Full wwPDB X-ray Structure Validation Report

Mar 10, 2018 – 08:58 pm GMT

PDB ID : 3CF5
Title : Thiopeptide antibiotic Thiostrepton bound to the large ribosomal subunit of Deinococcus radiodurans
Authors : Harms, J.M.; Wilson, D.N.; Schluenzen, F.; Connell, S.R.; Stachelhaus, T.; Zaborowska, Z.; Spahn, C.M.T.; Fucini, P.
Deposited on : 2008-03-02
Resolution : 3.30 Å (reported)

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

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

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

MolProbity : 4.02b-467
Mogul : 1.7.3 (157068), CSD as539be (2018)
Xtriage (Phenix) : 1.13
EDS : trunk30967
Percentile statistics : 20171227.v01 (using entries in the PDB archive December 27th 2017)
Refmac : 5.8.0158
CCP4 : 7.0 (Gargrove)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : trunk30967
1 Overall quality at a glance

The following experimental techniques were used to determine the structure: 

*X-RAY DIFFRACTION*

The reported resolution of this entry is 3.30 Å.

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

<table>
<thead>
<tr>
<th>Metric</th>
<th>Whole archive (#Entries)</th>
<th>Similar resolution (#Entries, resolution range(Å))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clashscore</td>
<td>122126</td>
<td>1022 (3.34-3.26)</td>
</tr>
<tr>
<td>Ramachandran outliers</td>
<td>120053</td>
<td>1004 (3.34-3.26)</td>
</tr>
<tr>
<td>Sidechain outliers</td>
<td>120020</td>
<td>1003 (3.34-3.26)</td>
</tr>
<tr>
<td>RSRZ outliers</td>
<td>108989</td>
<td>1133 (3.36-3.24)</td>
</tr>
<tr>
<td>RNA backbone</td>
<td>2636</td>
<td>1009 (3.74-2.86)</td>
</tr>
</tbody>
</table>

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5%. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Length</th>
<th>Quality of chain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>55</td>
<td>71%</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>47</td>
<td>98%</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>66</td>
<td>96%</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>37</td>
<td>5%</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>19</td>
<td>5%</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>274</td>
<td>5%</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Length</th>
<th>Quality of chain</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>B</td>
<td>211</td>
<td>27% 52% 16%</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>205</td>
<td>8% 62% 22%</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>180</td>
<td>9% 69% 18%</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>185</td>
<td>17% 58% 17% 8%</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>144</td>
<td>28% 53% 15%</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>174</td>
<td>9% 47% 22% 18%</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>134</td>
<td>22% 63% 13% 8%</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>156</td>
<td>13% 49% 26% 10%</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>142</td>
<td>15% 57% 18% 5%</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>116</td>
<td>24% 53% 19%</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>114</td>
<td>4% 54% 25% 9%</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>166</td>
<td>16% 31% 15% 35%</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>118</td>
<td>13% 64% 20%</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>100</td>
<td>14% 51% 29% 6%</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>134</td>
<td>19% 61% 13% 5%</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>95</td>
<td>8% 58% 29%</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>115</td>
<td>4% 59% 24%</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>237</td>
<td>8% 51% 12% 26%</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>91</td>
<td>9% 22% 54% 15% 8%</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>81</td>
<td>4% 52% 23% 7% 11%</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>67</td>
<td>6% 60% 21%</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>55</td>
<td>16% 62% 18%</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2880</td>
<td>2% 51% 22% 9% 7%</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>60</td>
<td>7% 53% 12% 5% 8%</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>123</td>
<td>2% 63% 16% 8%</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>5</td>
<td>BB9</td>
<td>5</td>
<td>13</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>BB9</td>
<td>5</td>
<td>15</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>DHA</td>
<td>5</td>
<td>16</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>DHA</td>
<td>5</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>
2 Entry composition

There are 32 unique types of molecules in this entry. The entry contains 84475 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called 50S RIBOSOMAL PROTEIN L33.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>53</td>
<td>Total C</td>
<td>0</td>
<td>0</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>53 53</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 2 is a protein called 50S RIBOSOMAL PROTEIN L34.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>46</td>
<td>Total C</td>
<td>0</td>
<td>0</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>46 46</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 3 is a protein called 50S RIBOSOMAL PROTEIN L35.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>63</td>
<td>Total C</td>
<td>0</td>
<td>0</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>63 63</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 4 is a protein called 50S RIBOSOMAL PROTEIN L36.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
<td>37</td>
<td>Total C</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>297 179 66 47 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 5 is a protein called THIOSTREPTON.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5</td>
<td>19</td>
<td>Total C</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>114 72 19 18 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 6 is a protein called 50S RIBOSOMAL PROTEIN L2.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>A</td>
<td>240</td>
<td>Total C</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1826 1137 366 321 2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- Molecule 7 is a protein called 50S RIBOSOMAL PROTEIN L3.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>B</td>
<td>205</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1539 965 295 271</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 8 is a protein called 50S RIBOSOMAL PROTEIN L4.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>C</td>
<td>197</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1506 935 287 282</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 9 is a protein called 50S RIBOSOMAL PROTEIN L5.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>D</td>
<td>177</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1400 892 247 254</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 10 is a protein called 50S RIBOSOMAL PROTEIN L6.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>E</td>
<td>171</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1286 812 237 236</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 11 is a protein called 50S RIBOSOMAL PROTEIN L11.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>F</td>
<td>144</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1044 663 179 197</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 12 is a protein called 50S RIBOSOMAL PROTEIN L13.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>G</td>
<td>142</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1114 704 209 198</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 13 is a protein called 50S RIBOSOMAL PROTEIN L14.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>H</td>
<td>134</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>997 614 198 180</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 14 is a protein called 50S RIBOSOMAL PROTEIN L15.
<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>I</td>
<td>141</td>
<td>Total C N O</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1067 655 216 196</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 15 is a protein called 50S RIBOSOMAL PROTEIN L16.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>J</td>
<td>136</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1090 696 202 185 7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is a discrepancy between the modelled and reference sequences:

<table>
<thead>
<tr>
<th>Chain</th>
<th>Residue</th>
<th>Modelled</th>
<th>Actual</th>
<th>Comment</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>1</td>
<td>MET</td>
<td>-</td>
<td>INITIATING METHIONINE</td>
<td>UNP Q9RXJ5</td>
</tr>
</tbody>
</table>

- Molecule 16 is a protein called 50S RIBOSOMAL PROTEIN L17.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>K</td>
<td>113</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>878 541 178 157 2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 17 is a protein called 50S RIBOSOMAL PROTEIN L18.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>L</td>
<td>104</td>
<td>Total C N O</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>779 476 161 142</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 18 is a protein called 50S RIBOSOMAL PROTEIN L19.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>M</td>
<td>108</td>
<td>Total C N O</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>871 543 172 156</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 19 is a protein called 50S RIBOSOMAL PROTEIN L20.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>N</td>
<td>117</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>978 608 210 159 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 20 is a protein called 50S RIBOSOMAL PROTEIN L21.
<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>O</td>
<td>94</td>
<td>Total C N O</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>741</td>
<td>465</td>
<td>139</td>
<td>137</td>
</tr>
</tbody>
</table>

- Molecule 21 is a protein called 50S RIBOSOMAL PROTEIN L22.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>P</td>
<td>127</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1014</td>
<td>639</td>
<td>199</td>
<td>174</td>
</tr>
</tbody>
</table>

- Molecule 22 is a protein called 50S RIBOSOMAL PROTEIN L23.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Q</td>
<td>93</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>726</td>
<td>458</td>
<td>136</td>
<td>130</td>
</tr>
</tbody>
</table>

- Molecule 23 is a protein called 50S RIBOSOMAL PROTEIN L24.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>R</td>
<td>110</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>825</td>
<td>513</td>
<td>160</td>
<td>151</td>
</tr>
</tbody>
</table>

- Molecule 24 is a protein called 50S RIBOSOMAL PROTEIN L25.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>S</td>
<td>175</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1345</td>
<td>849</td>
<td>236</td>
<td>254</td>
</tr>
</tbody>
</table>

- Molecule 25 is a protein called 50S RIBOSOMAL PROTEIN L27.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>T</td>
<td>84</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>625</td>
<td>393</td>
<td>122</td>
<td>109</td>
</tr>
</tbody>
</table>

- Molecule 26 is a protein called 50S RIBOSOMAL PROTEIN L28.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>U</td>
<td>72</td>
<td>Total C N O</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>552</td>
<td>341</td>
<td>116</td>
<td>95</td>
</tr>
</tbody>
</table>

- Molecule 27 is a protein called 50S RIBOSOMAL PROTEIN L29.
- Molecule 28 is a protein called 50S RIBOSOMAL PROTEIN L30.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>W</td>
<td>55</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

- Molecule 29 is a RNA chain called RRNA-23S RIBOSOMAL RNA.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>X</td>
<td>2686</td>
<td>Total C N O P</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

- Molecule 30 is a protein called 50S RIBOSOMAL PROTEIN L32.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>Y</td>
<td>58</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

- Molecule 31 is a RNA chain called RRNA-5S RIBOSOMAL RNA.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Z</td>
<td>122</td>
<td>Total C N O P</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

- Molecule 32 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>ZeroOcc</th>
<th>AltConf</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>X</td>
<td>30</td>
<td>Total Mg</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>Z</td>
<td>5</td>
<td>Total Mg</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>M</td>
<td>1</td>
<td>Total Mg</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
3 Residue-property plots

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

- Molecule 1: 50S RIBOSOMAL PROTEIN L33

Chain 1:

- Molecule 2: 50S RIBOSOMAL PROTEIN L34

Chain 2:

- Molecule 3: 50S RIBOSOMAL PROTEIN L35

Chain 3:

- Molecule 4: 50S RIBOSOMAL PROTEIN L36

Chain 4:

- Molecule 5: THIOSTREPTON

Chain 5:

- Molecule 6: 50S RIBOSOMAL PROTEIN L2
Molecule 7: 50S RIBOSOMAL PROTEIN L3

Molecule 8: 50S RIBOSOMAL PROTEIN L4

Molecule 9: 50S RIBOSOMAL PROTEIN L5
Chain D:

- Molecule 10: 50S RIBOSOMAL PROTEIN L6

Chain E:

- Molecule 11: 50S RIBOSOMAL PROTEIN L11

Chain F:

- Molecule 12: 50S RIBOSOMAL PROTEIN L13

Chain G:
Molecule 13: 50S RIBOSOMAL PROTEIN L14

Chain H:

Molecule 14: 50S RIBOSOMAL PROTEIN L15

Chain I:

Molecule 15: 50S RIBOSOMAL PROTEIN L16

Chain J:

Molecule 16: 50S RIBOSOMAL PROTEIN L17

Chain K:
• Molecule 17: 50S RIBOSOMAL PROTEIN L18

Chain L:

• Molecule 18: 50S RIBOSOMAL PROTEIN L19

Chain M:

• Molecule 19: 50S RIBOSOMAL PROTEIN L20

Chain N:

• Molecule 20: 50S RIBOSOMAL PROTEIN L21

Chain O:

• Molecule 21: 50S RIBOSOMAL PROTEIN L22

Chain P:
• Molecule 22: 50S RIBOSOMAL PROTEIN L23
  Chain Q:

• Molecule 23: 50S RIBOSOMAL PROTEIN L24
  Chain R:

• Molecule 24: 50S RIBOSOMAL PROTEIN L25
  Chain S:

• Molecule 25: 50S RIBOSOMAL PROTEIN L27
  Chain T:
• **Molecule 26: 50S RIBOSOMAL PROTEIN L28**

Chain U:

• **Molecule 27: 50S RIBOSOMAL PROTEIN L29**

Chain V:

• **Molecule 28: 50S RIBOSOMAL PROTEIN L30**

Chain W:

• **Molecule 29: RRNA-23S RIBOSOMAL RNA**

Chain X:
• Molecule 30: 50S RIBOSOMAL PROTEIN L32

Chain Y:

• Molecule 31: RRNA-5S RIBOSOMAL RNA

Chain Z:
4 Data and refinement statistics

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space group</td>
<td>I 2 2 2</td>
<td>Depositor</td>
</tr>
<tr>
<td>Cell constants</td>
<td>169.90Å 408.90Å 694.50Å 90.00° 90.00° 90.00°</td>
<td>Depositor</td>
</tr>
<tr>
<td>Resolution (Å)</td>
<td>30.00 – 3.30 29.76 – 3.31</td>
<td>EDS</td>
</tr>
<tr>
<td>% Data completeness (in resolution range)</td>
<td>94.1 (30.00-3.30) 93.2 (29.76-3.31)</td>
<td>Depositor</td>
</tr>
<tr>
<td>R&lt;sub&gt;merge&lt;/sub&gt;</td>
<td>(Not available)</td>
<td>Depositor</td>
</tr>
<tr>
<td>R&lt;sub&gt;sym&lt;/sub&gt;</td>
<td>(Not available)</td>
<td>Depositor</td>
</tr>
<tr>
<td>&lt; I/σ(I) &gt;&lt;sup&gt;1&lt;/sup&gt;</td>
<td>2.14 (at 3.31Å)</td>
<td>Xtriage</td>
</tr>
<tr>
<td>Refinement program</td>
<td>CNS</td>
<td>Depositor</td>
</tr>
<tr>
<td>R&lt;sub&gt;f&lt;/sub&gt;, R&lt;sub&gt;free&lt;/sub&gt;</td>
<td>0.276 , 0.318 0.241 , (Not available)</td>
<td>Depositor</td>
</tr>
<tr>
<td>R&lt;sub&gt;free&lt;/sub&gt; test set</td>
<td>No test flags present.</td>
<td>wwPDB-VP</td>
</tr>
<tr>
<td>Wilson B-factor (Å²)</td>
<td>67.5</td>
<td>Xtriage</td>
</tr>
<tr>
<td>Anisotropy</td>
<td>0.110</td>
<td>Xtriage</td>
</tr>
<tr>
<td>Bulk solvent k&lt;sub&gt;sol&lt;/sub&gt;(e/Å³), B&lt;sub&gt;sol&lt;/sub&gt;(Å²)</td>
<td>0.18 , 60.4</td>
<td>EDS</td>
</tr>
<tr>
<td>L-test for twinning&lt;sup&gt;2&lt;/sup&gt;</td>
<td>&lt;</td>
<td>L</td>
</tr>
<tr>
<td>Estimated twinning fraction</td>
<td>No twinning to report.</td>
<td>Xtriage</td>
</tr>
<tr>
<td>F&lt;sub&gt;o&lt;/sub&gt;-F&lt;sub&gt;c&lt;/sub&gt; correlation</td>
<td>0.87</td>
<td>EDS</td>
</tr>
<tr>
<td>Total number of atoms</td>
<td>84475</td>
<td>wwPDB-VP</td>
</tr>
<tr>
<td>Average B, all atoms (Å²)</td>
<td>49.0</td>
<td>wwPDB-VP</td>
</tr>
</tbody>
</table>

Xtriage’s analysis on translational NCS is as follows: The largest off-origin peak in the Patterson function is 2.08% of the height of the origin peak. No significant pseudotranslation is detected.

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

<sup>2</sup>Theoretical values of < |L| >, < L<sup>2</sup> > for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.
5  Model quality

5.1  Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: MG, DCY, DHA, QUA, BB9, NH2, MH6, DBU, TS9

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>4</td>
<td>4</td>
<td>0.46</td>
<td>0/298</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>1.46</td>
<td>0/31</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>0.55</td>
<td>0/1862</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>0.77</td>
<td>0/1567</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>0.63</td>
<td>0/1529</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>0.48</td>
<td>0/1419</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>0.48</td>
<td>0/1308</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>0.50</td>
<td>0/1063</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>0.69</td>
<td>0/1138</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>0.79</td>
<td>0/1007</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>0.65</td>
<td>0/1081</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>0.67</td>
<td>0/1113</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>0.87</td>
<td>0/886</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>0.52</td>
<td>0/785</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>0.73</td>
<td>0/884</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>0.63</td>
<td>0/994</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>0.61</td>
<td>0/750</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>0.77</td>
<td>0/1027</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>0.67</td>
<td>0/737</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>0.55</td>
<td>0/835</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>0.50</td>
<td>0/1370</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>0.56</td>
<td>0/633</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>0.58</td>
<td>0/556</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>0.44</td>
<td>0/537</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>0.56</td>
<td>0/426</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>0.88</td>
<td>59/64561 (0.1%)</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>0.70</td>
<td>0/469</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>0.55</td>
<td>0/2904</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>0.81</td>
<td>59/91770 (0.1%)</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>6</td>
<td>A</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2</td>
<td>257</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>2</td>
<td>266</td>
</tr>
</tbody>
</table>

All (59) bond length outliers are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Atoms</th>
<th>Z</th>
<th>Observed(A)</th>
<th>Ideal(A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>X</td>
<td>1856</td>
<td>U</td>
<td>C4'-C3'</td>
<td>-9.30</td>
<td>1.43</td>
<td>1.53</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1856</td>
<td>U</td>
<td>O3'-P</td>
<td>-8.64</td>
<td>1.50</td>
<td>1.61</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1056</td>
<td>U</td>
<td>P-O5'</td>
<td>8.52</td>
<td>1.68</td>
<td>1.59</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1855</td>
<td>G</td>
<td>O3'-P</td>
<td>-8.11</td>
<td>1.51</td>
<td>1.61</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>551</td>
<td>A</td>
<td>O3'-P</td>
<td>-8.05</td>
<td>1.51</td>
<td>1.61</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1860</td>
<td>A</td>
<td>O3'-P</td>
<td>-7.56</td>
<td>1.52</td>
<td>1.61</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2189</td>
<td>A</td>
<td>N9-C4</td>
<td>7.30</td>
<td>1.42</td>
<td>1.37</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1750</td>
<td>A</td>
<td>C5-C6</td>
<td>-7.03</td>
<td>1.34</td>
<td>1.41</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1859</td>
<td>A</td>
<td>O3'-P</td>
<td>-6.91</td>
<td>1.52</td>
<td>1.61</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1858</td>
<td>C</td>
<td>C4'-C3'</td>
<td>-6.73</td>
<td>1.45</td>
<td>1.53</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>728</td>
<td>G</td>
<td>C2'-C1'</td>
<td>6.65</td>
<td>1.60</td>
<td>1.53</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1688</td>
<td>U</td>
<td>C4-O4</td>
<td>6.60</td>
<td>1.28</td>
<td>1.23</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1858</td>
<td>C</td>
<td>N1-C2</td>
<td>-6.25</td>
<td>1.33</td>
<td>1.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2199</td>
<td>C</td>
<td>N1-C2</td>
<td>-6.23</td>
<td>1.33</td>
<td>1.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>722</td>
<td>C</td>
<td>N1-C2</td>
<td>-6.12</td>
<td>1.34</td>
<td>1.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2326</td>
<td>C</td>
<td>N1-C2</td>
<td>-6.10</td>
<td>1.34</td>
<td>1.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>731</td>
<td>A</td>
<td>C2'-C1'</td>
<td>6.03</td>
<td>1.59</td>
<td>1.53</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2195</td>
<td>C</td>
<td>N1-C2</td>
<td>-6.03</td>
<td>1.34</td>
<td>1.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>415</td>
<td>A</td>
<td>C3'-O3'</td>
<td>6.01</td>
<td>1.50</td>
<td>1.42</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1688</td>
<td>U</td>
<td>N3-C4</td>
<td>6.00</td>
<td>1.43</td>
<td>1.38</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>C2'-C1'</td>
<td>5.99</td>
<td>1.59</td>
<td>1.53</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2190</td>
<td>A</td>
<td>C4'-C3'</td>
<td>5.95</td>
<td>1.59</td>
<td>1.53</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1052</td>
<td>C</td>
<td>N1-C2</td>
<td>-5.93</td>
<td>1.34</td>
<td>1.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1857</td>
<td>G</td>
<td>O3'-P</td>
<td>-5.90</td>
<td>1.54</td>
<td>1.61</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>725</td>
<td>C</td>
<td>N1-C2</td>
<td>-5.88</td>
<td>1.34</td>
<td>1.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1282</td>
<td>A</td>
<td>C5-C6</td>
<td>-5.85</td>
<td>1.35</td>
<td>1.41</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1853</td>
<td>C</td>
<td>N1-C2</td>
<td>-5.79</td>
<td>1.34</td>
<td>1.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>556</td>
<td>A</td>
<td>N7-C5</td>
<td>-5.75</td>
<td>1.35</td>
<td>1.39</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1969</td>
<td>G</td>
<td>C5-C6</td>
<td>-5.72</td>
<td>1.36</td>
<td>1.42</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Atoms</th>
<th>Z</th>
<th>Observed(Å)</th>
<th>Ideal(Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>X</td>
<td>1981</td>
<td>A</td>
<td>C5-C6</td>
<td>-5.67</td>
<td>1.35</td>
<td>1.41</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1063</td>
<td>C</td>
<td>N1-C2</td>
<td>-5.66</td>
<td>1.34</td>
<td>1.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1862</td>
<td>C</td>
<td>C2'-C1'</td>
<td>-5.54</td>
<td>1.47</td>
<td>1.53</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1846</td>
<td>A</td>
<td>O3'-P</td>
<td>-5.48</td>
<td>1.54</td>
<td>1.61</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>728</td>
<td>G</td>
<td>N9-C4</td>
<td>5.48</td>
<td>1.42</td>
<td>1.38</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>415</td>
<td>A</td>
<td>C2'-C1'</td>
<td>5.47</td>
<td>1.59</td>
<td>1.53</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1632</td>
<td>A</td>
<td>C5-C6</td>
<td>-5.46</td>
<td>1.36</td>
<td>1.41</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>728</td>
<td>G</td>
<td>C3'-O3'</td>
<td>5.42</td>
<td>1.49</td>
<td>1.42</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>C1'-N1</td>
<td>5.39</td>
<td>1.56</td>
<td>1.48</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>796</td>
<td>A</td>
<td>C5-C6</td>
<td>-5.37</td>
<td>1.36</td>
<td>1.41</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1055</td>
<td>A</td>
<td>C3'-O3'</td>
<td>5.37</td>
<td>1.49</td>
<td>1.42</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>723</td>
<td>C</td>
<td>N1-C2</td>
<td>-5.37</td>
<td>1.34</td>
<td>1.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>774</td>
<td>A</td>
<td>C5-C6</td>
<td>-5.36</td>
<td>1.36</td>
<td>1.41</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2189</td>
<td>A</td>
<td>C3'-O3'</td>
<td>5.34</td>
<td>1.49</td>
<td>1.42</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1860</td>
<td>A</td>
<td>C4'-C3'</td>
<td>-5.34</td>
<td>1.47</td>
<td>1.52</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>699</td>
<td>G</td>
<td>N9-C4</td>
<td>-5.30</td>
<td>1.33</td>
<td>1.38</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1859</td>
<td>A</td>
<td>C3'-C2'</td>
<td>-5.29</td>
<td>1.47</td>
<td>1.52</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2571</td>
<td>G</td>
<td>C5-C6</td>
<td>-5.28</td>
<td>1.37</td>
<td>1.42</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2189</td>
<td>A</td>
<td>C2'-C1'</td>
<td>5.26</td>
<td>1.59</td>
<td>1.53</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1865</td>
<td>C</td>
<td>O3'-P</td>
<td>-5.24</td>
<td>1.54</td>
<td>1.61</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>975</td>
<td>C</td>
<td>C2-N3</td>
<td>-5.21</td>
<td>1.31</td>
<td>1.35</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>540</td>
<td>G</td>
<td>C2-N3</td>
<td>5.20</td>
<td>1.36</td>
<td>1.32</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1644</td>
<td>G</td>
<td>C5-C6</td>
<td>-5.17</td>
<td>1.37</td>
<td>1.42</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>C3'-O3'</td>
<td>5.14</td>
<td>1.49</td>
<td>1.42</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>417</td>
<td>C</td>
<td>C2'-C1'</td>
<td>5.06</td>
<td>1.58</td>
<td>1.53</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>833</td>
<td>A</td>
<td>C5-C6</td>
<td>-5.04</td>
<td>1.36</td>
<td>1.41</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1851</td>
<td>A</td>
<td>C3'-O3'</td>
<td>5.04</td>
<td>1.49</td>
<td>1.42</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2189</td>
<td>A</td>
<td>C8-N7</td>
<td>-5.02</td>
<td>1.28</td>
<td>1.31</td>
</tr>
</tbody>
</table>

All (532) 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>29</td>
<td>X</td>
<td>1055</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>-29.46</td>
<td>75.70</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2324</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>22.22</td>
<td>142.88</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>19.61</td>
<td>139.50</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>417</td>
<td>C</td>
<td>N1-C1'-C2'</td>
<td>18.73</td>
<td>138.35</td>
<td>114.00</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>28</td>
<td>ARG</td>
<td>C-N-CD</td>
<td>-18.52</td>
<td>79.85</td>
<td>120.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1856</td>
<td>U</td>
<td>P-O3'-C3'</td>
<td>-15.68</td>
<td>100.89</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1854</td>
<td>G</td>
<td>P-O3'-C3'</td>
<td>-15.22</td>
<td>101.44</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1861</td>
<td>G</td>
<td>P-O3'-C3'</td>
<td>-15.03</td>
<td>101.66</td>
<td>119.70</td>
</tr>
</tbody>
</table>

Continued on next page...
### Mol, Chain, Res, Type, Atoms, Z, Observed(°), Ideal(°)

<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>29</td>
<td>X</td>
<td>2854</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>14.06</td>
<td>132.28</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>558</td>
<td>G</td>
<td>C3'-C2'-C1'</td>
<td>-13.92</td>
<td>90.37</td>
<td>101.50</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1632</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>13.61</td>
<td>131.69</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2327</td>
<td>U</td>
<td>P-O3'-C3'</td>
<td>-13.11</td>
<td>103.97</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>728</td>
<td>G</td>
<td>P-O3'-C3'</td>
<td>12.40</td>
<td>134.58</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1857</td>
<td>G</td>
<td>P-O3'-C3'</td>
<td>-12.39</td>
<td>104.83</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2324</td>
<td>G</td>
<td>O4'-C1'-N9</td>
<td>-12.15</td>
<td>98.48</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>731</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>12.13</td>
<td>129.76</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>C6-N1-C2</td>
<td>-11.69</td>
<td>113.98</td>
<td>121.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1052</td>
<td>C</td>
<td>C6-N1-C2</td>
<td>11.50</td>
<td>124.90</td>
<td>120.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1859</td>
<td>A</td>
<td>P-O3'-C3'</td>
<td>-11.34</td>
<td>106.09</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2325</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>11.12</td>
<td>128.46</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>554</td>
<td>U</td>
<td>C6-N1-C2</td>
<td>10.92</td>
<td>127.55</td>
<td>121.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1055</td>
<td>A</td>
<td>P-O3'-C3'</td>
<td>10.87</td>
<td>132.74</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>556</td>
<td>A</td>
<td>P-O3'-C3'</td>
<td>10.81</td>
<td>132.67</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1853</td>
<td>C</td>
<td>P-O3'-C3'</td>
<td>-10.76</td>
<td>106.79</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1278</td>
<td>A</td>
<td>O4'-C4'-C3'</td>
<td>-10.72</td>
<td>93.28</td>
<td>104.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2326</td>
<td>C</td>
<td>O4'-C4'-C3'</td>
<td>10.70</td>
<td>127.91</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2594</td>
<td>U</td>
<td>C6-N1-C2</td>
<td>10.68</td>
<td>96.09</td>
<td>105.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2034</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>10.13</td>
<td>127.82</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1142</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>10.54</td>
<td>127.70</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>C6-N1-C2</td>
<td>10.53</td>
<td>109.92</td>
<td>101.50</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1314</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>10.38</td>
<td>127.50</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>417</td>
<td>C</td>
<td>C3'-C2'-C1'</td>
<td>10.33</td>
<td>109.76</td>
<td>101.50</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1056</td>
<td>U</td>
<td>O4'-C1'-N1</td>
<td>10.05</td>
<td>116.24</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>580</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>9.98</td>
<td>126.97</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2319</td>
<td>G</td>
<td>P-O3'-C3'</td>
<td>-9.90</td>
<td>107.81</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2189</td>
<td>A</td>
<td>P-O3'-C3'</td>
<td>9.83</td>
<td>131.50</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1853</td>
<td>C</td>
<td>C6-N1-C2</td>
<td>9.81</td>
<td>124.23</td>
<td>120.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2320</td>
<td>G</td>
<td>P-O3'-C3'</td>
<td>-9.74</td>
<td>108.02</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1979</td>
<td>C</td>
<td>N1-C1'-C2'</td>
<td>9.72</td>
<td>126.64</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2195</td>
<td>C</td>
<td>C6-N1-C2</td>
<td>9.71</td>
<td>124.18</td>
<td>120.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>728</td>
<td>G</td>
<td>C8-N9-C4</td>
<td>-9.70</td>
<td>102.52</td>
<td>106.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2197</td>
<td>U</td>
<td>C3'-C2'-C1'</td>
<td>-9.61</td>
<td>93.81</td>
<td>101.50</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1288</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>9.58</td>
<td>126.46</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1056</td>
<td>U</td>
<td>O4'-C4'-C3'</td>
<td>-9.51</td>
<td>94.49</td>
<td>104.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>415</td>
<td>A</td>
<td>P-O3'-C3'</td>
<td>9.45</td>
<td>131.04</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2824</td>
<td>C</td>
<td>N1-C1'-C2'</td>
<td>9.24</td>
<td>126.01</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>417</td>
<td>C</td>
<td>P-O3'-C3'</td>
<td>9.13</td>
<td>130.66</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>218</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>9.10</td>
<td>125.83</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1353</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>9.10</td>
<td>125.82</td>
<td>114.00</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>29</td>
<td>X</td>
<td>1264</td>
<td>C</td>
<td>N1-C1'-C2'</td>
<td>9.02</td>
<td>125.72</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>729</td>
<td>A</td>
<td>O4'-C4'-C3'</td>
<td>-8.95</td>
<td>95.05</td>
<td>104.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1265</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>8.93</td>
<td>125.60</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2323</td>
<td>U</td>
<td>C3'-C2'-C1'</td>
<td>-8.90</td>
<td>94.38</td>
<td>101.50</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>551</td>
<td>A</td>
<td>P-O3'-C3'</td>
<td>8.90</td>
<td>130.38</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1664</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>8.85</td>
<td>125.51</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1052</td>
<td>C</td>
<td>O4'-C1'-N1</td>
<td>-8.83</td>
<td>101.14</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1852</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>8.85</td>
<td>101.14</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>731</td>
<td>A</td>
<td>N9-C4-C5</td>
<td>8.70</td>
<td>109.28</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>558</td>
<td>G</td>
<td>C8-N9-C4</td>
<td>-8.70</td>
<td>102.92</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1862</td>
<td>C</td>
<td>P-O3'-C3'</td>
<td>-8.57</td>
<td>109.42</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>728</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>8.50</td>
<td>125.16</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1054</td>
<td>C</td>
<td>C6-N1-C2</td>
<td>-8.40</td>
<td>116.94</td>
<td>120.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1852</td>
<td>G</td>
<td>P-O3'-C3'</td>
<td>-8.72</td>
<td>109.24</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>C5-C6-N1</td>
<td>8.35</td>
<td>126.87</td>
<td>122.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1056</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>-8.33</td>
<td>102.83</td>
<td>112.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1975</td>
<td>G</td>
<td>C2'-C3'-O3'</td>
<td>8.31</td>
<td>127.79</td>
<td>109.50</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2325</td>
<td>A</td>
<td>P-O3'-C3'</td>
<td>8.31</td>
<td>129.68</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2189</td>
<td>A</td>
<td>N9-C4-C5</td>
<td>-8.31</td>
<td>116.94</td>
<td>120.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2823</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>8.31</td>
<td>124.80</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2593</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>8.31</td>
<td>124.80</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1057</td>
<td>A</td>
<td>N9-C4-C5</td>
<td>8.27</td>
<td>109.11</td>
<td>105.80</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>984</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>8.24</td>
<td>124.71</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>730</td>
<td>C</td>
<td>P-O3'-C3'</td>
<td>8.12</td>
<td>129.44</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>554</td>
<td>U</td>
<td>N1-C2-N3</td>
<td>-8.11</td>
<td>110.04</td>
<td>114.90</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1266</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>8.08</td>
<td>124.50</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1947</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>7.98</td>
<td>124.38</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>415</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>7.98</td>
<td>124.38</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1337</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>7.98</td>
<td>124.38</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1862</td>
<td>C</td>
<td>O4'-C4'-C3'</td>
<td>-7.96</td>
<td>96.04</td>
<td>104.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1947</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>7.86</td>
<td>124.21</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1167</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>7.86</td>
<td>124.21</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1947</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>7.86</td>
<td>124.21</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2476</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>7.85</td>
<td>124.20</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>985</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>7.85</td>
<td>124.20</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1167</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>7.85</td>
<td>124.20</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2476</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>7.85</td>
<td>124.20</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>555</td>
<td>U</td>
<td>O4'-C4'-C3'</td>
<td>-7.74</td>
<td>96.26</td>
<td>104.00</td>
</tr>
</tbody>
</table>

Continued on next page...
### Table of Observed and Ideal Z-Values

<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>29</td>
<td>X</td>
<td>312</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>7.73</td>
<td>124.04</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1867</td>
<td>A</td>
<td>O4'-C1'-N9</td>
<td>-7.71</td>
<td>102.03</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>460</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>7.67</td>
<td>123.98</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2190</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>-7.66</td>
<td>103.58</td>
<td>112.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1927</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>7.61</td>
<td>123.90</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1862</td>
<td>C</td>
<td>C4'-C3'-C2'</td>
<td>7.61</td>
<td>110.21</td>
<td>102.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1582</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>7.55</td>
<td>123.81</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>554</td>
<td>U</td>
<td>N1-C2-O2</td>
<td>7.54</td>
<td>128.08</td>
<td>122.80</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>417</td>
<td>C</td>
<td>O4'-C1'-N1</td>
<td>-7.54</td>
<td>102.17</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1632</td>
<td>A</td>
<td>C2'-C3'-O3'</td>
<td>7.52</td>
<td>126.04</td>
<td>109.50</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1139</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>7.51</td>
<td>123.76</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2608</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>7.48</td>
<td>123.72</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2190</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>-7.47</td>
<td>95.52</td>
<td>101.50</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1867</td>
<td>A</td>
<td>O4'-C1'-N9</td>
<td>7.47</td>
<td>114.10</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2320</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-7.36</td>
<td>108.55</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>417</td>
<td>C</td>
<td>N1-C1'-C2'</td>
<td>-7.33</td>
<td>108.60</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1632</td>
<td>C</td>
<td>N1-C1'-C2'</td>
<td>-7.33</td>
<td>108.60</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1975</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-7.31</td>
<td>110.92</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2854</td>
<td>G</td>
<td>O4'-C1'-N9</td>
<td>-7.29</td>
<td>108.67</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>490</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>7.28</td>
<td>132.46</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2015</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>7.28</td>
<td>123.46</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>118</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>7.20</td>
<td>123.18</td>
<td>120.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1865</td>
<td>C</td>
<td>P-O3'-C3'</td>
<td>7.16</td>
<td>111.10</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2190</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>7.15</td>
<td>107.22</td>
<td>101.50</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1867</td>
<td>A</td>
<td>O4'-C1'-N9</td>
<td>-7.12</td>
<td>108.92</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1716</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>7.11</td>
<td>123.24</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>841</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>7.10</td>
<td>123.23</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>555</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-7.09</td>
<td>108.97</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2325</td>
<td>A</td>
<td>C2'-C3'-O3'</td>
<td>7.08</td>
<td>125.07</td>
<td>109.50</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1850</td>
<td>G</td>
<td>C8-N9-C4</td>
<td>-7.07</td>
<td>103.57</td>
<td>106.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>747</td>
<td>A</td>
<td>C5'-C4'-C3'</td>
<td>7.05</td>
<td>127.28</td>
<td>116.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>418</td>
<td>C</td>
<td>N1-C1'-C2'</td>
<td>7.04</td>
<td>123.15</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>418</td>
<td>C</td>
<td>C6-N1-C2</td>
<td>7.03</td>
<td>123.11</td>
<td>120.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2854</td>
<td>G</td>
<td>C1'-O4'-C4'</td>
<td>-7.02</td>
<td>104.28</td>
<td>109.90</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>119</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>-7.00</td>
<td>99.21</td>
<td>115.30</td>
</tr>
</tbody>
</table>

Continued on next 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>29</td>
<td>X</td>
<td>2323</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-7.00</td>
<td>109.11</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1864</td>
<td>G</td>
<td>P-O3'-C3'</td>
<td>-6.99</td>
<td>111.31</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>818</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>6.99</td>
<td>123.08</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1339</td>
<td>U</td>
<td>OP2-P-O3'</td>
<td>6.99</td>
<td>120.57</td>
<td>105.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1869</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.99</td>
<td>109.12</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>729</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.97</td>
<td>109.14</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2075</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>6.97</td>
<td>123.06</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1856</td>
<td>U</td>
<td>C4'-C3'-C2'</td>
<td>6.96</td>
<td>109.56</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>556</td>
<td>A</td>
<td>C3'-C2'-C1'</td>
<td>6.95</td>
<td>109.12</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1033</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.95</td>
<td>109.18</td>
<td>119.60</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>36</td>
<td>CYS</td>
<td>CB-CA-C</td>
<td>6.85</td>
<td>124.09</td>
<td>110.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1059</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.84</td>
<td>109.34</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2321</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.83</td>
<td>109.35</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>420</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.83</td>
<td>109.36</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>716</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.82</td>
<td>109.37</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1055</td>
<td>A</td>
<td>C8-N9-C4</td>
<td>-6.82</td>
<td>103.07</td>
<td>105.80</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2326</td>
<td>C</td>
<td>C6-N1-C2</td>
<td>6.81</td>
<td>123.03</td>
<td>120.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2848</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>6.81</td>
<td>122.86</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1867</td>
<td>A</td>
<td>P-O3'-C3'</td>
<td>6.81</td>
<td>127.87</td>
<td>119.70</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>85</td>
<td>ALA</td>
<td>C-N-CD</td>
<td>-6.80</td>
<td>105.64</td>
<td>120.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1864</td>
<td>G</td>
<td>O4'-C1'-N9</td>
<td>-6.80</td>
<td>102.76</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1849</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.79</td>
<td>109.41</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>728</td>
<td>G</td>
<td>N7-C8-N9</td>
<td>6.78</td>
<td>116.49</td>
<td>113.10</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2188</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.77</td>
<td>109.45</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1583</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>6.76</td>
<td>122.79</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1847</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.76</td>
<td>109.46</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>417</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.76</td>
<td>109.47</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1064</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.75</td>
<td>109.47</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1856</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.75</td>
<td>109.47</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>N3-C4-O4</td>
<td>6.75</td>
<td>124.12</td>
<td>119.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1046</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.74</td>
<td>109.49</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>719</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.73</td>
<td>109.50</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2190</td>
<td>A</td>
<td>C3'-C2'-C1'</td>
<td>-6.73</td>
<td>96.12</td>
<td>101.50</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2370</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>6.73</td>
<td>122.75</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1047</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.73</td>
<td>109.51</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>558</td>
<td>G</td>
<td>O4'-C1'-N9</td>
<td>6.72</td>
<td>113.58</td>
<td>108.20</td>
</tr>
</tbody>
</table>
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>29</td>
<td>X</td>
<td>1052</td>
<td>C</td>
<td>N1-C2-O2</td>
<td>-6.72</td>
<td>122.93</td>
<td>118.90</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1848</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.71</td>
<td>109.53</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1860</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.71</td>
<td>109.53</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1863</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.70</td>
<td>109.54</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2326</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.70</td>
<td>109.55</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>739</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.70</td>
<td>109.55</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>554</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.68</td>
<td>109.57</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1866</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.67</td>
<td>109.59</td>
<td>119.60</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>3</td>
<td>THR</td>
<td>N-CA-C</td>
<td>-6.67</td>
<td>92.99</td>
<td>111.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1333</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>6.67</td>
<td>122.67</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1664</td>
<td>G</td>
<td>O5'-P-OP1</td>
<td>-6.66</td>
<td>99.70</td>
<td>105.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1723</td>
<td>U</td>
<td>C2'-C3'-O3'</td>
<td>6.66</td>
<td>124.36</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>736</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.65</td>
<td>109.62</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.65</td>
<td>109.62</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1050</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.65</td>
<td>109.63</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1054</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.64</td>
<td>109.63</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2469</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>6.64</td>
<td>122.63</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1852</td>
<td>G</td>
<td>O4'-C4'-C3'</td>
<td>-6.64</td>
<td>97.36</td>
<td>104.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2854</td>
<td>G</td>
<td>C4'-C3'-O3'</td>
<td>-6.63</td>
<td>95.47</td>
<td>109.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>552</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.63</td>
<td>109.66</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>738</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.62</td>
<td>109.67</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1850</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.62</td>
<td>109.67</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>458</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>6.62</td>
<td>122.61</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2201</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.61</td>
<td>109.68</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>400</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>6.61</td>
<td>122.59</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2324</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.61</td>
<td>109.69</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>780</td>
<td>U</td>
<td>C2'-C3'-O3'</td>
<td>6.60</td>
<td>124.26</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>726</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.60</td>
<td>109.70</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2323</td>
<td>U</td>
<td>O4'-C1'-N1</td>
<td>6.60</td>
<td>113.48</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1618</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>6.60</td>
<td>122.58</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>460</td>
<td>U</td>
<td>C4'-C3'-O3'</td>
<td>-6.59</td>
<td>95.55</td>
<td>109.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2322</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.59</td>
<td>109.71</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2326</td>
<td>C</td>
<td>P-O3'-C3'</td>
<td>-6.58</td>
<td>111.80</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2187</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.57</td>
<td>109.75</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>416</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>6.57</td>
<td>122.54</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>69</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>6.56</td>
<td>122.53</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1056</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.56</td>
<td>109.76</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2190</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.56</td>
<td>109.77</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>734</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.54</td>
<td>109.79</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2186</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.54</td>
<td>109.79</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1869</td>
<td>A</td>
<td>P-O5'-C5'</td>
<td>-6.53</td>
<td>110.45</td>
<td>120.90</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2016</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>6.52</td>
<td>122.48</td>
<td>114.00</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>29</td>
<td>X</td>
<td>717</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.51</td>
<td>109.83</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>724</td>
<td>C</td>
<td>C6-N1-C2</td>
<td>6.50</td>
<td>122.90</td>
<td>120.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1870</td>
<td>U</td>
<td>P-O3'-C3'</td>
<td>6.50</td>
<td>127.50</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>731</td>
<td>A</td>
<td>C8-N9-C4</td>
<td>-6.49</td>
<td>103.20</td>
<td>105.80</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>725</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.49</td>
<td>109.87</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>731</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.48</td>
<td>109.88</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1866</td>
<td>G</td>
<td>P-O3'-C3'</td>
<td>6.48</td>
<td>127.48</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1065</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.48</td>
<td>109.88</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2190</td>
<td>A</td>
<td>O4'-C1'-N9</td>
<td>6.48</td>
<td>113.38</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>415</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.47</td>
<td>109.89</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>720</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.47</td>
<td>109.89</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2197</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.47</td>
<td>109.90</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>718</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.47</td>
<td>109.90</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1853</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.47</td>
<td>109.90</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>421</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.46</td>
<td>109.90</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>721</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.46</td>
<td>109.90</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1063</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.46</td>
<td>109.91</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>968</td>
<td>C</td>
<td>N1-C1'-C2'</td>
<td>6.46</td>
<td>122.40</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>804</td>
<td>C</td>
<td>C4'-C3'-O3'</td>
<td>-6.46</td>
<td>95.83</td>
<td>109.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>562</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.45</td>
<td>109.92</td>
<td>119.60</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>106</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>-6.45</td>
<td>100.47</td>
<td>115.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2185</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.44</td>
<td>109.95</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2200</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.43</td>
<td>109.96</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>P-O3'-C3'</td>
<td>6.41</td>
<td>127.39</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>735</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.41</td>
<td>109.98</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1410</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>6.38</td>
<td>122.30</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2198</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>6.38</td>
<td>122.29</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1851</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.37</td>
<td>110.04</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>722</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.37</td>
<td>110.05</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1052</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.36</td>
<td>110.06</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>724</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.36</td>
<td>110.06</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>730</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.36</td>
<td>110.06</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2195</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.36</td>
<td>110.06</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1865</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.36</td>
<td>110.07</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>417</td>
<td>C</td>
<td>O4'-C4'-C3'</td>
<td>6.35</td>
<td>111.18</td>
<td>106.10</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>737</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-6.34</td>
<td>110.09</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1051</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.34</td>
<td>110.09</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1665</td>
<td>C</td>
<td>O5'-P-OP2</td>
<td>-6.33</td>
<td>100.00</td>
<td>105.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>741</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.33</td>
<td>110.11</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1852</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.33</td>
<td>110.11</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2841</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>6.32</td>
<td>122.22</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2760</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>6.31</td>
<td>122.21</td>
<td>114.00</td>
</tr>
</tbody>
</table>

Continued on next page...
Mol | Chain | Res | Type | Atoms | $\theta$ | Observed(°) | Ideal(°)  
--- | --- | --- | --- | --- | --- | --- | 
29 | X | 2324 | G | C1'-O4'-C4' | 6.31 | 114.95 | 109.90  
29 | X | 2325 | A | OP1-P-OP2 | -6.31 | 110.13 | 119.60  
29 | X | 731 | A | C3'-C2'-C1' | 6.31 | 106.55 | 101.50  
29 | X | 2323 | U | C6-N1-C1' | 6.31 | 130.03 | 121.20  
29 | X | 1859 | A | OP1-P-OP2 | -6.31 | 110.14 | 119.60  
29 | X | 1342 | U | N1-C1'-C2' | 6.30 | 122.20 | 119.00  
29 | X | 2328 | G | O5'-P-OP1 | -6.30 | 100.03 | 105.70  
29 | X | 416 | U | OP1-P-OP2 | -6.30 | 110.15 | 119.60  
29 | X | 1862 | C | OP1-P-OP2 | -6.30 | 110.15 | 119.60  
29 | X | 1868 | A | OP1-P-OP2 | -6.29 | 110.16 | 119.60  
29 | X | 1772 | C | N1-C1'-C2' | 6.28 | 122.17 | 114.00  
29 | X | 1861 | G | OP1-P-OP2 | -6.28 | 110.18 | 119.60  
29 | X | 2481 | G | O5'-P-OP1 | -6.30 | 100.03 | 105.70  
29 | X | 1867 | C | OP1-P-OP2 | -6.29 | 110.20 | 119.60  
29 | X | 1862 | A | OP1-P-OP2 | -6.26 | 110.15 | 119.60  
29 | X | 1861 | G | OP1-P-OP2 | -6.28 | 110.18 | 119.60  
29 | X | 795 | A | C2'-C3'-O3' | 6.26 | 233.71 | 137.30  
29 | X | 1799 | A | N9-C1'-C2' | 6.25 | 122.12 | 114.00  
29 | X | 1865 | C | O4'-C4'-C3' | -6.25 | 97.75 | 104.00  
29 | X | 2192 | U | OP1-P-OP2 | -6.24 | 110.23 | 119.60  
29 | X | 1631 | C | N1-C1'-C2' | 6.24 | 122.11 | 114.00  
29 | X | 1867 | A | OP1-P-OP2 | -6.24 | 110.24 | 119.60  
29 | X | 2328 | G | OP1-P-OP2 | -6.23 | 110.25 | 119.60  
29 | X | 1055 | A | OP1-P-OP2 | -6.22 | 110.26 | 119.60  
29 | X | 596 | C | N1-C1'-C2' | 6.22 | 122.08 | 114.00  
29 | X | 1710 | U | N1-C1'-C2' | 6.21 | 122.08 | 114.00  
29 | X | 2580 | C | N1-C1'-C2' | 6.21 | 122.08 | 114.00  
29 | X | 1055 | A | C4'-C3'-O3' | 6.20 | 125.40 | 113.00  
29 | X | 2323 | U | C2-N1-C1' | -6.20 | 110.26 | 117.70  
29 | X | 732 | G | OP1-P-OP2 | -6.20 | 110.31 | 119.60  
29 | X | 1054 | C | C5-C6-N1 | 6.20 | 124.10 | 121.00  
29 | X | 414 | A | OP1-P-OP2 | -6.18 | 110.32 | 119.60  
29 | X | 558 | G | OP1-P-OP2 | -6.18 | 110.33 | 119.60  
29 | X | 796 | A | N9-C1'-C2' | -6.16 | 105.22 | 112.00  
29 | X | 1771 | A | N9-C1'-C2' | 6.16 | 122.01 | 114.00  
29 | X | 2756 | A | C2'-C3'-O3' | 6.16 | 123.55 | 113.70  
29 | X | 1049 | C | OP1-P-OP2 | -6.15 | 110.37 | 119.60  
29 | X | 82 | G | N9-C1'-C2' | 6.15 | 121.99 | 114.00  
29 | X | 343 | A | N9-C1'-C2' | 6.14 | 121.99 | 114.00  
29 | X | 559 | C | OP1-P-OP2 | -6.14 | 110.38 | 119.60  
29 | X | 1858 | C | OP1-P-OP2 | -6.14 | 110.39 | 119.60  
29 | X | 560 | G | OP1-P-OP2 | -6.14 | 110.39 | 119.60  

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>29</td>
<td>X</td>
<td>740</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.14</td>
<td>110.39</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1153</td>
<td>A</td>
<td>O4'-C1'-N9</td>
<td>-6.13</td>
<td>103.30</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1152</td>
<td>C</td>
<td>N1-C1'-C2'</td>
<td>6.13</td>
<td>121.96</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2196</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.12</td>
<td>110.42</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1871</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.11</td>
<td>110.43</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1288</td>
<td>A</td>
<td>O4'-C4'-C3'</td>
<td>-6.11</td>
<td>97.89</td>
<td>104.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>727</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.10</td>
<td>110.45</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>805</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>6.09</td>
<td>121.92</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1061</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.09</td>
<td>110.47</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>582</td>
<td>G</td>
<td>OP2-P-O3'</td>
<td>6.08</td>
<td>118.58</td>
<td>105.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>801</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.07</td>
<td>110.49</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1870</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.06</td>
<td>110.50</td>
<td>119.60</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>108</td>
<td>GLY</td>
<td>N-CA-C</td>
<td>-6.06</td>
<td>97.95</td>
<td>113.10</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>O4'-C1'-N1</td>
<td>-6.06</td>
<td>103.35</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2823</td>
<td>G</td>
<td>C2'-C3'-O3'</td>
<td>6.06</td>
<td>123.40</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>13</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>6.05</td>
<td>121.86</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2323</td>
<td>U</td>
<td>P-O3'-C3'</td>
<td>6.05</td>
<td>126.96</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2322</td>
<td>U</td>
<td>C3'-C2'-C1'</td>
<td>-6.04</td>
<td>96.66</td>
<td>101.50</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2194</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.03</td>
<td>110.56</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2327</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-6.03</td>
<td>110.56</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1062</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-6.02</td>
<td>110.56</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1863</td>
<td>U</td>
<td>P-O3'-C3'</td>
<td>-6.02</td>
<td>112.47</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2668</td>
<td>U</td>
<td>C5'-C4'-C3'</td>
<td>-6.02</td>
<td>106.38</td>
<td>116.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>556</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-6.01</td>
<td>110.59</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2608</td>
<td>A</td>
<td>C2'-C3'-O3'</td>
<td>6.01</td>
<td>123.31</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1624</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>6.00</td>
<td>121.80</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1266</td>
<td>G</td>
<td>O4'-C1'-N9</td>
<td>5.98</td>
<td>112.99</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1860</td>
<td>A</td>
<td>C4'-C3'-C2'</td>
<td>5.97</td>
<td>108.57</td>
<td>102.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2418</td>
<td>A</td>
<td>O4'-C1'-N9</td>
<td>5.96</td>
<td>112.97</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>219</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>5.96</td>
<td>121.75</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1278</td>
<td>A</td>
<td>C2'-C3'-O3'</td>
<td>5.96</td>
<td>123.24</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2193</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-5.95</td>
<td>110.68</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2392</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>-5.95</td>
<td>105.46</td>
<td>112.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>561</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-5.93</td>
<td>110.70</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1866</td>
<td>G</td>
<td>C8-N9-C4</td>
<td>-5.93</td>
<td>104.03</td>
<td>106.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2189</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-5.92</td>
<td>110.72</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>467</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>5.91</td>
<td>121.69</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>777</td>
<td>A</td>
<td>C2'-C3'-O3'</td>
<td>5.91</td>
<td>123.15</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2198</td>
<td>U</td>
<td>P-O5'-C5'</td>
<td>-5.91</td>
<td>111.45</td>
<td>120.90</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2322</td>
<td>U</td>
<td>C4'-C3'-O3'</td>
<td>5.90</td>
<td>124.81</td>
<td>113.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>728</td>
<td>G</td>
<td>C2'-C3'-O3'</td>
<td>5.90</td>
<td>123.14</td>
<td>113.70</td>
</tr>
</tbody>
</table>

