:LYS:HB2</td>
<td>2.06</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:306:ASP:O</td>
<td>1:B:310:LEU:HD13</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>1:C:154:ARG:HE</td>
<td>1:C:162:GLN:NE2</td>
<td>2.06</td>
<td>0.54</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:C:286:ASP:O</td>
<td>1:C:287:LEU:HB2</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:118:ILE:O</td>
<td>1:E:122:SER:HB2</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>1:E:401:ARG:HD3</td>
<td>1:E:407:GLU:OE2</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:166:LEU:HA</td>
<td>1:A:170:GLN:O</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:297:LEU:O</td>
<td>1:A:301:ARG:HB2</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:F:374:ILE:HD12</td>
<td>1:F:375:ASN:H</td>
<td>1.72</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:103:ARG:HG2</td>
<td>1:A:103:ARG:NH1</td>
<td>2.21</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:133:THR:HG23</td>
<td>1:B:151:ASP:OD2</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>1:C:360:THR:OG1</td>
<td>1:C:363:GLU:HG3</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>1:D:411:His:HA</td>
<td>1:D:414:ASP:OD2</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>1:F:313:GLU:C</td>
<td>1:F:315:His:H</td>
<td>2.10</td>
<td>0.54</td>
</tr>
<tr>
<td>1:B:374:ILE:HA</td>
<td>1:B:377:VAL:HB</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:456:LEU:HD12</td>
<td>1:C:461:TRP:CH2</td>
<td>2.44</td>
<td>0.53</td>
</tr>
<tr>
<td>1:D:119:ARG:HG2</td>
<td>1:D:155:SER:O</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>1:F:130:TYR:CE2</td>
<td>1:F:162:GLN:HG3</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:371:LEU:C</td>
<td>1:B:373:ASN:H</td>
<td>2.11</td>
<td>0.53</td>
</tr>
<tr>
<td>1:C:293:ILE:H</td>
<td>1:C:295:ILE:CD1</td>
<td>2.03</td>
<td>0.53</td>
</tr>
<tr>
<td>1:E:193:SER:O</td>
<td>1:E:194:ILE:C</td>
<td>2.45</td>
<td>0.53</td>
</tr>
<tr>
<td>1:C:296:PHE:O</td>
<td>1:C:299:PHE:N</td>
<td>2.42</td>
<td>0.53</td>
</tr>
<tr>
<td>1:C:303:LEU:HD23</td>
<td>1:C:303:LEU:C</td>
<td>2.29</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:457:MET:HE2</td>
<td>1:B:463:CYS:HB3</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:D:338:GLN:NE2</td>
<td>1:D:341:LYS:NZ</td>
<td>2.56</td>
<td>0.53</td>
</tr>
<tr>
<td>1:D:436:ILE:O</td>
<td>1:D:439:GLN:HG2</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:430:ASN:O</td>
<td>1:A:434:VAL:HG23</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>1:D:292:THR:HG22</td>
<td>1:D:294:LYS:H</td>
<td>1.73</td>
<td>0.53</td>
</tr>
<tr>
<td>1:E:423:ASP:N</td>
<td>1:E:423:ASP:OD2</td>
<td>2.41</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:145:VAL:HG11</td>
<td>1:B:171:TYR:CE2</td>
<td>2.44</td>
<td>0.53</td>
</tr>
<tr>
<td>1:E:381:LEU:HD22</td>
<td>1:E:391:LEU:HD22</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:334:TYR:CZ</td>
<td>1:A:443:ARG:HG2</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:415:VAL:O</td>
<td>1:B:418:ALA:HB3</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>1:C:431:LYS:HG2</td>
<td>1:C:432:GLU:N</td>
<td>2.20</td>
<td>0.53</td>
</tr>
<tr>
<td>1:D:112:MET:O</td>
<td>1:D:114:TYR:N</td>
<td>2.42</td>
<td>0.53</td>
</tr>
<tr>
<td>1:D:454:THR:C</td>
<td>1:D:456:LEU:N</td>
<td>2.59</td>
<td>0.53</td>
</tr>
<tr>
<td>1:E:168:LEU:O</td>
<td>1:E:169:ASP:HB2</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>1:E:378:ASP:HB2</td>
<td>1:E:434:VAL:HG21</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:422:CYS:HB2</td>
<td>1:A:425:ASN:OD1</td>
<td>2.09</td>
<td>0.53</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:D:445:LEU:CD1</td>
<td>1:D:445:LEU:O</td>
<td>2.56</td>
<td>0.53</td>
</tr>
<tr>
<td>1:E:278:LEU:HD22</td>
<td>1:E:282:PHE:HE2</td>
<td>1.73</td>
<td>0.53</td>
</tr>
<tr>
<td>1:F:318:VAL:O</td>
<td>1:F:318:VAL:HG23</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>1:F:337:VAL:O</td>
<td>1:F:337:VAL:CG1</td>
<td>2.57</td>
<td>0.53</td>
</tr>
<tr>
<td>1:B:409:SER:OG</td>
<td>1:B:412:VAL:HG23</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>1:F:283:PHE:CE1</td>
<td>1:F:291:LEU:HB2</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>1:F:396:MET:HE3</td>
<td>1:F:428:LEU:HG</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:453:PHE:CB</td>
<td>1:C:461:TRP:NE1</td>
<td>2.72</td>
<td>0.52</td>
</tr>
<tr>
<td>1:C:134:LEU:HD12</td>
<td>1:C:203:LEU:HD11</td>
<td>1.90</td>
<td>0.52</td>
</tr>
<tr>
<td>1:C:425:ASN:C</td>
<td>1:C:427:GLU:H</td>
<td>2.13</td>
<td>0.52</td>
</tr>
<tr>
<td>1:C:461:TRP:C</td>
<td>1:C:463:CYS:H</td>
<td>2.12</td>
<td>0.52</td>
</tr>
<tr>
<td>1:D:430:ASN:O</td>
<td>1:D:434:VAL:HG23</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>1:F:283:PHE:HE1</td>
<td>1:F:291:LEU:HB2</td>
<td>1.73</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:317:PRO:HB3</td>
<td>1:A:321:ARG:O</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>1:D:409:SER:HB3</td>
<td>1:D:412:VAL:HB</td>
<td>1.90</td>
<td>0.52</td>
</tr>
<tr>
<td>1:D:245:GLN:O</td>
<td>1:D:249:ILE:HG13</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>1:E:194:ILE:C</td>
<td>1:E:196:TYR:N</td>
<td>2.62</td>
<td>0.52</td>
</tr>
<tr>
<td>1:E:194:ILE:O</td>
<td>1:E:196:TYR:H</td>
<td>2.12</td>
<td>0.52</td>
</tr>
<tr>
<td>1:F:283:LEU:O</td>
<td>1:F:281:TYR:N</td>
<td>2.41</td>
<td>0.52</td>
</tr>
<tr>
<td>1:F:115:GLU:OE1</td>
<td>1:F:161:LYS:HA</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:318:VAL:O</td>
<td>1:A:318:VAL:HG23</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:133:THR:CG2</td>
<td>1:B:166:LEU:HD13</td>
<td>2.39</td>
<td>0.52</td>
</tr>
<tr>
<td>1:D:313:GLU:C</td>
<td>1:D:315:HIS:N</td>
<td>2.63</td>
<td>0.52</td>
</tr>
<tr>
<td>1:D:350:LYS:HB2</td>
<td>1:D:355:GLU:CD</td>
<td>2.30</td>
<td>0.52</td>
</tr>
<tr>
<td>1:D:382:SER:O</td>
<td>1:D:386:MET:HG3</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>1:E:393:LYS:HG3</td>
<td>1:E:413:CYS:HB3</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>1:F:409:SER:HB3</td>
<td>1:F:412:VAL:CG2</td>
<td>2.35</td>
<td>0.52</td>
</tr>
<tr>
<td>1:C:148:THR:HG23</td>
<td>1:C:151:ASP:OD2</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>1:C:136:VAL:HG22</td>
<td>1:C:174:LYS:HE2</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:429:SER:OG</td>
<td>1:A:431:LYS:HE2</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:460:MET:HE1</td>
<td>1:E:460:MET:SD</td>
<td>2.50</td>
<td>0.52</td>
</tr>
<tr>
<td>1:C:194:ILE:HD12</td>
<td>1:C:195:PHE:N</td>
<td>2.20</td>
<td>0.52</td>
</tr>
<tr>
<td>1:C:193:SER:HA</td>
<td>1:C:306:ASP:OD2</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>1:D:154:ARG:HE</td>
<td>1:D:162:GLN:NE2</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>1:F:137:ILE:H</td>
<td>1:F:137:ILE:HD13</td>
<td>1.75</td>
<td>0.52</td>
</tr>
<tr>
<td>1:F:349:LEU:HD22</td>
<td>1:F:354:LYS:HB2</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:296:PHE:O</td>
<td>1:A:299:PHE:HB3</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:346:GLN:O</td>
<td>1:B:350:LYS:HG3</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:371:LEU:O</td>
<td>1:B:374:ILE:HG13</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>1:D:134:LEU:HD11</td>
<td>1:D:188:PHE:CE1</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>1:D:454:THR:O</td>
<td>1:D:457:MET:HG2</td>
<td>2.09</td>
<td>0.52</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:B:168:LEU:O</td>
<td>1:B:170:GLN:HG3</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:433:PHE:CE1</td>
<td>1:B:437:MET:HG3</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>1:F:214:THR:O</td>
<td>1:F:218:THR:HG23</td>
<td>2.08</td>
<td>0.52</td>
</tr>
<tr>
<td>1:B:395:THR:O</td>
<td>1:B:399:VAL:HG23</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>1:C:428:LEU:HD23</td>
<td>1:C:429:SER:H</td>
<td>1.74</td>
<td>0.51</td>
</tr>
<tr>
<td>1:F:182:SER:C</td>
<td>1:F:184:GLU:N</td>
<td>2.64</td>
<td>0.51</td>
</tr>
<tr>
<td>1:F:190:ASP:O</td>
<td>1:F:196:TYR:HE2</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:315:HIS:HB3</td>
<td>1:A:326:GLN:NE2</td>
<td>2.25</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:292:THR:HG22</td>
<td>1:B:294:LYS:N</td>
<td>2.22</td>
<td>0.51</td>
</tr>
<tr>
<td>1:D:336:GLY:C</td>
<td>1:D:338:GLN:N</td>
<td>2.61</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:119:ARG:NH1</td>
<td>1:A:131:PHE:HE1</td>
<td>2.09</td>
<td>0.51</td>
</tr>
<tr>
<td>1:C:306:ASP:O</td>
<td>1:C:310:LEU:HD13</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>1:D:151:ASP:OD1</td>
<td>1:D:154:ARG:NH2</td>
<td>2.43</td>
<td>0.51</td>
</tr>
<tr>
<td>1:E:119:ARG:NH1</td>
<td>1:E:154:ARG:O</td>
<td>2.43</td>
<td>0.51</td>
</tr>
<tr>
<td>1:C:194:ILE:HG23</td>
<td>1:C:302:LYS:HG2</td>
<td>1.91</td>
<td>0.51</td>
</tr>
<tr>
<td>1:F:422:CYS:CB</td>
<td>1:F:425:ASN:ND2</td>
<td>2.66</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:401:ARG:O</td>
