Full wwPDB/EMDataBank EM Map/Model Validation Report

Sep 22, 2019 – 09:38 PM EDT

PDB ID : 5LMO
EMDB ID: : EMD-4074
Title : Structure of bacterial 30S-IF1-IF3-mRNA translation pre-initiation complex (state-1B)
Authors : Hussain, T.; Llacer, J.L.; Wimberly, B.T.; Ramakrishnan, V.
Deposited on : 2016-08-01
Resolution : 4.30 Å (reported)

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

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

MolProbity : 4.02b-467
Percentile statistics : 20171227.v01 (using entries in the PDB archive December 27th 2017)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : 2.4
1 Overall quality at a glance

The following experimental techniques were used to determine the structure: 

**ELECTRON MICROSCOPY**

The reported resolution of this entry is 4.30 Å.

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

<table>
<thead>
<tr>
<th>Metric</th>
<th>Whole archive (#Entries)</th>
<th>EM structures (#Entries)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clashscore</td>
<td>136327</td>
<td>1886</td>
</tr>
<tr>
<td>Ramachandran outliers</td>
<td>132723</td>
<td>1663</td>
</tr>
<tr>
<td>Sidechain outliers</td>
<td>132532</td>
<td>1531</td>
</tr>
<tr>
<td>RNA backbone</td>
<td>3747</td>
<td>458</td>
</tr>
</tbody>
</table>

The table below summarises the geometric issues observed across the polymeric chains. The red, orange, yellow and green segments on the bar indicate the fraction of residues that contain outliers for >=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%

<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>1522</td>
<td>25% 55% 18%</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>256</td>
<td>53% 31% 7% 9%</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>239</td>
<td>55% 28%</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>209</td>
<td>47% 39% 13%</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>162</td>
<td>46% 37% 9% 7%</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>101</td>
<td>57% 39%</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>156</td>
<td>77% 21%</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>138</td>
<td>60% 33% 7%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Length</th>
<th>Quality of chain</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>I</td>
<td>128</td>
<td>65% 30% 5% -</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>105</td>
<td>52% 34% 7% 7%</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>129</td>
<td>53% 33% 6% 8%</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>132</td>
<td>60% 27% 8% 6%</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>126</td>
<td>67% 24% - 7%</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>61</td>
<td>54% 36% 8% -</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>89</td>
<td>48% 44% 7% -</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>88</td>
<td>55% 35% 5% 6%</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>105</td>
<td>69% 21% 5% 6%</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>88</td>
<td>39% 41% - 17%</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>93</td>
<td>54% 29% - 14%</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>106</td>
<td>56% 33% 5% 7%</td>
</tr>
<tr>
<td>21</td>
<td>V</td>
<td>27</td>
<td>74% 15% 11%</td>
</tr>
<tr>
<td>22</td>
<td>W</td>
<td>72</td>
<td>68% 25% 6% -</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>171</td>
<td>70% 26% - -</td>
</tr>
<tr>
<td>24</td>
<td>Y</td>
<td>39</td>
<td>15% 15% - 67%</td>
</tr>
</tbody>
</table>

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Type</th>
<th>Chain</th>
<th>Res</th>
<th>Chirality</th>
<th>Geometry</th>
<th>Clashes</th>
<th>Electron density</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>ZN</td>
<td>D</td>
<td>300</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
</tr>
</tbody>
</table>
2 Entry composition

There are 29 unique types of molecules in this entry. The entry contains 54110 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a RNA chain called 16S rRNA.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>1514</td>
<td>Total C N O P</td>
<td>32525 14481 6019 10514 1511</td>
<td>0</td>
</tr>
</tbody>
</table>

- Molecule 2 is a protein called 30S ribosomal protein S2.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>B</td>
<td>234</td>
<td>Total C N O S</td>
<td>1900 1213 341 341 5</td>
<td>0</td>
</tr>
</tbody>
</table>

- Molecule 3 is a protein called 30S ribosomal protein S3.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>C</td>
<td>206</td>
<td>Total C N O S</td>
<td>1612 1016 314 281 1</td>
<td>0</td>
</tr>
</tbody>
</table>

- Molecule 4 is a protein called 30S ribosomal protein S4.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>D</td>
<td>208</td>
<td>Total C N O S</td>
<td>1703 1066 339 291 7</td>
<td>0</td>
</tr>
</tbody>
</table>

- Molecule 5 is a protein called 30S ribosomal protein S5.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>E</td>
<td>150</td>
<td>Total C N O S</td>
<td>1146 724 217 201 4</td>
<td>0</td>
</tr>
</tbody>
</table>

- Molecule 6 is a protein called 30S ribosomal protein S6.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>F</td>
<td>101</td>
<td>Total C N O S</td>
<td>843 531 155 154 3</td>
<td>0</td>
</tr>
</tbody>
</table>
- Molecule 7 is a protein called 30S ribosomal protein S7.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>G</td>
<td>155</td>
<td>Total</td>
<td>C</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1257</td>
<td>781</td>
<td>252</td>
</tr>
</tbody>
</table>

- Molecule 8 is a protein called 30S ribosomal protein S8.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>H</td>
<td>138</td>
<td>Total</td>
<td>C</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1116</td>
<td>705</td>
<td>215</td>
</tr>
</tbody>
</table>

- Molecule 9 is a protein called 30S ribosomal protein S9.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>I</td>
<td>127</td>
<td>Total</td>
<td>C</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1010</td>
<td>639</td>
<td>197</td>
</tr>
</tbody>
</table>

- Molecule 10 is a protein called 30S ribosomal protein S10.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>J</td>
<td>98</td>
<td>Total</td>
<td>C</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>792</td>
<td>498</td>
<td>156</td>
</tr>
</tbody>
</table>

- Molecule 11 is a protein called 30S ribosomal protein S11.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>K</td>
<td>119</td>
<td>Total</td>
<td>C</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>885</td>
<td>549</td>
<td>168</td>
</tr>
</tbody>
</table>

- Molecule 12 is a protein called 30S ribosomal protein S12.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>L</td>
<td>124</td>
<td>Total</td>
<td>C</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>970</td>
<td>611</td>
<td>195</td>
</tr>
</tbody>
</table>

- Molecule 13 is a protein called 30S ribosomal protein S13.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>M</td>
<td>117</td>
<td>Total</td>
<td>C</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>933</td>
<td>577</td>
<td>192</td>
</tr>
</tbody>
</table>

- Molecule 14 is a protein called 30S ribosomal protein S14 type Z.
• Molecule 15 is a protein called 30S ribosomal protein S15.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>N</td>
<td>60</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>492 312 104 72 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• Molecule 16 is a protein called 30S ribosomal protein S16.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>O</td>
<td>88</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>734 459 147 126 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• Molecule 17 is a protein called 30S ribosomal protein S17.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>P</td>
<td>83</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>700 443 139 117 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• Molecule 18 is a protein called 30S ribosomal protein S18.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Q</td>
<td>99</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>823 528 151 142 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• Molecule 19 is a protein called 30S ribosomal protein S19.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>R</td>
<td>73</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>598 381 118 99</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• Molecule 20 is a protein called 30S ribosomal protein S20.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>S</td>
<td>80</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>647 414 119 112 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• Molecule 21 is a protein called 30S ribosomal protein Thx.
• Molecule 22 is a protein called Translation initiation factor IF-1.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>W</td>
<td>71</td>
<td>Total</td>
<td>C N O S</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>570 362</td>
<td>103 103</td>
</tr>
</tbody>
</table>

• Molecule 23 is a protein called Translation initiation factor IF-3.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>X</td>
<td>168</td>
<td>Total</td>
<td>C N O S</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1356 853</td>
<td>249 245</td>
</tr>
</tbody>
</table>

• Molecule 24 is a RNA chain called mRNA.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>Y</td>
<td>13</td>
<td>Total</td>
<td>C N O P</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>288 128</td>
<td>60 87 13</td>
</tr>
</tbody>
</table>

• Molecule 25 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>W</td>
<td>1</td>
<td>Total</td>
<td>Mg</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>A</td>
<td>107</td>
<td>Total</td>
<td>Mg</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>107 107</td>
</tr>
</tbody>
</table>

• Molecule 26 is ADENOSINE-5’-MONOPHOSPHATE (three-letter code: A) (formula: C_{10}H_{14}N_{5}O_{7}P).
- Molecule 27 is GUANOSINE-5’-MONOPHOSPHATE (three-letter code: G) (formula: C_{10}H_{14}N_{5}O_{8}P).
• Molecule 28 is ZINC ION (three-letter code: ZN) (formula: Zn).

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>D</td>
<td>1</td>
<td>Total Zn 1 1</td>
<td>0</td>
</tr>
<tr>
<td>28</td>
<td>N</td>
<td>1</td>
<td>Total Zn 1 1</td>
<td>0</td>
</tr>
</tbody>
</table>

• Molecule 29 is URIDINE-5’-MONOPHOSPHATE (three-letter code: U) (formula: C_{9}H_{13}N_{2}O_{9}P).

![Uridine-5’-Monophosphate](image)

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>AltConf</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>W</td>
<td>1</td>
<td>Total C N O P 20 9 2 8 1</td>
<td>0</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1</td>
<td>Total C N O P 20 9 2 8 1</td>
<td>0</td>
</tr>
</tbody>
</table>
3 Residue-property plots

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

- Molecule 1: 16S rRNA

Chain A:
• Molecule 2: 30S ribosomal protein S2

Chain B:

• Molecule 3: 30S ribosomal protein S3
Chain C:

- Molecule 4: 30S ribosomal protein S4

Chain D:

- Molecule 5: 30S ribosomal protein S5

Chain E:

- Molecule 6: 30S ribosomal protein S6

Chain F:

- Molecule 7: 30S ribosomal protein S7

Chain G:
- Molecule 8: 30S ribosomal protein S8

Chain H:

- Molecule 9: 30S ribosomal protein S9

Chain I:

- Molecule 10: 30S ribosomal protein S10

Chain J:

- Molecule 11: 30S ribosomal protein S11

Chain K:

- Molecule 12: 30S ribosomal protein S12

Chain L:
• Molecule 13: 30S ribosomal protein S13

Chain M: 67% 24% 7%

• Molecule 14: 30S ribosomal protein S14 type Z

Chain N: 54% 36% 8%

• Molecule 15: 30S ribosomal protein S15

Chain O: 48% 44% 7%

• Molecule 16: 30S ribosomal protein S16

Chain P: 55% 35% 5%

• Molecule 17: 30S ribosomal protein S17

Chain Q: 69% 21% 5%

• Molecule 18: 30S ribosomal protein S18

Chain R: 39% 41% 17%
• Molecule 19: 30S ribosomal protein S19

Chain S:

• Molecule 20: 30S ribosomal protein S20

Chain T:

• Molecule 21: 30S ribosomal protein Thx

Chain V:

• Molecule 22: Translation initiation factor IF-1

Chain W:

• Molecule 23: Translation initiation factor IF-3

Chain X:

• Molecule 24: mRNA
Chain Y:
## 4 Experimental information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reconstruction method</td>
<td>SINGLE PARTICLE</td>
<td>Depositor</td>
</tr>
<tr>
<td>Imposed symmetry</td>
<td>POINT, Not provided</td>
<td>Depositor</td>
</tr>
<tr>
<td>Number of particles used</td>
<td>57382</td>
<td>Depositor</td>
</tr>
<tr>
<td>Resolution determination method</td>
<td>FSC 0.143 CUT-OFF</td>
<td>Depositor</td>
</tr>
<tr>
<td>CTF correction method</td>
<td>PHASE FLIPPING AND AMPLITUDE CORRECTION</td>
<td>Depositor</td>
</tr>
<tr>
<td>Microscope</td>
<td>FEI POLARA 300</td>
<td>Depositor</td>
</tr>
<tr>
<td>Voltage (kV)</td>
<td>300</td>
<td>Depositor</td>
</tr>
<tr>
<td>Electron dose ((e^{-}/\AA^{2}))</td>
<td>30</td>
<td>Depositor</td>
</tr>
<tr>
<td>Minimum defocus (nm)</td>
<td>1500</td>
<td>Depositor</td>
</tr>
<tr>
<td>Maximum defocus (nm)</td>
<td>3500</td>
<td>Depositor</td>
</tr>
<tr>
<td>Magnification</td>
<td>104478</td>
<td>Depositor</td>
</tr>
<tr>
<td>Image detector</td>
<td>OTHER</td>
<td>Depositor</td>
</tr>
</tbody>
</table>
5  Model quality

5.1  Standard geometry

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

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>0.37</td>
<td>0/36397</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>0.55</td>
<td>0/805</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>0.52</td>
<td>0/900</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>0.38</td>
<td>0/986</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>0.59</td>
<td>0/943</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>0.49</td>
<td>0/501</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>0.49</td>
<td>0/745</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>0.42</td>
<td>0/716</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>0.42</td>
<td>0/836</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>0.51</td>
<td>0/604</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>0.64</td>
<td>0/661</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>0.57</td>
<td>0/1935</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>0.48</td>
<td>0/765</td>
</tr>
<tr>
<td>21</td>
<td>V</td>
<td>0.50</td>
<td>0/212</td>
</tr>
<tr>
<td>22</td>
<td>W</td>
<td>0.58</td>
<td>0/580</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>0.55</td>
<td>0/1373</td>
</tr>
<tr>
<td>24</td>
<td>Y</td>
<td>0.58</td>
<td>0/324</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>0.54</td>
<td>0/1636</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>0.47</td>
<td>0/1733</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>0.48</td>
<td>0/1162</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>0.46</td>
<td>0/856</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>0.56</td>
<td>0/1276</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>0.43</td>
<td>0/1136</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>0.54</td>
<td>0/1029</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>0.43</td>
<td>0/58111</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>12</td>
<td>L</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

There are no bond length outliers.

All (43) 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>9</td>
<td>I</td>
<td>11</td>
<td>LYS</td>
<td>CB-CA-C</td>
<td>21.20</td>
<td>152.79</td>
<td>110.40</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>21</td>
<td>ALA</td>
<td>CB-CA-C</td>
<td>17.11</td>
<td>135.76</td>
<td>110.10</td>
</tr>
<tr>
<td>22</td>
<td>W</td>
<td>23</td>
<td>ARG</td>
<td>N-CA-C</td>
<td>-11.55</td>
<td>79.83</td>
<td>111.00</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>266</td>
<td>LYS</td>
<td>C2'-C3'-O3'</td>
<td>9.66</td>
<td>130.75</td>
<td>109.50</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>792</td>
<td>ALA</td>
<td>C2'-C3'-O3'</td>
<td>8.32</td>
<td>127.80</td>
<td>109.50</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1534</td>
<td>ALA</td>
<td>C2'-C3'-O3'</td>
<td>7.77</td>
<td>126.60</td>
<td>109.50</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>91</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>7.62</td>
<td>132.83</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1190</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>7.60</td>
<td>126.22</td>
<td>109.50</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>75</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>7.60</td>
<td>132.77</td>
<td>115.30</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>103</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>7.42</td>
<td>132.37</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1346</td>
<td>LEU</td>
<td>C2'-C3'-O3'</td>
<td>7.13</td>
<td>125.19</td>
<td>109.50</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>11</td>
<td>LYS</td>
<td>N-CA-C</td>
<td>-7.07</td>
<td>91.91</td>
<td>111.00</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>281</td>
<td>LYS</td>
<td>C2'-C3'-O3'</td>
<td>6.98</td>
<td>124.86</td>
<td>113.70</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1498</td>
<td>U</td>
<td>C2'-C3'-O3'</td>
<td>6.87</td>
<td>124.69</td>
<td>113.70</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1301</td>
<td>U</td>
<td>C2'-C3'-O3'</td>
<td>6.71</td>
<td>124.43</td>
<td>113.70</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>42</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.61</td>
<td>130.51</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1145</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>6.44</td>
<td>124.01</td>
<td>113.70</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>197</td>
<td>LEU</td>
<td>C2'-C3'-O3'</td>
<td>6.34</td>
<td>123.84</td>
<td>113.70</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>181</td>
<td>LEU</td>
<td>C2'-C3'-O3'</td>
<td>6.15</td>
<td>123.54</td>
<td>113.70</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>36</td>
<td>ARG</td>
<td>C-N-CD</td>
<td>-6.12</td>
<td>107.13</td>
<td>120.60</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1182</td>
<td>U</td>
<td>C2'-C3'-O3'</td>
<td>6.07</td>
<td>123.42</td>
<td>113.70</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>90</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>5.93</td>
<td>128.93</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>559</td>
<td>LEU</td>
<td>C2'-C3'-O3'</td>
<td>5.85</td>
<td>123.06</td>
<td>113.70</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>12</td>
<td>GLU</td>
<td>N-CA-C</td>
<td>-5.76</td>
<td>95.46</td>
<td>111.00</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>328</td>
<td>LEU</td>
<td>C2'-C3'-O3'</td>
<td>5.69</td>
<td>122.80</td>
<td>113.70</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>157</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>5.63</td>
<td>128.24</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1000</td>
<td>U</td>
<td>C2'-C3'-O3'</td>
<td>5.62</td>
<td>122.70</td>
<td>113.70</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>44</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>5.59</td>
<td>128.16</td>
<td>115.30</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>15</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>5.58</td>
<td>128.12</td>
<td>115.30</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>509</td>
<td>LEU</td>
<td>C4'-C3'-O3'</td>
<td>5.56</td>
<td>124.12</td>
<td>113.00</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>96</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>5.49</td>
<td>127.94</td>
<td>115.30</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>51</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>5.46</td>
<td>127.86</td>
<td>115.30</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>28</td>
<td>GLN</td>
<td>N-CA-C</td>
<td>5.35</td>
<td>125.46</td>
<td>111.00</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Atoms</th>
<th>Z</th>
<th>Observed(°)</th>
<th>Ideal(°)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>115</td>
<td>G</td>
<td>C4’-C3’-O3’</td>
<td>5.28</td>
<td>123.56</td>
<td>113.00</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>24</td>
<td>TRP</td>
<td>N-CA-C</td>
<td>5.27</td>
<td>125.23</td>
<td>111.00</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>960</td>
<td>U</td>
<td>C2’-C3’-O3’</td>
<td>5.23</td>
<td>122.06</td>
<td>113.70</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>748</td>
<td>C</td>
<td>C2’-C3’-O3’</td>
<td>5.19</td>
<td>122.00</td>
<td>113.70</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>14</td>
<td>ILE</td>
<td>N-CA-C</td>
<td>5.11</td>
<td>124.78</td>
<td>111.00</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>20</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>5.07</td>
<td>126.96</td>
<td>115.30</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>29</td>
<td>TYR</td>
<td>N-CA-C</td>
<td>5.06</td>
<td>124.67</td>
<td>111.00</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>965</td>
<td>U</td>
<td>C2’-C3’-O3’</td>
<td>5.04</td>
<td>121.76</td>
<td>113.70</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>81</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>5.01</td>
<td>126.83</td>
<td>115.30</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>85</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>5.01</td>
<td>126.81</td>
<td>115.30</td>
</tr>
</tbody>
</table>

All (1) chirality outliers are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Atom</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>E</td>
<td>21</td>
<td>ALA</td>
<td>CA</td>
</tr>
</tbody>
</table>

All (3) 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>12</td>
<td>L</td>
<td>89</td>
<td>ARG</td>
<td>Peptide</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>67</td>
<td>THR</td>
<td>Peptide</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>53</td>
<td>ASP</td>
<td>Peptide</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>32525</td>
<td>0</td>
<td>16435</td>
<td>1137</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>1900</td>
<td>0</td>
<td>1951</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>1612</td>
<td>0</td>
<td>1677</td>
<td>95</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>1703</td>
<td>0</td>
<td>1764</td>
<td>81</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>1146</td>
<td>0</td>
<td>1207</td>
<td>62</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>843</td>
<td>0</td>
<td>857</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>1257</td>
<td>0</td>
<td>1296</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>1116</td>
<td>0</td>
<td>1177</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>1010</td>
<td>0</td>
<td>1035</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>792</td>
<td>0</td>
<td>832</td>
<td>72</td>
<td>0</td>
</tr>
</tbody>
</table>

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

<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>11</td>
<td>K</td>
<td>885</td>
<td>0</td>
<td>903</td>
<td>41</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>970</td>
<td>0</td>
<td>1057</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>933</td>
<td>0</td>
<td>992</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>492</td>
<td>0</td>
<td>533</td>
<td>35</td>
<td>0</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>734</td>
<td>0</td>
<td>771</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>700</td>
<td>0</td>
<td>720</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>823</td>
<td>0</td>
<td>891</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>598</td>
<td>0</td>
<td>670</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>647</td>
<td>0</td>
<td>673</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>763</td>
<td>0</td>
<td>861</td>
<td>35</td>
<td>0</td>
</tr>
<tr>
<td>21</td>
<td>V</td>
<td>208</td>
<td>0</td>
<td>221</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>22</td>
<td>W</td>
<td>570</td>
<td>0</td>
<td>599</td>
<td>33</td>
<td>0</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>1356</td>
<td>0</td>
<td>1399</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>24</td>
<td>Y</td>
<td>288</td>
<td>0</td>
<td>143</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>25</td>
<td>A</td>
<td>107</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>25</td>
<td>W</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>26</td>
<td>A</td>
<td>44</td>
<td>0</td>
<td>22</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>26</td>
<td>X</td>
<td>22</td>
<td>0</td>
<td>11</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>27</td>
<td>A</td>
<td>23</td>
<td>0</td>
<td>11</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>28</td>
<td>D</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>28</td>
<td>N</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>29</td>
<td>W</td>
<td>20</td>
<td>0</td>
<td>11</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>20</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>54110</td>
<td>0</td>
<td>38729</td>
<td>1694</td>
<td>0</td>
</tr>
</tbody>
</table>

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 18.