Continued on next 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>29</td>
<td>X</td>
<td>1866</td>
<td>G</td>
<td>O4'-C1'-N9</td>
<td>-5.89</td>
<td>103.49</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>731</td>
<td>A</td>
<td>P-O3'-C3'</td>
<td>5.89</td>
<td>126.77</td>
<td>119.70</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>29</td>
<td>PRO</td>
<td>CA-N-CD</td>
<td>-5.88</td>
<td>103.27</td>
<td>111.50</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1285</td>
<td>A</td>
<td>C2'-C3'-O3'</td>
<td>5.88</td>
<td>123.11</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>553</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-5.88</td>
<td>110.79</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1053</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-5.86</td>
<td>110.81</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1153</td>
<td>A</td>
<td>C2'-C3'-O3'</td>
<td>5.86</td>
<td>123.08</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>539</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.86</td>
<td>121.61</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>176</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.85</td>
<td>121.61</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>728</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-5.84</td>
<td>110.84</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>824</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>5.81</td>
<td>121.55</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1057</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>-5.80</td>
<td>105.62</td>
<td>112.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>871</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>5.79</td>
<td>121.53</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1561</td>
<td>A</td>
<td>C2'-C3'-O3'</td>
<td>5.79</td>
<td>122.96</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1851</td>
<td>A</td>
<td>P-O3'-C3'</td>
<td>5.76</td>
<td>126.61</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1285</td>
<td>A</td>
<td>N1-C1'-C2'</td>
<td>5.75</td>
<td>121.48</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>555</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>-5.73</td>
<td>105.69</td>
<td>112.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1057</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-5.75</td>
<td>110.97</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1865</td>
<td>C</td>
<td>O4'-C1'-N1</td>
<td>5.75</td>
<td>112.80</td>
<td>108.20</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>19</td>
<td>LYS</td>
<td>N-CA-C</td>
<td>5.74</td>
<td>126.51</td>
<td>111.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>226</td>
<td>C</td>
<td>O4'-C1'-N1</td>
<td>5.74</td>
<td>112.79</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>723</td>
<td>C</td>
<td>C5-C6-N1</td>
<td>5.74</td>
<td>123.87</td>
<td>121.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2045</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.74</td>
<td>121.46</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>73</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.74</td>
<td>121.46</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2633</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.75</td>
<td>121.48</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1057</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-5.75</td>
<td>110.97</td>
<td>119.60</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>19</td>
<td>LYS</td>
<td>N-CA-C</td>
<td>5.74</td>
<td>126.51</td>
<td>111.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>226</td>
<td>C</td>
<td>O4'-C1'-N1</td>
<td>5.74</td>
<td>112.79</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>723</td>
<td>C</td>
<td>C5-C6-N1</td>
<td>5.74</td>
<td>123.87</td>
<td>121.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2045</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.74</td>
<td>121.46</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>73</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.74</td>
<td>121.46</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2633</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>-5.73</td>
<td>105.69</td>
<td>112.00</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>243</td>
<td>GLY</td>
<td>N-CA-C</td>
<td>5.73</td>
<td>127.43</td>
<td>113.10</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2229</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>5.72</td>
<td>121.44</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>730</td>
<td>C</td>
<td>N1-C1'-C2'</td>
<td>5.72</td>
<td>121.44</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>418</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-5.71</td>
<td>111.04</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1963</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>5.70</td>
<td>121.41</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1723</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>5.69</td>
<td>121.40</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2545</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.69</td>
<td>121.40</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1056</td>
<td>U</td>
<td>C6-N1-C2</td>
<td>-5.69</td>
<td>117.59</td>
<td>121.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>O4'-C1'-C2'</td>
<td>-5.68</td>
<td>100.12</td>
<td>105.80</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>723</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-5.68</td>
<td>111.08</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1852</td>
<td>G</td>
<td>C4'-C3'-C2'</td>
<td>5.68</td>
<td>108.28</td>
<td>102.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1810</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>5.65</td>
<td>121.35</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2323</td>
<td>U</td>
<td>C1'-O4'-C4'</td>
<td>-5.65</td>
<td>105.38</td>
<td>109.90</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2199</td>
<td>C</td>
<td>OP1-P-OP2</td>
<td>-5.65</td>
<td>111.13</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2693</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>5.64</td>
<td>121.33</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1853</td>
<td>C</td>
<td>O4'-C4'-C3'</td>
<td>-5.64</td>
<td>98.36</td>
<td>104.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1057</td>
<td>A</td>
<td>N3-C4-N9</td>
<td>-5.64</td>
<td>122.89</td>
<td>127.40</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>29</td>
<td>X</td>
<td>1854</td>
<td>G</td>
<td>O3'-P-O5'</td>
<td>5.63</td>
<td>114.70</td>
<td>104.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>N3-C4-C5</td>
<td>-5.62</td>
<td>111.23</td>
<td>114.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2484</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>-5.62</td>
<td>105.82</td>
<td>112.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2823</td>
<td>G</td>
<td>OP2-P-O3'</td>
<td>5.62</td>
<td>117.56</td>
<td>105.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1266</td>
<td>G</td>
<td>C1'-O4'-C4'</td>
<td>-5.61</td>
<td>105.42</td>
<td>109.90</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2188</td>
<td>A</td>
<td>C4'-C3'-C2'</td>
<td>5.59</td>
<td>108.19</td>
<td>102.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>555</td>
<td>U</td>
<td>P-O3'-C3'</td>
<td>5.58</td>
<td>126.40</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>469</td>
<td>G</td>
<td>OP2-P-O3'</td>
<td>5.58</td>
<td>117.48</td>
<td>105.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2315</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.58</td>
<td>121.25</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2592</td>
<td>U</td>
<td>C5-C4-O4</td>
<td>-5.58</td>
<td>97.69</td>
<td>109.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>580</td>
<td>A</td>
<td>C2'-C3'-O3'</td>
<td>5.58</td>
<td>126.40</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>469</td>
<td>G</td>
<td>OP2-P-O3'</td>
<td>5.58</td>
<td>117.48</td>
<td>105.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2188</td>
<td>A</td>
<td>C4'-C3'-O3'</td>
<td>5.58</td>
<td>122.55</td>
<td>125.90</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>708</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>-5.57</td>
<td>105.87</td>
<td>112.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1854</td>
<td>G</td>
<td>C5'-C4'-C3'</td>
<td>5.57</td>
<td>124.92</td>
<td>116.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>538</td>
<td>A</td>
<td>C2'-C3'-O3'</td>
<td>5.57</td>
<td>122.61</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1052</td>
<td>C</td>
<td>P-O5'-C5'</td>
<td>-5.57</td>
<td>111.99</td>
<td>120.90</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1058</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>5.56</td>
<td>121.23</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>731</td>
<td>A</td>
<td>O4 '-C4 '-C3'</td>
<td>5.56</td>
<td>110.55</td>
<td>106.10</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>459</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.55</td>
<td>121.22</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2189</td>
<td>A</td>
<td>C2'-C3'-O3'</td>
<td>5.55</td>
<td>122.58</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2229</td>
<td>G</td>
<td>C4'-C3'-O3'</td>
<td>-5.54</td>
<td>97.76</td>
<td>109.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2482</td>
<td>A</td>
<td>O4 '-C1'-C9</td>
<td>5.54</td>
<td>112.63</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>721</td>
<td>C</td>
<td>C6-N1-C2</td>
<td>5.53</td>
<td>122.51</td>
<td>120.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>728</td>
<td>G</td>
<td>C4-N9-C1'</td>
<td>5.51</td>
<td>133.66</td>
<td>126.50</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1775</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.46</td>
<td>121.10</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>15</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>5.46</td>
<td>121.10</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>15</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>-5.43</td>
<td>106.02</td>
<td>112.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>551</td>
<td>A</td>
<td>OP1-P-OP2</td>
<td>-5.47</td>
<td>111.39</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>59</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>5.46</td>
<td>121.10</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1775</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.46</td>
<td>121.10</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>15</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>-5.43</td>
<td>106.02</td>
<td>112.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>551</td>
<td>A</td>
<td>OP1-P-OP3</td>
<td>5.42</td>
<td>117.13</td>
<td>105.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2320</td>
<td>G</td>
<td>C5'-C4'-C3'</td>
<td>5.42</td>
<td>124.67</td>
<td>116.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2810</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>5.42</td>
<td>121.05</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1854</td>
<td>G</td>
<td>C4'-C3'-O3'</td>
<td>5.42</td>
<td>123.84</td>
<td>113.00</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>29</td>
<td>X</td>
<td>1861</td>
<td>G</td>
<td>P-O5'-C5'</td>
<td>-5.42</td>
<td>112.23</td>
<td>120.90</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2323</td>
<td>U</td>
<td>C5'-C4'-O4'</td>
<td>-5.42</td>
<td>102.60</td>
<td>109.10</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>797</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.41</td>
<td>121.03</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1373</td>
<td>G</td>
<td>C5-C6-O6</td>
<td>-5.41</td>
<td>125.36</td>
<td>128.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1862</td>
<td>C</td>
<td>C1'-O4'-C4'</td>
<td>5.40</td>
<td>114.22</td>
<td>109.90</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1800</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.40</td>
<td>121.02</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1666</td>
<td>G</td>
<td>O4'-C4'-C3'</td>
<td>-5.40</td>
<td>98.60</td>
<td>104.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2482</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.40</td>
<td>121.02</td>
<td>114.00</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>66</td>
<td>GLY</td>
<td>N-CA-C</td>
<td>-5.40</td>
<td>99.61</td>
<td>113.10</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>N1-C2-N3</td>
<td>5.39</td>
<td>118.13</td>
<td>114.90</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1857</td>
<td>G</td>
<td>OP1-P-OP2</td>
<td>-5.39</td>
<td>111.52</td>
<td>119.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2198</td>
<td>U</td>
<td>OP1-P-OP2</td>
<td>-5.38</td>
<td>111.52</td>
<td>119.60</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>66</td>
<td>GLN</td>
<td>N-CA-C</td>
<td>-5.40</td>
<td>99.61</td>
<td>113.10</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1675</td>
<td>C</td>
<td>O5'-P-OP1</td>
<td>-5.35</td>
<td>100.89</td>
<td>105.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2254</td>
<td>C</td>
<td>N1-C1'-C2'</td>
<td>5.34</td>
<td>120.95</td>
<td>114.00</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>137</td>
<td>ARG</td>
<td>N-CA-C</td>
<td>-5.33</td>
<td>96.61</td>
<td>111.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1212</td>
<td>U</td>
<td>C2'-C3'-O3'</td>
<td>5.33</td>
<td>122.23</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1496</td>
<td>G</td>
<td>C2'-C3'-O3'</td>
<td>5.33</td>
<td>122.23</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2189</td>
<td>A</td>
<td>C4'-C3'-C2'</td>
<td>-5.32</td>
<td>97.28</td>
<td>102.60</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>51</td>
<td>TYR</td>
<td>N-CA-C</td>
<td>5.32</td>
<td>125.36</td>
<td>111.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2015</td>
<td>G</td>
<td>C5'-C4'-C3'</td>
<td>-5.30</td>
<td>107.52</td>
<td>116.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2769</td>
<td>C</td>
<td>O4'-C1'-N1</td>
<td>5.30</td>
<td>112.44</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1850</td>
<td>G</td>
<td>O4'-C1'-N9</td>
<td>5.30</td>
<td>112.44</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1866</td>
<td>G</td>
<td>N7-C8-N9</td>
<td>5.30</td>
<td>115.75</td>
<td>113.10</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>6</td>
<td>ALA</td>
<td>N-CA-C</td>
<td>5.28</td>
<td>125.27</td>
<td>111.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2588</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>5.27</td>
<td>120.85</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1299</td>
<td>A</td>
<td>C2'-C3'-O3'</td>
<td>5.26</td>
<td>122.12</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2261</td>
<td>G</td>
<td>O4'-C1'-N9</td>
<td>5.26</td>
<td>112.41</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2322</td>
<td>U</td>
<td>C6-N1-C2'</td>
<td>-5.26</td>
<td>117.84</td>
<td>121.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1056</td>
<td>U</td>
<td>C5'-C4'-C3'</td>
<td>5.26</td>
<td>124.41</td>
<td>116.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2191</td>
<td>A</td>
<td>O4'-C1'-N9</td>
<td>-5.25</td>
<td>104.00</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>795</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.25</td>
<td>120.83</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1871</td>
<td>G</td>
<td>O4'-C4'-C3'</td>
<td>-5.25</td>
<td>98.75</td>
<td>104.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>728</td>
<td>G</td>
<td>O3'-P-O5'</td>
<td>5.24</td>
<td>113.96</td>
<td>104.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>C1'-O4'-C4'</td>
<td>5.24</td>
<td>114.09</td>
<td>109.90</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>41</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>5.24</td>
<td>127.35</td>
<td>115.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>723</td>
<td>C</td>
<td>C4-C5-C6</td>
<td>-5.24</td>
<td>114.78</td>
<td>117.40</td>
</tr>
</tbody>
</table>

Continued on next 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>29</td>
<td>X</td>
<td>2193</td>
<td>C</td>
<td>C6-N1-C2</td>
<td>5.24</td>
<td>122.39</td>
<td>120.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1849</td>
<td>G</td>
<td>C4'-C3'-C2'</td>
<td>-5.23</td>
<td>97.37</td>
<td>102.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1716</td>
<td>G</td>
<td>OP1-P-O3'</td>
<td>5.23</td>
<td>116.70</td>
<td>105.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2660</td>
<td>C</td>
<td>N1-C1'-C2'</td>
<td>5.23</td>
<td>120.80</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2197</td>
<td>U</td>
<td>C6-N1-C2</td>
<td>-5.22</td>
<td>117.87</td>
<td>121.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>688</td>
<td>A</td>
<td>C5'-C4'-C3'</td>
<td>5.22</td>
<td>124.35</td>
<td>116.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1071</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>5.21</td>
<td>120.78</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1847</td>
<td>G</td>
<td>P-O5'-C5'</td>
<td>-5.21</td>
<td>115.57</td>
<td>120.90</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2480</td>
<td>C</td>
<td>N1-C1'-C2'</td>
<td>5.20</td>
<td>120.76</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>683</td>
<td>A</td>
<td>C2'-C3'-O3'</td>
<td>5.19</td>
<td>122.01</td>
<td>113.70</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>60</td>
<td>LEU</td>
<td>CA-CB-CG</td>
<td>5.18</td>
<td>127.22</td>
<td>115.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>742</td>
<td>G</td>
<td>N-O1'-C2'</td>
<td>5.18</td>
<td>120.74</td>
<td>114.00</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>89</td>
<td>GLY</td>
<td>N-CA-C</td>
<td>5.18</td>
<td>126.05</td>
<td>113.10</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1790</td>
<td>G</td>
<td>C2'-C3'-O3'</td>
<td>5.17</td>
<td>121.97</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>558</td>
<td>G</td>
<td>C4'-C3'-O3'</td>
<td>5.16</td>
<td>123.33</td>
<td>113.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1715</td>
<td>A</td>
<td>C5'-C4'-O4'</td>
<td>-5.16</td>
<td>102.91</td>
<td>109.10</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>36</td>
<td>GLY</td>
<td>N-CA-C</td>
<td>5.16</td>
<td>125.99</td>
<td>113.10</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>16</td>
<td>LYS</td>
<td>N-CA-C</td>
<td>-5.14</td>
<td>97.11</td>
<td>111.00</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>32</td>
<td>ARG</td>
<td>N-CA-C</td>
<td>-5.14</td>
<td>97.11</td>
<td>111.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>334</td>
<td>G</td>
<td>N-O1'-C2'</td>
<td>5.14</td>
<td>120.69</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1855</td>
<td>G</td>
<td>O3'-P-O5'</td>
<td>5.14</td>
<td>113.77</td>
<td>104.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>684</td>
<td>C</td>
<td>C5'-P-O5'</td>
<td>5.14</td>
<td>107.77</td>
<td>116.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1634</td>
<td>A</td>
<td>N-O1'-C2'</td>
<td>-5.14</td>
<td>120.68</td>
<td>114.00</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>53</td>
<td>ASP</td>
<td>CB-CG-OD2</td>
<td>5.14</td>
<td>122.92</td>
<td>118.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2668</td>
<td>U</td>
<td>O4'-C1'-N1</td>
<td>5.13</td>
<td>112.31</td>
<td>108.20</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>95</td>
<td>THR</td>
<td>N-CA-C</td>
<td>-5.13</td>
<td>97.15</td>
<td>111.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>469</td>
<td>G</td>
<td>O4'-C1'-N9</td>
<td>5.13</td>
<td>112.30</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>552</td>
<td>C</td>
<td>C6-N1-C2</td>
<td>5.13</td>
<td>122.35</td>
<td>120.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1194</td>
<td>U</td>
<td>C2'-C3'-O3'</td>
<td>5.13</td>
<td>121.90</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2191</td>
<td>A</td>
<td>N-O1'-C2'</td>
<td>5.11</td>
<td>120.65</td>
<td>114.00</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>211</td>
<td>ARG</td>
<td>N-CA-C</td>
<td>-5.11</td>
<td>97.20</td>
<td>111.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2199</td>
<td>C</td>
<td>C2'-C3'-O3'</td>
<td>5.11</td>
<td>121.88</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2756</td>
<td>A</td>
<td>OP2-P-O3'</td>
<td>5.11</td>
<td>116.44</td>
<td>105.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>469</td>
<td>G</td>
<td>N-O1'-C2'</td>
<td>5.10</td>
<td>120.63</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1249</td>
<td>G</td>
<td>C2'-C3'-O3'</td>
<td>5.09</td>
<td>121.85</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>3</td>
<td>U</td>
<td>C2'-C3'-O3'</td>
<td>5.09</td>
<td>121.84</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>558</td>
<td>G</td>
<td>N7-C8-N9</td>
<td>5.08</td>
<td>115.64</td>
<td>113.10</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>558</td>
<td>G</td>
<td>N9-C4-C5</td>
<td>5.08</td>
<td>107.43</td>
<td>105.40</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1701</td>
<td>C</td>
<td>C5'-C4'-C3'</td>
<td>-5.08</td>
<td>107.87</td>
<td>116.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1775</td>
<td>A</td>
<td>OP2-P-O3'</td>
<td>5.08</td>
<td>116.37</td>
<td>105.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1978</td>
<td>U</td>
<td>OP2-P-O3'</td>
<td>5.08</td>
<td>116.37</td>
<td>105.20</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>29</td>
<td>X</td>
<td>2188</td>
<td>A</td>
<td>P-O3'-C3'</td>
<td>-5.08</td>
<td>113.61</td>
<td>119.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2200</td>
<td>G</td>
<td>P-O5'-C5'</td>
<td>-5.07</td>
<td>112.78</td>
<td>120.90</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2470</td>
<td>U</td>
<td>N1-C1'-C2'</td>
<td>5.07</td>
<td>120.60</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1849</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>5.07</td>
<td>120.59</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1337</td>
<td>G</td>
<td>C4'-C3'-O3'</td>
<td>-5.06</td>
<td>98.77</td>
<td>109.40</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>69</td>
<td>ASP</td>
<td>N-CA-C</td>
<td>-5.05</td>
<td>97.38</td>
<td>111.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1000</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>5.05</td>
<td>120.56</td>
<td>114.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2758</td>
<td>A</td>
<td>O4'-C1'-N9</td>
<td>5.05</td>
<td>112.24</td>
<td>108.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1054</td>
<td>C</td>
<td>N3-C4-C5</td>
<td>-5.04</td>
<td>119.88</td>
<td>121.90</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>994</td>
<td>A</td>
<td>C2'-C3'-O3'</td>
<td>5.04</td>
<td>121.77</td>
<td>113.70</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1685</td>
<td>A</td>
<td>C4'-C3'-C2'</td>
<td>5.04</td>
<td>107.64</td>
<td>102.60</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1081</td>
<td>A</td>
<td>N9-C1'-C2'</td>
<td>5.04</td>
<td>120.55</td>
<td>114.00</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>100</td>
<td>ARG</td>
<td>NE-CZ-NH1</td>
<td>-5.03</td>
<td>117.78</td>
<td>120.30</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1937</td>
<td>G</td>
<td>N9-C1'-C2'</td>
<td>5.02</td>
<td>120.53</td>
<td>114.00</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>28</td>
<td>GLY</td>
<td>N-CA-C</td>
<td>5.01</td>
<td>125.63</td>
<td>113.10</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>67</td>
<td>LEU</td>
<td>CB-CA-C</td>
<td>5.01</td>
<td>119.72</td>
<td>110.20</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1710</td>
<td>U</td>
<td>OP1-P-O3'</td>
<td>5.01</td>
<td>116.23</td>
<td>105.20</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>35</td>
<td>LYS</td>
<td>N-CA-C</td>
<td>-5.01</td>
<td>97.47</td>
<td>111.00</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>583</td>
<td>C</td>
<td>OP2-P-O3'</td>
<td>5.01</td>
<td>116.22</td>
<td>105.20</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>85</td>
<td>GLY</td>
<td>N-CA-C</td>
<td>-5.01</td>
<td>100.58</td>
<td>113.10</td>
</tr>
</tbody>
</table>

All (2) 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>29</td>
<td>X</td>
<td>1278</td>
<td>A</td>
<td>C1'</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2592</td>
<td>U</td>
<td>C1'</td>
</tr>
</tbody>
</table>

All (266) 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>6</td>
<td>A</td>
<td>104</td>
<td>TYR</td>
<td>Sidechain</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>32</td>
<td>TYR</td>
<td>Sidechain</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>76</td>
<td>TYR</td>
<td>Sidechain</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>25</td>
<td>TYR</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1000</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1023</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1030</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1037</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1044</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1054</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1056</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>112</td>
<td>U</td>
<td>Sidechain</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>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>X</td>
<td>1124</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1136</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1141</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1142</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1143</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1152</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1153</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1156</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1165</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1167</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>118</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1184</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>12</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1200</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1202</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1206</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1213</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1236</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>124</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1240</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1250</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1251</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1253</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1261</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1265</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1269</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1281</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1282</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1284</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1287</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1290</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1294</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>13</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1314</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1322</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1332</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1342</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1357</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1370</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1373</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1377</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1452</td>
<td>U</td>
<td>Sidechain</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>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>X</td>
<td>1467</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>15</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1573</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1574</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1581</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1583</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1623</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1629</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1631</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1632</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>165</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1651</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1664</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1666</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1671</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1672</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1673</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1690</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1692</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1698</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1705</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1710</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1711</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1716</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>172</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1749</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1752</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1763</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>177</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1772</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1774</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1777</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>178</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1789</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1792</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1807</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1810</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1815</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1819</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1820</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1849</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1851</td>
<td>A</td>
<td>Sidechain</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>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>X</td>
<td>1922</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1938</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1945</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1947</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1961</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1974</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1975</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1976</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1994</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1996</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1998</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2009</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2015</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2016</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2022</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2028</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2034</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2037</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2042</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2045</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>214</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>218</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2189</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>219</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2192</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2195</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2196</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2199</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2211</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2223</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>224</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2243</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2258</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>228</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2284</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2310</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2313</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2315</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2323</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2324</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2342</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2355</td>
<td>A</td>
<td>Sidechain</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>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>X</td>
<td>2361</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2363</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2369</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2371</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2392</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2402</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2416</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2427</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2428</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2430</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2460</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2482</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2486</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2487</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2492</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2496</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2501</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2504</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2508</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2513</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2525</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2528</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2534</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2540</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2541</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2548</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2549</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2557</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2559</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2560</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2580</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2588</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2590</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2592</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2595</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2596</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2613</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2626</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2663</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2693</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2694</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2698</td>
<td>G</td>
<td>Sidechain</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>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>X</td>
<td>2702</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2706</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2711</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2730</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2734</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2736</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2805</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2813</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2817</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2819</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2821</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2824</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2837</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2844</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2847</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2855</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2858</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>318</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>320</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>333</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>335</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>342</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>39</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>396</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>400</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>404</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>415</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>424</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>447</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>456</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>467</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>474</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>482</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>490</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>505</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>518</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>520</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>539</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>570</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>571</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>577</td>
<td>U</td>
<td>Sidechain</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>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>X</td>
<td>59</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>594</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>617</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>62</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>631</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>671</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>681</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>683</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>685</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>69</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>701</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>713</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>731</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>752</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>756</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>774</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>780</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>794</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>804</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>805</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>814</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>816</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>824</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>831</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>833</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>835</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>836</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>840</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>859</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>873</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>919</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>920</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>943</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>951</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>956</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>969</td>
<td>U</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>985</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>991</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>993</td>
<td>C</td>
<td>Sidechain</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>52</td>
<td>TYR</td>
<td>Sidechain</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>101</td>
<td>A</td>
<td>Sidechain</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>17</td>
<td>A</td>
<td>Sidechain</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>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Z</td>
<td>25</td>
<td>G</td>
<td>Sidechain</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>68</td>
<td>A</td>
<td>Sidechain</td>
</tr>
</tbody>
</table>

### 5.2 Too-close contacts

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Non-H</th>
<th>H(model)</th>
<th>H(added)</th>
<th>Clashes</th>
<th>Symm-Clashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>53</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>46</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>63</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>297</td>
<td>0</td>
<td>330</td>
<td>62</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>114</td>
<td>0</td>
<td>79</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>1826</td>
<td>0</td>
<td>1885</td>
<td>451</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>1539</td>
<td>0</td>
<td>1600</td>
<td>303</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>1506</td>
<td>0</td>
<td>1525</td>
<td>371</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>1400</td>
<td>0</td>
<td>1481</td>
<td>373</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>1286</td>
<td>0</td>
<td>1336</td>
<td>264</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>1044</td>
<td>0</td>
<td>1088</td>
<td>176</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>1114</td>
<td>0</td>
<td>1144</td>
<td>310</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>997</td>
<td>0</td>
<td>1046</td>
<td>194</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>1067</td>
<td>0</td>
<td>1103</td>
<td>301</td>
<td>0</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>1090</td>
<td>0</td>
<td>1125</td>
<td>273</td>
<td>0</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>878</td>
<td>0</td>
<td>930</td>
<td>135</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>779</td>
<td>0</td>
<td>820</td>
<td>231</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>871</td>
<td>0</td>
<td>894</td>
<td>208</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>978</td>
<td>0</td>
<td>1020</td>
<td>239</td>
<td>0</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>741</td>
<td>0</td>
<td>756</td>
<td>186</td>
<td>0</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>1014</td>
<td>0</td>
<td>1096</td>
<td>181</td>
<td>0</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>726</td>
<td>0</td>
<td>753</td>
<td>150</td>
<td>0</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>825</td>
<td>0</td>
<td>881</td>
<td>266</td>
<td>0</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>1345</td>
<td>0</td>
<td>1372</td>
<td>303</td>
<td>0</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>625</td>
<td>0</td>
<td>655</td>
<td>111</td>
<td>0</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>552</td>
<td>0</td>
<td>604</td>
<td>207</td>
<td>0</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>533</td>
<td>0</td>
<td>558</td>
<td>109</td>
<td>0</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>424</td>
<td>0</td>
<td>470</td>
<td>83</td>
<td>0</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>57651</td>
<td>0</td>
<td>29049</td>
<td>4301</td>
<td>0</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>457</td>
<td>0</td>
<td>462</td>
<td>86</td>
<td>0</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>2598</td>
<td>0</td>
<td>1328</td>
<td>185</td>
<td>0</td>
</tr>
</tbody>
</table>

Continued on next page...
The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 66.