<td>1:A:405:LYS:HA</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>1:D:163:PRO:HB3</td>
<td>1:D:165:HIS:CE1</td>
<td>2.46</td>
<td>0.51</td>
</tr>
<tr>
<td>1:E:441:LEU:O</td>
<td>1:E:441:LEU:HD13</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:293:ILE:H</td>
<td>1:A:293:ILE:CD1</td>
<td>2.07</td>
<td>0.51</td>
</tr>
<tr>
<td>1:C:317:PRO:HG3</td>
<td>1:C:322:ILE:HD13</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:D:349:LEU:HB3</td>
<td>1:D:355:GLU:CG</td>
<td>2.41</td>
<td>0.51</td>
</tr>
<tr>
<td>1:E:323:THR:HG22</td>
<td>1:E:324:GLU:H</td>
<td>1.75</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:154:ARG:NH1</td>
<td>1:A:314:ARG:NH2</td>
<td>2.59</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:233:ASN:N</td>
<td>1:B:233:ASN:HD22</td>
<td>2.08</td>
<td>0.51</td>
</tr>
<tr>
<td>1:D:387:ALA:HB2</td>
<td>1:F:249:ILE:CD1</td>
<td>2.41</td>
<td>0.51</td>
</tr>
<tr>
<td>1:E:279:THR:O</td>
<td>1:E:283:PHE:CD2</td>
<td>2.62</td>
<td>0.51</td>
</tr>
<tr>
<td>1:F:313:GLU:O</td>
<td>1:F:315:HIS:N</td>
<td>2.36</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:195:PHE:HZ</td>
<td>1:A:307:VAL:HG22</td>
<td>1.75</td>
<td>0.51</td>
</tr>
<tr>
<td>1:C:300:GLN:O</td>
<td>1:C:304:GLN:HG3</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:E:430:ASN:O</td>
<td>1:E:434:VAL:HG13</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:B:291:LEU:HD23</td>
<td>1:B:292:THR:H</td>
<td>1.75</td>
<td>0.51</td>
</tr>
<tr>
<td>1:C:371:LEU:C</td>
<td>1:C:373:ASN:H</td>
<td>2.14</td>
<td>0.51</td>
</tr>
<tr>
<td>1:D:246:VAL:O</td>
<td>1:D:250:ILE:HG12</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>1:E:242:GLU:O</td>
<td>1:E:245:GLN:HB2</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:F:156:ILE:O</td>
<td>1:F:158:PRO:HD3</td>
<td>2.11</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:E:417:PHE:CZ</td>
<td>1:E:428:LEU:HD23</td>
<td>2.46</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:401:ARG:HD2</td>
<td>1:B:232:LEU:HD22</td>
<td>1.92</td>
<td>0.50</td>
</tr>
<tr>
<td>1:C:136:VAL:O</td>
<td>1:C:143:ALA:HA</td>
<td>2.10</td>
<td>0.50</td>
</tr>
<tr>
<td>1:D:115:GLU:HG2</td>
<td>1:D:130:TYR:OH</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>1:D:456:LEU:O</td>
<td>1:D:460:MET:N</td>
<td>2.44</td>
<td>0.50</td>
</tr>
<tr>
<td>1:F:416:VAL:O</td>
<td>1:F:420:PHE:HB2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:158:PRO:O</td>
<td>1:A:159:ASN:HB2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:154:ARG:NH1</td>
<td>1:A:314:ARG:HH21</td>
<td>2.09</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:214:THR:HB</td>
<td>1:B:254:THR:HG21</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>1:C:351:LYS:HG3</td>
<td>1:C:352:HIS:ND1</td>
<td>2.27</td>
<td>0.50</td>
</tr>
<tr>
<td>1:E:238:VAL:HG12</td>
<td>1:E:239:ASP:O</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:E:314:ARG:O</td>
<td>1:E:314:ARG:HG2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:E:317:PRO:HG3</td>
<td>1:E:322:ILE:HD13</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>1:F:421:ASP:HB2</td>
<td>1:F:426:GLY:H</td>
<td>1.75</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:194:ILE:HD12</td>
<td>1:B:195:PHE:H</td>
<td>1.77</td>
<td>0.50</td>
</tr>
<tr>
<td>1:C:147:MET:HB2</td>
<td>1:C:151:ASP:HB2</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>1:B:245:GLN:HG3</td>
<td>1:E:121:TYR:CZ</td>
<td>2.45</td>
<td>0.50</td>
</tr>
<tr>
<td>1:C:137:ILE:HD12</td>
<td>1:C:175:ARG:HA</td>
<td>1.92</td>
<td>0.50</td>
</tr>
<tr>
<td>1:D:123:THR:O</td>
<td>1:D:127:ILE:HG13</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>1:E:323:THR:CG2</td>
<td>1:E:324:GLU:N</td>
<td>2.73</td>
<td>0.50</td>
</tr>
<tr>
<td>1:D:170:GLN:HE21</td>
<td>1:D:170:GLN:HA</td>
<td>1.76</td>
<td>0.50</td>
</tr>
<tr>
<td>1:E:322:ILE:HG22</td>
<td>1:E:359:LEU:HB2</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>1:C:375:ASN:O</td>
<td>1:C:379:THR:HG23</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:D:224:GLU:HA</td>
<td>1:D:293:ILE:HG21</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>1:D:454:THR:O</td>
<td>1:D:456:LEU:N</td>
<td>2.43</td>
<td>0.50</td>
</tr>
<tr>
<td>1:F:315:HIS:CB</td>
<td>1:F:322:ILE:HD11</td>
<td>2.41</td>
<td>0.50</td>
</tr>
<tr>
<td>1:C:168:LEU:N</td>
<td>1:C:168:LEU:HD13</td>
<td>2.27</td>
<td>0.50</td>
</tr>
<tr>
<td>1:C:314:ARG:HG2</td>
<td>1:C:314:ARG:O</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:C:359:LEU:N</td>
<td>1:C:359:LEU:HD12</td>
<td>2.26</td>
<td>0.50</td>
</tr>
<tr>
<td>1:D:381:LEU:HD22</td>
<td>1:D:391:LEU:HD22</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:242:GLU:O</td>
<td>1:A:246:VAL:HG23</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:C:239:ASP:OD1</td>
<td>1:C:241:GLU:HG2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:D:283:PHE:HE1</td>
<td>1:D:291:LEU:HB2</td>
<td>1.77</td>
<td>0.50</td>
</tr>
<tr>
<td>1:E:300:GLN:O</td>
<td>1:E:304:GLN:HG3</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>1:E:216:LEU:HG23</td>
<td>1:E:304:GLN:HG2</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>1:C:119:ARG:NH1</td>
<td>1:C:157:THR:O</td>
<td>2.45</td>
<td>0.49</td>
</tr>
<tr>
<td>1:D:436:ILE:HG22</td>
<td>1:D:437:MET:CE</td>
<td>2.42</td>
<td>0.49</td>
</tr>
<tr>
<td>1:E:314:ARG:O</td>
<td>1:E:315:HIS:HD2</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:227:PHE:C</td>
<td>1:A:229:MET:N</td>
<td>2.65</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:115:GLU:HG2</td>
<td>1:B:130:TYR:OH</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:398:GLN:NE2</td>
<td>1:B:232:LEU:HD21</td>
<td>2.27</td>
<td>0.49</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:C:239:ASP:OD2</td>
<td>1:C:242:GLU:HG3</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>1:C:238:VAL:HG12</td>
<td>1:C:239:ASP:O</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>1:C:425:ASN:HD22</td>
<td>1:C:427:GLU:HG2</td>
<td>1.77</td>
<td>0.49</td>
</tr>
<tr>
<td>1:D:323:THR:HG22</td>
<td>1:D:325:ARG:N</td>
<td>2.05</td>
<td>0.49</td>
</tr>
<tr>
<td>1:C:148:THR:O</td>
<td>1:C:149:PRO:C</td>
<td>2.50</td>
<td>0.49</td>
</tr>
<tr>
<td>1:C:460:MET:O</td>
<td>1:C:463:CYS:HB2</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>1:F:203:ILE:CD1</td>
<td>1:F:203:ILE:H</td>
<td>2.20</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:292:THR:CG2</td>
<td>1:B:293:ILE:HD12</td>
<td>2.37</td>
<td>0.49</td>
</tr>
<tr>
<td>1:C:132:ALA:HB1</td>
<td>1:C:146:PHE:O</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:336:GLY:C</td>
<td>1:A:338:GLN:H</td>
<td>2.15</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:315:HIS:CB</td>
<td>1:B:322:ILE:HD11</td>
<td>2.42</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:431:LYS:HG2</td>
<td>1:A:432:GLU:N</td>
<td>2.27</td>
<td>0.49</td>
</tr>
<tr>
<td>1:E:321:ARG:HD2</td>
<td>1:E:358:GLY:HA3</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>1:F:399:VAL:HG12</td>
<td>1:F:399:VAL:O</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:114:TYR:O</td>
<td>1:A:118:ILE:HG13</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:227:PHE:CD1</td>
<td>1:B:203:ILE:HG23</td>
<td>2.47</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:346:GLN:CA</td>
<td>1:B:346:GLN:NE2</td>
<td>2.75</td>
<td>0.49</td>
</tr>
<tr>
<td>1:C:303:LEU:HD23</td>
<td>1:C:307:VAL:CG2</td>
<td>2.43</td>
<td>0.49</td>
</tr>
<tr>
<td>1:D:421:ASP:HA</td>
<td>1:D:428:LEU:HA</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:221:ARG:HH11</td>
<td>1:B:221:ARG:CB</td>
<td>2.21</td>
<td>0.49</td>
</tr>
<tr>
<td>1:C:428:LEU:HD23</td>
<td>1:C:429:SER:N</td>
<td>2.27</td>
<td>0.49</td>
</tr>
<tr>
<td>1:D:337:VAL:C</td>
<td>1:D:339:SER:N</td>
<td>2.64</td>
<td>0.49</td>
</tr>
<tr>
<td>1:E:337:VAL:C</td>
<td>1:E:339:SER:H</td>
<td>2.16</td>
<td>0.49</td>
</tr>
<tr>
<td>1:E:360:THR:O</td>
<td>1:E:364:VAL:HG23</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>1:E:432:GLU:O</td>
<td>1:E:432:GLU:HG2</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:245:GLN:O</td>
<td>1:B:249:ILE:HG13</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:459:ALA:HB1</td>
<td>1:D:456:LEU:CD2</td>
<td>2.24</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:174:LYS:HG3</td>
<td>1:B:175:ARG:N</td>
<td>2.28</td>
<td>0.48</td>
</tr>
<tr>
<td>1:C:291:LEU:HD23</td>
<td>1:C:292:THR:N</td>
<td>2.28</td>
<td>0.48</td>
</tr>
<tr>
<td>1:C:327:PHE:CD1</td>
<td>1:C:364:VAL:HG22</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>1:F:239:ASP:OD1</td>
<td>1:F:242:GLU:HG3</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:309:LYS:O</td>
<td>1:A:312:PHE:N</td>
<td>2.45</td>
<td>0.48</td>
</tr>
<tr>
<td>1:E:286:ASP:O</td>
<td>1:E:288:LYS:HG3</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:E:298:GLU:OE1</td>
<td>1:E:301:ARG:NH2</td>
<td>2.46</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:442:MET:O</td>
<td>1:A:443:ARG:HB2</td>
<td>2.13</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:B:148:THR:O</td>
<td>1:B:149:PRO:C</td>