All (1694) 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>20:T:72:LEU:CD2</td>
<td>20:T:77:ALA:HB2</td>
<td>1.20</td>
<td>1.68</td>
</tr>
<tr>
<td>1:A:1080:A:C5'</td>
<td>5:E:16:THR:CG2</td>
<td>1.84</td>
<td>1.53</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>3:C:59:ARG:CG</td>
<td>3:C:64:VAL:CG2</td>
<td>2.11</td>
<td>1.29</td>
</tr>
<tr>
<td>3:C:57:ILE:CG1</td>
<td>3:C:66:VAL:HG22</td>
<td>1.60</td>
<td>1.28</td>
</tr>
<tr>
<td>10:J:17:ASP:OD1</td>
<td>10:J:70:ARG:NH2</td>
<td>1.68</td>
<td>1.23</td>
</tr>
<tr>
<td>1:A:1113:C:H4'</td>
<td>3:C:14:ILE:CD1</td>
<td>1.67</td>
<td>1.22</td>
</tr>
<tr>
<td>4:D:36:ARG:HD2</td>
<td>4:D:38:TYR:CZ</td>
<td>1.73</td>
<td>1.21</td>
</tr>
<tr>
<td>10:J:38:ILE:HG23</td>
<td>10:J:71:LEU:O</td>
<td>1.05</td>
<td>1.20</td>
</tr>
<tr>
<td>1:A:262:A:C5'</td>
<td>20:T:73:HIS:HE1</td>
<td>1.54</td>
<td>1.20</td>
</tr>
<tr>
<td>3:C:59:ARG:HG3</td>
<td>3:C:64:VAL:CG2</td>
<td>1.68</td>
<td>1.18</td>
</tr>
<tr>
<td>3:C:59:ARG:CG</td>
<td>3:C:64:VAL:HG23</td>
<td>1.72</td>
<td>1.15</td>
</tr>
<tr>
<td>3:C:59:ARG:HG3</td>
<td>3:C:64:VAL:HG22</td>
<td>1.32</td>
<td>1.10</td>
</tr>
<tr>
<td>1:A:1079:G:H5'</td>
<td>5:E:14:ARG:HH22</td>
<td>0.97</td>
<td>1.09</td>
</tr>
<tr>
<td>1:A:1113:C:C4'</td>
<td>3:C:14:ILE:HD12</td>
<td>1.82</td>
<td>1.09</td>
</tr>
<tr>
<td>4:D:36:ARG:CD</td>
<td>4:D:38:TYR:CZ</td>
<td>2.36</td>
<td>1.09</td>
</tr>
<tr>
<td>3:C:59:ARG:NE</td>
<td>3:C:64:VAL:CG2</td>
<td>2.15</td>
<td>1.08</td>
</tr>
<tr>
<td>1:A:262:A:H5'</td>
<td>20:T:73:HIS:CE1</td>
<td>1.84</td>
<td>1.08</td>
</tr>
<tr>
<td>1:A:1113:C:H4'</td>
<td>3:C:14:ILE:HD12</td>
<td>1.09</td>
<td>1.08</td>
</tr>
<tr>
<td>3:C:59:ARG:CG</td>
<td>3:C:64:VAL:HG22</td>
<td>1.79</td>
<td>1.08</td>
</tr>
<tr>
<td>1:A:1081:G:H2'</td>
<td>1:A:1082:G:C8</td>
<td>1.89</td>
<td>1.08</td>
</tr>
<tr>
<td>3:C:59:ARG:HG2</td>
<td>3:C:64:VAL:HG23</td>
<td>1.36</td>
<td>1.08</td>
</tr>
<tr>
<td>8:H:54:ASP:O</td>
<td>8:H:56:LYS:HE3</td>
<td>1.51</td>
<td>1.07</td>
</tr>
<tr>
<td>3:C:59:ARG:CG</td>
<td>3:C:64:VAL:HG21</td>
<td>1.84</td>
<td>1.07</td>
</tr>
<tr>
<td>1:A:1079:G:C5'</td>
<td>5:E:14:ARG:HH22</td>
<td>1.68</td>
<td>1.06</td>
</tr>
<tr>
<td>1:A:1077:G:N2</td>
<td>1:A:1079:G:H3'</td>
<td>1.69</td>
<td>1.06</td>
</tr>
<tr>
<td>1:A:279:A:C5</td>
<td>17:Q:98:LEU:HD23</td>
<td>1.90</td>
<td>1.05</td>
</tr>
<tr>
<td>1:A:864:G:H2'</td>
<td>1:A:865:G:C8</td>
<td>1.92</td>
<td>1.05</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>3:C:24:ALA:HB1</td>
<td>3:C:28:GLN:HG2</td>
<td>1.38</td>
<td>1.02</td>
</tr>
<tr>
<td>1:A:664:G:H22</td>
<td>1:A:741:G:H1</td>
<td>1.05</td>
<td>1.01</td>
</tr>
<tr>
<td>20:T:72:LEU:CD2</td>
<td>20:T:77:ALA:CA</td>
<td>2.31</td>
<td>1.01</td>
</tr>
<tr>
<td>3:C:59:ARG:CD</td>
<td>3:C:64:VAL:HG22</td>
<td>1.91</td>
<td>1.00</td>
</tr>
<tr>
<td>1:A:1080:A:C5'</td>
<td>5:E:16:THR:HG23</td>
<td>1.91</td>
<td>0.98</td>
</tr>
<tr>
<td>1:A:17:U:H2'</td>
<td>1:A:18:C:C6</td>
<td>1.98</td>
<td>0.98</td>
</tr>
<tr>
<td>3:C:59:ARG:NE</td>
<td>3:C:64:VAL:HG22</td>
<td>1.78</td>
<td>0.98</td>
</tr>
<tr>
<td>1:A:1256:A:H3'</td>
<td>3:C:27:LYS:NZ</td>
<td>1.79</td>
<td>0.97</td>
</tr>
<tr>
<td>1:A:1070:U:H2'</td>
<td>1:A:1071:C:C6</td>
<td>1.98</td>
<td>0.97</td>
</tr>
<tr>
<td>1:A:279:A:N3</td>
<td>17:Q:98:LEU:CD2</td>
<td>1.79</td>
<td>0.97</td>
</tr>
<tr>
<td>1:A:1103:C:H2'</td>
<td>1:A:1104:G:O4'</td>
<td>1.64</td>
<td>0.97</td>
</tr>
<tr>
<td>1:A:1113:C:C4'</td>
<td>3:C:14:ILE:CD1</td>
<td>2.41</td>
<td>0.97</td>
</tr>
<tr>
<td>4:D:9:CYS:SG</td>
<td>28:D:300:ZN:ZN</td>
<td>1.53</td>
<td>0.97</td>
</tr>
<tr>
<td>1:A:1322:C:H5'</td>
<td>13:M:100:GLY:HA2</td>
<td>1.45</td>
<td>0.96</td>
</tr>
<tr>
<td>1:A:45:U:H2'</td>
<td>1:A:46:G:C8</td>
<td>1.99</td>
<td>0.96</td>
</tr>
<tr>
<td>1:A:45:U:H2'</td>
<td>1:A:46:G:H8</td>
<td>1.29</td>
<td>0.96</td>
</tr>
<tr>
<td>1:A:745:C:H2'</td>
<td>1:A:746:A:C8</td>
<td>2.01</td>
<td>0.96</td>
</tr>
<tr>
<td>16:P:59:TRP:O</td>
<td>16:P:62:VAL:HG22</td>
<td>1.65</td>
<td>0.95</td>
</tr>
<tr>
<td>1:A:1219:U:H2'</td>
<td>1:A:1220:G:G8</td>
<td>2.01</td>
<td>0.95</td>
</tr>
<tr>
<td>3:C:59:ARG:NE</td>
<td>3:C:64:VAL:HG21</td>
<td>1.81</td>
<td>0.94</td>
</tr>
<tr>
<td>1:A:266:G:H3'</td>
<td>17:Q:67:LYS:HB2</td>
<td>1.48</td>
<td>0.94</td>
</tr>
<tr>
<td>3:C:64:VAL:O</td>
<td>3:C:99:VAL:HG23</td>
<td>1.67</td>
<td>0.94</td>
</tr>
<tr>
<td>1:A:279:A:C2</td>
<td>17:Q:98:LEU:CD2</td>
<td>2.02</td>
<td>0.94</td>
</tr>
<tr>
<td>1:A:1080:A:H5'</td>
<td>5:E:16:THR:HG23</td>
<td>1.13</td>
<td>0.93</td>
</tr>
<tr>
<td>10:J:20:ALA:C6</td>
<td>10:J:70:ARG:HD3</td>
<td>1.95</td>
<td>0.93</td>
</tr>
<tr>
<td>20:T:72:LEU:HD23</td>
<td>20:T:77:ALA:HB2</td>
<td>0.94</td>
<td>0.93</td>
</tr>
<tr>
<td>1:A:1079:G:H5'</td>
<td>5:E:14:ARG:NH2</td>
<td>1.82</td>
<td>0.93</td>
</tr>
<tr>
<td>3:C:28:GLN:HE21</td>
<td>3:C:32:LEU:HD11</td>
<td>1.29</td>
<td>0.93</td>
</tr>
<tr>
<td>1:A:247:G:OP2</td>
<td>17:Q:100:LYS:CD</td>
<td>2.16</td>
<td>0.93</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:262:A:H5&quot;</td>
<td>20:T:73:HIS:HE1</td>
<td>1.35</td>
<td>0.92</td>
</tr>
<tr>
<td>11:K:91:ARG:NH2</td>
<td>11:K:110:ASP:OD2</td>
<td>2.03</td>
<td>0.92</td>
</tr>
<tr>
<td>1:A:1158:C:H4'</td>
<td>2:B:132:LYS:HB2</td>
<td>1.54</td>
<td>0.90</td>
</tr>
<tr>
<td>1:A:1356:G:H2'</td>
<td>1:A:1357:A:C8</td>
<td>2.07</td>
<td>0.90</td>
</tr>
<tr>
<td>1:A:827:U:O4</td>
<td>1:A:872:A:N1</td>
<td>2.05</td>
<td>0.90</td>
</tr>
<tr>
<td>1:A:1101:A:H5&quot;</td>
<td>2:B:99:GLY:HA3</td>
<td>1.54</td>
<td>0.89</td>
</tr>
<tr>
<td>10:J:50:ILE:CG1</td>
<td>10:J:60:ARG:HH21</td>
<td>1.85</td>
<td>0.89</td>
</tr>
<tr>
<td>10:J:36:GLY:O</td>
<td>10:J:72:VAL:HG13</td>
<td>1.73</td>
<td>0.89</td>
</tr>
<tr>
<td>1:A:729:A:H2'</td>
<td>1:A:730:G:H8</td>
<td>1.37</td>
<td>0.89</td>
</tr>
<tr>
<td>1:A:1070:U:H2'</td>
<td>1:A:1071:C:H6</td>
<td>1.35</td>
<td>0.88</td>
</tr>
<tr>
<td>1:A:1022:G:H2'</td>
<td>1:A:1023:G:H8</td>
<td>1.38</td>
<td>0.88</td>
</tr>
<tr>
<td>1:A:662:G:H2'</td>
<td>1:A:663:A:C8</td>
<td>2.09</td>
<td>0.88</td>
</tr>
<tr>
<td>1:A:917:G:H2'</td>
<td>1:A:918:A:C8</td>
<td>2.09</td>
<td>0.87</td>
</tr>
<tr>
<td>4:D:35:ARG:HH21</td>
<td>4:D:35:ARG:HB3</td>
<td>1.37</td>
<td>0.87</td>
</tr>
<tr>
<td>3:C:30:ARG:NH1</td>
<td>3:C:30:ARG:HB2</td>
<td>1.89</td>
<td>0.87</td>
</tr>
<tr>
<td>10:J:50:ILE:CG1</td>
<td>10:J:60:ARG:HE</td>
<td>1.87</td>
<td>0.87</td>
</tr>
<tr>
<td>10:J:38:ILE:HG22</td>
<td>10:J:71:LEU:O</td>
<td>1.76</td>
<td>0.86</td>
</tr>
<tr>
<td>1:A:247:G:OP2</td>
<td>17:Q:100:LYS:NZ</td>
<td>2.08</td>
<td>0.86</td>
</tr>
<tr>
<td>1:A:868:C:H5'</td>
<td>1:A:869:G:O4'</td>
<td>1.75</td>
<td>0.86</td>
</tr>
<tr>
<td>1:A:1106:G:H5'</td>
<td>3:C:172:ARG:HG3</td>
<td>1.58</td>
<td>0.86</td>
</tr>
<tr>
<td>8:H:45:ILE:HG22</td>
<td>8:H:63:LEU:HA</td>
<td>1.57</td>
<td>0.86</td>
</tr>
<tr>
<td>4:D:26:CYS:SG</td>
<td>28:D:300:ZN:ZN</td>
<td>1.64</td>
<td>0.85</td>
</tr>
<tr>
<td>1:A:247:G:OP2</td>
<td>17:Q:100:LYS:HD2</td>
<td>1.74</td>
<td>0.85</td>
</tr>
<tr>
<td>3:C:59:ARG:CD</td>
<td>3:C:64:VAL:CG2</td>
<td>2.53</td>
<td>0.85</td>
</tr>
<tr>
<td>1:A:1190:G:H5'</td>
<td>3:C:176:HIS:HE1</td>
<td>1.41</td>
<td>0.85</td>
</tr>
<tr>
<td>1:A:17:U:O2'</td>
<td>1:A:1079:G:H1'</td>
<td>1.77</td>
<td>0.85</td>
</tr>
<tr>
<td>10:J:20:ALA:HB1</td>
<td>10:J:70:ARG:HD3</td>
<td>1.55</td>
<td>0.85</td>
</tr>
<tr>
<td>1:A:15:G:H2'</td>
<td>1:A:16:A:H8</td>
<td>1.41</td>
<td>0.84</td>
</tr>
<tr>
<td>1:A:745:C:H2'</td>
<td>1:A:746:A:H8</td>
<td>1.40</td>
<td>0.84</td>
</tr>
<tr>
<td>1:A:662:G:H2'</td>
<td>1:A:663:A:H8</td>
<td>1.42</td>
<td>0.83</td>
</tr>
<tr>
<td>11:K:91:ARG:HH21</td>
<td>18:R:88:LYS:NZ</td>
<td>1.76</td>
<td>0.83</td>
</tr>
<tr>
<td>1:A:1099:G:C6</td>
<td>1:A:1100:C:N3</td>
<td>2.47</td>
<td>0.83</td>
</tr>
<tr>
<td>3:C:30:ARG:CD</td>
<td>14:N:35:ARG:O</td>
<td>2.28</td>
<td>0.82</td>
</tr>
<tr>
<td>1:A:170:U:H2'</td>
<td>1:A:171:A:H8</td>
<td>1.44</td>
<td>0.82</td>
</tr>
<tr>
<td>1:A:1022:G:H2'</td>
<td>1:A:1023:G:C8</td>
<td>2.14</td>
<td>0.82</td>
</tr>
<tr>
<td>4:D:36:ARG:CD</td>
<td>4:D:38:TYR:OH</td>
<td>2.27</td>
<td>0.82</td>
</tr>
<tr>
<td>1:A:269:C:H2'</td>
<td>1:A:270:A:C8</td>
<td>2.14</td>
<td>0.82</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:279:A:N3</td>
<td>17:Q:98:LEU:HD21</td>
<td>1.93</td>
<td>0.82</td>
</tr>
<tr>
<td>1:A:262:A:C4'</td>
<td>20:T:73:HIS:CE1</td>
<td>2.62</td>
<td>0.82</td>
</tr>
<tr>
<td>1:A:1101:A:H4'</td>
<td>1:A:1102:A:O5'</td>
<td>1.79</td>
<td>0.81</td>
</tr>
<tr>
<td>3:C:30:ARG:HG2</td>
<td>14:N:37:PHE:C</td>
<td>2.00</td>
<td>0.81</td>
</tr>
<tr>
<td>1:A:777:A:H2'</td>
<td>1:A:778:G:C8</td>
<td>2.14</td>
<td>0.81</td>
</tr>
<tr>
<td>1:A:398:C:H2'</td>
<td>1:A:399:G:H8</td>
<td>1.44</td>
<td>0.81</td>
</tr>
<tr>
<td>1:A:1256:A:H3'</td>
<td>3:C:27:LYS:CE</td>
<td>2.10</td>
<td>0.81</td>
</tr>
<tr>
<td>1:A:124:G:H2'</td>
<td>1:A:125:U:O4'</td>
<td>1.79</td>
<td>0.81</td>
</tr>
<tr>
<td>6:F:49:ALA:HB1</td>
<td>18:R:80:PRO:HA</td>
<td>1.62</td>
<td>0.81</td>
</tr>
<tr>
<td>1:A:16:A:N3</td>
<td>1:A:1080:A:H1'</td>
<td>1.96</td>
<td>0.80</td>
</tr>
<tr>
<td>1:A:101:A:H2'</td>
<td>1:A:102:G:H8</td>
<td>1.45</td>
<td>0.80</td>
</tr>
<tr>
<td>4:D:26:CYS:HA</td>
<td>4:D:31:CYS:HB2</td>
<td>1.63</td>
<td>0.80</td>
</tr>
<tr>
<td>1:A:1096:C:H2'</td>
<td>1:A:1097:C:C6</td>
<td>2.17</td>
<td>0.80</td>
</tr>
<tr>
<td>1:A:16:A:C2</td>
<td>1:A:1080:A:H1'</td>
<td>2.18</td>
<td>0.80</td>
</tr>
<tr>
<td>1:A:1073:U:H3</td>
<td>1:A:1102:A:H61</td>
<td>1.30</td>
<td>0.79</td>
</tr>
<tr>
<td>1:A:925:G:H1</td>
<td>1:A:1391:U:H3</td>
<td>1.28</td>
<td>0.79</td>
</tr>
<tr>
<td>1:A:729:A:H2'</td>
<td>1:A:730:G:C8</td>
<td>2.16</td>
<td>0.79</td>
</tr>
<tr>
<td>4:D:36:ARG:HG3</td>
<td>4:D:38:TYR:CE2</td>
<td>2.17</td>
<td>0.79</td>
</tr>
<tr>
<td>11:K:87:THR:HG23</td>
<td>11:K:91:ARG:HD3</td>
<td>1.65</td>
<td>0.78</td>
</tr>
<tr>
<td>1:A:309:G:H2'</td>
<td>1:A:310:G:H8</td>
<td>1.48</td>
<td>0.78</td>
</tr>
<tr>
<td>1:A:1390:U:H2'</td>
<td>1:A:1391:U:C6</td>
<td>2.18</td>
<td>0.78</td>
</tr>
<tr>
<td>1:A:299:G:H2'</td>
<td>1:A:300:U:C8</td>
<td>2.18</td>
<td>0.78</td>
</tr>
<tr>
<td>1:A:1190:G:H5'</td>
<td>3:C:176:HIS:CE1</td>
<td>2.17</td>
<td>0.78</td>
</tr>
<tr>
<td>6:F:49:ALA:CB</td>
<td>18:R:80:PRO:HA</td>
<td>2.13</td>
<td>0.78</td>
</tr>
<tr>
<td>1:A:1096:C:H2'</td>
<td>1:A:1097:C:H6</td>
<td>1.49</td>
<td>0.78</td>
</tr>
<tr>
<td>1:A:1128:C:H2'</td>
<td>1:A:1139:G:N7</td>
<td>1.99</td>
<td>0.78</td>
</tr>
<tr>
<td>11:K:87:THR:HA</td>
<td>11:K:91:ARG:HD2</td>
<td>1.65</td>
<td>0.78</td>
</tr>
<tr>
<td>1:A:21:G:H2'</td>
<td>1:A:22:G:C8</td>
<td>2.18</td>
<td>0.78</td>
</tr>
<tr>
<td>1:A:1127:G:H21</td>
<td>1:A:1147:C:H41</td>
<td>1.29</td>
<td>0.78</td>
</tr>
<tr>
<td>20:T:72:LEU:HD21</td>
<td>20:T:77:ALA:N</td>
<td>1.97</td>
<td>0.77</td>
</tr>
<tr>
<td>1:A:1435:G:H2'</td>
<td>1:A:1436:U:C6</td>
<td>2.19</td>
<td>0.77</td>
</tr>
<tr>
<td>1:A:728:A:H2'</td>
<td>1:A:729:A:C8</td>
<td>2.19</td>
<td>0.77</td>
</tr>
<tr>
<td>3:C:59:ARG:HG3</td>
<td>3:C:64:VAL:HG23</td>
<td>1.46</td>
<td>0.77</td>
</tr>
<tr>
<td>5:E:43:LEU:HD11</td>
<td>5:E:132:ALA:HB1</td>
<td>1.67</td>
<td>0.77</td>
</tr>
<tr>
<td>1:A:1507:A:H2'</td>
<td>1:A:1508:G:C8</td>
<td>2.19</td>
<td>0.77</td>
</tr>
<tr>
<td>16:P:59:TRP:O</td>
<td>16:P:62:VAL:CG2</td>
<td>2.31</td>
<td>0.77</td>
</tr>
<tr>
<td>4:D:35:ARG:HH21</td>
<td>4:D:35:ARG:CB</td>
<td>1.98</td>
<td>0.77</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:302:G:H2'</td>
<td>1:A:303:A:C8</td>
<td>2.19</td>
<td>0.77</td>
</tr>
<tr>
<td>1:A:914:A:H2'</td>
<td>1:A:915:A:H8</td>
<td>1.48</td>
<td>0.76</td>
</tr>
<tr>
<td>8:H:91:ARG:HD3</td>
<td>12:L:7:ILE:HG21</td>
<td>1.67</td>
<td>0.76</td>
</tr>
<tr>
<td>11:K:91:ARG:HH21</td>
<td>18:R:88:LYS:HZ2</td>
<td>1.30</td>
<td>0.76</td>
</tr>
<tr>
<td>1:A:1367:C:H4'</td>
<td>10:J:48:THR:HG21</td>
<td>1.66</td>
<td>0.76</td>
</tr>
<tr>
<td>1:A:24:U:H2'</td>
<td>1:A:25:C:C6</td>
<td>2.20</td>
<td>0.76</td>
</tr>
<tr>
<td>1:A:279:A:C4</td>
<td>17:Q:98:LEU:HD21</td>
<td>2.18</td>
<td>0.76</td>
</tr>
<tr>
<td>1:A:303:A:H2'</td>
<td>1:A:304:U:C6</td>
<td>2.21</td>
<td>0.76</td>
</tr>
<tr>
<td>10:J:37:PRO:O</td>
<td>10:J:70:ARG:CG</td>
<td>2.34</td>
<td>0.76</td>
</tr>
<tr>
<td>4:D:36:ARG:HD3</td>
<td>4:D:38:TYR:OH</td>
<td>1.85</td>
<td>0.76</td>
</tr>
<tr>
<td>5:E:107:ARG:NH1</td>
<td>5:E:107:ARG:HB2</td>
<td>2.01</td>
<td>0.76</td>
</tr>
<tr>
<td>1:A:728:A:H2'</td>
<td>1:A:729:A:H8</td>
<td>1.48</td>
<td>0.75</td>
</tr>
<tr>
<td>10:J:60:ARG:CZ</td>
<td>10:J:60:ARG:HB2</td>
<td>2.14</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:262:A:H4'</td>
<td>20:T:73:HIS:CE1</td>
<td>2.20</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:1080:A:H5'</td>
<td>5:E:16:THR:CB</td>
<td>2.15</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:1080:A:H5''</td>
<td>5:E:16:THR:HG21</td>
<td>0.77</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:1256:A:H3'</td>
<td>3:C:27:LYS:HZ2</td>
<td>1.49</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:1102:A:H2'</td>
<td>1:A:1103:C:C6</td>
<td>2.21</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:56:U:H2'</td>
<td>1:A:57:G:C8</td>
<td>2.21</td>
<td>0.75</td>
</tr>
<tr>
<td>1:A:919:A:C2</td>
<td>1:A:1080:A:H2</td>
<td>2.05</td>
<td>0.74</td>
</tr>
<tr>
<td>1:A:701:A:H4'</td>
<td>1:A:702:A:O5'</td>
<td>1.87</td>
<td>0.74</td>
</tr>
<tr>
<td>10:J:17:ASP:OD1</td>
<td>10:J:70:ARG:HZ</td>
<td>2.35</td>
<td>0.74</td>
</tr>
<tr>
<td>1:A:1080:A:C4'</td>
<td>5:E:16:THR:HG23</td>
<td>2.17</td>
<td>0.74</td>
</tr>
<tr>
<td>1:A:224:C:H2'</td>
<td>1:A:225:C:C6</td>
<td>2.21</td>
<td>0.74</td>
</tr>
<tr>
<td>1:A:398:C:H2'</td>
<td>1:A:399:G:C8</td>
<td>2.23</td>
<td>0.74</td>
</tr>
<tr>
<td>1:A:90:U:H2'</td>
<td>1:A:91:C:C6</td>
<td>2.22</td>
<td>0.74</td>
</tr>
<tr>
<td>3:C:30:ARG:HD2</td>
<td>14:N:35:ARG:O</td>
<td>1.87</td>
<td>0.74</td>
</tr>
<tr>
<td>10:J:50:ILE:CD1</td>
<td>10:J:60:ARG:HE</td>
<td>2.00</td>
<td>0.74</td>
</tr>
<tr>
<td>1:A:313:A:H2'</td>
<td>1:A:314:C:C6</td>
<td>2.22</td>
<td>0.74</td>
</tr>
<tr>
<td>8:H:54:ASP:O</td>
<td>8:H:56:LYS:CE</td>
<td>2.35</td>
<td>0.74</td>
</tr>
<tr>
<td>4:D:36:ARG:HD2</td>
<td>4:D:38:TYR:CE1</td>
<td>2.23</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:1077:G:H2'</td>
<td>1:A:1078:U:H2'</td>
<td>1.71</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:1113:C:H4'</td>
<td>3:C:14:ILE:HD13</td>
<td>1.69</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:269:C:H2'</td>
<td>1:A:270:A:H8</td>
<td>1.52</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:1521:G:H2'</td>
<td>1:A:1522:U:C6</td>
<td>2.22</td>
<td>0.73</td>
</tr>
<tr>
<td>10:J:50:ILE:HG13</td>
<td>10:J:60:ARG:HZ</td>
<td>2.18</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:1348:U:H2'</td>
<td>1:A:1349:A:H8</td>
<td>1.52</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:1390:U:H2'</td>
<td>1:A:1391:U:H6</td>
<td>1.54</td>
<td>0.73</td>
</tr>
<tr>
<td>1:A:439:A:OP2</td>
<td>1:A:493:G:N1</td>
<td>2.19</td>
<td>0.73</td>
</tr>
<tr>
<td>3:C:30:ARG:HD3</td>
<td>14:N:35:ARG:O</td>
<td>1.88</td>
<td>0.72</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>4:D:36:ARG:CD</td>
<td>4:D:38:TYR:CE2</td>
<td>2.72</td>
<td>0.72</td>
</tr>
<tr>
<td>1:A:279:A:C6</td>
<td>17:Q:98:LEU:HD23</td>
<td>2.25</td>
<td>0.72</td>
</tr>
<tr>
<td>2:B:15:VAL:HG11</td>
<td>2:B:209:ARG:HB3</td>
<td>1.70</td>
<td>0.72</td>
</tr>
<tr>
<td>1:A:262:A:C4′</td>
<td>20:T:73:HIS:HE1</td>
<td>1.98</td>
<td>0.72</td>
</tr>
<tr>
<td>1:A:1287:A:H2′</td>
<td>1:A:1288:A:C8</td>
<td>2.24</td>
<td>0.72</td>
</tr>
<tr>
<td>11:K:54:ARG:HD2</td>
<td>11:K:53:ARG:H</td>
<td>1.55</td>
<td>0.72</td>
</tr>
<tr>
<td>1:A:973:G:H3′</td>
<td>1:A:974:A:H5′</td>
<td>1.72</td>
<td>0.72</td>
</tr>
<tr>
<td>3:C:30:ARG:HG3</td>
<td>14:N:36:PHE:O</td>
<td>1.90</td>
<td>0.72</td>
</tr>
<tr>
<td>1:A:1256:A:C3′</td>
<td>3:C:27:LYS:NZ</td>
<td>2.51</td>
<td>0.72</td>
</tr>
<tr>
<td>1:A:1386:G:H2′</td>
<td>1:A:1387:G:H8</td>
<td>1.54</td>
<td>0.72</td>
</tr>
<tr>
<td>10:J:50:ILE:CG1</td>
<td>10:J:60:ARG:NH2</td>
<td>2.53</td>
<td>0.72</td>
</tr>
<tr>
<td>10:J:53:PRO:HA</td>
<td>14:N:41:ARG:HH21</td>
<td>1.54</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:113:G:H2′</td>
<td>1:A:114:U:C6</td>
<td>2.25</td>
<td>0.71</td>
</tr>
<tr>
<td>10:J:38:ILE:O</td>
<td>10:J:71:LEU:N</td>
<td>2.23</td>
<td>0.71</td>
</tr>
<tr>
<td>10:J:40:LEU:HB2</td>
<td>10:J:69:ASN:HB3</td>
<td>1.73</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:562:C:H41</td>
<td>1:A:884:U:H2′</td>
<td>1.55</td>
<td>0.71</td>
</tr>
<tr>
<td>10:J:48:THR:HG22</td>
<td>10:J:60:ARG:CG</td>
<td>2.18</td>
<td>0.71</td>
</tr>
<tr>
<td>20:T:72:LEU:CD2</td>
<td>20:T:77:ALA:HA</td>
<td>2.11</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:1080:A:H4′</td>
<td>5:E:16:THR:HG23</td>
<td>1.70</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:1256:A:C3′</td>
<td>3:C:27:LYS:HZ2</td>
<td>2.03</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:1443:G:C6</td>
<td>1:A:1444:C:N4</td>
<td>2.58</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:524:G:C6</td>
<td>1:A:525:C:N4</td>
<td>2.58</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:1500:G:H5′</td>
<td>1:A:1508:G:H5′</td>
<td>1.73</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:664:G:N2</td>
<td>1:A:741:G:H1</td>
<td>1.87</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:769:G:N2</td>
<td>1:A:770:C:C2</td>
<td>2.59</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:403:G:H5′</td>
<td>4:D:136:PRO:HD2</td>
<td>1.71</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:1081:G:OP2</td>
<td>5:E:16:THR:HG22</td>
<td>1.91</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:302:G:H2′</td>
<td>1:A:303:A:H8</td>
<td>1.53</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:316:G:H1</td>
<td>1:A:337:C:H42</td>
<td>1.38</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:69:G:H1</td>
<td>1:A:100:C:N4</td>
<td>1.89</td>
<td>0.70</td>
</tr>
<tr>
<td>10:J:37:PRO:HA</td>
<td>10:J:72:VAL:CG2</td>
<td>2.18</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:69:G:H1</td>
<td>1:A:100:C:H42</td>
<td>1.36</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:18:C:H2′</td>
<td>1:A:19:C:C6</td>
<td>2.27</td>
<td>0.70</td>
</tr>
<tr>
<td>1:A:406:G:H4′</td>
<td>4:D:5:ILE:HD11</td>
<td>1.73</td>
<td>0.69</td>
</tr>
<tr>
<td>10:J:38:ILE:HG23</td>
<td>10:J:71:LEU:C</td>
<td>2.05</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:24:U:H2′</td>
<td>1:A:25:C:H6</td>
<td>1.56</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:424:G:H2′</td>
<td>1:A:425:G:C8</td>
<td>2.27</td>
<td>0.69</td>
</tr>
<tr>
<td>5:E:14:ARG:O</td>
<td>5:E:14:ARG:HG2</td>
<td>1.92</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:10:U:H2′</td>
<td>1:A:11:G:C8</td>
<td>2.27</td>
<td>0.69</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:10:A:H2'</td>
<td>1:A:11:G:H8</td>
<td>1.56</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:584:G:H2'</td>
<td>1:A:585:G:H8</td>
<td>1.58</td>
<td>0.69</td>
</tr>
<tr>
<td>5:E:105:VAL:HB</td>