All (9214) 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>8:C:3:GLN:HG2</td>
<td>8:C:116:LYS:HD2</td>
<td>1.27</td>
<td>1.17</td>
</tr>
<tr>
<td>14:I:30:ALA:HB3</td>
<td>14:I:34:HIS:CE1</td>
<td>1.83</td>
<td>1.13</td>
</tr>
<tr>
<td>17:L:97:HIS:O</td>
<td>17:L:101:LYS:HB2</td>
<td>1.50</td>
<td>1.11</td>
</tr>
<tr>
<td>7:B:38:THR:HG22</td>
<td>7:B:40:GLN:H</td>
<td>1.07</td>
<td>1.11</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>29:X:1052:C:C3&quot;</td>
<td>29:X:1053:G:H5&quot;</td>
<td>1.79</td>
<td>1.11</td>
</tr>
<tr>
<td>7:B:150:VAL:HG21</td>
<td>7:B:154:LYS:HE2</td>
<td>1.31</td>
<td>1.10</td>
</tr>
<tr>
<td>29:X:729:A:H2&quot;</td>
<td>29:X:730:C:O4&quot;</td>
<td>1.50</td>
<td>1.09</td>
</tr>
<tr>
<td>29:X:1550:C:H2&quot;</td>
<td>29:X:1553:G:N2</td>
<td>1.67</td>
<td>1.08</td>
</tr>
<tr>
<td>26:U:48:LYS:HG2</td>
<td>26:U:49:LYS:H</td>
<td>0.95</td>
<td>1.08</td>
</tr>
<tr>
<td>11:F:126:THR:HA</td>
<td>29:X:1091:C:H1&quot;</td>
<td>1.34</td>
<td>1.08</td>
</tr>
<tr>
<td>23:R:84:VAL:HA</td>
<td>23:R:90:LYS:HD3</td>
<td>1.33</td>
<td>1.08</td>
</tr>
<tr>
<td>29:X:1058:G:H2&quot;</td>
<td>29:X:1121:G:H1</td>
<td>1.10</td>
<td>1.08</td>
</tr>
<tr>
<td>29:X:2194:A:C3&quot;</td>
<td>29:X:2195:G:H5&quot;</td>
<td>1.84</td>
<td>1.08</td>
</tr>
<tr>
<td>6:A:183:ARG:HB3</td>
<td>6:A:183:ARG:HH1</td>
<td>1.05</td>
<td>1.08</td>
</tr>
<tr>
<td>15:J:37:ALA:HA</td>
<td>15:J:130:THR:HG2</td>
<td>1.33</td>
<td>1.07</td>
</tr>
<tr>
<td>16:K:100:VAL:HG12</td>
<td>16:K:101:GLY:H</td>
<td>0.92</td>
<td>1.07</td>
</tr>
<tr>
<td>8:C:148:VAL:HB</td>
<td>8:C:167:VAL:HG12</td>
<td>1.13</td>
<td>1.07</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>16:K:3:HIS:ND1</td>
<td>16:K:5:LYS:HD2</td>
<td>1.68</td>
<td>1.06</td>
</tr>
<tr>
<td>6:A:77:ALA:HB2</td>
<td>6:A:97:TYR:HD1</td>
<td>1.20</td>
<td>1.05</td>
</tr>
<tr>
<td>29:X:1052:C:C2'</td>
<td>29:X:1053:G:H5''</td>
<td>1.86</td>
<td>1.05</td>
</tr>
<tr>
<td>29:X:1058:G:H2'</td>
<td>29:X:1121:G:N1</td>
<td>1.72</td>
<td>1.05</td>
</tr>
<tr>
<td>12:G:33:ILE:HB</td>
<td>12:G:34:PRO:CD</td>
<td>1.87</td>
<td>1.05</td>
</tr>
<tr>
<td>8:C:5:ASN:HA</td>
<td>8:C:118:VAL:HG21</td>
<td>1.33</td>
<td>1.05</td>
</tr>
<tr>
<td>15:J:64:LYS:HD2</td>
<td>15:J:64:LYS:H</td>
<td>1.15</td>
<td>1.05</td>
</tr>
<tr>
<td>24:S:120:LEU:HD21</td>
<td>24:S:162:ALA:HB2</td>
<td>1.38</td>
<td>1.05</td>
</tr>
<tr>
<td>29:X:2195:C:O2'</td>
<td>29:X:2196:U:H5'</td>
<td>1.56</td>
<td>1.05</td>
</tr>
<tr>
<td>8:C:95:LEU:HD23</td>
<td>8:C:96:PRO:HD2</td>
<td>1.36</td>
<td>1.05</td>
</tr>
<tr>
<td>29:X:1508:G:H5'</td>
<td>29:X:1509:A:H5''</td>
<td>1.33</td>
<td>1.05</td>
</tr>
<tr>
<td>17:L:15:ARG:HH11</td>
<td>17:L:15:ARG:HA</td>
<td>1.22</td>
<td>1.03</td>
</tr>
<tr>
<td>14:I:94:GLU:HA</td>
<td>14:I:97:ARG:HE</td>
<td>0.88</td>
<td>1.03</td>
</tr>
<tr>
<td>17:L:54:ALA:HB3</td>
<td>17:L:75:LEU:HB2</td>
<td>1.36</td>
<td>1.03</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>29:X:1053:G:H2'</td>
<td>29:X:1054:C:H6</td>
<td>1.00</td>
<td>1.03</td>
</tr>
<tr>
<td>16:K:87:TYR:HE1</td>
<td>16:K:94:TYR:HD2</td>
<td>1.07</td>
<td>1.03</td>
</tr>
<tr>
<td>29:X:2516:U:H2'</td>
<td>29:X:2517:C:C6</td>
<td>1.94</td>
<td>1.02</td>
</tr>
<tr>
<td>14:I:11:GLY:H</td>
<td>14:I:14:LYS:HB3</td>
<td>1.21</td>
<td>1.02</td>
</tr>
<tr>
<td>6:A:252:LYS:H</td>
<td>6:A:252:LYS:HE3</td>
<td>0.88</td>
<td>1.02</td>
</tr>
<tr>
<td>14:I:93:LEU:O</td>
<td>14:I:97:ARG:HG3</td>
<td>1.61</td>
<td>1.01</td>
</tr>
<tr>
<td>8:C:2:ALA:HA</td>
<td>8:C:13:ARG:HA</td>
<td>1.40</td>
<td>1.01</td>
</tr>
<tr>
<td>17:L:33:ARG:HH11</td>
<td>17:L:100:VAL:HA</td>
<td>1.17</td>
<td>1.01</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>7:B:152:LYS:HB2</td>
<td>12:G:106:TYR:HB3</td>
<td>1.42</td>
<td>0.99</td>
</tr>
<tr>
<td>8:C:48:ARG:HB2</td>
<td>8:C:51:VAL:HG22</td>
<td>1.44</td>
<td>0.99</td>
</tr>
<tr>
<td>29:X:1542:G:N2</td>
<td>29:X:1562:G:H1</td>
<td>1.61</td>
<td>0.98</td>
</tr>
<tr>
<td>7:B:117:MET:H</td>
<td>7:B:136:ARG:HD2</td>
<td>1.21</td>
<td>0.98</td>
</tr>
<tr>
<td>7:B:2:LYS:HA</td>
<td>7:B:84:PHE:CE1</td>
<td>1.98</td>
<td>0.98</td>
</tr>
<tr>
<td>29:X:1314:A:O2'</td>
<td>29:X:1315:A:H3'</td>
<td>1.64</td>
<td>0.98</td>
</tr>
<tr>
<td>7:B:9:ILE:HD11</td>
<td>7:B:27:LEU:HB2</td>
<td>1.43</td>
<td>0.98</td>
</tr>
<tr>
<td>15:J:21:ASP:HA</td>
<td>15:J:99:LYS:HG3</td>
<td>1.46</td>
<td>0.97</td>
</tr>
<tr>
<td>19:N:66:ASN:HB2</td>
<td>19:N:70:ARG:NH1</td>
<td>1.78</td>
<td>0.97</td>
</tr>
<tr>
<td>29:X:1281:A:H1'</td>
<td>29:X:2592:U:C5</td>
<td>1.98</td>
<td>0.97</td>
</tr>
<tr>
<td>29:X:1542:G:H22</td>
<td>29:X:1562:G:H1</td>
<td>1.02</td>
<td>0.97</td>
</tr>
<tr>
<td>29:X:2447:G:O2'</td>
<td>29:X:2448:A:H5'</td>
<td>1.64</td>
<td>0.97</td>
</tr>
<tr>
<td>7:B:116:VAL:HG13</td>
<td>7:B:136:ARG:HH21</td>
<td>1.30</td>
<td>0.97</td>
</tr>
<tr>
<td>15:J:12:LYS:O</td>
<td>15:J:13:GLN:HB2</td>
<td>1.65</td>
<td>0.97</td>
</tr>
<tr>
<td>29:X:1252:C:O2'</td>
<td>29:X:1253:C:H5''</td>
<td>1.64</td>
<td>0.97</td>
</tr>
<tr>
<td>8:C:66:ASN:HB3</td>
<td>29:X:1268:U:H2'</td>
<td>1.45</td>
<td>0.97</td>
</tr>
<tr>
<td>23:R:15:HIS:CD2</td>
<td>29:X:347:C:H4'</td>
<td>1.99</td>
<td>0.97</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>9:D:12:VAL:HG12</td>
<td>9:D:16:LEU:HD11</td>
<td>1.46</td>
<td>0.97</td>
</tr>
<tr>
<td>29:X:1223:G:H4'</td>
<td>29:X:1224:A:H5''</td>
<td>1.46</td>
<td>0.97</td>
</tr>
<tr>
<td>7:B:154:LYS:HE3</td>
<td>7:B:156:MET:SD</td>
<td>2.05</td>
<td>0.97</td>
</tr>
<tr>
<td>19:N:81:ASN:O</td>
<td>19:N:84:LYS:HB3</td>
<td>1.64</td>
<td>0.97</td>
</tr>
<tr>
<td>23:R:107:ALA:HB1</td>
<td>23:R:111:GLY:HA2</td>
<td>1.45</td>
<td>0.97</td>
</tr>
<tr>
<td>9:D:122:PHE:HB3</td>
<td>9:D:129:ASN:ND2</td>
<td>1.79</td>
<td>0.96</td>
</tr>
<tr>
<td>29:X:2196:U:H2''</td>
<td>29:X:2197:U:C1'</td>
<td>1.94</td>
<td>0.96</td>
</tr>
<tr>
<td>12:G:100:TYR:HB2</td>
<td>12:G:116:ARG:NH1</td>
<td>1.79</td>
<td>0.96</td>
</tr>
<tr>
<td>17:L:55:SER:O</td>
<td>17:L:71:VAL:HB</td>
<td>1.64</td>
<td>0.96</td>
</tr>
<tr>
<td>17:L:20:THR:HG21</td>
<td>17:L:23:ALA:HB3</td>
<td>1.45</td>
<td>0.96</td>
</tr>
<tr>
<td>29:X:758:G:H2''</td>
<td>29:X:759:C:H5'''</td>
<td>1.44</td>
<td>0.96</td>
</tr>
<tr>
<td>9:D:75:SER:H</td>
<td>9:D:79:LEU:HD22</td>
<td>1.29</td>
<td>0.96</td>
</tr>
<tr>
<td>14:I:10:PRO:HA</td>
<td>14:I:14:LYS:HB2</td>
<td>1.47</td>
<td>0.96</td>
</tr>
<tr>
<td>29:X:1052:C:H3'</td>
<td>29:X:1053:G:C5'</td>
<td>1.95</td>
<td>0.96</td>
</tr>
<tr>
<td>8:C:98:GLN:HE22</td>
<td>29:X:611:C:C4'</td>
<td>1.78</td>
<td>0.96</td>
</tr>
<tr>
<td>29:X:862:A:H2'</td>
<td>29:X:863:C:H6</td>
<td>1.31</td>
<td>0.96</td>
</tr>
<tr>
<td>29:X:2323:U:C6</td>
<td>29:X:2323:U:H5'''</td>
<td>2.00</td>
<td>0.95</td>
</tr>
<tr>
<td>26:U:32:ARG:H</td>
<td>26:U:32:ARG:HE</td>
<td>0.97</td>
<td>0.95</td>
</tr>
<tr>
<td>29:X:2498:U:H4'</td>
<td>29:X:2499:C:OP1</td>
<td>1.65</td>
<td>0.95</td>
</tr>
<tr>
<td>29:X:1057:A:N3</td>
<td>29:X:1057:A:H2'</td>
<td>1.79</td>
<td>0.95</td>
</tr>
<tr>
<td>18:M:79:ARG:HH11</td>
<td>18:M:79:ARG:HG3</td>
<td>1.29</td>
<td>0.95</td>
</tr>
<tr>
<td>17:L:16:LYS:HE2</td>
<td>17:L:28:ARG:HH12</td>
<td>1.31</td>
<td>0.95</td>
</tr>
<tr>
<td>18:M:101:ARG:HH22</td>
<td>29:X:1745:C:P</td>
<td>1.89</td>
<td>0.95</td>
</tr>
<tr>
<td>29:X:788:G:H5'</td>
<td>29:X:790:A:H1'</td>
<td>1.47</td>
<td>0.95</td>
</tr>
<tr>
<td>8:C:162:ARG:NH1</td>
<td>29:X:333:A:H5'''</td>
<td>1.81</td>
<td>0.95</td>
</tr>
<tr>
<td>9:D:148:LYS:HG3</td>
<td>9:D:149:THR:H</td>
<td>1.32</td>
<td>0.95</td>
</tr>
<tr>
<td>8:C:162:ARG:HH11</td>
<td>29:X:333:A:H5''</td>
<td>1.31</td>
<td>0.95</td>
</tr>
<tr>
<td>9:D:143:TYR:HA</td>
<td>9:D:146:VAL:HG22</td>
<td>1.47</td>
<td>0.95</td>
</tr>
<tr>
<td>17:L:33:ARG:HG3</td>
<td>17:L:38:ILE:HB</td>
<td>1.44</td>
<td>0.95</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>21:P:108:PRO:HG2</td>
<td>29:X:1631:C:H1'</td>
<td>1.49</td>
<td>0.95</td>
</tr>
<tr>
<td>29:X:1113:C:H2'</td>
<td>29:X:1114:A:H8</td>
<td>1.28</td>
<td>0.95</td>
</tr>
<tr>
<td>16:K:79:VAL:HA</td>
<td>16:K:83:VAL:HG13</td>
<td>1.48</td>
<td>0.94</td>
</tr>
<tr>
<td>29:X:1854:G:C2'</td>
<td>29:X:1855:G:OP2</td>
<td>2.10</td>
<td>0.94</td>
</tr>
<tr>
<td>7:B:9:ILE:HD13</td>
<td>18:M:12:LEU:HD13</td>
<td>1.48</td>
<td>0.94</td>
</tr>
<tr>
<td>14:I:94:GLU:HB3</td>
<td>14:I:97:ARG:HH11</td>
<td>1.32</td>
<td>0.94</td>
</tr>
<tr>
<td>8:C:162:ARG:HD2</td>
<td>29:X:333:A:C5'</td>
<td>1.98</td>
<td>0.94</td>
</tr>
<tr>
<td>16:K:11:ASN:ND2</td>
<td>16:K:12:ARG:HE</td>
<td>1.63</td>
<td>0.94</td>
</tr>
<tr>
<td>29:X:2811:G:H2'</td>
<td>29:X:2812:A:C8</td>
<td>2.03</td>
<td>0.94</td>
</tr>
<tr>
<td>27:V:2:LYS:HG3</td>
<td>27:V:3:PRO:HD3</td>
<td>1.46</td>
<td>0.94</td>
</tr>
<tr>
<td>26:U:70:LEU:HB3</td>
<td>26:U:79:GLU:OE2</td>
<td>1.67</td>
<td>0.94</td>
</tr>
<tr>
<td>29:X:2661:G:O6</td>
<td>29:X:2708:U:H1'</td>
<td>1.66</td>
<td>0.94</td>
</tr>
<tr>
<td>12:G:61:ARG:NE</td>
<td>12:G:65:LYS:HD2</td>
<td>1.82</td>
<td>0.94</td>
</tr>
<tr>
<td>18:M:39:VAL:HG12</td>
<td>18:M:45:THR:HG23</td>
<td>1.49</td>
<td>0.94</td>
</tr>
<tr>
<td>18:M:34:ARG:CZ</td>
<td>18:M:88:VAL:HG11</td>
<td>1.96</td>
<td>0.94</td>
</tr>
<tr>
<td>29:X:76:C:H6</td>
<td>29:X:76:C:H5'</td>
<td>1.31</td>
<td>0.94</td>
</tr>
<tr>
<td>14:I:104:ARG:HB3</td>
<td>14:I:105:PRO:HD2</td>
<td>1.48</td>
<td>0.93</td>
</tr>
<tr>
<td>29:X:1052:C:H2'</td>
<td>29:X:1053:G:H5'</td>
<td>1.47</td>
<td>0.93</td>
</tr>
<tr>
<td>19:N:24:PHE:CE1</td>
<td>29:X:543:G:H5'</td>
<td>2.02</td>
<td>0.93</td>
</tr>
<tr>
<td>17:L:15:ARG:CD</td>
<td>17:L:91:ARG:HH11</td>
<td>1.82</td>
<td>0.93</td>
</tr>
<tr>
<td>21:P:114:ALA:HB2</td>
<td>29:X:1630:A:N1</td>
<td>1.83</td>
<td>0.93</td>
</tr>
<tr>
<td>11:F:54:PRO:HG2</td>
<td>11:F:70:LYS:HB2</td>
<td>1.48</td>
<td>0.93</td>
</tr>
<tr>
<td>18:M:27:PHG:C</td>
<td>18:M:28:ARG:HG2</td>
<td>1.87</td>
<td>0.93</td>
</tr>
<tr>
<td>29:X:2662:C:H2'</td>
<td>29:X:2663:U:H6</td>
<td>1.34</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>25:T:40:GLN:NE2</td>
<td>25:T:43:THR:HA</td>
<td>1.84</td>
<td>0.93</td>
</tr>
<tr>
<td>29:X:558:G:C4</td>
<td>29:X:558:G:H3'</td>
<td>1.98</td>
<td>0.93</td>
</tr>
<tr>
<td>10:E:30:LYS:HG2</td>
<td>10:E:79:VAL:O</td>
<td>1.69</td>
<td>0.93</td>
</tr>
<tr>
<td>17:L:10:LYS:HB2</td>
<td>17:L:14:ARG:HH2</td>
<td>1.33</td>
<td>0.93</td>
</tr>
<tr>
<td>29:X:224:G:H4'</td>
<td>29:X:399:G:C6</td>
<td>2.04</td>
<td>0.93</td>
</tr>
<tr>
<td>30:Y:45:ILE:HG21</td>
<td>30:Y:57:VAL:HG23</td>
<td>1.46</td>
<td>0.92</td>
</tr>
<tr>
<td>4:4:9:LYS:H</td>
<td>4:4:9:LYS:HD2</td>
<td>1.32</td>
<td>0.92</td>
</tr>
<tr>
<td>29:X:1539:U:H2'</td>
<td>29:X:1540:C:H6</td>
<td>1.34</td>
<td>0.92</td>
</tr>
<tr>
<td>25:T:3:HIS:HD2</td>
<td>25:T:5:LYS:HD3</td>
<td>1.32</td>
<td>0.92</td>
</tr>
<tr>
<td>29:X:558:G:C5'</td>
<td>29:X:558:G:N3</td>
<td>2.33</td>
<td>0.92</td>
</tr>
<tr>
<td>17:L:33:ARG:CZ</td>
<td>17:L:103:LEU:HB2</td>
<td>2.00</td>
<td>0.92</td>
</tr>
<tr>
<td>10:E:18:ASN:HB2</td>
<td>10:E:25:LYS:HB3</td>
<td>1.51</td>
<td>0.91</td>
</tr>
<tr>
<td>29:X:1053:G:C2'</td>
<td>29:X:1054:C:H6</td>
<td>1.83</td>
<td>0.91</td>
</tr>
<tr>
<td>23:R:15:HIS:HD1</td>
<td>23:R:16:PHE:HD2</td>
<td>1.10</td>
<td>0.91</td>
</tr>
<tr>
<td>29:X:2212:U:H2'</td>
<td>29:X:2213:G:C8</td>
<td>2.05</td>
<td>0.91</td>
</tr>
<tr>
<td>9:D:150:ARG:CG</td>
<td>9:D:151:GLY:H</td>
<td>1.83</td>
<td>0.91</td>
</tr>
<tr>
<td>29:X:1467:U:H3'</td>
<td>29:X:1467:U:H6</td>
<td>1.32</td>
<td>0.91</td>
</tr>
<tr>
<td>31:Z:36:A:HO2'</td>
<td>31:Z:37:C:H5</td>
<td>1.14</td>
<td>0.91</td>
</tr>
<tr>
<td>8:C:110:SER:HA</td>
<td>8:C:113:GLU:OE1</td>
<td>1.71</td>
<td>0.91</td>
</tr>
<tr>
<td>29:X:176:A:H3'</td>
<td>29:X:177:U:H5</td>
<td>1.35</td>
<td>0.91</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>23:R:9:His:HD1</td>
<td>29:X:337:G:HO2'</td>
<td>1.18</td>
<td>0.91</td>
</tr>
<tr>
<td>20:O:57:GLN:H</td>
<td>20:O:97:GLY:CA</td>
<td>1.84</td>
<td>0.91</td>
</tr>
<tr>
<td>29:X:2691:CHO2'</td>
<td>29:X:2692:A:H8</td>
<td>0.93</td>
<td>0.91</td>
</tr>
<tr>
<td>7:B:75:THR:O</td>
<td>7:B:76:ARG:HB3</td>
<td>1.68</td>
<td>0.91</td>
</tr>
<tr>
<td>9:D:29:PRO:HG2</td>
<td>9:D:165:GLU:HB3</td>
<td>1.52</td>
<td>0.91</td>
</tr>
<tr>
<td>17:L:97:HIS:CD2</td>
<td>17:L:98:GLY:H</td>
<td>1.89</td>
<td>0.91</td>
</tr>
<tr>
<td>19:N:88:ILE:HG12</td>
<td>20:O:49:GLU:OE1</td>
<td>1.70</td>
<td>0.91</td>
</tr>
<tr>
<td>29:X:537:C:H1'</td>
<td>29:X:538:A:C6</td>
<td>2.05</td>
<td>0.91</td>
</tr>
<tr>
<td>6:A:211:ARG:HH11</td>
<td>6:A:211:ARG:CG</td>
<td>1.84</td>
<td>0.91</td>
</tr>
<tr>
<td>20:O:26:GLN:HG2</td>
<td>20:O:27:GLY:H</td>
<td>1.35</td>
<td>0.91</td>
</tr>
<tr>
<td>29:X:652:C:H42</td>
<td>29:X:657:A:H61</td>
<td>1.18</td>
<td>0.91</td>
</tr>
<tr>
<td>20:O:28:GLU:O</td>
<td>20:O:30:GLY:N</td>
<td>2.04</td>
<td>0.90</td>
</tr>
<tr>
<td>19:N:88:ILE:HG23</td>
<td>20:O:49:GLU:HB2</td>
<td>1.50</td>
<td>0.90</td>
</tr>
<tr>
<td>21:P:50:VAL:HB</td>
<td>21:P:90:LEU:O</td>
<td>1.70</td>
<td>0.90</td>
</tr>
<tr>
<td>27:V:42:ARG:NH1</td>
<td>27:V:45:GLN:HE22</td>
<td>1.69</td>
<td>0.90</td>
</tr>
<tr>
<td>29:X:497:C:H6</td>
<td>29:X:497:C:H5'</td>
<td>1.35</td>
<td>0.90</td>
</tr>
<tr>
<td>10:E:89:LEU:HB2</td>
<td>10:E:129:THR:HA</td>
<td>1.53</td>
<td>0.90</td>
</tr>
<tr>
<td>9:D:60:ILE:HG22</td>
<td>9:D:140:GLU:HB2</td>
<td>1.51</td>
<td>0.90</td>
</tr>
<tr>
<td>17:L:38:ILE:CD1</td>
<td>17:L:40:ALA:H</td>
<td>1.85</td>
<td>0.90</td>
</tr>
<tr>
<td>29:X:2490:U:H2'</td>
<td>29:X:2491:C:C6</td>
<td>2.06</td>
<td>0.90</td>
</tr>
<tr>
<td>8:C:47:THR:HG23</td>
<td>8:C:85:GLY:H</td>
<td>1.36</td>
<td>0.90</td>
</tr>
<tr>
<td>14:I:94:GLU:CA</td>
<td>14:I:97:ARG:HE</td>
<td>1.80</td>
<td>0.90</td>
</tr>
<tr>
<td>29:X:2189:A:H61</td>
<td>29:X:2195:C:H41</td>
<td>1.20</td>
<td>0.90</td>
</tr>
<tr>
<td>14:I:11:GLY:H</td>
<td>14:I:14:LYS:CB</td>
<td>1.84</td>
<td>0.90</td>
</tr>
<tr>
<td>17:L:38:ILE:HD11</td>
<td>17:L:40:ALA:H</td>
<td>1.35</td>
<td>0.90</td>
</tr>
<tr>
<td>29:X:1095:A:C3'</td>
<td>29:X:1096:A:H5&quot;</td>
<td>2.02</td>
<td>0.90</td>
</tr>
<tr>
<td>29:X:1281:A:H1'</td>
<td>29:X:2592:U:C4</td>
<td>2.06</td>
<td>0.90</td>
</tr>
<tr>
<td>16:K:60:LEU:HD11</td>
<td>16:K:64:ARG:HE</td>
<td>1.38</td>
<td>0.89</td>
</tr>
<tr>
<td>6:A:209:ALA:HB2</td>
<td>29:X:1781:C:O2'</td>
<td>1.71</td>
<td>0.89</td>
</tr>
<tr>
<td>21:P:8:PHE:O</td>
<td>21:P:9:ARG:HB2</td>
<td>1.71</td>
<td>0.89</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>29:X:1086:C:H3'</td>
<td>29:X:1087:C:H5&quot;</td>
<td>1.54</td>
<td>0.89</td>
</tr>
<tr>
<td>24:S:133:GLU:OE2</td>
<td>24:S:135:VAL:HG23</td>
<td>1.73</td>
<td>0.89</td>
</tr>
<tr>
<td>29:X:2195:C:C6</td>
<td>29:X:2196:U:C5</td>
<td>2.60</td>
<td>0.89</td>
</tr>
<tr>
<td>29:X:538:A:N3</td>
<td>29:X:538:A:H3'</td>
<td>1.87</td>
<td>0.89</td>
</tr>
<tr>
<td>19:N:3:ARG:HG2</td>
<td>19:N:3:ARG:HH11</td>
<td>1.35</td>
<td>0.89</td>
</tr>
<tr>
<td>7:B:120:TRP:CD2</td>
<td>7:B:155:ARG:HD2</td>
<td>2.07</td>
<td>0.89</td>
</tr>
<tr>
<td>9:D:40:LEU:HB3</td>
<td>9:D:150:ARG:NE</td>
<td>1.86</td>
<td>0.89</td>
</tr>
<tr>
<td>17:L:33:ARG:NH1</td>
<td>17:L:103:LEU:HB2</td>
<td>1.87</td>
<td>0.89</td>
</tr>
<tr>
<td>29:X:1859:A:H2'</td>
<td>29:X:1860:A:C8</td>
<td>2.06</td>
<td>0.89</td>
</tr>
<tr>
<td>9:D:12:VAL:O</td>
<td>9:D:16:LEU:HG</td>
<td>1.72</td>
<td>0.89</td>
</tr>
<tr>
<td>10:E:126:PRO:HG2</td>
<td>10:E:127:GLU:H</td>
<td>1.37</td>
<td>0.89</td>
</tr>
<tr>
<td>20:O:57:GLN:H</td>
<td>20:O:97:GLY:HA2</td>
<td>1.35</td>
<td>0.89</td>
</tr>
<tr>
<td>29:X:1734:C:C5</td>
<td>29:X:1735:G:H1'</td>
<td>2.08</td>
<td>0.89</td>
</tr>
<tr>
<td>14:I:122:VAL:HG21</td>
<td>14:I:125:ALA:HB2</td>
<td>1.55</td>
<td>0.89</td>
</tr>
<tr>
<td>15:J:15:ARG:HH11</td>
<td>15:J:15:ARG:HG3</td>
<td>1.38</td>
<td>0.89</td>
</tr>
<tr>
<td>20:O:36:LYS:HE3</td>
<td>20:O:56:VAL:HG13</td>
<td>1.52</td>
<td>0.89</td>
</tr>
<tr>
<td>8:C:112:GLN:O</td>
<td>8:C:116:LYS:HE2</td>
<td>1.72</td>
<td>0.89</td>
</tr>
<tr>
<td>26:U:70:LEU:HD21</td>
<td>26:U:77:GLY:O</td>
<td>1.72</td>
<td>0.89</td>
</tr>
<tr>
<td>15:J:62:GLY:HA3</td>
<td>15:J:64:LYS:HE3</td>
<td>1.55</td>
<td>0.89</td>
</tr>
<tr>
<td>29:X:1299:A:H2'</td>
<td>29:X:1301:U:OP2</td>
<td>1.73</td>
<td>0.89</td>
</tr>
<tr>
<td>29:X:169:C:H2'</td>
<td>29:X:170:U:H5'</td>
<td>1.54</td>
<td>0.89</td>
</tr>
<tr>
<td>23:R:95:ARG:HZ</td>
<td>23:R:106:VAL:HG12</td>
<td>2.03</td>
<td>0.88</td>
</tr>
<tr>
<td>29:X:635:C:H2'</td>
<td>29:X:636:G:H5&quot;</td>
<td>1.54</td>
<td>0.88</td>
</tr>
<tr>
<td>20:O:5:ILE:HD11</td>
<td>20:O:8:GLY:O</td>
<td>1.72</td>
<td>0.88</td>
</tr>
<tr>
<td>29:X:2195:C:H2'</td>
<td>29:X:2196:U:H6</td>
<td>1.31</td>
<td>0.88</td>
</tr>
<tr>
<td>10:E:44:ARG:NH2</td>
<td>10:E:46:ASP:HB2</td>
<td>1.88</td>
<td>0.88</td>
</tr>
<tr>
<td>12:G:61:ARG:HE</td>
<td>12:G:65:LYS:CD</td>
<td>1.84</td>
<td>0.88</td>
</tr>
<tr>
<td>20:O:11:GLN:NE2</td>
<td>20:O:38:LEU:HB3</td>
<td>1.88</td>
<td>0.88</td>
</tr>
<tr>
<td>12:G:36:ASN:O</td>
<td>12:G:38:GLU:N</td>
<td>2.06</td>
<td>0.88</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>29:X:914:C:H2'</td>
<td>29:X:915:C:H6</td>
<td>1.35</td>
<td>0.88</td>
</tr>
<tr>
<td>27:V:7:ARG:HD2</td>
<td>27:V:8:ASN:N</td>
<td>1.87</td>
<td>0.88</td>
</tr>
<tr>
<td>30:Y:16:ARG:HD3</td>
<td>30:Y:20:ARG:CZ</td>
<td>2.03</td>
<td>0.88</td>
</tr>
<tr>
<td>10:E:139:GLN:HB3</td>
<td>10:E:143:GLN:CD</td>
<td>1.94</td>
<td>0.88</td>
</tr>
<tr>
<td>20:O:36:LYS:HZ2</td>
<td>20:O:54:TYR:HB3</td>
<td>1.36</td>
<td>0.87</td>
</tr>
<tr>
<td>29:X:1354:A:H3'</td>
<td>29:X:1410:U:O2</td>
<td>1.73</td>
<td>0.87</td>
</tr>
<tr>
<td>29:X:862:A:H2'</td>
<td>29:X:863:C:C6</td>
<td>2.08</td>
<td>0.87</td>
</tr>
<tr>
<td>15:J:27:TYR:HB3</td>
<td>15:J:137:VAL:HG21</td>
<td>1.55</td>
<td>0.87</td>
</tr>
<tr>
<td>29:X:1181:C:H2'</td>
<td>29:X:1182:U:H5''</td>
<td>1.54</td>
<td>0.87</td>
</tr>
<tr>
<td>12:G:52:GLY:O</td>
<td>12:G:55:ALA:HB3</td>
<td>1.74</td>
<td>0.87</td>
</tr>
<tr>
<td>21:P:14:ARG:HA</td>
<td>21:P:17:GLN:HG2</td>
<td>1.56</td>
<td>0.87</td>
</tr>
<tr>
<td>7:B:194:GLY:HA2</td>
<td>18:M:2:GLN:HB3</td>
<td>1.55</td>
<td>0.87</td>
</tr>
<tr>
<td>29:X:1018:C:H3'</td>
<td>29:X:1019:U:C5'</td>
<td>2.04</td>
<td>0.87</td>
</tr>
<tr>
<td>29:X:1223:G:HG4'</td>
<td>29:X:1224:A:C5'</td>
<td>2.04</td>
<td>0.87</td>
</tr>
<tr>
<td>29:X:1313:U:H4'</td>
<td>29:X:1314:A:O5'</td>
<td>1.75</td>
<td>0.87</td>
</tr>
<tr>
<td>29:X:2170:C:H3'</td>
<td>29:X:2171:U:C5'</td>
<td>2.04</td>
<td>0.87</td>
</tr>
<tr>
<td>29:X:314:C:H2'</td>
<td>29:X:315:G:H8</td>
<td>1.36</td>
<td>0.87</td>
</tr>
<tr>
<td>11:F:12:LEU:HD13</td>
<td>11:F:18:THR:HG21</td>
<td>1.54</td>
<td>0.87</td>
</tr>
<tr>
<td>29:X:2326:C:C2</td>
<td>29:X:2327:U:C5</td>
<td>2.63</td>
<td>0.87</td>
</tr>
<tr>
<td>10:E:43:VAL:HB</td>
<td>10:E:52:VAL:HA</td>
<td>1.55</td>
<td>0.87</td>
</tr>
<tr>
<td>10:E:37:TYR:CD2</td>
<td>10:E:68:THR:HG23</td>
<td>2.09</td>
<td>0.87</td>
</tr>
<tr>
<td>29:X:2058:U:H3'</td>
<td>29:X:2217:G:N2</td>
<td>1.89</td>
<td>0.87</td>
</tr>
<tr>
<td>29:X:689:A:C8</td>
<td>29:X:2422:C:H1'</td>
<td>2.09</td>
<td>0.87</td>
</tr>
<tr>
<td>29:X:497:C:C6</td>
<td>29:X:497:C:H5'</td>
<td>2.09</td>
<td>0.87</td>
</tr>
<tr>
<td>29:X:2796:A:H2'</td>
<td>29:X:2797:G:C8</td>
<td>2.09</td>
<td>0.87</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>29:X:389:G:H2'</td>
<td>29:X:390:U:C6</td>
<td>2.10</td>
<td>0.87</td>
</tr>
<tr>
<td>29:X:788:G:H5'</td>
<td>29:X:790:A:C1'</td>
<td>2.04</td>
<td>0.87</td>
</tr>
<tr>
<td>15:J:78:LYS:HA</td>
<td>15:J:88:LYS:HZ3</td>
<td>1.40</td>
<td>0.87</td>
</tr>
<tr>
<td>25:T:40:GLN:HE22</td>
<td>25:T:43:THR:HA</td>
<td>1.35</td>
<td>0.87</td>
</tr>
<tr>
<td>29:X:1275:A:C2</td>
<td>30:Y:10:LYS:HE2</td>
<td>2.10</td>
<td>0.87</td>
</tr>
<tr>
<td>30:Y:4:HIS:HB3</td>
<td>30:Y:5:PRO:CD</td>
<td>2.03</td>
<td>0.87</td>
</tr>
<tr>
<td>7:B:2:LYS:HA</td>
<td>7:B:84:PHE:HE1</td>
<td>1.36</td>
<td>0.86</td>
</tr>
<tr>
<td>7:B:53:PRO:HD2</td>
<td>18:M:6:LYS:HZ2</td>
<td>1.40</td>
<td>0.86</td>
</tr>
<tr>
<td>29:X:176:A:H3'</td>
<td>29:X:177:U:C5</td>
<td>2.09</td>
<td>0.86</td>
</tr>
<tr>
<td>29:X:1052:C:C3'</td>
<td>29:X:1053:G:C5'</td>
<td>2.53</td>
<td>0.86</td>
</tr>
<tr>
<td>29:X:460:U:O4</td>
<td>29:X:592:G:H1'</td>
<td>1.75</td>
<td>0.86</td>
</tr>
<tr>
<td>6:A:183:ARG:HB3</td>
<td>6:A:183:ARG:NH1</td>
<td>1.90</td>
<td>0.86</td>
</tr>
<tr>
<td>29:X:1573:G:H3'</td>
<td>29:X:1574:A:H5''</td>
<td>1.56</td>
<td>0.86</td>
</tr>
<tr>
<td>29:X:731:A:H2'</td>
<td>29:X:732:G:O4'</td>
<td>1.75</td>
<td>0.86</td>
</tr>
<tr>
<td>14:I:13:ARG:HH11</td>
<td>29:X:1218:C:C4'</td>
<td>1.87</td>
<td>0.86</td>
</tr>
<tr>
<td>17:L:63:ASN:HB3</td>
<td>17:L:66:ASP:HB2</td>
<td>1.55</td>
<td>0.86</td>
</tr>
<tr>
<td>18:M:101:ARG:NH2</td>
<td>29:X:1745:C:OP1</td>
<td>2.09</td>
<td>0.86</td>
</tr>
<tr>
<td>29:X:2198:U:H2'</td>
<td>29:X:2199:C:O4'</td>
<td>1.75</td>
<td>0.86</td>
</tr>
<tr>
<td>29:X:1512:A:H2'</td>
<td>29:X:1514:C:C5'</td>
<td>2.09</td>
<td>0.86</td>
</tr>
<tr>
<td>29:X:789:G:H4'</td>
<td>29:X:790:A:O5'</td>
<td>1.76</td>
<td>0.86</td>
</tr>
<tr>
<td>8:C:22:VAL:HA</td>
<td>8:C:106:MET:HG3</td>
<td>1.56</td>
<td>0.86</td>
</tr>
<tr>
<td>9:D:13:ARG:HB3</td>
<td>9:D:14:PRO:HD3</td>
<td>1.58</td>
<td>0.86</td>
</tr>
<tr>
<td>24:S:36:ARG:HG2</td>
<td>24:S:40:ASP:OD1</td>
<td>1.73</td>
<td>0.86</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>25:T:3:HIS:CD2</td>
<td>25:T:5:LYS:HD3</td>
<td>2.10</td>
<td>0.86</td>
</tr>
<tr>
<td>29:X:1468:A:H5''</td>
<td>29:X:1472:C:H41</td>
<td>1.36</td>
<td>0.86</td>
</tr>
<tr>
<td>12:G:115:ALA:O</td>
<td>12:G:118:ALA:HB3</td>
<td>1.76</td>
<td>0.86</td>
</tr>
<tr>
<td>17:L:33:ARG:NH2</td>
<td>17:L:103:LEU:HB2</td>
<td>1.90</td>
<td>0.85</td>
</tr>
<tr>
<td>18:M:34:ARG:NH1</td>
<td>18:M:81:PHE:HB3</td>
<td>1.91</td>
<td>0.85</td>
</tr>
<tr>
<td>29:X:824:U:H1'</td>
<td>29:X:1264:C:H1'</td>
<td>1.58</td>
<td>0.85</td>
</tr>
<tr>
<td>29:X:476:G:H2'</td>
<td>29:X:477:A:C8</td>
<td>2.10</td>
<td>0.85</td>
</tr>
<tr>
<td>8:C:186:LEU:HG</td>
<td>8:C:188:ILE:HG12</td>
<td>1.56</td>
<td>0.85</td>
</tr>
<tr>
<td>9:D:33:LYS:HG3</td>
<td>9:D:157:VAL:HG21</td>
<td>1.57</td>
<td>0.85</td>
</tr>
<tr>
<td>23:R:18:LYS:HE2</td>
<td>23:R:18:LYS:N</td>
<td>1.91</td>
<td>0.85</td>
</tr>
<tr>
<td>19:N:8:ILE:O</td>
<td>19:N:12:ARG:HG3</td>
<td>1.75</td>
<td>0.85</td>
</tr>
<tr>
<td>9:D:171:GLN:HA</td>
<td>9:D:175:LEU:HB3</td>
<td>1.58</td>
<td>0.85</td>
</tr>
<tr>
<td>8:C:28:HIS:CE1</td>
<td>14:I:21:ARG:HH11</td>
<td>1.93</td>
<td>0.85</td>
</tr>
<tr>
<td>16:K:100:VAL:CG1</td>
<td>16:K:101:GLY:H</td>
<td>1.78</td>
<td>0.85</td>
</tr>
<tr>
<td>7:B:37:LYS:HD2</td>
<td>7:B:42:ASP:OD1</td>
<td>1.75</td>
<td>0.85</td>
</tr>
<tr>
<td>14:I:11:GLY:N</td>
<td>14:I:14:LYS:HB3</td>
<td>1.90</td>
<td>0.85</td>
</tr>
<tr>
<td>29:X:1031:C:H41</td>
<td>29:X:1153:A:N6</td>
<td>1.74</td>
<td>0.85</td>
</tr>
<tr>
<td>12:G:36:ASN:C</td>
<td>12:G:38:GLU:H</td>
<td>1.78</td>
<td>0.85</td>
</tr>
<tr>
<td>8:C:93:TYR:CD1</td>
<td>29:X:673:G:H5'</td>
<td>2.11</td>
<td>0.85</td>
</tr>
<tr>
<td>23:R:40:LEU:HB2</td>
<td>23:R:45:LYS:HB2</td>
<td>1.57</td>
<td>0.85</td>
</tr>
<tr>
<td>24:S:19:ILE:CG1</td>
<td>24:S:36:ARG:HA</td>
<td>2.06</td>
<td>0.85</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:623:C:C3'</td>
<td>29:X:624:A:H5&quot;</td>
<td>2.07</td>
<td>0.85</td>
</tr>
<tr>
<td>29:X:149:A:H2'</td>
<td>29:X:150:A:C8</td>
<td>2.11</td>
<td>0.85</td>
</tr>
<tr>
<td>12:G:132:PHE:CZ</td>
<td>12:G:145:HIS:HB2</td>
<td>2.10</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:1185:C:H2'</td>
<td>29:X:1186:G:H3'</td>
<td>1.59</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:1710:U:H5'</td>
<td>29:X:1711:C:C5</td>
<td>2.11</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:2706:U:H2'</td>
<td>29:X:2706:U:O2</td>
<td>1.76</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:833:A:HI1</td>
<td>29:X:954:U:O2'</td>
<td>1.77</td>
<td>0.84</td>
</tr>
<tr>
<td>7:B:116:VAL:N</td>
<td>7:B:136:ARG:NE</td>
<td>2.09</td>
<td>0.84</td>
</tr>
<tr>
<td>9:D:142:THR:O</td>
<td>9:D:146:VAL:HG13</td>
<td>1.75</td>
<td>0.84</td>
</tr>
<tr>
<td>24:S:3:LEU:HD12</td>
<td>24:S:4:THR:N</td>
<td>1.91</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:1018:C:H3'</td>
<td>29:X:1019:U:H5&quot;</td>
<td>1.59</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:2177:U:H2'</td>
<td>29:X:2178:U:C6</td>
<td>2.12</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:2490:U:H2'</td>
<td>29:X:2491:C:H6</td>
<td>1.38</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:2850:U:H6</td>
<td>29:X:2850:U:H5'</td>
<td>1.41</td>
<td>0.84</td>
</tr>
<tr>
<td>19:N:31:GLN:NE2</td>
<td>29:X:589:C:H4'</td>
<td>1.92</td>
<td>0.84</td>
</tr>
<tr>
<td>8:C:148:VAL:CB</td>
<td>8:C:167:VAL:HG12</td>
<td>2.03</td>
<td>0.84</td>
</tr>
<tr>
<td>26:U:50:ALA:H33</td>
<td>26:U:52:ARG:HH22</td>
<td>1.42</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:1385:C:HI1</td>
<td>29:X:2192:U:C5</td>
<td>2.12</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:1526:U:H2'</td>
<td>29:X:1527:G:O4'</td>
<td>1.75</td>
<td>0.84</td>
</tr>
<tr>
<td>6:A:244:ARG:HB3</td>
<td>6:A:252:LYS:NZ</td>
<td>1.91</td>
<td>0.84</td>
</tr>
<tr>
<td>7:B:188:ILE:CG2</td>
<td>7:B:189:PRO:HD2</td>
<td>2.07</td>
<td>0.84</td>
</tr>
<tr>
<td>8:C:27:LEU:O</td>
<td>8:C:31:VAL:HG22</td>
<td>1.76</td>
<td>0.84</td>
</tr>
<tr>
<td>25:T:60:PHE:CE1</td>
<td>29:X:2344:G:H4'</td>
<td>2.12</td>
<td>0.84</td>
</tr>
<tr>
<td>26:U:51:ILE:CG2</td>
<td>26:U:59:THR:HA</td>
<td>2.05</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:553:C:H5'</td>
<td>29:X:554:U:OP1</td>
<td>1.76</td>
<td>0.84</td>
</tr>
<tr>
<td>12:G:34:PRO:HA</td>
<td>12:G:69:ASP:CG</td>
<td>1.98</td>
<td>0.84</td>
</tr>
<tr>
<td>14:I:53:ARG:O</td>
<td>14:I:53:ARG:HD2</td>
<td>1.76</td>
<td>0.84</td>
</tr>
<tr>
<td>18:M:33:VAL:CG2</td>
<td>18:M:51:GLU:HB2</td>
<td>2.07</td>
<td>0.84</td>
</tr>
<tr>
<td>23:R:38:LEU:HB2</td>
<td>23:R:47:VAL:HB</td>
<td>1.58</td>
<td>0.84</td>
</tr>
<tr>
<td>23:R:25:LEU:HD11</td>
<td>23:R:81:VAL:HG23</td>
<td>1.60</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:2240:C:O2'</td>
<td>29:X:2241:U:H5'</td>
<td>1.78</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:759:C:H6</td>
<td>29:X:759:C:H5'</td>
<td>1.40</td>
<td>0.84</td>
</tr>
<tr>
<td>7:B:116:VAL:HG22</td>
<td>7:B:136:ARG:NE</td>
<td>1.90</td>
<td>0.84</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>23:R:69:GLN:HA</td>
<td>23:R:83:LEU:HD23</td>
<td>1.76</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:1195:U:C6</td>
<td>29:X:1507:A:O4'</td>
<td>1.78</td>
<td>0.84</td>
</tr>
<tr>
<td>8:C:93:TYR:H</td>
<td>8:C:93:TYR:H</td>
<td>1.24</td>
<td>0.84</td>
</tr>
<tr>
<td>18:M:39:VAL:HG13</td>
<td>23:R:56:LYS:HA</td>
<td>1.60</td>
<td>0.84</td>
</tr>
<tr>
<td>19:N:115:ASN:HD21</td>
<td>19:N:114:ARG:NH1</td>
<td>1.74</td>
<td>0.84</td>
</tr>
<tr>
<td>26:U:32:ARG:NH1</td>
<td>26:U:31:GLY:HA2</td>
<td>1.92</td>
<td>0.84</td>
</tr>
<tr>
<td>16:M:38:LYS:CE</td>
<td>16:M:37:LYS:O</td>
<td>2.04</td>
<td>0.83</td>
</tr>
<tr>
<td>13:H:17:ARG:HB2</td>
<td>16:K:76:VAL:HG12</td>
<td>1.91</td>
<td>0.83</td>
</tr>
<tr>
<td>13:H:10:LEU:CD2</td>
<td>16:K:73:LYS:O</td>
<td>1.93</td>
<td>0.83</td>
</tr>
<tr>
<td>29:X:2812:A:H8</td>
<td>29:X:2811:G:H2'</td>
<td>1.40</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:2041:A:H8</td>
<td>29:X:2040:A:H2'</td>
<td>1.43</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:2811:G:H2'</td>
<td>29:X:2812:A:H8</td>
<td>1.40</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:2041:A:H8</td>
<td>29:X:2040:A:H2'</td>
<td>1.43</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:2812:A:H8</td>
<td>29:X:2811:G:H2'</td>
<td>1.40</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:2040:A:H2'</td>
<td>29:X:2041:A:H8</td>
<td>1.43</td>
<td>0.84</td>
</tr>
<tr>
<td>29:X:2041:A:H8</td>
<td>29:X:2040:A:H2'</td>
<td>1.43</td>
<td>0.84</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>14:I:18:ARG:CB</td>
<td>14:I:21:ARG:HD3</td>
<td>2.09</td>
<td>0.83</td>
</tr>
<tr>
<td>20:O:38:LEU:HD13</td>
<td>20:O:39:PHEN</td>
<td>1.93</td>
<td>0.83</td>
</tr>
<tr>
<td>23:R:112:LYS:O</td>
<td>23:R:113:THR:HG23</td>
<td>1.78</td>
<td>0.83</td>
</tr>
<tr>
<td>29:X:558:G:CS</td>
<td>29:X:559:C:C</td>
<td>2.66</td>
<td>0.83</td>
</tr>
<tr>
<td>31:Z:64:C:H2'</td>
<td>31:Z:65:A:H8</td>
<td>1.42</td>
<td>0.83</td>
</tr>
<tr>
<td>15:J:44:LYS:HB2</td>
<td>15:J:47:GLN:HG3</td>
<td>1.59</td>
<td>0.83</td>
</tr>
<tr>
<td>9:D:4:LEU:CG</td>
<td>9:D:5:LYS:H</td>
<td>1.90</td>
<td>0.83</td>
</tr>
<tr>
<td>10:E:43:VAL:HG23</td>
<td>10:E:51:LEU:O</td>
<td>1.77</td>
<td>0.83</td>
</tr>
<tr>
<td>14:I:86:THR:OG1</td>
<td>14:I:118:VAL:HG12</td>
<td>1.77</td>
<td>0.83</td>
</tr>
<tr>
<td>14:I:28:LYS:HZ2</td>
<td>14:I:37:GLN:N</td>
<td>1.76</td>
<td>0.83</td>
</tr>
<tr>
<td>29:X:2581:A:H2'</td>
<td>29:X:2582:G:OP2</td>
<td>1.78</td>
<td>0.83</td>
</tr>
<tr>
<td>29:X:760:U:C5</td>
<td>30:Y:3:LYS:HG3</td>
<td>2.14</td>
<td>0.83</td>
</tr>
<tr>
<td>9:D:111:ILE:HB</td>
<td>9:D:114:PHE:HB2</td>
<td>1.59</td>
<td>0.83</td>
</tr>
<tr>
<td>10:E:29:PRO:HG2</td>
<td>10:E:79:VAL:O</td>
<td>1.76</td>
<td>0.83</td>
</tr>
<tr>
<td>29:X:704:G:H2'</td>
<td>29:X:705:C:H6</td>
<td>1.42</td>
<td>0.83</td>
</tr>
<tr>
<td>29:X:760:U:C4</td>
<td>30:Y:3:LYS:HG3</td>
<td>2.13</td>
<td>0.83</td>
</tr>
<tr>
<td>29:X:2440:C:H2'</td>
<td>29:X:2441:U:H6</td>
<td>1.44</td>
<td>0.83</td>
</tr>
<tr>
<td>23:R:93:ARG:HG2</td>
<td>23:R:93:ARG:HH11</td>
<td>1.43</td>
<td>0.82</td>
</tr>
<tr>
<td>29:X:2672:U:H2'</td>
<td>29:X:2673:G:C8</td>
<td>2.14</td>
<td>0.82</td>
</tr>
<tr>
<td>6:A:244:ARG:HD2</td>
<td>29:X:1885:C:H5'</td>
<td>1.60</td>
<td>0.82</td>
</tr>
<tr>
<td>16:K:87:TYR:CE1</td>
<td>16:K:94:TYR:HD2</td>
<td>1.96</td>
<td>0.82</td>
</tr>
<tr>
<td>17:L:33:ARG:NH1</td>
<td>17:L:100:VAL:HA</td>
<td>1.93</td>
<td>0.82</td>
</tr>
<tr>
<td>17:L:40:ALA:HB1</td>
<td>17:L:75:LEU:HD22</td>
<td>1.61</td>
<td>0.82</td>
</tr>
<tr>
<td>6:A:250:TRP:O</td>
<td>6A:255:LYS:NZ</td>
<td>2.13</td>
<td>0.82</td>
</tr>
<tr>
<td>15:J:69:ILE:HG23</td>
<td>15:J:104:MET:HA</td>
<td>1.61</td>
<td>0.82</td>
</tr>
<tr>
<td>15:J:22:ALA:HB2</td>
<td>15:J:100:PRO:O</td>
<td>1.79</td>
<td>0.82</td>
</tr>
<tr>
<td>6:A:149:PRO:HG2</td>
<td>29:X:2200:G:O2'</td>
<td>1.79</td>
<td>0.82</td>
</tr>
<tr>
<td>12:G:103:TYR:CE</td>
<td>12:G:111:LYS:HB2</td>
<td>2.14</td>
<td>0.82</td>
</tr>
<tr>
<td>24:S:67:LYS:HZ3</td>
<td>31:Z:106:U:H4'</td>
<td>1.43</td>
<td>0.82</td>
</tr>
<tr>
<td>29:X:940:G:OP1</td>
<td>29:X:940:G:HZ1</td>
<td>1.79</td>
<td>0.82</td>
</tr>
<tr>
<td>15:J:17:ARG:NH1</td>
<td>29:X:969:U:H5''</td>
<td>1.93</td>
<td>0.82</td>
</tr>
<tr>
<td>4:4:30:VAL:HG12</td>
<td>4:4:33:LYS:HE3</td>
<td>1.61</td>
<td>0.82</td>
</tr>
<tr>
<td>7:B:38:THR:HG22</td>
<td>7:B:40:GLN:N</td>
<td>1.92</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>23:R:4:PRO:N</td>
<td>29:X:34:U:HO2'</td>
<td>1.78</td>
<td>0.82</td>
</tr>
<tr>
<td>29:X:2029:G:H5'</td>
<td>30:Y:19:ARG:HB2</td>
<td>1.62</td>
<td>0.82</td>
</tr>
<tr>
<td>8:C:3:GLN:HE22</td>
<td>8:C:4:ILE:HG12</td>
<td>1.44</td>
<td>0.82</td>
</tr>
<tr>
<td>18:M:46:ARG:CG</td>
<td>18:M:47:SER:H</td>
<td>1.92</td>
<td>0.82</td>
</tr>
<tr>
<td>24:S:10:PRO:O</td>
<td>24:S:13:LYS:HG3</td>
<td>1.77</td>
<td>0.82</td>
</tr>
<tr>
<td>22:Q:70:GLY:HA2</td>
<td>29:X:63:A:O2'</td>
<td>1.80</td>
<td>0.82</td>
</tr>
<tr>
<td>29:X:757:U:O2'</td>
<td>29:X:758:G:H5'</td>
<td>1.79</td>
<td>0.82</td>
</tr>
<tr>
<td>30:Y:35:GLN:O</td>
<td>30:Y:36:CYS:HB3</td>
<td>1.79</td>
<td>0.82</td>
</tr>
<tr>
<td>7:B:198:LEU:N</td>
<td>7:B:198:LEU:HD12</td>
<td>1.95</td>
<td>0.82</td>
</tr>
<tr>
<td>17:L:20:THR:CG2</td>
<td>17:L:23:ALA:HB3</td>
<td>2.08</td>
<td>0.82</td>
</tr>
<tr>
<td>23:R:54:ILE:HD13</td>
<td>23:R:71:GLN:HA</td>
<td>1.60</td>
<td>0.82</td>
</tr>
<tr>
<td>23:R:56:LYS:HE3</td>
<td>29:X:493:A:H4'</td>
<td>1.60</td>
<td>0.82</td>
</tr>
<tr>
<td>29:X:2634:G:H2'</td>
<td>29:X:2643:G:O6</td>
<td>1.80</td>
<td>0.82</td>
</tr>
<tr>
<td>8:C:179:ASP:O</td>
<td>8:C:182:ARG:HB3</td>
<td>1.80</td>
<td>0.82</td>
</tr>
<tr>
<td>10:E:105:MET:HE3</td>
<td>10:E:131:ILE:HD11</td>
<td>1.61</td>
<td>0.82</td>
</tr>
<tr>
<td>15:J:125:LYS:H</td>
<td>15:J:125:LYS:HD2</td>
<td>1.43</td>
<td>0.82</td>
</tr>
<tr>
<td>15:J:64:LYS:HD2</td>
<td>15:J:64:LYS:N</td>
<td>1.95</td>
<td>0.82</td>
</tr>
<tr>
<td>26:U:14:VAL:HB</td>
<td>26:U:47:HIS:CE1</td>
<td>2.15</td>
<td>0.82</td>
</tr>
<tr>
<td>19:N:13:ARG:HE</td>
<td>29:X:1264:C:H5''</td>
<td>1.43</td>
<td>0.82</td>
</tr>
<tr>
<td>29:X:1711:C:H4'</td>
<td>29:X:1712:G:H5''</td>
<td>1.59</td>
<td>0.82</td>
</tr>
<tr>
<td>29:X:2195:C:C4</td>
<td>29:X:2196:U:C4</td>
<td>2.68</td>
<td>0.82</td>
</tr>
<tr>
<td>16:K:3:HIS:CE1</td>
<td>29:X:2796:A:OP2</td>
<td>2.33</td>
<td>0.82</td>
</tr>
<tr>
<td>29:X:501:G:H2'</td>
<td>29:X:502:A:C8</td>
<td>2.15</td>
<td>0.82</td>
</tr>
<tr>
<td>7:B:176:ARG:HE</td>
<td>18:M:16:ILE:HG12</td>
<td>1.45</td>
<td>0.82</td>
</tr>
<tr>
<td>9:D:4:LEU:HG</td>
<td>9:D:5:LYS:H</td>
<td>1.43</td>
<td>0.82</td>
</tr>
<tr>
<td>29:X:2787:A:H2'</td>
<td>29:X:2788:C:H6</td>
<td>1.43</td>
<td>0.82</td>
</tr>
<tr>
<td>29:X:663:G:C3'</td>
<td>29:X:664:C:H5''</td>
<td>2.10</td>
<td>0.82</td>
</tr>
<tr>
<td>29:X:2275:U:H4'</td>
<td>29:X:2276:C:OP1</td>
<td>1.78</td>
<td>0.82</td>
</tr>
<tr>
<td>29:X:2405:A:H4'</td>
<td>29:X:2406:C:OP2</td>
<td>1.80</td>
<td>0.82</td>
</tr>
<tr>
<td>29:X:2516:U:H2'</td>
<td>29:X:2517:C:H6</td>
<td>1.42</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:2769:C:H2'</td>
<td>29:X:2770:A:C8</td>
<td>2.14</td>
<td>0.81</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>10:E:43:VAL:HB</td>
<td>10:E:52:VAL:HG13</td>
<td>1.63</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:3:U:H2'</td>
<td>29:X:4:C:C6</td>
<td>2.15</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:1429:A:H1'</td>
<td>29:X:1603:A:C6</td>
<td>2.15</td>
<td>0.81</td>
</tr>
<tr>
<td>7:B:31:CYS:HB3</td>
<td>7:B:49:ILE:HG12</td>
<td>1.60</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:143:A:H2'</td>
<td>29:X:144:U:H6</td>
<td>1.43</td>
<td>0.81</td>
</tr>
<tr>
<td>8:C:176:ASN:HD21</td>
<td>8:C:178:TYR:HB3</td>
<td>1.45</td>
<td>0.81</td>
</tr>
<tr>
<td>9:D:74:ILE:HG12</td>
<td>9:D:80:ARG:O</td>
<td>1.80</td>
<td>0.81</td>
</tr>
<tr>
<td>15:J:78:LYS:HE2</td>
<td>15:J:81:GLU:HA</td>
<td>1.62</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:1118:G:H2'</td>
<td>29:X:1119:U:C5'</td>
<td>2.10</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:2326:C:H2'</td>
<td>29:X:2327:U:H6</td>
<td>1.44</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:813:A:H4'</td>
<td>29:X:814:G:O5'</td>
<td>1.78</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:857:U:H3'</td>
<td>29:X:858:G:C8</td>
<td>2.16</td>
<td>0.81</td>
</tr>
<tr>
<td>16:K:60:LEU:HD11</td>
<td>16:K:64:ARG:NE</td>
<td>1.94</td>
<td>0.81</td>
</tr>
<tr>
<td>17:L:36:LYS:HE3</td>
<td>17:L:36:LYS:HA</td>
<td>1.61</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:1051:U:H2'</td>
<td>29:X:1052:C:C6</td>
<td>2.15</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:1787:U:H2'</td>
<td>29:X:1788:C:H6</td>
<td>1.43</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:559:C:H2'</td>
<td>29:X:560:G:O4'</td>
<td>1.80</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:759:C:H5'</td>
<td>29:X:759:C:C6</td>
<td>2.16</td>
<td>0.81</td>
</tr>
<tr>
<td>16:K:91:PRO:O</td>
<td>16:K:92:GLY:O</td>
<td>1.98</td>
<td>0.81</td>
</tr>
<tr>
<td>17:L:101:LYS:HG2</td>
<td>17:L:105:ASP:OD2</td>
<td>1.79</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:1385:C:H1'</td>
<td>29:X:2192:U:C6</td>
<td>2.15</td>
<td>0.81</td>
</tr>
<tr>
<td>26:U:40:ARG:NE</td>
<td>29:X:178:C:OP1</td>
<td>2.14</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:1849:G:H1'</td>
<td>29:X:1868:A:H61</td>
<td>1.46</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:689:A:H8</td>
<td>29:X:2422:C:H1'</td>
<td>1.44</td>
<td>0.81</td>
</tr>
<tr>
<td>6:A:263:ARG:HG3</td>
<td>29:X:1791:C:OP1</td>
<td>1.81</td>
<td>0.81</td>
</tr>
<tr>
<td>12:G:158:His:HA</td>
<td>12:G:161:GLN:CD</td>
<td>2.01</td>
<td>0.81</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>14:I:18:ARG:HB2</td>
<td>14:I:21:ARG:CD</td>
<td>2.09</td>
<td>0.81</td>
</tr>
<tr>
<td>6:A:172:TYR:CE1</td>
<td>6:A:186:HIS:HB3</td>
<td>2.16</td>
<td>0.81</td>
</tr>
<tr>
<td>9:D:123:ASP:C</td>
<td>9:D:125:ARG:H</td>
<td>1.84</td>
<td>0.81</td>
</tr>
<tr>
<td>15:J:44:LYS:HB2</td>
<td>15:J:47:GLN:CD</td>
<td>2.02</td>
<td>0.81</td>
</tr>
<tr>
<td>29:X:404:A:H1'</td>
<td>29:X:424:G:H1'</td>
<td>1.63</td>
<td>0.81</td>
</tr>
<tr>
<td>7:B:189:PRO:HA</td>
<td>29:X:2659:C:H5'</td>
<td>1.61</td>
<td>0.80</td>
</tr>
<tr>
<td>8:C:44:SER:OG</td>
<td>29:X:37:C:H1'</td>
<td>1.79</td>
<td>0.80</td>
</tr>
<tr>
<td>10:E:89:LEU:HD13</td>
<td>10:E:95:ARG:HA</td>
<td>1.63</td>
<td>0.80</td>
</tr>
<tr>
<td>14:I:77:LEU:HB2</td>
<td>14:I:111:SER:H</td>
<td>1.45</td>
<td>0.80</td>
</tr>
<tr>
<td>16:K:13:ASN:ND2</td>
<td>16:K:16:ALA:H</td>
<td>1.79</td>
<td>0.80</td>
</tr>
<tr>
<td>29:X:2225:G:H2'</td>
<td>29:X:2226:A:H8</td>
<td>1.46</td>
<td>0.80</td>
</tr>
<tr>
<td>10:E:30:LYS:HB2</td>
<td>10:E:79:VAL:HA</td>
<td>1.60</td>
<td>0.80</td>
</tr>
<tr>
<td>29:X:914:C:H2'</td>
<td>29:X:915:C:C6</td>
<td>2.16</td>
<td>0.80</td>
</tr>
<tr>
<td>29:X:2617:G:HO2'</td>
<td>29:X:2618:A:H8</td>
<td>1.28</td>
<td>0.80</td>
</tr>
<tr>
<td>10:E:139:GLN:HE21</td>
<td>29:X:2726:U:H1'</td>
<td>1.46</td>
<td>0.80</td>
</tr>
<tr>
<td>16:K:103:ARG:NH2</td>
<td>16:K:106:ASP:OD2</td>
<td>2.14</td>
<td>0.80</td>
</tr>
<tr>
<td>17:L:36:LYS:HB3</td>
<td>17:L:64:LYS:HB2</td>
<td>1.62</td>
<td>0.80</td>
</tr>
<tr>
<td>29:X:1107:A:H3'</td>
<td>29:X:1108:U:H5'</td>
<td>1.60</td>
<td>0.80</td>
</tr>
<tr>
<td>29:X:1231:A:H2'</td>
<td>29:X:1232:A:C6</td>
<td>2.16</td>
<td>0.80</td>
</tr>
<tr>
<td>8:C:39:ARG:HH21</td>
<td>8:C:91:TYR:HD2</td>
<td>1.27</td>
<td>0.80</td>
</tr>
<tr>
<td>24:S:10:PRO:O</td>
<td>24:S:14:LEU:HG</td>
<td>1.81</td>
<td>0.80</td>
</tr>
<tr>
<td>24:S:120:LEU:HD23</td>
<td>24:S:121:GLN:H</td>
<td>1.46</td>
<td>0.80</td>
</tr>
<tr>
<td>24:S:127:PRO:CA</td>
<td>24:S:130:ILE:HD11</td>
<td>2.12</td>
<td>0.80</td>
</tr>
<tr>
<td>29:X:402:A:C8</td>
<td>29:X:2392:G:HD4'</td>
<td>2.16</td>
<td>0.80</td>
</tr>
<tr>
<td>7:B:188:ILE:HG23</td>
<td>7:B:189:PRO:HD2</td>
<td>1.62</td>
<td>0.80</td>
</tr>
<tr>
<td>9:D:4:LEU:HG</td>
<td>9:D:5:LYS:N</td>
<td>1.96</td>
<td>0.80</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>29:X:1439:G:H2'</td>
<td>29:X:1440:G:C8</td>
<td>2.17</td>
<td>0.80</td>
</tr>
<tr>
<td>14:I:86:THR:H</td>
<td>14:I:116:ARG:NH1</td>
<td>1.79</td>
<td>0.80</td>
</tr>
<tr>
<td>26:U:49:LYS:HB2</td>
<td>26:U:61:TRP:CA</td>
<td>2.10</td>
<td>0.80</td>
</tr>
<tr>
<td>9:D:122:PHE:HA</td>
<td>29:X:2282:G:H4'</td>
<td>1.64</td>
<td>0.80</td>
</tr>
<tr>
<td>29:X:2326:C:H2'</td>
<td>29:X:2327:U:C6</td>
<td>2.16</td>
<td>0.80</td>
</tr>
<tr>
<td>29:X:2324:G:N3</td>
<td>29:X:2360:C:H2'</td>
<td>1.97</td>
<td>0.80</td>
</tr>
<tr>
<td>29:X:693:A:H2'</td>
<td>29:X:694:G:H8</td>
<td>1.45</td>
<td>0.80</td>
</tr>
<tr>
<td>29:X:2311:U:H5'</td>
<td>29:X:2315:A:N6</td>
<td>1.95</td>
<td>0.80</td>
</tr>
<tr>
<td>31:Z:53:G:N2</td>
<td>31:Z:54:U:H5</td>
<td>1.80</td>
<td>0.80</td>
</tr>
<tr>
<td>27:V:14:PHE:CD2</td>
<td>27:V:57:LYS:HB2</td>
<td>2.16</td>
<td>0.80</td>
</tr>
<tr>
<td>29:X:2426:G:H3'</td>
<td>29:X:2479:U:OP2</td>
<td>1.82</td>
<td>0.80</td>
</tr>
<tr>
<td>29:X:685:U:O2'</td>
<td>29:X:686:C:H5'</td>
<td>1.82</td>
<td>0.80</td>
</tr>
<tr>
<td>7:B:136:ARG:HD3</td>
<td>29:X:1673:C:OP1</td>
<td>1.81</td>
<td>0.79</td>
</tr>
<tr>
<td>13:H:35:THR:HG21</td>
<td>29:X:2629:U:H5'</td>
<td>1.64</td>
<td>0.79</td>
</tr>
<tr>
<td>17:L:21:THR:HG22</td>
<td>17:L:22:ALA:N</td>
<td>1.97</td>
<td>0.79</td>
</tr>
<tr>
<td>17:L:32:TYR:CE2</td>
<td>31:Z:9:G:H5'</td>
<td>2.16</td>
<td>0.79</td>
</tr>
<tr>
<td>12:G:104:THR:OG1</td>
<td>12:G:110:LEU:HB3</td>
<td>1.82</td>
<td>0.79</td>
</tr>
<tr>
<td>17:L:89:PHE:CE2</td>
<td>29:X:2356:A:H1'</td>
<td>2.17</td>
<td>0.79</td>
</tr>
<tr>
<td>18:M:79:ARG:NH1</td>
<td>18:M:79:ARG:HG3</td>
<td>1.93</td>
<td>0.79</td>
</tr>
<tr>
<td>12:G:103:TYR:CD2</td>
<td>29:X:1142:G:H1'</td>
<td>2.17</td>
<td>0.79</td>
</tr>
<tr>
<td>29:X:2189:AH61</td>
<td>29:X:2195:C:N4</td>
<td>1.79</td>
<td>0.79</td>
</tr>
<tr>
<td>8:C:95:LEU:HD23</td>
<td>8:C:96:PRO:CD</td>
<td>2.13</td>
<td>0.79</td>
</tr>
<tr>
<td>12:G:155:THR:HG23</td>
<td>12:G:156:HIS:H</td>
<td>1.46</td>
<td>0.79</td>
</tr>
<tr>
<td>12:G:35:LYS:O</td>
<td>12:G:36:ASN:HB3</td>
<td>1.82</td>
<td>0.79</td>
</tr>
<tr>
<td>23:R:15:HIS:HD2</td>
<td>29:X:347:C:H4'</td>
<td>1.46</td>
<td>0.79</td>
</tr>
<tr>
<td>29:X:1468:A:O5'</td>
<td>29:X:1468:A:H8</td>
<td>1.64</td>
<td>0.79</td>
</tr>
<tr>
<td>29:X:2781:G:C2'</td>
<td>29:X:2782:G:H5&quot;</td>
<td>2.11</td>
<td>0.79</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>9:D:8:TYR:HD1</td>
<td>9:D:173:MET:SD</td>
<td>2.05</td>
<td>0.79</td>
</tr>
<tr>
<td>9:D:65:PRO:HB3</td>
<td>9:D:89:VAL:HG22</td>
<td>1.63</td>
<td>0.79</td>
</tr>
<tr>
<td>29:X:1432:G:H2'</td>
<td>29:X:1594:U:O4</td>
<td>1.81</td>
<td>0.79</td>
</tr>
<tr>
<td>8:C:5:ASN:HA</td>
<td>8:C:118:VAL:CG2</td>
<td>2.12</td>
<td>0.79</td>
</tr>
<tr>
<td>14:I:30:ALA:CB</td>
<td>14:I:34:HIS:CE1</td>
<td>2.66</td>
<td>0.79</td>
</tr>
<tr>
<td>15:J:125:LYS:HZ2</td>
<td>15:J:125:LYS:HB3</td>
<td>1.44</td>
<td>0.79</td>
</tr>
<tr>
<td>23:R:83:LEU:O</td>
<td>23:R:84:VAL:HG23</td>
<td>1.83</td>
<td>0.79</td>
</tr>
<tr>
<td>29:X:104:C:H2'</td>
<td>29:X:105:G:H5'</td>
<td>1.62</td>
<td>0.79</td>
</tr>
<tr>
<td>16:K:98:LEU:HD22</td>
<td>30:Y:56:GLN:HG2</td>
<td>1.64</td>
<td>0.79</td>
</tr>
<tr>
<td>29:X:1882:G:H21</td>
<td>29:X:1885:C:H41</td>
<td>1.29</td>
<td>0.79</td>
</tr>
<tr>
<td>8:C:194:GLU:O</td>
<td>8:C:195:ILE:HG12</td>
<td>1.83</td>
<td>0.79</td>
</tr>
<tr>
<td>9:D:38:GLU:CB</td>
<td>9:D:87:ILE:HB</td>
<td>2.11</td>
<td>0.79</td>
</tr>
<tr>
<td>12:G:162:LYS:H</td>
<td>12:G:163:PRO:CD</td>
<td>1.95</td>
<td>0.79</td>
</tr>
<tr>
<td>24:S:141:MET:SD</td>
<td>24:S:147:ILE:HG12</td>
<td>2.21</td>
<td>0.79</td>
</tr>
<tr>
<td>29:X:693:A:H2'</td>
<td>29:X:694:G:C8</td>
<td>2.17</td>
<td>0.79</td>
</tr>
<tr>
<td>17:L:66:ASP:C</td>
<td>17:L:68:ALA:H</td>
<td>1.86</td>
<td>0.79</td>
</tr>
<tr>
<td>20:O:10:LYS:HG3</td>
<td>20:O:11:GLN:HG2</td>
<td>1.64</td>
<td>0.79</td>
</tr>
<tr>
<td>29:X:2628:C:H2'</td>
<td>29:X:2629:U:H6</td>
<td>1.48</td>
<td>0.79</td>
</tr>
<tr>
<td>29:X:958:G:H2'</td>
<td>29:X:959:C:C6</td>
<td>2.18</td>
<td>0.79</td>
</tr>
<tr>
<td>9:D:80:ARG:HD3</td>
<td>9:D:83:MET:HB3</td>
<td>1.62</td>
<td>0.79</td>
</tr>
<tr>
<td>12:G:150:VAL:HG12</td>
<td>12:G:151:TYR:N</td>
<td>1.98</td>
<td>0.79</td>
</tr>
<tr>
<td>15:J:125:LYS:HB3</td>
<td>15:J:125:LYS:NZ</td>
<td>1.96</td>
<td>0.79</td>
</tr>
<tr>
<td>15:J:44:LYS:HB2</td>
<td>15:J:47:GLN:CG</td>
<td>2.13</td>
<td>0.79</td>
</tr>
<tr>
<td>29:X:1625:A:H4'</td>
<td>29:X:1626:A:OP1</td>
<td>1.81</td>
<td>0.79</td>
</tr>
<tr>
<td>29:X:2263:C:H1'</td>
<td>29:X:2304:G:N2</td>
<td>1.98</td>
<td>0.79</td>
</tr>
<tr>
<td>29:X:2821:G:H2'</td>
<td>29:X:2822:U:C6</td>
<td>2.17</td>
<td>0.79</td>
</tr>
<tr>
<td>29:X:37:C:H2'</td>
<td>29:X:38:G:C8</td>
<td>2.16</td>
<td>0.79</td>
</tr>
<tr>
<td>7:B:142:GLY:C</td>
<td>7:B:143:GLN:HE21</td>
<td>1.84</td>
<td>0.79</td>
</tr>
<tr>
<td>8:C:23:ASN:HB3</td>
<td>8:C:26:VAL:HG23</td>
<td>1.64</td>
<td>0.79</td>
</tr>
<tr>
<td>25:T:41:ARG:NH1</td>
<td>29:X:2366:U:H1'</td>
<td>1.98</td>
<td>0.79</td>
</tr>
</tbody>
</table>