<td>2.50</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:220:GLN:HG2</td>
<td>1:B:297:LEU:CD2</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>1:C:134:LEU:HD12</td>
<td>1:C:203:LEU:CD1</td>
<td>2.42</td>
<td>0.48</td>
</tr>
<tr>
<td>1:E:371:LEU:O</td>
<td>1:E:374:ILE:HG13</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:F:148:THR:OG1</td>
<td>1:F:149:PRO:HD2</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:D:166:LEU:CD2</td>
<td>1:D:172:ILE:HG13</td>
<td>2.40</td>
<td>0.48</td>
</tr>
<tr>
<td>1:E:460:MET:C</td>
<td>1:E:462:LYS:N</td>
<td>2.66</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:154:ARG:HD3</td>
<td>1:B:314:ARG:HH22</td>
<td>1.75</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:194:ILE:C</td>
<td>1:B:196:TYR:H</td>
<td>2.17</td>
<td>0.48</td>
</tr>
<tr>
<td>1:E:123:THR:O</td>
<td>1:E:127:ILE:HG13</td>
<td>2.12</td>
<td>0.48</td>
</tr>
<tr>
<td>1:E:296:PHE:O</td>
<td>1:E:299:PHE:HB3</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:452:GLY:O</td>
<td>1:A:454:THR:N</td>
<td>2.41</td>
<td>0.48</td>
</tr>
<tr>
<td>1:C:333:ALA:HB3</td>
<td>1:C:440:ARG:HH11</td>
<td>1.78</td>
<td>0.48</td>
</tr>
<tr>
<td>1:F:437:MET:HE2</td>
<td>1:F:440:ARG:HG2</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:393:LYS:HG3</td>
<td>1:B:413:CYS:CB</td>
<td>2.44</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:371:LEU:HB3</td>
<td>1:B:441:LEU:HD23</td>
<td>1.94</td>
<td>0.48</td>
</tr>
<tr>
<td>1:D:346:GLN:O</td>
<td>1:D:355:GLU:OE2</td>
<td>2.31</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:371:LEU:HD21</td>
<td>1:B:437:MET:SD</td>
<td>2.54</td>
<td>0.48</td>
</tr>
<tr>
<td>1:D:206:PHE:CE2</td>
<td>1:D:210:ILE:HD11</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>1:D:330:MET:O</td>
<td>1:D:440:ARG:NH1</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>1:E:115:GLU:OE1</td>
<td>1:E:161:LYS:HA</td>
<td>2.14</td>
<td>0.48</td>
</tr>
<tr>
<td>1:C:124:PRO:HG2</td>
<td>1:C:260:HIS:CB</td>
<td>2.44</td>
<td>0.48</td>
</tr>
<tr>
<td>1:C:303:LEU:HD23</td>
<td>1:C:307:VAL:HG23</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>1:D:320:GLY:O</td>
<td>1:D:360:THR:HA</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:366:ASN:ND2</td>
<td>1:B:406:VAL:CG2</td>
<td>2.71</td>
<td>0.47</td>
</tr>
<tr>
<td>1:C:371:LEU:CD2</td>
<td>1:C:437:MET:HB3</td>
<td>2.44</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:368:PHE:HA</td>
<td>1:B:371:LEU:HB2</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:C:278:LEU:O</td>
<td>1:C:281:TYR:N</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>1:D:149:PRO:HG2</td>
<td>1:D:189:ALA:HB2</td>
<td>1.94</td>
<td>0.47</td>
</tr>
<tr>
<td>1:E:374:ILE:O</td>
<td>1:E:378:ASP:N</td>
<td>2.46</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:B:245:GLN:NE2</td>
<td>1:E:117:ARG:HD3</td>
<td>2.28</td>
<td>0.47</td>
</tr>
<tr>
<td>1:C:174:LYS:NZ</td>
<td>1:C:188:PHE:HE2</td>
<td>2.13</td>
<td>0.47</td>
</tr>
<tr>
<td>1:C:238:VAL:CG1</td>
<td>1:C:243:PHE:HB2</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>1:D:206:PHE:HZ</td>
<td>1:D:210:ILE:HD11</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>1:D:456:LEU:O</td>
<td>1:D:459:ALA:N</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>1:E:334:TYR:CE2</td>
<td>1:E:443:ARG:HG2</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:431:LYS:N</td>
<td>1:A:431:LYS:HD3</td>
<td>2.28</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:462:LYS:O</td>
<td>1:B:463:CYS:C</td>
<td>2.53</td>
<td>0.47</td>
</tr>
<tr>
<td>1:C:128:PHE:CE2</td>
<td>1:C:206:PHE:HB2</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>1:C:335:SER:OG</td>
<td>1:C:336:GLY:N</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>1:F:324:GLU:OE1</td>
<td>1:F:411:HIS:HE1</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:D:196:TYR:C</td>
<td>1:D:198:LEU:N</td>
<td>2.68</td>
<td>0.47</td>
</tr>
<tr>
<td>1:D:147:MET:HB2</td>
<td>1:D:151:ASP:HB2</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:340:LYS:N</td>
<td>1:B:340:LYS:HD2</td>
<td>2.30</td>
<td>0.47</td>
</tr>
<tr>
<td>1:C:321:ARG:HA</td>
<td>1:C:359:LEU:O</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:E:137:ILE:HG12</td>
<td>1:E:143:ALA:CB</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>1:E:177:ASP:C</td>
<td>1:E:185:ARG:HD3</td>
<td>2.35</td>
<td>0.47</td>
</tr>
<tr>
<td>1:E:278:LEU:O</td>
<td>1:E:281:TYR:HB3</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>1:E:376:ASP:HB3</td>
<td>1:E:403:VAL:HG13</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:216:LEU:CD2</td>
<td>1:A:216:LEU:O</td>
<td>2.63</td>
<td>0.47</td>
</tr>
<tr>
<td>1:D:292:THR:HG22</td>
<td>1:D:293:ILE:HD12</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>1:E:132:ALA:HA</td>
<td>1:E:147:MET:HB3</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:162:GLN:CD</td>
<td>1:B:163:PRO:HD2</td>
<td>2.35</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:431:LYS:HG2</td>
<td>1:B:432:GLU:H</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>1:C:292:THR:CG2</td>
<td>1:C:293:ILE:N</td>
<td>2.78</td>
<td>0.47</td>
</tr>
<tr>
<td>1:D:194:ILE:CD1</td>
<td>1:D:194:ILE:C</td>
<td>2.83</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:371:LEU:O</td>
<td>1:B:373:ASN:N</td>
<td>2.46</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:231:ASP:CB</td>
<td>1:D:237:GLU:H</td>
<td>2.21</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:239:ASP:C</td>
<td>1:D:239:ASP:OD1</td>
<td>2.54</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:346:GLN:NE2</td>
<td>1:D:355:GLU:OE1</td>
<td>2.48</td>
<td>0.46</td>
</tr>
<tr>
<td>1:E:393:LYS:O</td>
<td>1:E:397:GLN:HG3</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:194:ILE:HG21</td>
<td>1:A:302:LYS:HD3</td>
<td>1.96</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:210:ILE:N</td>
<td>1:D:210:ILE:HD12</td>
<td>2.30</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:293:ILE:H</td>
<td>1:D:293:ILE:CD1</td>
<td>2.17</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:220:GLN:HG2</td>
<td>1:D:297:LEU:HD22</td>
<td>1.96</td>
<td>0.46</td>
</tr>
<tr>
<td>1:E:430:ASN:O</td>
<td>1:E:434:VAL:CG1</td>
<td>2.63</td>
<td>0.46</td>
</tr>
<tr>
<td>1:F:436:ILE:HG22</td>
<td>1:F:437:MET:N</td>
<td>2.29</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:303:LEU:O</td>
<td>1:A:307:VAL:HG23</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:228:LYS:HG2</td>
<td>1:B:228:LYS:O</td>
<td>2.14</td>
<td>0.46</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:B:368:PHE:O</td>
<td>1:B:371:LEU:HB2</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:E:218:THR:HA</td>
<td>1:E:219:PRO:HD3</td>
<td>1.65</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:293:ILE:CD1</td>
<td>1:B:294:LYS:N</td>
<td>2.78</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:153:VAL:HG21</td>
<td>1:B:310:LEU:HB3</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:371:LEU:HD22</td>
<td>1:B:437:MET:HB3</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>1:F:355:MET:HE3</td>
<td>1:F:419:LEU:CG</td>
<td>2.45</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:232:LEU:N</td>
<td>1:C:232:LEU:CD1</td>
<td>2.79</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:431:LYS:H</td>
<td>1:B:431:LYS:CD</td>
<td>2.29</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:148:THR:OG1</td>
<td>1:C:150:GLU:HG2</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:232:LEU:H</td>
<td>1:C:232:LEU:CD1</td>
<td>2.28</td>
<td>0.46</td>
</tr>
<tr>
<td>1:F:308:LEU:HD13</td>
<td>1:F:361:PHE:HE1</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:F:390:SER:O</td>
<td>1:F:395:THR:CG2</td>
<td>2.64</td>
<td>0.46</td>
</tr>
<tr>
<td>1:F:417:PHE:CE1</td>
<td>1:F:426:GLY:O</td>
<td>2.65</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:148:THR:CB</td>
<td>1:A:149:PRO:CD</td>
<td>2.94</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:208:ASP:O</td>
<td>1:B:212:LEU:HG</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:436:ILE:HG22</td>
<td>1:C:437:MET:HE2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:364:VAL:O</td>
<td>1:D:365:GLU:C</td>
<td>2.53</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:249:ILE:CD1</td>
<td>1:E:387:ALA:HB2</td>
<td>2.46</td>
<td>0.46</td>
</tr>
<tr>
<td>1:F:185:ARG:HG2</td>
<td>1:F:186:GLU:N</td>
<td>2.31</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:252:SER:HB2</td>
<td>1:F:386:MET:HG2</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>1:F:327:PHE:HD2</td>
<td>1:F:415:VAL:HG11</td>
<td>1.79</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:453:PHE:CB</td>
<td>1:C:461:TRP:CG2</td>
<td>2.99</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:112:MET:C</td>
<td>1:D:114:TYR:N</td>
<td>2.67</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:227:PHE:HB3</td>
<td>1:A:236:GLY:HA3</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:200:GLU:OE1</td>
<td>1:B:200:GLU:N</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:249:ILE:HD11</td>