<td>5:E:106:PRO:HD3</td>
<td>1.74</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:312:C:H2'</td>
<td>1:A:313:A:C8</td>
<td>2.28</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:1095:U:H2'</td>
<td>1:A:1096:C:C6</td>
<td>2.27</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:1445:C:C2</td>
<td>1:A:1458:G:C2</td>
<td>2.81</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:584:G:H2'</td>
<td>1:A:585:G:C8</td>
<td>2.27</td>
<td>0.69</td>
</tr>
<tr>
<td>1:A:56:U:H2'</td>
<td>1:A:57:G:H8</td>
<td>1.58</td>
<td>0.68</td>
</tr>
<tr>
<td>24:Y:28:A:H3'</td>
<td>24:Y:29:G:C8</td>
<td>2.27</td>
<td>0.68</td>
</tr>
<tr>
<td>4:D:9:CYS:HG</td>
<td>28:D:300:ZN:ZN</td>
<td>1.07</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:13:U:H3</td>
<td>1:A:915:A:N6</td>
<td>1.91</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:67:C:H2'</td>
<td>1:A:68:G:H8</td>
<td>1.57</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:543:C:H2'</td>
<td>1:A:544:G:C8</td>
<td>2.28</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:1079:G:H2'</td>
<td>1:A:1080:A:C8</td>
<td>2.28</td>
<td>0.68</td>
</tr>
<tr>
<td>10:J:40:LEU:HG</td>
<td>10:J:71:LEU:HB2</td>
<td>1.76</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:1536:C:H42</td>
<td>24:Y:29:G:H1</td>
<td>1.41</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:16:A:C2</td>
<td>1:A:17:U:C6</td>
<td>2.82</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:524:G:C2</td>
<td>1:A:525:C:N3</td>
<td>2.61</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:576:G:H3'</td>
<td>1:A:577:G:H5'</td>
<td>1.75</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:67:C:H2'</td>
<td>1:A:68:G:C8</td>
<td>2.28</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:1256:A:H3'</td>
<td>3:C:27:LYS:HE3</td>
<td>1.74</td>
<td>0.68</td>
</tr>
<tr>
<td>10:J:37:PRO:CA</td>
<td>10:J:72:VAL:HG22</td>
<td>2.21</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:1410:G:H2'</td>
<td>1:A:1411:C:C6</td>
<td>2.29</td>
<td>0.68</td>
</tr>
<tr>
<td>3:C:71:ALA:HB2</td>
<td>3:C:115:LEU:HD11</td>
<td>1.75</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:1264:C:H2'</td>
<td>1:A:1265:G:H8</td>
<td>1.58</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:860:A:H3'</td>
<td>1:A:861:G:H8</td>
<td>1.59</td>
<td>0.68</td>
</tr>
<tr>
<td>1:A:279:A:C2</td>
<td>17:Q:98:LEU:CD2</td>
<td>2.74</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:521:G:N2</td>
<td>1:A:522:C:C2</td>
<td>2.62</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:1016:A:H2'</td>
<td>1:A:1017:G:O4'</td>
<td>1.95</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:564:C:O2</td>
<td>1:A:564:C:H2'</td>
<td>1.94</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:588:G:N2</td>
<td>1:A:589:C:C2</td>
<td>2.63</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:234:C:H2'</td>
<td>1:A:235:C:C6</td>
<td>2.29</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:690:G:OP2</td>
<td>11:K:27:ASN:HB3</td>
<td>1.94</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:1132:C:H2'</td>
<td>1:A:1133:G:C8</td>
<td>2.30</td>
<td>0.66</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>8:H:29:SER:HB3</td>
<td>8:H:32:LYS:HG3</td>
<td>1.78</td>
<td>0.66</td>
</tr>
<tr>
<td>15:O:31:LEU:O</td>
<td>15:O:35:ARG:G3</td>
<td>1.96</td>
<td>0.66</td>
</tr>
<tr>
<td>1:A:610:G:H2'</td>
<td>1:A:611:A:H8</td>
<td>1.59</td>
<td>0.66</td>
</tr>
<tr>
<td>3:C:57:ILE:CD1</td>
<td>3:C:66:VAL:HG22</td>
<td>2.25</td>
<td>0.66</td>
</tr>
<tr>
<td>1:A:168:A:H1'</td>
<td>1:A:1080:A:H4'</td>
<td>1.77</td>
<td>0.66</td>
</tr>
<tr>
<td>1:A:568:G:N2</td>
<td>1:A:883:C:C2</td>
<td>2.63</td>
<td>0.66</td>
</tr>
<tr>
<td>3:C:24:ALA:CB</td>
<td>3:C:28:GLN:HG2</td>
<td>2.22</td>
<td>0.66</td>
</tr>
<tr>
<td>1:A:543:C:H2'</td>
<td>1:A:544:G:H8</td>
<td>1.60</td>
<td>0.66</td>
</tr>
<tr>
<td>5:E:139:LEU:HA</td>
<td>5:E:142:LEU:HD12</td>
<td>1.77</td>
<td>0.66</td>
</tr>
<tr>
<td>4:D:36:ARG:HD3</td>
<td>4:D:38:TYR:CZ</td>
<td>2.26</td>
<td>0.66</td>
</tr>
<tr>
<td>1:A:1079:G:C5'</td>
<td>5:E:14:ARG:NH2</td>
<td>2.51</td>
<td>0.66</td>
</tr>
<tr>
<td>1:A:522:C:H41</td>
<td>12:L:53:ARG:HH21</td>
<td>1.44</td>
<td>0.66</td>
</tr>
<tr>
<td>3:C:66:VAL:HG12</td>
<td>3:C:68:VAL:HG22</td>
<td>1.77</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:1244:C:H2'</td>
<td>1:A:1245:A:H8</td>
<td>1.60</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:955:U:H1'</td>
<td>1:A:1227:A:H61</td>
<td>1.61</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:19:C:H2'</td>
<td>1:A:20:U:C6</td>
<td>2.32</td>
<td>0.65</td>
</tr>
<tr>
<td>4:D:63:LYS:O</td>
<td>4:D:67:ILE:HG13</td>
<td>1.97</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:1328:C:H2'</td>
<td>1:A:1329:A:O4'</td>
<td>1.97</td>
<td>0.65</td>
</tr>
<tr>
<td>10:J:17:ASP:CG</td>
<td>10:J:70:ARG:NH2</td>
<td>2.49</td>
<td>0.65</td>
</tr>
<tr>
<td>1:A:1163:C:H2'</td>
<td>1:A:1164:G:H8</td>
<td>1.60</td>
<td>0.65</td>
</tr>
<tr>
<td>3:C:39:ILE:HG21</td>
<td>3:C:66:VAL:HG21</td>
<td>1.77</td>
<td>0.65</td>
</tr>
<tr>
<td>9:I:114:TYR:HD2</td>
<td>10:J:58:ASP:O</td>
<td>1.80</td>
<td>0.65</td>
</tr>
<tr>
<td>10:J:37:PRO:O</td>
<td>10:J:70:ARG:HG3</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>4:D:7:PRO:HB2</td>
<td>4:D:10:ARG:HD2</td>
<td>1.78</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:1020:U:H2'</td>
<td>1:A:1021:G:H8</td>
<td>1.63</td>
<td>0.64</td>
</tr>
<tr>
<td>6:F:9:VAL:HB</td>
<td>6:F:87:ARG:HB2</td>
<td>1.79</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:1504:G:H5''</td>
<td>1:A:1505:G:O4'</td>
<td>1.98</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:777:A:H2'</td>
<td>1:A:778:G:H8</td>
<td>1.59</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:930:C:H2'</td>
<td>1:A:931:C:O4'</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:172:A:H2'</td>
<td>1:A:174:C:H5</td>
<td>1.62</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:1073:U:H3</td>
<td>1:A:1102:A:N6</td>
<td>1.94</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:1264:C:H2'</td>
<td>1:A:1265:G:C8</td>
<td>2.33</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:587:G:O2'</td>
<td>1:A:588:G:H5'</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>1:A:312:C:H2'</td>
<td>1:A:313:A:H8</td>
<td>1.62</td>
<td>0.63</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>3:C:30:ARG:HH11</td>
<td>3:C:30:ARG:HB2</td>
<td>1.63</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:335:C:H2'</td>
<td>1:A:336:C:C6</td>
<td>2.33</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:424:G:H2'</td>
<td>1:A:425:G:H8</td>
<td>1.60</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:1402:C:H2'</td>
<td>1:A:1403:C:H6</td>
<td>1.62</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:864:A:O2'</td>
<td>1:A:1078:U:C4</td>
<td>2.52</td>
<td>0.63</td>
</tr>
<tr>
<td>12:L:46:LYS:HB3</td>
<td>12:L:48:PRO:HD2</td>
<td>1.80</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:1071:C:H2'</td>
<td>1:A:1072:G:H8</td>
<td>1.64</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:1536:C:N4</td>
<td>24:Y:29:G:H1</td>
<td>1.96</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:878:G:H5'</td>
<td>8:H:89:PRO:HG2</td>
<td>1.79</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:1443:G:C2</td>
<td>1:A:1444:C:N3</td>
<td>2.67</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:370:C:C2</td>
<td>1:A:392:G:N2</td>
<td>2.66</td>
<td>0.63</td>
</tr>
<tr>
<td>1:A:914:A:H2'</td>
<td>1:A:915:A:C8</td>
<td>2.32</td>
<td>0.62</td>
</tr>
<tr>
<td>3:C:29:TYR:OH</td>
<td>14:N:37:PHE:CE1</td>
<td>2.51</td>
<td>0.62</td>
</tr>
<tr>
<td>20:T:34:LYS:HG3</td>
<td>20:T:80:ARG:HH12</td>
<td>1.64</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:1241:G:N2</td>
<td>1:A:1242:C:C2</td>
<td>2.67</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:1515:C:H2'</td>
<td>1:A:1516:G:C8</td>
<td>2.34</td>
<td>0.62</td>
</tr>
<tr>
<td>5:E:87:SER:HA</td>
<td>5:E:125:SER:HB3</td>
<td>1.80</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:678:U:H2'</td>
<td>1:A:679:G:C6</td>
<td>2.34</td>
<td>0.62</td>
</tr>
<tr>
<td>10:J:37:G:O2</td>
<td>10:J:70:ARG:HB2</td>
<td>1.98</td>
<td>0.62</td>
</tr>
<tr>
<td>15:O:8:LYS:HG2</td>
<td>15:O:31:LEU:HD11</td>
<td>1.80</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:919:G:C2</td>
<td>1:A:1079:G:N2</td>
<td>2.68</td>
<td>0.62</td>
</tr>
<tr>
<td>10:J:50:ILE:HG12</td>
<td>10:J:60:ARG:NH2</td>
<td>2.06</td>
<td>0.62</td>
</tr>
<tr>
<td>23:X:89:LYS:HD2</td>
<td>26:X:201:A:H61</td>
<td>1.64</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:1152:G:H5'</td>
<td>10:J:13:His:HB2</td>
<td>1.81</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:946:A:H2'</td>
<td>1:A:947:G:C8</td>
<td>2.35</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:110:C:H2'</td>
<td>1:A:111:G:O4'</td>
<td>1.98</td>
<td>0.62</td>
</tr>
<tr>
<td>16:P:13:His:O</td>
<td>16:P:15:PRO:HD3</td>
<td>1.99</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:1342:C:H2'</td>
<td>1:A:1343:G:C8</td>
<td>2.35</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:1387:G:O3'</td>
<td>1:A:1388:C:H5'</td>
<td>1.99</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:1505:G:H4'</td>
<td>1:A:1506:U:H5'</td>
<td>1.81</td>
<td>0.62</td>
</tr>
<tr>
<td>1:A:1313:U:H2'</td>
<td>1:A:1314:G:C6</td>
<td>2.35</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:610:G:H2'</td>
<td>1:A:611:A:C8</td>
<td>2.35</td>
<td>0.61</td>
</tr>
<tr>
<td>4:D:36:ARG:CG</td>
<td>4:D:38:TYR:CE2</td>
<td>2.83</td>
<td>0.61</td>
</tr>
<tr>
<td>12:L:102:ARG:HG2</td>
<td>12:L:107:ALA:HB1</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:671:G:N2</td>
<td>1:A:736:C:C2</td>
<td>2.68</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:911:U:H2'</td>
<td>1:A:912:G:C6</td>
<td>2.35</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:112:G:H21</td>
<td>1:A:135:G:H5'</td>
<td>1.64</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:259:G:H2'</td>
<td>1:A:260:G:C8</td>
<td>2.35</td>
<td>0.61</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:442:C:H2'</td>
<td>1:A:443:C:C6</td>
<td>2.35</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:725:G:N2</td>
<td>1:A:726:C:C2</td>
<td>2.69</td>
<td>0.61</td>
</tr>
<tr>
<td>4:D:36:ARG:HD2</td>
<td>4:D:38:TYR:OH</td>
<td>1.90</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:1098:C:H1'</td>
<td>1:A:1168:A:H2</td>
<td>1.66</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:123:C:H2'</td>
<td>1:A:124:G:H8</td>
<td>1.64</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:974:A:H4'</td>
<td>1:A:975:A:H3'</td>
<td>1.83</td>
<td>0.61</td>
</tr>
<tr>
<td>10:J:49:VAL:O</td>
<td>10:J:60:ARG:HG3</td>
<td>2.00</td>
<td>0.61</td>
</tr>
<tr>
<td>3:C:57:ILE:HG12</td>
<td>3:C:66:VAL:HG22</td>
<td>0.72</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:1353:G:N2</td>
<td>1:A:1354:C:C2</td>
<td>2.68</td>
<td>0.61</td>
</tr>
<tr>
<td>2:B:111:ARG:HD3</td>
<td>2:B:145:LEU:HD21</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:1080:A:H5'</td>
<td>5:E:16:THR:OG1</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:1355:G:H2'</td>
<td>1:A:1356:G:H8</td>
<td>1.65</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:27:G:H2'</td>
<td>1:A:28:G:C8</td>
<td>2.36</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:1065:U:H4'</td>
<td>1:A:1066:O:5'</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:309:G:H2'</td>
<td>1:A:310:G:C8</td>
<td>2.34</td>
<td>0.60</td>
</tr>
<tr>
<td>8:H:121:ASP:CG</td>
<td>8:H:122:ARG:H</td>
<td>2.04</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:376:G:H2'</td>
<td>1:A:377:G:H8</td>
<td>1.67</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:548:G:H2'</td>
<td>1:A:549:G:C6</td>
<td>2.37</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:683:G:N2</td>
<td>1:A:708:G:C2</td>
<td>2.70</td>
<td>0.60</td>
</tr>
<tr>
<td>4:D:20:TYR:HA</td>
<td>4:D:26:CYS:HB3</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:181:G:H4'</td>
<td>1:A:182:U:H5'</td>
<td>1.82</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:407:G:H1'</td>
<td>4:D:119:GLN:HE22</td>
<td>1.67</td>
<td>0.60</td>
</tr>
<tr>
<td>6:F:94:GLN:HB3</td>
<td>18:R:32:ARG:HD3</td>
<td>1.82</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:568:G:C2</td>
<td>1:A:883:C:N3</td>
<td>2.70</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:1355:G:H1</td>
<td>1:A:1367:C:H42</td>
<td>1.50</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:174:C:H2'</td>
<td>1:A:175:C:C6</td>
<td>2.36</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:895:G:H1</td>
<td>1:A:904:C:H42</td>
<td>1.50</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:1235:U:H2'</td>
<td>1:A:1236:A:O4'</td>
<td>2.02</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:15:G:C5</td>
<td>1:A:16:A:N7</td>
<td>2.69</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:123:C:H2'</td>
<td>1:A:124:G:C8</td>
<td>2.37</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:255:G:C2</td>
<td>1:A:272:C:C2</td>
<td>2.90</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:279:A:C5</td>
<td>17:Q:98:LEU:CD2</td>
<td>2.67</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:453:A:H2'</td>
<td>1:A:454:C:C6</td>
<td>2.37</td>
<td>0.60</td>
</tr>
<tr>
<td>1:A:266:G:C8</td>
<td>1:A:266:G:H5''</td>
<td>2.37</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:1001:A:H2'</td>
<td>1:A:1001(A):G:C8</td>
<td>2.36</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:46:G:H2'</td>
<td>1:A:366:C:C5</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>3:C:59:ARG:HG2</td>
<td>3:C:64:VAL:CG2</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>4:D:109:GLY:HA3</td>
<td>4:D:165:MET:HG3</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:1080:A:C4'</td>
<td>5:E:16:THR:CG2</td>
<td>2.70</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:1507:A:H2'</td>
<td>1:A:1508:G:H8</td>
<td>1.67</td>
<td>0.59</td>
</tr>
<tr>
<td>4:D:30:LYS:C</td>
<td>4:D:32:ALA:H</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>5:E:18:ARG:HB3</td>
<td>5:E:25:ARG:O</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:1512:U:H2'</td>
<td>1:A:1513:A:C8</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:313:A:H2'</td>
<td>1:A:314:C:H6</td>
<td>1.67</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:32:A:H2'</td>
<td>1:A:33:A:C8</td>
<td>2.38</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:521:G:N1</td>
<td>1:A:522:C:C4</td>
<td>2.70</td>
<td>0.59</td>
</tr>
<tr>
<td>12:L:24:VAL:HG12</td>
<td>12:L:26:ALA:H</td>
<td>1.67</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:1105:A:H2'</td>
<td>1:A:1106:G:H8</td>
<td>1.68</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:769:G:N1</td>
<td>1:A:770:C:C4</td>
<td>2.71</td>
<td>0.59</td>
</tr>
<tr>
<td>10:J:50:ILE:HG13</td>
<td>10:J:60:ARG:NH2</td>
<td>2.18</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:1416:G:H2'</td>
<td>1:A:1417:G:O4'</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:183:G:H2'</td>
<td>1:A:184:G:O4'</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:20:U:H2'</td>
<td>1:A:21:G:O4'</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:861:G:O6</td>
<td>1:A:869:G:N2</td>
<td>2.35</td>
<td>0.59</td>
</tr>
<tr>
<td>10:J:50:ILE:CG1</td>
<td>10:J:60:ARG:NE</td>
<td>2.56</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:1069:CH42</td>
<td>1:A:1106:G:H1</td>
<td>1.51</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:1162:C:C2</td>
<td>1:A:1175:G:N2</td>
<td>2.70</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:170:U:H2'</td>
<td>1:A:171:A:C8</td>
<td>2.33</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:320:C:H2'</td>
<td>1:A:321:A:C8</td>
<td>2.38</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:743:U:H2'</td>
<td>1:A:744:C:C6</td>
<td>2.38</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:77:G:C8</td>
<td>1:A:77:G:H3'</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:128:G:N2</td>
<td>1:A:234:C:C2</td>
<td>2.71</td>
<td>0.59</td>
</tr>
<tr>
<td>4:D:166:LYS:HG3</td>
<td>4:D:178:VAL:HG21</td>
<td>1.85</td>
<td>0.59</td>
</tr>
<tr>
<td>7:G:93:PRO:O</td>
<td>7:G:96:GLN:HG2</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:1238:A:H5'</td>
<td>1:A:1336:C:H41</td>
<td>1.68</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:741:G:H5'</td>
<td>15:O:39:LEU:HD21</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:920:U:O2'</td>
<td>1:A:1081:G:O2'</td>
<td>2.20</td>
<td>0.59</td>
</tr>
<tr>
<td>3:C:66:VAL:CG1</td>
<td>3:C:68:VAL:HG22</td>
<td>2.32</td>
<td>0.59</td>
</tr>
<tr>
<td>1:A:926:G:H3'</td>
<td>1:A:1505:G:N2</td>
<td>2.18</td>
<td>0.58</td>
</tr>
<tr>
<td>10:J:34:VAL:HG22</td>
<td>10:J:74:ILE:HG23</td>
<td>1.85</td>
<td>0.58</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:1074:G:N1</td>
<td>1:A:1075:C:C2</td>
<td>2.72</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:1515:C:H2'</td>
<td>1:A:1516:G:H8</td>
<td>1.68</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:363:A:C6</td>
<td>12:L:31:PRO:HD2</td>
<td>2.38</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:1099:G:C2</td>
<td>1:A:1100:C:O2</td>
<td>2.56</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:928:G:H2'</td>
<td>1:A:929:G:C8</td>
<td>2.38</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:1128:C:H1'</td>
<td>1:A:1146:A:H61</td>
<td>1.67</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:34:C:H2'</td>
<td>1:A:35:G:C8</td>
<td>2.39</td>
<td>0.58</td>
</tr>
<tr>
<td>10:J:7:LYS:HB2</td>
<td>10:J:97:GLU:HB2</td>
<td>1.84</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:1456:G:N2</td>
<td>1:A:1457:G:C8</td>
<td>2.72</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:392:G:H2'</td>
<td>1:A:393:A:H8</td>
<td>1.67</td>
<td>0.58</td>
</tr>
<tr>
<td>6:F:35:ALA:HA</td>
<td>6:F:67:MET:HB3</td>
<td>1.84</td>
<td>0.58</td>
</tr>
<tr>
<td>10:J:60:ARG:NH1</td>
<td>10:J:60:ARG:HB2</td>
<td>2.19</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:1464:G:N2</td>
<td>1:A:1465:C:C2</td>
<td>2.72</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:1118:C:H2'</td>
<td>1:A:1119:C:C6</td>
<td>2.39</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:1172:C:H2'</td>
<td>1:A:1173:G:H8</td>
<td>1.68</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:936:C:H2'</td>
<td>1:A:937:A:H8</td>
<td>1.69</td>
<td>0.58</td>
</tr>
<tr>
<td>5:E:81:GLU:HA</td>
<td>5:E:89:ILE:O</td>
<td>2.04</td>
<td>0.58</td>
</tr>
<tr>
<td>1:A:1369:C:H2'</td>
<td>1:A:1370:G:C8</td>
<td>2.40</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:1059:C:H2'</td>
<td>1:A:1060:C:C6</td>
<td>2.39</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:397:A:N3</td>
<td>1:A:397:A:H3'</td>
<td>2.18</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:648:A:H2'</td>
<td>1:A:649:G:C8</td>
<td>2.39</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:860:A:H3'</td>
<td>1:A:861:G:C8</td>
<td>2.39</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:1097:C:H2'</td>
<td>1:A:1098:C:C6</td>
<td>2.38</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:128:G:C2</td>
<td>1:A:234:C:C2</td>
<td>2.93</td>
<td>0.57</td>
</tr>