Continued on next page...
### Interatomic Distance 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>26:U:54:ASN:C</td>
<td>26:U:56:GLN:H</td>
<td>1.86</td>
<td>0.79</td>
</tr>
<tr>
<td>29:X:1467:U:H3'</td>
<td>29:X:1467:U:C6</td>
<td>2.18</td>
<td>0.79</td>
</tr>
<tr>
<td>29:X:857:U:H3'</td>
<td>29:X:858:G:H8</td>
<td>1.46</td>
<td>0.79</td>
</tr>
<tr>
<td>8:C:162:ARG:O</td>
<td>8:C:162:ARG:HG2</td>
<td>1.83</td>
<td>0.78</td>
</tr>
<tr>
<td>10:E:124:ALA:HB3</td>
<td>10:E:132:ASP:HB3</td>
<td>1.65</td>
<td>0.78</td>
</tr>
<tr>
<td>10:E:68:THR:O</td>
<td>10:E:72:VAL:HG23</td>
<td>1.83</td>
<td>0.78</td>
</tr>
<tr>
<td>23:R:112:LYS:HD2</td>
<td>23:R:112:LYS:N</td>
<td>1.97</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:2189:A:H2</td>
<td>29:X:2196:U:H3</td>
<td>1.31</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:314:G:H2'</td>
<td>29:X:315:G:C8</td>
<td>2.17</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:865:A:H2'</td>
<td>29:X:866:U:C6</td>
<td>2.18</td>
<td>0.78</td>
</tr>
<tr>
<td>8:C:148:VAL:HB</td>
<td>8:C:167:VAL:CG1</td>
<td>2.07</td>
<td>0.78</td>
</tr>
<tr>
<td>8:C:162:ARG:HH22</td>
<td>29:X:310:A:H61</td>
<td>1.30</td>
<td>0.78</td>
</tr>
<tr>
<td>12:G:67:ARG:HE</td>
<td>12:G:70:PHE:HA</td>
<td>1.48</td>
<td>0.78</td>
</tr>
<tr>
<td>15:J:44:LYS:HD3</td>
<td>15:J:47:GLN:NE2</td>
<td>1.98</td>
<td>0.78</td>
</tr>
<tr>
<td>18:M:100:ARG:HD2</td>
<td>29:X:1744:G:OP1</td>
<td>1.83</td>
<td>0.78</td>
</tr>
<tr>
<td>19:N:13:ARG:NH1</td>
<td>29:X:825:C:OP1</td>
<td>2.16</td>
<td>0.78</td>
</tr>
<tr>
<td>23:R:84:VAL:HG13</td>
<td>23:R:86:PRO:HD2</td>
<td>1.65</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:1051:U:H2'</td>
<td>29:X:1052:C:H6</td>
<td>1.47</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:999:A:HO2'</td>
<td>29:X:1166:A:H2</td>
<td>1.31</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:2040:A:H2'</td>
<td>29:X:2041:A:C8</td>
<td>2.17</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:2259:G:H4'</td>
<td>29:X:2306:A:H5'</td>
<td>1.64</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:558:G:C3'</td>
<td>29:X:558:G:N3</td>
<td>2.45</td>
<td>0.78</td>
</tr>
<tr>
<td>7:B:134:TRP:H</td>
<td>7:B:134:TRP:HD1</td>
<td>1.27</td>
<td>0.78</td>
</tr>
<tr>
<td>12:G:100:TYR:HB2</td>
<td>12:G:116:ARG:HH12</td>
<td>1.48</td>
<td>0.78</td>
</tr>
<tr>
<td>12:G:103:TYR:HD2</td>
<td>29:X:1142:G:CD1</td>
<td>1.97</td>
<td>0.78</td>
</tr>
<tr>
<td>12:G:33:ILE:HB</td>
<td>12:G:34:PRO:HD2</td>
<td>1.64</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:2440:C:H2'</td>
<td>29:X:2441:U:C6</td>
<td>2.17</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:2475:C:C2'</td>
<td>29:X:2476:A:H5'</td>
<td>2.13</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:2569:A:H2'</td>
<td>29:X:2570:C:H6</td>
<td>1.49</td>
<td>0.78</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:C:162:ARG:NH1</td>
<td>29:X:333:A:H3'</td>
<td>1.97</td>
<td>0.78</td>
</tr>
<tr>
<td>10:E:71:LEU:O</td>
<td>10:E:74:ASN:HB2</td>
<td>1.82</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:2170:C:H2'</td>
<td>29:X:2171:U:H4'</td>
<td>1.66</td>
<td>0.78</td>
</tr>
<tr>
<td>7:B:131:SER:O</td>
<td>7:B:132:LYS:HG2</td>
<td>1.83</td>
<td>0.78</td>
</tr>
<tr>
<td>12:G:67:ARG:HH21</td>
<td>12:G:70:PHE:C</td>
<td>1.86</td>
<td>0.78</td>
</tr>
<tr>
<td>14:I:76:LYS:HE3</td>
<td>14:I:111:SER:HB3</td>
<td>1.66</td>
<td>0.78</td>
</tr>
<tr>
<td>15:J:55:MET:HG2</td>
<td>15:J:118:ALA:O</td>
<td>1.83</td>
<td>0.78</td>
</tr>
<tr>
<td>23:R:105:ARG:HH22</td>
<td>23:R:112:LYS:CA</td>
<td>1.96</td>
<td>0.78</td>
</tr>
<tr>
<td>8:C:66:ASN:HB3</td>
<td>29:X:1268:U:C2'</td>
<td>2.12</td>
<td>0.78</td>
</tr>
<tr>
<td>10:E:149:ARG:HH21</td>
<td>10:E:149:ARG:HG2</td>
<td>1.49</td>
<td>0.78</td>
</tr>
<tr>
<td>10:E:154:PRO:HA</td>
<td>10:E:160:LYS:O</td>
<td>1.83</td>
<td>0.78</td>
</tr>
<tr>
<td>14:R:41:PH:O</td>
<td>11:F:45:THR:HG23</td>
<td>1.83</td>
<td>0.78</td>
</tr>
<tr>
<td>14:R:66:ASN:HD21</td>
<td>14:R:68:VAL:HG23</td>
<td>1.48</td>
<td>0.78</td>
</tr>
<tr>
<td>20:O:12:TYR:O</td>
<td>20:O:13:ARG:HB2</td>
<td>1.84</td>
<td>0.78</td>
</tr>
<tr>
<td>23:R:84:VAL:HG21</td>
<td>23:R:89:GLY:HA2</td>
<td>1.63</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:104:C:H2'</td>
<td>29:X:105:G:C5'</td>
<td>2.13</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:1474:A:H4'</td>
<td>29:X:1475:U:O5'</td>
<td>1.83</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:687:G:O2'</td>
<td>29:X:688:A:H5'</td>
<td>1.84</td>
<td>0.78</td>
</tr>
<tr>
<td>12:G:62:ILE:O</td>
<td>12:G:77:GLY:HA3</td>
<td>1.84</td>
<td>0.78</td>
</tr>
<tr>
<td>19:N:3:ARG:HD3</td>
<td>29:X:457:C:O3'</td>
<td>1.81</td>
<td>0.78</td>
</tr>
<tr>
<td>24:S:127:PRO:O</td>
<td>24:S:128:ARG:HG2</td>
<td>1.82</td>
<td>0.78</td>
</tr>
<tr>
<td>31:Z:17:A:H1'</td>
<td>31:Z:112:A:C8</td>
<td>2.19</td>
<td>0.78</td>
</tr>
<tr>
<td>8:C:30:VAL:HG12</td>
<td>8:C:31:VAL:H</td>
<td>1.48</td>
<td>0.78</td>
</tr>
<tr>
<td>12:G:162:LYS:NZ</td>
<td>29:X:5:A:H1'</td>
<td>1.99</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:704:G:H2'</td>
<td>29:X:705:C:C6</td>
<td>2.19</td>
<td>0.78</td>
</tr>
<tr>
<td>10:E:44:ARG:HG3</td>
<td>10:E:44:ARG:HH21</td>
<td>1.49</td>
<td>0.78</td>
</tr>
<tr>
<td>11:F:54:PRO:HG2</td>
<td>11:F:70:LYS:HD2</td>
<td>1.66</td>
<td>0.78</td>
</tr>
<tr>
<td>12:G:103:TYR:CB</td>
<td>12:G:107:GLN:HE21</td>
<td>1.96</td>
<td>0.78</td>
</tr>
<tr>
<td>26:U:33:LYS:NZ</td>
<td>29:X:2400:G:H21</td>
<td>1.80</td>
<td>0.78</td>
</tr>
<tr>
<td>29:X:2796:A:H2'</td>
<td>29:X:2797:G:H8</td>
<td>1.49</td>
<td>0.78</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>14:I:4:HIS:HA</td>
<td>14:I:7:LYS:NZ</td>
<td>1.98</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:1337:G:H1'</td>
<td>29:X:1632:A:N6</td>
<td>1.98</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:1539:U:H2'</td>
<td>29:X:1540:C:C6</td>
<td>2.18</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:652:C:H42</td>
<td>29:X:657:A:N6</td>
<td>1.83</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:925:U:H4'</td>
<td>29:X:926:C:OP1</td>
<td>1.84</td>
<td>0.77</td>
</tr>
<tr>
<td>30:Y:58:LEU:HD12</td>
<td>30:Y:58:LEU:H</td>
<td>1.48</td>
<td>0.77</td>
</tr>
<tr>
<td>11:F:23:VAL:HA</td>
<td>11:F:26:ALA:HB3</td>
<td>1.65</td>
<td>0.77</td>
</tr>
<tr>
<td>18:M:103:LYS:O</td>
<td>18:M:104:LEU:HB2</td>
<td>1.82</td>
<td>0.77</td>
</tr>
<tr>
<td>26:U:23:LYS:HD2</td>
<td>26:U:35:THR:OG1</td>
<td>1.84</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:2228:U:H5''</td>
<td>29:X:2229:G:OP2</td>
<td>1.83</td>
<td>0.77</td>
</tr>
<tr>
<td>9:D:71:LYS:HB2</td>
<td>29:X:2291:U:OP1</td>
<td>1.84</td>
<td>0.77</td>
</tr>
<tr>
<td>31:Z:34:C:H2'</td>
<td>31:Z:35:C:C6</td>
<td>2.19</td>
<td>0.77</td>
</tr>
<tr>
<td>8:C:84:PHE:HE1</td>
<td>29:X:596:C:H5'</td>
<td>1.48</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:1117:G:H2'</td>
<td>29:X:1118:G:C8</td>
<td>2.19</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:987:G:H4'</td>
<td>29:X:1167:A:N7</td>
<td>1.98</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:1597:A:H2'</td>
<td>29:X:1598:C:C6</td>
<td>2.20</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:172:A:C5</td>
<td>29:X:175:C:H5</td>
<td>2.01</td>
<td>0.77</td>
</tr>
<tr>
<td>12:G:107:GLN:HA</td>
<td>12:G:110:LEU:HG</td>
<td>1.65</td>
<td>0.77</td>
</tr>
<tr>
<td>16:K:11:ASN:HD21</td>
<td>16:K:12:ARG:HE</td>
<td>1.30</td>
<td>0.77</td>
</tr>
<tr>
<td>18:M:28:ARG:HB2</td>
<td>18:M:29:PRO:CD</td>
<td>2.11</td>
<td>0.77</td>
</tr>
<tr>
<td>23:R:54:ILE:HA</td>
<td>23:R:70:GLU:O</td>
<td>1.84</td>
<td>0.77</td>
</tr>
<tr>
<td>23:R:82:ALA:O</td>
<td>23:R:83:LEU:HD12</td>
<td>1.85</td>
<td>0.77</td>
</tr>
<tr>
<td>24:S:6:LYS:H</td>
<td>24:S:7:PRO:CD</td>
<td>1.97</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:1061:A:O2'</td>
<td>29:X:1062:G:H5'</td>
<td>1.85</td>
<td>0.77</td>
</tr>
<tr>
<td>8:C:148:VAL:O</td>
<td>8:C:167:VAL:HA</td>
<td>1.84</td>
<td>0.77</td>
</tr>
<tr>
<td>12:G:132:PHE:CE1</td>
<td>12:G:145:HIS:HB2</td>
<td>2.18</td>
<td>0.77</td>
</tr>
<tr>
<td>18:M:104:LEU:HA</td>
<td>18:M:106:TYR:CE2</td>
<td>2.19</td>
<td>0.77</td>
</tr>
<tr>
<td>21:P:37:LYS:HG3</td>
<td>29:X:1279:G:N1</td>
<td>1.99</td>
<td>0.77</td>
</tr>
<tr>
<td>23:R:18:LYS:HE3</td>
<td>23:R:19:GLY:N</td>
<td>1.99</td>
<td>0.77</td>
</tr>
<tr>
<td>23:R:82:ALA:O</td>
<td>23:R:83:LEU:O</td>
<td>2.03</td>
<td>0.77</td>
</tr>
<tr>
<td>24:S:141:MET:HA</td>
<td>24:S:145:ASP:OD1</td>
<td>1.84</td>
<td>0.77</td>
</tr>
<tr>
<td>26:U:10:LYS:HG2</td>
<td>26:U:11:LYS:N</td>
<td>2.00</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:172:A:N1</td>
<td>29:X:178:C:N3</td>
<td>2.33</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:2:G:H2'</td>
<td>29:X:3:U:C6</td>
<td>2.18</td>
<td>0.77</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>19:N:24:PHE:CD1</td>
<td>29:X:543:G:H5'</td>
<td>2.19</td>
<td>0.77</td>
</tr>
<tr>
<td>17:L:16:LYS:HD3</td>
<td>31:Z:11:G:OP1</td>
<td>1.84</td>
<td>0.77</td>
</tr>
<tr>
<td>12:G:67:ARG:HB3</td>
<td>12:G:70:PHE:CA</td>
<td>2.14</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:1072:U:H1'</td>
<td>29:X:1081:A:H1'</td>
<td>1.65</td>
<td>0.77</td>
</tr>
<tr>
<td>19:N:48:ARG:O</td>
<td>19:N:52:ASN:HB2</td>
<td>1.84</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:2189:A:N6</td>
<td>29:X:2195:C:N4</td>
<td>2.33</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:427:C:H2'</td>
<td>29:X:428:A:C8</td>
<td>2.20</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:445:A:H2'</td>
<td>29:X:446:C:C6</td>
<td>2.20</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:746:C:N7</td>
<td>29:X:774:A:C5</td>
<td>2.53</td>
<td>0.77</td>
</tr>
<tr>
<td>9:D:92:ARG:HH12</td>
<td>31:Z:46:G:C4'</td>
<td>1.97</td>
<td>0.77</td>
</tr>
<tr>
<td>27:V:41:HIS:CD2</td>
<td>27:V:42:ARG:N</td>
<td>2.52</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:1053:G:C2'</td>
<td>29:X:1054:C:C6</td>
<td>2.61</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:861:G:H2'</td>
<td>29:X:862:A:H5'</td>
<td>1.66</td>
<td>0.77</td>
</tr>
<tr>
<td>8:C:147:LYS:HA</td>
<td>8:C:165:SER:O</td>
<td>1.85</td>
<td>0.77</td>
</tr>
<tr>
<td>8:C:48:ARG:H</td>
<td>8:C:48:ARG:HD2</td>
<td>1.48</td>
<td>0.77</td>
</tr>
<tr>
<td>8:C:75:PRO:CG</td>
<td>8:C:83:ALA:HB2</td>
<td>2.14</td>
<td>0.77</td>
</tr>
<tr>
<td>23:R:93:ARG:HH12</td>
<td>23:R:108:VAL:CA</td>
<td>1.97</td>
<td>0.77</td>
</tr>
<tr>
<td>24:S:91:PRO:O</td>
<td>24:S:92:VAL:HG13</td>
<td>1.85</td>
<td>0.77</td>
</tr>
<tr>
<td>29:X:208:C:C2'</td>
<td>29:X:209:G:H5'</td>
<td>2.15</td>
<td>0.77</td>
</tr>
<tr>
<td>15:J:66:TYR:HB2</td>
<td>15:J:106:GLU:CD</td>
<td>2.05</td>
<td>0.76</td>
</tr>
<tr>
<td>29:X:1505:U:H2'</td>
<td>29:X:1506:C:H5''</td>
<td>1.66</td>
<td>0.76</td>
</tr>
<tr>
<td>7:B:33:ILE:HD13</td>
<td>7:B:36:ARG:HH12</td>
<td>1.50</td>
<td>0.76</td>
</tr>
<tr>
<td>14:L:126:SER:O</td>
<td>14:L:129:ALA:HB3</td>
<td>1.85</td>
<td>0.76</td>
</tr>
<tr>
<td>17:L:33:ARG:CG</td>
<td>17:L:38:ILE:HB</td>
<td>2.14</td>
<td>0.76</td>
</tr>
<tr>
<td>19:N:66:ASN:HD22</td>
<td>19:N:70:ARG:NH1</td>
<td>1.84</td>
<td>0.76</td>
</tr>
<tr>
<td>26:U:28:GLY:O</td>
<td>26:U:30:VAL:N</td>
<td>2.18</td>
<td>0.76</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>25:T:24:LYS:HD2</td>
<td>29:X:2334:C:H4'</td>
<td>1.67</td>
<td>0.76</td>
</tr>
<tr>
<td>8:C:162:ARG:HD2</td>
<td>29:X:333:A:H5'</td>
<td>1.65</td>
<td>0.76</td>
</tr>
<tr>
<td>7:B:82:ARG:HH22</td>
<td>29:X:2617:G:P</td>
<td>2.09</td>
<td>0.76</td>
</tr>
<tr>
<td>10:E:54:ARG:HH11</td>
<td>10:E:57:ASP:HB3</td>
<td>1.48</td>
<td>0.76</td>
</tr>
<tr>
<td>29:X:847:C:C2</td>
<td>29:X:848:A:C8</td>
<td>2.73</td>
<td>0.76</td>
</tr>
<tr>
<td>8:C:30:VAL:O</td>
<td>8:C:32:THR:N</td>
<td>2.18</td>
<td>0.76</td>
</tr>
<tr>
<td>29:X:1561:A:H2'</td>
<td>29:X:1562:G:O4'</td>
<td>1.85</td>
<td>0.76</td>
</tr>
<tr>
<td>29:X:2769:C:C2'</td>
<td>29:X:2770:A:H8</td>
<td>1.97</td>
<td>0.76</td>
</tr>
<tr>
<td>18:M:100:ARG:NH1</td>
<td>29:X:2824:C:OP1</td>
<td>2.19</td>
<td>0.76</td>
</tr>
<tr>
<td>29:X:482:A:O2'</td>
<td>29:X:483:A:H5'</td>
<td>1.84</td>
<td>0.76</td>
</tr>
<tr>
<td>14:I:89:ASP:OD2</td>
<td>14:I:120:VAL:HA</td>
<td>1.85</td>
<td>0.76</td>
</tr>
<tr>
<td>29:X:1229:C:H2'</td>
<td>29:X:1230:C:H6</td>
<td>1.50</td>
<td>0.76</td>
</tr>
<tr>
<td>8:C:22:VAL:HG11</td>
<td>8:C:110:SER:OG</td>
<td>1.85</td>
<td>0.76</td>
</tr>
<tr>
<td>9:D:10:ASP:O</td>
<td>9:D:14:PRO:HD2</td>
<td>1.85</td>
<td>0.76</td>
</tr>
<tr>
<td>10:E:87:LEU:HB2</td>
<td>10:E:131:ILE:HB</td>
<td>1.65</td>
<td>0.76</td>
</tr>
<tr>
<td>20:O:71:ILE:HD13</td>
<td>29:X:1003:C:O3'</td>
<td>1.85</td>
<td>0.76</td>
</tr>
<tr>
<td>29:X:2265:A:H4'</td>
<td>29:X:2266:A:O5'</td>
<td>1.86</td>
<td>0.76</td>
</tr>
<tr>
<td>29:X:652:C:N4</td>
<td>29:X:657:A:H61</td>
<td>1.83</td>
<td>0.76</td>
</tr>
<tr>
<td>8:C:180:ILE:HG23</td>
<td>8:C:181:LEU:H</td>
<td>1.49</td>
<td>0.76</td>
</tr>
<tr>
<td>10:E:95:ARG:CZ</td>
<td>10:E:97:LYS:HE2</td>
<td>2.15</td>
<td>0.76</td>
</tr>
<tr>
<td>13:H:132:GLU:HG3</td>
<td>13:H:133:VAL:N</td>
<td>2.01</td>
<td>0.76</td>
</tr>
<tr>
<td>24:S:3:LEU:HB2</td>
<td>24:S:34:LEU:HB3</td>
<td>1.67</td>
<td>0.76</td>
</tr>
<tr>
<td>24:S:23:ALA:HB2</td>
<td>24:S:83:PHE:HB2</td>
<td>1.67</td>
<td>0.76</td>
</tr>
<tr>
<td>29:X:1834:G:H2'</td>
<td>29:X:1835:C:C6</td>
<td>2.21</td>
<td>0.76</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>29:X:2286:G:N2</td>
<td>29:X:2290:A:H61</td>
<td>1.82</td>
<td>0.76</td>
</tr>
<tr>
<td>29:X:487:G:H4’</td>
<td>29:X:512:A:N1</td>
<td>2.00</td>
<td>0.76</td>
</tr>
<tr>
<td>29:X:627:A:H2’</td>
<td>29:X:628:A:C8</td>
<td>2.21</td>
<td>0.76</td>
</tr>
<tr>
<td>6:A:249:PRO:HG3</td>
<td>29:X:2218:G:O4’</td>
<td>1.84</td>
<td>0.76</td>
</tr>
<tr>
<td>14:I:13:VAL:HG21</td>
<td>14:I:140:VAL:CG2</td>
<td>2.16</td>
<td>0.76</td>
</tr>
<tr>
<td>14:I:94:GLU:HB3</td>
<td>14:I:97:ARG:NH1</td>
<td>2.00</td>
<td>0.76</td>
</tr>
<tr>
<td>17:L:68:ALA:O</td>
<td>17:L:71:VAL:HG13</td>
<td>1.86</td>
<td>0.76</td>
</tr>
<tr>
<td>26:U:51:ILE:HG23</td>
<td>26:U:59:THR:CA</td>
<td>2.10</td>
<td>0.76</td>
</tr>
<tr>
<td>15:J:106:GLU:CD</td>
<td>15:J:106:GLU:N</td>
<td>2.38</td>
<td>0.76</td>
</tr>
<tr>
<td>13:H:116:ARG:NH2</td>
<td>18:M:40:ARG:HB2</td>
<td>2.01</td>
<td>0.76</td>
</tr>
<tr>
<td>23:R:18:LYS:HA</td>
<td>23:R:36:VAL:CG1</td>
<td>2.16</td>
<td>0.76</td>
</tr>
<tr>
<td>29:X:1729:C:H2’</td>
<td>29:X:1730:G:C8</td>
<td>2.21</td>
<td>0.76</td>
</tr>
<tr>
<td>29:X:2329:C:H2’</td>
<td>29:X:2330:G:O4’</td>
<td>1.86</td>
<td>0.76</td>
</tr>
<tr>
<td>29:X:2660:C:C2</td>
<td>29:X:2704:U:O4</td>
<td>2.39</td>
<td>0.76</td>
</tr>
<tr>
<td>7:B:142:GLY:CA</td>
<td>7:B:143:GLN:HE21</td>
<td>1.98</td>
<td>0.76</td>
</tr>
<tr>
<td>9:D:30:ARG:HE</td>
<td>9:D:159:THR:HG21</td>
<td>1.51</td>
<td>0.76</td>
</tr>
<tr>
<td>29:X:1468:A:O5’</td>
<td>29:X:1468:A:C8</td>
<td>2.39</td>
<td>0.76</td>
</tr>
<tr>
<td>6:A:250:TRP:CD1</td>
<td>6:A:255:LYS:HD2</td>
<td>2.21</td>
<td>0.75</td>
</tr>
<tr>
<td>29:X:1448:A:H61</td>
<td>29:X:1574:A:N6</td>
<td>1.84</td>
<td>0.75</td>
</tr>
<tr>
<td>29:X:1778:U:H2’</td>
<td>29:X:1779:C:C6</td>
<td>2.20</td>
<td>0.75</td>
</tr>
<tr>
<td>14:I:13:ARG:HE</td>
<td>29:X:1218:C:H1’</td>
<td>1.51</td>
<td>0.75</td>
</tr>
<tr>
<td>29:X:318:G:N2</td>
<td>29:X:320:A:H3’</td>
<td>2.01</td>
<td>0.75</td>
</tr>
<tr>
<td>6:A:89:SER:OG</td>
<td>6:A:159:ALA:HB2</td>
<td>1.86</td>
<td>0.75</td>
</tr>
<tr>
<td>23:R:10:HIS:O</td>
<td>23:R:11:ASN:HB3</td>
<td>1.85</td>
<td>0.75</td>
</tr>
<tr>
<td>23:R:38:LEU:HB2</td>
<td>23:R:47:VAL:CG2</td>
<td>2.16</td>
<td>0.75</td>
</tr>
<tr>
<td>14:I:13:ARG:HE</td>
<td>29:X:1218:C:Cl’</td>
<td>2.00</td>
<td>0.75</td>
</tr>
<tr>
<td>29:X:1503:G:H2’</td>
<td>29:X:1504:G:C8</td>
<td>2.21</td>
<td>0.75</td>
</tr>
<tr>
<td>8:C:84:PHE:CE1</td>
<td>29:X:596:C:H5’</td>
<td>2.21</td>
<td>0.75</td>
</tr>
<tr>
<td>30:Y:35:GLN:O</td>
<td>30:Y:36:CYS:CB</td>
<td>2.34</td>
<td>0.75</td>
</tr>
<tr>
<td>12:G:140:GLN:HG2</td>
<td>12:G:144:MET:HE2</td>
<td>1.66</td>
<td>0.75</td>
</tr>
<tr>
<td>9:D:108:LEU:HA</td>
<td>9:D:111:ILE:CD1</td>
<td>2.17</td>
<td>0.75</td>
</tr>
<tr>
<td>17:L:15:ARG:HD2</td>
<td>17:L:91:ARG:NH1</td>
<td>1.95</td>
<td>0.75</td>
</tr>
<tr>
<td>17:L:64:LYS:N</td>
<td>17:L:64:LYS:HD3</td>
<td>2.02</td>
<td>0.75</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>29:X:1374:G:O2'</td>
<td>29:X:1375:C:H5'</td>
<td>1.87</td>
<td>0.75</td>
</tr>
<tr>
<td>29:X:1737:G:H2'</td>
<td>29:X:1738:U:H6</td>
<td>1.50</td>
<td>0.75</td>
</tr>
<tr>
<td>14:1:53:ARG:HB3</td>
<td>29:X:228:A:OP1</td>
<td>1.86</td>
<td>0.75</td>
</tr>
<tr>
<td>13:H:79:His:CD2</td>
<td>13:H:80:ala:H</td>
<td>2.05</td>
<td>0.75</td>
</tr>
<tr>
<td>17:L:76:ala:HB1</td>
<td>17:L:111:gly:N</td>
<td>2.01</td>
<td>0.75</td>
</tr>
<tr>
<td>23:R:93:arg:NH1</td>
<td>23:R:108:val:HA</td>
<td>2.01</td>
<td>0.75</td>
</tr>
<tr>
<td>29:X:1508:G:H5'</td>
<td>29:X:1509:A:C5'</td>
<td>2.16</td>
<td>0.75</td>
</tr>
<tr>
<td>29:X:2548:G:O2'</td>
<td>29:X:2549:G:H5'</td>
<td>1.87</td>
<td>0.75</td>
</tr>
<tr>
<td>15:J:27:tyr:HB3</td>
<td>15:J:137:val:CG2</td>
<td>2.17</td>
<td>0.75</td>
</tr>
<tr>
<td>15:J:17:arg:HH1</td>
<td>29:X:969:U:H5''</td>
<td>1.48</td>
<td>0.75</td>
</tr>
<tr>
<td>16:K:3:his:ND1</td>
<td>16:K:5:lys:CD</td>
<td>2.49</td>
<td>0.75</td>
</tr>
<tr>
<td>17:L:91:arg:HH2</td>
<td>29:X:2356:A:H2</td>
<td>1.35</td>
<td>0.75</td>
</tr>
<tr>
<td>24:S:3:leu:HD21</td>
<td>24:S:32:phe:HB3</td>
<td>1.67</td>
<td>0.75</td>
</tr>
<tr>
<td>25:T:74:lys:O</td>
<td>25:T:76:ala:N</td>
<td>2.19</td>
<td>0.75</td>
</tr>
<tr>
<td>4:4:9:lys:H</td>
<td>4:4:9:lys:CD</td>
<td>1.98</td>
<td>0.75</td>
</tr>
<tr>
<td>15:J:69:ile:CG2</td>
<td>15:J:104:met:HA</td>
<td>2.17</td>
<td>0.75</td>
</tr>
<tr>
<td>23:R:93:arg:HG2</td>
<td>23:R:94:val:H</td>
<td>1.52</td>
<td>0.75</td>
</tr>
<tr>
<td>29:X:1283:C:H5''</td>
<td>29:X:1284:G:H5'</td>
<td>1.68</td>
<td>0.75</td>
</tr>
<tr>
<td>8:C:7:ile:O</td>
<td>8:C:120:val:HB</td>
<td>1.86</td>
<td>0.75</td>
</tr>
<tr>
<td>10:E:56:ser:HB2</td>
<td>10:E:61:his:CD2</td>
<td>2.21</td>
<td>0.75</td>
</tr>
<tr>
<td>12:G:61:arg:NH2</td>
<td>12:G:61:arg:HB3</td>
<td>2.02</td>
<td>0.75</td>
</tr>
<tr>
<td>17:L:10:lys:O</td>
<td>17:L:14:arg:HG3</td>
<td>1.87</td>
<td>0.75</td>
</tr>
<tr>
<td>24:S:91:pro:HD3</td>
<td>24:S:127:pro:HD3</td>
<td>1.68</td>
<td>0.75</td>
</tr>
<tr>
<td>6:A:96:his:CD2</td>
<td>29:X:1517:C:H4'</td>
<td>2.22</td>
<td>0.75</td>
</tr>
<tr>
<td>29:X:1811:A:H1'</td>
<td>29:X:1813:A:C6</td>
<td>2.22</td>
<td>0.75</td>
</tr>
<tr>
<td>12:G:117:glu:C</td>
<td>12:G:119:leu:H</td>
<td>1.89</td>
<td>0.74</td>
</tr>
<tr>
<td>19:N:93:lys:HE2</td>
<td>20:O:10:lys:HZ3</td>
<td>1.51</td>
<td>0.74</td>
</tr>
<tr>
<td>23:R:60:pro:O</td>
<td>23:R:62:met:N</td>
<td>2.19</td>
<td>0.74</td>
</tr>
<tr>
<td>24:S:10:pro:HG2</td>
<td>24:S:14:leu:HD11</td>
<td>1.69</td>
<td>0.74</td>
</tr>
<tr>
<td>14:I:63:arg:hh1</td>
<td>29:X:2394:G:H3'</td>
<td>1.51</td>
<td>0.74</td>
</tr>
<tr>
<td>6:A:149:pro:HD3</td>
<td>6:A:186:his:NE2</td>
<td>2.02</td>
<td>0.74</td>
</tr>
<tr>
<td>7:B:75:thr:O</td>
<td>7:B:76:arg:CB</td>
<td>2.35</td>
<td>0.74</td>
</tr>
<tr>
<td>10:E:126:pro:HD2</td>
<td>10:E:130:arg:O</td>
<td>1.86</td>
<td>0.74</td>
</tr>
<tr>
<td>12:G:39:glu:O</td>
<td>12:G:39:glu:HG3</td>
<td>1.87</td>
<td>0.74</td>
</tr>
<tr>
<td>13:H:70:val:HG22</td>
<td>13:H:71:lys:N</td>
<td>2.02</td>
<td>0.74</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>14:I:76:LYS:HG3</td>
<td>14:I:111:SER:HB2</td>
<td>1.69</td>
<td>0.74</td>
</tr>
<tr>
<td>20:o:29:ALA:O</td>
<td>20:o:31:ASP:N</td>
<td>2.20</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:1051:U:H2’</td>
<td>29:x:1052:C:O4’</td>
<td>1.86</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:1416:A:H2’</td>
<td>29:x:1417:C:H6</td>
<td>1.52</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:1830:C:H41</td>
<td>29:x:1881:U:H3’</td>
<td>1.51</td>
<td>0.74</td>
</tr>
<tr>
<td>8:c:68:ARG:HH12</td>
<td>29:x:2043:A:H62</td>
<td>0.79</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:2640:G:H2’</td>
<td>29:x:2641:A:C8</td>
<td>2.22</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:2867:G:H4’</td>
<td>29:x:2868:G:O5’</td>
<td>1.87</td>
<td>0.74</td>
</tr>
<tr>
<td>8:c:31:VAL:HG23</td>
<td>8:c:32:THR:H</td>
<td>1.52</td>
<td>0.74</td>
</tr>
<tr>
<td>18:m:46:ARG:HG3</td>
<td>18:m:47:SER:H</td>
<td>1.49</td>
<td>0.74</td>
</tr>
<tr>
<td>18:m:99:VAL:CG2</td>
<td>18:m:100:ARG:H</td>
<td>1.99</td>
<td>0.74</td>
</tr>
<tr>
<td>23:r:111:GLY:C</td>
<td>23:r:112:LYS:HD2</td>
<td>2.07</td>
<td>0.74</td>
</tr>
<tr>
<td>23:r:85:ASP:OD1</td>
<td>23:r:86:PRO:HD3</td>
<td>1.87</td>
<td>0.74</td>
</tr>
<tr>
<td>25:t:44:LYS:HG2</td>
<td>25:t:45:PHE:CD1</td>
<td>2.22</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:1850:G:N2</td>
<td>29:x:1867:A:C8</td>
<td>2.54</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:689:A:H1’</td>
<td>29:x:2422:C:O4’</td>
<td>1.87</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:2641:A:H2’</td>
<td>29:x:2642:G:O4’</td>
<td>1.87</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:306:G:N2</td>
<td>29:x:355:G:H1’</td>
<td>2.02</td>
<td>0.74</td>
</tr>
<tr>
<td>15:j:20:GLY:C</td>
<td>15:j:99:LYS:HE2</td>
<td>2.06</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:1312:G:H5”</td>
<td>29:x:1313:U:OP1</td>
<td>1.87</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:2706:U:O2’</td>
<td>29:x:2707:G:OP1</td>
<td>2.05</td>
<td>0.74</td>
</tr>
<tr>
<td>31:z:42:U:H1’</td>
<td>31:z:47:A:N6</td>
<td>2.02</td>
<td>0.74</td>
</tr>
<tr>
<td>26:u:15:VAL:HG12</td>
<td>26:u:46:LEU:HD22</td>
<td>1.67</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:1193:G:C2’</td>
<td>29:x:1194:U:H5”</td>
<td>2.17</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:1913:G:H5’</td>
<td>29:x:1914:U:OP1</td>
<td>1.87</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:2856:U:O2’</td>
<td>29:x:2857:C:H5’</td>
<td>1.88</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:651:C:H2’</td>
<td>29:x:652:C:H5”</td>
<td>1.69</td>
<td>0.74</td>
</tr>
<tr>
<td>25:t:26:PHE:HE2</td>
<td>29:x:870:C:H1’</td>
<td>1.52</td>
<td>0.74</td>
</tr>
<tr>
<td>9:d:66:ILE:CD1</td>
<td>31:z:43:G:H5”</td>
<td>2.15</td>
<td>0.74</td>
</tr>
<tr>
<td>7:b:120:TRP:O</td>
<td>7:b:121:ASN:HB2</td>
<td>1.88</td>
<td>0.74</td>
</tr>
<tr>
<td>12:g:55:ALA:HB1</td>
<td>12:g:134:MET:HE1</td>
<td>1.69</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:1416:A:H2’</td>
<td>29:x:1417:C:C6</td>
<td>2.23</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:1525:A:H3’</td>
<td>29:x:1526:U:H6</td>
<td>1.51</td>
<td>0.74</td>
</tr>
<tr>
<td>29:x:242:A:H61</td>
<td>29:x:440:U:H2’</td>
<td>1.53</td>
<td>0.74</td>
</tr>
<tr>
<td>8:c:139:GLN:HA</td>
<td>8:c:139:GLN:HE21</td>
<td>1.53</td>
<td>0.74</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>12:G:34:PRO:HA</td>
<td>12:G:69:ASP:OD2</td>
<td>1.86</td>
<td>0.74</td>
</tr>
<tr>
<td>14:I:28:LYS:CD</td>
<td>14:I:36:GLY:HA3</td>
<td>2.17</td>
<td>0.74</td>
</tr>
<tr>
<td>14:I:45:LYS:HG2</td>
<td>14:I:46:GLY:H</td>
<td>1.53</td>
<td>0.74</td>
</tr>
<tr>
<td>20:O:44:GLN:O</td>
<td>20:O:46:VAL:HG23</td>
<td>1.87</td>
<td>0.74</td>
</tr>
<tr>
<td>23:R:95:ARG:NH1</td>
<td>23:R:106:VAL:HA</td>
<td>2.01</td>
<td>0.74</td>
</tr>
<tr>
<td>24:S:4:THR:HB</td>
<td>24:S:57:GLU:HB1</td>
<td>1.70</td>
<td>0.74</td>
</tr>
<tr>
<td>29:X:1007:A:C2</td>
<td>29:X:1008:G:C8</td>
<td>2.76</td>
<td>0.74</td>
</tr>
<tr>
<td>29:X:1071:U:H1'</td>
<td>29:X:1073:G:H5'</td>
<td>1.70</td>
<td>0.74</td>
</tr>
<tr>
<td>11:F:122:ALA:CA</td>
<td>29:X:1092:U:H4'</td>
<td>2.18</td>
<td>0.74</td>
</tr>
<tr>
<td>29:X:1466:C:H2'</td>
<td>29:X:1467:U:O4'</td>
<td>1.87</td>
<td>0.74</td>
</tr>
<tr>
<td>29:X:1775:A:H3'</td>
<td>29:X:1775:A:OP1</td>
<td>1.88</td>
<td>0.74</td>
</tr>
<tr>
<td>29:X:2286:G:C6</td>
<td>29:X:2287:G:H1'</td>
<td>2.23</td>
<td>0.74</td>
</tr>
<tr>
<td>29:X:2320:G:H2'</td>
<td>29:X:2321:C:H6</td>
<td>1.52</td>
<td>0.74</td>
</tr>
<tr>
<td>12:G:110:LEU:CD2</td>
<td>12:G:110:LEU:N</td>
<td>2.51</td>
<td>0.74</td>
</tr>
<tr>
<td>14:I:13:ARG:HH21</td>
<td>14:I:13:ARG:CG</td>
<td>2.01</td>
<td>0.74</td>
</tr>
<tr>
<td>14:I:42:GLY:O</td>
<td>14:I:43:ALA:HB2</td>
<td>1.87</td>
<td>0.74</td>
</tr>
<tr>
<td>27:V:18:ILE:C</td>
<td>27:V:20:ALA:H</td>
<td>1.91</td>
<td>0.74</td>
</tr>
<tr>
<td>29:X:847:C:H2'</td>
<td>29:X:848:U:H8</td>
<td>1.53</td>
<td>0.74</td>
</tr>
<tr>
<td>15:J:17:ARG:NH2</td>
<td>29:X:967:G:O6</td>
<td>2.20</td>
<td>0.74</td>
</tr>
<tr>
<td>4:4:9:LYS:HD2</td>
<td>4:4:9:LYS:N</td>
<td>2.03</td>
<td>0.73</td>
</tr>
<tr>
<td>8:C:23:ASN:O</td>
<td>8:C:27:LEU:HD12</td>
<td>1.87</td>
<td>0.73</td>
</tr>
<tr>
<td>14:I:28:LYS:NZ</td>
<td>14:I:36:GLY:CA</td>
<td>2.51</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:1058:G:C2'</td>
<td>29:X:1121:G:H1</td>
<td>1.96</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:1482:U:H2'</td>
<td>29:X:1483:G:C8</td>
<td>2.22</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:2639:U:H2'</td>
<td>29:X:2640:G:O4'</td>
<td>1.88</td>
<td>0.73</td>
</tr>
<tr>
<td>9:D:13:ARG:O</td>
<td>9:D:16:LEU:HB2</td>
<td>1.89</td>
<td>0.73</td>
</tr>
<tr>
<td>10:E:50:LEU:HD23</td>
<td>10:E:51:LEU:N</td>
<td>2.02</td>
<td>0.73</td>
</tr>
<tr>
<td>24:S:71:MET:CB</td>
<td>24:S:78:PRO:HA</td>
<td>2.19</td>
<td>0.73</td>
</tr>
<tr>
<td>15:J:100:PRO:HG2</td>
<td>24:S:74:ARG:HH11</td>
<td>1.53</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:2852:G:O2'</td>
<td>29:X:2853:U:H5'</td>
<td>1.88</td>
<td>0.73</td>
</tr>
<tr>
<td>11:F:88:SER:O</td>
<td>29:X:1075:G:H4'</td>
<td>1.89</td>
<td>0.73</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>12:G:162:LYS:H</td>
<td>12:G:163:PRO:HD2</td>
<td>1.51</td>
<td>0.73</td>
</tr>
<tr>
<td>18:M:27:PHE:O</td>
<td>18:M:28:ARG:HG2</td>
<td>1.86</td>
<td>0.73</td>
</tr>
<tr>
<td>26:U:78:ILE:HD13</td>
<td>26:U:79:GLU:N</td>
<td>2.03</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:1086:C:C3'</td>
<td>29:X:1087:C:H5''</td>
<td>2.18</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:1475:U:H4'</td>
<td>29:X:1475:U:OP2</td>
<td>1.87</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:2252:A:O2'</td>
<td>29:X:2253:A:H5'</td>
<td>1.88</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:469:G:O2'</td>
<td>29:X:470:U:OP2</td>
<td>2.06</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:954:U:H2'</td>
<td>29:X:955:G:H5''</td>
<td>1.70</td>
<td>0.73</td>
</tr>
<tr>
<td>6:A:257:LEU:HD22</td>
<td>29:X:1795:C:OP1</td>
<td>1.88</td>
<td>0.73</td>
</tr>
<tr>
<td>12:G:105:GLY:O</td>
<td>12:G:106:TYR:C</td>
<td>2.27</td>
<td>0.73</td>
</tr>
<tr>
<td>12:G:33:ILE:HB</td>
<td>12:G:34:PRO:HD3</td>
<td>1.71</td>
<td>0.73</td>
</tr>
<tr>
<td>14:I:108:LEU:HB3</td>
<td>14:I:125:ALA:CB</td>
<td>2.19</td>
<td>0.73</td>
</tr>
<tr>
<td>24:S:97:PRO:HA</td>
<td>24:S:119:ASN:HA</td>
<td>1.70</td>
<td>0.73</td>
</tr>
<tr>
<td>24:S:147:ILE:HB</td>
<td>24:S:169:VAL:HG22</td>
<td>1.69</td>
<td>0.73</td>
</tr>
<tr>
<td>26:U:49:LYS:HB3</td>
<td>26:U:61:TRP:HE3</td>
<td>1.52</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:1574:A:O2'</td>
<td>29:X:1575:C:H3'</td>
<td>1.87</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:1787:U:H2'</td>
<td>29:X:1788:C:C6</td>
<td>2.23</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:2404:A:H4'</td>
<td>29:X:2405:A:H5'</td>
<td>1.68</td>
<td>0.73</td>
</tr>
<tr>
<td>28:W:8:SER:CB</td>
<td>29:X:999:A:H5''</td>
<td>2.15</td>
<td>0.73</td>
</tr>
<tr>
<td>8:C:3:GLN:HEE22</td>
<td>8:C:4:ILE:CG1</td>
<td>2.00</td>
<td>0.73</td>
</tr>
<tr>
<td>9:D:138:PHE:HB2</td>
<td>9:D:141:ILE:HB</td>
<td>1.69</td>
<td>0.73</td>
</tr>
<tr>
<td>9:D:35:VAL:HG12</td>
<td>9:D:36:VAL:H</td>
<td>1.54</td>
<td>0.73</td>
</tr>
<tr>
<td>14:I:90:ARG:HA</td>
<td>14:I:121:HIS:ND1</td>
<td>2.03</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:2451:G:O6</td>
<td>29:X:2455:A:H4'</td>
<td>1.88</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:939:C:H5''</td>
<td>29:X:940:G:O5'</td>
<td>1.87</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:98:U:C5'</td>
<td>29:X:99:U:H5''</td>
<td>2.18</td>
<td>0.73</td>
</tr>
<tr>
<td>6:A:211:ARG:HG2</td>
<td>6:A:211:ARG:NH1</td>
<td>2.02</td>
<td>0.73</td>
</tr>
<tr>
<td>8:C:117:LEU:HD23</td>
<td>8:C:117:LEU:C</td>
<td>2.09</td>
<td>0.73</td>
</tr>
<tr>
<td>10:E:109:TYR:O</td>
<td>10:E:111:HIS:N</td>
<td>2.21</td>
<td>0.73</td>
</tr>
<tr>
<td>12:G:154:GLU:C</td>
<td>12:G:157:PRO:HD2</td>
<td>2.08</td>
<td>0.73</td>
</tr>
<tr>
<td>24:S:51:LEU:N</td>
<td>24:S:51:LEU:HD23</td>
<td>2.04</td>
<td>0.73</td>
</tr>
<tr>
<td>8:C:48:ARG:CB</td>
<td>8:C:51:VAL:HG22</td>
<td>2.18</td>
<td>0.73</td>
</tr>
<tr>
<td>9:D:143:TYR:HA</td>
<td>9:D:146:VAL:CG2</td>
<td>2.17</td>
<td>0.73</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>14:I:85:ASP:O</td>
<td>14:I:87:THR:N</td>
<td>2.21</td>
<td>0.73</td>
</tr>
<tr>
<td>17:L:67:THR:O</td>
<td>17:L:70:ALA:HB3</td>
<td>1.89</td>
<td>0.73</td>
</tr>
<tr>
<td>24:S:44:ARG:HD3</td>
<td>24:S:45:GLN:HE22</td>
<td>1.54</td>
<td>0.73</td>
</tr>
<tr>
<td>27:V:37:LEU:HD11</td>
<td>29:X:60:A:H4'</td>
<td>1.70</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:554:U:O2</td>
<td>29:X:554:U:H2'</td>
<td>1.87</td>
<td>0.73</td>
</tr>
<tr>
<td>8:C:43:ALA:HB1</td>
<td>8:C:86:PRO:O</td>
<td>1.89</td>
<td>0.73</td>
</tr>
<tr>
<td>9:D:28:VAL:O</td>
<td>9:D:30:ARG:HG3</td>
<td>1.87</td>
<td>0.73</td>
</tr>
<tr>
<td>12:G:103:TYR:O</td>
<td>12:G:107:GLN:NE2</td>
<td>2.22</td>
<td>0.73</td>
</tr>
<tr>
<td>19:N:11:ARG:HH22</td>
<td>29:X:29:U:C4'</td>
<td>2.01</td>
<td>0.73</td>
</tr>
<tr>
<td>25:T:32:LYS:N</td>
<td>25:T:35:ASN:HD22</td>
<td>1.87</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:610:G:H1</td>
<td>29:X:670:U:H3</td>
<td>1.37</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:76:C:H5'</td>
<td>29:X:76:C:C6</td>
<td>2.20</td>
<td>0.73</td>
</tr>
<tr>
<td>14:I:18:ARG:HB2</td>
<td>14:I:21:ARG:HB2</td>
<td>1.71</td>
<td>0.73</td>
</tr>
<tr>
<td>17:L:38:ILE:HD12</td>
<td>17:L:39:TYR:N</td>
<td>2.02</td>
<td>0.73</td>
</tr>
<tr>
<td>22:Q:59:PRO:O</td>
<td>22:Q:75:ARG:NH2</td>
<td>2.20</td>
<td>0.73</td>
</tr>
<tr>
<td>25:T:37:LEU:O</td>
<td>25:T:38:VAL:HG23</td>
<td>1.87</td>
<td>0.73</td>
</tr>
<tr>
<td>27:V:38:ALA:C</td>
<td>27:V:40:PRO:HD3</td>
<td>2.09</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:2194:A:C2'</td>
<td>29:X:2195:C:H5''</td>
<td>2.17</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:2225:G:H2'</td>
<td>29:X:2226:A:C8</td>
<td>2.23</td>
<td>0.73</td>
</tr>
<tr>
<td>8:C:62:LYS:HD3</td>
<td>8:C:63:GLY:N</td>
<td>2.03</td>
<td>0.73</td>
</tr>
<tr>
<td>15:J:125:LYS:HZ2</td>
<td>15:J:125:LYS:CB</td>
<td>2.02</td>
<td>0.73</td>
</tr>
<tr>
<td>17:L:8:ARG:HH11</td>
<td>17:L:8:ARG:CB</td>
<td>2.02</td>
<td>0.73</td>
</tr>
<tr>
<td>22:Q:9:ALA:HB1</td>
<td>22:Q:10:PRO:HD2</td>
<td>1.69</td>
<td>0.73</td>
</tr>
<tr>
<td>26:U:32:ARG:HG2</td>
<td>26:U:34:THR:H</td>
<td>1.54</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:1149:G:N3</td>
<td>29:X:1154:A:H2</td>
<td>1.86</td>
<td>0.73</td>
</tr>
<tr>
<td>21:P:37:LYS:HG3</td>
<td>29:X:1279:G:N2</td>
<td>2.04</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:1524:C:H5''</td>
<td>29:X:1525:A:H8</td>
<td>1.54</td>
<td>0.73</td>
</tr>
<tr>
<td>29:X:465:C:O2'</td>
<td>29:X:467:U:H1'</td>
<td>1.89</td>
<td>0.73</td>
</tr>
<tr>
<td>30:Y:33:CYS:SG</td>
<td>30:Y:34:PRO:HD2</td>
<td>2.29</td>
<td>0.73</td>
</tr>
<tr>
<td>7:B:116:VAL:HG13</td>
<td>7:B:136:ARG:NH2</td>
<td>2.03</td>
<td>0.72</td>
</tr>
<tr>
<td>7:B:131:SER:C</td>
<td>7:B:132:LYS:HG2</td>
<td>2.08</td>
<td>0.72</td>
</tr>
<tr>
<td>9:D:111:ILE:CB</td>
<td>9:D:114:PHE:HB2</td>
<td>2.17</td>
<td>0.72</td>
</tr>
<tr>
<td>12:G:142:ARG:HH12</td>
<td>29:X:538:A:H5''</td>
<td>1.54</td>
<td>0.72</td>
</tr>
<tr>
<td>14:I:63:ARG:O</td>
<td>14:I:64:GLY:C</td>
<td>2.27</td>
<td>0.72</td>
</tr>
<tr>
<td>26:U:11:LYS:NZ</td>
<td>26:U:75:TYR:HB2</td>
<td>2.03</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:2197:U:C4</td>
<td>29:X:2198:U:C4</td>
<td>2.77</td>
<td>0.72</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>29:X:2569:A:H2'</td>
<td>29:X:2570:C:C6</td>
<td>2.23</td>
<td>0.72</td>
</tr>
<tr>
<td>8:C:162:ARG:NH2</td>
<td>29:X:333:A:H3'</td>
<td>2.02</td>
<td>0.72</td>
</tr>
<tr>
<td>31:Z:19:C:H2'</td>
<td>31:Z:20:A:O4'</td>
<td>1.88</td>
<td>0.72</td>
</tr>
<tr>
<td>14:I:182:ASP:H</td>
<td>14:I:114:ILE:HG21</td>
<td>1.54</td>
<td>0.72</td>
</tr>
<tr>
<td>21:P:37:LYS:HE2</td>
<td>21:P:64:ALA:HB2</td>
<td>1.68</td>
<td>0.72</td>
</tr>
<tr>
<td>23:R:38:LEU:HB2</td>
<td>23:R:47:VAL:CB</td>
<td>2.18</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:1058:G:C2'</td>
<td>29:X:1121:G:N1</td>
<td>2.52</td>
<td>0.72</td>
</tr>
<tr>
<td>6:A:208:LYS:CE</td>
<td>29:X:1782:A:H1'</td>
<td>2.17</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:558:G:H5&quot;</td>
<td>29:X:558:G:N3</td>
<td>2.03</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:564:U:H2'</td>
<td>29:X:565:A:C8</td>
<td>2.25</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:617:U:C5</td>
<td>29:X:632:A:C2</td>
<td>2.77</td>
<td>0.72</td>
</tr>
<tr>
<td>8:C:164:VAL:O</td>
<td>8:C:166:TRP:N</td>
<td>2.23</td>
<td>0.72</td>
</tr>
<tr>
<td>9:D:4:LEU:HD11</td>
<td>9:D:173:MET:HE1</td>
<td>1.70</td>
<td>0.72</td>
</tr>
<tr>
<td>11:F:87:GLY:HA3</td>
<td>29:X:1075:C:H5&quot;</td>
<td>1.69</td>
<td>0.72</td>
</tr>
<tr>
<td>14:I:128:ALA:HA</td>
<td>14:I:131:LYS:HB2</td>
<td>1.70</td>
<td>0.72</td>
</tr>
<tr>
<td>17:L:16:LYS:HE2</td>
<td>17:L:28:ARG:NH1</td>
<td>2.03</td>
<td>0.72</td>
</tr>
<tr>
<td>23:R:105:ARG:HH12</td>
<td>23:R:112:LYS:HA</td>
<td>1.53</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:1778:U:H2'</td>
<td>29:X:1779:C:H6</td>
<td>1.52</td>
<td>0.72</td>
</tr>
<tr>
<td>7:B:137:ARG:NH2</td>
<td>29:X:2034:A:OP1</td>
<td>2.22</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:2195:C:C5</td>
<td>29:X:2196:U:C5</td>
<td>2.76</td>
<td>0.72</td>
</tr>
<tr>
<td>10:E:6:LYS:HB3</td>
<td>10:E:69:ARG:HD2</td>
<td>1.72</td>
<td>0.72</td>
</tr>
<tr>
<td>12:G:150:VAL:HG12</td>
<td>12:G:151:TYR:H</td>
<td>1.52</td>
<td>0.72</td>
</tr>
<tr>
<td>17:L:28:ARG:HA</td>
<td>17:L:88:VAL:O</td>
<td>1.89</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:1283:C:H5&quot;</td>
<td>29:X:1284:G:C5'</td>
<td>2.19</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:1314:A:H2</td>
<td>29:X:1642:G:N3</td>
<td>1.87</td>
<td>0.72</td>
</tr>
<tr>
<td>12:G:70:PHE:HB2</td>
<td>19:N:64:ARG:HG2</td>
<td>1.71</td>
<td>0.72</td>
</tr>
<tr>
<td>12:G:58:ILE:HG23</td>
<td>12:G:80:VAL:HG11</td>
<td>1.71</td>
<td>0.72</td>
</tr>
<tr>
<td>14:I:28:LYS:HZ2</td>
<td>14:I:37:GLN:N:H</td>
<td>1.35</td>
<td>0.72</td>
</tr>
<tr>
<td>9:D:33:LYS:HG3</td>
<td>9:D:157:VAL:CG2</td>
<td>2.18</td>
<td>0.72</td>
</tr>
<tr>
<td>9:D:5:LYS:O</td>
<td>9:D:8:TYR:HB3</td>
<td>1.89</td>
<td>0.72</td>
</tr>
<tr>
<td>16:K:3:His:HE1</td>
<td>29:X:2796:A:P</td>
<td>2.13</td>
<td>0.72</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>18:M:5:ILE:CD1</td>
<td>18:M:7:ILE:HB</td>
<td>2.19</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:1061:A:C2'</td>
<td>29:X:1062:G:H5'</td>
<td>2.19</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:1231:A:C4</td>
<td>29:X:1232:U:C5</td>
<td>2.78</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:1329:U:O2'</td>
<td>29:X:1330:G:H5'</td>
<td>1.90</td>
<td>0.72</td>
</tr>
<tr>
<td>7:B:140:SER:HB2</td>
<td>29:X:2557:G:N7</td>
<td>2.05</td>
<td>0.72</td>
</tr>
<tr>
<td>14:I:30:ALA:H</td>
<td>14:I:34:HIS:CG</td>
<td>2.06</td>
<td>0.72</td>
</tr>
<tr>
<td>20:O:40:VAL:HG12</td>
<td>20:O:45:THR:CA</td>
<td>2.15</td>
<td>0.72</td>
</tr>
<tr>
<td>23:R:18:LYS:HA</td>
<td>23:R:36:VAL:HG11</td>
<td>1.70</td>
<td>0.72</td>
</tr>
<tr>
<td>24:S:13:LYS:O</td>
<td>24:S:16:GLU:O</td>
<td>2.07</td>
<td>0.72</td>
</tr>
<tr>
<td>24:S:18:MET:HA</td>
<td>24:S:36:ARG:H</td>
<td>1.55</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:1233:A:O2'</td>
<td>29:X:1234:C:OP1</td>
<td>2.07</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:1255:A:H2'</td>
<td>29:X:1256:C:C6</td>
<td>2.25</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:2662:C:H2'</td>
<td>29:X:2663:U:C6</td>
<td>2.23</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:428:A:H2'</td>
<td>29:X:429:C:C6</td>
<td>2.23</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:746:G:N7</td>
<td>29:X:774:A:C6</td>
<td>2.57</td>
<td>0.72</td>
</tr>
<tr>
<td>12:G:84:ASN:O</td>
<td>12:G:152:ALA:HA</td>
<td>1.89</td>
<td>0.72</td>
</tr>
<tr>
<td>14:I:28:LYS:NZ</td>
<td>14:I:36:GLY:HA3</td>
<td>2.04</td>
<td>0.72</td>
</tr>
<tr>
<td>15:J:34:GLY:HA2</td>
<td>15:J:106:GLU:CA</td>
<td>2.14</td>
<td>0.72</td>
</tr>
<tr>
<td>23:R:11:ASN:HD22</td>
<td>23:R:11:ASN:C</td>
<td>1.93</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:1060:C:H2'</td>
<td>29:X:1061:A:H8</td>
<td>1.54</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:150:A:H2'</td>
<td>29:X:151:G:O4'</td>
<td>1.90</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:2197:U:O4</td>
<td>29:X:2198:U:O4</td>
<td>2.08</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:2225:G:C2</td>
<td>29:X:2405:A:H1'</td>
<td>2.24</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:2441:U:H2'</td>
<td>29:X:2442:C:H6</td>
<td>1.54</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:925:U:O2'</td>
<td>29:X:926:C:H5'</td>
<td>1.89</td>
<td>0.72</td>
</tr>
<tr>
<td>6:A:243:GLY:CA</td>
<td>6:A:244:ARG:NH1</td>
<td>2.53</td>
<td>0.72</td>
</tr>
<tr>
<td>6:A:244:ARG:N</td>
<td>6:A:244:ARG:GD3</td>
<td>2.04</td>
<td>0.72</td>
</tr>
<tr>
<td>7:B:117:MET:N</td>
<td>7:B:136:ARG:HD2</td>
<td>2.00</td>
<td>0.72</td>
</tr>
<tr>
<td>9:D:74:ILE:HA</td>
<td>9:D:79:LEU:HB3</td>
<td>1.71</td>
<td>0.72</td>
</tr>
<tr>
<td>16:K:84:ALA:HB3</td>
<td>16:K:85:PRO:HD3</td>
<td>1.71</td>
<td>0.72</td>
</tr>
<tr>
<td>21:P:37:LYS:HG3</td>
<td>29:X:1279:G:C2</td>
<td>2.24</td>
<td>0.72</td>
</tr>
<tr>
<td>23:R:4:PRO:N</td>
<td>29:X:34:U:H1'</td>
<td>2.05</td>
<td>0.72</td>
</tr>
<tr>
<td>23:R:84:VAL:HA</td>
<td>23:R:90:LYS:CD</td>
<td>2.18</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:1057:A:C2'</td>
<td>29:X:1057:A:N3</td>
<td>2.52</td>
<td>0.72</td>
</tr>
<tr>
<td>29:X:1113:C:H2'</td>
<td>29:X:1114:A:C8</td>
<td>2.19</td>
<td>0.72</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>29:X:777:A:O2'</td>
<td>29:X:778:G:OP1</td>
<td>2.08</td>
<td>0.72</td>
</tr>
<tr>
<td>8:C:48:ARG:HB2</td>
<td>8:C:51:VAL:CG2</td>
<td>2.19</td>
<td>0.72</td>
</tr>
<tr>
<td>8:C:95:LEU:CD2</td>
<td>8:C:96:PRO:HD2</td>
<td>2.16</td>
<td>0.72</td>
</tr>
<tr>
<td>17:L:101:LYS:O</td>
<td>17:L:104:ALA:HB3</td>
<td>1.90</td>
<td>0.72</td>
</tr>
<tr>
<td>17:L:97:His:O</td>
<td>17:L:101:LYS:CB</td>
<td>2.35</td>
<td>0.72</td>
</tr>
<tr>
<td>21:P:85:MET:HE3</td>
<td>21:P:130:GLU:HG3</td>
<td>1.72</td>
<td>0.72</td>
</tr>
<tr>
<td>26:U:33:LYS:O</td>
<td>26:U:34:THR:HB</td>
<td>1.89</td>
<td>0.72</td>
</tr>
<tr>
<td>8:C:45:THR:HG21</td>
<td>8:C:85:GLY:HA3</td>
<td>1.72</td>
<td>0.71</td>
</tr>
<tr>
<td>16:K:11:ASN:OD1</td>
<td>16:K:17:ARG:CZ</td>
<td>2.37</td>
<td>0.71</td>
</tr>
<tr>
<td>23:R:22:VAL:CG1</td>
<td>23:R:80:LYS:HD2</td>
<td>2.18</td>
<td>0.71</td>
</tr>
<tr>
<td>27:V:42:ARG:NH1</td>
<td>27:V:45:GLN:NE2</td>
<td>2.38</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:172:A:N7</td>
<td>29:X:175:C:H5</td>
<td>1.88</td>
<td>0.71</td>
</tr>
<tr>
<td>17:L:37:His:CB</td>
<td>31:Z:30:C:OP1</td>
<td>2.38</td>
<td>0.71</td>
</tr>
<tr>
<td>17:L:97:His:CG</td>
<td>17:L:98:GLY:H</td>
<td>2.05</td>
<td>0.71</td>
</tr>
<tr>
<td>25:T:56:ASP:OD1</td>
<td>29:X:2343:C:H4'</td>
<td>1.89</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:417:C:N1</td>
<td>29:X:419:G:C8</td>
<td>2.58</td>
<td>0.71</td>
</tr>
<tr>
<td>4:4:25:VAL:HB</td>
<td>4:4:34:GLN:HB2</td>
<td>1.72</td>
<td>0.71</td>
</tr>
<tr>
<td>8:C:135:SER:O</td>
<td>8:C:138:LYS:HB2</td>
<td>1.90</td>
<td>0.71</td>
</tr>
<tr>
<td>12:G:116:ARG:NE</td>
<td>12:G:126:VAL:HG13</td>
<td>2.06</td>
<td>0.71</td>
</tr>
<tr>
<td>27:V:1:MET:HG3</td>
<td>27:V:2:LYS:HG3</td>
<td>1.70</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:1122:A:C2</td>
<td>29:X:1123:G:H1'</td>
<td>2.25</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:1850:G:HO2'</td>
<td>29:X:1851:A:H8</td>
<td>0.72</td>
<td>0.71</td>
</tr>
<tr>
<td>31:Z:4:C:O2'</td>
<td>31:Z:5:C:H5'</td>
<td>1.91</td>
<td>0.71</td>
</tr>
<tr>
<td>10:E:105:MET:HE3</td>
<td>10:E:131:ILE:CD1</td>
<td>2.20</td>
<td>0.71</td>
</tr>
<tr>
<td>10:E:45:GLN:HG3</td>
<td>10:E:49:GLN:O</td>
<td>1.90</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:1072:U:Cl'</td>
<td>29:X:1081:A:H1'</td>
<td>2.21</td>
<td>0.71</td>
</tr>
<tr>
<td>7:B:152:LYS:HD2</td>
<td>12:G:106:TYR:H</td>
<td>1.55</td>
<td>0.71</td>
</tr>
<tr>
<td>8:C:125:ALA:O</td>
<td>8:C:130:THR:N</td>
<td>2.24</td>
<td>0.71</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>23:R:24:VAL:O</td>
<td>23:R:30:LYS:HA</td>
<td>1.90</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:1193:C:H2'</td>
<td>29:X:1194:U:H5''</td>
<td>1.71</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:1391:A:O2''</td>
<td>29:X:1392:U:C6</td>
<td>2.43</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:1468:A:H5''</td>
<td>29:X:1472:C:H42</td>
<td>1.52</td>
<td>0.71</td>
</tr>
<tr>
<td>9:D:123:ASP:O</td>
<td>9:D:125:ARG:N</td>
<td>2.24</td>
<td>0.71</td>
</tr>
<tr>
<td>17:L:28:ARG:HD2</td>
<td>17:L:90:ASP:CG</td>
<td>2.10</td>
<td>0.71</td>
</tr>
<tr>
<td>17:L:28:ARG:NH1</td>
<td>17:L:90:ASP:OD2</td>
<td>2.24</td>
<td>0.71</td>
</tr>
<tr>
<td>17:L:54:ALA:CB</td>
<td>17:L:75:LEU:HB2</td>
<td>2.19</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:1682:A:O2''</td>
<td>29:X:1683:G:H5'</td>
<td>1.91</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:1724:C:O2''</td>
<td>29:X:1725:C:H5'</td>
<td>1.90</td>
<td>0.71</td>
</tr>
<tr>
<td>26:U:32:ARG:O</td>
<td>29:X:2375:G:H4'</td>
<td>1.90</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:429:C:H2'</td>
<td>29:X:430:C:H6</td>
<td>1.56</td>
<td>0.71</td>
</tr>
<tr>
<td>9:D:10:ASP:HA</td>
<td>9:D:14:PRO:HG2</td>
<td>1.71</td>
<td>0.71</td>
</tr>
<tr>
<td>10:E:84:THR:HA</td>
<td>10:E:134:SER:HA</td>
<td>1.72</td>
<td>0.71</td>
</tr>
<tr>
<td>20:O:5:ILE:HG21</td>
<td>20:O:10:LYS:HE2</td>
<td>1.71</td>
<td>0.71</td>
</tr>
<tr>
<td>20:O:64:GLY:HA3</td>
<td>20:O:90:PHE:CZ</td>
<td>2.25</td>
<td>0.71</td>
</tr>
<tr>
<td>10:E:143:GLN:HG2</td>
<td>29:X:2725:O:O2'</td>
<td>1.91</td>
<td>0.71</td>
</tr>
<tr>
<td>17:L:60:LYS:HG2</td>
<td>17:L:62:GLY:N</td>
<td>2.02</td>
<td>0.71</td>
</tr>
<tr>
<td>17:L:87:VAL:HG12</td>
<td>17:L:88:VAL:N</td>
<td>2.05</td>
<td>0.71</td>
</tr>
<tr>
<td>23:R:107:ALA:CB</td>
<td>23:R:111:GLY:HA2</td>
<td>2.21</td>
<td>0.71</td>
</tr>
<tr>
<td>23:R:80:LYS:HE3</td>
<td>23:R:80:LYS:O</td>
<td>1.91</td>
<td>0.71</td>
</tr>
<tr>
<td>8:C:91:TYR:HE2</td>
<td>29:X:1259:A:H4'</td>
<td>1.54</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:594:C:H2'</td>
<td>29:X:1264:C:H42</td>
<td>1.56</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:1317:G:O2'</td>
<td>29:X:1318:A:H5'</td>
<td>1.91</td>
<td>0.71</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>14:I:61:PRO:HB3</td>
<td>29:X:2372:A:H5&quot;</td>
<td>1.72</td>
<td>0.71</td>
</tr>
<tr>
<td>7:B:25:VAL:HG13</td>
<td>7:B:183:LEU:CD2</td>
<td>2.20</td>
<td>0.71</td>
</tr>
<tr>
<td>9:D:166:ALA:O</td>
<td>9:D:170:LEU:HG</td>
<td>1.90</td>
<td>0.71</td>
</tr>
<tr>
<td>9:D:38:GLU:HB3</td>
<td>9:D:87:ILE:CB</td>
<td>2.19</td>
<td>0.71</td>
</tr>
<tr>
<td>9:D:4:LEU:CG</td>
<td>9:D:5:LYS:N</td>
<td>2.53</td>
<td>0.71</td>
</tr>
<tr>
<td>16:K:30:ARG:HG3</td>
<td>16:K:30:ARG:O</td>
<td>1.91</td>
<td>0.71</td>
</tr>
<tr>
<td>20:O:36:LYS:NZ</td>
<td>20:O:54:TYR:HB3</td>
<td>2.05</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:2555:G:H3'</td>
<td>29:X:2555:G:OP1</td>
<td>1.91</td>
<td>0.71</td>
</tr>
<tr>
<td>14:I:107:LYS:HE3</td>
<td>29:X:647:G:O6</td>
<td>1.91</td>
<td>0.71</td>
</tr>
<tr>
<td>30:Y:45:ILE:HG21</td>
<td>30:Y:57:VAL:CG2</td>
<td>2.21</td>
<td>0.71</td>
</tr>
<tr>
<td>6:A:244:ARG:HD2</td>
<td>29:X:1885:C:C5'</td>
<td>2.20</td>
<td>0.71</td>
</tr>
<tr>
<td>7:B:33:ILE:HG21</td>
<td>7:B:36:ARG:NH1</td>
<td>2.05</td>
<td>0.71</td>
</tr>
<tr>
<td>10:E:95:ARG:NH2</td>
<td>10:E:97:LYS:HE2</td>
<td>2.05</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:1655:C:H4'</td>
<td>29:X:2689:C:O2</td>
<td>1.91</td>
<td>0.71</td>
</tr>
<tr>
<td>29:X:1730:G:O2'</td>
<td>29:X:1731:C:H5'</td>
<td>1.91</td>
<td>0.71</td>
</tr>
<tr>
<td>9:D:74:ILE:HG12</td>
<td>9:D:80:ARG:C</td>
<td>2.11</td>
<td>0.70</td>
</tr>
<tr>
<td>14:I:103:ASN:OD1</td>
<td>14:I:104:ARG:HG3</td>
<td>1.90</td>
<td>0.70</td>
</tr>
<tr>
<td>14:I:107:LYS:HG2</td>
<td>14:I:109:LEU:HD21</td>
<td>1.73</td>
<td>0.70</td>
</tr>
<tr>
<td>19:N:70:ARG:NH1</td>
<td>19:N:70:ARG:HG3</td>
<td>2.02</td>
<td>0.70</td>
</tr>
<tr>
<td>23:R:25:LEU:CD1</td>
<td>23:R:81:VAL:HG23</td>
<td>2.21</td>
<td>0.70</td>
</tr>
<tr>
<td>12:G:103:TYR:CD2</td>
<td>29:X:1142:G:C1'</td>
<td>2.73</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:2198:U:C2</td>
<td>29:X:2199:C:C6</td>
<td>2.79</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:540:G:O2'</td>
<td>29:X:542:A:C2</td>
<td>2.44</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:659:G:H2'</td>
<td>29:X:660:G:H8</td>
<td>1.56</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:666:U:H2'</td>
<td>29:X:667:U:H4'</td>
<td>1.73</td>
<td>0.70</td>
</tr>
<tr>
<td>12:G:104:THR:O</td>
<td>12:G:105:GLY:O</td>
<td>2.08</td>
<td>0.70</td>
</tr>
<tr>
<td>12:G:56:THR:N</td>
<td>12:G:134:MET:HE1</td>
<td>2.07</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:460:U:C4</td>
<td>29:X:592:G:H1'</td>
<td>2.26</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:617:U:H5</td>
<td>29:X:632:A:C2</td>
<td>2.09</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:689:A:H2'</td>
<td>29:X:690:A:H5'</td>
<td>1.73</td>
<td>0.70</td>
</tr>
<tr>
<td>7:B:134:TRP:CE2</td>
<td>29:X:1675:C:OP1</td>
<td>2.44</td>
<td>0.70</td>
</tr>
<tr>
<td>9:D:8:TYR:O</td>
<td>9:D:12:VAL:HB</td>
<td>1.91</td>
<td>0.70</td>
</tr>
<tr>
<td>10:E:139:GLN:C</td>
<td>10:E:143:GLN:HG3</td>
<td>2.11</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:537:C:O2'</td>
<td>29:X:538:A:C2</td>
<td>2.44</td>
<td>0.70</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>31:Z:6:4:C:H2'</td>
<td>31:Z:6:5:A:C8</td>
<td>2.24</td>
<td>0.70</td>
</tr>
<tr>
<td>9:D:4:LEU:CD1</td>
<td>9:D:5:LYS:H</td>
<td>2.04</td>
<td>0.70</td>
</tr>
<tr>
<td>12:G:15:4:GLU:N</td>
<td>12:G:15:7:PRO:HG2</td>
<td>2.05</td>
<td>0.70</td>
</tr>
<tr>
<td>21:P:3:8:VAL:HG2</td>
<td>21:P:6:4:ALA:HB1</td>
<td>1.73</td>
<td>0.70</td>
</tr>
<tr>
<td>23:R:8:5:ASP:H</td>
<td>23:R:8:6:PRO:CD</td>
<td>2.05</td>
<td>0.70</td>
</tr>
<tr>
<td>24:S:6:4:ALA:N</td>
<td>24:S:8:6:VAL:HG23</td>
<td>2.05</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:13:7:3:G:O6</td>
<td>29:X:13:8:5:C:C4</td>
<td>2.43</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:19:7:8:U:C3'</td>
<td>29:X:19:7:9:C:H5''</td>
<td>2.18</td>
<td>0.70</td>
</tr>
<tr>
<td>8:C:11:2:2:GLN:HB3</td>
<td>8:C:11:6:LYS:NZ</td>
<td>2.06</td>
<td>0.70</td>
</tr>
<tr>
<td>12:G:10:6:TYR:O</td>
<td>12:G:11:0:LEU:HG</td>
<td>1.91</td>
<td>0.70</td>
</tr>
<tr>
<td>14:1:3:2:ARG:CEZ</td>
<td>20:O:8:1:ARG:NE</td>
<td>2.54</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:14:2:9:A:O2'</td>
<td>29:X:14:3:0:G:H4'</td>
<td>1.91</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:7:0:9:A:O2'</td>
<td>29:X:7:1:0:C:H5'</td>
<td>1.92</td>
<td>0.70</td>
</tr>
<tr>
<td>9:D:3:8:GLU:N</td>
<td>9:D:8:7:ILE:O</td>
<td>2.24</td>
<td>0.70</td>
</tr>
<tr>
<td>18:M:9:9:VAL:CG2</td>
<td>18:M:10:0:ARG:N</td>
<td>2.54</td>
<td>0.70</td>
</tr>
<tr>
<td>18:M:3:9:3:VAL:HG12</td>
<td>18:M:4:5:THR:CG2</td>
<td>2.22</td>
<td>0.70</td>
</tr>
<tr>
<td>25:T:4:4:LYS:HG2</td>
<td>25:T:4:5:PHE:HD1</td>
<td>1.57</td>
<td>0.70</td>
</tr>
<tr>
<td>25:T:5:2:GLY:HA3</td>
<td>25:T:6:0:PHE:CE2</td>
<td>2.26</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:2:5:6:0:G:H4'</td>
<td>29:X:2:5:6:1:G:C8</td>
<td>2.27</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:4:0:0:U:O2'</td>
<td>29:X:4:0:1:G:H5''</td>
<td>1.92</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:8:2:6:U:H2'</td>
<td>29:X:8:2:7:C:C6</td>
<td>2.27</td>
<td>0.70</td>
</tr>
<tr>
<td>7:B:1:5:0:VAL:CG2</td>
<td>7:B:1:5:4:LYS:HE2</td>
<td>2.18</td>
<td>0.70</td>
</tr>
<tr>
<td>8:C:1:1:5:GLY:O</td>
<td>8:C:1:8:5:ARG:HD2</td>
<td>1.91</td>
<td>0.70</td>
</tr>
<tr>
<td>8:C:1:2:2:GLY:HA2</td>
<td>8:C:1:2:4:ASP:OD1</td>
<td>1.92</td>
<td>0.70</td>
</tr>
<tr>
<td>9:D:5:8:ALA:A:O</td>
<td>9:D:6:2:LEU:HA</td>
<td>1.91</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:5:0:3:G:H2'</td>
<td>29:X:5:0:4:G:O4'</td>
<td>1.92</td>
<td>0.70</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:C:139:GLN:CA</td>
<td>8:C:139:GLN:HE21</td>
<td>2.05</td>
<td>0.70</td>
</tr>
<tr>
<td>12:G:141:GLY:O</td>
<td>12:G:144:MET:HB2</td>
<td>1.92</td>
<td>0.70</td>
</tr>
<tr>
<td>7:B:9:ILE:HD13</td>
<td>18:M:12:LEU:CD1</td>
<td>2.21</td>
<td>0.70</td>
</tr>
<tr>
<td>19:N:50:ARG:C</td>
<td>19:N:52:ASN:N</td>
<td>2.44</td>
<td>0.70</td>
</tr>
<tr>
<td>21:P:133:ASN:HD22</td>
<td>21:P:133:ASN:N</td>
<td>1.90</td>
<td>0.70</td>
</tr>
<tr>
<td>26:U:70:LEU:HD22</td>
<td>26:U:79:GLU:HG2</td>
<td>1.74</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:1071:U:H1'</td>
<td>29:X:1073:G:C5'</td>
<td>2.21</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:1177:U:H2'</td>
<td>29:X:1178:C:C6</td>
<td>2.27</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:1644:G:H2'</td>
<td>29:X:1645:U:H6</td>
<td>1.56</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:1741:G:O2'</td>
<td>29:X:1742:G:H5'</td>
<td>1.91</td>
<td>0.70</td>
</tr>
<tr>
<td>15:J:84:MET:HG2</td>
<td>29:X:2229:G:H5'</td>
<td>1.74</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:490:A:O2'</td>
<td>29:X:491:A:H3'</td>
<td>1.91</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:687:G:C2'</td>
<td>29:X:688:A:H5'</td>
<td>2.22</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:796:A:H8</td>
<td>29:X:797:A:H4'</td>
<td>1.57</td>
<td>0.70</td>
</tr>
<tr>
<td>6:A:188:LEU:O</td>
<td>6:A:211:ARG:HD3</td>
<td>1.91</td>
<td>0.70</td>
</tr>
<tr>
<td>25:T:73:GLY:O</td>
<td>25:T:74:LYS:HB2</td>
<td>1.91</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:1911:U:H2'</td>
<td>29:X:1912:G:H1'</td>
<td>1.72</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:2387:U:H2'</td>
<td>29:X:2388:G:H8</td>
<td>1.56</td>
<td>0.70</td>
</tr>
<tr>
<td>6:A:100:GLU:OE2</td>
<td>29:X:2201:G:H5''</td>
<td>1.90</td>
<td>0.70</td>
</tr>
<tr>
<td>18:M:43:ASN:C</td>
<td>18:M:43:ASN:ND2</td>
<td>2.45</td>
<td>0.70</td>
</tr>
<tr>
<td>24:S:138:VAL:HA</td>
<td>24:S:141:MET:HE2</td>
<td>1.74</td>
<td>0.70</td>
</tr>
<tr>
<td>29:X:1255:A:H2'</td>
<td>29:X:1256:C:H6</td>
<td>1.56</td>
<td>0.70</td>
</tr>
<tr>
<td>31:Z:15:A:C6</td>
<td>31:Z:72:C:H5'</td>
<td>2.26</td>
<td>0.70</td>
</tr>
<tr>
<td>11:F:10:LEU:HD12</td>
<td>11:F:12:LEU:HG</td>
<td>1.72</td>
<td>0.69</td>
</tr>
<tr>
<td>25:T:40:GLN:HE21</td>
<td>25:T:57:HIS:HB3</td>
<td>1.54</td>
<td>0.69</td>
</tr>
<tr>
<td>26:U:69:THR:HG22</td>
<td>26:U:70:LEU:N</td>
<td>2.06</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:1467:U:C3'</td>
<td>29:X:1467:U:C6</td>
<td>2.74</td>
<td>0.69</td>
</tr>
<tr>
<td>26:U:33:LYS:CE</td>
<td>29:X:2400:G:H21</td>
<td>2.05</td>
<td>0.69</td>
</tr>
<tr>
<td>19:N:31:GLN:HE22</td>
<td>29:X:589:C:H4'</td>
<td>1.55</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:683:ALA:HE4</td>
<td>29:X:684:C:H5'</td>
<td>1.74</td>
<td>0.69</td>
</tr>
<tr>
<td>7:B:20:ALA:HB2</td>
<td>13:H:85:ASP:O</td>
<td>1.92</td>
<td>0.69</td>
</tr>
<tr>
<td>9:D:70:ALA:C</td>
<td>9:D:72:LYS:H</td>
<td>1.92</td>
<td>0.69</td>
</tr>
<tr>
<td>12:G:138:GLY:O</td>
<td>12:G:141:GLY:N</td>
<td>2.24</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>14:I:43:ALA:HB1</td>
<td>29:X:684:C:C5</td>
<td>2.26</td>
<td>0.69</td>
</tr>
<tr>
<td>19:N:93:LYS:CE</td>
<td>20:O:10:LYS:HZ3</td>
<td>2.05</td>
<td>0.69</td>
</tr>
<tr>
<td>26:U:23:LYS:HB2</td>
<td>26:U:35:THR:HG23</td>
<td>1.74</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:1840:A:H2'</td>
<td>29:X:1841:G:O4'</td>
<td>1.91</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:1845:A:N1</td>
<td>29:X:2070:G:H1'</td>
<td>2.06</td>
<td>0.69</td>
</tr>
<tr>
<td>6:A:68:LYS:CA</td>
<td>6:A:152:GLY:HA2</td>
<td>2.22</td>
<td>0.69</td>
</tr>
<tr>
<td>7:B:49:ILE:HD11</td>
<td>7:B:90:SER:HB3</td>
<td>1.73</td>
<td>0.69</td>
</tr>
<tr>
<td>12:G:103:TYR:CD1</td>
<td>12:G:111:LYS:HA</td>
<td>2.26</td>
<td>0.69</td>
</tr>
<tr>
<td>14:I:39:SER:O</td>
<td>14:I:40:ARG:HB2</td>
<td>1.92</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:2585:C:H2'</td>
<td>29:X:2586:G:H5'</td>
<td>1.74</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:70:A:H4'</td>
<td>29:X:71:A:H3'</td>
<td>1.73</td>
<td>0.69</td>
</tr>
<tr>
<td>6:A:200:GLU:HG3</td>
<td>6:A:202:LYS:HB2</td>
<td>1.74</td>
<td>0.69</td>
</tr>
<tr>
<td>8:C:112:GLN:CD</td>
<td>8:C:116:LYS:HD3</td>
<td>2.12</td>
<td>0.69</td>
</tr>
<tr>
<td>8:C:98:GLN:HE22</td>
<td>29:X:611:C:H4'</td>
<td>1.56</td>
<td>0.69</td>
</tr>
<tr>
<td>10:E:38:ASN:HB2</td>
<td>10:E:41:LEU:HB2</td>
<td>1.73</td>
<td>0.69</td>
</tr>
<tr>
<td>13:H:1:MET:HB3</td>
<td>13:H:44:TYR:HB3</td>
<td>1.73</td>
<td>0.69</td>
</tr>
<tr>
<td>14:I:107:LYS:HG3</td>
<td>14:I:108:LEU:N</td>
<td>2.06</td>
<td>0.69</td>
</tr>
<tr>
<td>17:L:41:GLN:HG2</td>
<td>17:L:43:ILE:HD11</td>
<td>1.74</td>
<td>0.69</td>
</tr>
<tr>
<td>20:O:35:LEU:HD21</td>
<td>20:O:52:GLY:HA2</td>
<td>1.73</td>
<td>0.69</td>
</tr>
<tr>
<td>21:P:37:LYS:HG3</td>
<td>29:X:1279:G:H1</td>
<td>1.57</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:1478:U:H2'</td>
<td>29:X:1479:G:H8</td>
<td>1.56</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:2307:A:H2'</td>
<td>29:X:2308:A:C8</td>
<td>2.28</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:2441:U:H2'</td>
<td>29:X:2442:C:C6</td>
<td>2.27</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:2628:C:H2'</td>
<td>29:X:2629:U:C6</td>
<td>2.27</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:2671:C:O2'</td>
<td>29:X:2672:U:H5'</td>
<td>1.92</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:417:C:C2</td>
<td>29:X:419:G:C5</td>
<td>2.80</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:520:C:H2'</td>
<td>29:X:520:C:O2</td>
<td>1.92</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:651:C:C3'</td>
<td>29:X:652:C:H5'</td>
<td>2.22</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:717:G:H1'</td>
<td>29:X:740:A:N6</td>
<td>2.08</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:931:G:H4'</td>
<td>31:Z:83:C:H4'</td>
<td>1.74</td>
<td>0.69</td>
</tr>
<tr>
<td>11:F:12:LEU:HD22</td>
<td>11:F:22:PRO:HB3</td>
<td>1.75</td>
<td>0.69</td>
</tr>
<tr>
<td>20:O:6:GLN:HG2</td>
<td>29:X:1007:A:H1'</td>
<td>1.74</td>
<td>0.69</td>
</tr>
<tr>
<td>23:R:59:LYS:O</td>
<td>23:R:60:PRO:O</td>
<td>2.10</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:469:G:N2</td>
<td>29:X:480:G:H2'</td>
<td>2.07</td>
<td>0.69</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:B:117:MET:HB2</td>
<td>7:B:136:ARG:HD2</td>
<td>1.75</td>
<td>0.69</td>
</tr>
<tr>
<td>8:C:83:ALA:O</td>
<td>8:C:84:PHE:HB2</td>
<td>1.92</td>
<td>0.69</td>
</tr>
<tr>
<td>10:E:96:ALA:HA</td>
<td>10:E:104:GLU:O</td>
<td>1.92</td>
<td>0.69</td>
</tr>
<tr>
<td>15:J:113:GLU:C</td>
<td>15:J:115:ALA:H</td>
<td>1.92</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:2596:C:O2'</td>
<td>29:X:2597:G:H5'</td>
<td>1.93</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:732:G:P</td>
<td>29:X:732:G:H8</td>
<td>2.15</td>
<td>0.69</td>
</tr>
<tr>
<td>30:Y:58:LEU:HD12</td>
<td>30:Y:58:LEU:N</td>
<td>2.06</td>
<td>0.69</td>
</tr>
<tr>
<td>9:D:11:GLN:O</td>
<td>9:D:15:ALA:HB3</td>
<td>1.93</td>
<td>0.69</td>
</tr>
<tr>
<td>11:F:5:ALA:HB2</td>
<td>11:F:60:TYR:O</td>
<td>1.92</td>
<td>0.69</td>
</tr>
<tr>
<td>12:G:84:ASN:O</td>
<td>12:G:85:ALA:HB3</td>
<td>1.91</td>
<td>0.69</td>
</tr>
<tr>
<td>24:S:3:LEU:CD2</td>
<td>24:S:32:PHE:HB3</td>
<td>2.21</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:1107:A:C3'</td>
<td>29:X:1108:U:H5''</td>
<td>2.22</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:445:A:H2'</td>
<td>29:X:446:C:H6</td>
<td>1.56</td>
<td>0.69</td>
</tr>
<tr>
<td>8:C:62:LYS:HD3</td>
<td>8:C:62:LYS:C</td>
<td>2.12</td>
<td>0.69</td>
</tr>
<tr>
<td>9:D:75:SER:N</td>
<td>9:D:79:LEU:HD22</td>
<td>2.06</td>
<td>0.69</td>
</tr>
<tr>
<td>14:I:56:LEU:O</td>
<td>14:I:58:ALA:O</td>
<td>2.11</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:104:C:C2'</td>
<td>29:X:105:G:H5''</td>
<td>2.22</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:1672:A:H3'</td>
<td>29:X:1673:C:C6</td>
<td>2.27</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:2194:A:H2'</td>
<td>29:X:2195:C:O4'</td>
<td>1.93</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:48:A:H1'</td>
<td>29:X:50:G:N3</td>
<td>2.08</td>
<td>0.69</td>
</tr>
<tr>
<td>31:Z:58:G:H4'</td>
<td>31:Z:59:A:H5''</td>
<td>1.74</td>
<td>0.69</td>
</tr>
<tr>
<td>13:H:7:ARG:NH1</td>
<td>13:H:20:MET:HE3</td>
<td>2.07</td>
<td>0.69</td>
</tr>
<tr>
<td>21:P:35:PRO:HG2</td>
<td>21:P:99:ALA:HB2</td>
<td>1.75</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:2198:U:C4</td>
<td>29:X:2199:C:C5</td>
<td>2.81</td>
<td>0.69</td>
</tr>
<tr>
<td>21:P:29:LYS:HG2</td>
<td>21:P:123:HIS:ND1</td>
<td>2.07</td>
<td>0.69</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>26:U:10:LYS:HZ3</td>
<td>26:U:70:LEU:HG</td>
<td>1.56</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:1301:U:H5''</td>
<td>29:X:1302:C:OP2</td>
<td>1.93</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:1813:A:H2'</td>
<td>29:X:1814:G:C8</td>
<td>2.26</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:1850:G:O2'</td>
<td>29:X:1851:A:O4'</td>
<td>2.11</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:2736:U:H4'</td>
<td>29:X:2737:A:OP1</td>
<td>1.92</td>
<td>0.69</td>
</tr>
<tr>
<td>8:C:58:MET:HB2</td>
<td>8:C:70:GLY:O</td>
<td>1.93</td>
<td>0.69</td>
</tr>
<tr>
<td>24:S:24:TYR:HB3</td>
<td>24:S:29:ASN:HA</td>
<td>1.75</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:1737:G:H2'</td>
<td>29:X:1738:U:C6</td>
<td>2.27</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:3996:G:O2'</td>
<td>29:X:1851:A:O4'</td>
<td>2.11</td>
<td>0.69</td>
</tr>
<tr>
<td>29:X:765:C:O2'</td>
<td>29:X:766:A:OP2</td>
<td>2.10</td>
<td>0.69</td>
</tr>
<tr>
<td>4:4:3:VAL:HA</td>
<td>4:4:35:ARG:O</td>
<td>1.93</td>
<td>0.68</td>
</tr>
<tr>
<td>6:A:181:GLU:HG2</td>
<td>6:A:182:LEU:N</td>
<td>2.08</td>
<td>0.68</td>
</tr>
<tr>
<td>6:A:243:GLY:O</td>
<td>6:A:244:ARG:CZ</td>
<td>2.41</td>
<td>0.68</td>
</tr>
<tr>
<td>8:C:93:TYR:N</td>
<td>8:C:93:TYR:CD2</td>
<td>2.61</td>
<td>0.68</td>
</tr>
<tr>
<td>9:D:126:GLY:O</td>
<td>9:D:160:ALA:HB3</td>
<td>1.93</td>
<td>0.68</td>
</tr>
<tr>
<td>9:D:79:LEU:HA</td>
<td>9:D:80:ARG:CZ</td>
<td>2.22</td>
<td>0.68</td>
</tr>
<tr>
<td>11:F:98:LYS:HB2</td>
<td>11:F:137:THR:OG1</td>
<td>1.93</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:173:A:H61</td>
<td>29:X:844:G:N2</td>
<td>1.91</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:2708:U:H2'</td>
<td>29:X:2709:C:C6</td>
<td>2.28</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:2756:A:O2'</td>
<td>29:X:2757:G:OP2</td>
<td>2.10</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:2873:G:H2'</td>
<td>29:X:2874:A:C8</td>
<td>2.28</td>
<td>0.68</td>
</tr>
<tr>
<td>12:G:162:LYS:HZ1</td>
<td>29:X:5:A:H1'</td>
<td>1.57</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:635:C:C2'</td>
<td>29:X:636:G:H5''</td>
<td>2.22</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:738:G:O5'</td>
<td>29:X:738:G:H8</td>
<td>1.76</td>
<td>0.68</td>
</tr>
<tr>
<td>9:D:106:ILE:HG21</td>
<td>9:D:139:PRO:HB3</td>
<td>1.75</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:2169:A:H2'</td>
<td>29:X:2170:C:C6</td>
<td>2.28</td>
<td>0.68</td>
</tr>
<tr>
<td>9:D:123:ASP:OD1</td>
<td>29:X:2294:U:H1'</td>
<td>1.93</td>
<td>0.68</td>
</tr>
<tr>
<td>31:Z:25:G:H2'</td>
<td>31:Z:26:G:N7</td>
<td>2.08</td>
<td>0.68</td>
</tr>
<tr>
<td>8:C:8:GLY:O</td>
<td>8:C:9:GLN:HB3</td>
<td>1.93</td>
<td>0.68</td>
</tr>
<tr>
<td>15:J:102:ARG:HG3</td>
<td>15:J:103:VAL:H</td>
<td>1.58</td>
<td>0.68</td>
</tr>
<tr>
<td>20:O:61:VAL:HG23</td>
<td>20:O:94:LYS:H</td>
<td>1.58</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:1729:C:H2'</td>
<td>29:X:1730:G:H8</td>
<td>1.55</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:946:U:H2'</td>
<td>29:X:947:C:H6</td>
<td>1.57</td>
<td>0.68</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>31:Z:112:A:H2'</td>
<td>31:Z:113:G:C8</td>
<td>2.29</td>
<td>0.68</td>
</tr>
<tr>
<td>4:4:1:MET:HA</td>
<td>4:4:1:MET:HE2</td>
<td>1.74</td>
<td>0.68</td>
</tr>
<tr>
<td>12:G:42:VAL:HG13</td>
<td>12:G:166:LEU:O</td>
<td>1.94</td>
<td>0.68</td>
</tr>
<tr>
<td>17:L:87:VAL:HG12</td>
<td>17:L:88:VAL:H</td>
<td>1.59</td>
<td>0.68</td>
</tr>
<tr>
<td>22:Q:54:SER:HB2</td>
<td>29:X:1354:A:HO2'</td>
<td>1.58</td>
<td>0.68</td>
</tr>
<tr>
<td>24:S:103:ARG:NH2</td>
<td>24:S:108:VAL:HG23</td>
<td>2.09</td>
<td>0.68</td>
</tr>
<tr>
<td>24:S:92:VAL:HG23</td>
<td>24:S:93:GLU:H</td>
<td>1.57</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:1275:A:H2</td>
<td>30:Y:10:LYS:HE2</td>
<td>1.57</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:1522:C:H2'</td>
<td>29:X:1523:A:C4'</td>
<td>2.23</td>
<td>0.68</td>
</tr>
<tr>
<td>12:G:102:ARG:NH2</td>
<td>12:G:112:THR:HG21</td>
<td>2.08</td>
<td>0.68</td>
</tr>
<tr>
<td>15:J:116:LYS:NZ</td>
<td>15:J:132:MET:HB3</td>
<td>2.09</td>
<td>0.68</td>
</tr>
<tr>
<td>19:N:11:ARG:HH22</td>
<td>29:X:29:U:H4'</td>
<td>1.56</td>
<td>0.68</td>
</tr>
<tr>
<td>22:Q:7:LEU:HD21</td>
<td>27:V:30:PHE:CE2</td>
<td>2.19</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:1441:A:H1'</td>
<td>29:X:1442:C:C5</td>
<td>2.28</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:2586:G:N1</td>
<td>29:X:2587:G:C2</td>
<td>2.62</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:649:G:N2</td>
<td>29:X:661:C:H1'</td>
<td>2.08</td>
<td>0.68</td>
</tr>
<tr>
<td>8:C:5:ASN:HB2</td>
<td>8:C:10:ASN:HA</td>
<td>1.74</td>
<td>0.68</td>
</tr>
<tr>
<td>9:D:83:MET:O</td>
<td>9:D:85:VAL:HG13</td>
<td>1.94</td>
<td>0.68</td>
</tr>
<tr>
<td>12:G:162:LYS:N</td>
<td>12:G:163:PRO:CD</td>
<td>2.56</td>
<td>0.68</td>
</tr>
<tr>
<td>15:J:17:ARG:O</td>
<td>15:J:17:ARG:HG3</td>
<td>1.92</td>
<td>0.68</td>
</tr>
<tr>
<td>23:R:93:ARG:NH2</td>
<td>23:R:108:VAL:HA</td>
<td>2.09</td>
<td>0.68</td>
</tr>
<tr>
<td>24:S:71:MET:HB2</td>
<td>24:S:78:PRO:HA</td>
<td>1.75</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:1478:U:O2'</td>
<td>29:X:1479:G:H5'</td>
<td>1.93</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:172:A:C5</td>
<td>29:X:175:C:C5</td>
<td>2.80</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:2448:A:H2'</td>
<td>29:X:2449:G:O4'</td>
<td>1.92</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:416:U:O2'</td>
<td>29:X:417:C:H5</td>
<td>1.77</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:922:A:H2'</td>
<td>29:X:923:A:C8</td>
<td>2.28</td>
<td>0.68</td>
</tr>
<tr>
<td>30:Y:19:ARG:O</td>
<td>30:Y:21:SER:N</td>
<td>2.27</td>
<td>0.68</td>
</tr>
<tr>
<td>31:Z:12:C:H2'</td>
<td>31:Z:13:C:O4'</td>
<td>1.93</td>
<td>0.68</td>
</tr>
<tr>
<td>9:D:92:ARG:NH1</td>
<td>31:Z:46:G:H4'</td>
<td>2.08</td>
<td>0.68</td>
</tr>
<tr>
<td>10:E:43:VAL:CG2</td>
<td>10:E:52:VAL:HG22</td>
<td>2.24</td>
<td>0.68</td>
</tr>
<tr>
<td>18:M:26:ASP:OD1</td>
<td>18:M:27:PHE:N</td>
<td>2.26</td>
<td>0.68</td>
</tr>
<tr>
<td>21:P:85:MET:CE</td>
<td>21:P:130:GLU:HG3</td>
<td>2.24</td>
<td>0.68</td>
</tr>
<tr>
<td>23:R:60:PRO:O</td>
<td>23:R:65:PRO:HG3</td>
<td>1.93</td>
<td>0.68</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24:S:133:GLU:HG3</td>
<td>24:S:134:LEU:N</td>
<td>2.06</td>
<td>0.68</td>
</tr>
<tr>
<td>24:S:3:LEU:HD13</td>
<td>24:S:33:ALA:H</td>
<td>1.57</td>
<td>0.68</td>
</tr>
<tr>
<td>26:U:34:THR:HG23</td>
<td>26:U:35:THR:N</td>
<td>2.08</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:1672:A:H3’</td>
<td>29:X:1673:C:H6</td>
<td>1.58</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:1681:A:H61</td>
<td>29:X:1979:C:H42</td>
<td>1.42</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:2057:U:H5”</td>
<td>29:X:2057:U:H6</td>
<td>1.58</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:2197:U:C4</td>
<td>29:X:2198:U:C5</td>
<td>2.81</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:2699:G:O2’</td>
<td>29:X:2700:U:H5’</td>
<td>1.93</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:431:G:H2’</td>
<td>29:X:432:C:C6</td>
<td>2.28</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:539:A:H5’</td>
<td>29:X:540:G:OP1</td>
<td>1.93</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:558:G:N3</td>
<td>29:X:558:G:O5’</td>
<td>2.27</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:739:G:O2’</td>
<td>29:X:740:AP</td>
<td>2.51</td>
<td>0.68</td>
</tr>
<tr>
<td>7:B:147:PRO:HD3</td>
<td>29:X:1141:U:C4</td>
<td>2.29</td>
<td>0.68</td>
</tr>
<tr>
<td>14:I:104:ARG:HB3</td>
<td>14:I:105:PRO:CD</td>
<td>2.23</td>
<td>0.68</td>
</tr>
<tr>
<td>15:J:102:ARG:HG3</td>
<td>15:J:103:VAL:N</td>
<td>2.07</td>
<td>0.68</td>
</tr>
<tr>
<td>15:J:40:PRO:HB3</td>
<td>15:J:99:LYS:HZ2</td>
<td>1.58</td>
<td>0.68</td>
</tr>
<tr>
<td>19:N:10:ARG:HH11</td>
<td>29:X:592:G:P</td>
<td>2.16</td>
<td>0.68</td>
</tr>
<tr>
<td>24:S:103:ARG:HH21</td>
<td>24:S:108:VAL:CG2</td>
<td>2.05</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:2644:A:O2’</td>
<td>29:X:2645:C:H5’</td>
<td>1.93</td>
<td>0.68</td>
</tr>
<tr>
<td>14:I:28:LYS:CE</td>
<td>14:I:36:GLY:HA3</td>
<td>2.24</td>
<td>0.68</td>
</tr>
<tr>
<td>18:M:38:LYS:HB3</td>
<td>18:M:46:ARG:HB3</td>
<td>1.76</td>
<td>0.68</td>
</tr>
<tr>
<td>18:M:34:ARG:CZ</td>
<td>18:M:88:VAL:HG21</td>
<td>2.23</td>
<td>0.68</td>
</tr>
<tr>
<td>24:S:122:ILE:HG22</td>
<td>24:S:160:LEU:HA</td>
<td>1.75</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:1252:C:HO2’</td>
<td>29:X:1253:C:H5”</td>
<td>1.58</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:1459:U:C2</td>
<td>29:X:1475:U:H1’</td>
<td>2.29</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:1514:C:O4’</td>
<td>29:X:1593:C:H4’</td>
<td>1.93</td>
<td>0.68</td>
</tr>
<tr>
<td>29:X:2787:A:H2’</td>
<td>29:X:2788:C:C6</td>
<td>2.28</td>
<td>0.68</td>
</tr>
<tr>
<td>7:B:28:ALA:O</td>
<td>7:B:180:ASN:HB3</td>
<td>1.94</td>
<td>0.68</td>
</tr>
<tr>
<td>22:Q:92:ALA:O</td>
<td>22:Q:94:GLN:N</td>
<td>2.27</td>
<td>0.68</td>
</tr>
<tr>
<td>23:R:5:SER:O</td>
<td>23:R:6:ALA:HB3</td>
<td>1.94</td>
<td>0.68</td>
</tr>
<tr>
<td>7:B:151:TYR:HB3</td>
<td>12:G:106:TYR:CD2</td>
<td>2.29</td>
<td>0.67</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>17:L:68:ALA:HB1</td>
<td>17:L:102:ALA:CB</td>
<td>2.24</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:1031:CH41</td>
<td>29:X:1153:AH61</td>
<td>1.39</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:1851:A:H62</td>
<td>29:X:1866:G:N2</td>
<td>1.91</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:2665:G:C2</td>
<td>29:X:2704:U:O2</td>
<td>2.48</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:417:C:C2</td>
<td>29:X:419:G:N7</td>
<td>2.62</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:837:U:H2'</td>
<td>29:X:838:AH8</td>
<td>1.60</td>
<td>0.67</td>
</tr>
<tr>
<td>14:I:38:LYS:HZ3</td>
<td>29:X:954:U:P</td>
<td>2.15</td>
<td>0.67</td>
</tr>
<tr>
<td>7:B:134:TRP:NE1</td>
<td>29:X:1675:C:OP1</td>
<td>2.27</td>
<td>0.67</td>
</tr>
<tr>
<td>9:D:92:ARG:HH12</td>
<td>31:Z:46:G:C5'</td>
<td>2.06</td>
<td>0.67</td>
</tr>
<tr>
<td>10:E:126:PRO:HG2</td>
<td>10:E:127:GLU:N</td>
<td>2.09</td>
<td>0.67</td>
</tr>
<tr>
<td>16:K:20:LEU:O</td>
<td>16:K:21:ALA:C</td>
<td>2.31</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:1399:C:H2'</td>
<td>29:X:1400:AH8</td>
<td>1.59</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:2845:C:C4</td>
<td>29:X:2846:G:N7</td>
<td>2.62</td>
<td>0.67</td>
</tr>
<tr>
<td>7:B:76:ARG:HG2</td>
<td>7:B:77:ILE:HG13</td>
<td>1.75</td>
<td>0.67</td>
</tr>
<tr>
<td>8:C:28:HIS:ND1</td>
<td>14:I:21:ARG:NH1</td>
<td>2.42</td>
<td>0.67</td>
</tr>
<tr>
<td>12:G:69:ASP:C</td>
<td>12:G:70:PHE:HD2</td>
<td>1.96</td>
<td>0.67</td>
</tr>
<tr>
<td>15:J:99:LYS:HE3</td>
<td>15:J:100:PRO:HD2</td>
<td>1.74</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:1837:G:O2'</td>
<td>29:X:1838:G:H5'</td>
<td>1.94</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:421:G:H2'</td>
<td>29:X:422:C:H6</td>
<td>1.57</td>
<td>0.67</td>
</tr>
<tr>
<td>5:5:5:SER:H</td>
<td>5:5:13:BB9:HN1</td>
<td>1.41</td>
<td>0.67</td>
</tr>
<tr>
<td>7:B:116:VAL:H</td>
<td>7:B:136:ARG:CZ</td>
<td>2.07</td>
<td>0.67</td>
</tr>
<tr>
<td>9:D:81:GLN:HG2</td>
<td>9:D:82:GLY:N</td>
<td>2.05</td>
<td>0.67</td>
</tr>
<tr>
<td>10:E:41:LEU:HD21</td>
<td>10:E:68:THR:OG1</td>
<td>1.93</td>
<td>0.67</td>
</tr>
<tr>
<td>12:G:103:TYR:HB3</td>
<td>12:G:107:GLN:NE2</td>
<td>1.98</td>
<td>0.67</td>
</tr>
<tr>
<td>19:N:10:ARG:HD2</td>
<td>29:X:592:G:OP2</td>
<td>1.95</td>
<td>0.67</td>
</tr>
</tbody>
</table>