<td>1:E:387:ALA:HB2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:451:MET:HA</td>
<td>1:C:454:THR:CG2</td>
<td>2.46</td>
<td>0.46</td>
</tr>
<tr>
<td>1:E:433:PHE:C</td>
<td>1:E:435:SER:N</td>
<td>2.69</td>
<td>0.46</td>
</tr>
<tr>
<td>1:F:419:LEU:HD13</td>
<td>1:F:420:PHE:CD1</td>
<td>2.51</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:109:ARG:O</td>
<td>1:B:113:GLU:HG3</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:239:ASP:OD1</td>
<td>1:C:239:ASP:C</td>
<td>2.53</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:323:THR:CG2</td>
<td>1:C:325:ARG:H</td>
<td>2.08</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:398:GLN:NE2</td>
<td>1:F:232:LEU:HD22</td>
<td>2.31</td>
<td>0.46</td>
</tr>
<tr>
<td>1:D:416:VAL:O</td>
<td>1:D:420:PHE:HB2</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:F:147:MET:HB2</td>
<td>1:F:151:ASP:HB2</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>1:F:337:VAL:C</td>
<td>1:F:339:SER:N</td>
<td>2.69</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:115:GLU:O</td>
<td>1:A:119:ARG:HG3</td>
<td>2.15</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:115:GLU:OE2</td>
<td>1:A:162:GLN:HB2</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:373:ASN:O</td>
<td>1:B:374:ILE:C</td>
<td>2.55</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:462:LYS:O</td>
<td>1:B:466:GLU:HG3</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:324:GLU:OE2</td>
<td>1:C:358:GLY:N</td>
<td>2.36</td>
<td>0.45</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:C:346:GLN:CA</td>
<td>1:C:346:GLN:NE2</td>
<td>2.79</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:346:GLN:NE2</td>
<td>1:C:346:GLN:HA</td>
<td>2.31</td>
<td>0.45</td>
</tr>
<tr>
<td>1:D:417:PHE:CE1</td>
<td>1:D:428:LEU:HB2</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:314:ARG:CG</td>
<td>1:E:314:ARG:O</td>
<td>2.64</td>
<td>0.45</td>
</tr>
<tr>
<td>1:F:166:LEU:O</td>
<td>1:F:170:GLN:HB2</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:F:431:LYS:HD3</td>
<td>1:F:431:LYS:N</td>
<td>2.27</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:147:MET:HB2</td>
<td>1:A:151:ASP:CB</td>
<td>2.47</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:334:TYR:CE2</td>
<td>1:B:443:ARG:HG2</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>1:F:231:ASP:O</td>
<td>1:F:233:ASN:N</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:D:203:LEU:HD23</td>
<td>1:D:203:LEU:HA</td>
<td>1.76</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:243:PHE:O</td>
<td>1:E:247:GLN:HG3</td>
<td>2.15</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:278:LEU:HD22</td>
<td>1:E:282:PHE:CE2</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:421:ASP:CG</td>
<td>1:E:424:GLY:HA2</td>
<td>2.36</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:434:VAL:O</td>
<td>1:E:438:LYS:HG2</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:F:114:TYR:CE2</td>
<td>1:F:118:ILE:HD11</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:218:THR:HG21</td>
<td>1:B:250:ILE:HG23</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:314:ARG:NH1</td>
<td>1:C:314:ARG:HG2</td>
<td>2.31</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:350:LYS:HA</td>
<td>1:C:355:GLU:OE2</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:461:TRP:O</td>
<td>1:C:463:CYS:N</td>
<td>2.43</td>
<td>0.45</td>
</tr>
<tr>
<td>1:D:322:ILE:HG22</td>
<td>1:D:359:LEU:HB2</td>
<td>1.97</td>
<td>0.45</td>
</tr>
<tr>
<td>1:F:190:ASP:OD1</td>
<td>1:F:191:GLU:HG2</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:247:GLN:NE2</td>
<td>1:B:251:ARG:HH12</td>
<td>2.14</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:257:GLY:C</td>
<td>1:C:259:ARG:H</td>
<td>2.19</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:156:ILE:O</td>
<td>1:C:334:TYR:HE1</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:371:LEU:HD22</td>
<td>1:C:437:MET:HB3</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>1:D:209:TYR:CD1</td>
<td>1:D:210:ILE:HD12</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>1:F:393:LYS:HG3</td>
<td>1:F:413:CYS:HB3</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:298:GLU:OE2</td>
<td>1:B:298:GLU:HA</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:428:LEU:HD22</td>
<td>1:C:430:ASN:N</td>
<td>2.32</td>
<td>0.45</td>
</tr>
<tr>
<td>1:D:216:LEU:HG</td>
<td>1:D:303:LEU:HD11</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>1:F:182:SER:O</td>
<td>1:F:184:GLU:N</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>1:F:218:THR:HA</td>
<td>1:F:219:PRO:HD3</td>
<td>1.72</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:309:LYS:O</td>
<td>1:B:313:GLU:HB2</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:322:ILE:HA</td>
<td>1:C:322:ILE:HD12</td>
<td>1.73</td>
<td>0.45</td>
</tr>
<tr>
<td>1:D:391:LEU:HD23</td>
<td>1:D:391:LEU:HA</td>
<td>1.83</td>
<td>0.45</td>
</tr>
</tbody>
</table>
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:E:239:ASP:HB3</td>
<td>1:E:290:LYS:HE2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:F:189:ALA:HB3</td>
<td>1:F:196:TYR:CE2</td>
<td>2.52</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:237:GLU:O</td>
<td>1:C:238:VAL:CG2</td>
<td>2.64</td>
<td>0.45</td>
</tr>
<tr>
<td>1:D:108:ASP:O</td>
<td>1:D:112:MET:HG3</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:D:199:GLY:CA</td>
<td>1:D:277:ALA:HB1</td>
<td>2.47</td>
<td>0.45</td>
</tr>
<tr>
<td>1:D:325:ARG:O</td>
<td>1:D:325:ARG:HG2</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:332:LEU:HD11</td>
<td>1:E:419:LEU:CD2</td>
<td>2.47</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:146:PHE:CD2</td>
<td>1:A:205:SER:HA</td>
<td>2.52</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:309:LYS:HG3</td>
<td>1:A:361:PHE:CE1</td>
<td>2.52</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:119:ARG:NH1</td>
<td>1:B:154:ARG:O</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:278:LEU:O</td>
<td>1:C:281:TYR:HB3</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:D:218:THR:HA</td>
<td>1:D:219:PRO:HD3</td>
<td>1.83</td>
<td>0.45</td>
</tr>
<tr>
<td>1:D:324:GLU:OE2</td>
<td>1:D:411:HIS:HE1</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:247:GLN:HB3</td>
<td>1:E:251:ARG:NH1</td>
<td>2.32</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:147:MET:HE2</td>
<td>1:B:151:ASP:HB3</td>
<td>1.99</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:401:ARG:CD</td>
<td>1:B:232:LEU:HD22</td>
<td>2.47</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:316:ASP:N</td>
<td>1:B:317:PRO:HD3</td>
<td>2.33</td>
<td>0.44</td>
</tr>
<tr>
<td>1:D:326:GLN:HE21</td>
<td>1:D:326:GLN:HB2</td>
<td>1.66</td>
<td>0.44</td>
</tr>
<tr>
<td>1:F:419:LEU:HD12</td>
<td>1:F:419:LEU:H</td>
<td>1.82</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:313:GLU:O</td>
<td>1:B:315:His:N</td>
<td>2.49</td>
<td>0.44</td>
</tr>
<tr>
<td>1:F:373:ASN:O</td>
<td>1:F:374:ILE:C</td>
<td>2.56</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:293:ILE:CD1</td>
<td>1:B:293:ILE:H</td>
<td>2.30</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:453:PHE:CB</td>
<td>1:C:461:TRP:CE2</td>
<td>3.01</td>
<td>0.44</td>
</tr>
<tr>
<td>1:C:298:GLU:OE2</td>
<td>1:C:298:GLU:HA</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>1:D:198:LEU:HD23</td>
<td>1:D:278:LEU:HD23</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>1:D:349:LEU:HB3</td>
<td>1:D:355:GLU:OE2</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>1:C:457:MET:HE2</td>
<td>1:D:460:MET:HE1</td>
<td>1.99</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:228:LYS:HG2</td>
<td>1:A:235:ASP:O</td>
<td>2.16</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:322:ILE:HG13</td>
<td>1:A:326:GLN:NE2</td>
<td>2.32</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:381:LEU:CD2</td>
<td>1:A:391:LEU:HD22</td>
<td>2.47</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:395:THR:O</td>
<td>1:A:398:GLN:N</td>
<td>2.50</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:334:TYR:CD1</td>
<td>1:A:443:ARG:HA</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:115:GLU:OE1</td>
<td>1:B:161:LYS:HA</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:211:PHE:O</td>
<td>1:B:215:VAL:HG23</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:243:PHE:HZ</td>
<td>1:B:296:PHE:CE1</td>
<td>2.35</td>
<td>0.44</td>
</tr>
<tr>
<td>1:C:246:VAL:HG12</td>
<td>1:C:250:ILE:HD12</td>
<td>1.99</td>
<td>0.44</td>
</tr>
<tr>
<td>1:D:336:GLY:O</td>
<td>1:D:338:GLN:N</td>
<td>2.50</td>
<td>0.44</td>
</tr>
<tr>
<td>1:E:239:ASP:C</td>
<td>1:E:239:ASP:OD1</td>
<td>2.56</td>
<td>0.44</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:194:ILE:CG2</td>
<td>1:A:302:LYS:HD3</td>
<td>2.47</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:166:LEU:CD2</td>
<td>1:B:172:ILE:HG13</td>
<td>2.42</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:286:ASP:O</td>
<td>1:B:287:LEU:HB2</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:B:375:ASN:O</td>