<tr>
<td>11:K:15:ALA:HA</td>
<td>11:K:77:MET:HA</td>
<td>1.85</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:1118:C:H4'</td>
<td>9:I:83:ARG:HH22</td>
<td>1.69</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:689:C:H5'</td>
<td>11:K:27:ASN:ND2</td>
<td>2.20</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:883:C:H2'</td>
<td>1:A:884:U:C6</td>
<td>2.38</td>
<td>0.57</td>
</tr>
<tr>
<td>10:J:37:PRO:HB2</td>
<td>10:J:70:ARG:HH11</td>
<td>1.68</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:401:C:H2'</td>
<td>1:A:402:G:H8</td>
<td>1.68</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:540:G:H2'</td>
<td>1:A:541:G:C8</td>
<td>2.39</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:837:G:O5'</td>
<td>1:A:837:G:H8</td>
<td>1.88</td>
<td>0.57</td>
</tr>
<tr>
<td>4:D:115:ARG:HB3</td>
<td>4:D:115:ARG:HH11</td>
<td>1.69</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:549:C:H2'</td>
<td>1:A:550:G:H8</td>
<td>1.70</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:681:C:C2</td>
<td>1:A:710:G:N2</td>
<td>2.72</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:392:G:H2'</td>
<td>1:A:393:A:C8</td>
<td>2.40</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:590:C:H42</td>
<td>1:A:649:G:H1</td>
<td>1.53</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:864:A:C2</td>
<td>1:A:865:A:C2</td>
<td>2.92</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:877:C:H2'</td>
<td>1:A:878:G:C8</td>
<td>2.40</td>
<td>0.57</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>2:B:97:TRP:HZ2</td>
<td>2:B:102:LEU:HD13</td>
<td>1.70</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:1081:G:H5'</td>
<td>5:E:18:ARG:HD3</td>
<td>1.85</td>
<td>0.57</td>
</tr>
<tr>
<td>8:H:108:GLY:HA3</td>
<td>8:H:138:TRP:HB3</td>
<td>1.87</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:1132:C:H2'</td>
<td>1:A:1133:G:H8</td>
<td>1.69</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:1225:A:N3</td>
<td>1:A:1225:A:H2'</td>
<td>2.20</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:78:G:H2'</td>
<td>1:A:79:G:O4'</td>
<td>2.05</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:1409:C:H2'</td>
<td>1:A:1410:G:H8</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:1409:C:H2'</td>
<td>1:A:1410:G:C8</td>
<td>2.40</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:585:G:H2'</td>
<td>1:A:586:C:O4'</td>
<td>2.04</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:1114:C:C2</td>
<td>1:A:1187:G:C2</td>
<td>2.93</td>
<td>0.56</td>
</tr>
<tr>
<td>5:E:83:GLU:HA</td>
<td>5:E:87:SER:O</td>
<td>2.04</td>
<td>0.56</td>
</tr>
<tr>
<td>19:S:50:ALA:HB1</td>
<td>19:S:57:HIS:HB3</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:1300:G:O2'</td>
<td>1:A:1303:C:N4</td>
<td>2.37</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:19:C:H2'</td>
<td>1:A:20:U:H6</td>
<td>1.69</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:437:U:H3'</td>
<td>1:A:438:G:C8</td>
<td>2.40</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:582:U:H2'</td>
<td>1:A:583:U:C8</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:1104:G:H5''</td>
<td>1:A:1104:G:H8</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>8:H:113:SER:HB2</td>
<td>8:H:134:ILE:HD11</td>
<td>1.86</td>
<td>0.56</td>
</tr>
<tr>
<td>12:L:75:HIS:HD2</td>
<td>12:L:77:LEU:H</td>
<td>1.52</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:1488:G:H2'</td>
<td>1:A:1489:G:H8</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:184:G:H2'</td>
<td>1:A:185:G:H8</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:109:A:H2'</td>
<td>1:A:326:G:N2</td>
<td>2.21</td>
<td>0.56</td>
</tr>
<tr>
<td>3:C:28:GLN:NE2</td>
<td>3:C:32:LEU:HD11</td>
<td>2.12</td>
<td>0.56</td>
</tr>
<tr>
<td>3:C:66:VAL:HG12</td>
<td>3:C:68:VAL:CG2</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:919:A:N3</td>
<td>1:A:1080:A:H2</td>
<td>2.03</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:918:A:C2</td>
<td>1:A:1079:G:N2</td>
<td>2.74</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:1121:U:H2'</td>
<td>1:A:1122:U:C6</td>
<td>2.41</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:434:U:H2'</td>
<td>1:A:435:C:C6</td>
<td>2.41</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:1355:G:H2'</td>
<td>1:A:1356:G:C8</td>
<td>2.40</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:153:C:N4</td>
<td>1:A:154:C:N4</td>
<td>2.54</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:967:C:H2'</td>
<td>1:A:968:A:C8</td>
<td>2.40</td>
<td>0.56</td>
</tr>
<tr>
<td>2:B:88:ALA:HB2</td>
<td>2:B:219:VAL:HG13</td>
<td>1.86</td>
<td>0.56</td>
</tr>
<tr>
<td>1:A:1368:G:N2</td>
<td>1:A:1369:C:C2</td>
<td>2.74</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:165:C:H2'</td>
<td>1:A:166:G:H8</td>
<td>1.70</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:671:G:C2</td>
<td>1:A:736:C:N3</td>
<td>2.74</td>
<td>0.55</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:834:C:C2</td>
<td>1:A:853:G:C2</td>
<td>2.94</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:409:G:OP1</td>
<td>4:D:24:GLU:HB3</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>10:J:20:ALA:CB</td>
<td>10:J:70:ARG:NE</td>
<td>2.69</td>
<td>0.55</td>
</tr>
<tr>
<td>17:Q:56:VAL:HG13</td>
<td>17:Q:77:VAL:HB</td>
<td>1.87</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:1244:C:H2'</td>
<td>1:A:1245:A:C8</td>
<td>2.40</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:1174:G:N2</td>
<td>2.75</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>1:A:877:C:H2'</td>
<td>1:A:878:G:H8</td>
<td>1.71</td>
<td>0.55</td>
</tr>
<tr>
<td>10:J:48:THR:O</td>
<td>10:J:60:ARG:HD3</td>
<td>2.05</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:1071:C:H2'</td>
<td>1:A:1072:G:C8</td>
<td>2.40</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:1106:G:N2</td>
<td>1:A:1107:C:C2</td>
<td>2.74</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:1324:A:C8</td>
<td>2.41</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>1:A:254:G:C8</td>
<td>2.41</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>3:C:57:ILE:CG1</td>
<td>3:C:66:VAL:CG2</td>
<td>2.54</td>
<td>0.55</td>
</tr>
<tr>
<td>5:E:17:ALA:HA</td>
<td>5:E:26:PHE:HA</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:1346:A:C8</td>
<td>1:A:1348:U:C2</td>
<td>2.94</td>
<td>0.55</td>
</tr>
<tr>
<td>8:H:121:ASP:CG</td>
<td>8:H:122:ARG:N</td>
<td>2.60</td>
<td>0.55</td>
</tr>
<tr>
<td>3:C:30:ARG:HG2</td>
<td>14:N:37:PHE:CA</td>
<td>2.37</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:81:U:C5'</td>
<td>2.26</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>4:D:32:ALA:O</td>
<td>4:D:36:ARG:N</td>
<td>2.39</td>
<td>0.55</td>
</tr>
<tr>
<td>8:H:120:THR:HG22</td>
<td>8:H:121:ASP:H</td>
<td>1.70</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:559:H:H5''</td>
<td>1:A:559:H:H5''</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>3:C:29:TYR:OH</td>
<td>14:N:37:PHE:HE1</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>3:C:59:ARG:CZ</td>
<td>3:C:64:VAL:CG2</td>
<td>2.64</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:336:C:C2</td>
<td>2.75</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>1:A:736:C:C2</td>
<td>2.95</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>1:A:940:C:N4</td>
<td>2.75</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>1:A:1206:G:C8</td>
<td>2.42</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>1:A:1080:A:C2</td>
<td>2.94</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>1:A:928:G:P</td>
<td>2.65</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>1:A:1234:C:N4</td>
<td>2.75</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>1:A:384:G:H1'</td>
<td>2.42</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>1:A:752:G:O2'</td>
<td>2.25</td>
<td>0.55</td>
<td></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:266:G:H5&quot;</td>
<td>1:A:266:G:H8</td>
<td>1.70</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:455:C:H2'</td>
<td>1:A:456:C:C6</td>
<td>2.42</td>
<td>0.54</td>
</tr>
<tr>
<td>12:L:25:PRO:C</td>
<td>12:L:27:LEU:H</td>
<td>2.11</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:1512:U:H2'</td>
<td>1:A:1513:A:H8</td>
<td>1.71</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:229:U:H2'</td>
<td>1:A:230:G:H8</td>
<td>1.72</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:28:G:H2'</td>
<td>1:A:29:G:O4'</td>
<td>2.06</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:659:U:H2'</td>
<td>1:A:660:G:C8</td>
<td>2.42</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:928:G:H2'</td>
<td>1:A:929:G:H8</td>
<td>1.72</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:279:A:N9</td>
<td>17:Q:98:LEU:CD2</td>
<td>2.67</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:1020:U:H2'</td>
<td>1:A:1021:G:C8</td>
<td>2.43</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:1162:C:C2</td>
<td>1:A:1175:G:C2</td>
<td>2.96</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:577:G:N2</td>
<td>1:A:578:C:C2</td>
<td>2.76</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:1256:A:H2'</td>
<td>3:C:27:LYS:HZ1</td>
<td>1.72</td>
<td>0.54</td>
</tr>
<tr>
<td>6:F:27:GLN:HA</td>
<td>6:F:30:LEU:HD12</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:1135:U:H4'</td>
<td>1:A:1136:U:H5</td>
<td>1.71</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:1342:C:H2'</td>
<td>1:A:1343:G:H8</td>
<td>1.71</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:761:G:C2</td>
<td>1:A:762:C:C2</td>
<td>2.95</td>
<td>0.54</td>
</tr>
<tr>
<td>2:B:61:LEU:HD21</td>
<td>2:B:160:ASP:HB3</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>13:M:34:LEU:HD13</td>
<td>13:M:41:PRO:HG3</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:333:G:N2</td>
<td>1:A:334:C:C2</td>
<td>2.75</td>
<td>0.54</td>
</tr>
<tr>
<td>2:B:61:LEU:HD11</td>
<td>2:B:160:ASP:HB2</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>4:D:156:GLU:HA</td>
<td>4:D:159:ARG:HD2</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>4:D:24:GLU:HA</td>
<td>4:D:27:TYR:HB2</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>11:K:87:THR:HZ1</td>
<td>24:Y:29:G:H4'</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>15:O:26:GLU:O</td>
<td>15:O:29:VAL:HG12</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:101:A:H2'</td>
<td>1:A:102:G:C8</td>
<td>2.34</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:500:G:C6</td>
<td>1:A:501:C:N4</td>
<td>2.76</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:836:G:H2'</td>
<td>1:A:837:G:C8</td>
<td>2.43</td>
<td>0.54</td>
</tr>
<tr>
<td>15:O:82:ILE:HA</td>
<td>15:O:87:ILE:HD12</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:197:A:C6</td>
<td>1:A:221:C:H4'</td>
<td>2.43</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:262:A:H5&quot;</td>
<td>20:T:73:His:CE1</td>
<td>2.21</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:568:G:C2</td>
<td>1:A:883:C:C2</td>
<td>2.95</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:588:G:N1</td>
<td>1:A:589:C:C4</td>
<td>2.75</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:756:C:H2'</td>
<td>1:A:757:U:O4'</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:927:G:OP2</td>
<td>1:A:927:G:H4'</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>2:B:17:PHE:HB2</td>
<td>2:B:41:ILE:HG12</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>8:H:91:ARG:O</td>
<td>8:H:91:ARG:HG3</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:1008:G:C2</td>
<td>1:A:1022:G:N2</td>
<td>2.76</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:661:G:C2</td>
<td>1:A:745:C:N3</td>
<td>2.76</td>
<td>0.54</td>
</tr>
<tr>
<td>Atom-1</td>
<td>Atom-2</td>
<td>Interatomic distance (Å)</td>
<td>Clash overlap (Å)</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>--------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>1:A:669:U:H2'</td>
<td>1:A:670:G:C8</td>
<td>2.43</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:936:C:H2'</td>
<td>1:A:937:A:C8</td>
<td>2.42</td>
<td>0.54</td>
</tr>
<tr>
<td>20:T:49:ALA:HB3</td>
<td>20:T:99:LEU:HD12</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:1077:G:N3</td>
<td>1:A:1079:G:C8</td>
<td>2.75</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:934:C:C5</td>
<td>1:A:1344:C:H2'</td>
<td>2.43</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:972:C:O3'</td>
<td>10:J:57:LYS:HG3</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:1098:C:H1'</td>
<td>1:A:1168:A:C2</td>
<td>2.43</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:166:G:H2'</td>
<td>1:A:167:G:C8</td>
<td>2.43</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:730:G:N2</td>
<td>1:A:765:G:H5''</td>
<td>2.23</td>
<td>0.54</td>
</tr>
<tr>
<td>3:C:57:ILE:CD1</td>
<td>3:C:66:VAL:CG2</td>
<td>2.85</td>
<td>0.54</td>
</tr>
<tr>
<td>10:J:6:ILE:HG13</td>
<td>10:J:72:VAL:O</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>12:L:33:ARG:HD3</td>
<td>12:L:62:SER:HB3</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:919:A:N3</td>
<td>1:A:1080:A:C2</td>
<td>2.76</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:184:G:H2'</td>
<td>1:A:185:A:C8</td>
<td>2.42</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:279:A:C4</td>
<td>17:Q:98:LEU:HD22</td>
<td>2.31</td>
<td>0.53</td>
</tr>
<tr>
<td>3:C:30:ARG:CB</td>
<td>3:C:30:ARG:CZ</td>
<td>2.86</td>
<td>0.53</td>
</tr>
<tr>
<td>5:E:127:ASN:ND2</td>
<td>5:E:129:ILE:H</td>
<td>2.06</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:994:A:N7</td>
<td>1:A:1216:G:H4'</td>
<td>2.24</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:1513:A:H2'</td>
<td>1:A:1514:C:C6</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>8:H:12:ARG:NH1</td>
<td>8:H:25:ASP:O</td>
<td>2.41</td>
<td>0.53</td>
</tr>
<tr>
<td>11:K:84:VAL:CG2</td>
<td>11:K:91:ARG:NH2</td>
<td>2.71</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:504:C:C2</td>
<td>1:A:542:G:N2</td>
<td>2.76</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:589:C:O2</td>
<td>1:A:651:C:O2</td>
<td>2.26</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:872:A:C8</td>
<td>1:A:874:G:C8</td>
<td>2.96</td>
<td>0.53</td>
</tr>
<tr>
<td>4:D:43:HIS:HB3</td>
<td>4:D:46:LYS:HD2</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:1118:C:H2'</td>
<td>1:A:1119:C:H6</td>
<td>1.73</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:114:U:H2'</td>
<td>1:A:115:G:C8</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:1526:G:H2'</td>
<td>1:A:1527:C:C6</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:229:U:H2'</td>
<td>1:A:230:G:C8</td>
<td>2.44</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:289:G:N2</td>
<td>1:A:290:C:C2</td>
<td>2.76</td>
<td>0.53</td>
</tr>
<tr>
<td>19:S:30:LEU:HD23</td>
<td>19:S:50:ALA:HB2</td>
<td>1.89</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:1048:G:H2'</td>
<td>1:A:1050:G:H8</td>
<td>1.73</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:152:OP2</td>
<td>1:A:153:C:N4</td>
<td>2.42</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:939:G:H2'</td>
<td>1:A:940:C:C6</td>
<td>2.44</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:35:G:H2'</td>
<td>1:A:36:C:C6</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:44:G:H3'</td>
<td>1:A:45:U:C6</td>
<td>2.44</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:509:A:H5'</td>
<td>4:D:55:ALA:HB2</td>
<td>1.89</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:576:G:H3'</td>
<td>1:A:577:G:C5'</td>
<td>2.38</td>
<td>0.53</td>
</tr>
<tr>
<td>3:C:77:ILE:HA</td>
<td>3:C:84:ILE:HB</td>
<td>1.91</td>
<td>0.53</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:980:C:H1'</td>
<td>14:N:19:ARG:HG2</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:1338:G:H2'</td>
<td>1:A:1339:A:C8</td>
<td>2.44</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:1348:U:H2'</td>
<td>1:A:1349:A:C8</td>
<td>2.41</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:1464:G:N1</td>
<td>1:A:1465:C:C4</td>
<td>2.77</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:351:G:H4'</td>
<td>1:A:352:C:OP1</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:669:U:H2'</td>
<td>1:A:670:G:H8</td>
<td>1.74</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:1088:G:H2'</td>
<td>1:A:1089:G:O4'</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:735:C:H5'</td>
<td>18:R:71:LYS:HD3</td>
<td>1.91</td>
<td>0.53</td>
</tr>
<tr>
<td>10:J:48:THR:CG2</td>
<td>10:J:60:ARG:HG2</td>
<td>2.27</td>
<td>0.53</td>
</tr>
<tr>
<td>1:A:1078:U:O2'</td>
<td>1:A:1079:G:O4'</td>
<td>2.27</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:316:G:H1</td>
<td>1:A:337:C:N4</td>
<td>2.05</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:439:A:C4</td>
<td>1:A:496:A:C2</td>
<td>2.96</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:621:A:H2'</td>
<td>1:A:622:A:C8</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:22:G:C6</td>
<td>1:A:23:C:C4</td>
<td>2.96</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:598:U:H2'</td>
<td>1:A:599:C:C6</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>5:E:110:LEU:HD13</td>
<td>5:E:118:ILE:HG13</td>
<td>1.89</td>
<td>0.52</td>
</tr>
<tr>
<td>10:J:17:ASP:HA</td>
<td>10:J:70:ARG:NH2</td>
<td>2.24</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:1321:C:H5'</td>
<td>13:M:87:TYR:CE1</td>
<td>2.45</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:1502:A:H2'</td>
<td>1:A:1504:G:C8</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:399:G:C6</td>
<td>1:A:400:C:N4</td>
<td>2.77</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:505:G:H2'</td>
<td>1:A:506:G:H8</td>
<td>1.73</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:643:C:H2'</td>
<td>1:A:644:G:C8</td>
<td>2.43</td>
<td>0.52</td>
</tr>
<tr>
<td>2:B:142:LEU:HD23</td>
<td>2:B:146:GLN:HE22</td>
<td>1.74</td>
<td>0.52</td>
</tr>
<tr>
<td>3:C:30:ARG:CZ</td>
<td>3:C:30:ARG:HB2</td>
<td>2.37</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:1151:A:O2'</td>
<td>1:A:1152:A:H8</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:122:G:N1</td>
<td>1:A:123:C:C2</td>
<td>2.77</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:1291:G:O3'</td>
<td>9:I:39:GLY:HA3</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:1400:C:N3</td>
<td>27:A:1710:G:O6</td>
<td>2.41</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:598:U:H2'</td>
<td>1:A:599:C:H6</td>
<td>1.74</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:71:C:H2'</td>
<td>1:A:72:C:O4'</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:189:G:C2</td>
<td>1:A:189(A):C:C2</td>
<td>2.98</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:332:G:C2</td>
<td>1:A:333:G:C8</td>
<td>2.98</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:761:G:C6</td>
<td>1:A:762:C:C4</td>
<td>2.98</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:779:C:H2'</td>
<td>1:A:780:A:O4'</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:832:C:C2</td>
<td>1:A:855:G:C2</td>
<td>2.97</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:872:A:C4</td>
<td>1:A:874:G:N7</td>
<td>2.77</td>
<td>0.52</td>
</tr>
<tr>
<td>8:H:111:ILE:HG22</td>
<td>8:H:134:ILE:HD12</td>
<td>1.91</td>
<td>0.52</td>
</tr>
</tbody>
</table>