Continued on next page...
## Atom-1 vs. Atom-2 Interatomic Distance

<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:O:39:PHE:CE2</td>
<td>20:O:51:ALA:HB1</td>
<td>2.30</td>
<td>0.67</td>
</tr>
<tr>
<td>24:S:87:THR:O</td>
<td>24:S:88:TYR:HB2</td>
<td>1.94</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:2594:U:H2'</td>
<td>29:X:2595:C6</td>
<td>2.29</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:529:U:H2'</td>
<td>29:X:530:G:H8</td>
<td>1.56</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:558:G:C4</td>
<td>29:X:558:G:C3'</td>
<td>2.74</td>
<td>0.67</td>
</tr>
<tr>
<td>7:B:60:ASN:HB3</td>
<td>7:B:62:PRO:HD2</td>
<td>1.77</td>
<td>0.67</td>
</tr>
<tr>
<td>7:B:91:VAL:HB</td>
<td>7:B:93:VAL:HG12</td>
<td>1.77</td>
<td>0.67</td>
</tr>
<tr>
<td>8:C:2:ALA:CA</td>
<td>8:C:13:ARG:HA</td>
<td>2.21</td>
<td>0.67</td>
</tr>
<tr>
<td>17:L:27:LEU:O</td>
<td>17:L:88:VAL:N</td>
<td>2.28</td>
<td>0.67</td>
</tr>
<tr>
<td>7:B:143:GLN:O</td>
<td>29:X:2035:G:H4'</td>
<td>1.93</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:421:G:H2'</td>
<td>29:X:422:C:C6</td>
<td>2.29</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:659:G:H2'</td>
<td>29:X:660:G:C8</td>
<td>2.28</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:76:C:H6</td>
<td>29:X:76:C:C5'</td>
<td>2.07</td>
<td>0.67</td>
</tr>
<tr>
<td>31:Z:5:C:H2'</td>
<td>31:Z:6:C:O4'</td>
<td>1.94</td>
<td>0.67</td>
</tr>
<tr>
<td>7:B:72:VAL:O</td>
<td>7:B:73:ALA:CB</td>
<td>2.41</td>
<td>0.67</td>
</tr>
<tr>
<td>11:F:50:ASP:O</td>
<td>11:F:51:ALA:HB2</td>
<td>1.95</td>
<td>0.67</td>
</tr>
<tr>
<td>15:J:64:LYS:CB</td>
<td>15:J:108:ALA:O</td>
<td>2.43</td>
<td>0.67</td>
</tr>
<tr>
<td>17:L:85:LYS:HG2</td>
<td>17:L:86:GLN:HG2</td>
<td>1.74</td>
<td>0.67</td>
</tr>
<tr>
<td>23:R:71:GLN:O</td>
<td>23:R:72:ARG:HG3</td>
<td>1.94</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:1064:C:O5'</td>
<td>29:X:1064:C:H6</td>
<td>1.77</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:2501:U:H5''</td>
<td>29:X:2502:G:OP2</td>
<td>1.95</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:732:G:C8</td>
<td>29:X:732:G:OP2</td>
<td>2.48</td>
<td>0.67</td>
</tr>
<tr>
<td>8:C:166:TRP:H</td>
<td>8:C:166:TRP:HE3</td>
<td>1.40</td>
<td>0.67</td>
</tr>
<tr>
<td>15:J:19:THR:HB</td>
<td>31:Z:93:G:OP1</td>
<td>1.95</td>
<td>0.67</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>29:X:2178:U:O2'</td>
<td>29:X:2179:C:H5'</td>
<td>1.93</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:33:C:O2'</td>
<td>29:X:34:U:H5'</td>
<td>1.94</td>
<td>0.67</td>
</tr>
<tr>
<td>9:D:16:LEU:O</td>
<td>9:D:20:PHE:N</td>
<td>2.27</td>
<td>0.67</td>
</tr>
<tr>
<td>10:E:103:LEU:HB2</td>
<td>10:E:123:PHE:CD2</td>
<td>2.29</td>
<td>0.67</td>
</tr>
<tr>
<td>14:1:28:LYS:HZ3</td>
<td>14:1:36:GLY:CA</td>
<td>2.08</td>
<td>0.67</td>
</tr>
<tr>
<td>15:J:20:GLY:O</td>
<td>15:J:99:LYS:HG2</td>
<td>1.95</td>
<td>0.67</td>
</tr>
<tr>
<td>17:L:32:TYR:CD2</td>
<td>31:Z:9:G:H5'</td>
<td>2.30</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:1522:CH2'</td>
<td>29:X:1523:A:O5'</td>
<td>2.24</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:2352:A:H2'</td>
<td>29:X:2353:G:C8</td>
<td>2.28</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:416:U:O2'</td>
<td>29:X:417:C:C5</td>
<td>2.48</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:422:C:O2'</td>
<td>29:X:423:G:H5'</td>
<td>1.95</td>
<td>0.67</td>
</tr>
<tr>
<td>14:1:45:LYS:NZ</td>
<td>29:X:818:G:OP1</td>
<td>2.27</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:841:G:H2'</td>
<td>29:X:842:A:C8</td>
<td>2.30</td>
<td>0.67</td>
</tr>
<tr>
<td>4:4:10:MET:N</td>
<td>4:4:14:CYS:SG</td>
<td>2.65</td>
<td>0.67</td>
</tr>
<tr>
<td>9:D:16:LEU:O</td>
<td>9:D:20:PHE:HD1</td>
<td>1.77</td>
<td>0.67</td>
</tr>
<tr>
<td>14:1:54:SER:OG</td>
<td>14:1:59:ARG:CZ</td>
<td>2.43</td>
<td>0.67</td>
</tr>
<tr>
<td>19:N:7:GLY:O</td>
<td>19:N:8:ILE:HG12</td>
<td>1.94</td>
<td>0.67</td>
</tr>
<tr>
<td>20:O:48:GLY:O</td>
<td>20:O:50:ASP:N</td>
<td>2.27</td>
<td>0.67</td>
</tr>
<tr>
<td>21:P:79:ALA:O</td>
<td>21:P:85:MET:HB2</td>
<td>1.95</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:2165:CH2'</td>
<td>29:X:2166:G:H8</td>
<td>1.59</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:2319:G:O2'</td>
<td>29:X:2320:G:H5'</td>
<td>1.95</td>
<td>0.67</td>
</tr>
<tr>
<td>17:L:37:HIS:HB3</td>
<td>31:Z:30:C:OP1</td>
<td>1.95</td>
<td>0.67</td>
</tr>
<tr>
<td>14:I:47:ALA:HA</td>
<td>14:I:49:PHE:CE2</td>
<td>2.30</td>
<td>0.67</td>
</tr>
<tr>
<td>16:K:10:LEU:HD22</td>
<td>16:K:17:ARG:HB2</td>
<td>1.75</td>
<td>0.67</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>23:R:25:LEU:HD22</td>
<td>23:R:26:SER:HB3</td>
<td>1.77</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:2395:H2'</td>
<td>29:X:2396:H5'</td>
<td>1.77</td>
<td>0.67</td>
</tr>
<tr>
<td>29:X:758:C2'</td>
<td>29:X:759:H5''</td>
<td>2.22</td>
<td>0.67</td>
</tr>
<tr>
<td>4:4:26:ILE:HG13</td>
<td>4:4:26:ILE:O</td>
<td>1.93</td>
<td>0.66</td>
</tr>
<tr>
<td>8:C:125:ILE:O</td>
<td>8:C:126:ALA:HB3</td>
<td>1.94</td>
<td>0.66</td>
</tr>
<tr>
<td>18:Q:16:ILE:HG22</td>
<td>18:Q:16:ILE:O</td>
<td>1.95</td>
<td>0.66</td>
</tr>
<tr>
<td>23:R:93:ARG:HG2</td>
<td>23:R:94:VAL:N</td>
<td>2.09</td>
<td>0.66</td>
</tr>
<tr>
<td>24:S:64:ALA:HA</td>
<td>24:S:86:VAL:H</td>
<td>1.60</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:1031:C:H3'</td>
<td>29:X:1031:C:O2</td>
<td>1.94</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:1347:C:O2'</td>
<td>29:X:1348:C:H5'</td>
<td>1.94</td>
<td>0.66</td>
</tr>
<tr>
<td>8:C:63:GLY:N</td>
<td>29:X:2043:A:OP1</td>
<td>2.26</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:1347:C:O2'</td>
<td>29:X:1348:C:H5'</td>
<td>1.94</td>
<td>0.66</td>
</tr>
<tr>
<td>8:C:63:GLY:N</td>
<td>29:X:2043:A:OP1</td>
<td>2.26</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:1347:C:O2'</td>
<td>29:X:1348:C:H5'</td>
<td>1.94</td>
<td>0.66</td>
</tr>
<tr>
<td>8:C:63:GLY:N</td>
<td>29:X:2043:A:OP1</td>
<td>2.26</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:1347:C:O2'</td>
<td>29:X:1348:C:H5'</td>
<td>1.94</td>
<td>0.66</td>
</tr>
<tr>
<td>8:C:63:GLY:N</td>
<td>29:X:2043:A:OP1</td>
<td>2.26</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:1347:C:O2'</td>
<td>29:X:1348:C:H5'</td>
<td>1.94</td>
<td>0.66</td>
</tr>
<tr>
<td>8:C:63:GLY:N</td>
<td>29:X:2043:A:OP1</td>
<td>2.26</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:1347:C:O2'</td>
<td>29:X:1348:C:H5'</td>
<td>1.94</td>
<td>0.66</td>
</tr>
</tbody>
</table>