<td>1:B:379:THR:HG23</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:D:175:ARG:O</td>
<td>1:D:177:ASP:N</td>
<td>2.50</td>
<td>0.44</td>
</tr>
<tr>
<td>1:E:455:ARG:C</td>
<td>1:E:457:MET:H</td>
<td>2.20</td>
<td>0.44</td>
</tr>
<tr>
<td>1:F:350:LYS:HG2</td>
<td>1:F:355:GLU:OE2</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:C:187:LYS:HD3</td>
<td>1:C:201:CYS:HB3</td>
<td>1.99</td>
<td>0.44</td>
</tr>
<tr>
<td>1:C:246:VAL:O</td>
<td>1:C:247:GLN:C</td>
<td>2.56</td>
<td>0.44</td>
</tr>
<tr>
<td>1:C:347:ARG:O</td>
<td>1:C:350:LYS:HB3</td>
<td>2.16</td>
<td>0.44</td>
</tr>
<tr>
<td>1:D:138:SER:HB3</td>
<td>1:D:176:PHE:CB</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>1:E:218:THR:HG21</td>
<td>1:E:250:ILE:HG21</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:F:240:MET:HA</td>
<td>1:F:283:PHE:CE2</td>
<td>2.53</td>
<td>0.44</td>
</tr>
<tr>
<td>1:C:124:PRO:HG2</td>
<td>1:C:260:HIS:H</td>
<td>1.82</td>
<td>0.44</td>
</tr>
<tr>
<td>1:D:123:THR:O</td>
<td>1:D:124:PRO:C</td>
<td>2.55</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:168:LEU:O</td>
<td>1:A:170:GLN:HG3</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:410:ASP:O</td>
<td>1:A:413:CYS:HB2</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:C:115:GLU:OE1</td>
<td>1:C:161:LYS:HA</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>1:D:172:ILE:HG22</td>
<td>1:D:172:ILE:O</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:D:214:THR:HG21</td>
<td>1:D:251:ARG:CG</td>
<td>2.47</td>
<td>0.44</td>
</tr>
<tr>
<td>1:E:158:PRO:CD</td>
<td>1:E:334:TYR:CE1</td>
<td>3.01</td>
<td>0.44</td>
</tr>
<tr>
<td>1:F:190:ASP:O</td>
<td>1:F:196:TYR:CE2</td>
<td>2.70</td>
<td>0.44</td>
</tr>
<tr>
<td>1:F:408:LEU:HD23</td>
<td>1:F:408:LEU:HA</td>
<td>1.78</td>
<td>0.44</td>
</tr>
<tr>
<td>1:F:421:ASP:C</td>
<td>1:F:421:ASP:OD2</td>
<td>2.56</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:342:LEU:HD12</td>
<td>1:A:342:LEU:H</td>
<td>1.81</td>
<td>0.44</td>
</tr>
<tr>
<td>1:C:129:ARG:NH1</td>
<td>1:C:169:ASP:OD2</td>
<td>2.51</td>
<td>0.44</td>
</tr>
<tr>
<td>1:C:292:THR:CG2</td>
<td>1:C:293:ILE:HD12</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>1:C:393:LYS:HG3</td>
<td>1:C:413:CYS:HB3</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:D:216:LEU:HA</td>
<td>1:D:216:LEU:HD23</td>
<td>1.68</td>
<td>0.44</td>
</tr>
<tr>
<td>1:E:189:ALA:O</td>
<td>1:E:190:ASP:O</td>
<td>2.36</td>
<td>0.44</td>
</tr>
<tr>
<td>1:D:387:ALA:HB2</td>
<td>1:D:249:ILE:HD13</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:437:MET:CE</td>
<td>1:A:437:MET:HA</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:452:GLY:C</td>
<td>1:A:454:THR:H</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:D:154:ARG:NH2</td>
<td>1:D:162:GLN:NE2</td>
<td>2.63</td>
<td>0.43</td>
</tr>
<tr>
<td>1:D:417:PHE:O</td>
<td>1:D:418:ALA:C</td>
<td>2.55</td>
<td>0.43</td>
</tr>
<tr>
<td>1:F:221:ARG:HA</td>
<td>1:F:221:ARG:HE</td>
<td>1.82</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:334:TYR:CZ</td>
<td>1:B:443:ARG:HG2</td>
<td>2.54</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:137:ILE:HG22</td>
<td>1:C:143:ALA:HB2</td>
<td>1.98</td>
<td>0.43</td>
</tr>
<tr>
<td>1:E:119:ARG:HD3</td>
<td>1:E:155:SER:O</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:E:158:PRO:HD3</td>
<td>1:E:334:TYR:CE1</td>
<td>2.53</td>
<td>0.43</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:B:174:LYS:NZ</td>
<td>1:B:186:GLU:OE2</td>
<td>2.52</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:245:GLN:HE22</td>
<td>1:E:117:ARG:HD3</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:E:154:ARG:HE</td>
<td>1:E:162:GLN:HE21</td>
<td>1.65</td>
<td>0.43</td>
</tr>
<tr>
<td>1:F:324:GLU:H</td>
<td>1:F:324:GLU:HG2</td>
<td>1.43</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:339:SER:HA</td>
<td>1:B:342:LEU:HB2</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:334:TYR:HD2</td>
<td>1:B:440:ARG:HD2</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:151:ASP:OD1</td>
<td>1:C:154:ARG:NH2</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:198:LEU:HD23</td>
<td>1:C:278:LEU:HD23</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:D:291:LEU:HD23</td>
<td>1:D:292:THR:H</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>1:E:375:ASN:O</td>
<td>1:E:379:THR:HG23</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:323:THR:HG22</td>
<td>1:A:324:GLU:N</td>
<td>2.34</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:395:THR:O</td>
<td>1:A:396:MET:C</td>
<td>2.57</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:390:SER:O</td>
<td>1:C:395:THR:HG21</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:396:MET:HE2</td>
<td>1:C:428:LEU:HD11</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:414:ASP:O</td>
<td>1:C:418:ALA:HB2</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:D:208:ASP:O</td>
<td>1:D:212:LEU:HG</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:F:133:THR:O</td>
<td>1:F:134:LEU:HD23</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:F:168:LEU:O</td>
<td>1:F:170:GLN:HG3</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:F:315:HIS:HB3</td>
<td>1:F:326:GLN:OE1</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:F:320:GLY:O</td>
<td>1:F:360:THR:HA</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:210:ILE:HG22</td>
<td>1:B:211:PHEN</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:111:VAL:O</td>
<td>1:C:114:TYR:HB3</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:383:PHE:O</td>
<td>1:C:384:TYR:C</td>
<td>2.56</td>
<td>0.43</td>
</tr>
<tr>
<td>1:E:137:ILE:HG12</td>
<td>1:E:143:ALA:HB2</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:342:LEU:O</td>
<td>1:C:345:MET:HB3</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:417:PHE:O</td>
<td>1:C:421:ASP:HB3</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:454:THR:OG1</td>
<td>1:C:455:ARG:N</td>
<td>2.50</td>
<td>0.43</td>
</tr>
<tr>
<td>1:D:187:LYS:HG2</td>
<td>1:D:201:CYSHB3</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:D:407:GLU:OE1</td>
<td>1:D:407:GLU:HA</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:F:278:LEU:O</td>
<td>1:F:281:TYR:HB3</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:398:GLN:HE21</td>
<td>1:A:402:THR:HG23</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:146:PHEN</td>
<td>1:B:200:GLU:OE2</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:233:ASN:N</td>
<td>1:B:233:ASN:ND2</td>
<td>2.67</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:218:THR:HG21</td>
<td>1:C:250:ILE:HG23</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:315:HIS:O</td>
<td>1:C:316:ASP:HB2</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:415:VAL:O</td>
<td>1:C:419:LEU:HD12</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:D:146:PHEN</td>
<td>1:D:200:GLU:HG2</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:E:112:MET:HE3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Continued on next page...*
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:E:113:GLU:O</td>
<td>1:E:114:TYR:C</td>
<td>2.57</td>
<td>0.43</td>
</tr>
<tr>
<td>1:E:206:PHE:CE2</td>
<td>1:E:210:ILE:CD1</td>
<td>3.02</td>
<td>0.43</td>
</tr>
<tr>
<td>1:E:194:ILE:HG13</td>
<td>1:E:306:ASP:OD1</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:F:166:LEU:HD23</td>
<td>1:F:171:TYR:HA</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>1:F:145:VAL:HG11</td>
<td>1:F:171:TYR:CE2</td>
<td>2.54</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:293:ILE:HD12</td>
<td>1:B:293:ILE:H</td>
<td>1.82</td>
<td>0.43</td>
</tr>
<tr>
<td>1:D:305:His:HD2</td>
<td>1:D:365:GLU:OE2</td>
<td>2.02</td>
<td>0.43</td>
</tr>
<tr>
<td>1:E:137:ILE:HG22</td>
<td>1:E:138:SER:N</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>1:E:302:LYS:O</td>
<td>1:E:303:LEU:C</td>
<td>2.56</td>
<td>0.43</td>
</tr>
<tr>
<td>1:E:374:ILE:N</td>
<td>1:E:374:ILE:HD12</td>
<td>2.34</td>
<td>0.43</td>
</tr>
<tr>
<td>1:F:196:TYR:C</td>
<td>1:F:198:LEU:H</td>
<td>2.22</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:353:PHE:H</td>
<td>1:C:353:PHE:HD2</td>
<td>1.67</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:371:LEU:HB3</td>
<td>1:C:441:LEU:HD23</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:D:210:ILE:CD1</td>
<td>1:D:210:ILE:N</td>
<td>2.82</td>
<td>0.43</td>
</tr>
<tr>
<td>1:D:391:LEU:HD23</td>
<td>1:D:395:THR:HG21</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:F:346:GLN:O</td>
<td>1:F:350:LYS:CG</td>
<td>2.58</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:442:MET:HA</td>
<td>1:A:442:MET:HE2</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:383:PHE:CE2</td>
<td>1:F:226:ALA:HB2</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:464:ALA:HB2</td>
<td>1:E:457:MET:HG2</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:F:220:GLN:O</td>
<td>1:F:221:ARG:C</td>
<td>2.57</td>
<td>0.42</td>
</tr>
<tr>
<td>1:F:437:MET:HE3</td>
<td>1:F:437:MET:HA</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:148:THR:HB</td>