Continued from previous 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:109:A:H5'</td>
<td>1:A:110:C:C5</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:1106:C:N4</td>
<td>1:A:1107:C:N4</td>
<td>2.78</td>
<td>0.52</td>
</tr>
<tr>
<td>3:C:174:PRO:HB2</td>
<td>3:C:177:THR:HG23</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>10:J:17:ASP:CB</td>
<td>10:J:70:ARG:NH2</td>
<td>2.73</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:1107:C:N4</td>
<td>1:A:1147:C:N4</td>
<td>2.02</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:1212:G:C2</td>
<td>1:A:1121:G:C2</td>
<td>2.57</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:600:A:H4'</td>
<td>1:A:611:G:O5'</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>4:D:200:GLU:OE1</td>
<td>4:D:201:GLN:HG3</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:1030:C:H42</td>
<td>1:A:1031:G:H1</td>
<td>1.55</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:9266:G:H3'</td>
<td>1:A:1005:G:H2</td>
<td>1.74</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:1518:A:H2'</td>
<td>1:A:1519:A:C8</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:500:C:N3</td>
<td>1:A:542:G:C2</td>
<td>2.78</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:643:C:H2'</td>
<td>1:A:644:G:H8</td>
<td>1.75</td>
<td>0.52</td>
</tr>
<tr>
<td>4:D:98:GLU:HA</td>
<td>4:D:103:ASN:ND2</td>
<td>2.25</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:996:U:H2'</td>
<td>1:A:100:U:H2'</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:1488:G:H2'</td>
<td>1:A:1489:G:C8</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:360:A:H2'</td>
<td>1:A:361:G:O4'</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:667:G:H2'</td>
<td>1:A:668:G:H8</td>
<td>1.74</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:834:C:O2</td>
<td>1:A:853:G:C2</td>
<td>2.63</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:1010:G:H1</td>
<td>1:A:1019:G:H42</td>
<td>1.57</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:1068:G:N2</td>
<td>1:A:1069:G:C2</td>
<td>2.78</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:955:U:H1'</td>
<td>1:A:1227:U:N6</td>
<td>2.24</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:505:G:H5'</td>
<td>1:A:534:U:H2'</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>4:D:36:ARG:HG3</td>
<td>4:D:38:TYR:CD2</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:1048:G:H2'</td>
<td>1:A:1050:G:C8</td>
<td>2.45</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:1223:G:H5'</td>
<td>1:A:1224:G:H5'</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:558:G:H3'</td>
<td>1:A:559:G:C5</td>
<td>2.40</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:1007:G:H42</td>
<td>1:A:1022:G:H1</td>
<td>1.57</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:230:G:H2'</td>
<td>1:A:231:G:O4'</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:444:G:H3'</td>
<td>1:A:455:U:H6</td>
<td>1.75</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:766:G:H2'</td>
<td>1:A:767:G:O4'</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:1379:G:HO2'</td>
<td>7:G:156:TRP:HD1</td>
<td>1.57</td>
<td>0.51</td>
</tr>
<tr>
<td>15:O:54:ARG:HH11</td>
<td>15:O:58:MET:HG3</td>
<td>1.74</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:1014:G:H5'</td>
<td>19:S:14:HIS:HB3</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:755:G:N2</td>
<td>1:A:756:G:C2</td>
<td>2.79</td>
<td>0.51</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:1376:U:H5'</td>
<td>7:G:102:ARG:HH22</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:1434:A:H3'</td>
<td>1:A:1435:G:C8</td>
<td>2.46</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:258:G:N2</td>
<td>1:A:269:C:C2</td>
<td>2.78</td>
<td>0.51</td>
</tr>
<tr>
<td>8:H:18:ARG:HH12</td>
<td>8:H:78:GLN:HG3</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:1081:G:OP2</td>
<td>5:E:16:THR:CG2</td>
<td>2.58</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:737:A:H2'</td>
<td>1:A:738:C:C6</td>
<td>2.45</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:92:C:H2'</td>
<td>1:A:93:G:H8</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>3:C:120:VAL:HB</td>
<td>3:C:198:VAL:HG11</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:881:G:OP2</td>
<td>12:L:12:ARG:NH2</td>
<td>2.41</td>
<td>0.51</td>
</tr>
<tr>
<td>12:L:41:ARG:HH12</td>
<td>12:L:57:LYS:HG3</td>
<td>1.74</td>
<td>0.51</td>
</tr>
<tr>
<td>16:P:33:ILE:HG22</td>
<td>16:P:34:GLU:HB2</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:262:A:H4'</td>
<td>20:Y:73:HIS:HE1</td>
<td>1.66</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:827:U:O2'</td>
<td>8:H:19:VAL:HG11</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:1359:C:H3'</td>
<td>14:N:35:ARG:HH21</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:1312:G:C2</td>
<td>1:A:1326:C:C2</td>
<td>2.98</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:437:U:H3'</td>
<td>1:A:438:G:H8</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:824:C:H2'</td>
<td>1:A:825:G:H8</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>3:C:178:LEU:C</td>
<td>3:C:180:ALA:H</td>
<td>2.14</td>
<td>0.51</td>
</tr>
<tr>
<td>4:D:35:ARG:NH2</td>
<td>4:D:35:ARG:CB</td>
<td>2.73</td>
<td>0.51</td>
</tr>
<tr>
<td>6:F:45:LEU:HG</td>
<td>6:F:50:TYR:HD2</td>
<td>1.75</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:1379:G:O2'</td>
<td>7:G:156:TRP:HD1</td>
<td>1.94</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:1226:C:H3'</td>
<td>13:M:96:LEU:HD21</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>16:P:5:ARG:HH21</td>
<td>16:P:28:ARG:HA</td>
<td>1.75</td>
<td>0.51</td>
</tr>
<tr>
<td>16:P:48:TRP:H</td>
<td>16:P:48:TRP:HD1</td>
<td>1.57</td>
<td>0.51</td>
</tr>
<tr>
<td>17:Q:19:VAL:HG23</td>
<td>17:Q:44:ALA:HB3</td>
<td>1.91</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:864:A:O2'</td>
<td>1:A:1078:U:O4</td>
<td>2.28</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:919:A:O2'</td>
<td>1:A:1080:A:O2'</td>
<td>2.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:1086:U:O5'</td>
<td>1:A:1086:U:H6</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:1466:C:H2'</td>
<td>1:A:1467:G:O4'</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:694:A:H5'</td>
<td>11:K:53:SER:HB2</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:914:A:C4</td>
<td>1:A:915:A:N7</td>
<td>2.78</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:98:G:H2'</td>
<td>1:A:99:U:C6</td>
<td>2.46</td>
<td>0.51</td>
</tr>
<tr>
<td>5:E:50:GLU:HB2</td>
<td>5:E:53:LEU:HB3</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>8:H:28:ALA:HA</td>
<td>8:H:59:LEU:HD12</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:122:G:C6</td>
<td>1:A:123:C:C4</td>
<td>2.99</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:1281:A:O2'</td>
<td>1:A:1282:G:OP2</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:35:G:C6</td>
<td>1:A:36:C:N4</td>
<td>2.79</td>
<td>0.51</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:663:A:H2'</td>
<td>1:A:664:G:O4'</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:77:G:C8</td>
<td>1:A:77:G:C3'</td>
<td>2.93</td>
<td>0.51</td>
</tr>
<tr>
<td>2:B:124:SER:O</td>
<td>2:B:127:ILE:HG13</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>2:B:163:PHE:HA</td>
<td>2:B:185:ILE:HB</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>7:G:27:ILE:HA</td>
<td>7:G:30:ILE:HD12</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:1348:U:OP1</td>
<td>9:I:110:GLU:N</td>
<td>2.31</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:251:G:C2</td>
<td>1:A:266:G:C6</td>
<td>3.00</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:270:A:H2'</td>
<td>1:A:271:C:C6</td>
<td>2.46</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:827:U:N3</td>
<td>1:A:872:A:C6</td>
<td>2.67</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:1055:A:H2</td>
<td>3:C:194:GLY:CA</td>
<td>2.24</td>
<td>0.50</td>
</tr>
<tr>
<td>5:E:20:GLN:O</td>
<td>5:E:21:ALA:C</td>
<td>2.49</td>
<td>0.50</td>
</tr>
<tr>
<td>7:G:16:LEU:HD22</td>
<td>9:I:45:ALA:HB2</td>
<td>1.92</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:1048:G:N2</td>
<td>1:A:1210:C:C2</td>
<td>2.79</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:769:G:HA'</td>
<td>1:A:1513:A:H4'</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:198:G:H2'</td>
<td>1:A:199:G:C8</td>
<td>2.46</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:1070:U:H2'</td>
<td>1:A:1071:C:C5</td>
<td>2.43</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:1323:G:H2'</td>
<td>1:A:1324:A:O4'</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:1366:C:H2'</td>
<td>1:A:1367:C:C6</td>
<td>2.46</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:1399:C:C2</td>
<td>1:A:1502:A:N6</td>
<td>2.79</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:661:G:N2</td>
<td>1:A:745:C:C2</td>
<td>2.79</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:79:G:H2'</td>
<td>1:A:80:G:H8</td>
<td>1.75</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:1103:C:OP1</td>
<td>2:B:98:LEU:HD22</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>6:F:100:ASN:HA</td>
<td>18:R:23:LYS:HE2</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>6:F:45:LEU:HG</td>
<td>6:F:59:TYR:CD2</td>
<td>2.46</td>
<td>0.50</td>
</tr>
<tr>
<td>14:N:24:CYS:HB3</td>
<td>14:N:29:ARG:N</td>
<td>2.19</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:1243:C:C2</td>
<td>1:A:1295:G:N2</td>
<td>2.80</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:557:G:C6</td>
<td>1:A:558:G:C2</td>
<td>2.99</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:731:G:N2</td>
<td>1:A:732:C:C2</td>
<td>2.79</td>
<td>0.50</td>
</tr>
<tr>
<td>4:D:24:GLU:O</td>
<td>4:D:25:ARG:HB3</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>15:O:41:GLU:O</td>
<td>15:O:44:LYS:HB2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:714:G:H2'</td>
<td>1:A:715:A:C8</td>
<td>2.47</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:774:G:N2</td>
<td>1:A:806:C:C2</td>
<td>2.80</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:824:C:H2'</td>
<td>1:A:825:G:C8</td>
<td>2.47</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:932:C:H5'</td>
<td>7:G:3:ARG:CB</td>
<td>2.42</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:223:U:H5'</td>
<td>20:F:68:LYS:HZ1</td>
<td>1.77</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:13:U:C4</td>
<td>1:A:915:A:N6</td>
<td>2.79</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:1525:G:H2'</td>
<td>1:A:1526:G:H8</td>
<td>1.76</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:613:C:H2'</td>
<td>1:A:614:A:H8</td>
<td>1.77</td>
<td>0.50</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:572:A:N1</td>
<td>1:A:864:A:C5</td>
<td>2.80</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:916:G:C2</td>
<td>1:A:917:G:C5</td>
<td>2.99</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:90:U:H2'</td>
<td>1:A:91:C:H6</td>
<td>1.71</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:946:A:H2'</td>
<td>1:A:947:G:H8</td>
<td>1.75</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:30:U:H3'</td>
<td>1:A:31:G:H5'</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:354:G:N2</td>
<td>1:A:355:C:C2</td>
<td>2.79</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:525:C:H2'</td>
<td>1:A:526:C:C6</td>
<td>2.46</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:864:A:C2'</td>
<td>1:A:865:A:C8</td>
<td>2.83</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:1018:C:H2'</td>
<td>1:A:1019:C:C6</td>
<td>2.47</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:1059:C:H2'</td>
<td>1:A:1060:C:H6</td>
<td>1.76</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:1356:G:C2</td>
<td>1:A:1367:C:C2</td>
<td>3.00</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:590:C:N4</td>
<td>1:A:649:G:H1</td>
<td>2.10</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:987:G:O5'</td>
<td>1:A:987:G:H8</td>
<td>1.95</td>
<td>0.50</td>
</tr>
<tr>
<td>20:T:54:LYS:HA</td>
<td>20:T:57:ARG:HH11</td>
<td>1.77</td>
<td>0.50</td>
</tr>
<tr>
<td>23:X:5:TYR:CE2</td>
<td>23:X:65:TRP:CH2</td>
<td>2.96</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:22:G:C2</td>
<td>1:A:23:C:C2</td>
<td>3.00</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:681:C:N3</td>
<td>1:A:710:G:C2</td>
<td>2.79</td>
<td>0.50</td>
</tr>
<tr>
<td>1:A:827:U:C4</td>
<td>1:A:872:A:N1</td>
<td>2.79</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:920:U:C2'</td>
<td>1:A:921:U:C6</td>
<td>2.83</td>
<td>0.49</td>
</tr>
<tr>
<td>4:D:133:VAL:HG11</td>
<td>4:D:138:TYR:HD2</td>
<td>1.77</td>
<td>0.49</td>
</tr>
<tr>
<td>4:D:57:ARG:NE</td>
<td>5:E:107:ARG:HE</td>
<td>2.10</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:1365:G:C2</td>
<td>1:A:1366:C:C2</td>
<td>3.00</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:1459:C:H2'</td>
<td>1:A:1460:A:O'</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:500:G:H2'</td>
<td>1:A:501:C:C6</td>
<td>2.47</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:501:C:H2'</td>
<td>1:A:502:G:H8</td>
<td>1.77</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:717:C:H2'</td>
<td>1:A:734:G:H5'</td>
<td>1.93</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:876:G:C6</td>
<td>1:A:877:C:N4</td>
<td>2.79</td>
<td>0.49</td>
</tr>
<tr>
<td>17:Q:18:THR:HG23</td>
<td>17:Q:69:LYS:HE3</td>
<td>1.93</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:1007:C:O2</td>
<td>1:A:1023:G:C2</td>
<td>2.65</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:130:A:H8</td>
<td>1:A:130:A:OP1</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:1393:U:H2'</td>
<td>1:A:1395:C:C5</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:500:G:C2</td>
<td>1:A:501:C:N3</td>
<td>2.80</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:562:C:OP2</td>
<td>1:A:562:C:H2'</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:648:A:H2'</td>
<td>1:A:649:G:H8</td>
<td>1.76</td>
<td>0.49</td>
</tr>
<tr>
<td>2:B:61:LEU:HD11</td>
<td>2:B:160:ASP:CB</td>
<td>2.42</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:1135:U:H4'</td>
<td>1:A:1136:U:C5</td>
<td>2.47</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:861:G:N2</td>
<td>1:A:862:C:C2</td>
<td>2.81</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:1023:G:H2'</td>
<td>1:A:1023:G:N3</td>
<td>2.28</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:366:C:H1'</td>
<td>1:A:394:G:H22</td>
<td>1.78</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:725:G:N1</td>
<td>1:A:726:C:C4</td>
<td>2.81</td>
<td>0.49</td>
</tr>
<tr>
<td>4:D:133:VAL:HG11</td>
<td>4:D:138:TYR:CD2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:1014:A:C5'</td>
<td>19:S:14:HIS:HB3</td>
<td>2.42</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:1354:C:H42</td>
<td>1:A:1368:G:H1</td>
<td>1.60</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:92:C:H2'</td>
<td>1:A:93:G:C8</td>
<td>2.47</td>
<td>0.49</td>
</tr>
<tr>
<td>4:D:149:ALA:HB3</td>
<td>4:D:152:SER:HB2</td>
<td>1.95</td>
<td>0.49</td>
</tr>
<tr>
<td>4:D:19:LEU:HB3</td>
<td>4:D:21:LEU:HB2</td>
<td>1.93</td>
<td>0.49</td>
</tr>
<tr>
<td>5:E:82:VAL:O</td>
<td>5:E:89:ILE:HG22</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:1127:G:N2</td>
<td>1:A:1145:C:C2</td>
<td>2.81</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:1436:U:H2'</td>
<td>1:A:1437:C:O4'</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:548:G:C6</td>
<td>1:A:549:C:N4</td>
<td>2.80</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:585:G:C2</td>
<td>1:A:586:C:C2</td>
<td>3.00</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:623:C:H2'</td>
<td>1:A:624:C:O4'</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:590:C:OP1</td>
<td>8:H:30:ARG:N</td>
<td>2.45</td>
<td>0.49</td>
</tr>
<tr>
<td>11:K:91:ARG:NH2</td>
<td>18:R:88:LYS:NZ</td>
<td>2.55</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:1082:G:H2'</td>
<td>1:A:1083:U:O4'</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:233:C:H2'</td>
<td>1:A:234:C:H6</td>
<td>1.76</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:505:G:H2'</td>
<td>1:A:506:G:C8</td>
<td>2.47</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:549:C:H2'</td>
<td>1:A:550:G:C8</td>
<td>2.48</td>
<td>0.49</td>
</tr>
<tr>
<td>4:D:3:ARG:CZ</td>
<td>4:D:3:ARG:HA</td>
<td>2.43</td>
<td>0.49</td>
</tr>
<tr>
<td>17:Q:93:GLN:C</td>
<td>17:Q:93:GLN:HE21</td>
<td>2.15</td>
<td>0.49</td>
</tr>
<tr>
<td>18:R:26:LEU:HD21</td>
<td>18:R:39:VAL:HG22</td>
<td>1.95</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:1106:C:C2</td>
<td>1:A:1107:C:C4</td>
<td>3.01</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:582:U:H2'</td>
<td>1:A:583:A:H8</td>
<td>1.78</td>
<td>0.49</td>
</tr>
<tr>
<td>1:A:17:U:O2</td>
<td>1:A:1079:G:N3</td>
<td>2.46</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:21:G:C2</td>
<td>1:A:22:G:C5</td>
<td>3.01</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:236:G:C2</td>
<td>1:A:237:C:C2</td>
<td>3.01</td>
<td>0.48</td>
</tr>
<tr>
<td>18:R:53:ARG:HE</td>
<td>18:R:60:ALA:HA</td>
<td>1.78</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:148:G:C2</td>
<td>1:A:175:C:C2</td>
<td>3.02</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:46:G:H2'</td>
<td>1:A:366:C:H5</td>
<td>1.76</td>
<td>0.48</td>
</tr>
<tr>
<td>3:C:174:PRO:HD2</td>
<td>3:C:182:ILE:HD11</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:590:C:OP1</td>
<td>8:H:30:ARG:HG2</td>
<td>2.12</td>
<td>0.48</td>
</tr>
<tr>
<td>11:K:84:VAL:HG23</td>
<td>11:K:91:ARG:HH22</td>
<td>1.78</td>
<td>0.48</td>
</tr>
<tr>
<td>18:R:31:LEU:O</td>
<td>18:R:69:THR:HG21</td>
<td>2.11</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:994:A:H8</td>
<td>1:A:1216:G:HO2'</td>
<td>1.56</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:1365:G:C6</td>
<td>1:A:1366:C:C4</td>
<td>3.01</td>
<td>0.48</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:216:G:C6</td>
<td>1:A:217:C:N4</td>
<td>2.81</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:259:G:H2'</td>
<td>1:A:260:G:H8</td>
<td>1.74</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:370:C:N3</td>
<td>1:A:392:G:C2</td>
<td>2.81</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:557:G:N1</td>
<td>1:A:558:G:C2</td>
<td>2.81</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:707:C:H2'</td>
<td>1:A:708:C:C6</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:1074:G:H4'</td>
<td>2:B:103:THR:O</td>
<td>2.12</td>
<td>0.48</td>
</tr>
<tr>
<td>4:D:61:LYS:HD3</td>
<td>4:D:206:PHE:CE2</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>5:E:41:VAL:HG13</td>
<td>5:E:113:ALA:HA</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:189:G:C6</td>
<td>1:A:189(A):C:C4</td>
<td>3.01</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:29:G:H5''</td>
<td>1:A:30:U:OP2</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:407:G:H2'</td>
<td>1:A:408:A:H8</td>
<td>1.78</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:823:G:H2'</td>
<td>1:A:824:C:C6</td>
<td>2.47</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:972:C:O2</td>
<td>1:A:972:C:H2'</td>
<td>2.12</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:998:G:N2</td>
<td>1:A:999:C:C2</td>
<td>2.80</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:1308:U:H2'</td>
<td>1:A:1309:G:C8</td>
<td>2.49</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:295:C:H2'</td>
<td>1:A:296:U:O4'</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>5:E:80:ILE:HD13</td>
<td>5:E:138:ALA:HB1</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:876:G:H2'</td>
<td>1:A:877:C:C6</td>
<td>2.49</td>
<td>0.48</td>
</tr>
<tr>
<td>2:B:118:LEU:HB3</td>
<td>2:B:142:LEU:HD11</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:1148:U:C5'</td>
<td>9:I:17:THR:HG21</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:1218:C:H2'</td>
<td>1:A:1219:U:C6</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:165:C:H2'</td>
<td>1:A:166:G:C8</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:37:U:O2'</td>
<td>1:A:500:G:H4'</td>
<td>2.12</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:734:G:C2</td>
<td>1:A:735:C:C2</td>
<td>3.01</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:881:G:C2</td>
<td>1:A:882:C:C2</td>
<td>3.02</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:1130:A:H4'</td>
<td>9:I:3:GLN:OE1</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>17:Q:64:PRO:HB3</td>
<td>17:Q:70:ARG:HG3</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:1149:C:H2'</td>
<td>1:A:1150:U:C6</td>
<td>2.49</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:1256:A:C2'</td>
<td>3:C:27:LYS:NZ</td>
<td>2.77</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:1267:C:H2'</td>
<td>1:A:1268:A:O4'</td>
<td>2.14</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:1353:G:N1</td>
<td>1:A:1354:C:C4</td>
<td>2.81</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:176:C:H2'</td>
<td>1:A:177:C:C6</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>8:H:39:LEU:HG</td>
<td>8:H:44:PHE:HB2</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>11:K:91:ARG:NH2</td>
<td>18:R:88:LYS:HZ2</td>
<td>2.06</td>
<td>0.48</td>
</tr>
<tr>
<td>20:T:63:ILE:HG21</td>
<td>20:T:81:LYS:HG3</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:1312:G:N2</td>
<td>1:A:1326:C:C2</td>
<td>2.82</td>
<td>0.48</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:153:C:N4</td>
<td>1:A:154:C:H41</td>
<td>2.12</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:15:G:C4</td>
<td>1:A:16:A:N7</td>
<td>2.82</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:362:G:N2</td>
<td>1:A:364:A:H3'</td>
<td>2.28</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:945:G:H2'</td>
<td>1:A:945:G:N3</td>
<td>2.29</td>
<td>0.48</td>
</tr>
<tr>
<td>4:D:39:PRO:HB2</td>
<td>4:D:44:GLY:HA2</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:962:C:H1'</td>
<td>1:A:1201:A:N6</td>
<td>2.28</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:985:C:C2</td>
<td>1:A:1221:G:N2</td>
<td>2.82</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:218:C:H2'</td>
<td>1:A:219:C:C6</td>
<td>2.49</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:39:G:N7</td>
<td>1:A:547:A:H2'</td>
<td>2.29</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:974:A:H8</td>
<td>1:A:974:A:OP1</td>
<td>1.97</td>
<td>0.48</td>
</tr>
<tr>
<td>2:B:72:GLY:HA2</td>
<td>2:B:165:VAL:HB</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>4:D:68:TYR:HB2</td>
<td>4:D:70:ILE:HD11</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>8:H:55:GLY:O</td>
<td>8:H:56:LYS:HG3</td>
<td>2.14</td>
<td>0.48</td>
</tr>
<tr>
<td>14:N:12:ARG:O</td>
<td>14:N:14:PRO:HD3</td>
<td>2.14</td>
<td>0.48</td>
</tr>
<tr>
<td>15:O:26:GLU:HB3</td>
<td>15:O:81:LEU:HD2</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:A:1257:U:H4'</td>
<td>1:A:1258:G:O5'</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1270:C:H2'</td>
<td>1:A:1271:G:H8</td>
<td>1.78</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:718:G:H5'</td>
<td>11:K:117:ASN:HB2</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:992:U:H4'</td>
<td>1:A:993:G:O5'</td>
<td>2.13</td>
<td>0.47</td>
</tr>
<tr>
<td>8:H:104:ARG:O</td>
<td>8:H:105:ARG:HB2</td>
<td>2.13</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1266:G:N2</td>
<td>1:A:1270:C:C2</td>
<td>2.82</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1504:G:H4'</td>
<td>1:A:1505:G:O5'</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:18:C:C4</td>
<td>1:A:19:C:N4</td>
<td>2.82</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:504:CH42</td>
<td>1:A:541:G:H1</td>
<td>1.62</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:585:G:C6</td>
<td>1:A:586:C:C4</td>
<td>3.02</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:96:U:H2'</td>
<td>1:A:97:G:H8</td>
<td>1.77</td>
<td>0.47</td>
</tr>
<tr>
<td>18:R:43:PHE:HD2</td>
<td>18:R:56:THR:HG22</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1017:G:C2</td>
<td>1:A:1018:C:C2</td>
<td>3.02</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1396:A:H4'</td>
<td>1:A:1397:C:H5''</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1444:CH2'</td>
<td>1:A:1445:C:C6</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:193:C:H2'</td>
<td>1:A:194:C:C6</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:262:AH5''</td>
<td>20:T:76:ALA:HB2</td>
<td>1.95</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:70:G:C2</td>
<td>1:A:100:C:C2</td>
<td>3.03</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:874:G:C2</td>
<td>1:A:875:C:C2</td>
<td>3.03</td>
<td>0.47</td>
</tr>
<tr>
<td>10:J:37:PRO:HB2</td>
<td>10:J:70:ARG:NH1</td>
<td>2.27</td>
<td>0.47</td>
</tr>
<tr>
<td>6:F:49:ALA:HB2</td>
<td>18:R:80:PRO:HA</td>
<td>1.91</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:530:G:H8</td>
<td>22:W:38:GLY:HA3</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1255:G:O2'</td>
<td>1:A:1258:G:N3</td>
<td>2.46</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1373:G:H5''</td>
<td>7:G:36:LYS:HB3</td>
<td>1.96</td>
<td>0.47</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:1444: C: H2'</td>
<td>1:A:1445: C: H6</td>
<td>1.80</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1526: C: C6</td>
<td>1:A:1527: C: N4</td>
<td>2.83</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:240: C: H2'</td>
<td>1:A:241: C: H6</td>
<td>1.80</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:25: C: H2'</td>
<td>1:A:26: A: H8</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:548: G: C2</td>
<td>1:A:549: C: C2</td>
<td>3.03</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:613: C: H2'</td>
<td>1:A:614: A: C8</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:774: G: C2</td>
<td>1:A:806: C: C2</td>
<td>3.02</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:823: G: N2</td>
<td>1:A:824: C: C2</td>
<td>2.82</td>
<td>0.47</td>
</tr>
<tr>
<td>2:B:146: GLN: HG2</td>
<td>2:B:153: ARG: HH21</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>4:D:108: LEU: HB3</td>
<td>4:D:110: PHE: CE1</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>16:P:11: SER: HB2</td>
<td>16:P:14: ASN: HD22</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1274: G: H2'</td>
<td>1:A:1275: A: H8</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:542: G: C6</td>
<td>1:A:543: C: N4</td>
<td>2.82</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:910: C: O2'</td>
<td>1:A:911: U: H5'</td>
<td>2.13</td>
<td>0.47</td>
</tr>
<tr>
<td>2:B:25: ASN: HA</td>
<td>2:B:26: PRO: HD3</td>
<td>1.66</td>
<td>0.47</td>
</tr>
<tr>
<td>4:D:133: VAL: HG13</td>
<td>4:D:135: LEU: HD12</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1443: G: C2</td>
<td>1:A:1444: C: C4</td>
<td>3.02</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:18: C: H2'</td>
<td>1:A:19: C: H6</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:246: A: C4</td>
<td>1:A:279: A: C6</td>
<td>3.03</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:399: G: N2</td>
<td>1:A:400: C: C2</td>
<td>2.82</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:63: C: H42</td>
<td>1:A:104: G: H1</td>
<td>1.62</td>
<td>0.47</td>
</tr>
<tr>
<td>12:L:9: GLN: HG2</td>
<td>12:L:12: ARG: HH21</td>
<td>1.80</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1089: G: N2</td>
<td>1:A:1097: C: C2</td>
<td>2.83</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1418: A: H2'</td>
<td>1:A:1418: A: N3</td>
<td>2.29</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:73: G: H5'</td>
<td>1:A:76: C: OP2</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:827: U: O3'</td>
<td>8:H:19: VAL: HG21</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>3:C:140: ARG: O</td>
<td>3:C:143: GLU: HB2</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>4:D:25: ARG: CZ</td>
<td>4:D:30: LYS: HB3</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>11:K:84: VAL: HG21</td>
<td>11:K:91: ARG: NH2</td>
<td>2.30</td>
<td>0.47</td>
</tr>
<tr>
<td>12:L:30: ALA: CB</td>
<td>12:L:33: ARG: HE</td>
<td>2.27</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1365: G: C5</td>
<td>1:A:1366: C: C4</td>
<td>3.03</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:975: A: H4'</td>
<td>1:A:976: G: H5'</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>4:D:64: LEU: HD12</td>
<td>4:D:203: VAL: HG21</td>
<td>1.95</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1008: C: N3</td>
<td>1:A:1022: G: N2</td>
<td>2.63</td>
<td>0.47</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:A:1508:G:C2</td>
<td>1:A:1509:C:C2</td>
<td>3.03</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:540:G:H2'</td>
<td>1:A:541:G:H8</td>
<td>1.77</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:838:G:C2</td>
<td>1:A:849:C:C2</td>
<td>3.02</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:944:G:H2'</td>
<td>1:A:945:G:H5'</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>16:P:53:VAL:O</td>
<td>16:P:57:ARG:HD2</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1287:A:H5'</td>
<td>1:A:1282:A:H8</td>
<td>1.80</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1106:G:N1</td>
<td>1:A:1107:C:C4</td>
<td>2.83</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1171:G:N2</td>
<td>1:A:1172:C:C2</td>
<td>2.83</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1246:C:H2'</td>
<td>1:A:1247:U:C6</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1445:C:N3</td>
<td>1:A:1458:G:C2</td>
<td>2.83</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1527:C:H2'</td>
<td>1:A:1528:U:C6</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:25:C:H2'</td>
<td>1:A:26:A:C8</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:903:G:H2'</td>
<td>1:A:904:G:C6</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>11:K:100:ALA:O</td>
<td>11:K:102:GLY:N</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>13:M:23:TYR:CE1</td>
<td>13:M:70:LEU:HB3</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:1070:U:OP1</td>
<td>5:E:20:GLN:HG3</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:1103:C:H5'</td>
<td>2:B:98:LEU:HD13</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:1241:G:N1</td>
<td>1:A:1242:C:C4</td>
<td>2.83</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:132:C:C2</td>
<td>1:A:231:G:N2</td>
<td>2.83</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:172:A:H2'</td>
<td>1:A:174:C:C5</td>
<td>2.46</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:115:G:O2'</td>
<td>1:A:289:G:H5''</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:321:A:H61</td>
<td>1:A:332:G:H1</td>
<td>1.63</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:457:C:H2'</td>
<td>1:A:458:G:C6</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:715:A:H2'</td>
<td>1:A:716:A:C8</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>11:K:91:ARG:HH21</td>
<td>18:R:88:LYS:HZ1</td>
<td>1.59</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:948:C:OP1</td>
<td>13:M:108:ARG:N</td>
<td>2.47</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:1137:C:H4'</td>
<td>1:A:1138:G:C2</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:861:G:C2</td>
<td>1:A:862:C:C2</td>
<td>3.03</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:881:G:C6</td>
<td>1:A:882:C:C4</td>
<td>3.03</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:895:G:H1</td>
<td>1:A:904:C:N4</td>
<td>2.11</td>
<td>0.46</td>
</tr>
<tr>
<td>4:D:140:VAL:HG11</td>
<td>4:D:146:ILE:HD11</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>20:T:72:LEU:O</td>
<td>20:T:72:LEU:HG</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:109:A:H5''</td>
<td>1:A:110:C:H5</td>
<td>1.79</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:363:A:OP2</td>
<td>12:L:34:ARG:HG2</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:443:C:C2</td>
<td>1:A:492:G:N2</td>
<td>2.84</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:827:U:H5''</td>
<td>8:H:21:LYS:HE2</td>
<td>1.96</td>
<td>0.46</td>
</tr>
<tr>
<td>4:D:9:CYS:SG</td>
<td>4:D:26:CYS:SG</td>
<td>3.13</td>
<td>0.46</td>
</tr>
</tbody>
</table>