**Continued from previous page...**

**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>17:L:26:ARG:NH1</td>
<td>29:X:2357:A:H4'</td>
<td>2.09</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:2387:U:H2'</td>
<td>29:X:2388:G:C8</td>
<td>2.29</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:939:C:H5'</td>
<td>29:X:940:G:C5'</td>
<td>2.25</td>
<td>0.66</td>
</tr>
<tr>
<td>11:F:111:LYS:O</td>
<td>11:F:115:LEU:HG</td>
<td>1.95</td>
<td>0.66</td>
</tr>
<tr>
<td>15:J:103:VAL:O</td>
<td>15:J:103:VAL:HG12</td>
<td>1.94</td>
<td>0.66</td>
</tr>
<tr>
<td>23:R:102:LYS:HE2</td>
<td>29:X:100:G:O6</td>
<td>1.95</td>
<td>0.66</td>
</tr>
<tr>
<td>26:U:10:LYS:HG2</td>
<td>26:U:11:LYS:HG3</td>
<td>1.76</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:1234:C:H2'</td>
<td>29:X:1235:C:H6</td>
<td>1.58</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:2302:G:H1</td>
<td>29:X:2311:U:H5</td>
<td>1.41</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:2634:G:HO2'</td>
<td>29:X:2643:G:H1</td>
<td>1.44</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:417:C:C5</td>
<td>29:X:419:G:C4</td>
<td>2.84</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:417:C:C6</td>
<td>29:X:419:G:N9</td>
<td>2.64</td>
<td>0.66</td>
</tr>
<tr>
<td>16:K:25:ALA:HB2</td>
<td>16:K:47:PHE:HE2</td>
<td>1.61</td>
<td>0.66</td>
</tr>
<tr>
<td>17:L:54:ALA:O</td>
<td>17:L:71:VAL:HG23</td>
<td>1.96</td>
<td>0.66</td>
</tr>
<tr>
<td>23:R:9:HIS:CE1</td>
<td>29:X:338:G:H5'</td>
<td>2.30</td>
<td>0.66</td>
</tr>
<tr>
<td>7:B:26:VAL:HB</td>
<td>7:B:182:ILE:HG23</td>
<td>1.78</td>
<td>0.66</td>
</tr>
<tr>
<td>17:L:30:SER:C</td>
<td>17:L:31:VAL:HG12</td>
<td>2.16</td>
<td>0.66</td>
</tr>
<tr>
<td>18:M:102:ALA:O</td>
<td>18:M:103:LYS:HD2</td>
<td>1.95</td>
<td>0.66</td>
</tr>
<tr>
<td>23:R:96:LYS:HG3</td>
<td>23:R:97:GLN:N</td>
<td>2.10</td>
<td>0.66</td>
</tr>
<tr>
<td>7:B:14:ILE:HD11</td>
<td>7:B:183:LEU:CD1</td>
<td>2.26</td>
<td>0.66</td>
</tr>
<tr>
<td>8:C:3:GLN:NE2</td>
<td>8:C:4:ILE:HG12</td>
<td>2.11</td>
<td>0.66</td>
</tr>
<tr>
<td>9:D:9:ASN:O</td>
<td>9:D:13:ARG:N</td>
<td>2.28</td>
<td>0.66</td>
</tr>
<tr>
<td>16:K:6:ALA:HB1</td>
<td>29:X:2848:A:H2</td>
<td>1.61</td>
<td>0.66</td>
</tr>
<tr>
<td>26:U:45:ASN:HA</td>
<td>29:X:2210:C:OP1</td>
<td>1.94</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:104:C:O2'</td>
<td>29:X:105:G:H5&quot;</td>
<td>1.95</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:1437:A:H2'</td>
<td>29:X:1438:G:C8</td>
<td>2.31</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:1745:C:O2'</td>
<td>29:X:1746:A:H5'</td>
<td>1.94</td>
<td>0.66</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>29:X:965:G:N3</td>
<td>29:X:2253:A:C2</td>
<td>2.64</td>
<td>0.66</td>
</tr>
<tr>
<td>31:Z:4:C:C2'</td>
<td>31:Z:5:C:H5'</td>
<td>2.25</td>
<td>0.66</td>
</tr>
<tr>
<td>4:3:31:LYS:H</td>
<td>4:4:31:LYS:CD</td>
<td>2.09</td>
<td>0.66</td>
</tr>
<tr>
<td>7:B:143:GLN:HE21</td>
<td>7:B:143:GLN:N</td>
<td>1.94</td>
<td>0.66</td>
</tr>
<tr>
<td>8:C:162:ARG:CZ</td>
<td>29:X:333:A:C3'</td>
<td>2.66</td>
<td>0.66</td>
</tr>
<tr>
<td>15:J:37:ALA:HB2</td>
<td>15:J:104:MET:CE</td>
<td>2.25</td>
<td>0.66</td>
</tr>
<tr>
<td>19:N:84:LYS:HB2</td>
<td>19:N:92:ARG:NH2</td>
<td>2.11</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:2407:G:H5&quot;</td>
<td>29:X:2408:G:OP1</td>
<td>1.94</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:357:ASN:H</td>
<td>29:X:358:C:H1'</td>
<td>1.98</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:1517:C:H2'</td>
<td>29:X:1518:C:H6</td>
<td>1.61</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:2506:C:O2'</td>
<td>29:X:2507:U:H5'</td>
<td>1.96</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:357:A:N7</td>
<td>29:X:358:C:H1'</td>
<td>2.11</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:914:C:O2'</td>
<td>29:X:915:C:H5'</td>
<td>1.96</td>
<td>0.66</td>
</tr>
<tr>
<td>8:C:28:HIS:CE1</td>
<td>14:I:21:ARG:NH1</td>
<td>2.63</td>
<td>0.66</td>
</tr>
<tr>
<td>15:J:79:PRO:CD</td>
<td>15:J:88:LYS:HD2</td>
<td>2.25</td>
<td>0.66</td>
</tr>
<tr>
<td>16:K:79:VAL:HA</td>
<td>16:K:83:VAL:CG1</td>
<td>2.25</td>
<td>0.66</td>
</tr>
<tr>
<td>23:R:105:ARG:NH1</td>
<td>23:R:112:LYS:HA</td>
<td>2.10</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:1135:C:H2'</td>
<td>29:X:1136:G:H8</td>
<td>1.59</td>
<td>0.66</td>
</tr>
<tr>
<td>25:T:39:ARG:NH2</td>
<td>29:X:2334:C:H1'</td>
<td>2.01</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:568:G:H2'</td>
<td>29:X:569:C:O4'</td>
<td>1.96</td>
<td>0.66</td>
</tr>
<tr>
<td>29:X:591:G:H2'</td>
<td>29:X:592:G:C8</td>
<td>2.31</td>
<td>0.66</td>
</tr>
<tr>
<td>12:G:92:GLY:HA3</td>
<td>12:G:93:LYS:HE2</td>
<td>1.77</td>
<td>0.65</td>
</tr>
<tr>
<td>16:K:44:LEU:HD12</td>
<td>16:K:44:LEU:O</td>
<td>1.95</td>
<td>0.65</td>
</tr>
<tr>
<td>17:L:33:ARG:HH12</td>
<td>17:L:103:LEU:HB2</td>
<td>1.60</td>
<td>0.65</td>
</tr>
<tr>
<td>20:O:93:ILE:O</td>
<td>20:O:93:ILE:HG13</td>
<td>1.96</td>
<td>0.65</td>
</tr>
<tr>
<td>21:P:108:PRO:HG2</td>
<td>29:X:1631:C:Cl'</td>
<td>2.25</td>
<td>0.65</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24:S:68:ALA:H</td>
<td>24:S:82:ASP:HB2</td>
<td>1.60</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:1086:C:H3'</td>
<td>29:X:1087:C:C5'</td>
<td>2.25</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:1850:G:C2'</td>
<td>29:X:1851:A:H8</td>
<td>2.07</td>
<td>0.65</td>
</tr>
<tr>
<td>6:A:244:ARG:HD2</td>
<td>29:X:1885:C:C4'</td>
<td>2.26</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:2712:G:H3'</td>
<td>29:X:2713:A:C5'</td>
<td>2.26</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:796:A:C8</td>
<td>29:X:797:A:H4'</td>
<td>2.30</td>
<td>0.65</td>
</tr>
<tr>
<td>9:D:122:PHE:CB</td>
<td>9:D:129:ASN:HD22</td>
<td>2.04</td>
<td>0.65</td>
</tr>
<tr>
<td>14:I:32:ARG:HD2</td>
<td>20:O:81:ARG:HD2</td>
<td>1.77</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:168:A:O2'</td>
<td>29:X:169:C:H5'</td>
<td>1.96</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:1830:C:N4</td>
<td>29:X:1881:U:H3'</td>
<td>2.11</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:2368:G:H5''</td>
<td>29:X:2369:U:H3'</td>
<td>2.11</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:2405:A:H2'</td>
<td>29:X:2405:A:N3</td>
<td>2.11</td>
<td>0.65</td>
</tr>
<tr>
<td>31:Z:43:G:C5'</td>
<td>31:Z:44:C:H5'</td>
<td>2.18</td>
<td>0.65</td>
</tr>
<tr>
<td>4:4:6:SER:HB2</td>
<td>29:X:2445:C:H5''</td>
<td>1.78</td>
<td>0.65</td>
</tr>
<tr>
<td>9:D:150:ARG:CG</td>
<td>9:D:151:GLY:N</td>
<td>2.53</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:1386:A:H5''</td>
<td>29:X:2191:A:C6</td>
<td>2.31</td>
<td>0.65</td>
</tr>
<tr>
<td>8:C:30:VAL:HG12</td>
<td>8:C:31:VAL:N</td>
<td>2.11</td>
<td>0.65</td>
</tr>
<tr>
<td>9:D:153:ASP:C</td>
<td>9:D:154:ILE:HD12</td>
<td>2.16</td>
<td>0.65</td>
</tr>
<tr>
<td>12:G:148:LEU:HD12</td>
<td>12:G:149:LYS:N</td>
<td>2.11</td>
<td>0.65</td>
</tr>
<tr>
<td>15:J:66:Tyr:O</td>
<td>15:J:106:GLU:OE2</td>
<td>2.14</td>
<td>0.65</td>
</tr>
<tr>
<td>17:L:81:GLU:O</td>
<td>17:L:82:LYS:HG2</td>
<td>1.96</td>
<td>0.65</td>
</tr>
<tr>
<td>23:R:93:ARG:NH1</td>
<td>23:R:107:ALA:O</td>
<td>2.29</td>
<td>0.65</td>
</tr>
<tr>
<td>27:V:18:ILE:O</td>
<td>27:V:20:ALA:N</td>
<td>2.28</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:1482:U:H2'</td>
<td>29:X:1483:G:H8</td>
<td>1.60</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:1501:C:H2'</td>
<td>29:X:1502:G:O4'</td>
<td>1.96</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:1681:A:N1</td>
<td>29:X:2706:U:C5</td>
<td>2.65</td>
<td>0.65</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>29:X:2195:C:C6</td>
<td>29:X:2196:U:H5</td>
<td>2.15</td>
<td>0.65</td>
</tr>
<tr>
<td>25:T:18:PRO:HD2</td>
<td>29:X:2240:C:OP2</td>
<td>1.97</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:2796:A:O2'</td>
<td>29:X:2797:G:H5'</td>
<td>1.96</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:645:G:H2'</td>
<td>29:X:646:C:C6</td>
<td>2.32</td>
<td>0.65</td>
</tr>
<tr>
<td>24:S:84:TYR:HE1</td>
<td>31:Z:107:C:H4'</td>
<td>1.61</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:5:A:H2'</td>
<td>29:X:6:A:C8</td>
<td>2.31</td>
<td>0.65</td>
</tr>
<tr>
<td>12:G:103:TYR:HZ</td>
<td>12:G:111:LYS:CB</td>
<td>2.79</td>
<td>0.65</td>
</tr>
<tr>
<td>12:G:157:PRO:O</td>
<td>12:G:161:GLN:NE2</td>
<td>2.28</td>
<td>0.65</td>
</tr>
<tr>
<td>14:J:81:GLN:NE2</td>
<td>14:J:115:SER:HA</td>
<td>2.09</td>
<td>0.65</td>
</tr>
<tr>
<td>25:T:4:LYS:C</td>
<td>25:T:5:LYS:HD2</td>
<td>2.17</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:104:C:C2'</td>
<td>29:X:105:G:C5'</td>
<td>2.75</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:2320:G:H2'</td>
<td>29:X:2321:C:C6</td>
<td>2.32</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:930:A:N6</td>
<td>29:X:2247:A:C8</td>
<td>2.63</td>
<td>0.65</td>
</tr>
<tr>
<td>9:D:134:GLU:HG2</td>
<td>9:D:136:LEU:H</td>
<td>1.61</td>
<td>0.65</td>
</tr>
<tr>
<td>16:K:5:LYS:HE2</td>
<td>29:X:2795:A:C4'</td>
<td>2.17</td>
<td>0.65</td>
</tr>
<tr>
<td>18:M:34:ARG:CZ</td>
<td>18:M:88:VAL:CG1</td>
<td>2.73</td>
<td>0.65</td>
</tr>
<tr>
<td>23:R:15:HIS:ND1</td>
<td>23:R:16:PHE:HD2</td>
<td>1.90</td>
<td>0.65</td>
</tr>
<tr>
<td>26:U:23:LYS:HD2</td>
<td>26:U:35:THR:CG2</td>
<td>2.27</td>
<td>0.65</td>
</tr>
<tr>
<td>11:F:93:LYS:NZ</td>
<td>29:X:1087:C:OP2</td>
<td>2.29</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:1486:A:H2'</td>
<td>29:X:1487:C:C6</td>
<td>2.32</td>
<td>0.65</td>
</tr>
<tr>
<td>26:U:33:LYS:NZ</td>
<td>29:X:2400:G:N2</td>
<td>2.45</td>
<td>0.65</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:433:G:N2</td>
<td>29:X:434:C:H1'</td>
<td>2.11</td>
<td>0.65</td>
</tr>
<tr>
<td>10:E:44:ARG:HG3</td>
<td>10:E:44:ARG:NH2</td>
<td>2.12</td>
<td>0.65</td>
</tr>
<tr>
<td>17:L:66:ASP:C</td>
<td>17:L:68:ALA:N</td>
<td>2.49</td>
<td>0.65</td>
</tr>
<tr>
<td>23:R:113:THR:N</td>
<td>23:R:113:THR:N</td>
<td>2.44</td>
<td>0.65</td>
</tr>
<tr>
<td>23:R:37:LEU:HD21</td>
<td>23:R:37:LEU:HD21</td>
<td>1.78</td>
<td>0.65</td>
</tr>
<tr>
<td>24:S:85:MET:SD</td>
<td>24:S:85:MET:SD</td>
<td>2.36</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:1503:C:H2'</td>
<td>29:X:1503:C:H2'</td>
<td>1.59</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:1712:C:H5''</td>
<td>29:X:1712:C:H5''</td>
<td>2.27</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:692:C:H6</td>
<td>29:X:692:C:H6</td>
<td>1.62</td>
<td>0.65</td>
</tr>
<tr>
<td>31:Z:40:C:OP2</td>
<td>31:Z:40:C:OP2</td>
<td>1.97</td>
<td>0.65</td>
</tr>
<tr>
<td>7:B:70:ALA:O</td>
<td>7:B:72:VAL:HG23</td>
<td>1.96</td>
<td>0.65</td>
</tr>
<tr>
<td>19:N:3:ARG:NH1</td>
<td>19:N:3:ARG:NH1</td>
<td>2.06</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:1593:C:H5'</td>
<td>29:X:1593:C:H5'</td>
<td>1.79</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:2227:C:H6</td>
<td>29:X:2227:C:H6</td>
<td>1.60</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:2476:A:H5'</td>
<td>29:X:2476:A:H5'</td>
<td>1.77</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:2485:U:C5'</td>
<td>29:X:2485:U:C5'</td>
<td>2.44</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:2706:U:C2'</td>
<td>29:X:2706:U:C2'</td>
<td>2.45</td>
<td>0.65</td>
</tr>
<tr>
<td>6:A:143:HIS:NE2</td>
<td>6:A:143:HIS:NE2</td>
<td>2.12</td>
<td>0.65</td>
</tr>
<tr>
<td>14:I:34:HIS:HB2</td>
<td>14:I:34:HIS:HB2</td>
<td>1.78</td>
<td>0.65</td>
</tr>
<tr>
<td>14:I:93:LEU:HD12</td>
<td>14:I:93:LEU:HD12</td>
<td>1.79</td>
<td>0.65</td>
</tr>
<tr>
<td>18:M:91:VAL:CG2</td>
<td>18:M:91:VAL:CG2</td>
<td>2.09</td>
<td>0.65</td>
</tr>
<tr>
<td>26:U:31:GLY:O</td>
<td>26:U:31:GLY:N</td>
<td>2.27</td>
<td>0.65</td>
</tr>
<tr>
<td>26:U:33:LYS:N2</td>
<td>29:X:2400:G:N2</td>
<td>1.94</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:1333:G:N1</td>
<td>29:X:1333:G:N1</td>
<td>2.65</td>
<td>0.65</td>
</tr>
<tr>
<td>29:X:175:CO2</td>
<td>29:X:175:CO2</td>
<td>2.49</td>
<td>0.65</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:A:258:LYS:HE3</td>
<td>6:A:264:LYS:HD3</td>
<td>1.78</td>
<td>0.64</td>
</tr>
<tr>
<td>12:G:84:ASN:N</td>
<td>12:G:153:GLY:O</td>
<td>2.29</td>
<td>0.64</td>
</tr>
<tr>
<td>21:P:89:ARG:CZ</td>
<td>21:P:132:GLY:HA2</td>
<td>2.27</td>
<td>0.64</td>
</tr>
<tr>
<td>23:R:15:HIS:ND1</td>
<td>23:R:16:PHE:CD2</td>
<td>2.66</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:169:C:C2'</td>
<td>29:X:170:U:H5'</td>
<td>2.27</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:357:A:H3'</td>
<td>29:X:358:C:C6</td>
<td>2.32</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:408:U:O2'</td>
<td>29:X:409:G:H8</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>7:B:1:MET:HG3</td>
<td>7:B:83:GLY:O</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>15:J:71:PRO:HA</td>
<td>15:J:96:SER:HB2</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>17:L:33:ARG:NH2</td>
<td>17:L:103:LEU:HD12</td>
<td>2.12</td>
<td>0.64</td>
</tr>
<tr>
<td>18:M:105:TYR:CE1</td>
<td>18:M:108:ARG:NH2</td>
<td>2.66</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1242:A:O2'</td>
<td>29:X:1243:G:H5'</td>
<td>1.96</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1553:G:H2'</td>
<td>29:X:1554:G:C8</td>
<td>2.32</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:2345:G:H2'</td>
<td>29:X:2346:G:O4'</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:2663:U:N3</td>
<td>29:X:2664:G:C8</td>
<td>2.66</td>
<td>0.64</td>
</tr>
<tr>
<td>7:B:168:GLN:O</td>
<td>29:X:2710:C:H4'</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:2807:U:H4'</td>
<td>29:X:2808:U:H5”</td>
<td>1.79</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:75:CH2'</td>
<td>29:X:76:CH5&quot;</td>
<td>1.78</td>
<td>0.64</td>
</tr>
<tr>
<td>8:C:172:VAL:O</td>
<td>8:C:172:VAL:HG12</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>9:D:135:GLN:HG3</td>
<td>9:D:151:GLY:HA2</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>21:P:79:ALA:HB1</td>
<td>21:P:85:MET:SD</td>
<td>2.37</td>
<td>0.64</td>
</tr>
<tr>
<td>24:S:3:LEU:HD21</td>
<td>24:S:32:PHE:CB</td>
<td>2.27</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1536:G:H2'</td>
<td>29:X:1537:U:C6</td>
<td>2.33</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1629:G:H2'</td>
<td>29:X:1633:C:N4</td>
<td>2.12</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1856:U:O2'</td>
<td>29:X:1857:G:O5’</td>
<td>2.15</td>
<td>0.64</td>
</tr>
<tr>
<td>21:P:134:LYS:HB2</td>
<td>29:X:2777:A:C5</td>
<td>2.31</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:2838:U:O2'</td>
<td>29:X:2839:G:H5’</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:701:U:O2</td>
<td>29:X:800:U:H4’</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>7:B:127:ALA:HB2</td>
<td>7:B:135:HIS:CE1</td>
<td>2.32</td>
<td>0.64</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>7:B:92:ASN:HA</td>
<td>7:B:95:ILE:HB</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>15:J:35:LEU:N</td>
<td>15:J:105:PHE:O</td>
<td>2.26</td>
<td>0.64</td>
</tr>
<tr>
<td>18:M:103:LYS:O</td>
<td>18:M:104:LEU:CB</td>
<td>2.44</td>
<td>0.64</td>
</tr>
<tr>
<td>14:I:32:ARG:NH2</td>
<td>20:O:81:ARG:HE</td>
<td>1.95</td>
<td>0.64</td>
</tr>
<tr>
<td>24:S:43:PHE:CE1</td>
<td>24:S:66:VAL:HG11</td>
<td>2.32</td>
<td>0.64</td>
</tr>
<tr>
<td>26:U:78:ILE:HD13</td>
<td>26:U:79:GLU:O</td>
<td>1.96</td>
<td>0.64</td>
</tr>
<tr>
<td>27:V:31:GLN:HA</td>
<td>27:V:34:ALA:HB3</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>6:A:229:VAL:HG21</td>
<td>29:X:797:A:C6</td>
<td>2.33</td>
<td>0.64</td>
</tr>
<tr>
<td>6:A:186:HIS:HD1</td>
<td>6:A:186:HIS:H</td>
<td>1.45</td>
<td>0.64</td>
</tr>
<tr>
<td>7:B:51:TYR:N</td>
<td>7:B:75:THR:OG1</td>
<td>2.29</td>
<td>0.64</td>
</tr>
<tr>
<td>9:D:74:ILE:HG23</td>
<td>9:D:79:LEU:O</td>
<td>1.98</td>
<td>0.64</td>
</tr>
<tr>
<td>11:F:27:LEU:HA</td>
<td>11:F:30:TYR:CD2</td>
<td>2.32</td>
<td>0.64</td>
</tr>
<tr>
<td>11:F:42:ASN:HA</td>
<td>11:F:45:THR:CG2</td>
<td>2.27</td>
<td>0.64</td>
</tr>
<tr>
<td>14:I:102:LYS:O</td>
<td>14:I:104:ARG:N</td>
<td>2.29</td>
<td>0.64</td>
</tr>
<tr>
<td>14:I:38:LYS:NZ</td>
<td>29:X:954:U:OP2</td>
<td>2.29</td>
<td>0.64</td>
</tr>
<tr>
<td>15:J:79:PRO:HD3</td>
<td>15:J:88:LYS:NZ</td>
<td>2.13</td>
<td>0.64</td>
</tr>
<tr>
<td>17:L:75:LEU:O</td>
<td>17:L:78:ALA:HB3</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>19:N:27:SER:C</td>
<td>19:N:29:SER:H</td>
<td>2.00</td>
<td>0.64</td>
</tr>
<tr>
<td>23:R:33:THR:OG1</td>
<td>23:R:34:GLY:N</td>
<td>2.29</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1065:A:O2'</td>
<td>29:X:1066:G:H5'</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1218:C:O2'</td>
<td>29:X:1219:C:H5'</td>
<td>1.96</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:2074:U:H3'</td>
<td>29:X:2075:U:C5'</td>
<td>2.27</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:583:C:H4'</td>
<td>29:X:584:A:O5'</td>
<td>1.96</td>
<td>0.64</td>
</tr>
<tr>
<td>6:A:214:TRP:HH2</td>
<td>29:X:777:A:OP2</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:824:U:H1'</td>
<td>29:X:1264:C:C1'</td>
<td>2.27</td>
<td>0.64</td>
</tr>
<tr>
<td>15:J:30:PHE:CE1</td>
<td>29:X:886:A:HZ</td>
<td>2.33</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:889:C:H2'</td>
<td>29:X:890:U:O4'</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>8:C:158:ARG:O</td>
<td>8:C:160:ALA:N</td>
<td>2.31</td>
<td>0.64</td>
</tr>
<tr>
<td>13:H:26:ASN:HB3</td>
<td>13:H:38:GLY:H</td>
<td>1.61</td>
<td>0.64</td>
</tr>
<tr>
<td>14:I:32:ARG:CZ</td>
<td>20:O:79:GLN:HA</td>
<td>2.28</td>
<td>0.64</td>
</tr>
<tr>
<td>25:T:72:LYS:HD3</td>
<td>31:Z:14:C:H5''</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>26:U:20:ARG:HB3</td>
<td>26:U:43:ARG:NH2</td>
<td>2.12</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1128:G:C2'</td>
<td>29:X:1129:A:H5''</td>
<td>2.27</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:2030:U:H2'</td>
<td>29:X:2031:A:C8</td>
<td>2.32</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:2261:G:H21</td>
<td>29:X:2369:U:H3</td>
<td>1.44</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:2373:C:H2'</td>
<td>29:X:2374:C:C6</td>
<td>2.32</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:392:G:N2</td>
<td>29:X:409:G:C4</td>
<td>2.66</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:712:A:H2'</td>
<td>29:X:713:G:O4'</td>
<td>1.98</td>
<td>0.64</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>29:X:839:U:OP1</td>
<td>29:X:2408:G:OP2</td>
<td>2.15</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:995:A:OP2</td>
<td>29:X:996:C:N4</td>
<td>2.22</td>
<td>0.64</td>
</tr>
<tr>
<td>7:B:14:ILE:HD11</td>
<td>7:B:183:LEU:HD13</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>7:B:72:VAL:O</td>
<td>7:B:73:ALA:HB2</td>
<td>1.98</td>
<td>0.64</td>
</tr>
<tr>
<td>8:C:75:PRO:HG3</td>
<td>8:C:83:ALA:HB2</td>
<td>1.79</td>
<td>0.64</td>
</tr>
<tr>
<td>9:D:111:ILE:CG2</td>
<td>9:D:114:PHE:HB2</td>
<td>2.28</td>
<td>0.64</td>
</tr>
<tr>
<td>10:E:139:GLN:O</td>
<td>10:E:142:GLY:N</td>
<td>2.31</td>
<td>0.64</td>
</tr>
<tr>
<td>10:E:16:THR:HG22</td>
<td>10:E:16:THR:O</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>20:O:38:LEU:HA</td>
<td>20:O:46:VAL:O</td>
<td>1.98</td>
<td>0.64</td>
</tr>
<tr>
<td>24:S:3:LEU:CD1</td>
<td>24:S:33:ALA:H</td>
<td>2.11</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1069:G:C3'</td>
<td>29:X:1070:G:H5&quot;</td>
<td>2.27</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1440:G:H3'</td>
<td>29:X:1441:A:H5&quot;</td>
<td>1.78</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:648:A:H5'</td>
<td>29:X:649:G:H4'</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:752:G:C4'</td>
<td>29:X:753:U:OP1</td>
<td>2.40</td>
<td>0.64</td>
</tr>
<tr>
<td>6:A:244:ARG:HB3</td>
<td>6:A:252:LYS:HZ1</td>
<td>1.62</td>
<td>0.64</td>
</tr>
<tr>
<td>8:C:176:ASN:O</td>
<td>8:C:180:ILE:HG22</td>
<td>1.98</td>
<td>0.64</td>
</tr>
<tr>
<td>14:I:76:LYS:CG</td>
<td>14:I:111:SER:HB2</td>
<td>2.28</td>
<td>0.64</td>
</tr>
<tr>
<td>15:J:35:LEU:HB2</td>
<td>15:J:119:PHE:CE1</td>
<td>2.32</td>
<td>0.64</td>
</tr>
<tr>
<td>15:J:9:LYS:HG3</td>
<td>29:X:884:C:OP1</td>
<td>1.98</td>
<td>0.64</td>
</tr>
<tr>
<td>18:M:82:PRO:HB2</td>
<td>18:M:85:SER:HB2</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>26:U:22:GLY:HA3</td>
<td>26:U:39:LYS:CD</td>
<td>2.27</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1016:C:H4'</td>
<td>29:X:1023:U:H5&quot;</td>
<td>1.79</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1471:G:O2'</td>
<td>29:X:1472:C:H5'</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1882:G:H21</td>
<td>29:X:1885:C:N4</td>
<td>1.95</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:2226:A:H2'</td>
<td>29:X:2227:C:C6</td>
<td>2.32</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:2437:G:O2'</td>
<td>29:X:2438:A:N7</td>
<td>2.30</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:742:G:O2'</td>
<td>29:X:776:G:H4'</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>14:I:130:ILE:O</td>
<td>14:I:132:ALA:N</td>
<td>2.26</td>
<td>0.64</td>
</tr>
<tr>
<td>15:J:116:LYS:HD3</td>
<td>15:J:132:MET:SD</td>
<td>2.37</td>
<td>0.64</td>
</tr>
<tr>
<td>17:L:33:ARG:HH22</td>
<td>17:L:103:LEU:HB2</td>
<td>1.63</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1215:A:H2'</td>
<td>29:X:1216:G:C8</td>
<td>2.33</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1281:A:O4'</td>
<td>29:X:2592:U:H5</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1563:U:H2'</td>
<td>29:X:1564:U:C6</td>
<td>2.32</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:163:A:H2'</td>
<td>29:X:164:G:H8</td>
<td>1.61</td>
<td>0.64</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>29:X:2195:C:C5</td>
<td>29:X:2196:U:C4</td>
<td>2.85</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:2494:C:O2</td>
<td>29:X:2549:G:C2</td>
<td>2.51</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:2736:U:O2</td>
<td>29:X:2737:A:C5</td>
<td>2.31</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:2824:C:H1</td>
<td>29:X:2843:A:C4</td>
<td>2.33</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:2825:A:C2</td>
<td>29:X:2826:C:C2</td>
<td>2.86</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:456:C:O2</td>
<td>29:X:457:C:H5</td>
<td>1.97</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:48:A:C8</td>
<td>29:X:50:G:N2</td>
<td>2.66</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:553:C:C5</td>
<td>29:X:554:U:OP1</td>
<td>2.45</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:699:G:H4</td>
<td>29:X:700:C:OP2</td>
<td>1.98</td>
<td>0.64</td>
</tr>
<tr>
<td>7:B:67:PHE:CZ</td>
<td>7:B:75:THR:HG22</td>
<td>2.33</td>
<td>0.64</td>
</tr>
<tr>
<td>8:C:24:SER:HA</td>
<td>8:C:27:LEU:HD13</td>
<td>1.80</td>
<td>0.64</td>
</tr>
<tr>
<td>12:G:51:LEU:HD12</td>
<td>12:G:88:VAL:HG21</td>
<td>1.79</td>
<td>0.64</td>
</tr>
<tr>
<td>17:L:8:ARG:NH1</td>
<td>17:L:8:ARG:HB2</td>
<td>2.13</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1188:A:H8</td>
<td>29:X:1188:A:O5'</td>
<td>1.79</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:763:A:OP1</td>
<td>29:X:1631:C:N4</td>
<td>2.30</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:1782:A:N6</td>
<td>29:X:1820:G:O2'</td>
<td>2.31</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:2196:U:O2</td>
<td>29:X:2197:U:O4'</td>
<td>2.15</td>
<td>0.64</td>
</tr>
<tr>
<td>29:X:490:A:O2'</td>
<td>29:X:491:A:C5'</td>
<td>2.46</td>
<td>0.64</td>
</tr>
<tr>
<td>9:D:35:VAL:O</td>
<td>9:D:154:ILE:HG13</td>
<td>1.98</td>
<td>0.63</td>
</tr>
<tr>
<td>16:K:100:VAL:CG1</td>
<td>16:K:101:GLY:N</td>
<td>2.43</td>
<td>0.63</td>
</tr>
<tr>
<td>17:L:63:ASN:CB</td>
<td>17:L:66:ASP:HB2</td>
<td>2.28</td>
<td>0.63</td>
</tr>
<tr>
<td>23:R:93:ARG:NH1</td>
<td>23:R:108:VAL:CA</td>
<td>2.61</td>
<td>0.63</td>
</tr>
<tr>
<td>24:S:18:MET:SD</td>
<td>24:S:35:ASP:HA</td>
<td>2.37</td>
<td>0.63</td>
</tr>
<tr>
<td>29:X:1002:C:C4</td>
<td>29:X:1003:C:H5</td>
<td>2.15</td>
<td>0.63</td>
</tr>
<tr>
<td>30:Y:12:SER:HB2</td>
<td>30:Y:15:LYS:H</td>
<td>1.61</td>
<td>0.63</td>
</tr>
<tr>
<td>9:D:13:ARG:NH1</td>
<td>9:D:14:PRO:CG</td>
<td>2.55</td>
<td>0.63</td>
</tr>
<tr>
<td>29:X:1773:C:H2'</td>
<td>29:X:2587:G:O2'</td>
<td>1.98</td>
<td>0.63</td>
</tr>
<tr>
<td>8:C:39:ARG:NH2</td>
<td>8:C:91:TYR:HD2</td>
<td>1.95</td>
<td>0.63</td>
</tr>
<tr>
<td>20:O:35:LEU:CD2</td>
<td>20:O:52:GLY:HA2</td>
<td>2.28</td>
<td>0.63</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>21:P:37:LYS:CE</td>
<td>21:P:64:ALA:HB2</td>
<td>2.28</td>
<td>0.63</td>
</tr>
<tr>
<td>8:C:162:ARG:CD</td>
<td>29:X:333:A:H5'</td>
<td>2.27</td>
<td>0.63</td>
</tr>
<tr>
<td>4:4:1:MET:SD</td>
<td>4:4:35:ARG:HB2</td>
<td>2.39</td>
<td>0.63</td>
</tr>
<tr>
<td>14:I:77:LEU:HD22</td>
<td>14:I:110:ALA:HA</td>
<td>1.81</td>
<td>0.63</td>
</tr>
<tr>
<td>22:Q:35:LYS:HE3</td>
<td>29:X:1615:C:OP2</td>
<td>1.98</td>
<td>0.63</td>
</tr>
<tr>
<td>14:I:38:LYS:HG2</td>
<td>29:X:954:U:OP2</td>
<td>1.98</td>
<td>0.63</td>
</tr>
<tr>
<td>7:B:37:LYS:HD2</td>
<td>7:B:42:ASP:CG</td>
<td>2.18</td>
<td>0.63</td>
</tr>
<tr>
<td>8:C:197:GLU:HG2</td>
<td>8:C:198:GLU:HG3</td>
<td>1.80</td>
<td>0.63</td>
</tr>
<tr>
<td>14:I:58:ALA:O</td>
<td>14:I:59:ARG:HB2</td>
<td>1.99</td>
<td>0.63</td>
</tr>
<tr>
<td>15:J:78:LYS:HA</td>
<td>15:J:88:LYS:NZ</td>
<td>2.13</td>
<td>0.63</td>
</tr>
<tr>
<td>27:V:7:ARG:O</td>
<td>27:V:9:LEU:N</td>
<td>2.32</td>
<td>0.63</td>
</tr>
<tr>
<td>29:X:1922:U:O2</td>
<td>29:X:2570:C:O2'</td>
<td>2.16</td>
<td>0.63</td>
</tr>
<tr>
<td>29:X:2477:C:O2'</td>
<td>29:X:2478:C:H5'</td>
<td>1.98</td>
<td>0.63</td>
</tr>
<tr>
<td>8:C:48:ARG:O</td>
<td>8:C:51:VAL:HG22</td>
<td>1.99</td>
<td>0.63</td>
</tr>
<tr>
<td>12:G:155:THR:HA</td>
<td>12:G:158:HIS:HD2</td>
<td>1.64</td>
<td>0.63</td>
</tr>
<tr>
<td>14:1:14:LYS:O</td>
<td>14:1:14:LYS:HG3</td>
<td>1.98</td>
<td>0.63</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>14:1:73:GLU:OE1</td>
<td>14:1:73:GLU:N</td>
<td>2.32</td>
<td>0.63</td>
</tr>
<tr>
<td>15:J:15:ARG:NH1</td>
<td>15:J:15:ARG:HG3</td>
<td>2.09</td>
<td>0.63</td>
</tr>
<tr>
<td>18:M:11:GLU:O</td>
<td>18:M:14:ARG:N</td>
<td>2.31</td>
<td>0.63</td>
</tr>
<tr>
<td>20:O:36:LYS:HD3</td>
<td>20:O:39:PHE:CE2</td>
<td>2.34</td>
<td>0.63</td>
</tr>
<tr>
<td>29:X:532:A:H2'</td>
<td>29:X:533:C:C6</td>
<td>2.33</td>
<td>0.63</td>
</tr>
<tr>
<td>7:B:20:ALA:C</td>
<td>7:B:21:ILE:HG13</td>
<td>2.19</td>
<td>0.63</td>
</tr>
<tr>
<td>7:B:52:ALA:O</td>
<td>7:B:75:THR:O</td>
<td>2.17</td>
<td>0.63</td>
</tr>
<tr>
<td>9:D:133:LYS:O</td>
<td>9:D:151:GLY:HA2</td>
<td>1.99</td>
<td>0.63</td>
</tr>
<tr>
<td>9:D:75:SER:H</td>
<td>9:D:79:LEU:CD2</td>
<td>2.10</td>
<td>0.63</td>
</tr>
<tr>
<td>9:D:79:LEU:HD21</td>
<td>29:X:2289:A:H2</td>
<td>1.64</td>
<td>0.63</td>
</tr>
<tr>
<td>29:X:1072:U:H1</td>
<td>29:X:1081:A:C1</td>
<td>2.28</td>
<td>0.63</td>
</tr>
<tr>
<td>29:X:1372:A:C5</td>
<td>29:X:1373:G:N7</td>
<td>2.67</td>
<td>0.63</td>
</tr>
<tr>
<td>29:X:2383:C:H2'</td>
<td>29:X:2384:G:O4</td>
<td>1.99</td>
<td>0.63</td>
</tr>
<tr>
<td>9:D:46:ASP:C</td>
<td>9:D:48:LYS:N</td>
<td>2.50</td>
<td>0.63</td>
</tr>
<tr>
<td>17:L:35:SER:C</td>
<td>17:L:36:LYS:HD2</td>
<td>2.19</td>
<td>0.63</td>
</tr>
<tr>
<td>24:S:89:GLY:O</td>
<td>24:S:90:GLU:HG2</td>
<td>1.98</td>
<td>0.63</td>
</tr>
<tr>
<td>29:X:1175:A:C2</td>
<td>29:X:1176:U:C2</td>
<td>2.87</td>
<td>0.63</td>
</tr>
<tr>
<td>29:X:1764:A:H2</td>
<td>29:X:1765:C:H5</td>
<td>1.79</td>
<td>0.63</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>29:X:663:G:H2'</td>
<td>29:X:664:C:C4'</td>
<td>2.29</td>
<td>0.63</td>
</tr>
<tr>
<td>8:C:112:GLN:HA</td>
<td>8:C:116:LYS:CG</td>
<td>2.29</td>
<td>0.63</td>
</tr>
<tr>
<td>10:E:56:SER:HB2</td>
<td>10:E:61:His:HD2</td>
<td>1.63</td>
<td>0.63</td>
</tr>
<tr>
<td>10:E:92:VAL:O</td>
<td>10:E:94:PHEN</td>
<td>2.31</td>
<td>0.63</td>
</tr>
<tr>
<td>17:L:33:ARG:NH2</td>
<td>17:L:103:LEU:CB</td>
<td>2.61</td>
<td>0.63</td>
</tr>
<tr>
<td>17:L:34:SER:HB2</td>
<td>17:L:94:TYR:CE2</td>
<td>2.34</td>
<td>0.63</td>
</tr>
<tr>
<td>20:O:19:VAL:HG13</td>
<td>20:O:90:PHED1</td>
<td>2.34</td>
<td>0.63</td>
</tr>
<tr>
<td>23:R:102:LYS:HE2</td>
<td>29:X:100:G:C6</td>
<td>2.34</td>
<td>0.63</td>
</tr>
<tr>
<td>29:X:1791:C:H5'</td>
<td>29:X:1792:C:OP1</td>
<td>1.99</td>
<td>0.63</td>
</tr>
<tr>
<td>29:X:469:G:HO2'</td>
<td>29:X:480:G:H1</td>
<td>1.47</td>
<td>0.63</td>
</tr>
<tr>
<td>8:C:148:VAL:N</td>
<td>8:C:166:TRP:O</td>
<td>2.25</td>
<td>0.62</td>
</tr>
<tr>
<td>8:C:194:GLU:O</td>
<td>8:C:195:ILE:HG23</td>
<td>1.99</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:2239:C:H2'</td>
<td>29:X:2240:C:H6</td>
<td>1.63</td>
<td>0.62</td>
</tr>
<tr>
<td>31:Z:36:A:O2'</td>
<td>31:Z:37:C:H5</td>
<td>1.80</td>
<td>0.62</td>
</tr>
<tr>
<td>9:D:63:GLN:HG3</td>
<td>9:D:95:ARG:HH21</td>
<td>1.64</td>
<td>0.62</td>
</tr>
<tr>
<td>14:I:38:LYS:NZ</td>
<td>14:I:38:LYS:HB3</td>
<td>2.14</td>
<td>0.62</td>
</tr>
<tr>
<td>14:I:97:ARG:O</td>
<td>14:I:98:LEU:HB3</td>
<td>1.98</td>
<td>0.62</td>
</tr>
<tr>
<td>16:K:31:GLU:O</td>
<td>16:K:33:ARG:N</td>
<td>2.32</td>
<td>0.62</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18:M:43:ASN:C</td>
<td>18:M:43:ASN:HD22</td>
<td>2.03</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:1337:G:O2'</td>
<td>29:X:1632:A:C6</td>
<td>2.51</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:2195:C:C4</td>
<td>29:X:2196:U:O4</td>
<td>2.51</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:417:C:H4'</td>
<td>29:X:418:C:H5'</td>
<td>1.79</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:492:G:1'</td>
<td>29:X:516:G:HG21</td>
<td>1.63</td>
<td>0.62</td>
</tr>
<tr>
<td>14:I:76:LYS:O</td>
<td>14:I:79:GLN:HG2</td>
<td>1.99</td>
<td>0.62</td>
</tr>
<tr>
<td>23:R:80:LYS:HE3</td>
<td>23:R:80:LYS:C</td>
<td>2.19</td>
<td>0.62</td>
</tr>
<tr>
<td>14:I:43:ALA:HB1</td>
<td>29:X:684:C:H5</td>
<td>1.65</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:717:G:C2'</td>
<td>29:X:739:G:N2</td>
<td>2.61</td>
<td>0.62</td>
</tr>
<tr>
<td>12:G:64:GLY:C</td>
<td>12:G:67:ARG:HG3</td>
<td>2.20</td>
<td>0.62</td>
</tr>
<tr>
<td>14:I:130:ILE:HA</td>
<td>14:I:140:VAL:HG21</td>
<td>1.82</td>
<td>0.62</td>
</tr>
<tr>
<td>21:P:37:LYS:HG3</td>
<td>29:X:1279:G:H22</td>
<td>1.64</td>
<td>0.62</td>
</tr>
<tr>
<td>23:R:8:SER:O</td>
<td>23:R:11:ASN:N</td>
<td>2.31</td>
<td>0.62</td>
</tr>
<tr>
<td>23:R:37:LEU:HD11</td>
<td>23:R:49:GLU:HG2</td>
<td>1.82</td>
<td>0.62</td>
</tr>
<tr>
<td>23:R:8:SER:O</td>
<td>23:R:11:ASN:N</td>
<td>2.31</td>
<td>0.62</td>
</tr>
<tr>
<td>23:R:37:LEU:HD11</td>
<td>23:R:49:GLU:HG2</td>
<td>1.82</td>
<td>0.62</td>
</tr>
<tr>
<td>23:R:84:VAL:CG2</td>
<td>23:R:89:GLY:HA2</td>
<td>2.29</td>
<td>0.62</td>
</tr>
<tr>
<td>24:S:3:LEU:HB2</td>
<td>24:S:34:LEU:CA</td>
<td>2.30</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:417:C:H1'</td>
<td>29:X:419:G:C5</td>
<td>2.35</td>
<td>0.62</td>
</tr>
<tr>
<td>14:I:40:ARG:NH2</td>
<td>29:X:577:U:OP1</td>
<td>2.32</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:748:A:H3'</td>
<td>29:X:749:C:C6</td>
<td>2.35</td>
<td>0.62</td>
</tr>
<tr>
<td>30:Y:43:HIS:C</td>
<td>30:Y:44:HIS:HD2</td>
<td>2.02</td>
<td>0.62</td>
</tr>
<tr>
<td>7:B:1:MET:HG2</td>
<td>7:B:2:LYS:N</td>
<td>2.14</td>
<td>0.62</td>
</tr>
<tr>
<td>8:C:134:ILE:O</td>
<td>8:C:137:ALA:HB3</td>
<td>1.98</td>
<td>0.62</td>
</tr>
<tr>
<td>10:E:30:LYS:HG2</td>
<td>10:E:79:VAL:C</td>
<td>2.20</td>
<td>0.62</td>
</tr>
<tr>
<td>23:R:56:LYS:HB3</td>
<td>23:R:69:GLN:HG2</td>
<td>1.82</td>
<td>0.62</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24:S:6:LYS:HB2</td>
<td>24:S:31:SER:HB3</td>
<td>1.82</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:1040:A:C8</td>
<td>29:X:1041:G:C8</td>
<td>2.88</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:1053:G:C4</td>
<td>29:X:1054:C:C5</td>
<td>2.88</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:2081:U:H2'</td>
<td>29:X:2082:C:C6</td>
<td>2.33</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:2310:G:N2</td>
<td>29:X:2364:C:C4</td>
<td>2.68</td>
<td>0.62</td>
</tr>
<tr>
<td>17:L:89:PHE:CE1</td>
<td>29:X:2356:A:N3</td>
<td>2.68</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:343:A:H1'</td>
<td>29:X:346:C:N4</td>
<td>2.15</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:433:G:H21</td>
<td>29:X:434:C:H1'</td>
<td>1.63</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:481:A:C6</td>
<td>29:X:482:A:C6</td>
<td>2.88</td>
<td>0.62</td>
</tr>
<tr>
<td>8:C:176:ASN:HB2</td>
<td>29:X:626:A:O2'</td>
<td>2.00</td>
<td>0.62</td>
</tr>
<tr>
<td>10:E:41:LEU:HD13</td>
<td>10:E:64:LEU:HB3</td>
<td>1.81</td>
<td>0.62</td>
</tr>
<tr>
<td>23:R:29:HIS:CE1</td>
<td>23:R:51:VAL:HG22</td>
<td>2.35</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:1193:G:H2'</td>
<td>29:X:1194:U:C5'</td>
<td>2.30</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:1223:G:C4'</td>
<td>29:X:1224:A:H5&quot;</td>
<td>2.28</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:2194:A:H3'</td>
<td>29:X:2195:C:C5'</td>
<td>2.21</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:2240:C:C2'</td>
<td>29:X:2241:U:H5'</td>
<td>2.29</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:2691:C:H2'</td>
<td>29:X:2692:A:C5'</td>
<td>2.28</td>
<td>0.62</td>
</tr>
<tr>
<td>16:K:3:HIS:HE1</td>
<td>29:X:2795:A:O3'</td>
<td>1.81</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:403:A:H5&quot;</td>
<td>29:X:404:A:OP1</td>
<td>2.00</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:74:G:C8</td>
<td>29:X:774:A:O5'</td>
<td>2.53</td>
<td>0.62</td>
</tr>
<tr>
<td>8:C:104:LEU:HD23</td>
<td>8:C:104:LEU:N</td>
<td>2.14</td>
<td>0.62</td>
</tr>
<tr>
<td>12:G:93:LYS:HB3</td>
<td>12:G:96:ASP:O</td>
<td>2.00</td>
<td>0.62</td>
</tr>
<tr>
<td>16:K:49:GLU:O</td>
<td>16:K:52:ILE:HG12</td>
<td>2.00</td>
<td>0.62</td>
</tr>
<tr>
<td>16:K:74:ASP:OD1</td>
<td>16:K:77:ARG:NH2</td>
<td>2.32</td>
<td>0.62</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29: X:1066:G:H2'&lt;</td>
<td>29: X:1067:G:C8</td>
<td>2.35</td>
<td>0.62</td>
</tr>
<tr>
<td>29: X:1356:G:H1'</td>
<td>29: X:1613:G:C2</td>
<td>2.35</td>
<td>0.62</td>
</tr>
<tr>
<td>29: X:2471:U:O2'</td>
<td>29: X:2472:U:H5'</td>
<td>2.00</td>
<td>0.62</td>
</tr>
<tr>
<td>29: X:2663:U:C2</td>
<td>29: X:2664:G:C8</td>
<td>2.87</td>
<td>0.62</td>
</tr>
<tr>
<td>29: X:396:U:O4</td>
<td>29: X:398:C:C2</td>
<td>2.52</td>
<td>0.62</td>
</tr>
<tr>
<td>29: X:417:C:C1'</td>
<td>29: X:419:G:C8</td>
<td>2.82</td>
<td>0.62</td>
</tr>
<tr>
<td>20: O:88:GLN:NE2</td>
<td>29: X:1004:A:N3</td>
<td>2.45</td>
<td>0.62</td>
</tr>
<tr>
<td>29: X:2220:A:H2'</td>
<td>29: X:2221:G:C8</td>
<td>2.35</td>
<td>0.62</td>
</tr>
<tr>
<td>29: X:2876:C:H2'</td>
<td>29: X:2877:A:C4</td>
<td>2.34</td>
<td>0.62</td>
</tr>
<tr>
<td>29: X:748:A:H5'</td>
<td>29: X:749:C:OP2</td>
<td>2.00</td>
<td>0.62</td>
</tr>
<tr>
<td>29: X:972:CH4'</td>
<td>29: X:973:U:OP2</td>
<td>1.98</td>
<td>0.62</td>
</tr>
<tr>
<td>9: D:135:GLN:HG3</td>
<td>9: D:151:GLY:CA</td>
<td>2.30</td>
<td>0.62</td>
</tr>
<tr>
<td>10: E:37:TYR:CZ</td>
<td>10: E:72:VAL:HG22</td>
<td>2.34</td>
<td>0.62</td>
</tr>
<tr>
<td>14: I:120:VAL:CG1</td>
<td>14: I:122:VAL:HG13</td>
<td>2.30</td>
<td>0.62</td>
</tr>
<tr>
<td>14: I:127:ALA:O</td>
<td>14: I:129:ALA:N</td>
<td>2.33</td>
<td>0.62</td>
</tr>
<tr>
<td>16: K:6:ALA:HB1</td>
<td>29: X:2848:A:C2</td>
<td>2.35</td>
<td>0.62</td>
</tr>
<tr>
<td>7: B:183:LEU:CD2</td>
<td>18: M:16:ILE:HD13</td>
<td>2.21</td>
<td>0.62</td>
</tr>
<tr>
<td>29: X:1060:C:H2'</td>
<td>29: X:1061:A:C8</td>
<td>2.34</td>
<td>0.62</td>
</tr>
<tr>
<td>7: B:141:ILE:HG21</td>
<td>7: B:154:LYS:HZ3</td>
<td>1.65</td>
<td>0.62</td>
</tr>
<tr>
<td>8: C:112:GLN:HA</td>
<td>8: C:116:LYS:CD</td>
<td>2.30</td>
<td>0.62</td>
</tr>
<tr>
<td>8: C:112:GLN:HA</td>
<td>8: C:116:LYS:HD3</td>
<td>1.82</td>
<td>0.62</td>
</tr>
<tr>
<td>11: F:54:PRO:CG</td>
<td>11: F:70:LYS:HD2</td>
<td>2.30</td>
<td>0.62</td>
</tr>
<tr>
<td>15: J:75:VAL:HG12</td>
<td>15: J:76:THR:H</td>
<td>1.65</td>
<td>0.62</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17:L:15:ARG:HD2</td>
<td>17:L:91:ARG:CD</td>
<td>2.30</td>
<td>0.62</td>
</tr>
<tr>
<td>7:B:12:THR:OG1</td>
<td>18:M:17:GLU:OE1</td>
<td>2.15</td>
<td>0.62</td>
</tr>
<tr>
<td>20:O:9:GLY:O</td>
<td>20:O:10:LYS:HB3</td>
<td>2.00</td>
<td>0.62</td>
</tr>
<tr>
<td>24:S:44:ARG:HD3</td>
<td>24:S:45:GLN:NE2</td>
<td>2.15</td>
<td>0.62</td>
</tr>
<tr>
<td>25:T:41:ARG:HH1</td>
<td>25:T:41:ARG:HG3</td>
<td>1.64</td>
<td>0.62</td>
</tr>
<tr>
<td>27:V:13:ASP:O</td>
<td>27:V:17:GLU:HG2</td>
<td>2.00</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:1466:C:H2'</td>
<td>29:X:1467:U:Cl'</td>
<td>2.30</td>
<td>0.62</td>
</tr>
<tr>
<td>29:X:2642:G:H2'</td>
<td>29:X:2643:G:C5'</td>
<td>2.30</td>
<td>0.62</td>
</tr>
<tr>
<td>6:A:208:LYS:HE3</td>
<td>6:A:208:LYS:HA</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>7:B:136:ARG:HH1</td>
<td>7:B:136:ARG:CG</td>
<td>2.14</td>
<td>0.61</td>
</tr>
<tr>
<td>9:D:75:SER:CB</td>
<td>9:D:79:LEU:HD22</td>
<td>2.30</td>
<td>0.61</td>
</tr>
<tr>
<td>14:I:112:GLY:O</td>
<td>14:I:113:GLU:HG3</td>
<td>2.00</td>
<td>0.61</td>
</tr>
<tr>
<td>14:I:18:ARG:CB</td>
<td>14:I:21:ARG:HB2</td>
<td>2.30</td>
<td>0.61</td>
</tr>
<tr>
<td>14:I:86:THR:C</td>
<td>14:I:88:PHE:N</td>
<td>2.53</td>
<td>0.61</td>
</tr>
<tr>
<td>18:M:95:GLU:HG3</td>
<td>18:M:95:GLU:O</td>
<td>2.00</td>
<td>0.61</td>
</tr>
<tr>
<td>20:O:36:LYS:HD2</td>
<td>20:O:54:TYR:C</td>
<td>2.20</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:179:U:H2'</td>
<td>29:X:180:C:C6</td>
<td>2.35</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:2426:G:H4'</td>
<td>29:X:2427:A:O5'</td>
<td>2.00</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:429:C:H2'</td>
<td>29:X:430:C:C6</td>
<td>2.35</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:585:U:H2'</td>
<td>29:X:586:G:C8</td>
<td>2.35</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:748:A:H3'</td>
<td>29:X:749:C:H6</td>
<td>1.65</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:872:G:H2'</td>
<td>29:X:928:G:C6</td>
<td>2.35</td>
<td>0.61</td>
</tr>
<tr>
<td>17:L:57:ALA:HB1</td>
<td>31:L:119:G:H4'</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>14:I:82:ASP:H</td>
<td>14:I:114:ILE:CG2</td>
<td>2.12</td>
<td>0.61</td>
</tr>
<tr>
<td>14:I:86:THR:O</td>
<td>14:I:86:THR:HG22</td>
<td>2.00</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>29:X:1121:G:H2'</td>
<td>29:X:1122:A:C8</td>
<td>2.35</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:583:C:H1'</td>
<td>29:X:2038:C:C6</td>
<td>2.35</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:497:C:C5'</td>
<td>29:X:497:C:H6</td>
<td>2.09</td>
<td>0.61</td>
</tr>
<tr>
<td>31:Z:35:C:H2'</td>
<td>31:Z:36:A:O4'</td>
<td>2.00</td>
<td>0.61</td>
</tr>
<tr>
<td>4:4:10:MET:HE3</td>
<td>4:4:32:HIS:CA</td>
<td>2.21</td>
<td>0.61</td>
</tr>
<tr>
<td>7:B:153:GLY:O</td>
<td>7:B:154:LYS:C</td>
<td>2.39</td>
<td>0.61</td>
</tr>
<tr>
<td>8:C:129:LYS:C</td>
<td>8:C:131:LYS:H</td>
<td>2.03</td>
<td>0.61</td>
</tr>
<tr>
<td>9:D:150:ARG:HG11</td>
<td>9:D:150:ARG:HG3</td>
<td>1.65</td>
<td>0.61</td>
</tr>
<tr>
<td>10:E:84:THR:HA</td>
<td>10:E:133:VAL:O</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>11:F:100:ASN:OD1</td>
<td>11:F:101:TRP:N</td>
<td>2.33</td>
<td>0.61</td>
</tr>
<tr>
<td>14:I:73:GLU:HG2</td>
<td>14:I:101:ARG:CB</td>
<td>2.31</td>
<td>0.61</td>
</tr>
<tr>
<td>14:I:54:SER:OG</td>
<td>14:I:59:ARG:NH1</td>
<td>2.34</td>
<td>0.61</td>
</tr>
<tr>
<td>15:J:64:LYS:CD</td>
<td>15:J:64:LYS:H</td>
<td>1.87</td>
<td>0.61</td>
</tr>
<tr>
<td>18:M:24:LEU:O</td>
<td>18:M:25:PRO:O</td>
<td>2.18</td>
<td>0.61</td>
</tr>
<tr>
<td>20:O:78:VAL:O</td>
<td>20:O:79:GLN:HB2</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>23:R:39:ALA:O</td>
<td>23:R:41:PRO:HD3</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>10:E:143:GLN:HG2</td>
<td>29:X:2725:C:HI'</td>
<td>1.81</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:590:C:H2'</td>
<td>29:X:591:G:H8</td>
<td>1.64</td>
<td>0.61</td>
</tr>
<tr>
<td>8:C:197:GLU:HG2</td>
<td>8:C:198:GLU:N</td>
<td>2.14</td>
<td>0.61</td>
</tr>
<tr>
<td>12:G:103:TYR:CE1</td>
<td>12:G:111:LYS:HA</td>
<td>2.35</td>
<td>0.61</td>
</tr>
<tr>
<td>14:I:117:ALA:HA</td>
<td>14:I:137:GLY:O</td>
<td>1.98</td>
<td>0.61</td>
</tr>
<tr>
<td>14:I:10:PRO:CA</td>
<td>14:I:14:LYS:HB2</td>
<td>2.28</td>
<td>0.61</td>
</tr>
<tr>
<td>15:J:77:LYS:HG3</td>
<td>15:J:78:LYS:H</td>
<td>1.64</td>
<td>0.61</td>
</tr>
<tr>
<td>17:L:30:SER:O</td>
<td>17:L:31:VAL:HG12</td>
<td>1.99</td>
<td>0.61</td>
</tr>
<tr>
<td>17:L:9:ARG:O</td>
<td>17:L:10:LYS:C</td>
<td>2.39</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:1383:C:C2</td>
<td>29:X:1384:G:C8</td>
<td>2.87</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:2585:C:C2'</td>
<td>29:X:2586:G:H5'</td>
<td>2.30</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:26:G:N1</td>
<td>29:X:27:G:N2</td>
<td>2.47</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:471:A:H2'</td>
<td>29:X:472:C:O4'</td>
<td>2.00</td>
<td>0.61</td>
</tr>
<tr>
<td>21:P:39:ARG:NH2</td>
<td>29:X:527:C:O2'</td>
<td>2.32</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:917:U:C2'</td>
<td>29:X:918:A:H5'</td>
<td>2.30</td>
<td>0.61</td>
</tr>
<tr>
<td>6:A:37:LEU:HD12</td>
<td>29:X:1808:C:H41</td>
<td>1.65</td>
<td>0.61</td>
</tr>
<tr>
<td>9:D:36:VAL:HG11</td>
<td>9:D:57:LEU:HD22</td>
<td>1.83</td>
<td>0.61</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24:S:73:LYS:C</td>
<td>24:S:75:LYS:H</td>
<td>2.03</td>
<td>0.61</td>
</tr>
<tr>
<td>26:U:11:LYS:NZ</td>
<td>26:U:75:TYR:CD1</td>
<td>2.68</td>
<td>0.61</td>
</tr>
<tr>
<td>6:A:39:LYS:HE2</td>
<td>29:X:1808:C:O5'</td>
<td>2.00</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:988:G:N3</td>
<td>29:X:1012:A:H2</td>
<td>1.97</td>
<td>0.61</td>
</tr>
<tr>
<td>31:Z:95:U:H2'</td>
<td>31:Z:96:C:C6</td>
<td>2.35</td>
<td>0.61</td>
</tr>
<tr>
<td>6:A:76:ASN:OD1</td>
<td>6:A:118:ASN:HB2</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>10:E:17:VAL:HG12</td>
<td>10:E:18:ASN:N</td>
<td>2.15</td>
<td>0.61</td>
</tr>
<tr>
<td>10:E:38:ASN:H</td>
<td>10:E:41:LEU:HD23</td>
<td>1.64</td>
<td>0.61</td>
</tr>
<tr>
<td>10:E:89:LEU:HD11</td>
<td>10:E:96:ALA:CB</td>
<td>2.31</td>
<td>0.61</td>
</tr>
<tr>
<td>16:K:11:ASN:OD1</td>
<td>16:K:17:ARG:NH2</td>
<td>2.34</td>
<td>0.61</td>
</tr>
<tr>
<td>16:K:45:ARG:HB3</td>
<td>16:K:46:PRO:HD3</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:208:C:O2'</td>
<td>29:X:209:G:H5'</td>
<td>2.00</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:224:G:H4'</td>
<td>29:X:399:G:C5</td>
<td>2.34</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:649:G:H22</td>
<td>29:X:661:C:H1'</td>
<td>1.66</td>
<td>0.61</td>
</tr>
<tr>
<td>8:C:3:GLN:CG</td>
<td>8:C:116:LYS:HD2</td>
<td>2.18</td>
<td>0.61</td>
</tr>
<tr>
<td>12:G:54:LEU:O</td>
<td>12:G:58:ILE:HG13</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>15:J:99:LYS:HD2</td>
<td>15:J:100:PRO:HD3</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>17:L:54:ALA:HB3</td>
<td>17:L:75:LEU:CB</td>
<td>2.22</td>
<td>0.61</td>
</tr>
<tr>
<td>24:S:13:LYS:NZ</td>
<td>24:S:18:MET:HB2</td>
<td>2.15</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:1324:G:H1'</td>
<td>29:X:1326:U:O4</td>
<td>2.00</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:2195:C:C2'</td>
<td>29:X:2196:U:H5'</td>
<td>2.30</td>
<td>0.61</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>29:X:2500:C:H2'</td>
<td>29:X:2501:U:C6</td>
<td>2.36</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:333:A:H2'</td>
<td>29:X:350:U:O2</td>
<td>2.00</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:38:G:H2'</td>
<td>29:X:39:C:C6</td>
<td>2.35</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:716:U:H2'</td>
<td>29:X:717:G:O4'</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>4:4:2:LYS:HG2</td>
<td>4:4:4:ARG:CD</td>
<td>2.31</td>
<td>0.61</td>
</tr>
<tr>
<td>8:C:93:TYR:N</td>
<td>8:C:93:TYR:HD2</td>
<td>1.98</td>
<td>0.61</td>
</tr>
<tr>
<td>16:K:20:LEU:O</td>
<td>16:K:23:ALA:N</td>
<td>2.34</td>
<td>0.61</td>
</tr>
<tr>
<td>23:R:24:VAL:HB</td>
<td>23:R:29:HIS:O</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:1122:A:O2'</td>
<td>29:X:1123:G:H4'</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:1468:A:C5'</td>
<td>29:X:1472:C:N4</td>
<td>2.55</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:142:G:C8</td>
<td>29:X:2008:C:H4'</td>
<td>2.36</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:2312:A:H4'</td>
<td>29:X:2313:G:O5'</td>
<td>2.00</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:2389:G:N2</td>
<td>29:X:2390:A:H1'</td>
<td>2.16</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:2594:U:C2</td>
<td>29:X:2595:C:C5</td>
<td>2.88</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:1982:C:OP1</td>
<td>29:X:2704:U:H5'</td>
<td>2.00</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:408:U:O2'</td>
<td>29:X:409:G:C8</td>
<td>2.53</td>
<td>0.61</td>
</tr>
<tr>
<td>28:W:11:GLY:HA2</td>
<td>29:X:980:G:O3'</td>
<td>2.00</td>
<td>0.61</td>
</tr>
<tr>
<td>31:Z:14:C:H4'</td>
<td>31:Z:17:A:N6</td>
<td>2.16</td>
<td>0.61</td>
</tr>
<tr>
<td>4:4:19:ARG:NH1</td>
<td>4:4:24:LEU:HD22</td>
<td>2.15</td>
<td>0.61</td>
</tr>
<tr>
<td>7:B:78:LEU:O</td>
<td>7:B:79:ARG:NE</td>
<td>2.34</td>
<td>0.61</td>
</tr>
<tr>
<td>8:C:47:THR:CG2</td>
<td>8:C:85:GLY:H</td>
<td>2.13</td>
<td>0.61</td>
</tr>
<tr>
<td>9:D:35:VAL:HG12</td>
<td>9:D:36:VAL:N</td>
<td>2.15</td>
<td>0.61</td>
</tr>
<tr>
<td>10:E:105:MET:HB2</td>
<td>10:E:113:VAL:HB</td>
<td>1.83</td>
<td>0.61</td>
</tr>
<tr>
<td>14:I:76:LYS:HG3</td>
<td>14:I:111:SER:CB</td>
<td>2.31</td>
<td>0.61</td>
</tr>
<tr>
<td>24:S:1:MET:HG3</td>
<td>24:S:52:PHE:CD2</td>
<td>2.36</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:1624:A:O2'</td>
<td>29:X:1625:A:H5'</td>
<td>2.00</td>
<td>0.61</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>29:X:638:A:O2'</td>
<td>29:X:639:G:C8</td>
<td>2.51</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:936:A:O2'</td>
<td>29:X:937:C:H5'</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>7:B:183:LEU:HD23</td>
<td>7:B:183:LEU:N</td>
<td>2.16</td>
<td>0.61</td>
</tr>
<tr>
<td>8:C:66:ASN:HA</td>
<td>29:X:1268:U:C6</td>
<td>2.36</td>
<td>0.61</td>
</tr>
<tr>
<td>9:D:12:VAL:HG12</td>
<td>9:D:16:LEU:CD1</td>
<td>2.27</td>
<td>0.61</td>
</tr>
<tr>
<td>9:D:72:LYS:HA</td>
<td>9:D:81:GLN:C</td>
<td>2.21</td>
<td>0.61</td>
</tr>
<tr>
<td>9:D:85:VAL:HG23</td>
<td>9:D:86:GLY:H</td>
<td>1.65</td>
<td>0.61</td>
</tr>
<tr>
<td>9:D:92:ARG:HH12</td>
<td>31:Z:46:G:H4'</td>
<td>1.64</td>
<td>0.61</td>
</tr>
<tr>
<td>14:I:8:PRO:O</td>
<td>29:X:1218:C:H1'</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>18:M:32:THR:HG22</td>
<td>18:M:33:VAL:N</td>
<td>2.16</td>
<td>0.61</td>
</tr>
<tr>
<td>18:M:39:VAL:CG1</td>
<td>18:M:45:THR:HG23</td>
<td>2.29</td>
<td>0.61</td>
</tr>
<tr>
<td>27:V:16:LYS:HG2</td>
<td>27:V:17:GLU:OE2</td>
<td>2.01</td>
<td>0.61</td>
</tr>
<tr>
<td>29:X:1854:G:HO2'</td>
<td>29:X:1855:G:H5'</td>
<td>1.65</td>
<td>0.61</td>
</tr>
<tr>
<td>7:B:121:ASN:O</td>
<td>7:B:122:PHE:C</td>
<td>2.38</td>
<td>0.60</td>
</tr>
<tr>
<td>8:C:34:GLN:HG2</td>
<td>29:X:627:A:OP1</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>9:D:108:LEU:HD22</td>
<td>9:D:114:PHE:CE1</td>
<td>2.36</td>
<td>0.60</td>
</tr>
<tr>
<td>10:E:137:ASP:OD2</td>
<td>10:E:139:GLN:HB2</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>14:I:120:VAL:HG12</td>
<td>14:I:122:VAL:HG13</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>14:I:127:ALA:C</td>
<td>14:I:129:ALA:H</td>
<td>2.05</td>
<td>0.60</td>
</tr>
<tr>
<td>18:M:44:ARG:HD1</td>
<td>18:M:46:ARG:HH1</td>
<td>1.66</td>
<td>0.60</td>
</tr>
<tr>
<td>20:O:24:SER:O</td>
<td>20:O:26:GLN:N</td>
<td>2.34</td>
<td>0.60</td>
</tr>
<tr>
<td>23:R:110:SER:OG</td>
<td>23:R:111:GLY:N</td>
<td>2.34</td>
<td>0.60</td>
</tr>
<tr>
<td>24:S:64:ALA:HA</td>
<td>24:S:86:VAL:N</td>
<td>2.16</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:1578:U:H2'</td>
<td>29:X:1579:G:H8</td>
<td>1.64</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:1629:G:H2'</td>
<td>29:X:1633:CH42</td>
<td>1.65</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:172:A:N7</td>
<td>29:X:175:C:C5</td>
<td>2.69</td>
<td>0.60</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>29:X:2238:G:H1'</td>
<td>29:X:2406:C:C2</td>
<td>2.36</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2352:A:H2'</td>
<td>29:X:2353:G:H8</td>
<td>1.65</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2498:U:C4'</td>
<td>29:X:2499:C:OP1</td>
<td>2.44</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:580:A:N7</td>
<td>29:X:584:A:C5</td>
<td>2.68</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:754:G:H2'</td>
<td>29:X:755:C:C6</td>
<td>2.36</td>
<td>0.60</td>
</tr>
<tr>
<td>6:A:172:TYR:HA</td>
<td>6:A:186:HIS:HA</td>
<td>1.82</td>
<td>0.60</td>
</tr>
<tr>
<td>9:D:122:PHE:CD2</td>
<td>9:D:129:ASN:HB2</td>
<td>2.36</td>
<td>0.60</td>
</tr>
<tr>
<td>12:G:158:HIS:HA</td>
<td>12:G:161:GLN:OE1</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>14:I:141:VAL:C</td>
<td>14:I:142:LEU:HD23</td>
<td>2.20</td>
<td>0.60</td>
</tr>
<tr>
<td>14:I:28:LYS:HZ3</td>
<td>14:I:36:GLY:HA2</td>
<td>1.65</td>
<td>0.60</td>
</tr>
<tr>
<td>7:B:195:LEU:H</td>
<td>18:M:2:GLN:HG2</td>
<td>1.65</td>
<td>0.60</td>
</tr>
<tr>
<td>20:O:66:GLY:O</td>
<td>20:O:87:ARG:NH1</td>
<td>2.33</td>
<td>0.60</td>
</tr>
<tr>
<td>21:P:68:VAL:HG12</td>
<td>21:P:68:VAL:O</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>24:S:130:ILE:HD12</td>
<td>24:S:130:ILE:N</td>
<td>2.16</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:107:G:N2</td>
<td>29:X:108:G:H1'</td>
<td>2.15</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:1373:G:N2</td>
<td>29:X:1374:G:H1'</td>
<td>2.17</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:187:U:H2'</td>
<td>29:X:188:G:C8</td>
<td>2.34</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2422:C:O2'</td>
<td>29:X:2423:G:H5'</td>
<td>2.00</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2431:C:H42</td>
<td>29:X:2483:U:H3</td>
<td>1.48</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2495:G:O2'</td>
<td>29:X:2496:C:H5'</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2857:C:H2'</td>
<td>29:X:2858:A:O5'</td>
<td>2.02</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:48:A:H4'</td>
<td>29:X:49:U:C5'</td>
<td>2.31</td>
<td>0.60</td>
</tr>
<tr>
<td>6:A:227:ASN:ND2</td>
<td>29:X:797:A:H5''</td>
<td>2.16</td>
<td>0.60</td>
</tr>
<tr>
<td>7:B:116:VAL:H</td>
<td>7:B:136:ARG:HE</td>
<td>0.64</td>
<td>0.60</td>
</tr>
<tr>
<td>7:B:176:ARG:HH21</td>
<td>18:M:16:ILE:HA</td>
<td>1.66</td>
<td>0.60</td>
</tr>
<tr>
<td>8:C:147:LYS:N</td>
<td>8:C:184:ASP:OD2</td>
<td>2.27</td>
<td>0.60</td>
</tr>
<tr>
<td>9:D:103:LEU:HA</td>
<td>9:D:107:GLY:HA3</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>9:D:122:PHE:O</td>
<td>9:D:124:GLY:N</td>
<td>2.35</td>
<td>0.60</td>
</tr>
<tr>
<td>9:D:46:ASP:HB2</td>
<td>9:D:49:ALA:HB3</td>
<td>1.81</td>
<td>0.60</td>
</tr>
<tr>
<td>11:F:60:TYR:O</td>
<td>11:F:61:ALA:HB2</td>
<td>2.00</td>
<td>0.60</td>
</tr>
<tr>
<td>14:I:100:ARG:O</td>
<td>14:I:100:ARG:HG3</td>
<td>2.02</td>
<td>0.60</td>
</tr>
<tr>
<td>14:I:13:ARG:NH2</td>
<td>14:I:13:ARG:CG</td>
<td>2.61</td>
<td>0.60</td>
</tr>
<tr>
<td>17:L:38:ILE:CD1</td>
<td>17:L:39:TYR:H</td>
<td>2.06</td>
<td>0.60</td>
</tr>
<tr>
<td>17:L:8:ARG:HH11</td>
<td>17:L:8:ARG:HB2</td>
<td>1.65</td>
<td>0.60</td>
</tr>
<tr>
<td>24:S:1:MET:HE2</td>
<td>24:S:52:PHE:HB3</td>
<td>1.82</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:1467:U:C6</td>
<td>29:X:1467:U:H5''</td>
<td>2.36</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:1690:U:H2'</td>
<td>29:X:1691:G:H5'</td>
<td>1.82</td>
<td>0.60</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>29:X:2327:U:O4</td>
<td>29:X:2361:G:C2</td>
<td>2.53</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2725:C:H2'</td>
<td>29:X:2726:U:H6</td>
<td>1.65</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:538:A:C2</td>
<td>29:X:2025:A:C6</td>
<td>2.89</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:760:U:C4</td>
<td>29:X:2592:U:O2</td>
<td>2.54</td>
<td>0.60</td>
</tr>
<tr>
<td>6:A:105:ILE:HG22</td>
<td>6:A:106:LEU:O</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>7:B:120:TRP:CD1</td>
<td>7:B:155:ARG:HB3</td>
<td>2.36</td>
<td>0.60</td>
</tr>
<tr>
<td>9:D:151:GLY:O</td>
<td>9:D:152:MET:HB3</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>15:J:37:ALA:CA</td>
<td>15:J:130:THR:HG22</td>
<td>2.21</td>
<td>0.60</td>
</tr>
<tr>
<td>17:L:37:HIS:O</td>
<td>17:L:38:ILE:O</td>
<td>2.19</td>
<td>0.60</td>
</tr>
<tr>
<td>22:Q:76:LYS:HG2</td>
<td>22:Q:76:LYS:O</td>
<td>2.00</td>
<td>0.60</td>
</tr>
<tr>
<td>23:R:98:ILE:HB</td>
<td>23:R:100:ASP:H</td>
<td>1.67</td>
<td>0.60</td>
</tr>
<tr>
<td>23:R:8:SER:C</td>
<td>23:R:10:HIS:N</td>
<td>2.54</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:1090:C:O2'</td>
<td>29:X:1091:C:H5'</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>22:Q:34:THR:O</td>
<td>22:Q:38:ILE:HG22</td>
<td>2.02</td>
<td>0.60</td>
</tr>
<tr>
<td>27:V:2:LYS:HA</td>
<td>27:V:6:MET:HE2</td>
<td>1.83</td>
<td>0.60</td>
</tr>
</tbody>
</table>
**Continued from previous page...**