<td>1:A:149:PRO:HD3</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:314:ARG:HE3</td>
<td>1:A:314:ARG:HH11</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:316:ASP:H</td>
<td>1:B:317:PRO:HD3</td>
<td>1.83</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:342:LEU:O</td>
<td>1:B:345:MET:HB3</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:C:209:TYR:O</td>
<td>1:C:213:THR:HG23</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:C:239:ASP:OD1</td>
<td>1:C:242:GLU:HG3</td>
<td>2.18</td>
<td>0.42</td>
</tr>
<tr>
<td>1:C:377:GLU:O</td>
<td>1:C:381:LEU:HG</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:421:ASP:O</td>
<td>1:D:422:CYS:C</td>
<td>2.57</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:371:LEU:C</td>
<td>1:E:373:ASN:H</td>
<td>2.22</td>
<td>0.42</td>
</tr>
<tr>
<td>1:F:212:LEU:HD22</td>
<td>1:F:303:LEU:HD11</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:452:GLY:O</td>
<td>1:B:453:PHE:CB</td>
<td>2.66</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:112:MET:C</td>
<td>1:D:114:TYR:H</td>
<td>2.22</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:196:TYR:C</td>
<td>1:D:198:LEU:H</td>
<td>2.23</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:334:TYR:CE2</td>
<td>1:E:443:ARG:HA</td>
<td>2.55</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:460:MET:HB2</td>
<td>1:E:460:MET:HE3</td>
<td>1.91</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:462:LYS:O</td>
<td>1:E:465:GLN:CB</td>
<td>2.67</td>
<td>0.42</td>
</tr>
<tr>
<td>1:C:244:GLU:HB3</td>
<td>1:F:121:TYR:CD1</td>
<td>2.55</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:C:145:VAL:HG12</td>
<td>1:C:146:PHE:N</td>
<td>2.34</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:297:LEU:HD23</td>
<td>1:D:297:LEU:HA</td>
<td>1.63</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:324:GLU:OE2</td>
<td>1:D:411:HIS:CE1</td>
<td>2.72</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:459:ALA:O</td>
<td>1:D:456:LEU:HD21</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>1:C:335:SER:HA</td>
<td>1:C:439:GLN:CD</td>
<td>2.39</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:193:SER:C</td>
<td>1:D:195:PHE:N</td>
<td>2.70</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:214:THR:O</td>
<td>1:D:218:THR:HG23</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:323:THR:HB</td>
<td>1:D:326:GLN:H</td>
<td>1.85</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:322:ILE:HG23</td>
<td>1:E:323:THR:O</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:309:LYS:HG3</td>
<td>1:A:361:PHE:CZ</td>
<td>2.55</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:194:ILE:HD12</td>
<td>1:B:195:PHE:N</td>
<td>2.35</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:247:GLN:NE2</td>
<td>1:B:251:ARG:NH1</td>
<td>2.67</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:144:GLU:HB3</td>
<td>1:D:146:PHE:HE2</td>
<td>1.83</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:325:ARG:HA</td>
<td>1:D:345:MET:HE1</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:376:ASP:O</td>
<td>1:D:380:ALA:HB2</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:245:GLN:HE22</td>
<td>1:E:117:ARG:HH11</td>
<td>1.66</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:292:THR:HG22</td>
<td>1:E:294:LYS:N</td>
<td>2.35</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:206:PHE:CE2</td>
<td>1:A:210:ILE:HD11</td>
<td>2.54</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:395:THR:C</td>
<td>1:A:397:GLN:N</td>
<td>2.72</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:431:LYS:HG2</td>
<td>1:A:432:GLU:H</td>
<td>1.83</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:215:VAL:CG1</td>
<td>1:D:215:VAL:O</td>
<td>2.66</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:350:LYS:HB2</td>
<td>1:D:355:GLU:OE1</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:373:ASN:O</td>
<td>1:E:374:ILE:C</td>
<td>2.57</td>
<td>0.42</td>
</tr>
<tr>
<td>1:F:128:PHE:CE1</td>
<td>1:F:206:PHE:HA</td>
<td>2.54</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:371:LEU:HD11</td>
<td>1:A:437:MET:SD</td>
<td>2.60</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:158:PRO:HD3</td>
<td>1:B:334:TYR:CE1</td>
<td>2.55</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:243:PHE:HA</td>
<td>1:B:246:VAL:CG1</td>
<td>2.48</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:433:PHE:CZ</td>
<td>1:B:437:MET:HG3</td>
<td>2.55</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:325:ARG:HA</td>
<td>1:D:345:MET:CE</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:323:THR:HG22</td>
<td>1:E:325:ARG:N</td>
<td>2.32</td>
<td>0.42</td>
</tr>
<tr>
<td>1:F:323:THR:HB</td>
<td>1:F:326:GLN:H</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:331:LEU:O</td>
<td>1:A:333:ALA:N</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>1:B:137:ILE:HD12</td>
<td>1:B:137:ILE:N</td>
<td>2.34</td>
<td>0.42</td>
</tr>
<tr>
<td>1:C:149:PRO:HB3</td>
<td>1:C:310:LEU:HD21</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:421:ASP:O</td>
<td>1:D:421:ASP:OD2</td>
<td>2.38</td>
<td>0.42</td>
</tr>
<tr>
<td>1:F:374:ILE:O</td>
<td>1:F:378:ASP:HB2</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:123:THR:OG1</td>
<td>1:A:125:ASP:HB3</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:460:MET:HA</td>
<td>1:D:456:LEU:HD11</td>
<td>2.02</td>
<td>0.42</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:B:322:ILE:HA</td>
<td>1:B:322:ILE:HD12</td>
<td>1.91</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:307:VAL:HG12</td>
<td>1:D:308:LEU:N</td>
<td>2.33</td>
<td>0.42</td>
</tr>
<tr>
<td>1:D:352:HIS:O</td>
<td>1:D:353:PHE:HB2</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:327:PHE:CD2</td>
<td>1:E:359:LEU:HD13</td>
<td>2.55</td>
<td>0.42</td>
</tr>
<tr>
<td>1:C:454:THR:HG22</td>
<td>1:E:460:MET:SD</td>
<td>2.60</td>
<td>0.42</td>
</tr>
<tr>
<td>1:F:352:HIS:O</td>
<td>1:F:353:PHE:HB2</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:119:ARG:NH2</td>
<td>1:A:159:ASN:H</td>
<td>2.18</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:198:LEU:CD1</td>
<td>1:A:204:ILE:HG12</td>
<td>2.47</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:342:LEU:O</td>
<td>1:A:345:MET:HB3</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:255:SER:O</td>
<td>1:C:259:ARG:NE</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>1:F:313:GLU:C</td>
<td>1:F:315:HIS:N</td>
<td>2.73</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:171:TYR:O</td>
<td>1:A:172:ILE:O</td>
<td>2.38</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:359:LEU:HD23</td>
<td>1:B:363:GLU:OE2</td>
<td>2.19</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:398:GLN:O</td>
<td>1:B:402:THR:HG23</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:345:MET:HG3</td>
<td>1:B:418:ALA:HB1</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:122:SER:HB3</td>
<td>1:C:126:LYS:HB3</td>
<td>2.01</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:283:PHE:O</td>
<td>1:C:284:GLY:O</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:160:GLU:HB3</td>
<td>1:D:314:ARG:NH1</td>
<td>2.24</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:348:GLN:CA</td>
<td>1:E:348:GLN:HE21</td>
<td>2.32</td>
<td>0.41</td>
</tr>
<tr>
<td>1:F:210:ILE:O</td>
<td>1:F:211:PHE:C</td>
<td>2.58</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:390:SER:N</td>
<td>1:F:337:VAL:HG21</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:133:THR:C</td>
<td>1:A:171:TYR:HB3</td>
<td>2.41</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:148:THR:O</td>
<td>1:B:151:ASP:N</td>
<td>2.53</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:305:HIS:HD2</td>
<td>1:B:365:GLU:OE2</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:396:MET:G</td>
<td>1:B:398:GLN:N</td>
<td>2.74</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:393:Lys:HG3</td>
<td>1:B:413:CYS:HB3</td>
<td>2.01</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:337:VAL:C</td>
<td>1:C:339:SER:N</td>
<td>2.72</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:146:PHE:N</td>
<td>1:D:146:PHE:CD2</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:196:TYR:O</td>
<td>1:D:198:LEU:N</td>
<td>2.54</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:231:ASP:HB3</td>
<td>1:D:236:GLY:HA2</td>
<td>2.01</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:367:PHE:O</td>
<td>1:D:370:PHE:HB3</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:F:350:Lys:HG2</td>
<td>1:F:355:GLU:CG</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:173:ILE:N</td>
<td>1:B:173:ILE:HD12</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:216:LEU:HD23</td>
<td>1:B:216:LEU:HA</td>
<td>1.81</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:420:PHE:CE1</td>
<td>1:D:436:ILE:HD12</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:295:ASN:O</td>
<td>1:E:298:GLU:N</td>
<td>2.54</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:298:GLU:HA</td>