**Continued on next page...**
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:G:12:LEU:H</td>
<td>7:G:12:LEU:HD12</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:1355:G:H1</td>
<td>1:A:1367:C:N4</td>
<td>2.12</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:1384:C:H2'</td>
<td>1:A:1385:G:C8</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:1432:G:O2'</td>
<td>1:A:1468:A:N6</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:1464:G:C2</td>
<td>1:A:1465:C:C4</td>
<td>3.03</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:251:G:N1</td>
<td>1:A:266:G:C6</td>
<td>2.83</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:334:C:H5'</td>
<td>1:A:370:C:C6</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:377:G:H1</td>
<td>1:A:386:C:H42</td>
<td>1.62</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:868:C:H5'</td>
<td>1:A:873:A:N6</td>
<td>2.31</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:96:U:H2'</td>
<td>1:A:97:G:C8</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:11:G:H2'</td>
<td>1:A:12:U:O4'</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:1493:A:H4'</td>
<td>1:A:1494:G:OP1</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:334:C:H2'</td>
<td>1:A:335:C:H6</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:369:C:H2'</td>
<td>1:A:370:C:C6</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:1127:G:H5'</td>
<td>1:A:1128:C:OP2</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:778:G:C6</td>
<td>1:A:779:C:C4</td>
<td>3.04</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:1077:G:N3</td>
<td>1:A:1079:G:H8</td>
<td>2.12</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:240:C:H2'</td>
<td>1:A:241:C:C6</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:370:C:O2</td>
<td>1:A:482:A:O2'</td>
<td>2.34</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:542:G:C2</td>
<td>1:A:543:C:C2</td>
<td>3.04</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:564:C:O2</td>
<td>1:A:564:C:C2'</td>
<td>2.61</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:577:G:C2</td>
<td>1:A:578:C:C2</td>
<td>3.03</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:675:A:H2'</td>
<td>1:A:676:A:H8</td>
<td>1.81</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:814:A:H2'</td>
<td>1:A:816:A:H5'</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>18:R:58:LEU:HB3</td>
<td>18:R:62:GLU:HB3</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:17:U:C2</td>
<td>1:A:18:C:C4</td>
<td>3.04</td>
<td>0.46</td>
</tr>
<tr>
<td>4:D:19:LEU:HD13</td>
<td>4:D:21:LEU:HD22</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:266:G:C3'</td>
<td>17:Q:67:LYS:HB2</td>
<td>2.34</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:1445:C:C2</td>
<td>1:A:1458:G:N2</td>
<td>2.84</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:1484:C:H2'</td>
<td>1:A:1485:U:O4'</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:244:U:O4</td>
<td>1:A:906:G:H1'</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:378:G:C6</td>
<td>1:A:379:C:N4</td>
<td>2.83</td>
<td>0.46</td>
</tr>
<tr>
<td>4:D:119:GLN:O</td>
<td>4:D:123:HIS:CD2</td>
<td>2.69</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>11:K:18:ARG:HB2</td>
<td>11:K:33:THR:HG23</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:155:C:42</td>
<td>1:A:166:G:H1</td>
<td>1.64</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:39:G:C6</td>
<td>1:A:40:C:C4</td>
<td>3.04</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:614:A:H2'</td>
<td>1:A:615:C:C6</td>
<td>2.51</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:938:A:O5'</td>
<td>1:A:938:A:H8</td>
<td>1.99</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:246:A:O2'</td>
<td>17:Q:99:SER:HA</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>18:R:37:VAL:O</td>
<td>18:R:40:LEU:HB2</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:1459:C:OP1</td>
<td>20:T:28:ALA:HA</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:1074:G:H1'</td>
<td>1:A:1102:A:C2</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1315:U:O2'</td>
<td>1:A:1360:A:N3</td>
<td>2.48</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:132:C:N3</td>
<td>1:A:231:G:C2</td>
<td>2.84</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:639:G:H2'</td>
<td>1:A:640:A:C8</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>4:D:42:GLN:C</td>
<td>4:D:44:GLY:H</td>
<td>2.18</td>
<td>0.45</td>
</tr>
<tr>
<td>23:X:5:TYR:CE2</td>
<td>23:X:65:TRP:HH2</td>
<td>2.30</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1102:A:H2'</td>
<td>1:A:1103:C:H6</td>
<td>1.76</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1386:G:H2'</td>
<td>1:A:1387:G:C8</td>
<td>2.41</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:289:G:C2</td>
<td>1:A:290:C:C2</td>
<td>3.04</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:678:U:H2'</td>
<td>1:A:679:C:H6</td>
<td>1.76</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:708:C:H2'</td>
<td>1:A:709:G:H8</td>
<td>1.82</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:951:G:C6</td>
<td>1:A:1231:G:C6</td>
<td>3.04</td>
<td>0.45</td>
</tr>
<tr>
<td>4:D:64:LEU:HA</td>
<td>4:D:67:ILE:HD12</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>5:E:10:MET:HA</td>
<td>5:E:32:VAL:HG23</td>
<td>1.97</td>
<td>0.45</td>
</tr>
<tr>
<td>6:F:12:PRO:HD3</td>
<td>6:F:58:GLY:HA2</td>
<td>1.97</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1007:C:C2</td>
<td>1:A:1023:G:N1</td>
<td>2.84</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1220:G:H2'</td>
<td>1:A:1221:G:O4'</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1241:G:C6</td>
<td>1:A:1242:C:N4</td>
<td>2.84</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:15:G:H2'</td>
<td>1:A:16:A:C8</td>
<td>2.32</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:327:A:N3</td>
<td>1:A:329:A:H1'</td>
<td>2.31</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:524:G:C2</td>
<td>1:A:525:C:C4</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>4:D:98:GLU:HA</td>
<td>4:D:103:ASN:HD22</td>
<td>1.80</td>
<td>0.45</td>
</tr>
<tr>
<td>8:H:39:LEU:HD23</td>
<td>8:H:45:ILE:HG12</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>11:K:18:ARG:HB2</td>
<td>11:K:33:THR:CG2</td>
<td>2.46</td>
<td>0.45</td>
</tr>
<tr>
<td>11:K:43:SER:HB3</td>
<td>11:K:68:ALA:HB2</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:974:A:OP2</td>
<td>14:N:32:SER:HB2</td>
<td>2.17</td>
<td>0.45</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:1138:G:H2'</td>
<td>1:A:1140:C:H5''</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1162:C:N3</td>
<td>1:A:1175:G:C2</td>
<td>2.85</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:15:G:H21</td>
<td>5:E:19:MET:HB2</td>
<td>1.80</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:79:G:H2'</td>
<td>1:A:80:G:C8</td>
<td>2.52</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1050:G:C6</td>
<td>1:A:1051:C:N4</td>
<td>2.84</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1105:A:H2'</td>
<td>1:A:1106:G:C8</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1525:G:H2'</td>
<td>1:A:1526:G:C8</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:317:G:C2</td>
<td>1:A:337:C:C2</td>
<td>3.04</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:568:G:C6</td>
<td>1:A:569:C:N4</td>
<td>2.85</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:823:G:C6</td>
<td>1:A:824:C:N4</td>
<td>2.84</td>
<td>0.45</td>
</tr>
<tr>
<td>2:B:131:PRO:HA</td>
<td>2:B:135:GLN:OE1</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1313:U:H2'</td>
<td>1:A:1314:C:H6</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1351:U:H2'</td>
<td>1:A:1352:C:H6</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1391:U:H2'</td>
<td>1:A:1392:G:C8</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1408:A:H2'</td>
<td>1:A:1409:C:C6</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:284:G:H2'</td>
<td>1:A:285:G:H8</td>
<td>1.82</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:501:C:H2'</td>
<td>1:A:502:G:C8</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:524:G:H2'</td>
<td>1:A:525:C:C6</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:639:G:H2'</td>
<td>1:A:640:A:H8</td>
<td>1.82</td>
<td>0.45</td>
</tr>
<tr>
<td>14:N:37:PHE:HB3</td>
<td>14:N:39:LEU:HG</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1422:G:H1</td>
<td>1:A:1478:C:H42</td>
<td>1.63</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:895:G:C2</td>
<td>1:A:896:C:C2</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:931:C:H2'</td>
<td>1:A:932:C:O4'</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>3:C:29:TYR:CE1</td>
<td>14:N:37:PHE:CD1</td>
<td>3.04</td>
<td>0.45</td>
</tr>
<tr>
<td>14:N:49:HIS:HE1</td>
<td>14:N:58:LYS:HE2</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>15:O:7:GLU:O</td>
<td>15:O:11:VAL:HG23</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>20:T:42:GLN:O</td>
<td>20:T:45:GLN:HB2</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1116:C:H2'</td>
<td>1:A:1117:G:O4'</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:1420:C:H2'</td>
<td>1:A:1421:G:H8</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:202:U:OP2</td>
<td>1:A:203:U:H5</td>
<td>2.00</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:285:G:H2'</td>
<td>1:A:286:G:O4'</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:391:G:H2'</td>
<td>1:A:392:G:O4'</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:439:A:H3'</td>
<td>1:A:441:A:H5''</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:544:G:OP1</td>
<td>4:D:62:GLN:HG3</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:573:A:H2'</td>
<td>1:A:574:A:O4'</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:916:G:H2'</td>
<td>1:A:917:G:C8</td>
<td>2.52</td>
<td>0.45</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3: C: 6: HIS: HD2</td>
<td>3: C: 9: GLY: H</td>
<td>1.65</td>
<td>0.45</td>
</tr>
<tr>
<td>11: K: 24: SER: C</td>
<td>11: K: 26: ASN: H</td>
<td>2.20</td>
<td>0.45</td>
</tr>
<tr>
<td>1: A: 1046: A: H3'</td>
<td>1: A: 1047: G: H8</td>
<td>1.82</td>
<td>0.45</td>
</tr>
<tr>
<td>1: A: 319: G: C2</td>
<td>1: A: 320: C: C2</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>1: A: 335: C: H2'</td>
<td>1: A: 336: C: H6</td>
<td>1.77</td>
<td>0.45</td>
</tr>
<tr>
<td>1: A: 613: C: C2</td>
<td>1: A: 628: G: N2</td>
<td>2.85</td>
<td>0.45</td>
</tr>
<tr>
<td>1: A: 985: C: C2</td>
<td>1: A: 1221: G: C2</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>7: G: 71: PRO: HD2</td>
<td>7: G: 96: GLN: HB2</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>9: J: 37: PRO: CB</td>
<td>9: J: 70: ARG: HH11</td>
<td>2.30</td>
<td>0.45</td>
</tr>
<tr>
<td>1: A: 1055: A: H2</td>
<td>3: C: 194: GLY: HA2</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1: A: 1246: C: H2'</td>
<td>1: A: 1247: U: H6</td>
<td>1.82</td>
<td>0.45</td>
</tr>
<tr>
<td>1: A: 1526: G: C2</td>
<td>1: A: 1527: C: C2</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>1: A: 233: C: H2'</td>
<td>1: A: 234: C: C6</td>
<td>2.52</td>
<td>0.45</td>
</tr>
<tr>
<td>1: A: 370: C: H42</td>
<td>1: A: 391: G: H1</td>
<td>1.65</td>
<td>0.45</td>
</tr>
<tr>
<td>1: A: 674: G: H2'</td>
<td>1: A: 675: A: H8</td>
<td>1.82</td>
<td>0.45</td>
</tr>
<tr>
<td>1: A: 928: G: H1</td>
<td>1: A: 1389: C: N4</td>
<td>2.15</td>
<td>0.45</td>
</tr>
<tr>
<td>16: P: 67: THR: CG2</td>
<td>16: P: 68: ASP: H</td>
<td>2.28</td>
<td>0.45</td>
</tr>
<tr>
<td>1: A: 189: G: H2'</td>
<td>1: A: 189(A): C: C6</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>1: A: 444: C: H42</td>
<td>1: A: 490: G: H1</td>
<td>1.65</td>
<td>0.44</td>
</tr>
<tr>
<td>1: A: 502: G: OP1</td>
<td>12: L: 118: SER: N</td>
<td>2.46</td>
<td>0.44</td>
</tr>
<tr>
<td>1: A: 79: G: N1</td>
<td>1: A: 91: C: C2</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>1: A: 939: G: C2</td>
<td>1: A: 940: C: N3</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>2: B: 211: ILE: H</td>
<td>2: B: 211: ILE: HG13</td>
<td>1.58</td>
<td>0.44</td>
</tr>
<tr>
<td>21: V: 3: LYS: O</td>
<td>21: V: 11: GLY: HA2</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>1: A: 1015: A: H2'</td>
<td>1: A: 1016: A: C8</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>1: A: 1430: C: C2</td>
<td>1: A: 1471: G: N2</td>
<td>2.84</td>
<td>0.44</td>
</tr>
<tr>
<td>1: A: 1487: G: H5''</td>
<td>1: A: 1488: G: OP1</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>1: A: 1509: C: H2'</td>
<td>1: A: 1510: U: O4'</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1: A: 33: A: H2'</td>
<td>1: A: 34: C: C6</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>1: A: 542: G: H2'</td>
<td>1: A: 543: C: C6</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>1: A: 1101: A: H61</td>
<td>2: B: 103: THR: HG21</td>
<td>1.82</td>
<td>0.44</td>
</tr>
<tr>
<td>3: C: 29: TYR: CD1</td>
<td>14: N: 36: PHE: CE2</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>1: A: 279: A: N1</td>
<td>17: Q: 98: LEU: HD23</td>
<td>2.30</td>
<td>0.44</td>
</tr>
<tr>
<td>1: A: 1064: G: C8</td>
<td>1: A: 1066: C: C2</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>1: A: 1283: G: C6</td>
<td>1: A: 1284: C: N4</td>
<td>2.85</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:1329: A:H5''</td>
<td>13:M:26:GLY:N</td>
<td>2.31</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:1391: U:H2'</td>
<td>1:A:1392: G:H8</td>
<td>1.81</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:1541: U:O3'</td>
<td>18:R:19:LYS:HB3</td>
<td>2.16</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:551: U:H2'</td>
<td>1:A:552: U:C6</td>
<td>2.51</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:763: G:C2</td>
<td>1:A:764: C:C2</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:903: G:C2</td>
<td>1:A:904: C:C2</td>
<td>3.04</td>
<td>0.44</td>
</tr>
<tr>
<td>2:B:166: ASP:C</td>
<td>2:B:168: THR:H</td>
<td>2.21</td>
<td>0.44</td>
</tr>
<tr>
<td>2:B:18: GLY:HA2</td>
<td>2:B:42: ILE:HD12</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>4:D:13: ARG:HH12</td>
<td>4:D:40: PRO:HA</td>
<td>1.81</td>
<td>0.44</td>
</tr>
<tr>
<td>4:D:158: ILE:HG13</td>
<td>4:D:158: ILE: H</td>
<td>1.55</td>
<td>0.44</td>
</tr>
<tr>
<td>4:D:43: HIS:CD2</td>
<td>4:D:43: HIS: H</td>
<td>2.36</td>
<td>0.44</td>
</tr>
<tr>
<td>19:S:30: LEU:H</td>
<td>19:S:48: THR:HB</td>
<td>1.82</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:1082: G:C8</td>
<td>1:A:1082: G:O5'</td>
<td>2.69</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:1144: G:N2</td>
<td>1:A:1146: A:H62</td>
<td>2.15</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:625: G:OP1</td>
<td>16:P:9: PHE:HB3</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>3:C:24:ALA:HB2</td>
<td>3:C:32: LEU: HD12</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>4:D:173: TRP:HB2</td>
<td>4:D:187: ARG: O</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>7:G:29:LYS:HB3</td>
<td>7:G:105: VAL: HG21</td>
<td>1.99</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:1017: G:C6</td>
<td>1:A:1018: C:C4</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:1106: G:H2'</td>
<td>1:A:1107: C:C6</td>
<td>2.53</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:1163: C:H2'</td>
<td>1:A:1164: G:C8</td>
<td>2.45</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:1438: G:N2</td>
<td>1:A:1439: C:C2</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:455: C:H2'</td>
<td>1:A:456: C:H6</td>
<td>1.81</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:51: A:C6</td>
<td>1:A:353: A:C2</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:601: C:C2</td>
<td>1:A:638: G:N2</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:571: U:H5''</td>
<td>1:A:819: A:C5</td>
<td>2.53</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:827: U:C4</td>
<td>1:A:872: A:N6</td>
<td>2.73</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:942: G:C6</td>
<td>1:A:1342: C:N3</td>
<td>2.84</td>
<td>0.44</td>
</tr>
<tr>
<td>3:C:116: VAL:O</td>
<td>3:C:120: VAL: HG23</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>3:C:14: ILE:H</td>
<td>3:C:14: ILE: HG12</td>
<td>1.40</td>
<td>0.44</td>
</tr>
<tr>
<td>4:D:108: LEU:HB3</td>
<td>4:D:110: PHE:HE1</td>
<td>1.83</td>
<td>0.44</td>
</tr>
<tr>
<td>5:E:33: VAL:HG12</td>
<td>5:E:112: LEU:HD22</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:188: C:H5'</td>
<td>20:T:89: ARG: HD3</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:1007: C:N3</td>
<td>1:A:1023: G:C6</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:1001(A): G:N2</td>
<td>1:A:1040: U:C2</td>
<td>2.86</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:344: A:H4'</td>
<td>1:A:345: C:OP2</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:751: U:C5</td>
<td>1:A:752: G:C5</td>
<td>3.05</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:761:G:C5</td>
<td>1:A:762:C:C4</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:864:A:O2'</td>
<td>1:A:865:A:O4'</td>
<td>2.35</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:920:U:C2</td>
<td>1:A:921:U:C5</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>3:C:153:VAL:HG22</td>
<td>3:C:198:VAL:HA</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>3:C:50:ALA:HA</td>
<td>3:C:72:LYS:HB2</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>15:O:54:ARG:HG3</td>
<td>15:O:55:GLY:N</td>
<td>2.32</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:624:C:O3'</td>
<td>16:P:10:GLY:HA2</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:105:G:C2</td>
<td>1:A:106:C:C2</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:18:G:H4'</td>
<td>1:A:1078:U:H1'</td>
<td>1.99</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:1110:A:H2'</td>
<td>1:A:1111:A:O4'</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:1276:G:H2'</td>
<td>1:A:1277:C:O4'</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>10:J:7:LYS:HG2</td>
<td>10:J:71:LEU:CD2</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>23:X:17:ARG:HB2</td>
<td>23:X:54:PRO:O</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:1419:G:C2</td>
<td>1:A:1420:C:C2</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:291:C:O2</td>
<td>1:A:310:G:C2</td>
<td>2.71</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:334:C:H2'</td>
<td>1:A:335:C:C6</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>11:K:50:TYR:CD2</td>
<td>11:K:54:ARG:HB2</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>12:L:75:HIS:HB2</td>
<td>12:L:77:LEU:HD13</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:1518:A:H2'</td>
<td>1:A:1519:A:H8</td>
<td>1.83</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:236:G:C6</td>
<td>1:A:237:C:O2</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:307:C:C6</td>
<td>1:A:308:C:C5</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:6:G:N2</td>
<td>5:E:98:THR:OG1</td>
<td>2.51</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:926:G:O5'</td>
<td>1:A:926:G:C8</td>
<td>2.71</td>
<td>0.44</td>
</tr>
<tr>
<td>12:L:60:LEU:HD11</td>
<td>12:L:85:ILE:HD13</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:A:1134:G:N2</td>
<td>1:A:1141:C:C2</td>
<td>2.85</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1401:G:O6</td>
<td>1:A:1504:G:N2</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:237:C:H2'</td>
<td>1:A:238:G:H8</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:836:G:C6</td>
<td>1:A:851:G:C6</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>3:C:55:VAL:HG22</td>
<td>3:C:68:VAL:HG13</td>
<td>1.98</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1081:G:C2'</td>
<td>1:A:1082:G:H8</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1253:G:C2</td>
<td>1:A:1254:C:C2</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:674:G:H2'</td>
<td>1:A:675:A:C8</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>3:C:91:LEU:HG</td>
<td>3:C:99:VAL:HG11</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>10:J:38:ILE:HA</td>
<td>10:J:39:PRO:HD3</td>
<td>1.87</td>
<td>0.43</td>
</tr>
<tr>
<td>10:J:37:PRO:C</td>
<td>10:J:72:VAL:HG22</td>
<td>2.38</td>
<td>0.43</td>
</tr>
<tr>
<td>16:P:21:VAL:HG12</td>
<td>16:P:34:GLU:HB3</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1098:C:C1'</td>
<td>1:A:1168:A:H2</td>
<td>2.31</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1241:G:C2</td>
<td>1:A:1242:C:C4</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1462:G:N2</td>
<td>1:A:1463:C:C2</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:158:G:H8</td>
<td>1:A:158:G:O5'</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:276:G:C2</td>
<td>1:A:277:C:C2</td>
<td>3.06</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:A:60:A:H8</td>
<td>1:A:60:A:OP1</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:792:A:H4'</td>
<td>1:A:793:U:C5'</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:942:C:C2</td>
<td>1:A:1342:C:O2</td>
<td>2.71</td>
<td>0.43</td>
</tr>
<tr>
<td>16:P:48:TRP:CD1</td>
<td>16:P:48:TRP:N</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>17:Q:92:ARG:O</td>
<td>17:Q:95:TYR:HB2</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>18:R:25:THR:HB</td>
<td>18:R:42:ARG:HH22</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1343:C:C6</td>
<td>1:A:1344:C:N3</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1381:U:H1'</td>
<td>7:G:78:ARG:HE</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:767:A:H2'</td>
<td>1:A:768:A:O4'</td>
<td>2.17</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:778:C:C2</td>
<td>1:A:779:C:C2</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>3:C:36:ASP:HA</td>
<td>3:C:39:ILE:HD12</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>4:D:119:GLN:HG2</td>
<td>4:D:120:LEU:N</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>12:L:102:ARG:CM</td>
<td>12:L:110:VAL:HG22</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:174:C:H2'</td>
<td>1:A:175:C:H6</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:291:C:H2'</td>
<td>1:A:292:C:C8</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:29:C:N2</td>
<td>1:A:555:C:C2</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:321:A:H2'</td>
<td>1:A:322:C:C6</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:457:C:H2'</td>
<td>1:A:458:C:H6</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:602:A:H2'</td>
<td>1:A:603:U:O4'</td>
<td>2.17</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:667:C:H2'</td>
<td>1:A:668:C:C8</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:70:C:C2</td>
<td>1:A:100:C:N1</td>
<td>2.71</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:828:A:H2'</td>
<td>1:A:829:C:N1</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:886:C:N1</td>
<td>1:A:912:C:C2</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>8:H:53:VAL:HG23</td>
<td>8:H:58:TYR:CD2</td>
<td>2.54</td>
<td>0.43</td>
</tr>
<tr>
<td>11:K:84:VAL:CG2</td>
<td>11:K:91:ARG:HH22</td>
<td>2.30</td>
<td>0.43</td>
</tr>
<tr>
<td>12:L:90:VAL:HG11</td>
<td>12:L:93:LEU:HD12</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1373:G:H5'</td>
<td>7:G:36:LYS:CB</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:245:C:C2</td>
<td>1:A:284:C:C2</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:734:G:C6</td>
<td>1:A:735:C:C4</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:662:C:C2</td>
<td>1:A:744:C:N1</td>
<td>2.71</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:794:C:H2'</td>
<td>1:A:795:C:H6</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>3:C:30:ARG:HG2</td>
<td>14:N:37:PHE:O</td>
<td>2.17</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1081:G:OP1</td>
<td>5:E:18:ARG:HA</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>12:L:93:LEU:HA</td>
<td>12:L:94:PRO:HD3</td>
<td>1.68</td>
<td>0.43</td>
</tr>
<tr>
<td>17:Q:51:TYR:HE1</td>
<td>17:Q:76:LEU:HB2</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:115:C:C2</td>
<td>1:A:289:G:N7</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:166:C:H2'</td>
<td>1:A:167:C:H8</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:137:C:C2</td>
<td>1:A:227:C:C2</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:407:C:H2'</td>
<td>1:A:408:A:C8</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:677:U:H3</td>
<td>1:A:713:G:H1</td>
<td>1.66</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>5:E:78:HIS:HB2</td>
<td>8:H:104:ARG:HD2</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>5:E:88:LYS:HB3</td>
<td>5:E:123:LEU:HB2</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>7:G:16:LEU:H</td>
<td>7:G:16:LEU:HG</td>
<td>1.54</td>
<td>0.43</td>
</tr>
<tr>
<td>10:J:60:ARG:NH1</td>
<td>10:J:60:ARG:CB</td>
<td>2.81</td>
<td>0.43</td>
</tr>
<tr>
<td>18:R:26:LEU:HD13</td>
<td>18:R:42:ARG:HE</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1081:G:P</td>
<td>5:E:18:ARG:HA</td>
<td>2.58</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:237:C:H2'</td>
<td>1:A:238:G:C8</td>
<td>2.54</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:250:A:H1'</td>
<td>1:A:252:U:C4</td>
<td>2.54</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:430:A:P</td>
<td>4:D:8:VAL:H</td>
<td>2.41</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:529:G:H5'</td>
<td>1:A:530:G:OP2</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:651:C:H2'</td>
<td>1:A:652:U:C6</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:668:G:H2'</td>
<td>1:A:669:U:C6</td>
<td>2.54</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:698:G:C6</td>
<td>1:A:699:C:N4</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:861:G:C6</td>
<td>1:A:862:C:C4</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:922:G:C2</td>
<td>1:A:923:A:C4</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>8:H:89:PRO:HA</td>
<td>8:H:92:ARG:NH1</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>9:I:26:VAL:HB</td>
<td>9:I:33:PHE:HB2</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>10:J:57:LYS:HA</td>
<td>10:J:60:ARG:HH22</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1192:C:H2'</td>
<td>1:A:1193:G:O4'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1419:G:C6</td>
<td>1:A:1420:C:C4</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1542:U:O2</td>
<td>1:A:1542:U:H2'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:39:G:C2</td>
<td>1:A:40:C:C2</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:444:C:C2</td>
<td>1:A:491:G:N2</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:502:G:H2'</td>
<td>1:A:503:C:O4'</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:560:U:H2'</td>
<td>5:E:123:LEU:HD22</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:740:U:H2'</td>
<td>1:A:741:G:H8</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>14:N:15:LYS:HD3</td>
<td>14:N:19:ARG:HH12</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1050:G:N2</td>
<td>1:A:1051:C:C2</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:15:G:N1</td>
<td>1:A:921:U:C2</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:250:A:H4'</td>
<td>1:A:251:G:O5'</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:442:G:H2'</td>
<td>1:A:443:C:H6</td>
<td>1.79</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:476:G:H2'</td>
<td>1:A:477:A:C8</td>
<td>2.54</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:769:G:C2</td>
<td>1:A:770:C:C4</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:73:G:N1</td>
<td>1:A:76:C:C2</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:836:G:C6</td>
<td>1:A:837:G:C6</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>3:C:62:ASP:HA</td>
<td>3:C:97:LYS:HE3</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>3:C:6:HAS:HA</td>
<td>3:C:7:PRO:HD3</td>
<td>1.85</td>
<td>0.43</td>
</tr>
<tr>
<td>4:D:3:ARG:HD2</td>
<td>4:D:118:ARG:HD3</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>4:D:30:LYS:C</td>
<td>4:D:32:ALA:N</td>
<td>2.72</td>
<td>0.43</td>
</tr>
<tr>
<td>5:E:15:ARG:HD3</td>
<td>5:E:28:PHE:CE1</td>
<td>2.54</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:A:276:G:O2'</td>
<td>17:Q:68:ARG:NH2</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:1141:C:H2'</td>
<td>1:A:1142:G:H8</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1484:C:H6</td>
<td>1:A:1484:C:O5'</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1508:G:C6</td>
<td>1:A:1509:C:C4</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:157:G:C6</td>
<td>1:A:165:C:N3</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:399:G:H2'</td>
<td>1:A:400:C:C6</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:416:G:C6</td>
<td>1:A:417:C:C4</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:806:C:H2'</td>
<td>1:A:807:A:C8</td>
<td>2.54</td>
<td>0.42</td>
</tr>
<tr>
<td>2:B:33:TYR:HB3</td>
<td>2:B:41:ILE:HG22</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1256:A:C2'</td>
<td>3:C:27:LYS:HZ1</td>
<td>2.32</td>
<td>0.42</td>
</tr>
<tr>
<td>8:H:25:ASP:OD2</td>
<td>8:H:53:VAL:HG21</td>
<td>2.18</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:115:G:C2</td>
<td>1:A:289:G:C5</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1189:C:H5&quot;</td>
<td>3:C:5:ILE:HG12</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1393:U:H2'</td>
<td>1:A:1395:C:H5</td>
<td>1.83</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:621:A:H2'</td>
<td>1:A:622:A:H8</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>2:B:55:PHE:HD1</td>
<td>2:B:55:PHE:HA</td>
<td>1.74</td>
<td>0.42</td>
</tr>
<tr>
<td>8:H:6:ILE:HD12</td>
<td>8:H:35:ILE:HD12</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1253:G:C6</td>
<td>1:A:1254:C:C4</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:976:G:N2</td>
<td>1:A:1363:C:H5&quot;</td>
<td>2.34</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:258:G:H2'</td>
<td>1:A:259:G:H8</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:456:C:C2</td>
<td>1:A:476:G:C2</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>3:C:135:LYS:O</td>
<td>3:C:139:GLN:HG2</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>4:D:150:GLU:O</td>
<td>4:D:153:ARG:HB2</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>8:H:3:THR:HG23</td>
<td>8:H:4:ASP:H</td>
<td>1.83</td>
<td>0.42</td>
</tr>
<tr>
<td>11:K:21:ILE:HG23</td>
<td>11:K:30:VAL:HG22</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:104:G:C2</td>
<td>1:A:105:G:C5</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1172:C:H2'</td>
<td>1:A:1173:G:C8</td>
<td>2.51</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1368:G:N1</td>
<td>1:A:1369:C:C4</td>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:333:G:C2</td>
<td>1:A:334:G:C2</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:786:G:N2</td>
<td>1:A:797:C:C2</td>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:895:G:C6</td>
<td>1:A:896:C:C4</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>2:B:115:LEU:HD11</td>
<td>2:B:146:GLN:HG3</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1119:C:C2</td>
<td>1:A:1155:G:N2</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:293:G:C4</td>
<td>1:A:305:G:N2</td>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:333:G:N1</td>
<td>1:A:334:G:C4</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:357:G:OP1</td>
<td>1:A:367:U:H5&quot;</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:399:G:C2</td>
<td>1:A:400:C:C2</td>
<td>3.08</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:A:402:G:OP1</td>
<td>4:D:74:GLN:HG3</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:41:G:C6</td>
<td>1:A:402:G:C6</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:580:U:O4</td>
<td>1:A:581:G:C6</td>
<td>2.73</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:810:C:H2'</td>
<td>1:A:811:C:O4'</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>20:T:61:SER:o</td>
<td>20:T:65:LYS:HG2</td>
<td>2.18</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1030(C):G:H2'</td>
<td>1:A:1030(D):A:C8</td>
<td>2.54</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:112:G:C2</td>
<td>1:A:113:G:C8</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:396:G:O2'</td>
<td>1:A:398:C:OP1</td>
<td>2.24</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:577:G:N1</td>
<td>1:A:578:C:C4</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:829:G:O4'</td>
<td>2:B:26:PRO:HG2</td>
<td>2.18</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:874:G:C6</td>
<td>1:A:875:C:C4</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>4:D:36:ARG:HD3</td>
<td>4:D:38:TYR:CE2</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>11:K:92:GLU:HA</td>
<td>11:K:95:ILE:HD12</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1095:U:C4</td>
<td>1:A:1096:C:N4</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1270:C:H2'</td>
<td>1:A:1271:G:C8</td>
<td>2.54</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1286:A:H2'</td>
<td>1:A:1287:A:H4'</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1361:G:C6</td>
<td>1:A:1362:C:N3</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:939:G:H1'</td>
<td>1:A:1375:A:C2</td>
<td>2.54</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:310:G:C6</td>
<td>1:A:311:C:C4</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:617:G:C6</td>
<td>1:A:618:C:N4</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:768:A:C5</td>
<td>1:A:769:G:C8</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:823:G:C2</td>
<td>1:A:824:C:C2</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:966:G:C6</td>
<td>1:A:967:C:C4</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:998:G:N1</td>
<td>1:A:999:C:C4</td>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>4:D:89:THR:HA</td>
<td>4:D:92:VAL:HG12</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1081:G:OP1</td>
<td>5:E:18:ARG:CA</td>
<td>2.68</td>
<td>0.42</td>
</tr>
<tr>
<td>7:G:26:PHE:O</td>
<td>7:G:30:ILE:HG13</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>8:H:29:SER:HB3</td>
<td>8:H:32:LYS:CG</td>
<td>2.48</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1158:C:H2'</td>
<td>1:A:1158:C:O2</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:374:A:C6</td>
<td>1:A:375:U:C4</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:402:G:C2</td>
<td>1:A:403:C:C2</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:590:C:N3</td>
<td>1:A:650:G:C2</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>3:C:29:TYR:CE1</td>
<td>14:N:37:PHE:CE1</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>8:H:51:VAL:HB</td>
<td>8:H:52:ASP:H</td>
<td>1.73</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1123:A:H4'</td>
<td>10:I:36:GLY:HA3</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>3:C:34:LEU:HD11</td>
<td>14:N:25:VAL:HG21</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1063:C:O5'</td>
<td>1:A:1064:G:H2'</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:1356:G:N2</td>
<td>1:A:1367:C:C2</td>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:200:G:C2</td>
<td>1:A:218:C:C2</td>
<td>3.08</td>
<td>0.42</td>
</tr>
</tbody>
</table>