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:1134:C:H2'</td>
<td>29:X:1135:C:H6</td>
<td>1.67</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:1698:C:C2'</td>
<td>29:X:1753:A:H2'</td>
<td>2.32</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2170:C:H2'</td>
<td>29:X:2171:U:C4'</td>
<td>2.30</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2252:A:C2</td>
<td>29:X:2253:A:C5</td>
<td>2.90</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2298:U:H4'</td>
<td>29:X:2299:A:C8</td>
<td>2.37</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2501:U:O2'</td>
<td>29:X:2626:U:H5&quot;</td>
<td>2.02</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2522:G:H2'</td>
<td>29:X:2523:G:C8</td>
<td>2.37</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2553:G:H2'</td>
<td>29:X:2554:C:C6</td>
<td>2.37</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:527:C:O2'</td>
<td>29:X:528:G:H5'</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>30:Y:45:ILE:HD13</td>
<td>30:Y:57:VAL:CG2</td>
<td>2.31</td>
<td>0.60</td>
</tr>
<tr>
<td>6:A:184:ARG:NH2</td>
<td>6:A:268:ARG:NH1</td>
<td>2.50</td>
<td>0.60</td>
</tr>
<tr>
<td>9:D:75:SER:HB2</td>
<td>29:X:2289:A:C2</td>
<td>2.36</td>
<td>0.60</td>
</tr>
<tr>
<td>10:E:109:TYR:HE1</td>
<td>10:E:152:ARG:NH1</td>
<td>1.99</td>
<td>0.60</td>
</tr>
<tr>
<td>10:E:134:SER:HA</td>
<td>10:E:134:SER:HA</td>
<td>2.30</td>
<td>0.60</td>
</tr>
<tr>
<td>15:J:81:GLU:OE1</td>
<td>15:J:81:GLU:OE1</td>
<td>2.49</td>
<td>0.60</td>
</tr>
<tr>
<td>17:L:103:LEU:CB</td>
<td>17:L:103:LEU:CB</td>
<td>2.14</td>
<td>0.60</td>
</tr>
<tr>
<td>24:S:127:PRO:CD</td>
<td>24:S:127:PRO:CD</td>
<td>2.31</td>
<td>0.60</td>
</tr>
<tr>
<td>24:S:95:SER:N</td>
<td>24:S:95:SER:N</td>
<td>2.16</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:1167:A:H5&quot;</td>
<td>29:X:1167:A:H5&quot;</td>
<td>2.32</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:1509:A:H5&quot;</td>
<td>29:X:1509:A:H5&quot;</td>
<td>2.21</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2403:C:N4</td>
<td>29:X:2403:C:N4</td>
<td>2.35</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:512:A:H3'</td>
<td>29:X:512:A:H3'</td>
<td>2.17</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:664:C:H4'</td>
<td>29:X:664:C:H4'</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>31:Z:40:C:C6</td>
<td>31:Z:40:C:C6</td>
<td>2.37</td>
<td>0.60</td>
</tr>
<tr>
<td>12:G:108:GLY:CA</td>
<td>12:G:108:GLY:CA</td>
<td>2.84</td>
<td>0.60</td>
</tr>
<tr>
<td>12:G:156:HIS:ND1</td>
<td>12:G:156:HIS:ND1</td>
<td>2.17</td>
<td>0.60</td>
</tr>
<tr>
<td>12:G:134:MET:HE1</td>
<td>12:G:134:MET:HE1</td>
<td>2.22</td>
<td>0.60</td>
</tr>
<tr>
<td>23:R:81:VAL:N</td>
<td>23:R:81:VAL:N</td>
<td>2.17</td>
<td>0.60</td>
</tr>
<tr>
<td>25:T:2241:U:C5</td>
<td>25:T:2241:U:C5</td>
<td>2.70</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:1051:U:C5'</td>
<td>29:X:1051:U:C5'</td>
<td>2.32</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:1455:C:H6</td>
<td>29:X:1455:C:H6</td>
<td>1.65</td>
<td>0.60</td>
</tr>
<tr>
<td>21:P:2225:G:H4'</td>
<td>21:P:2225:G:H4'</td>
<td>2.02</td>
<td>0.60</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>29:X:93:A:O2'</td>
<td>29:X:94:C:H5'</td>
<td>2.02</td>
<td>0.60</td>
</tr>
<tr>
<td>31:Z:58:G:H4'</td>
<td>31:Z:59:A:C5'</td>
<td>2.31</td>
<td>0.60</td>
</tr>
<tr>
<td>8:C:173:ALA:HB1</td>
<td>8:C:193:LEU:HD13</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>9:D:108:LEU:HB2</td>
<td>9:D:109:PRO:HD3</td>
<td>1.84</td>
<td>0.60</td>
</tr>
<tr>
<td>10:E:35:VAL:HB</td>
<td>10:E:37:TYR:CE1</td>
<td>2.36</td>
<td>0.60</td>
</tr>
<tr>
<td>11:F:52:ILE:O</td>
<td>11:F:73:PRO:HD3</td>
<td>2.02</td>
<td>0.60</td>
</tr>
<tr>
<td>14:I:62:LYS:HG3</td>
<td>14:I:63:ARG:H</td>
<td>1.67</td>
<td>0.60</td>
</tr>
<tr>
<td>14:I:62:LYS:CG</td>
<td>14:I:63:ARG:N</td>
<td>2.64</td>
<td>0.60</td>
</tr>
<tr>
<td>16:K:91:PRO:C</td>
<td>16:K:92:GLY:O</td>
<td>2.40</td>
<td>0.60</td>
</tr>
<tr>
<td>17:L:97:HIS:CG</td>
<td>17:L:98:GLY:N</td>
<td>2.70</td>
<td>0.60</td>
</tr>
<tr>
<td>18:M:43:ASN:ND2</td>
<td>18:M:43:ASN:O</td>
<td>2.34</td>
<td>0.60</td>
</tr>
<tr>
<td>23:R:15:HIS:O</td>
<td>23:R:16:PHE:HB3</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>24:S:64:ALA:CB</td>
<td>24:S:85:MET:HA</td>
<td>2.32</td>
<td>0.60</td>
</tr>
<tr>
<td>25:T:26:PHE:CE2</td>
<td>29:X:870:C:H1'</td>
<td>2.36</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:1448:A:H2'</td>
<td>29:X:1449:C:H6</td>
<td>1.67</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:1551:U:H5'</td>
<td>29:X:1552:C:C6</td>
<td>2.36</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2194:A:C5'</td>
<td>29:X:2195:C:C5'</td>
<td>2.71</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2279:G:H2'</td>
<td>29:X:2280:A:C8</td>
<td>2.37</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2292:C:O2'</td>
<td>29:X:2293:G:H5'</td>
<td>2.02</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2475:C:O2'</td>
<td>29:X:2476:A:H5'</td>
<td>2.02</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2860:C:H2'</td>
<td>29:X:2861:A:O4'</td>
<td>2.02</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:449:C:H2'</td>
<td>29:X:450:C:H6</td>
<td>1.66</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:664:C:H5'</td>
<td>29:X:664:C:H6</td>
<td>1.66</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:913:A:H2'</td>
<td>29:X:914:C:O5'</td>
<td>2.02</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:957:G:O2'</td>
<td>29:X:958:G:H5'</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>31:Z:37:C:H2'</td>
<td>31:Z:38:C:O4'</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>6:A:53:PHE:O</td>
<td>6:A:54:ILE:HG22</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>7:B:119:ARG:HA</td>
<td>7:B:160:MET:CE</td>
<td>2.31</td>
<td>0.60</td>
</tr>
<tr>
<td>7:B:146:THR:O</td>
<td>7:B:147:PRO:C</td>
<td>2.40</td>
<td>0.60</td>
</tr>
<tr>
<td>7:B:53:PRO:HD2</td>
<td>18:M:6:LYS:NZ</td>
<td>2.14</td>
<td>0.60</td>
</tr>
<tr>
<td>7:B:8:LYS:HG2</td>
<td>7:B:192:ASN:HA</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>8:C:54:THR:HG21</td>
<td>8:C:72:ARG:H</td>
<td>1.66</td>
<td>0.60</td>
</tr>
<tr>
<td>9:D:13:ARG:HB3</td>
<td>9:D:14:PRO:CD</td>
<td>2.31</td>
<td>0.60</td>
</tr>
<tr>
<td>10:E:121:VAL:HG12</td>
<td>10:E:122:THR:N</td>
<td>2.17</td>
<td>0.60</td>
</tr>
<tr>
<td>15:J:51:CYS:O</td>
<td>15:J:52:ARG:C</td>
<td>2.39</td>
<td>0.60</td>
</tr>
<tr>
<td>15:J:21:ASP:HA</td>
<td>15:J:99:LYS:CE</td>
<td>2.32</td>
<td>0.60</td>
</tr>
<tr>
<td>18:M:11:GLU:O</td>
<td>18:M:12:LEU:C</td>
<td>2.40</td>
<td>0.60</td>
</tr>
<tr>
<td>18:M:34:ARG:HH21</td>
<td>18:M:91:VAL:HG23</td>
<td>1.65</td>
<td>0.60</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>15:J:61:ARG:HD3</td>
<td>24:S:174:PRO:HB2</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>27:V:2:LYS:CG</td>
<td>27:V:3:PRO:HD3</td>
<td>2.26</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:1004:A:C5</td>
<td>29:X:1005:U:C5</td>
<td>2.90</td>
<td>0.60</td>
</tr>
<tr>
<td>12:G:107:GLN:O</td>
<td>29:X:1142:G:OP1</td>
<td>2.20</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:1685:A:H2'</td>
<td>29:X:1691:G:N7</td>
<td>2.16</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:176:A:C3'</td>
<td>29:X:177:U:H5</td>
<td>2.09</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2500:C:H2'</td>
<td>29:X:2501:U:H6</td>
<td>1.66</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:2699:G:O2'</td>
<td>29:X:2700:U:C5'</td>
<td>2.49</td>
<td>0.60</td>
</tr>
<tr>
<td>29:X:648:A:H4'</td>
<td>29:X:649:G:O5'</td>
<td>2.01</td>
<td>0.60</td>
</tr>
<tr>
<td>7:B:121:ASN:O</td>
<td>7:B:122:PHE:O</td>
<td>2.20</td>
<td>0.59</td>
</tr>
<tr>
<td>12:G:103:TYR:CE2</td>
<td>29:X:1142:G:H4'</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>12:G:64:GLY:CA</td>
<td>12:G:67:ARG:HG3</td>
<td>2.32</td>
<td>0.59</td>
</tr>
<tr>
<td>14:1:98:LEU:O</td>
<td>14:1:99:VAL:HG13</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>18:M:55:ILE:O</td>
<td>18:M:56:ALA:HB2</td>
<td>2.01</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1069:G:C2'</td>
<td>29:X:1070:G:H5''</td>
<td>2.32</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:148:C:H6</td>
<td>29:X:148:C:OP1</td>
<td>1.85</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1685:A:C8</td>
<td>29:X:1691:G:C5</td>
<td>2.89</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2677:U:H2'</td>
<td>29:X:2678:C:H6</td>
<td>1.65</td>
<td>0.59</td>
</tr>
<tr>
<td>6:A:244:ARG:N</td>
<td>6:A:244:ARG:CD</td>
<td>2.64</td>
<td>0.59</td>
</tr>
<tr>
<td>7:B:48:GLN:NE2</td>
<td>29:X:2614:A:O2'</td>
<td>2.35</td>
<td>0.59</td>
</tr>
<tr>
<td>7:B:80:GLU:OE2</td>
<td>29:X:2615:U:H4'</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>8:C:187:VAL:HG12</td>
<td>8:C:189:ASP:HB2</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>11:F:18:THR:HB</td>
<td>11:F:22:PRO:HB2</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>12:G:107:GLN:CA</td>
<td>12:G:110:LEU:HG</td>
<td>2.32</td>
<td>0.59</td>
</tr>
<tr>
<td>16:K:72:ASP:HB3</td>
<td>16:K:75:VAL:HG23</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>19:N:10:ARG:O</td>
<td>19:N:13:ARG:HB3</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>24:S:3:LEU:HB2</td>
<td>24:S:34:LEU:CB</td>
<td>2.32</td>
<td>0.59</td>
</tr>
<tr>
<td>25:T:45:PHE:CZ</td>
<td>25:T:77:ARG:NH2</td>
<td>2.70</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1058:G:H2'</td>
<td>29:X:1121:G:C6</td>
<td>2.36</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1135:C:N4</td>
<td>29:X:1136:G:O6</td>
<td>2.34</td>
<td>0.59</td>
</tr>
<tr>
<td>8:C:67:ALA:N</td>
<td>29:X:1268:U:C5</td>
<td>2.60</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1524:C:H3'</td>
<td>29:X:1525:A:O4'</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:400:U:HO2'</td>
<td>29:X:401:G:H5'</td>
<td>1.66</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:464:G:H2'</td>
<td>29:X:465:C:C6</td>
<td>2.37</td>
<td>0.59</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>29:X:633:G:O2'</td>
<td>29:X:634:G:H5'</td>
<td>2.01</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:715:U:O2'</td>
<td>29:X:716:U:H5'</td>
<td>2.00</td>
<td>0.59</td>
</tr>
<tr>
<td>9:D:4:LEU:HD11</td>
<td>9:D:173:MET:CE</td>
<td>2.32</td>
<td>0.59</td>
</tr>
<tr>
<td>17:L:37:HIS:CE1</td>
<td>17:L:39:TYR:CZ</td>
<td>2.91</td>
<td>0.59</td>
</tr>
<tr>
<td>22:Q:91:LEU:CD2</td>
<td>22:Q:91:LEU:N</td>
<td>2.64</td>
<td>0.59</td>
</tr>
<tr>
<td>24:S:97:PRO:HB2</td>
<td>24:S:99:HIS:HE1</td>
<td>1.67</td>
<td>0.59</td>
</tr>
<tr>
<td>27:V:41:HIS:ND1</td>
<td>29:X:95:G:H4'</td>
<td>2.18</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1033:G:O2'</td>
<td>29:X:1034:U:H5'</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1323:G:H3'</td>
<td>29:X:1324:G:N2</td>
<td>2.17</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2451:G:H2'</td>
<td>29:X:2454:C:H42</td>
<td>1.68</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2496:C:C5</td>
<td>29:X:2521:A:C5</td>
<td>2.90</td>
<td>0.59</td>
</tr>
<tr>
<td>9:D:70:ALA:O</td>
<td>9:D:72:LYS:N</td>
<td>2.35</td>
<td>0.59</td>
</tr>
<tr>
<td>12:G:79:PHE:CE2</td>
<td>12:G:147:ARG:HG2</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>15:J:64:LYS:HB2</td>
<td>15:J:108:ALA:O</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>17:L:38:ILE:HD11</td>
<td>17:L:40:ALA:N</td>
<td>2.10</td>
<td>0.59</td>
</tr>
<tr>
<td>20:O:14:VAL:O</td>
<td>20:O:15:SER:HB2</td>
<td>2.01</td>
<td>0.59</td>
</tr>
<tr>
<td>24:S:10:PRO:HB2</td>
<td>24:S:14:LEU:HD21</td>
<td>1.85</td>
<td>0.59</td>
</tr>
<tr>
<td>26:U:14:VAL:HB</td>
<td>26:U:47:HIS:NE2</td>
<td>2.18</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1786:C:H2'</td>
<td>29:X:1787:U:O4'</td>
<td>2.01</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1854:G:C6</td>
<td>29:X:1864:G:C6</td>
<td>2.90</td>
<td>0.59</td>
</tr>
<tr>
<td>7:B:155:ARG:NH1</td>
<td>7:B:155:ARG:HG3</td>
<td>2.16</td>
<td>0.59</td>
</tr>
<tr>
<td>9:D:15:ALA:HA</td>
<td>9:D:18:GLN:HB2</td>
<td>1.83</td>
<td>0.59</td>
</tr>
<tr>
<td>23:R:85:ASP:N</td>
<td>23:R:86:PRO:HD3</td>
<td>2.16</td>
<td>0.59</td>
</tr>
<tr>
<td>24:S:11:LYS:O</td>
<td>24:S:13:LYS:N</td>
<td>2.31</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1710:U:H4'</td>
<td>29:X:1711:C:OP2</td>
<td>2.03</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Continued on next page...
### Interatomic Distance and Clash Overlap Report