<td>1:E:298:GLU:OE2</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:119:ARG:NH2</td>
<td>1:A:159:ASN:N</td>
<td>2.69</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:417:PHE:CE1</td>
<td>1:A:428:LEU:HB2</td>
<td>2.55</td>
<td>0.41</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:149:PRO:O</td>
<td>1:B:150:GLU:C</td>
<td>2.59</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:117:ARG:HG2</td>
<td>1:D:121:TYR:HD2</td>
<td>1.85</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:105:GLY:O</td>
<td>1:E:108:ASP:HB2</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:F:196:TYR:C</td>
<td>1:F:198:LEU:N</td>
<td>2.74</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:145:VAL:C</td>
<td>1:A:146:PHE:HD2</td>
<td>2.24</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:218:THR:HA</td>
<td>1:A:219:PRO:HD3</td>
<td>1.78</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:381:LEU:HD22</td>
<td>1:A:391:LEU:HD22</td>
<td>2.01</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:223:PHE:O</td>
<td>1:C:224:GLU:C</td>
<td>2.58</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:283:PHE:CE1</td>
<td>1:C:291:LEU:HB2</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:465:GLN:C</td>
<td>1:D:467:THR:H</td>
<td>2.24</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:315:HIS:HB2</td>
<td>1:E:322:ILE:HD11</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:352:HIS:O</td>
<td>1:E:354:LYS:N</td>
<td>2.53</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:119:ARG:HH21</td>
<td>1:A:159:ASN:H</td>
<td>1.67</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:147:MET:HE2</td>
<td>1:A:151:ASP:CB</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:292:THR:HG22</td>
<td>1:A:293:ILE:CD1</td>
<td>2.45</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:398:GLN:O</td>
<td>1:A:401:ARG:HB3</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:315:HIS:O</td>
<td>1:B:316:ASP:CB</td>
<td>2.62</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:162:GLN:O</td>
<td>1:C:163:PRO:C</td>
<td>2.59</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:216:LEU:HA</td>
<td>1:C:216:LEU:HD23</td>
<td>1.85</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:428:LEU:CD2</td>
<td>1:C:429:SER:N</td>
<td>2.84</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:198:LEU:O</td>
<td>1:A:277:ALA:HB1</td>
<td>2.19</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:187:LYS:HB3</td>
<td>1:B:196:TYR:OH</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:195:PHE:O</td>
<td>1:B:202:GLY:HA2</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:323:THR:CG2</td>
<td>1:C:324:GLU:N</td>
<td>2.83</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:351:LYS:HE2</td>
<td>1:C:352:HIS:HE1</td>
<td>1.85</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:387:ALA:HB2</td>
<td>1:F:249:ILE:HD11</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:F:350:LYS:HG2</td>
<td>1:F:355:GLU:HG3</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:323:THR:HB</td>
<td>1:A:326:GLN:CB</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:222:ASN:ND2</td>
<td>1:B:383:PHE:HZ</td>
<td>2.11</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:133:THR:HG22</td>
<td>1:C:166:LEU:HD13</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:238:VAL:HG12</td>
<td>1:C:243:PHE:HB2</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:308:LEU:HA</td>
<td>1:D:308:LEU:HD23</td>
<td>1.83</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:160:GLU:CB</td>
<td>1:D:314:ARG:HH12</td>
<td>2.25</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:332:LEU:HD11</td>
<td>1:D:419:LEU:CD2</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>1:F:200:GLU:N</td>
<td>1:F:200:GLU:OE1</td>
<td>2.54</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:231:ASP:OD2</td>
<td>1:A:234:GLY:HA3</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:438:LYS:O</td>
<td>1:A:442:MET:CG</td>
<td>2.67</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:350:LYS:N</td>
<td>1:D:355:GLU:OE2</td>
<td>2.54</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:286:ASP:OD2</td>
<td>1:E:288:LYS:HB2</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:421:ASP:OD2</td>
<td>1:E:421:ASP:C</td>
<td>2.59</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:378:ASP:CG</td>
<td>1:E:434:VAL:HG21</td>
<td>2.41</td>
<td>0.41</td>
</tr>
</tbody>
</table>
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:370:PHE:CZ</td>
<td>1:A:377:VAL:HG11</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:291:LEU:HD23</td>
<td>1:B:292:THR:N</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:371:LEU:C</td>
<td>1:B:373:ASN:N</td>
<td>2.73</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:115:GLU:OE1</td>
<td>1:C:160:GLU:O</td>
<td>2.39</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:136:VAL:CG2</td>
<td>1:C:174:LYS:HE2</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:397:GLN:NE2</td>
<td>1:C:413:CY9:SG</td>
<td>2.94</td>
<td>0.41</td>
</tr>
<tr>
<td>1:C:430:ASN:O</td>
<td>1:C:434:VAL:HG23</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:124:PRO:HG3</td>
<td>1:D:256:MET:HB3</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:436:ILE:HG22</td>
<td>1:D:437:MET:HE2</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:166:LEU:HA</td>
<td>1:E:166:LEU:HD23</td>
<td>1.66</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:199:GLY:HA3</td>
<td>1:E:277:ALA:CB</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:341:LYS:O</td>
<td>1:E:344:ALA:HB3</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:F:323:THR:CG2</td>
<td>1:F:324:GLU:N</td>
<td>2.82</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:221:ARG:HD3</td>
<td>1:F:376:ASP:OD1</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:145:VAL:O</td>
<td>1:A:146:PHE:HD2</td>
<td>2.04</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:239:ASP:OD1</td>
<td>1:A:242:GLU:HG3</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>1:C:205:SER:O</td>
<td>1:C:206:PHE:C</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>1:C:313:GLU:C</td>
<td>1:C:315:HIS:H</td>
<td>2.25</td>
<td>0.40</td>
</tr>
<tr>
<td>1:D:303:LEU:HD13</td>
<td>1:D:303:LEU:C</td>
<td>2.41</td>
<td>0.40</td>
</tr>
<tr>
<td>1:E:154:ARG:NH1</td>
<td>1:E:314:ARG:HH21</td>
<td>2.04</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:453:PHE:CB</td>
<td>1:C:461:TRP:HE1</td>
<td>2.32</td>
<td>0.40</td>
</tr>
<tr>
<td>1:C:218:THR:HA</td>
<td>1:C:219:PRO:HD3</td>
<td>1.73</td>
<td>0.40</td>
</tr>
<tr>
<td>1:C:258:MET:C</td>
<td>1:C:259:ARG:HG3</td>
<td>2.41</td>
<td>0.40</td>
</tr>
<tr>
<td>1:E:108:ASP:O</td>
<td>1:E:112:MET:HG3</td>
<td>2.20</td>
<td>0.40</td>
</tr>
<tr>
<td>1:F:404:ALA:O</td>
<td>1:F:405:LYS:C</td>
<td>2.57</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:206:PHE:CB</td>
<td>1:A:210:ILE:HD11</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:429:SER:O</td>
<td>1:B:431:LYS:N</td>
<td>2.54</td>
<td>0.40</td>
</tr>
<tr>
<td>1:C:322:ILE:HG13</td>
<td>1:C:326:GLN:HB2</td>
<td>2.02</td>
<td>0.40</td>
</tr>
<tr>
<td>1:C:368:PHE:HE2</td>
<td>1:C:440:ARG:HE</td>
<td>1.69</td>
<td>0.40</td>
</tr>
<tr>
<td>1:C:431:LYS:CD</td>
<td>1:C:431:LYS:H</td>
<td>2.33</td>
<td>0.40</td>
</tr>
<tr>
<td>1:D:154:ARG:HZ</td>
<td>1:D:162:GLN:HE21</td>
<td>2.33</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:106:PHE:CE2</td>
<td>1:D:241:GLU:HB2</td>
<td>2.57</td>
<td>0.40</td>
</tr>
<tr>
<td>1:E:193:SER:HG</td>
<td>1:E:195:PHE:HD2</td>
<td>1.69</td>
<td>0.40</td>
</tr>
<tr>
<td>1:E:308:LEU:HA</td>
<td>1:E:308:LEU:HD23</td>
<td>1.84</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:411:HIS:O</td>
<td>1:B:415:VAL:HG23</td>
<td>2.22</td>
<td>0.40</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:C:117:ARG:HH11</td>
<td>1:C:117:ARG:HG3</td>
<td>1.85</td>
<td>0.40</td>
</tr>
<tr>
<td>1:C:163:PRO:O</td>
<td>1:C:165:HIS:N</td>
<td>2.55</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:327:PHE:CD2</td>
<td>1:A:415:VAL:HG11</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:108:ASP:O</td>
<td>1:B:111:VAL:N</td>
<td>2.54</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:258:MET:HE3</td>
<td>1:B:458:GLN:HG2</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:D:117:ARG:HG2</td>
<td>1:D:121:TYR:CD2</td>
<td>2.57</td>
<td>0.40</td>
</tr>
<tr>
<td>1:D:217:SER:HB2</td>
<td>1:D:445:LEU:CD2</td>
<td>2.43</td>
<td>0.40</td>
</tr>
<tr>
<td>1:E:119:ARG:NE</td>
<td>1:E:158:PRO:HA</td>
<td>2.36</td>
<td>0.40</td>
</tr>
<tr>
<td>1:E:247:GLN:NE2</td>
<td>1:E:251:ARG:HH12</td>
<td>2.10</td>
<td>0.40</td>
</tr>
<tr>
<td>1:E:154:ARG:HD3</td>
<td>1:E:314:ARG:NH2</td>
<td>2.36</td>
<td>0.40</td>
</tr>
<tr>
<td>1:E:335:SER:O</td>
<td>1:E:336:GLY:O</td>
<td>2.39</td>
<td>0.40</td>
</tr>
<tr>
<td>1:E:421:ASP:O</td>
<td>1:E:422:CYS:O</td>
<td>2.40</td>
<td>0.40</td>
</tr>
<tr>
<td>1:F:337:VAL:HG12</td>
<td>1:F:340:LYS:HD3</td>
<td>2.03</td>
<td>0.40</td>
</tr>
</tbody>
</table>