Continued on next page...
### Atom-1

### Atom-2

<table>
<thead>
<tr>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>2.83</td>
<td>0.42</td>
</tr>
<tr>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>2.29</td>
<td>0.42</td>
</tr>
<tr>
<td>2.35</td>
<td>0.42</td>
</tr>
<tr>
<td>2.55</td>
<td>0.42</td>
</tr>
<tr>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>2.17</td>
<td>0.42</td>
</tr>
<tr>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>3.07</td>
<td>0.41</td>
</tr>
<tr>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>1.68</td>
<td>0.41</td>
</tr>
<tr>
<td>1.85</td>
<td>0.41</td>
</tr>
<tr>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>2.19</td>
<td>0.41</td>
</tr>
<tr>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>2.19</td>
<td>0.41</td>
</tr>
<tr>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>2.89</td>
<td>0.41</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:276:G:H2'</td>
<td>1:A:277:C:C6</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:613:C:H42</td>
<td>1:A:627:G:H1</td>
<td>1.68</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:673:G:H1</td>
<td>1:A:717:C:H42</td>
<td>1.68</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:874:G:N2</td>
<td>1:A:875:C:C2</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:966:G:C2</td>
<td>1:A:967:C:C2</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>6:F:2:ARG:HB2</td>
<td>6:F:4:TYR:CE2</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>11:K:27:ASN:HA</td>
<td>11:K:56:GLY:HA2</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>15:O:9:GLN:HA</td>
<td>15:O:12:ILE:HD12</td>
<td>2.01</td>
<td>0.41</td>
</tr>
<tr>
<td>18:R:25:THR:HB</td>
<td>18:R:42:ARG:NH2</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1216:G:N2</td>
<td>1:A:1217:C:C2</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1526:G:C6</td>
<td>1:A:1527:C:C4</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:129(A):G:O2'</td>
<td>1:A:189(F):U:H2'</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:324:G:OP2</td>
<td>1:A:324:G:H8</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:352:C:N3</td>
<td>1:A:356:A:N6</td>
<td>2.67</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:568:G:N1</td>
<td>1:A:883:C:C4</td>
<td>2.89</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:500:C:C2</td>
<td>1:A:650:G:N2</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:681:C:H42</td>
<td>1:A:709:G:H1</td>
<td>1.67</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:725:G:C2</td>
<td>1:A:726:C:C2</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>2:B:105:PHE:HA</td>
<td>2:B:108:ILE:HG22</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>3:C:148:GLY:HA3</td>
<td>3:C:172:ARG:O</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>4:D:173:TRP:CD1</td>
<td>4:D:174:LEU:HG</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>5:E:80:ILE:CD1</td>
<td>5:E:138:ALA:HB1</td>
<td>2.49</td>
<td>0.41</td>
</tr>
<tr>
<td>7:G:71:PRO:HD3</td>
<td>7:G:103:TRP:HZ3</td>
<td>1.85</td>
<td>0.41</td>
</tr>
<tr>
<td>10:J:20:ALA:HB1</td>
<td>10:J:37:PRO:HB3</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1005:A:O4'</td>
<td>1:A:1036:G:N2</td>
<td>2.53</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1068:G:C2</td>
<td>1:A:1069:C:C2</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1171:G:C2</td>
<td>1:A:1172:C:C2</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:130:A:C8</td>
<td>1:A:130:A:OP1</td>
<td>2.72</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:937:A:H1'</td>
<td>1:A:1379:G:N2</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1464:G:C2</td>
<td>1:A:1465:C:N3</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:197:A:H4'</td>
<td>1:A:198:G:O5'</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:333:G:C6</td>
<td>1:A:334:C:N4</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:381:C:H2'</td>
<td>1:A:382:A:O4'</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:841:U:H6</td>
<td>1:A:841:U:H5''</td>
<td>1.86</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:886:G:C2</td>
<td>1:A:912:C:O2</td>
<td>2.73</td>
<td>0.41</td>
</tr>
<tr>
<td>10:J:17:ASP:CG</td>
<td>10:J:70:ARG:HH22</td>
<td>2.06</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1158:C:C2</td>
<td>1:A:1158:C:O2</td>
<td>2.68</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1458:G:OP1</td>
<td>20:F:32:ALA:HA</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1464:G:C6</td>
<td>1:A:1465:C:N4</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:417:C:N4</td>
<td>1:A:418:C:N4</td>
<td>2.69</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:521:G:C2</td>
<td>1:A:522:C:C4</td>
<td>3.08</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:A:675:A:H2'</td>
<td>1:A:676:A:C8</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:916:G:H2'</td>
<td>1:A:917:G:H8</td>
<td>1.83</td>
<td>0.41</td>
</tr>
<tr>
<td>2:B:77:ALA:HB2</td>
<td>2:B:211:ILE:HG21</td>
<td>2.01</td>
<td>0.41</td>
</tr>
<tr>
<td>5:E:79:GLU:HA</td>
<td>5:E:91:LEU:O</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>8:H:36:LEU:HD12</td>
<td>8:H:59:LEU:HD22</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>17:Q:29:HIS:CG</td>
<td>17:Q:30:PRO:HD2</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1004:A:N7</td>
<td>1:A:1037:C:N3</td>
<td>2.68</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1096:C:C2</td>
<td>1:A:1097:C:C5</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1171:G:N1</td>
<td>1:A:1172:C:C4</td>
<td>2.89</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1413:A:H2'</td>
<td>1:A:1414:U:O4'</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1523:G:H2'</td>
<td>1:A:1524:C:C6</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:216:G:C2</td>
<td>1:A:217:C:N3</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:306:G:C2</td>
<td>1:A:307:C:C2</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:376:G:H2'</td>
<td>1:A:377:G:C8</td>
<td>2.52</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:695:A:OP2</td>
<td>11:K:53:SER:N</td>
<td>2.53</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:830:G:H2'</td>
<td>1:A:831:U:O4'</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>12:L:93:LEU:O</td>
<td>12:L:96:VAL:HB</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>14:N:3:ARG:CZ</td>
<td>14:N:6:LEU:HD11</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>16:P:59:TRP:C</td>
<td>16:P:62:VAL:HG22</td>
<td>2.39</td>
<td>0.41</td>
</tr>
<tr>
<td>19:S:17:GLU:HA</td>
<td>19:S:20:LEU:HG</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1468:A:H2'</td>
<td>1:A:1469:G:O4'</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:265:G:H2'</td>
<td>1:A:267:C:H5</td>
<td>1.85</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:427:U:H4'</td>
<td>1:A:541:G:H5'</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:769:G:N3</td>
<td>1:A:769:G:H2'</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:903:G:C6</td>
<td>1:A:904:C:C4</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>4:D:69:GLY:C</td>
<td>4:D:70:ILE:HG13</td>
<td>2.41</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:691:G:C8</td>
<td>11:K:26:ASN:HB3</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>13:M:16:ASP:HB3</td>
<td>13:M:34:LEU:HD11</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1119:C:H2'</td>
<td>1:A:1120:G:O4'</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1288:A:H2'</td>
<td>1:A:1289:A:H8</td>
<td>1.86</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:197:A:N6</td>
<td>1:A:221:C:H4'</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:299:G:C6</td>
<td>1:A:300:A:C6</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:577:G:C6</td>
<td>1:A:578:C:C4</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>2:B:54:THR:HG21</td>
<td>2:B:185:ILE:HG23</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>2:B:215:LEU:O</td>
<td>2:B:219:VAL:HG23</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>3:C:65:ALA:HA</td>
<td>3:C:100:ALA:O</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>3:C:29:TYR:CD2</td>
<td>3:C:29:TYR:O</td>
<td>2.73</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1048:G:C2</td>
<td>1:A:1210:C:C2</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1283:G:N2</td>
<td>1:A:1284:C:C2</td>
<td>2.89</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1444:C:O5'</td>
<td>1:A:1444:C:H6</td>
<td>2.04</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:500:G:C2</td>
<td>1:A:501:C:C2</td>
<td>3.09</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:563:A:N3</td>
<td>1:A:563:A:H2'</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>5:E:127:ASN:HA</td>
<td>5:E:128:PRO:HD2</td>
<td>1.83</td>
<td>0.41</td>
</tr>
<tr>
<td>10:J:60:ARG:CZ</td>
<td>10:J:60:ARG:CB</td>
<td>2.95</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1106:G:C2</td>
<td>1:A:1107:C:N3</td>
<td>2.89</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1341:U:H2'</td>
<td>1:A:1342:C:C6</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1323:G:H4'</td>
<td>1:A:1363:C:C2</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1374:A:O2'</td>
<td>7:G:28:ASN:HB3</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1514:C:H2'</td>
<td>1:A:1515:C:C6</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:666:G:C6</td>
<td>1:A:741:G:C5</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:716:A:C6</td>
<td>1:A:717:C:C4</td>
<td>3.10</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:763:G:C6</td>
<td>1:A:764:C:C4</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:794:A:H2'</td>
<td>1:A:795:C:C6</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:861:G:H2'</td>
<td>1:A:862:C:C6</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>16:P:12:LYS:C</td>
<td>16:P:14:ASN:H</td>
<td>2.24</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:1423:G:C6</td>
<td>1:A:1424:C:C4</td>
<td>3.09</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:1425:U:H2'</td>
<td>1:A:1426:C:C6</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:1522:U:H2'</td>
<td>1:A:1523:G:H8</td>
<td>1.85</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:1534:A:H2'</td>
<td>1:A:1535:C:C6</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:673:G:H2'</td>
<td>1:A:674:G:C8</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:749:C:H2'</td>
<td>1:A:750:G:H8</td>
<td>1.86</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:784:C:C2</td>
<td>1:A:799:G:N2</td>
<td>2.89</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:886:G:C4</td>
<td>1:A:887:G:C8</td>
<td>3.08</td>
<td>0.40</td>
</tr>
<tr>
<td>7:G:39:ALA:HA</td>
<td>7:G:42:ILE:HD12</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>15:O:75:PRO:O</td>
<td>15:O:78:TYR:HB3</td>
<td>2.22</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:1274:G:H2'</td>
<td>1:A:1275:A:C8</td>
<td>2.57</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:1300:G:HO2'</td>
<td>1:A:1303:C:H41</td>
<td>1.65</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:977:A:H1'</td>
<td>1:A:982:U:O4</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>4:D:61:LYS:HD2</td>
<td>4:D:207:TYR:HE1</td>
<td>1.86</td>
<td>0.40</td>
</tr>
<tr>
<td>10:J:17:ASP:OD1</td>
<td>10:J:70:ARG:NH1</td>
<td>2.54</td>
<td>0.40</td>
</tr>
<tr>
<td>18:R:61:LYS:HG2</td>
<td>18:R:62:GLU:N</td>
<td>2.37</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:1198:G:H2'</td>
<td>1:A:1199:U:C6</td>
<td>2.57</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:289:G:N1</td>
<td>1:A:290:C:C4</td>
<td>2.89</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:394:G:C2</td>
<td>1:A:395:C:C2</td>
<td>3.10</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:A:832:C:O2</td>
<td>1:A:855:G:C2</td>
<td>2.74</td>
<td>0.40</td>
</tr>
<tr>
<td>2:B:130:ARG:N</td>
<td>2:B:130:ARG:HD2</td>
<td>2.36</td>
<td>0.40</td>
</tr>
<tr>
<td>3:C:30:ARG:CB</td>
<td>3:C:30:ARG:NH1</td>
<td>2.73</td>
<td>0.40</td>
</tr>
<tr>
<td>7:G:50:ILE:HD11</td>
<td>7:G:124:LEU:HB3</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>10:J:17:ASP:CA</td>
<td>10:J:70:ARG:NH2</td>
<td>2.85</td>
<td>0.40</td>
</tr>
<tr>
<td>10:J:90:LEU:HA</td>
<td>10:J:91:PRO:HD3</td>
<td>1.76</td>
<td>0.40</td>
</tr>
<tr>
<td>13:M:16:ASP:HB3</td>
<td>13:M:34:LEU:CD1</td>
<td>2.52</td>
<td>0.40</td>
</tr>
<tr>
<td>14:N:53:LEU:HA</td>
<td>14:N:54:PRO:HD2</td>
<td>1.85</td>
<td>0.40</td>
</tr>
<tr>
<td>16:P:70:ALA:O</td>
<td>16:P:74:LEU:HD12</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>20:T:43:LEU:HB3</td>
<td>20:T:52:ALA:HB2</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:102:G:C2</td>
<td>1:A:103:C:C2</td>
<td>3.09</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:1099:G:C6</td>
<td>1:A:1100:C:C2</td>
<td>3.08</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:1241:G:C2</td>
<td>1:A:1242:C:C2</td>
<td>3.09</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:1342:C:H5'</td>
<td>9:I:125:Tyr:CE1</td>
<td>2.57</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:319:G:C6</td>
<td>1:A:320:C:C4</td>
<td>3.09</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:407:G:H1'</td>
<td>4:D:119:GLN:NE2</td>
<td>2.33</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:926:G:H8</td>
<td>1:A:926:G:O5'</td>
<td>2.04</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:975:A:H4'</td>
<td>1:A:976:G:C5'</td>
<td>2.51</td>
<td>0.40</td>
</tr>
<tr>
<td>2:B:201:ILE:HG21</td>
<td>2:B:214:ILE:HG21</td>
<td>2.02</td>
<td>0.40</td>
</tr>
<tr>
<td>5:E:18:ARG:H</td>
<td>5:E:25:ARG:H</td>
<td>1.69</td>
<td>0.40</td>
</tr>
<tr>
<td>12:L:42:THR:CG2</td>
<td>12:L:52:LEU:HB3</td>
<td>2.51</td>
<td>0.40</td>
</tr>
<tr>
<td>18:R:37:VAL:HG21</td>
<td>18:R:78:LEU:HB3</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>23:X:90:PHE:HB2</td>
<td>23:X:120:ILE:HG12</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:1069:C:N4</td>
<td>1:A:1106:G:H1</td>
<td>2.18</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:1356:G:N2</td>
<td>1:A:1357:A:C2</td>
<td>2.90</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:1395:C:H2'</td>
<td>1:A:1396:A:C8</td>
<td>2.57</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:289:G:C6</td>
<td>1:A:290:C:N4</td>
<td>2.90</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:434:U:H2'</td>
<td>1:A:435:C:H6</td>
<td>1.84</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:725:G:C2</td>
<td>1:A:726:C:C4</td>
<td>3.10</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:895:G:H2'</td>
<td>1:A:896:C:C6</td>
<td>2.55</td>
<td>0.40</td>
</tr>
<tr>
<td>1:A:1113:C:O4'</td>
<td>3:C:14:ILE:CD1</td>
<td>2.68</td>
<td>0.40</td>
</tr>
<tr>
<td>4:D:138:TYR:CD1</td>
<td>4:D:138:TYR:C</td>
<td>2.95</td>
<td>0.40</td>
</tr>
<tr>
<td>4:D:52:SER:O</td>
<td>4:D:55:ALA:HB3</td>
<td>2.21</td>
<td>0.40</td>
</tr>
</tbody>
</table>

Continued on next page...
There are no symmetry-related clashes.

### 5.3 Torsion angles

#### 5.3.1 Protein backbone

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

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Analysed</th>
<th>Favoured</th>
<th>Allowed</th>
<th>Outliers</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>B</td>
<td>232/256 (91%)</td>
<td>186 (80%)</td>
<td>26 (11%)</td>
<td>20 (9%)</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>204/239 (85%)</td>
<td>181 (89%)</td>
<td>17 (8%)</td>
<td>6 (3%)</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>206/209 (99%)</td>
<td>181 (88%)</td>
<td>18 (9%)</td>
<td>7 (3%)</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>148/162 (91%)</td>
<td>130 (88%)</td>
<td>13 (9%)</td>
<td>5 (3%)</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>99/101 (98%)</td>
<td>90 (91%)</td>
<td>6 (6%)</td>
<td>3 (3%)</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>153/156 (98%)</td>
<td>139 (91%)</td>
<td>10 (6%)</td>
<td>4 (3%)</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>136/138 (99%)</td>
<td>124 (91%)</td>
<td>9 (7%)</td>
<td>3 (2%)</td>
<td>7</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>125/128 (98%)</td>
<td>103 (82%)</td>
<td>17 (14%)</td>
<td>5 (4%)</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>96/105 (91%)</td>
<td>81 (84%)</td>
<td>10 (10%)</td>
<td>5 (5%)</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>117/129 (91%)</td>
<td>98 (84%)</td>
<td>14 (12%)</td>
<td>5 (4%)</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>122/132 (92%)</td>
<td>93 (76%)</td>
<td>26 (21%)</td>
<td>3 (2%)</td>
<td>6</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>115/126 (91%)</td>
<td>93 (81%)</td>
<td>20 (17%)</td>
<td>2 (2%)</td>
<td>10</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>58/61 (95%)</td>
<td>45 (78%)</td>
<td>11 (19%)</td>
<td>2 (3%)</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>86/89 (97%)</td>
<td>81 (94%)</td>
<td>5 (6%)</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>81/88 (92%)</td>
<td>68 (84%)</td>
<td>13 (16%)</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>97/105 (92%)</td>
<td>82 (84%)</td>
<td>14 (14%)</td>
<td>1 (1%)</td>
<td>17</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>71/88 (81%)</td>
<td>60 (84%)</td>
<td>7 (10%)</td>
<td>4 (6%)</td>
<td>2</td>
</tr>
</tbody>
</table>
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>19</td>
<td>S</td>
<td>78/93 (84%)</td>
<td>64 (82%)</td>
<td>10 (13%)</td>
<td>4 (5%)</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>97/106 (92%)</td>
<td>87 (90%)</td>
<td>5 (5%)</td>
<td>5 (5%)</td>
<td>2</td>
</tr>
<tr>
<td>21</td>
<td>V</td>
<td>22/27 (82%)</td>
<td>19 (86%)</td>
<td>3 (14%)</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>22</td>
<td>W</td>
<td>69/72 (96%)</td>
<td>63 (91%)</td>
<td>4 (6%)</td>
<td>2 (3%)</td>
<td>5</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>162/171 (95%)</td>
<td>141 (87%)</td>
<td>14 (9%)</td>
<td>7 (4%)</td>
<td>3</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>2574/2781 (93%)</td>
<td>2209 (86%)</td>
<td>272 (11%)</td>
<td>93 (4%)</td>
<td>7</td>
</tr>
</tbody>
</table>

All (93) 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>2</td>
<td>B</td>
<td>17</td>
<td>PHE</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>20</td>
<td>GLU</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>24</td>
<td>TRP</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>208</td>
<td>ILE</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>37</td>
<td>PRO</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>17</td>
<td>ALA</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>21</td>
<td>ALA</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>11</td>
<td>LYS</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>27</td>
<td>LEU</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>45</td>
<td>PRO</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>113</td>
<td>PRO</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>71</td>
<td>LEU</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>54</td>
<td>PRO</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>16</td>
<td>HIS</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>21</td>
<td>ARG</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>204</td>
<td>ASN</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>228</td>
<td>GLY</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>229</td>
<td>VAL</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>13</td>
<td>GLY</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>5</td>
<td>ILE</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>42</td>
<td>GLN</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>96</td>
<td>PRO</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>56</td>
<td>LEU</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>101</td>
<td>SER</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>67</td>
<td>LYS</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>18</td>
<td>ARG</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>20</td>
<td>ALA</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>32</td>
<td>ARG</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>49</td>
<td>ALA</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>95</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>20</td>
<td>T</td>
<td>98</td>
<td>PRO</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>83</td>
<td>THR</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>92</td>
<td>VAL</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>4</td>
<td>LYS</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>9</td>
<td>CYS</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>43</td>
<td>HIS</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>4</td>
<td>ARG</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>53</td>
<td>LYS</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>34</td>
<td>VAL</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>38</td>
<td>ILE</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>54</td>
<td>PHE</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>55</td>
<td>LYS</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>55</td>
<td>LYS</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>67</td>
<td>GLU</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>42</td>
<td>PRO</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>9</td>
<td>GLU</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>78</td>
<td>GLN</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>123</td>
<td>ALA</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>108</td>
<td>ASN</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>31</td>
<td>CYS</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>7</td>
<td>ALA</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>55</td>
<td>GLY</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>5</td>
<td>PRO</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>102</td>
<td>ARG</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>56</td>
<td>HIS</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>14</td>
<td>VAL</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>23</td>
<td>ARG</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>17</td>
<td>SER</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>9</td>
<td>VAL</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>97</td>
<td>ALA</td>
</tr>
<tr>
<td>22</td>
<td>W</td>
<td>50</td>
<td>GLY</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>8</td>
<td>ASN</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>96</td>
<td>GLU</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>154</td>
<td>PRO</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>8</td>
<td>LYS</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>130</td>
<td>ARG</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>194</td>
<td>PRO</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>233</td>
<td>SER</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>156</td>
<td>ARG</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>179</td>
<td>ARG</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>75</td>
<td>ARG</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>54</td>
<td>ASP</td>
</tr>
</tbody>
</table>
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Analysed</th>
<th>Rotameric</th>
<th>Outliers</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>K</td>
<td>74</td>
<td>ALA</td>
<td>11</td>
<td>74 (100%)</td>
<td>1 (100%)</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>75</td>
<td>LYS</td>
<td>2</td>
<td>75 (100%)</td>
<td>0 (0%)</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>125</td>
<td>PRO</td>
<td>2</td>
<td>125 (100%)</td>
<td>0 (0%)</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>3</td>
<td>ASN</td>
<td>3</td>
<td>3 (100%)</td>
<td>0 (0%)</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>85</td>
<td>GLY</td>
<td>5</td>
<td>85 (100%)</td>
<td>0 (0%)</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>15</td>
<td>ASP</td>
<td>6</td>
<td>15 (100%)</td>
<td>0 (0%)</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>35</td>
<td>ALA</td>
<td>6</td>
<td>35 (100%)</td>
<td>0 (0%)</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>24</td>
<td>GLY</td>
<td>9</td>
<td>24 (100%)</td>
<td>0 (0%)</td>
<td>9</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>119</td>
<td>ALA</td>
<td>9</td>
<td>119 (100%)</td>
<td>0 (0%)</td>
<td>9</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>79</td>
<td>GLU</td>
<td>12</td>
<td>79 (100%)</td>
<td>0 (0%)</td>
<td>12</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>7</td>
<td>ILE</td>
<td>14</td>
<td>7 (100%)</td>
<td>0 (0%)</td>
<td>14</td>
</tr>
<tr>
<td>22</td>
<td>W</td>
<td>2</td>
<td>LYS</td>
<td>22</td>
<td>2 (100%)</td>
<td>0 (0%)</td>
<td>22</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>167</td>
<td>PRO</td>
<td>2</td>
<td>167 (100%)</td>
<td>0 (0%)</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>69</td>
<td>GLY</td>
<td>4</td>
<td>69 (100%)</td>
<td>0 (0%)</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>77</td>
<td>PRO</td>
<td>5</td>
<td>77 (100%)</td>
<td>0 (0%)</td>
<td>5</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>8</td>
<td>GLY</td>
<td>19</td>
<td>8 (100%)</td>
<td>0 (0%)</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>131</td>
<td>PRO</td>
<td>2</td>
<td>131 (100%)</td>
<td>0 (0%)</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>105</td>
<td>VAL</td>
<td>5</td>
<td>105 (100%)</td>
<td>0 (0%)</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>48</td>
<td>ILE</td>
<td>11</td>
<td>48 (100%)</td>
<td>0 (0%)</td>
<td>11</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>96</td>
<td>GLY</td>
<td>20</td>
<td>96 (100%)</td>
<td>0 (0%)</td>
<td>20</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>55</td>
<td>PRO</td>
<td>23</td>
<td>55 (100%)</td>
<td>0 (0%)</td>
<td>23</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 PDB entries followed by that with respect to all EM entries.