All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:E:171:TYR:O</td>
<td>1:F:357:LYS:NZ[2_756]</td>
<td>2.10</td>
<td>0.10</td>
</tr>
</tbody>
</table>

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>300/401 (75%)</td>
<td>227 (76%)</td>
<td>54 (18%)</td>
<td>19 (6%)</td>
<td>1 11</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>304/401 (76%)</td>
<td>235 (77%)</td>
<td>53 (17%)</td>
<td>16 (5%)</td>
<td>2 16</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>322/401 (80%)</td>
<td>248 (77%)</td>
<td>56 (17%)</td>
<td>18 (6%)</td>
<td>2 15</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>316/401 (79%)</td>
<td>262 (83%)</td>
<td>39 (12%)</td>
<td>15 (5%)</td>
<td>2 19</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>322/401 (80%)</td>
<td>261 (81%)</td>
<td>47 (15%)</td>
<td>14 (4%)</td>
<td>3 22</td>
</tr>
</tbody>
</table>

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

<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>F</td>
<td>302/401 (75%)</td>
<td>237 (78%)</td>
<td>49 (16%)</td>
<td>16 (5%)</td>
<td>2 16</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>1866/2406 (78%)</td>
<td>1470 (79%)</td>
<td>298 (16%)</td>
<td>98 (5%)</td>
<td>2 16</td>
</tr>
</tbody>
</table>

All (98) 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>166</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>172</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>354</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>453</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>374</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>453</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>200</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>338</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>422</td>
<td>CYS</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>450</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>176</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>190</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>314</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>190</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>194</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>336</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>353</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>422</td>
<td>CYS</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>430</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>164</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>200</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>253</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>422</td>
<td>CYS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>200</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>221</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>332</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>166</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>190</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>200</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>430</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>164</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>168</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>254</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>284</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>351</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>430</td>
<td>ASN</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C</td>
<td>448</td>
<td>PRO</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>113</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>166</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>200</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>337</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>387</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>195</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>200</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>166</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>189</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>232</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>336</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>236</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>333</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>337</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>353</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>430</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>135</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>168</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>336</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>193</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>389</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>422</td>
<td>CYS</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>338</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>159</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>231</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>314</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>228</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>232</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>195</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>236</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>314</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>372</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>163</td>
<td>PRO</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>372</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>447</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>462</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>208</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>425</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>389</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>183</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>277</td>
<td>ALA</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>427</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>169</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>316</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>452</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>253</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>314</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>459</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>356</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>389</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>234</td>
<td>GLY</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>193</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>190</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>374</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>163</td>
<td>PRO</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>173</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>374</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>337</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>127</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>374</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>140</td>
<td>PRO</td>
</tr>
</tbody>
</table>

5.3.2 Protein sidechains

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Analysed</th>
<th>Rotameric</th>
<th>Outliers</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>259/354 (73%)</td>
<td>232 (90%)</td>
<td>27 (10%)</td>
<td>8 31</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>273/354 (77%)</td>
<td>243 (89%)</td>
<td>30 (11%)</td>
<td>7 29</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>274/354 (77%)</td>
<td>249 (91%)</td>
<td>25 (9%)</td>
<td>10 37</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>278/354 (78%)</td>
<td>256 (92%)</td>
<td>22 (8%)</td>
<td>13 46</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>269/354 (76%)</td>
<td>240 (89%)</td>
<td>29 (11%)</td>
<td>7 29</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>270/354 (76%)</td>
<td>241 (89%)</td>
<td>29 (11%)</td>
<td>7 30</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>1623/2124 (76%)</td>
<td>1461 (90%)</td>
<td>162 (10%)</td>
<td>8 33</td>
</tr>
</tbody>
</table>

All (162) 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>103</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>108</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>162</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>165</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>168</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>171</td>
<td>TYR</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>200</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>216</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>278</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>279</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>291</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>292</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>293</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>313</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>314</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>340</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>346</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>360</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>365</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>371</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>374</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>396</td>
<td>MET</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>419</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>425</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>431</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>440</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>137</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>148</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>149</td>
<td>PRO</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>162</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>190</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>194</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>200</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>205</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>207</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>221</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>235</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>241</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>246</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>247</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>275</td>
<td>CYS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>279</td>
<td>THR</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>291</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>293</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>303</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>346</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>360</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>362</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>374</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>379</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>398</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>419</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>430</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>431</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>463</td>
<td>CYS</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>168</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>171</td>
<td>TYR</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>194</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>200</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>221</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>241</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>258</td>
<td>MET</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>278</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>279</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>293</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>301</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>313</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>346</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>348</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>353</td>
<td>PHE</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>379</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>390</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>396</td>
<td>MET</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>397</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>419</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>423</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>428</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>431</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>443</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>147</td>
<td>MET</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>162</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>168</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>D</td>
<td>190</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>200</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>214</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>221</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>241</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>278</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>286</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>291</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>293</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>343</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>349</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>407</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>412</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>419</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>428</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>431</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>440</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>445</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>108</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>112</td>
<td>MET</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>122</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>150</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>162</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>164</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>216</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>248</td>
<td>SER</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>278</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>291</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>293</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>303</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>308</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>318</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>331</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>340</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>346</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>348</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>350</td>
<td>LYS</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>371</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>374</td>
<td>ILE</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>406</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>422</td>
<td>CYS</td>
</tr>
</tbody>
</table>

Continued on next page...
Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (74) 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>162</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>222</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>233</td>
<td>ASN</td>
</tr>
</tbody>
</table>
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>245</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>247</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>295</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>304</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>326</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>346</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>373</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>375</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>397</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>398</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>439</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>162</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>233</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>245</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>247</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>315</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>326</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>346</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>352</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>366</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>430</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>162</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>170</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>220</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>233</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>245</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>300</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>326</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>346</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>397</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>411</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>425</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>439</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>162</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>170</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>245</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>247</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>253</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>295</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>300</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>305</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>315</td>
<td>HIS</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>D</td>
<td>326</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>338</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>348</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>352</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>366</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>397</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>411</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>439</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>162</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>233</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>247</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>295</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>300</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>305</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>315</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>326</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>346</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>373</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>411</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>425</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>439</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>162</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>245</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>247</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>326</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>346</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>397</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>411</td>
<td>HIS</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>425</td>
<td>ASN</td>
</tr>
</tbody>
</table>

5.3.3 RNA

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates

There are no carbohydrates in this entry.
5.6  Ligand geometry

There are no ligands in this entry.

5.7  Other polymers

There are no such residues in this entry.

5.8  Polymer linkage issues

There are no chain breaks in this entry.
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, 95\textsuperscript{th} 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(Å\textsuperscript{2})</th>
<th>Q&lt;0.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>310/401 (77%)</td>
<td>0.09</td>
<td>7 (2%)</td>
<td>60</td>
<td>47</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>316/401 (78%)</td>
<td>-0.11</td>
<td>2 (0%)</td>
<td>89</td>
<td>83</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>330/401 (82%)</td>
<td>-0.15</td>
<td>6 (1%)</td>
<td>68</td>
<td>55</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>326/401 (81%)</td>
<td>-0.17</td>
<td>3 (0%)</td>
<td>84</td>
<td>76</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>330/401 (82%)</td>
<td>-0.30</td>
<td>2 (0%)</td>
<td>89</td>
<td>83</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>310/401 (77%)</td>
<td>-0.33</td>
<td>0 (0%)</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>1922/2406 (79%)</td>
<td>-0.16</td>
<td>20 (1%)</td>
<td>82</td>
<td>73</td>
</tr>
</tbody>
</table>

All (20) 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>A</td>
<td>461</td>
<td>TRP</td>
<td>5.1</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>462</td>
<td>LYS</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>124</td>
<td>PRO</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>453</td>
<td>PHE</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>456</td>
<td>LEU</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>337</td>
<td>VAL</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>125</td>
<td>ASP</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>388</td>
<td>GLY</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>462</td>
<td>LYS</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>458</td>
<td>GLN</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>172</td>
<td>ILE</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>136</td>
<td>VAL</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>353</td>
<td>PHE</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>450</td>
<td>ASP</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>339</td>
<td>SER</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>164</td>
<td>GLU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>451</td>
<td>MET</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>461</td>
<td>TRP</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>320</td>
<td>GLY</td>
<td>2.0</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>177</td>
<td>ASP</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

There are no ligands in this entry.

6.5 Other polymers

There are no such residues in this entry.