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

<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>10</td>
<td>J</td>
<td>87/92 (95%)</td>
<td>72 (83%)</td>
<td>15 (17%)</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>90/99 (91%)</td>
<td>70 (78%)</td>
<td>20 (22%)</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>104/109 (95%)</td>
<td>85 (82%)</td>
<td>19 (18%)</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>94/101 (93%)</td>
<td>80 (85%)</td>
<td>14 (15%)</td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>49/50 (98%)</td>
<td>44 (90%)</td>
<td>5 (10%)</td>
<td>8</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>79/80 (99%)</td>
<td>52 (66%)</td>
<td>27 (34%)</td>
<td>0</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>72/74 (97%)</td>
<td>58 (81%)</td>
<td>14 (19%)</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>94/97 (97%)</td>
<td>84 (89%)</td>
<td>10 (11%)</td>
<td>7</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>64/77 (83%)</td>
<td>50 (78%)</td>
<td>14 (22%)</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>71/80 (89%)</td>
<td>59 (83%)</td>
<td>12 (17%)</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>76/82 (93%)</td>
<td>60 (79%)</td>
<td>16 (21%)</td>
<td>1</td>
</tr>
<tr>
<td>21</td>
<td>V</td>
<td>19/22 (86%)</td>
<td>17 (90%)</td>
<td>2 (10%)</td>
<td>7</td>
</tr>
<tr>
<td>22</td>
<td>W</td>
<td>62/63 (98%)</td>
<td>56 (90%)</td>
<td>6 (10%)</td>
<td>9</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>145/150 (97%)</td>
<td>126 (87%)</td>
<td>19 (13%)</td>
<td>4</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>2196/2323 (94%)</td>
<td>1786 (81%)</td>
<td>410 (19%)</td>
<td>4</td>
</tr>
</tbody>
</table>

All (410) 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>2</td>
<td>B</td>
<td>8</td>
<td>LYS</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>10</td>
<td>LEU</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>15</td>
<td>VAL</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>16</td>
<td>HIS</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>21</td>
<td>ARG</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>23</td>
<td>ARG</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>28</td>
<td>PHE</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>40</td>
<td>HIS</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>44</td>
<td>LEU</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>45</td>
<td>GLN</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>61</td>
<td>LEU</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>73</td>
<td>THR</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>82</td>
<td>ARG</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>83</td>
<td>MET</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>87</td>
<td>ARG</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>95</td>
<td>GLN</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>96</td>
<td>ARG</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>102</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>2</td>
<td>B</td>
<td>107</td>
<td>THR</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>111</td>
<td>ARG</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>112</td>
<td>VAL</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>114</td>
<td>ARG</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>117</td>
<td>GLU</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>126</td>
<td>GLU</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>127</td>
<td>ILE</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>130</td>
<td>ARG</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>137</td>
<td>ARG</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>144</td>
<td>ARG</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>146</td>
<td>GLN</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>154</td>
<td>LEU</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>155</td>
<td>LEU</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>157</td>
<td>ARG</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>163</td>
<td>PHE</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>165</td>
<td>VAL</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>168</td>
<td>THR</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>172</td>
<td>ILE</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>178</td>
<td>ARG</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>180</td>
<td>LEU</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>187</td>
<td>LEU</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>190</td>
<td>THR</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>195</td>
<td>ASP</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>198</td>
<td>ASP</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>200</td>
<td>ILE</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>205</td>
<td>ASP</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>208</td>
<td>ILE</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>211</td>
<td>ILE</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>213</td>
<td>LEU</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>221</td>
<td>LEU</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>229</td>
<td>VAL</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>3</td>
<td>ASN</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>4</td>
<td>LYS</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>14</td>
<td>ILE</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>21</td>
<td>ARG</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>33</td>
<td>LEU</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>40</td>
<td>ARG</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>52</td>
<td>LEU</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>82</td>
<td>GLU</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>87</td>
<td>LEU</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>90</td>
<td>GLU</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>91</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>3</td>
<td>C</td>
<td>94</td>
<td>LEU</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>98</td>
<td>ASN</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>101</td>
<td>LEU</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>102</td>
<td>ASN</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>115</td>
<td>LEU</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>119</td>
<td>ARG</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>157</td>
<td>ILE</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>177</td>
<td>THR</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>190</td>
<td>ARG</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>191</td>
<td>THR</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>204</td>
<td>LEU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>5</td>
<td>ILE</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>11</td>
<td>LEU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>13</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>14</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>15</td>
<td>GLU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>20</td>
<td>TYR</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>21</td>
<td>LEU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>25</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>27</td>
<td>TYR</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>35</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>45</td>
<td>GLN</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>46</td>
<td>LYS</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>49</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>50</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>53</td>
<td>ASP</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>59</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>64</td>
<td>LEU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>65</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>70</td>
<td>ILE</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>74</td>
<td>GLN</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>76</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>78</td>
<td>LEU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>83</td>
<td>SER</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>97</td>
<td>LEU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>112</td>
<td>VAL</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>115</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>119</td>
<td>GLN</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>122</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>132</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>135</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>4</td>
<td>D</td>
<td>137</td>
<td>SER</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>138</td>
<td>TYR</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>141</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>144</td>
<td>ASP</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>153</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>154</td>
<td>ASN</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>155</td>
<td>LEU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>157</td>
<td>LEU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>158</td>
<td>ILE</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>162</td>
<td>LEU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>163</td>
<td>GLU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>168</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>174</td>
<td>LEU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>176</td>
<td>LEU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>178</td>
<td>VAL</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>181</td>
<td>MET</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>186</td>
<td>LEU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>187</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>190</td>
<td>ASP</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>192</td>
<td>GLU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>193</td>
<td>ASP</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>196</td>
<td>LEU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>200</td>
<td>GLU</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>207</td>
<td>TYR</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>209</td>
<td>ARG</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>5</td>
<td>ASP</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>7</td>
<td>GLU</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>12</td>
<td>LEU</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>14</td>
<td>ARG</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>19</td>
<td>MET</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>27</td>
<td>ARG</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>32</td>
<td>VAL</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>34</td>
<td>VAL</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>36</td>
<td>ASP</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>37</td>
<td>ARG</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>38</td>
<td>GLN</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>40</td>
<td>ARG</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>41</td>
<td>VAL</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>47</td>
<td>LYS</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>63</td>
<td>ARG</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>67</td>
<td>VAL</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>71</td>
<td>LEU</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>5</td>
<td>E</td>
<td>76</td>
<td>ILE</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>79</td>
<td>GLU</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>80</td>
<td>ILE</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>91</td>
<td>LEU</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>98</td>
<td>THR</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>107</td>
<td>ARG</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>116</td>
<td>THR</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>118</td>
<td>ILE</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>127</td>
<td>ASN</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>135</td>
<td>THR</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>136</td>
<td>MET</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>141</td>
<td>GLN</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>144</td>
<td>THR</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>147</td>
<td>ASP</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>148</td>
<td>VAL</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>5</td>
<td>GLU</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>18</td>
<td>GLN</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>19</td>
<td>LEU</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>27</td>
<td>GLN</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>28</td>
<td>ARG</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>31</td>
<td>GLU</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>32</td>
<td>ASN</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>36</td>
<td>ARG</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>40</td>
<td>VAL</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>61</td>
<td>LEU</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>69</td>
<td>GLU</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>75</td>
<td>LEU</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>77</td>
<td>ARG</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>82</td>
<td>ARG</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>86</td>
<td>ARG</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>16</td>
<td>LEU</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>60</td>
<td>LYS</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>72</td>
<td>ARG</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>74</td>
<td>GLU</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>91</td>
<td>VAL</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>136</td>
<td>LYS</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>137</td>
<td>LYS</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>142</td>
<td>GLU</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>156</td>
<td>TRP</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>8</td>
<td>ASP</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>11</td>
<td>THR</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>18</td>
<td>ARG</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>8</td>
<td>H</td>
<td>21</td>
<td>LYS</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>31</td>
<td>PHE</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>45</td>
<td>ILE</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>50</td>
<td>ARG</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>59</td>
<td>LEU</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>63</td>
<td>LEU</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>78</td>
<td>GLN</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>82</td>
<td>HIS</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>85</td>
<td>ARG</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>87</td>
<td>SER</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>92</td>
<td>ARG</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>93</td>
<td>VAL</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>102</td>
<td>ARG</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>120</td>
<td>THR</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>127</td>
<td>LEU</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>135</td>
<td>CYS</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>3</td>
<td>GLN</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>12</td>
<td>GLU</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>38</td>
<td>GLN</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>56</td>
<td>LEU</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>65</td>
<td>VAL</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>78</td>
<td>LYS</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>79</td>
<td>LEU</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>85</td>
<td>LEU</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>95</td>
<td>LYS</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>102</td>
<td>LEU</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>111</td>
<td>ARG</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>112</td>
<td>LYS</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>121</td>
<td>ARG</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>127</td>
<td>LYS</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>4</td>
<td>ILE</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>8</td>
<td>LEU</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>23</td>
<td>ILE</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>44</td>
<td>VAL</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>46</td>
<td>ARG</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>49</td>
<td>VAL</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>61</td>
<td>GLU</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>62</td>
<td>HIS</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>66</td>
<td>ARG</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>71</td>
<td>LEU</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>74</td>
<td>ILE</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>10</td>
<td>J</td>
<td>82</td>
<td>ILE</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>83</td>
<td>GLU</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>86</td>
<td>MET</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>87</td>
<td>THR</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>18</td>
<td>ARG</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>25</td>
<td>TYR</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>29</td>
<td>ILE</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>34</td>
<td>ASP</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>41</td>
<td>THR</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>47</td>
<td>VAL</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>48</td>
<td>ILE</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>54</td>
<td>ARG</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>57</td>
<td>THR</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>62</td>
<td>GLN</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>63</td>
<td>LEU</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>77</td>
<td>MET</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>92</td>
<td>GLU</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>93</td>
<td>GLN</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>96</td>
<td>ARG</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>103</td>
<td>LEU</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>109</td>
<td>VAL</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>111</td>
<td>ASP</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>116</td>
<td>HIS</td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>123</td>
<td>LYS</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>6</td>
<td>THR</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>7</td>
<td>ILE</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>17</td>
<td>LYS</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>33</td>
<td>ARG</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>36</td>
<td>VAL</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>39</td>
<td>VAL</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>41</td>
<td>ARG</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>46</td>
<td>LYS</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>50</td>
<td>SER</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>53</td>
<td>ARG</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>59</td>
<td>ARG</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>81</td>
<td>SER</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>83</td>
<td>VAL</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>89</td>
<td>ARG</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>90</td>
<td>VAL</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>104</td>
<td>VAL</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>110</td>
<td>VAL</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>113</td>
<td>ARG</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>12</td>
<td>L</td>
<td>122</td>
<td>THR</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>12</td>
<td>ASN</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>32</td>
<td>GLU</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>37</td>
<td>THR</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>44</td>
<td>ARG</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>45</td>
<td>VAL</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>66</td>
<td>LEU</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>67</td>
<td>GLU</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>73</td>
<td>GLU</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>87</td>
<td>TYR</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>90</td>
<td>LEU</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>102</td>
<td>ARG</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>110</td>
<td>ARG</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>115</td>
<td>LYS</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>116</td>
<td>THR</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>3</td>
<td>ARG</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>4</td>
<td>LYS</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>12</td>
<td>ARG</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>17</td>
<td>LYS</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>41</td>
<td>ARG</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>10</td>
<td>LYS</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>17</td>
<td>ARG</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>21</td>
<td>ASP</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>22</td>
<td>THR</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>25</td>
<td>THR</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>27</td>
<td>VAL</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>28</td>
<td>GLN</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>29</td>
<td>VAL</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>39</td>
<td>LEU</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>40</td>
<td>SER</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>41</td>
<td>GLU</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>43</td>
<td>LEU</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>45</td>
<td>VAL</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>48</td>
<td>LYS</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>49</td>
<td>ASP</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>52</td>
<td>SER</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>54</td>
<td>ARG</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>56</td>
<td>LEU</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>64</td>
<td>ARG</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>67</td>
<td>LEU</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>68</td>
<td>ARG</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>70</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>15</td>
<td>O</td>
<td>71</td>
<td>GLN</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>72</td>
<td>ARG</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>77</td>
<td>ARG</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>84</td>
<td>LYS</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>88</td>
<td>ARG</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>8</td>
<td>ARG</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>20</td>
<td>VAL</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>23</td>
<td>ASP</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>28</td>
<td>ARG</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>29</td>
<td>ASP</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>39</td>
<td>TYR</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>42</td>
<td>ARG</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>44</td>
<td>THR</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>45</td>
<td>THR</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>48</td>
<td>TRP</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>54</td>
<td>GLU</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>55</td>
<td>ARG</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>57</td>
<td>ARG</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>60</td>
<td>LEU</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>27</td>
<td>PHE</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>38</td>
<td>ARG</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>52</td>
<td>LYS</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>63</td>
<td>ARG</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>68</td>
<td>ARG</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>70</td>
<td>ARG</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>81</td>
<td>ARG</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>89</td>
<td>LEU</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>93</td>
<td>GLN</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>100</td>
<td>LYS</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>35</td>
<td>ARG</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>38</td>
<td>GLU</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>41</td>
<td>LYS</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>44</td>
<td>LEU</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>46</td>
<td>GLU</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>47</td>
<td>THR</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>53</td>
<td>ARG</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>54</td>
<td>ARG</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>61</td>
<td>LYS</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>66</td>
<td>LEU</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>75</td>
<td>ILE</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>76</td>
<td>LEU</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>82</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>18</td>
<td>R</td>
<td>87</td>
<td>ARG</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>6</td>
<td>LYS</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>7</td>
<td>LYS</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>13</td>
<td>ASP</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>15</td>
<td>LEU</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>19</td>
<td>VAL</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>25</td>
<td>LYS</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>29</td>
<td>ARG</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>30</td>
<td>LEU</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>37</td>
<td>ARG</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>41</td>
<td>VAL</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>52</td>
<td>TYR</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>63</td>
<td>THR</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>10</td>
<td>LEU</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>15</td>
<td>ARG</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>19</td>
<td>SER</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>22</td>
<td>ARG</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>23</td>
<td>ARG</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>24</td>
<td>LEU</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>46</td>
<td>GLU</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>62</td>
<td>LEU</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>64</td>
<td>ASP</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>68</td>
<td>LYS</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>72</td>
<td>LEU</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>73</td>
<td>HIS</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>74</td>
<td>LYS</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>75</td>
<td>ASN</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>84</td>
<td>LEU</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>89</td>
<td>ARG</td>
</tr>
<tr>
<td>21</td>
<td>V</td>
<td>7</td>
<td>ARG</td>
</tr>
<tr>
<td>21</td>
<td>V</td>
<td>12</td>
<td>LYS</td>
</tr>
<tr>
<td>22</td>
<td>W</td>
<td>8</td>
<td>ARG</td>
</tr>
<tr>
<td>22</td>
<td>W</td>
<td>19</td>
<td>ASN</td>
</tr>
<tr>
<td>22</td>
<td>W</td>
<td>32</td>
<td>ILE</td>
</tr>
<tr>
<td>22</td>
<td>W</td>
<td>33</td>
<td>LEU</td>
</tr>
<tr>
<td>22</td>
<td>W</td>
<td>47</td>
<td>ILE</td>
</tr>
<tr>
<td>22</td>
<td>W</td>
<td>48</td>
<td>LEU</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>31</td>
<td>THR</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>35</td>
<td>LEU</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>73</td>
<td>GLU</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>74</td>
<td>LYS</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>78</td>
<td>LYS</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>X</td>
<td>91</td>
<td>ARG</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>98</td>
<td>ASP</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>118</td>
<td>VAL</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>123</td>
<td>ARG</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>125</td>
<td>ARG</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>132</td>
<td>LEU</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>134</td>
<td>GLU</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>135</td>
<td>ARG</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>143</td>
<td>ASP</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>144</td>
<td>LEU</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>152</td>
<td>MET</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>162</td>
<td>ASN</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>163</td>
<td>MET</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>164</td>
<td>LEU</td>
</tr>
</tbody>
</table>

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (34) 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>2</td>
<td>B</td>
<td>16</td>
<td>HIS</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>19</td>
<td>HIS</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>25</td>
<td>ASN</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>95</td>
<td>GLN</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>146</td>
<td>GLN</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>204</td>
<td>ASN</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>3</td>
<td>ASN</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>6</td>
<td>HIS</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>28</td>
<td>GLN</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>108</td>
<td>ASN</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>123</td>
<td>GLN</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>176</td>
<td>HIS</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>119</td>
<td>GLN</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>123</td>
<td>HIS</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>125</td>
<td>HIS</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>129</td>
<td>ASN</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>7</td>
<td>ASN</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>37</td>
<td>ASN</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>97</td>
<td>GLN</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>82</td>
<td>HIS</td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>68</td>
<td>HIS</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>8</td>
<td>ASN</td>
</tr>
<tr>
<td>12</td>
<td>L</td>
<td>75</td>
<td>HIS</td>
</tr>
<tr>
<td>15</td>
<td>O</td>
<td>28</td>
<td>GLN</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>15</td>
<td>O</td>
<td>62</td>
<td>GLN</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>14</td>
<td>ASN</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>65</td>
<td>GLN</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>93</td>
<td>GLN</td>
</tr>
<tr>
<td>17</td>
<td>Q</td>
<td>94</td>
<td>ASN</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>36</td>
<td>ASN</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>63</td>
<td>GLN</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>47</td>
<td>HIS</td>
</tr>
<tr>
<td>19</td>
<td>S</td>
<td>53</td>
<td>ASN</td>
</tr>
<tr>
<td>20</td>
<td>T</td>
<td>73</td>
<td>HIS</td>
</tr>
</tbody>
</table>

5.3.3 RNA

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Analysed</th>
<th>Backbone Outliers</th>
<th>Pucker Outliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>1505/1522 (98%)</td>
<td>468 (31%)</td>
<td>114 (7%)</td>
</tr>
<tr>
<td>24</td>
<td>Y</td>
<td>12/39 (30%)</td>
<td>4 (33%)</td>
<td>0</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>1517/1561 (97%)</td>
<td>472 (31%)</td>
<td>114 (7%)</td>
</tr>
</tbody>
</table>

All (472) RNA backbone 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>8</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>9</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>13</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>14</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>18</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>19</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>22</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>29</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>30</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>31</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>32</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>35</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>39</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>43</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>44</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>47</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>48</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>49</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>50</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>51</td>
<td>A</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>52</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>54</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>59</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>60</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>61</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>62</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>66</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>68</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>73</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>76</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>77</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>79</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>81</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>83</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>91</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>97</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>101</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>108</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>115</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>116</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>120</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>121</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>122</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>129(A)</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>130</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>131</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>142</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>144</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>151</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>153</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>157</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>163</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>167</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>173</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>174</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>175</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>181</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>182</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>189(E)</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>189(F)</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>189(G)</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>189(H)</td>
<td>G</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>195</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>196</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>197</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>198</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>199</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>201</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>203</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>204</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>217</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>220</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>243</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>244</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>245</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>247</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>251</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>252</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>253</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>266</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>267</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>279</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>280</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>281</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>282</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>283</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>288</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>289</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>291</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>298</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>299</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>300</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>301</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>306</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>309</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>315</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>316</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>321</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>324</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>325</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>327</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>328</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>329</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>330</td>
<td>C</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>332</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>339</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>340</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>342</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>344</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>345</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>350</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>351</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>352</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>353</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>357</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>366</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>367</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>368</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>372</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>373</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>375</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>378</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>384</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>388</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>389</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>390</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>392</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>393</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>395</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>397</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>398</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>406</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>409</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>412</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>413</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>414</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>419</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>421</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>422</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>423</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>428</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>429</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>438</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>439</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>441</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>444</td>
<td>C</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>446</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>450</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>451</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>452</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>470</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>484</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>485</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>492</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>495</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>496</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>498</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>510</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>511</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>517</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>518</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>519</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>521</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>524</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>527</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>528</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>529</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>531</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>532</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>534</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>535</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>540</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>545</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>547</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>548</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>550</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>559</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>560</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>561</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>562</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>564</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>565</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>568</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>572</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>573</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>576</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>577</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>578</td>
<td>C</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>587</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>588</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>596</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>597</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>607</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>619</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>620</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>641</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>642</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>644</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>650</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>652</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>653</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>654</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>665</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>666</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>671</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>672</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>677</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>687</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>688</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>697</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>701</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>702</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>703</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>713</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>716</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>717</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>721</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>723</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>724</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>731</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>737</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>740</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>748</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>749</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>755</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>760</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>764</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>777</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>784</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>785</td>
<td>G</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>787</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>792</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>793</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>794</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>802</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>812</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>815</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>817</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>819</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>821</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>828</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>835</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>839</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>841</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>851</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>853</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>855</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>859</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>864</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>865</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>866</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>869</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>871</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>872</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>873</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>874</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>876</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>882</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>885</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>889</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>900</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>902</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>911</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>920</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>922</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>927</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>930</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>932</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>933</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>934</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>935</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>937</td>
<td>A</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>942</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>943</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>945</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>950</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>960</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>961</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>965</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>966</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>968</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>969</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>971</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>972</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>974</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>975</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>976</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>977</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>989</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>991</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>992</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>993</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>994</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>998</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1000</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1001</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1005</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1007</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1023</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1024</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1025</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1026</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1028</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1029</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1030(C)</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1031</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1045</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1046</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1049</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1050</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1051</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1053</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1054</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1055</td>
<td>A</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>1060</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1065</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1066</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1067</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1070</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1074</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1078</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1079</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1081</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1085</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1086</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1092</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1093</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1094</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1095</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1097</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1098</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1100</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1101</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1102</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1104</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1117</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1118</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1124</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1125</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1126</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1127</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1128</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1129</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1130</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1131</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1135</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1136</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1137</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1138</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1139</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1145</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1146</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1150</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1152</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1157</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1158</td>
<td>C</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>1159</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1170</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1171</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1183</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1184</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1187</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1190</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1191</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1195</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1196</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1197</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1200</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1201</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1202</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1205</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1212</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1213</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1215</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1224</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1225</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1226</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1227</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1238</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1239</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1240</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1249</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1250</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1256</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1257</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1258</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1260</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1266</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1270</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1278</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1279</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1281</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1282</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1285</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1286</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1287</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1295</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1297</td>
<td>C</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>1300</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1301</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1302</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1303</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1305</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1306</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1312</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1317</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1318</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1319</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1321</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1322</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1323</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1331</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1332</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1336</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1338</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1342</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1346</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1347</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1351</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1353</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1357</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1362</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1363</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1363(A)</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1364</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1370</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1379</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1380</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1381</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1394</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1398</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1409</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1412</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1418</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1419</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1433</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1440</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1442</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1442(A)</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1443</td>
<td>G</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>1447</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1452</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1456</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1457</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1485</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1486</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1488</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1492</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1494</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1497</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1499</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1503</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1504</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1505</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1506</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1507</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1517</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1519</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1520</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1528</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1529</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1530</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1531</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1535</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1536</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1539</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1541</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1542</td>
<td>U</td>
</tr>
<tr>
<td>24</td>
<td>Y</td>
<td>28</td>
<td>A</td>
</tr>
<tr>
<td>24</td>
<td>Y</td>
<td>30</td>
<td>G</td>
</tr>
<tr>
<td>24</td>
<td>Y</td>
<td>31</td>
<td>U</td>
</tr>
<tr>
<td>24</td>
<td>Y</td>
<td>32</td>
<td>A</td>
</tr>
</tbody>
</table>

All (114) RNA pucker 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>7</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>8</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>13</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>30</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>31</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>48</td>
<td>C</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>49</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>51</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>60</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>115</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>119</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>129(A)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>145</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>156</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>173</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>181</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>195</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>197</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>202</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>243</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>250</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>251</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>266</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>274</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>279</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>281</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>289</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>327</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>328</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>329</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>344</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>350</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>351</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>366</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>372</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>389</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>421</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>428</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>484</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>495</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>496</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>509</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>518</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>535</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>559</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>560</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>561</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>576</td>
<td>G</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>577</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>595</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>641</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>653</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>687</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>701</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>702</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>748</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>777</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>792</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>840</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>864</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>872</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>884</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>932</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>933</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>960</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>965</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>975</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>992</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>993</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1000</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1050</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1065</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1077</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1078</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1082</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1092</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1101</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1145</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1151</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1182</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1187</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1190</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1196</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1200</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1201</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1212</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1214</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1224</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1226</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1239</td>
<td>A</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>1257</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1278</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1279</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1285</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1299</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1300</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1301</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1322</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1331</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1335</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1337</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1346</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1364</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1380</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1398</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1442(B)</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1447</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1452</td>
<td>C</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1493</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1498</td>
<td>U</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1503</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1504</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1529</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1534</td>
<td>A</td>
</tr>
</tbody>
</table>

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

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

5.5 Carbohydrates

There are no carbohydrates in this entry.

5.6 Ligand geometry

Of 116 ligands modelled in this entry, 110 are monoatomic - leaving 6 for Mogul analysis.
There are no bond length outliers.
There are no bond angle outliers.
There are no chirality outliers.
There are no torsion outliers.
There are no ring outliers.
No monomer is involved in short contacts.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

The following chains have linkage breaks:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Number of breaks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>7</td>
</tr>
<tr>
<td>23</td>
<td>X</td>
<td>2</td>
</tr>
</tbody>
</table>

All chain breaks are listed below:

<table>
<thead>
<tr>
<th>Model</th>
<th>Chain</th>
<th>Residue-1</th>
<th>Atom-1</th>
<th>Residue-2</th>
<th>Atom-2</th>
<th>Distance (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>84:U</td>
<td>O3'</td>
<td>88:A</td>
<td>P</td>
<td>5.27</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>93:G</td>
<td>O3'</td>
<td>96:U</td>
<td>P</td>
<td>4.63</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>204:U</td>
<td>O3'</td>
<td>216:G</td>
<td>P</td>
<td>4.48</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>841:U</td>
<td>O3'</td>
<td>848:C</td>
<td>P</td>
<td>4.32</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1442(A):G</td>
<td>O3'</td>
<td>1442(B):A</td>
<td>P</td>
<td>3.82</td>
</tr>
<tr>
<td>1</td>
<td>X</td>
<td>81:LYS</td>
<td>C</td>
<td>82:ARG</td>
<td>N</td>
<td>3.73</td>
</tr>
<tr>
<td>1</td>
<td>X</td>
<td>79:LYS</td>
<td>C</td>
<td>80:ALA</td>
<td>N</td>
<td>3.54</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>1387:G</td>
<td>O3'</td>
<td>1388:C</td>
<td>P</td>
<td>3.33</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>927:G</td>
<td>O3'</td>
<td>928:G</td>
<td>P</td>
<td>2.65</td>
</tr>
</tbody>
</table>