<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>29:X:2046:C:O2</td>
<td>29:X:2430:A:C2</td>
<td>2.55</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2210:C:H2&quot;</td>
<td>29:X:2211:U:H6</td>
<td>1.67</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2264:C:H42</td>
<td>29:X:2325:A:H2</td>
<td>1.51</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2508:C:O2&quot;</td>
<td>29:X:2599:U:H5’</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2857:C:C2’</td>
<td>29:X:2858:A:O5’</td>
<td>2.51</td>
<td>0.59</td>
</tr>
<tr>
<td>14:1:22:GLY:CA</td>
<td>29:X:674:U:H1’</td>
<td>2.32</td>
<td>0.59</td>
</tr>
<tr>
<td>7:B:39:ALA:HA</td>
<td>7:B:43:GLY:C</td>
<td>2.23</td>
<td>0.59</td>
</tr>
<tr>
<td>7:B:31:CYS:HB3</td>
<td>7:B:49:ILE:CG1</td>
<td>2.32</td>
<td>0.59</td>
</tr>
<tr>
<td>8:C:62:LYS:CD</td>
<td>8:C:63:GLY:NL</td>
<td>2.66</td>
<td>0.59</td>
</tr>
<tr>
<td>9:D:138:PHE:HB2</td>
<td>9:D:141:ILE:CG1</td>
<td>2.32</td>
<td>0.59</td>
</tr>
<tr>
<td>9:D:97:TYR:HD2</td>
<td>9:D:100:LEU:HD23</td>
<td>1.67</td>
<td>0.59</td>
</tr>
<tr>
<td>10:E:87:LEU:O</td>
<td>10:E:131:ILE:NL</td>
<td>2.36</td>
<td>0.59</td>
</tr>
<tr>
<td>12:G:100:TYR:HB2</td>
<td>12:G:116:ARG:HL2</td>
<td>1.64</td>
<td>0.59</td>
</tr>
<tr>
<td>14:I:17:LYS:HA</td>
<td>14:I:21:ARG:HE</td>
<td>1.67</td>
<td>0.59</td>
</tr>
<tr>
<td>15:J:14:PHE:O</td>
<td>15:J:15:ARG:HL3</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>16:K:28:LEU:CD2</td>
<td>16:K:115:LEU:HG</td>
<td>2.31</td>
<td>0.59</td>
</tr>
<tr>
<td>16:K:25:ALA:HB2</td>
<td>16:K:47:PHE:CE2</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>19:N:25:TRP:CE3</td>
<td>19:N:26:GLY:NL</td>
<td>2.70</td>
<td>0.59</td>
</tr>
<tr>
<td>22:Q:14:GLU:HG3</td>
<td>22:Q:15:LYS:NL</td>
<td>2.16</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:181:A:H4’</td>
<td>29:X:182:G:OP1</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:872:G:OP2</td>
<td>29:X:872:G:C8</td>
<td>2.56</td>
<td>0.59</td>
</tr>
<tr>
<td>8:C:22:VAL:HA</td>
<td>8:C:106:MET:CG</td>
<td>2.31</td>
<td>0.59</td>
</tr>
<tr>
<td>9:D:103:LEU:CD1</td>
<td>9:D:108:LEU:HG</td>
<td>2.32</td>
<td>0.59</td>
</tr>
<tr>
<td>10:E:37:TYR:HE2</td>
<td>10:E:71:LEU:HB2</td>
<td>1.67</td>
<td>0.59</td>
</tr>
<tr>
<td>18:M:93:ILE:HG22</td>
<td>18:M:94:VAL:NL</td>
<td>2.18</td>
<td>0.59</td>
</tr>
<tr>
<td>21:P:78:ASN:O</td>
<td>21:P:80:LEU:NL</td>
<td>2.35</td>
<td>0.59</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>26:U:17:SER:HB2</td>
<td>26:U:44:ALA:HA</td>
<td>1.85</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1573:G:H3'</td>
<td>29:X:1574:A:C5'</td>
<td>2.31</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1578:U:H2'</td>
<td>29:X:1579:G:C8</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2194:A:H2'</td>
<td>29:X:2195:C:H5''</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2236:U:H2'</td>
<td>29:X:2237:C:C6</td>
<td>2.38</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2391:U:H2'</td>
<td>29:X:2392:G:H4'</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:562:G:H2'</td>
<td>29:X:563:U:H4'</td>
<td>2.01</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:872:G:H2'</td>
<td>29:X:928:G:N1</td>
<td>2.18</td>
<td>0.59</td>
</tr>
<tr>
<td>31:Z:75:A:C2</td>
<td>31:Z:76:U:H1'</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>8:C:112:GLN:CB</td>
<td>8:C:116:LYS:HD3</td>
<td>2.33</td>
<td>0.59</td>
</tr>
<tr>
<td>8:C:50:GLN:CD</td>
<td>29:X:814:G:OP1</td>
<td>2.40</td>
<td>0.59</td>
</tr>
<tr>
<td>10:E:128:PRO:O</td>
<td>10:E:129:THR:HG23</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>10:E:87:LEU:N</td>
<td>10:E:131:ILE:O</td>
<td>2.31</td>
<td>0.59</td>
</tr>
<tr>
<td>12:G:45:ASP:OD1</td>
<td>12:G:47:SER:HB2</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>15:J:125:LYS:HZ2</td>
<td>15:J:125:LYS:N</td>
<td>2.00</td>
<td>0.59</td>
</tr>
<tr>
<td>15:J:27:TYR:CB</td>
<td>15:J:137:VAL:HG11</td>
<td>2.32</td>
<td>0.59</td>
</tr>
<tr>
<td>18:M:34:ARG:HH12</td>
<td>18:M:81:PHE:HB3</td>
<td>1.66</td>
<td>0.59</td>
</tr>
<tr>
<td>21:P:33:MET:SD</td>
<td>21:P:64:ALA:HA</td>
<td>2.43</td>
<td>0.59</td>
</tr>
<tr>
<td>24:S:23:ALA:HA</td>
<td>24:S:83:PHE:O</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1252:C:C2'</td>
<td>29:X:1253:C:H5''</td>
<td>2.33</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1699:A:H2'</td>
<td>29:X:1700:C:C6</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>6:A:222:ARG:NH1</td>
<td>29:X:1779:C:H5''</td>
<td>2.18</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1686:A:C2</td>
<td>29:X:1977:C:H1'</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:224:G:OP2</td>
<td>29:X:226:C:N4</td>
<td>2.36</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2685:A:C2</td>
<td>29:X:2686:C:C2</td>
<td>2.91</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:492:G:HO2'</td>
<td>29:X:517:ALA:N6</td>
<td>2.00</td>
<td>0.59</td>
</tr>
<tr>
<td>17:L:28:ARG:NH2</td>
<td>31:Z:10:U:O3'</td>
<td>2.30</td>
<td>0.59</td>
</tr>
<tr>
<td>7:B:67:PHE:CE2</td>
<td>7:B:74:PRO:HA</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>9:D:74:ILE:HA</td>
<td>9:D:79:LEU:CB</td>
<td>2.32</td>
<td>0.59</td>
</tr>
<tr>
<td>10:E:103:LEU:CD2</td>
<td>10:E:131:ILE:HD13</td>
<td>2.30</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Continued on next page...
### Interatomic Distances and Overlap 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:F:117:ALA:HB1</td>
<td>11:F:122:ALA:HB1</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>15:J:34:GLY:CA</td>
<td>15:J:106:GLU:HA</td>
<td>2.19</td>
<td>0.59</td>
</tr>
<tr>
<td>15:J:44:LYS:HD3</td>
<td>15:J:47:GLN:HE22</td>
<td>1.68</td>
<td>0.59</td>
</tr>
<tr>
<td>15:J:80:ALA:O</td>
<td>15:J:81:GLU:HB3</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>20:O:26:GLN:HG2</td>
<td>20:O:27:GLY:N</td>
<td>2.11</td>
<td>0.59</td>
</tr>
<tr>
<td>20:O:68:LYS:HD2</td>
<td>20:O:86:HIS:O</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>24:S:19:ILE:HD11</td>
<td>24:S:36:ARG:HG3</td>
<td>0.85</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:1053:G:C5</td>
<td>29:X:1054:C:C5</td>
<td>2.90</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2175:A:H2'</td>
<td>29:X:2176:U:C6</td>
<td>2.34</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2280:A:H2'</td>
<td>29:X:2281:C:C6</td>
<td>2.38</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2624:G:H4'</td>
<td>29:X:2712:G:O2'</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2764:U:H2'</td>
<td>29:X:2765:C:H6</td>
<td>1.63</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2779:C:H2'</td>
<td>29:X:2780:A:O4'</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:487:G:H4'</td>
<td>29:X:512:ALA:O</td>
<td>1.68</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:631:G:H4'</td>
<td>29:X:632:A:C5'</td>
<td>2.31</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:941:U:H2'</td>
<td>29:X:942:U:O4'</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>31:Z:20:A:H2'</td>
<td>31:Z:21:C:C6</td>
<td>2.37</td>
<td>0.59</td>
</tr>
<tr>
<td>31:Z:81:C:H6</td>
<td>31:Z:81:C:O5'</td>
<td>1.86</td>
<td>0.59</td>
</tr>
<tr>
<td>7:B:141:ILE:HG21</td>
<td>7:B:150:VAL:HG11</td>
<td>1.85</td>
<td>0.59</td>
</tr>
<tr>
<td>7:B:82:ARG:NH2</td>
<td>29:X:2617:G:G</td>
<td>2.76</td>
<td>0.59</td>
</tr>
<tr>
<td>7:B:85:ALA:HB3</td>
<td>7:B:86:PRO:CD</td>
<td>2.33</td>
<td>0.59</td>
</tr>
<tr>
<td>8:C:151:VAL:O</td>
<td>8:C:152:THR:HB</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>9:D:152:MET:HE3</td>
<td>9:D:154:ILE:HD11</td>
<td>1.83</td>
<td>0.59</td>
</tr>
<tr>
<td>9:D:13:ARG:HA</td>
<td>9:D:16:LEU:HD12</td>
<td>1.82</td>
<td>0.59</td>
</tr>
<tr>
<td>12:G:84:ASN:HA</td>
<td>12:G:152:ALA:O</td>
<td>2.02</td>
<td>0.59</td>
</tr>
<tr>
<td>12:G:85:ALA:O</td>
<td>12:G:88:VAL:N</td>
<td>2.33</td>
<td>0.59</td>
</tr>
<tr>
<td>12:G:96:ASP:O</td>
<td>12:G:98:LYS:N</td>
<td>2.27</td>
<td>0.59</td>
</tr>
<tr>
<td>15:J:35:LEU:HB2</td>
<td>15:J:119:PHE:CD1</td>
<td>2.38</td>
<td>0.59</td>
</tr>
<tr>
<td>15:J:73:LYS:HB3</td>
<td>15:J:95:VAL:O</td>
<td>2.03</td>
<td>0.59</td>
</tr>
<tr>
<td>15:J:6:LYS:HG2</td>
<td>15:J:7:ARG:HG3</td>
<td>1.83</td>
<td>0.59</td>
</tr>
<tr>
<td>24:S:1:MET:HG3</td>
<td>24:S:52:PHE:HD2</td>
<td>1.66</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2194:A:H2'</td>
<td>29:X:2195:C:C4'</td>
<td>2.32</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2448:A:N6</td>
<td>29:X:2460:G:H1'</td>
<td>2.18</td>
<td>0.59</td>
</tr>
<tr>
<td>29:X:2492:G:N2</td>
<td>29:X:2493:U:C2</td>
<td>2.70</td>
<td>0.59</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>29:X:322:A:O2'</td>
<td>29:X:343:A:C4'</td>
<td>2.51</td>
<td>0.59</td>
</tr>
<tr>
<td>24:S:22:VAL:HG21</td>
<td>31:Z:77:G:H1'</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>10:E:76:VAL:C</td>
<td>10:E:78:GLY:H</td>
<td>2.05</td>
<td>0.58</td>
</tr>
<tr>
<td>14:I:108:LEU:HB3</td>
<td>14:I:125:ALA:HB1</td>
<td>1.84</td>
<td>0.58</td>
</tr>
<tr>
<td>16:K:69:ASP:O</td>
<td>16:K:70:ILE:HD13</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>19:N:93:LYS:O</td>
<td>19:N:94:VAL:HB</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>20:O:15:SER:C</td>
<td>20:O:16:GLU:HG3</td>
<td>2.22</td>
<td>0.58</td>
</tr>
<tr>
<td>20:O:71:ILE:CD1</td>
<td>29:X:1003:C:O3'</td>
<td>2.50</td>
<td>0.58</td>
</tr>
<tr>
<td>23:R:105:ARG:HZ</td>
<td>23:R:112:LYS:HA</td>
<td>2.31</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:1011:A:O2'</td>
<td>29:X:1012:A:H5'</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:1419:G:H2'</td>
<td>29:X:1420:A:C8</td>
<td>2.38</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2286:G:C5</td>
<td>29:X:2287:G:H1'</td>
<td>2.37</td>
<td>0.58</td>
</tr>
<tr>
<td>30:Y:45:ILE:HD13</td>
<td>30:Y:57:VAL:HG22</td>
<td>1.84</td>
<td>0.58</td>
</tr>
<tr>
<td>8:C:147:LYS:HA</td>
<td>8:C:166:TRP:O</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>8:C:12:GLY:O</td>
<td>8:C:14:THR:N</td>
<td>2.36</td>
<td>0.58</td>
</tr>
<tr>
<td>9:D:60:ILE:HG22</td>
<td>9:D:140:GLU:CB</td>
<td>2.30</td>
<td>0.58</td>
</tr>
<tr>
<td>12:G:158:HIS:HA</td>
<td>12:G:161:GLN:NE2</td>
<td>2.18</td>
<td>0.58</td>
</tr>
<tr>
<td>15:J:69:ILE:HD13</td>
<td>15:J:104:MET:HG2</td>
<td>1.84</td>
<td>0.58</td>
</tr>
<tr>
<td>15:J:82:THR:O</td>
<td>15:J:83:ARG:CB</td>
<td>2.52</td>
<td>0.58</td>
</tr>
<tr>
<td>16:K:3:HIS:CG</td>
<td>16:K:5:LYS:HD2</td>
<td>2.36</td>
<td>0.58</td>
</tr>
<tr>
<td>17:L:13:THR:O</td>
<td>17:L:17:VAL:HG12</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>20:O:46:VAL:HG12</td>
<td>20:O:51:ALA:HB2</td>
<td>1.86</td>
<td>0.58</td>
</tr>
<tr>
<td>27:V:1:MET:HG3</td>
<td>27:V:2:LYS:N</td>
<td>2.17</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:1253:C:H5'</td>
<td>29:X:1253:C:H6</td>
<td>1.67</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>29:X:1450:G:O2'</td>
<td>29:X:1451:C:H5'</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:1541:G:H2'</td>
<td>29:X:1542:G:C8</td>
<td>2.38</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:189:A:O2'</td>
<td>29:X:190:A:H5'</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2181:A:O2'</td>
<td>29:X:2182:A:H5'</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>8: C:107:ALA:HB1</td>
<td>8: C:180:ILE:HD13</td>
<td>1.85</td>
<td>0.58</td>
</tr>
<tr>
<td>8: C:74:VAL:O</td>
<td>8: C:77:PHE:N</td>
<td>2.32</td>
<td>0.58</td>
</tr>
<tr>
<td>9: D:60:ILE:HD12</td>
<td>9: D:138:PHE:CE2</td>
<td>2.38</td>
<td>0.58</td>
</tr>
<tr>
<td>14: I:105:PRO:O</td>
<td>14: I:106:VAL:CG2</td>
<td>2.52</td>
<td>0.58</td>
</tr>
<tr>
<td>15: J:30:PHE:HE1</td>
<td>29: X:886:A:H1'</td>
<td>1.69</td>
<td>0.58</td>
</tr>
<tr>
<td>16: K:36:THR:OG1</td>
<td>16: K:37:THR:N</td>
<td>2.33</td>
<td>0.58</td>
</tr>
<tr>
<td>17: L:99:ARG:HG3</td>
<td>17: L:100:VAL:N</td>
<td>2.17</td>
<td>0.58</td>
</tr>
<tr>
<td>17: L:17:VAL:HG13</td>
<td>17: L:18:ARG:N</td>
<td>2.18</td>
<td>0.58</td>
</tr>
<tr>
<td>29: X:1283:C:H5&quot;</td>
<td>29: X:1284:G:O5'</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>29: X:2335:U:H2'</td>
<td>29: X:2336:G:H8</td>
<td>1.69</td>
<td>0.58</td>
</tr>
<tr>
<td>29: X:2560:G:H4'</td>
<td>29: X:2561:G:N7</td>
<td>2.18</td>
<td>0.58</td>
</tr>
<tr>
<td>8: C:109:ALA:O</td>
<td>8: C:112:GLN:N</td>
<td>2.34</td>
<td>0.58</td>
</tr>
<tr>
<td>9: D:102:LYS:O</td>
<td>9: D:106:ILE:N</td>
<td>2.32</td>
<td>0.58</td>
</tr>
<tr>
<td>12: G:66:HIS:O</td>
<td>12: G:70:PHE:CD1</td>
<td>2.56</td>
<td>0.58</td>
</tr>
<tr>
<td>14: I:29:THR:HG22</td>
<td>14: I:29:THR:O</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>17: L:33:ARG:O</td>
<td>17: L:99:ARG:HZ</td>
<td>2.50</td>
<td>0.58</td>
</tr>
<tr>
<td>21: P:9:ARG:O</td>
<td>21: P:10:ASN:HB3</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>26: U:75:TYR:O</td>
<td>26: U:76:LYS:HB2</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>Atom-1</td>
<td>Atom-2</td>
<td>Interatomic distance (Å)</td>
<td>Clash overlap (Å)</td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
<td>--------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>29:X:1074:G:H2'</td>
<td>29:X:1075:C:O4'</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:1522:C:H2'</td>
<td>29:X:1523:A:H4'</td>
<td>1.84</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2029:G:H5'</td>
<td>30:Y:19:ARG:CB</td>
<td>2.31</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2217:G:H5''</td>
<td>29:X:2218:G:OP1</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2628:C:C2</td>
<td>29:X:2629:U:C5</td>
<td>2.92</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:417:C:O3'</td>
<td>29:X:418:C:H4'</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:417:C:O3'</td>
<td>29:X:418:C:H4'</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:640:C:C4'</td>
<td>29:X:660:G:H21</td>
<td>2.16</td>
<td>0.58</td>
</tr>
<tr>
<td>7:B:103:ASP:OD2</td>
<td>7:B:202:ALA:N</td>
<td>2.33</td>
<td>0.58</td>
</tr>
<tr>
<td>7:B:144:ARG:HD3</td>
<td>29:X:2551:A:C8</td>
<td>2.38</td>
<td>0.58</td>
</tr>
<tr>
<td>7:B:49:ILE:HG21</td>
<td>7:B:81:PHE:HE2</td>
<td>1.68</td>
<td>0.58</td>
</tr>
<tr>
<td>7:B:2:LYS:HA</td>
<td>7:B:84:PHE:CD1</td>
<td>2.38</td>
<td>0.58</td>
</tr>
<tr>
<td>10:E:172:LYS:HD3</td>
<td>29:X:2508:G:OP2</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>11:F:34:ILE:O</td>
<td>11:F:37:PHE:HB3</td>
<td>2.04</td>
<td>0.58</td>
</tr>
<tr>
<td>14:I:80:LEU:HD21</td>
<td>14:I:97:ARG:NH2</td>
<td>2.18</td>
<td>0.58</td>
</tr>
<tr>
<td>23:R:27:GLY:O</td>
<td>23:R:30:LYS:HG2</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>25:T:36:ILE:HD11</td>
<td>29:X:2343:C:O2</td>
<td>2.04</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:1108:U:H2'</td>
<td>29:X:1109:A:O4'</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:1322:G:O2'</td>
<td>29:X:1323:G:H5'</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:1524:C:H5''</td>
<td>29:X:1525:A:C8</td>
<td>2.36</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:826:U:C2</td>
<td>29:X:827:C:C5</td>
<td>2.90</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:861:G:C2'</td>
<td>29:X:862:A:H5'</td>
<td>2.32</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:930:A:O5'</td>
<td>29:X:930:A:H8</td>
<td>1.86</td>
<td>0.58</td>
</tr>
<tr>
<td>7:B:4:ILE:HG21</td>
<td>7:B:28:ALA:HB1</td>
<td>1.86</td>
<td>0.58</td>
</tr>
<tr>
<td>8:C:61:GLN:HA</td>
<td>8:C:61:GLN:NE2</td>
<td>2.18</td>
<td>0.58</td>
</tr>
<tr>
<td>17:L:52:ALA:O</td>
<td>17:L:53:ALA:CB</td>
<td>2.52</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:1002:C:N4</td>
<td>29:X:1003:C:H41</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:1631:C:O2</td>
<td>29:X:1631:C:H2'</td>
<td>2.02</td>
<td>0.58</td>
</tr>
</tbody>
</table>
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:175:C:C6</td>
<td>29:X:175:C:H3'</td>
<td>2.39</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:175:C:H6</td>
<td>29:X:175:C:H3'</td>
<td>1.67</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:204:A:N6</td>
<td>29:X:2386:G:C8</td>
<td>2.72</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2301:A:C4</td>
<td>29:X:2302:G:C8</td>
<td>2.91</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2609:G:H1'</td>
<td>29:X:2868:G:C4</td>
<td>2.38</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:810:U:H2'</td>
<td>29:X:811:G:O4'</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>30:Y:32:GLU:HG3</td>
<td>30:Y:37:HIS:O</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>8:C:130:THR:OG1</td>
<td>8:C:160:ALA:HA</td>
<td>2.04</td>
<td>0.58</td>
</tr>
<tr>
<td>12:G:51:LEU:CD1</td>
<td>12:G:88:VAL:HG21</td>
<td>2.33</td>
<td>0.58</td>
</tr>
<tr>
<td>17:L:29:LEU:HD13</td>
<td>17:L:75:LEU:HD21</td>
<td>1.85</td>
<td>0.58</td>
</tr>
<tr>
<td>20:O:79:GLN:HA</td>
<td>20:O:79:GLN:OE1</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>23:R:44:GLN:O</td>
<td>23:R:77:HIS:HA</td>
<td>2.04</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:1112:U:O2'</td>
<td>29:X:1113:C:H5'</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2550:CON4</td>
<td>29:X:2553:G:C8</td>
<td>2.72</td>
<td>0.58</td>
</tr>
<tr>
<td>31:Z:25:G:H2'</td>
<td>31:Z:26:G:C5</td>
<td>2.38</td>
<td>0.58</td>
</tr>
<tr>
<td>9:D:52:LYS:HZ1</td>
<td>9:D:149:THR:HA</td>
<td>1.68</td>
<td>0.58</td>
</tr>
<tr>
<td>12:G:67:ARG:O</td>
<td>12:G:70:PHE:CG</td>
<td>2.57</td>
<td>0.58</td>
</tr>
<tr>
<td>17:L:15:ARG:HD2</td>
<td>17:L:91:ARG:HD3</td>
<td>1.84</td>
<td>0.58</td>
</tr>
<tr>
<td>27:V:38:ALA:O</td>
<td>27:V:40:PRO:HD3</td>
<td>2.02</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:1525:AH3'</td>
<td>29:X:1526:U:C6</td>
<td>2.37</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:1608:C:O2'</td>
<td>29:X:1753:A:C2'</td>
<td>2.51</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2222:G:O2'</td>
<td>29:X:2223:C:H5'</td>
<td>2.04</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2358:C:H2'</td>
<td>29:X:2359:U:H6</td>
<td>1.69</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2448:AH61</td>
<td>29:X:2460:G:H1'</td>
<td>1.68</td>
<td>0.58</td>
</tr>
<tr>
<td>10:E:172:LYS:HE2</td>
<td>29:X:2508:G:OP2</td>
<td>2.02</td>
<td>0.58</td>
</tr>
</tbody>
</table>
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:2836:U:O2'</td>
<td>29:X:2837:G:H5'</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:357:A:H3'</td>
<td>29:X:358:C:H6</td>
<td>1.67</td>
<td>0.58</td>
</tr>
<tr>
<td>8:C:40:ARG:O2</td>
<td>29:X:39:C:O2</td>
<td>2.36</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:639:G:O5'</td>
<td>29:X:639:G:H8</td>
<td>1.87</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:649:G:N1</td>
<td>29:X:660:G:N1</td>
<td>2.52</td>
<td>0.58</td>
</tr>
<tr>
<td>7:B:42:ASP:OD2</td>
<td>29:X:2764:U:H4'</td>
<td>2.04</td>
<td>0.58</td>
</tr>
<tr>
<td>7:B:47:VAL:O</td>
<td>7:B:80:GLU:HA</td>
<td>2.04</td>
<td>0.58</td>
</tr>
<tr>
<td>9:D:13:ARG:CB</td>
<td>9:D:14:PRO:HD3</td>
<td>2.32</td>
<td>0.58</td>
</tr>
<tr>
<td>13:H:5:GLN:HG3</td>
<td>29:X:1685:A:OP1</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>27:V:50:VAL:O</td>
<td>27:V:53:LEU:HB2</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2725:C:H2'</td>
<td>29:X:2726:U:C6</td>
<td>2.39</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2819:G:H2'</td>
<td>29:X:2820:C:H6</td>
<td>1.68</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:530:G:H2'</td>
<td>29:X:531:G:H8</td>
<td>1.68</td>
<td>0.58</td>
</tr>
<tr>
<td>4:4:1:MET:H1</td>
<td>29:X:2505:G:C2'</td>
<td>2.17</td>
<td>0.58</td>
</tr>
<tr>
<td>8:C:45:THR:O2</td>
<td>8:C:47:THR:OG1</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>12:G:82:VAL:HB</td>
<td>12:G:150:VAL:HG13</td>
<td>1.86</td>
<td>0.58</td>
</tr>
<tr>
<td>20:O:54:TYR:N</td>
<td>20:O:54:TYR:CD1</td>
<td>2.71</td>
<td>0.58</td>
</tr>
<tr>
<td>24:S:100:THR:CG2</td>
<td>24:S:138:VAL:HG11</td>
<td>2.34</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:1868:A:H2'</td>
<td>29:X:1869:A:O4'</td>
<td>2.03</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2081:U:H2'</td>
<td>29:X:2082:C:H6</td>
<td>1.69</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2265:A:H4'</td>
<td>29:X:2266:A:C5'</td>
<td>2.33</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:689:A:C2'</td>
<td>29:X:690:A:H5'</td>
<td>2.34</td>
<td>0.58</td>
</tr>
<tr>
<td>29:X:2039:G:O2'</td>
<td>30:Y:8:LYS:HE2</td>
<td>2.04</td>
<td>0.58</td>
</tr>
<tr>
<td>8:C:180:ILE:HG23</td>
<td>8:C:181:LEU:N</td>
<td>2.16</td>
<td>0.57</td>
</tr>
<tr>
<td>9:D:39:GLY:HA2</td>
<td>9:D:86:GLY:HA2</td>
<td>1.86</td>
<td>0.57</td>
</tr>
<tr>
<td>14:1:28:LYS:HD2</td>
<td>14:1:36:GLY:HA3</td>
<td>1.86</td>
<td>0.57</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:K:43:GLU:OE1</td>
<td>16:K:44:LEU:HA</td>
<td>2.03</td>
<td>0.57</td>
</tr>
<tr>
<td>18:M:94:VAL:O</td>
<td>18:M:95:GLU:HB3</td>
<td>2.03</td>
<td>0.57</td>
</tr>
<tr>
<td>20:O:11:GLN:HA</td>
<td>20:O:38:LEU:O</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>24:S:75:LYS:C</td>
<td>24:S:77:ALA:H</td>
<td>2.05</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:1174:G:C2</td>
<td>29:X:1175:A:C5</td>
<td>2.92</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:2691:C:C2&quot;</td>
<td>29:X:2692:A:C5&quot;</td>
<td>2.82</td>
<td>0.57</td>
</tr>
<tr>
<td>7:B:62:PRO:HB3</td>
<td>29:X:2767:GLY:O3&quot;</td>
<td>1.84</td>
<td>0.57</td>
</tr>
<tr>
<td>8:C:129:LYS:O</td>
<td>8:C:130:THR:HB</td>
<td>2.03</td>
<td>0.57</td>
</tr>
<tr>
<td>17:L:74:ALA:O</td>
<td>17:L:78:ALA:HB2</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:1598:GLY:H6</td>
<td>29:X:1598:GLY:O5&quot;</td>
<td>1.87</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:833:ALA:C1&quot;</td>
<td>29:X:954:U:O2&quot;</td>
<td>2.50</td>
<td>0.57</td>
</tr>
<tr>
<td>6:A:164:GLN:HE22</td>
<td>6:A:166:GLN:NE2</td>
<td>2.01</td>
<td>0.57</td>
</tr>
<tr>
<td>6:A:99:ASP:OD1</td>
<td>29:X:1506:GLY:H2&quot;</td>
<td>2.05</td>
<td>0.57</td>
</tr>
<tr>
<td>8:C:109:ALA:O</td>
<td>8:C:113:GLY:HB3</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>8:C:173:ALA:CB</td>
<td>8:C:193:LEU:HB2</td>
<td>2.35</td>
<td>0.57</td>
</tr>
<tr>
<td>8:C:48:ARG:O</td>
<td>8:C:50:GLY:N</td>
<td>2.57</td>
<td>0.57</td>
</tr>
<tr>
<td>9:D:85:VAL:HG23</td>
<td>9:D:86:GLY:N</td>
<td>2.19</td>
<td>0.57</td>
</tr>
<tr>
<td>10:E:43:VAL:CB</td>
<td>10:E:52:VAL:HA</td>
<td>2.30</td>
<td>0.57</td>
</tr>
<tr>
<td>12:G:150:VAL:CG1</td>
<td>12:G:151:TYR:N</td>
<td>2.68</td>
<td>0.57</td>
</tr>
<tr>
<td>15:J:113:GLU:HA</td>
<td>15:J:113:GLU:OE2</td>
<td>2.05</td>
<td>0.57</td>
</tr>
<tr>
<td>15:J:35:LEU:HD11</td>
<td>15:J:130:THR:HB</td>
<td>1.86</td>
<td>0.57</td>
</tr>
<tr>
<td>16:K:72:ASP:HB3</td>
<td>16:K:75:VAL:CG2</td>
<td>2.33</td>
<td>0.57</td>
</tr>
<tr>
<td>27:V:45:GLN:O</td>
<td>27:V:46:LEU:C</td>
<td>2.42</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:1310:C:H2&quot;</td>
<td>29:X:1311:C:H6</td>
<td>1.67</td>
<td>0.57</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:2237:C:H4'</td>
<td>29:X:2238:G:OP2</td>
<td>2.05</td>
<td>0.57</td>
</tr>
<tr>
<td>9:D:75:SER:HB2</td>
<td>29:X:2289:A:H2</td>
<td>1.68</td>
<td>0.57</td>
</tr>
<tr>
<td>7:B:203:LYS:HG2</td>
<td>29:X:2713:A:C6</td>
<td>2.39</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:558:G:N3</td>
<td>29:X:558:G:C4'</td>
<td>2.65</td>
<td>0.57</td>
</tr>
<tr>
<td>6:A:243:GLY:C</td>
<td>6:A:244:ARG:CZ</td>
<td>2.73</td>
<td>0.57</td>
</tr>
<tr>
<td>8:C:122:GLY:C</td>
<td>8:C:124:ASP:N</td>
<td>2.56</td>
<td>0.57</td>
</tr>
<tr>
<td>9:D:115:ARG:HD2</td>
<td>9:D:178:ARG:NH2</td>
<td>2.18</td>
<td>0.57</td>
</tr>
<tr>
<td>10:E:30:LYS:CB</td>
<td>10:E:79:VAL:HA</td>
<td>2.33</td>
<td>0.57</td>
</tr>
<tr>
<td>12:G:84:ASN:O</td>
<td>12:G:86:ALA:N</td>
<td>2.30</td>
<td>0.57</td>
</tr>
<tr>
<td>14:I:38:LYS:HZ3</td>
<td>14:I:38:LYS:HB3</td>
<td>1.69</td>
<td>0.57</td>
</tr>
<tr>
<td>17:L:42:ILE:HD11</td>
<td>17:L:87:VAL:CG1</td>
<td>2.34</td>
<td>0.57</td>
</tr>
<tr>
<td>18:M:44:ARG:HD2</td>
<td>18:M:46:ARG:NH2</td>
<td>2.19</td>
<td>0.57</td>
</tr>
<tr>
<td>23:R:8:SER:O</td>
<td>23:R:10:HIS:N</td>
<td>2.37</td>
<td>0.57</td>
</tr>
<tr>
<td>26:U:11:LYS:HZ1</td>
<td>26:U:75:TYR:HB2</td>
<td>1.69</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:1611:U:H2'</td>
<td>29:X:1612:U:O4'</td>
<td>2.03</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:16:G:C2</td>
<td>29:X:17:G:C8</td>
<td>2.92</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:2372:A:H2'</td>
<td>29:X:2373:C:H6</td>
<td>1.69</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:2474:G:N2</td>
<td>29:X:2475:C:O2</td>
<td>2.37</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:417:C:C6</td>
<td>29:X:419:G:C8</td>
<td>2.93</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:596:C:C2</td>
<td>29:X:684:C:Cl'</td>
<td>2.87</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:888:G:O2'</td>
<td>29:X:889:C:H5'</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>7:B:39:ALA:HA</td>
<td>7:B:44:TYR:N</td>
<td>2.18</td>
<td>0.57</td>
</tr>
<tr>
<td>17:L:14:ARG:O</td>
<td>17:L:17:VAL:HG12</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:1545:G:O2'</td>
<td>29:X:1546:C:H5'</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:1775:A:H4'</td>
<td>29:X:1776:A:C5'</td>
<td>2.34</td>
<td>0.57</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:2071:G:O2'</td>
<td>29:X:2072:C:H5'</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:2702:G:C6</td>
<td>29:X:2703:C:N3</td>
<td>2.72</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:590:C:H2'</td>
<td>29:X:591:G:C8</td>
<td>2.38</td>
<td>0.57</td>
</tr>
<tr>
<td>14:I:22:GLY:HA2</td>
<td>29:X:674:U:H1'</td>
<td>1.84</td>
<td>0.57</td>
</tr>
<tr>
<td>14:I:30:ALA:H</td>
<td>14:I:34:HIS:CD2</td>
<td>2.22</td>
<td>0.57</td>
</tr>
<tr>
<td>14:I:76:LYS:HE3</td>
<td>14:I:111:SER:CB</td>
<td>2.35</td>
<td>0.57</td>
</tr>
<tr>
<td>14:I:82:ASP:N</td>
<td>14:I:114:ILE:HG21</td>
<td>2.20</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:1343:C:H2'</td>
<td>29:X:1344:C:H6</td>
<td>1.69</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:2081:U:H3</td>
<td>29:X:2174:G:H1</td>
<td>1.52</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:2265:A:C2</td>
<td>29:X:2325:A:N7</td>
<td>2.73</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:937:C:H2'</td>
<td>29:X:938:G:O4'</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>10:E:9:ILE:HD12</td>
<td>10:E:51:LEU:N</td>
<td>2.20</td>
<td>0.57</td>
</tr>
<tr>
<td>14:I:130:ILE:O</td>
<td>14:I:133:VAL:HG23</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>15:J:113:GLU:C</td>
<td>15:J:115:ALA:N</td>
<td>2.56</td>
<td>0.57</td>
</tr>
<tr>
<td>15:J:77:LYS:O</td>
<td>15:J:88:LYS:NZ</td>
<td>2.36</td>
<td>0.57</td>
</tr>
<tr>
<td>23:R:45:LYS:HA</td>
<td>23:R:76:LEU:O</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>24:S:75:LYS:C</td>
<td>24:S:77:ALA:N</td>
<td>2.58</td>
<td>0.57</td>
</tr>
<tr>
<td>20:O:88:GLN:NE2</td>
<td>29:X:1173:G:N3</td>
<td>2.53</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:1886:G:H2'</td>
<td>29:X:1887:G:H8</td>
<td>1.70</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:208:C:H2'</td>
<td>29:X:209:G:H5'</td>
<td>1.86</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:2441:U:C2</td>
<td>29:X:2442:C:C5</td>
<td>2.93</td>
<td>0.57</td>
</tr>
<tr>
<td>7:B:154:LYS:CE</td>
<td>29:X:2598:C:H1'</td>
<td>2.34</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:303:C:H6</td>
<td>29:X:303:C:O5'</td>
<td>1.88</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:692:C:O2'</td>
<td>29:X:693:A:H5'</td>
<td>2.05</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:729:A:N3</td>
<td>29:X:730:C:OP2</td>
<td>2.38</td>
<td>0.57</td>
</tr>
<tr>
<td>31:Z:63:A:O2'</td>
<td>31:Z:64:C:H5'</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>10:E:77:LYS:HA</td>
<td>10:E:80:SER:HB3</td>
<td>1.86</td>
<td>0.57</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18:M:91:VAL:HG12</td>
<td>18:M:92:THR:N</td>
<td>2.18</td>
<td>0.57</td>
</tr>
<tr>
<td>20:O:5:ILE:CG2</td>
<td>20:O:10:LYS:HE2</td>
<td>2.35</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:1573:G:C3'</td>
<td>29:X:1574:A:H5'</td>
<td>2.31</td>
<td>0.57</td>
</tr>
<tr>
<td>25:T:24:LYS:HE3</td>
<td>29:X:2334:C:O2'</td>
<td>2.05</td>
<td>0.57</td>
</tr>
<tr>
<td>8:C:42:THR:HB</td>
<td>29:X:454:G:H21</td>
<td>1.69</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:813:A:C4'</td>
<td>29:X:814:G:O5'</td>
<td>2.53</td>
<td>0.57</td>
</tr>
<tr>
<td>8:C:108:ILE:O</td>
<td>8:C:111:ARG:HB2</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>9:D:119:PRO:CG</td>
<td>9:D:120:ASN:H</td>
<td>2.15</td>
<td>0.57</td>
</tr>
<tr>
<td>15:J:111:THR:HG23</td>
<td>15:J:114:GLN:HB2</td>
<td>1.86</td>
<td>0.57</td>
</tr>
<tr>
<td>25:T:32:LYS:N</td>
<td>25:T:35:ASN:ND2</td>
<td>2.51</td>
<td>0.57</td>
</tr>
<tr>
<td>8:C:116:LYS:O</td>
<td>28:W:28:ILE:G</td>
<td>2.38</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:864:C:O2'</td>
<td>29:X:814:G:O5'</td>
<td>2.53</td>
<td>0.57</td>
</tr>
<tr>
<td>31:Z:53:G:N2</td>
<td>31:Z:54:U:C5</td>
<td>2.67</td>
<td>0.57</td>
</tr>
<tr>
<td>7:B:188:ILE:HG22</td>
<td>7:B:189:PRO:HD2</td>
<td>1.83</td>
<td>0.57</td>
</tr>
<tr>
<td>8:C:56:ARG:HA</td>
<td>8:C:71:ASP:OD2</td>
<td>2.05</td>
<td>0.57</td>
</tr>
<tr>
<td>8:C:47:THR:HG23</td>
<td>8:C:84:PHE:N</td>
<td>2.20</td>
<td>0.57</td>
</tr>
<tr>
<td>9:D:4:LEU:HD12</td>
<td>9:D:5:LYS:H</td>
<td>1.69</td>
<td>0.57</td>
</tr>
<tr>
<td>12:G:61:ARG:NH2</td>
<td>12:G:78:ASP:OD2</td>
<td>2.33</td>
<td>0.57</td>
</tr>
<tr>
<td>15:J:116:LYS:HZ1</td>
<td>15:J:132:MET:HB3</td>
<td>1.70</td>
<td>0.57</td>
</tr>
<tr>
<td>15:J:21:ASP:HA</td>
<td>15:J:99:LYS:HE3</td>
<td>1.86</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:1552:C:H1'</td>
<td>29:X:1553:G:N3</td>
<td>2.20</td>
<td>0.57</td>
</tr>
<tr>
<td>17:L:95:LYS:HD2</td>
<td>29:X:2273:C:H5'</td>
<td>1.86</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:2434:G:H2'</td>
<td>29:X:2435:C:C6</td>
<td>2.40</td>
<td>0.57</td>
</tr>
<tr>
<td>29:X:324:C:H2'</td>
<td>29:X:325:U:O4'</td>
<td>2.04</td>
<td>0.57</td>
</tr>
<tr>
<td>6:A:258:LYS:HZ1</td>
<td>6:A:261:ARG:HE</td>
<td>1.51</td>
<td>0.56</td>
</tr>
<tr>
<td>6:A:258:LYS:NZ</td>
<td>6:A:261:ARG:HH21</td>
<td>2.03</td>
<td>0.56</td>
</tr>
<tr>
<td>7:B:108:SER:OG</td>
<td>7:B:163:GLU:N</td>
<td>2.38</td>
<td>0.56</td>
</tr>
<tr>
<td>8:C:116:LYS:O</td>
<td>8:C:117:LEU:HB2</td>
<td>2.05</td>
<td>0.56</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:D:40:LEU:HA</td>
<td>9:D:150:ARG:NH2</td>
<td>2.20</td>
<td>0.56</td>
</tr>
<tr>
<td>10:E:18:ASN:HB2</td>
<td>10:E:25:LYS:CB</td>
<td>2.32</td>
<td>0.56</td>
</tr>
<tr>
<td>11:F:100:ASN:HB3</td>
<td>11:F:103:GLN:OE1</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>14:I:72:TYR:CD2</td>
<td>14:I:107:LYS:HB2</td>
<td>2.40</td>
<td>0.56</td>
</tr>
<tr>
<td>14:I:126:SER:OG</td>
<td>14:I:129:ALA:HB2</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>14:I:17:LYS:O</td>
<td>14:I:17:LYS:HG2</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>15:J:123:GLY:HA2</td>
<td>15:J:126:LEU:HD12</td>
<td>1.86</td>
<td>0.56</td>
</tr>
<tr>
<td>15:J:19:THR:CG2</td>
<td>15:J:99:LYS:NZ</td>
<td>2.68</td>
<td>0.56</td>
</tr>
<tr>
<td>16:K:45:ARG:HB3</td>
<td>16:K:46:PRO:CD</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>18:M:104:LEU:O</td>
<td>18:M:106:TYR:N</td>
<td>2.38</td>
<td>0.56</td>
</tr>
<tr>
<td>26:U:46:LEU:C</td>
<td>26:U:47:HIS:CG</td>
<td>2.77</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1770:U:O2</td>
<td>29:X:1774:A:C5</td>
<td>2.58</td>
<td>0.56</td>
</tr>
<tr>
<td>7:B:146:THR:HG23</td>
<td>29:X:2015:G:H21</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2081:U:H2'</td>
<td>29:X:2082:C:O4'</td>
<td>2.04</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2210:C:C2</td>
<td>29:X:2211:U:C6</td>
<td>2.92</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2271:C:H2'</td>
<td>29:X:2272:A:H8</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:328:A:H2'</td>
<td>29:X:329:C:H6</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>4:4:24:LEU:HD12</td>
<td>4:4:24:LEU:N</td>
<td>2.20</td>
<td>0.56</td>
</tr>
<tr>
<td>6:A:252:LYS:CE</td>
<td>6:A:253:PRO:HD2</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>9:D:52:LYS:NZ</td>
<td>9:D:149:THR:HA</td>
<td>2.20</td>
<td>0.56</td>
</tr>
<tr>
<td>9:D:92:ARG:HG3</td>
<td>9:D:92:ARG:HH21</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>10:E:65:HIS:C</td>
<td>10:E:67:LEU:H</td>
<td>2.08</td>
<td>0.56</td>
</tr>
<tr>
<td>10:E:6:LYS:HB3</td>
<td>10:E:69:ARG:CD</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>15:J:75:VAL:HG21</td>
<td>15:J:93:TYR:HE2</td>
<td>1.69</td>
<td>0.56</td>
</tr>
<tr>
<td>17:L:28:ARG:HH22</td>
<td>31:Z:10:U:C3'</td>
<td>2.18</td>
<td>0.56</td>
</tr>
<tr>
<td>17:L:37:HIS:O</td>
<td>17:L:37:HIS:ND1</td>
<td>2.38</td>
<td>0.56</td>
</tr>
<tr>
<td>21:P:134:LYS:HG2</td>
<td>21:P:134:LYS:OXT</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>23:R:96:LYS:O</td>
<td>23:R:104:VAL:HA</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>23:R:96:LYS:HG3</td>
<td>23:R:97:GLN:H</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1276:U:H1'</td>
<td>30:Y:10:LYS:HG3</td>
<td>1.86</td>
<td>0.56</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:1466:C:C2'</td>
<td>29:X:1467:U:O4'</td>
<td>2.53</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1734:C:C4</td>
<td>29:X:1735:G:H1'</td>
<td>2.41</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1770:U:H5</td>
<td>29:X:1775:A:N7</td>
<td>2.03</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2691:C:OP1</td>
<td>29:X:2694:G:H4'</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2792:C:C2</td>
<td>29:X:2805:G:N2</td>
<td>2.73</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2819:G:H2'</td>
<td>29:X:2820:C:C6</td>
<td>2.40</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1:G:H2'</td>
<td>29:X:2:G:C8</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:305:A:H2'</td>
<td>29:X:306:G:H5'</td>
<td>1.86</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:529:U:C2</td>
<td>29:X:530:G:C8</td>
<td>2.94</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:603:C:O2</td>
<td>29:X:603:C:H2'</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:614:G:O2'</td>
<td>29:X:615:C:H5'</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:754:G:C6</td>
<td>29:X:755:C:N4</td>
<td>2.73</td>
<td>0.56</td>
</tr>
<tr>
<td>8:C:130:THR:O</td>
<td>8:C:134:ILE:HG13</td>
<td>2.03</td>
<td>0.56</td>
</tr>
<tr>
<td>9:D:12:VAL:HG22</td>
<td>9:D:172:SER:OG</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>11:F:19:PRO:HG2</td>
<td>11:F:20:ALA:H</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>11:F:83:GLY:O</td>
<td>11:F:84:ILE:HG13</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>15:J:117:GLU:O</td>
<td>15:J:121:LEU:HG</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>15:J:80:ALA:HB1</td>
<td>15:J:81:GLU:OE1</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>15:J:21:ASP:CA</td>
<td>15:J:99:LYS:HG3</td>
<td>2.30</td>
<td>0.56</td>
</tr>
<tr>
<td>16:K:96:ARG:HD2</td>
<td>16:K:114:GLU:OE2</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>16:K:7:GLY:O</td>
<td>16:K:8:ARG:HG2</td>
<td>2.04</td>
<td>0.56</td>
</tr>
<tr>
<td>19:N:93:LYS:O</td>
<td>19:N:93:LYS:HD2</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>19:N:93:LYS:O</td>
<td>19:N:94:VAL:CB</td>
<td>2.52</td>
<td>0.56</td>
</tr>
<tr>
<td>20:O:42:GLY:O</td>
<td>20:O:43:GLU:HB2</td>
<td>2.04</td>
<td>0.56</td>
</tr>
<tr>
<td>23:R:80:LYS:O</td>
<td>23:R:80:LYS:CE</td>
<td>2.52</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1465:G:H2'</td>
<td>29:X:1466:C:C6</td>
<td>2.41</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2203:G:H4'</td>
<td>29:X:2205:C:C2</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2264:C:N4</td>
<td>29:X:2325:A:H2</td>
<td>2.02</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2426:G:HO2'</td>
<td>29:X:2427:A:P</td>
<td>2.28</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2463:G:O2'</td>
<td>29:X:2464:G:H5'</td>
<td>2.04</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2564:U:H5'</td>
<td>29:X:2565:C:OP1</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2:G:H2'</td>
<td>29:X:3:U:H6</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:313:U:O2'</td>
<td>29:X:314:G:H5'</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:648:A:H5'</td>
<td>29:X:649:G:OP1</td>
<td>2.05</td>
<td>0.56</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>29:X:874:A:H2'</td>
<td>29:X:875:G:O4'</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>31:Z:16:U:C1'</td>
<td>31:Z:109:G:H2'</td>
<td>2.15</td>
<td>0.56</td>
</tr>
<tr>
<td>9:D:66:ILE:HG13</td>
<td>31:Z:44:C:O4'</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>6:A:244:ARG:C</td>
<td>6:A:252:LYS:NZ</td>
<td>2.58</td>
<td>0.56</td>
</tr>
<tr>
<td>6:A:44:ASN:N</td>
<td>6:A:44:ASN:HD22</td>
<td>2.00</td>
<td>0.56</td>
</tr>
<tr>
<td>8:C:162:ARG:NH1</td>
<td>29:X:333:A:C8</td>
<td>2.73</td>
<td>0.56</td>
</tr>
<tr>
<td>12:G:119:LEU:HD13</td>
<td>12:G:126:VAL:HG22</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>18:M:13:LEU:CD1</td>
<td>18:M:13:LEU:N</td>
<td>2.69</td>
<td>0.56</td>
</tr>
<tr>
<td>19:N:96:ALA:O</td>
<td>19:N:99:ALA:HB3</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>23:R:16:PHE:HZ</td>
<td>23:R:46:VAL:HG22</td>
<td>1.71</td>
<td>0.56</td>
</tr>
<tr>
<td>24:S:30:VAL:HB</td>
<td>24:S:32:PHE:CZ</td>
<td>2.41</td>
<td>0.56</td>
</tr>
<tr>
<td>25:T:44:LYS:HE3</td>
<td>25:T:45:PHE:CE1</td>
<td>2.40</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1002:C:N3</td>
<td>29:X:1003:C:C5</td>
<td>2.73</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1509:A:H2'</td>
<td>29:X:1510:A:H5'</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1514:C:C4'</td>
<td>29:X:1593:C:H5'</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1926:U:C1'</td>
<td>29:X:1928:G:H5'</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:242:A:O2'</td>
<td>29:X:243:G:H4'</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2553:G:H2'</td>
<td>29:X:2554:C:H6</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2627:G:O2'</td>
<td>29:X:2628:C:H5'</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>10:E:143:GLN:CG</td>
<td>29:X:2725:C:O2'</td>
<td>2.53</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:431:G:H2'</td>
<td>29:X:432:C:H6</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:531:G:H2'</td>
<td>29:X:532:A:C8</td>
<td>2.41</td>
<td>0.56</td>
</tr>
<tr>
<td>6:A:254:THR:O</td>
<td>29:X:1836:C:H5'</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>7:B:152:LYS:H</td>
<td>12:G:106:TYR:CB</td>
<td>2.18</td>
<td>0.56</td>
</tr>
<tr>
<td>8:C:47:THR:HB</td>
<td>8:C:48:ARG:HD2</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>10:E:149:ARG:HG2</td>
<td>10:E:149:ARG:NH2</td>
<td>2.17</td>
<td>0.56</td>
</tr>
<tr>
<td>10:E:95:ARG:NH1</td>
<td>10:E:97:LYS:NZ</td>
<td>2.54</td>
<td>0.56</td>
</tr>
<tr>
<td>15:J:15:ARG:CD</td>
<td>15:J:73:LYS:HG3</td>
<td>2.36</td>
<td>0.56</td>
</tr>
<tr>
<td>21:P:50:VAL:O</td>
<td>21:P:54:GLU:HG3</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>25:T:45:PHE:HZ</td>
<td>25:T:77:ARG:NH2</td>
<td>2.04</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1933:G:C8</td>
<td>29:X:1934:U:C5</td>
<td>2.93</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:21:A:C6</td>
<td>29:X:530:G:C6</td>
<td>2.94</td>
<td>0.56</td>
</tr>
<tr>
<td>23:R:9:HIS:CG</td>
<td>29:X:338:G:H4'</td>
<td>2.41</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:553:C:H2'</td>
<td>29:X:557:U:C5</td>
<td>2.41</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:782:U:O2'</td>
<td>29:X:783:G:H5'</td>
<td>2.06</td>
<td>0.56</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:B:154:LYS:NZ</td>
<td>7:B:156:MET:CE</td>
<td>2.68</td>
<td>0.56</td>
</tr>
<tr>
<td>8:C:46:ARG:O</td>
<td>8:C:47:THR:C</td>
<td>2.43</td>
<td>0.56</td>
</tr>
<tr>
<td>9:D:124:GLY:HA2</td>
<td>9:D:163:ASP:OD2</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>10:E:64:LEU:HA</td>
<td>10:E:67:LEU:HB2</td>
<td>1.88</td>
<td>0.56</td>
</tr>
<tr>
<td>10:E:84:THR:CB</td>
<td>10:E:134:SER:HA</td>
<td>2.36</td>
<td>0.56</td>
</tr>
<tr>
<td>17:L:38:ILE:CD1</td>
<td>17:L:39:TYR:N</td>
<td>2.67</td>
<td>0.56</td>
</tr>
<tr>
<td>23:R:17:LYS:C</td>
<td>23:R:19:GLY:H</td>
<td>2.09</td>
<td>0.56</td>
</tr>
<tr>
<td>23:R:25:LEU:HD13</td>
<td>23:R:25:LEU:O</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1001:A:H1'</td>
<td>29:X:1073:G:H21</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>11:F:133:SER:HB3</td>
<td>29:X:1167:A:C2</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1162:A:H2'</td>
<td>29:X:1163:C:H6</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1802:A:O2'</td>
<td>29:X:1803:G:H5'</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:47:G:N3</td>
<td>29:X:48:A:H2</td>
<td>2.03</td>
<td>0.56</td>
</tr>
<tr>
<td>9:D:8:TYR:HA</td>
<td>9:D:173:MET:SD</td>
<td>2.45</td>
<td>0.56</td>
</tr>
<tr>
<td>11:F:103:GLN:O</td>
<td>11:F:107:ILE:HG13</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>12:G:61:ARG:NE</td>
<td>12:G:65:LYS:CD</td>
<td>2.57</td>
<td>0.56</td>
</tr>
<tr>
<td>23:R:23:ILE:HD12</td>
<td>23:R:81:VAL:O</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>24:S:72:ASP:OD1</td>
<td>24:S:75:LYS:HD2</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>27:V:2:LYS:HA</td>
<td>27:V:6:MET:CE</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1053:G:C4</td>
<td>29:X:1054:C:C6</td>
<td>2.93</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:824:U:O2</td>
<td>29:X:1263:G:H3'</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>21:P:108:PRO:CG</td>
<td>29:X:1631:C:H1'</td>
<td>2.30</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1856:U:H3</td>
<td>29:X:1861:G:H1</td>
<td>1.54</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:203:G:C2</td>
<td>29:X:204:A:C2</td>
<td>2.93</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2672:U:O2'</td>
<td>29:X:2673:G:H5'</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:796:A:H4'</td>
<td>29:X:2567:G:H4'</td>
<td>1.86</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:876:A:H2'</td>
<td>29:X:877:G:C8</td>
<td>2.41</td>
<td>0.56</td>
</tr>
<tr>
<td>4:4:1:MET:CE</td>
<td>4:4:33:LYS:HB3</td>
<td>2.36</td>
<td>0.56</td>
</tr>
<tr>
<td>8:C:112:GLN:HA</td>
<td>8:C:116:LYS:HB3</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>9:D:13:ARG:CZ</td>
<td>9:D:14:PRO:CG</td>
<td>2.79</td>
<td>0.56</td>
</tr>
<tr>
<td>10:E:54:ARG:HE</td>
<td>10:E:57:ASP:CB</td>
<td>2.18</td>
<td>0.56</td>
</tr>
<tr>
<td>10:E:97:LYS:O</td>
<td>10:E:98:LEU:CB</td>
<td>2.53</td>
<td>0.56</td>
</tr>
<tr>
<td>12:G:33:ILE:CD1</td>
<td>12:G:34:PRO:N</td>
<td>2.69</td>
<td>0.56</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:G:35:LYS:N</td>
<td>12:G:69:ASP:OD2</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>15:J:19:THR:HG23</td>
<td>15:J:20:GLY:N</td>
<td>2.20</td>
<td>0.56</td>
</tr>
<tr>
<td>15:J:79:PRO:O</td>
<td>15:J:80:ALA:HB2</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>24:S:94:VAL:O</td>
<td>24:S:121:GLN:HG3</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1815:G:O2'</td>
<td>29:X:1816:G:H5'</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1835:C:O5'</td>
<td>29:X:1835:C:H6</td>
<td>1.89</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2395:C:O2'</td>
<td>29:X:2396:C:H5''</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>7:B:136:ARG:NH1</td>
<td>7:B:136:ARG:HG2</td>
<td>2.19</td>
<td>0.56</td>
</tr>
<tr>
<td>8:C:153:ASP:C</td>
<td>8:C:154:ASP:OD1</td>
<td>2.44</td>
<td>0.56</td>
</tr>
<tr>
<td>10:E:30:LYS:HG3</td>
<td>10:E:78:GLY:O</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>10:E:54:ARG:NE</td>
<td>10:E:57:ASP:OD2</td>
<td>2.38</td>
<td>0.56</td>
</tr>
<tr>
<td>11:F:103:GLN:O</td>
<td>11:F:106:GLU:HG2</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>15:J:77:LYS:O</td>
<td>15:J:79:PRO:HD3</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>17:L:29:LEU:HA</td>
<td>17:L:41:GLN:O</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>19:N:66:ASN:HD22</td>
<td>19:N:70:ARG:NH2</td>
<td>2.03</td>
<td>0.56</td>
</tr>
<tr>
<td>24:S:36:ARG:O</td>
<td>24:S:40:ASP:OD2</td>
<td>2.23</td>
<td>0.56</td>
</tr>
<tr>
<td>25:T:34:GLY:HA3</td>
<td>29:X:2332:G:H1'</td>
<td>1.88</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1107:A:H3'</td>
<td>29:X:1108:U:C5'</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1368:G:C4</td>
<td>29:X:1369:G:C8</td>
<td>2.94</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1675:C:H2'</td>
<td>29:X:1676:U:C6</td>
<td>2.41</td>
<td>0.56</td>
</tr>
<tr>
<td>6:A:261:ARG:HH22</td>
<td>29:X:1790:G:C5'</td>
<td>2.19</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2047:C:H2'</td>
<td>29:X:2048:C:C6</td>
<td>2.41</td>
<td>0.56</td>
</tr>
<tr>
<td>8:C:40:ARG:HH22</td>
<td>29:X:452:G:N2</td>
<td>2.04</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:537:C:O2'</td>
<td>29:X:538:A:N3</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>8:C:161:ALA:HB3</td>
<td>8:C:169:VAL:CG2</td>
<td>2.36</td>
<td>0.56</td>
</tr>
<tr>
<td>10:E:45:GLN:HA</td>
<td>10:E:50:LEU:HG</td>
<td>1.88</td>
<td>0.56</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>10:E:84:THR:HB</td>
<td>10:E:134:SER:HA</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>11:F:129:GLY:HA3</td>
<td>29:X:1090:C:O2</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>12:G:64:GLY:HA3</td>
<td>12:G:67:ARG:CG</td>
<td>2.36</td>
<td>0.56</td>
</tr>
<tr>
<td>12:G:64:GLY:HA3</td>
<td>12:G:67:ARG:HG3</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>19:N:40:LEU:O</td>
<td>19:N:43:ALA:HB3</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>23:R:105:ARG:NH1</td>
<td>23:R:113:THR:H</td>
<td>2.04</td>
<td>0.56</td>
</tr>
<tr>
<td>23:R:25:LEU:HD22</td>
<td>23:R:26:SER:N</td>
<td>2.21</td>
<td>0.56</td>
</tr>
<tr>
<td>24:S:13:LYS:HA</td>
<td>24:S:16:GLU:HB2</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>24:S:19:ILE:HG12</td>
<td>24:S:36:ARG:CA</td>
<td>2.20</td>
<td>0.56</td>
</tr>
<tr>
<td>26:U:10:LYS:NZ</td>
<td>26:U:70:LEU:HG</td>
<td>2.20</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1058:G:C4</td>
<td>29:X:1121:G:C6</td>
<td>2.94</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1623:C:H4</td>
<td>29:X:1624:A:O5</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1979:C:O2'</td>
<td>29:X:1980:A:P</td>
<td>2.64</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2379:G:C2'</td>
<td>29:X:2380:U:H5'</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>8:C:162:ARG:CD</td>
<td>29:X:333:A:C5'</td>
<td>2.80</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:401:G:H5'</td>
<td>29:X:402:A:OP2</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:409:G:O2'</td>
<td>29:X:410:A:H5'</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:765:C:N4</td>
<td>29:X:1772:C:O2</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:75:C:C2'</td>
<td>29:X:76:C:H5'</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:830:C:H2'</td>
<td>29:X:831:G:C8</td>
<td>2.41</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1275:A:N3</td>
<td>30:Y:10:LYS:HE2</td>
<td>2.21</td>
<td>0.56</td>
</tr>
<tr>
<td>30:Y:19:ARG:C</td>
<td>30:Y:21:SER:H</td>
<td>2.09</td>
<td>0.56</td>
</tr>
<tr>
<td>31:Z:4:C:C6</td>
<td>31:Z:4:C:H3'</td>
<td>2.41</td>
<td>0.56</td>
</tr>
<tr>
<td>7:B:88:GLY:O</td>
<td>7:B:89:ASP:OD1</td>
<td>2.23</td>
<td>0.56</td>
</tr>
<tr>
<td>8:C:136:TRP:C</td>
<td>8:C:140:ASN:HD22</td>
<td>2.10</td>
<td>0.56</td>
</tr>
<tr>
<td>8:C:58:MET:SD</td>
<td>8:C:69:HIS:HB2</td>
<td>2.46</td>
<td>0.56</td>
</tr>
<tr>
<td>10:E:137:ASP:O</td>
<td>10:E:141:VAL:HG23</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>12:G:92:GLY:C</td>
<td>12:G:93:LYS:HE2</td>
<td>2.25</td>
<td>0.56</td>
</tr>
<tr>
<td>13:H:60:PRO:O</td>
<td>13:H:61:ARG:HB2</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>14:I:71:THR:O</td>
<td>14:I:104:ARG:HD3</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>15:J:136:GLU:HA</td>
<td>15:J:138:TYR:CE2</td>
<td>2.41</td>
<td>0.56</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>24:S:75:LYS:O</td>
<td>24:S:77:ALA:N</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:829:C:C2</td>
<td>29:X:1206:G:N2</td>
<td>2.74</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1320:A:H2'</td>
<td>29:X:1321:A:O4'</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:1979:C:O2'</td>
<td>29:X:1980:A:C4'</td>
<td>2.54</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:2074:U:OP2</td>
<td>29:X:2075:U:H3'</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:233:A:O2'</td>
<td>29:X:234:C:H5'</td>
<td>2.06</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:759:C:H6</td>
<td>29:X:759:C:C5'</td>
<td>2.17</td>
<td>0.56</td>
</tr>
<tr>
<td>31:Z:112:A:H2'</td>
<td>31:Z:113:G:H8</td>
<td>1.69</td>
<td>0.56</td>
</tr>
<tr>
<td>29:X:931:G:H4'</td>
<td>31:Z:83:C:C4'</td>
<td>2.35</td>
<td>0.56</td>
</tr>
<tr>
<td>9:D:135:GLN:O</td>
<td>9:D:141:ILE:HG13</td>
<td>2.05</td>
<td>0.55</td>
</tr>
<tr>
<td>9:D:163:ASP:O</td>
<td>9:D:166:ALA:HB3</td>
<td>2.05</td>
<td>0.55</td>
</tr>
<tr>
<td>9:D:46:ASP:HB3</td>
<td>9:D:48:LYS:HG3</td>
<td>1.87</td>
<td>0.55</td>
</tr>
<tr>
<td>14:I:83:LEU:O</td>
<td>14:I:84:GLU:HB2</td>
<td>2.05</td>
<td>0.55</td>
</tr>
<tr>
<td>14:I:33:GLY:HA2</td>
<td>20:O:79:GLN:HG3</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>20:O:82:ARG:HA</td>
<td>29:X:827:C:OP1</td>
<td>2.05</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:1662:G:H5'''</td>
<td>29:X:1663:C:H5''</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:558:G:O4''</td>
<td>29:X:558:G:P</td>
<td>2.64</td>
<td>0.55</td>
</tr>
<tr>
<td>8:C:136:TRP:CD1</td>
<td>8:C:137:ALA:N</td>
<td>2.74</td>
<td>0.55</td>
</tr>
<tr>
<td>8:C:166:TRP:N</td>
<td>8:C:166:TRP:HE3</td>
<td>2.01</td>
<td>0.55</td>
</tr>
<tr>
<td>8:C:90:SER:O</td>
<td>8:C:91:TYR:C</td>
<td>2.44</td>
<td>0.55</td>
</tr>
<tr>
<td>14:I:81:GLN:HB3</td>
<td>14:I:114:ILE:HG22</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>15:J:78:LYS:HG2</td>
<td>15:J:78:LYS:O</td>
<td>2.04</td>
<td>0.55</td>
</tr>
<tr>
<td>17:L:102:ALA:O</td>
<td>17:L:103:LEU:C</td>
<td>2.44</td>
<td>0.55</td>
</tr>
<tr>
<td>17:L:89:PHE:CZ</td>
<td>29:X:2356:A:N3</td>
<td>2.74</td>
<td>0.55</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>20:O:40:VAL:CG1</td>
<td>20:O:45:THR:HA</td>
<td>2.22</td>
<td>0.55</td>
</tr>
<tr>
<td>23:R:92:THR:C</td>
<td>23:R:95:ARG:HH2</td>
<td>2.09</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:1073:G:H2'</td>
<td>29:X:1074:G:C8</td>
<td>2.41</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:1648:C:H5'</td>
<td>29:X:1648:C:C6</td>
<td>2.40</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2065:A:H2'</td>
<td>29:X:2066:G:O4'</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2082:C:H2'</td>
<td>29:X:2083:G:C5'</td>
<td>2.36</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:558:G:H8</td>
<td>29:X:559:C:C5</td>
<td>2.21</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:749:C:H2'</td>
<td>29:X:750:G:H6</td>
<td>1.71</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:765:C:C4</td>
<td>29:X:1772:C:H1'</td>
<td>2.42</td>
<td>0.55</td>
</tr>
<tr>
<td>7:B:179:GLU:O</td>
<td>7:B:181:LEU:N</td>
<td>2.39</td>
<td>0.55</td>
</tr>
<tr>
<td>8:C:149:LEU:HD12</td>
<td>8:C:168:SER:O</td>
<td>2.07</td>
<td>0.55</td>
</tr>
<tr>
<td>9:D:148:LYS:HG3</td>
<td>9:D:149:THR:N</td>
<td>2.11</td>
<td>0.55</td>
</tr>
<tr>
<td>17:L:38:ILE:HG12</td>
<td>17:L:71:VAL:HG21</td>
<td>1.87</td>
<td>0.55</td>
</tr>
<tr>
<td>21:P:14:ARG:CA</td>
<td>21:P:17:GLN:HG2</td>
<td>2.32</td>
<td>0.55</td>
</tr>
<tr>
<td>23:R:95:ARG:HG3</td>
<td>23:R:105:ARG:O</td>
<td>2.05</td>
<td>0.55</td>
</tr>
<tr>
<td>24:S:120:LEU:CD2</td>
<td>24:S:121:GLN:N</td>
<td>2.67</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:127:C:O2'</td>
<td>29:X:128:C:H5'</td>
<td>2.07</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:1391:A:N7</td>
<td>29:X:1393:G:C5</td>
<td>2.74</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:169:C:H2'</td>
<td>29:X:170:U:C5'</td>
<td>2.32</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:1770:U:C5</td>
<td>29:X:1775:A:N7</td>
<td>2.74</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2203:G:H4'</td>
<td>29:X:2205:C:O2</td>
<td>2.07</td>
<td>0.55</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:638:A:C6</td>
<td>29:X:648:A:C8</td>
<td>2.94</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:976:C:O2'</td>
<td>29:X:977:G:H5'</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>6:A:244:ARG:CB</td>
<td>6:A:252:LYS:HZ1</td>
<td>2.18</td>
<td>0.55</td>
</tr>
<tr>
<td>9:D:112:ARG:O</td>
<td>9:D:113:ASP:HB2</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>12:G:159:SER:C</td>
<td>12:G:161:GLN:H</td>
<td>2.10</td>
<td>0.55</td>
</tr>
<tr>
<td>16:K:30:ARG:HG2</td>
<td>16:K:31:GLU:HG2</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>17:L:43:ILE:HG23</td>
<td>17:L:49:GLN:O</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>17:L:63:ASN:C</td>
<td>17:L:64:LYS:HD3</td>
<td>2.27</td>
<td>0.55</td>
</tr>
<tr>
<td>23:R:18:LYS:HA</td>
<td>23:R:36:VAL:HG12</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>24:S:96:VAL:O</td>
<td>24:S:120:LEU:N</td>
<td>2.28</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:1182:U:C2'</td>
<td>29:X:1183:C:O5'</td>
<td>2.54</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:1522:C:H2'</td>
<td>29:X:1523:A:H5''</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:1966:C:H4'</td>
<td>29:X:2585:C:H4'</td>
<td>1.87</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2695:C:O2'</td>
<td>29:X:2696:A:H5'</td>
<td>2.07</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:573:C:H2'</td>
<td>29:X:574:C:O4'</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>14:I:18:ARG:HD3</td>
<td>29:X:608:G:O2'</td>
<td>2.05</td>
<td>0.55</td>
</tr>
<tr>
<td>31:Z:4:C:H2'</td>
<td>31:Z:5:C:H5''</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>7:B:127:ALA:CB</td>
<td>7:B:135:HIS:CE1</td>
<td>2.90</td>
<td>0.55</td>
</tr>
<tr>
<td>7:B:73:ALA:O</td>
<td>7:B:74:PRO:C</td>
<td>2.45</td>
<td>0.55</td>
</tr>
<tr>
<td>15:J:35:LEU:HB3</td>
<td>15:J:105:PHE:HB2</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>24:S:54:ILE:HG22</td>
<td>24:S:54:ILE:O</td>
<td>2.06</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>29:X:1189:G:H2'</td>
<td>29:X:1190:C:O4'</td>
<td>2.07</td>
<td>0.55</td>
</tr>
<tr>
<td>21:P:36:ARG:NH2</td>
<td>30:Y:20:ARG:CZ</td>
<td>2.70</td>
<td>0.55</td>
</tr>
<tr>
<td>10:E:170:ALA:C</td>
<td>10:E:171:LEU:HD12</td>
<td>2.27</td>
<td>0.55</td>
</tr>
<tr>
<td>18:M:34:ARG:NH1</td>
<td>18:M:81:PHE:CB</td>
<td>2.66</td>
<td>0.55</td>
</tr>
<tr>
<td>7:B:53:PRO:CD</td>
<td>18:M:6:LYS:HZ2</td>
<td>2.16</td>
<td>0.55</td>
</tr>
<tr>
<td>23:R:103:LYS:HG3</td>
<td>23:R:104:VAL:H</td>
<td>1.72</td>
<td>0.55</td>
</tr>
<tr>
<td>23:R:23:ILE:CD1</td>
<td>23:R:81:VAL:O</td>
<td>2.54</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:1229:C:O2''</td>
<td>29:X:1230:C:H5'</td>
<td>2.07</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2198:U:H2'</td>
<td>29:X:2199:C:C1'</td>
<td>2.36</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2210:C:H2'</td>
<td>29:X:2211:U:C6</td>
<td>2.41</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2217:G:H5'</td>
<td>29:X:2218:G:N7</td>
<td>2.21</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2270:U:O2''</td>
<td>29:X:2271:G:H5'</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2585:C:H2'</td>
<td>29:X:2586:G:C5'</td>
<td>2.35</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:746:G:C8</td>
<td>29:X:774:A:C6</td>
<td>2.95</td>
<td>0.55</td>
</tr>
<tr>
<td>4:4:2:LYS:HG2</td>
<td>4:4:4:ARG:HD3</td>
<td>1.87</td>
<td>0.55</td>
</tr>
<tr>
<td>8:C:104:LEU:N</td>
<td>8:C:177:VAL:HG22</td>
<td>2.22</td>
<td>0.55</td>
</tr>
<tr>
<td>8:C:108:ILE:HG22</td>
<td>8:C:109:ALA:N</td>
<td>2.22</td>
<td>0.55</td>
</tr>
<tr>
<td>12:G:92:GLY:CA</td>
<td>12:G:93:LYS:HE2</td>
<td>2.36</td>
<td>0.55</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21:P:34:SER:O</td>
<td>21:P:35:PRO:C</td>
<td>2.45</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:1174:C:G</td>
<td>29:X:1175:A:N7</td>
<td>2.75</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:1641:C:O2</td>
<td>29:X:1641:C:H2'</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>18:M:101:ARG:NH2</td>
<td>29:X:1745:C:P</td>
<td>2.71</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2083:G:H2'</td>
<td>29:X:2084:G:C8</td>
<td>2.42</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2326:C:C4</td>
<td>29:X:2327:U:O4</td>
<td>2.60</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2474:G:C2</td>
<td>29:X:2475:C:C2</td>
<td>2.94</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2586:G:C2</td>
<td>29:X:2587:G:N3</td>
<td>2.75</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2849:C:H2'</td>
<td>29:X:2850:U:C5'</td>
<td>2.37</td>
<td>0.55</td>
</tr>
<tr>
<td>8:C:98:GLN:NE2</td>
<td>29:X:611:C:H4'</td>
<td>2.22</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:788:G:C5'</td>
<td>29:X:790:A:H1'</td>
<td>2.30</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:981:C:O2'</td>
<td>29:X:995:A:H4'</td>
<td>2.07</td>
<td>0.55</td>
</tr>
<tr>
<td>8:C:173:ALA:C</td>
<td>8:C:175:VAL:H</td>
<td>2.10</td>
<td>0.55</td>
</tr>
<tr>
<td>9:D:99:PHE:O</td>
<td>9:D:102:LYS:HB2</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>11:F:54:PRO:HG2</td>
<td>11:F:70:LYS:CB</td>
<td>2.30</td>
<td>0.55</td>
</tr>
<tr>
<td>12:G:32:TYR:OH</td>
<td>12:G:35:LYS:HE3</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>14:I:72:TYR:HD2</td>
<td>14:I:107:LYS:HB2</td>
<td>1.72</td>
<td>0.55</td>
</tr>
<tr>
<td>15:J:75:VAL:HG12</td>
<td>15:J:76:THR:N</td>
<td>2.21</td>
<td>0.55</td>
</tr>
<tr>
<td>15:J:97:VAL:HG23</td>
<td>15:J:97:VAL:O</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>23:R:93:ARG:O</td>
<td>23:R:95:ARG:HZ</td>
<td>2.54</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:1102:G:O2'</td>
<td>29:X:1103:C:HZ</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>14:I:13:ARG:NH1</td>
<td>29:X:1218:C:O4'</td>
<td>2.32</td>
<td>0.55</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:2604:G:H2'</td>
<td>29:X:2605:C:C6</td>
<td>2.41</td>
<td>0.55</td>
</tr>
<tr>
<td>12:G:162:LYS:NZ</td>
<td>29:X:5:A:N3</td>
<td>2.49</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:76:C:O2'</td>
<td>29:X:77:C:H5'</td>
<td>2.07</td>
<td>0.55</td>
</tr>
<tr>
<td>7:B:117:MET:C</td>
<td>4:4:24:LEU:HD12</td>
<td>2.27</td>
<td>0.55</td>
</tr>
<tr>
<td>8:C:122:GLY:O</td>
<td>8:C:124:ASP:N</td>
<td>2.39</td>
<td>0.55</td>
</tr>
<tr>
<td>10:E:146:ALA:O</td>
<td>10:E:149:ARG:N</td>
<td>2.39</td>
<td>0.55</td>
</tr>
<tr>
<td>15:J:100:PRO:HB2</td>
<td>24:S:74:ARG:HG2</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>7:B:181:LEU:HD21</td>
<td>18:M:12:LEU:HD22</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>20:O:40:VAL:HG23</td>
<td>20:O:40:VAL:O</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>23:R:96:LYS:O</td>
<td>23:R:104:VAL:HG12</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>23:R:29:His:CE1</td>
<td>23:R:51:VAL:HA</td>
<td>2.42</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:1373:G:N2</td>
<td>29:X:1374:G:C1'</td>
<td>2.70</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2823:G:O2'</td>
<td>29:X:2824:C:OP2</td>
<td>2.25</td>
<td>0.55</td>
</tr>
<tr>
<td>7:B:155:ARG:HG3</td>
<td>7:B:155:ARG:HH11</td>
<td>1.70</td>
<td>0.55</td>
</tr>
<tr>
<td>8:C:104:LEU:HA</td>
<td>8:C:107:ALA:CB</td>
<td>2.37</td>
<td>0.55</td>
</tr>
<tr>
<td>14:I:36:GLY:O</td>
<td>14:I:37:GLN:CB</td>
<td>2.55</td>
<td>0.55</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:1294:G:C5</td>
<td>29:X:1295:U:C5</td>
<td>2.95</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:1711:C:H4'</td>
<td>29:X:1712:G:OP1</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:172:A:C2</td>
<td>29:X:178:C:C2</td>
<td>2.95</td>
<td>0.55</td>
</tr>
<tr>
<td>17:L:11:LEU:HD21</td>
<td>29:X:2273:C:H5''</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>29:X:2616:U:H2'</td>
<td>29:X:2617:G:O4'</td>
<td>2.06</td>
<td>0.55</td>
</tr>
<tr>
<td>25:T:72:LYS:HD3</td>
<td>31:Z:14:C:C5'</td>
<td>2.37</td>
<td>0.55</td>
</tr>
<tr>
<td>4:4:9:LYS:HZ2</td>
<td>4:4:16:VAL:HG21</td>
<td>1.71</td>
<td>0.54</td>
</tr>
<tr>
<td>9:D:46:ASP:O</td>
<td>9:D:48:LYS:N</td>
<td>2.39</td>
<td>0.54</td>
</tr>
<tr>
<td>10:E:43:VAL:HB</td>
<td>10:E:52:VAL:CG1</td>
<td>2.35</td>
<td>0.54</td>
</tr>
<tr>
<td>12:G:106:TYR:O</td>
<td>12:G:110:LEU:CG</td>
<td>2.54</td>
<td>0.54</td>
</tr>
<tr>
<td>17:L:52:ALA:O</td>
<td>17:L:53:ALA:HB3</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>23:R:18:LYS:CE</td>
<td>23:R:19:GLY:N</td>
<td>2.68</td>
<td>0.54</td>
</tr>
<tr>
<td>24:S:91:PRO:CD</td>
<td>24:S:92:VAL:H</td>
<td>2.19</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1038:U:O2'</td>
<td>29:X:1039:A:H5'</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1302:C:H2'</td>
<td>29:X:1303:U:C6</td>
<td>2.41</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1499:A:H2'</td>
<td>29:X:1500:U:O4'</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1512:A:H2'</td>
<td>29:X:1514:C:H5</td>
<td>1.71</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:175:C:C6</td>
<td>29:X:175:C:C6</td>
<td>2.90</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2617:G:O2'</td>
<td>29:X:2618:A:H8</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>7:B:203:LYS:HG2</td>
<td>29:X:2713:A:N1</td>
<td>2.22</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:457:G:C2'</td>
<td>29:X:458:G:H5'</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:827:C:O2'</td>
<td>29:X:828:C:H5'</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:993:G:H5'</td>
<td>29:X:940:G:H5'</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:956:A:C4</td>
<td>29:X:2427:A:C2</td>
<td>2.95</td>
<td>0.54</td>
</tr>
<tr>
<td>31:Z:46:G:C2</td>
<td>31:Z:50:U:O2</td>
<td>2.60</td>
<td>0.54</td>
</tr>
<tr>
<td>4:4:7:VAL:HG13</td>
<td>4:4:34:GLN:HE21</td>
<td>1.73</td>
<td>0.54</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>12:G:150:VAL:O</td>
<td>12:G:151:TYR:CG</td>
<td>2.60</td>
<td>0.54</td>
</tr>
<tr>
<td>14:I:37:GLN:O</td>
<td>14:I:38:LYS:C</td>
<td>2.44</td>
<td>0.54</td>
</tr>
<tr>
<td>14:I:85:ASP:HA</td>
<td>14:I:116:ARG:NH1</td>
<td>2.21</td>
<td>0.54</td>
</tr>
<tr>
<td>20:O:36:LYS:HZ2</td>
<td>20:O:54:TYR:CBB</td>
<td>2.13</td>
<td>0.54</td>
</tr>
<tr>
<td>23:R:101:GLY:C</td>
<td>23:R:103:LYS:H</td>
<td>2.10</td>
<td>0.54</td>
</tr>
<tr>
<td>24:S:13:LYS:NZ</td>
<td>24:S:18:MET:CB</td>
<td>2.70</td>
<td>0.54</td>
</tr>
<tr>
<td>24:S:3:LEU:CB</td>
<td>24:S:34:LEU:HB3</td>
<td>2.36</td>
<td>0.54</td>
</tr>
<tr>
<td>27:V:31:GLN:O</td>
<td>27:V:35:GLY:N</td>
<td>2.40</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1324:G:H2'</td>
<td>29:X:1325:U:C6</td>
<td>2.42</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1456:C:H4'</td>
<td>29:X:1645:U:OP1</td>
<td>2.06</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:16:G:O2'</td>
<td>29:X:17:G:H5'</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:796:A:H5''</td>
<td>29:X:2567:G:O3'</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:490:A:HO2'</td>
<td>29:X:491:A:H3'</td>
<td>1.72</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:81:C:C5</td>
<td>29:X:82:G:C6</td>
<td>2.95</td>
<td>0.54</td>
</tr>
<tr>
<td>4:4:15:LYS:HB2</td>
<td>4:4:26:ILE:HG13</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>6:A:126:LYS:HB2</td>
<td>6:A:129:ASN:ND2</td>
<td>2.22</td>
<td>0.54</td>
</tr>
<tr>
<td>7:B:26:VAL:HB</td>
<td>7:B:182:ILE:CG2</td>
<td>2.37</td>
<td>0.54</td>
</tr>
<tr>
<td>7:B:70:ALA:O</td>
<td>7:B:72:VAL:N</td>
<td>2.40</td>
<td>0.54</td>
</tr>
<tr>
<td>8:C:154:ASP:HB2</td>
<td>8:C:157:THR:HG23</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>8:C:44:SER:HA</td>
<td>29:X:37:C:O2'</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>10:E:121:VAL:CG1</td>
<td>10:E:122:THR:N</td>
<td>2.71</td>
<td>0.54</td>
</tr>
<tr>
<td>10:E:76:VAL:O</td>
<td>10:E:80:SER:HB2</td>
<td>2.06</td>
<td>0.54</td>
</tr>
<tr>
<td>8:C:24:SER:HB2</td>
<td>14:I:15:ASP:OD1</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>15:J:42:TRP:HG3</td>
<td>15:J:95:VAL:HG11</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>17:L:42:ILE:HD11</td>
<td>17:L:87:VAL:HG11</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>17:L:68:ALA:HB1</td>
<td>17:L:102:ALA:HB1</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>17:L:84:ILE:HD12</td>
<td>17:L:84:ILE:N</td>
<td>2.23</td>
<td>0.54</td>
</tr>
<tr>
<td>18:M:34:ARG:NH1</td>
<td>18:M:88:VAL:CG2</td>
<td>2.55</td>
<td>0.54</td>
</tr>
<tr>
<td>20:O:72:ARG:HA</td>
<td>20:O:82:ARG:O</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>23:R:9:HIS:ND1</td>
<td>29:X:338:G:H5'</td>
<td>2.22</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1467:U:C4</td>
<td>29:X:1473:U:N3</td>
<td>2.66</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:145:CL:O2</td>
<td>29:X:153:CL:O2</td>
<td>2.95</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1574:CL:C2</td>
<td>29:X:1575:CL:H5''</td>
<td>2.36</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1608:U:H2'</td>
<td>29:X:1609:G:H8</td>
<td>1.72</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1629:G:C2</td>
<td>29:X:1633:G:C2</td>
<td>2.96</td>
<td>0.54</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>29:X:1695:U:H2'</td>
<td>29:X:1696:C:O4'</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2058:U:C4</td>
<td>29:X:2217:G:C6</td>
<td>2.95</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2358:C:H2'</td>
<td>29:X:2359:U:C6</td>
<td>2.41</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2526:U:C5</td>
<td>29:X:2545:A:C5</td>
<td>2.96</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2542:U:O2</td>
<td>29:X:2544:A:H8</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2779:C:H2'</td>
<td>29:X:2780:A:C1'</td>
<td>2.37</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2863:U:H2'</td>
<td>29:X:2864:C:O4'</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>7:B:116:VAL:HG22</td>
<td>7:B:136:ARG:NH2</td>
<td>2.23</td>
<td>0.54</td>
</tr>
<tr>
<td>8:C:20:PRO:HG2</td>
<td>8:C:21:GLU:H</td>
<td>1.71</td>
<td>0.54</td>
</tr>
<tr>
<td>10:E:102:ALA:HA</td>
<td>10:E:117:PRO:HD3</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>10:E:54:ARG:HE</td>
<td>10:E:57:ASP:HA</td>
<td>1.73</td>
<td>0.54</td>
</tr>
<tr>
<td>10:E:92:VAL:O</td>
<td>10:E:94:PHE:HD1</td>
<td>1.91</td>
<td>0.54</td>
</tr>
<tr>
<td>14:I:101:ARG:NH1</td>
<td>14:I:104:ARG:NH2</td>
<td>2.55</td>
<td>0.54</td>
</tr>
<tr>
<td>20:O:14:VAL:HG12</td>
<td>20:O:14:VAL:O</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>24:S:21:ALA:O</td>
<td>24:S:22:VAL:HG13</td>
<td>2.06</td>
<td>0.54</td>
</tr>
<tr>
<td>27:V:41:His:O</td>
<td>27:V:42:ARG:C</td>
<td>2.46</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1026:U:O2'</td>
<td>29:X:1027:C:H5'</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1053:G:H2'</td>
<td>29:X:1054:C:O4'</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1145:C:C6</td>
<td>29:X:1147:G:OP2</td>
<td>2.60</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2058:U:C3'</td>
<td>29:X:2217:G:N2</td>
<td>2.67</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2209:G:C5</td>
<td>29:X:2210:C:H5</td>
<td>2.26</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2501:U:C5'</td>
<td>29:X:2502:G:OP2</td>
<td>2.55</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2502:G:OP2</td>
<td>29:X:2502:G:OP2</td>
<td>2.55</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:26:G:C2</td>
<td>29:X:27:G:N2</td>
<td>2.76</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:313:U:H2'</td>
<td>29:X:314:G:C8</td>
<td>2.42</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:471:A:C8</td>
<td>29:X:472:C:C6</td>
<td>2.96</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:640:C:H4'</td>
<td>29:X:660:G:N3</td>
<td>2.23</td>
<td>0.54</td>
</tr>
<tr>
<td>7:B:72:VAL:HG12</td>
<td>7:B:73:ALA:N</td>
<td>2.23</td>
<td>0.54</td>
</tr>
<tr>
<td>8:C:7:ILE:HG21</td>
<td>8:C:121:ASP:O</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>9:D:17:MET:N</td>
<td>9:D:17:MET:SD</td>
<td>2.80</td>
<td>0.54</td>
</tr>
<tr>
<td>12:G:157:PRO:C</td>
<td>12:G:161:GLN:NE2</td>
<td>2.60</td>
<td>0.54</td>
</tr>
<tr>
<td>14:I:119:THR:HG23</td>
<td>14:I:139:ARG:O</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>15:J:37:ALA:HB2</td>
<td>15:J:104:MET:HE1</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>16:K:30:ARG:O</td>
<td>16:K:30:ARG:CG</td>
<td>2.56</td>
<td>0.54</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>23:R:93:ARG:O</td>
<td>23:R:95:ARG:HD2</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1115:C:H6</td>
<td>29:X:1115:C:O5'</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:525:A:H2</td>
<td>29:X:1273:G:N3</td>
<td>2.06</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2247:A:H5&quot;</td>
<td>29:X:2247:A:H8</td>
<td>1.72</td>
<td>0.54</td>
</tr>
<tr>
<td>14:I:63:ARG:NH1</td>
<td>29:X:2395:C:OP2</td>
<td>2.41</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:930:A:H5&quot;</td>
<td>31:Z:100:G:O2'</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>7:B:70:ALA:O</td>
<td>7:B:71:GLY:C</td>
<td>2.46</td>
<td>0.54</td>
</tr>
<tr>
<td>8:C:43:ALA:HB3</td>
<td>8:C:87:LYS:C</td>
<td>2.27</td>
<td>0.54</td>
</tr>
<tr>
<td>10:E:140:LEU:HA</td>
<td>10:E:143:GLN:HB2</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>10:E:148:VAL:C</td>
<td>10:E:150:LYS:H</td>
<td>2.10</td>
<td>0.54</td>
</tr>
<tr>
<td>11:F:52:ILE:C</td>
<td>11:F:73:PRO:HD3</td>
<td>2.27</td>
<td>0.54</td>
</tr>
<tr>
<td>12:G:61:ARG:HH2</td>
<td>12:G:78:ASP:CG</td>
<td>2.11</td>
<td>0.54</td>
</tr>
<tr>
<td>13:H:1:MET:HB2</td>
<td>13:H:44:TYR:CD1</td>
<td>2.43</td>
<td>0.54</td>
</tr>
<tr>
<td>15:J:34:GLY:O</td>
<td>15:J:133:VAL:HG22</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>23:R:103:LYS:HG3</td>
<td>23:R:104:VAL:N</td>
<td>2.23</td>
<td>0.54</td>
</tr>
<tr>
<td>23:R:40:LEU:CB</td>
<td>23:R:45:LYS:HB2</td>
<td>2.34</td>
<td>0.54</td>
</tr>
<tr>
<td>26:U:53:GLU:HB2</td>
<td>26:U:56:GLN:O</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>26:U:54:ASN:OD1</td>
<td>26:U:54:ASN:C</td>
<td>2.45</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1431:U:H4'</td>
<td>29:X:1604:A:C4'</td>
<td>2.37</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2070:G:O5'</td>
<td>29:X:2070:G:H8</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2204:A:H4'</td>
<td>29:X:2205:G:O5'</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2268:G:C2</td>
<td>29:X:2269:G:C8</td>
<td>2.96</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2469:G:H8</td>
<td>29:X:2469:G:OP2</td>
<td>1.91</td>
<td>0.54</td>
</tr>
<tr>
<td>31:Z:34:C:H2&quot;</td>
<td>31:Z:35:C:H6</td>
<td>1.72</td>
<td>0.54</td>
</tr>
<tr>
<td>6:A:166:GLN:HE2</td>
<td>6:A:176:ARG:NH2</td>
<td>2.06</td>
<td>0.54</td>
</tr>
<tr>
<td>7:B:105:THR:HG2</td>
<td>7:B:199:ARG:HH2</td>
<td>1.73</td>
<td>0.54</td>
</tr>
<tr>
<td>8:C:158:ARG:HH1</td>
<td>8:C:158:ARG:HB2</td>
<td>1.73</td>
<td>0.54</td>
</tr>
<tr>
<td>10:E:9:ILE:CG2</td>
<td>10:E:50:LEU:HB3</td>
<td>2.37</td>
<td>0.54</td>
</tr>
<tr>
<td>10:E:6:LYS:HD2</td>
<td>10:E:66:GLY:HA2</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>11:F:58:THR:HB</td>
<td>11:F:66:THR:OG1</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>14:I:62:LYS:HG3</td>
<td>14:I:63:ARG:N</td>
<td>2.21</td>
<td>0.54</td>
</tr>
<tr>
<td>16:K:59:ASP:N</td>
<td>16:K:59:ASP:OD1</td>
<td>2.41</td>
<td>0.54</td>
</tr>
<tr>
<td>17:L:94:TYR:N</td>
<td>17:L:94:TYR:CD2</td>
<td>2.72</td>
<td>0.54</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19:N:89:ASP:OD1</td>
<td>20:O:47:PHE:HB2</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>23:R:18:LYS:HE2</td>
<td>23:R:18:LYS:H</td>
<td>1.69</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1336:G:C2'</td>
<td>29:X:1337:G:H5'</td>
<td>2.37</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:139:A:O2'</td>
<td>29:X:140:G:H5'</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1588:A:H2'</td>
<td>29:X:1589:G:O4'</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1745:C:N3</td>
<td>29:X:1746:A:C5</td>
<td>2.75</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2084:G:H2'</td>
<td>29:X:2085:G:H8</td>
<td>1.72</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2263:C:H1'</td>
<td>29:X:2304:G:C2</td>
<td>2.42</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:402:A:H8</td>
<td>29:X:2392:G:H4'</td>
<td>1.72</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:677:G:O2'</td>
<td>29:X:678:G:H5'</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>14:I:108:LEU:HG2</td>
<td>14:I:125:ALA:HB2</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>14:I:32:ARG:HD2</td>
<td>20:O:81:ARG:HG3</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>14:I:76:LYS:O</td>
<td>14:I:79:GLN:CG</td>
<td>2.56</td>
<td>0.54</td>
</tr>
<tr>
<td>14:I:85:ASP:O</td>
<td>14:I:86:THR:C</td>
<td>2.46</td>
<td>0.54</td>
</tr>
<tr>
<td>15:J:56:SER:O</td>
<td>15:J:59:PHE:N</td>
<td>2.35</td>
<td>0.54</td>
</tr>
<tr>
<td>16:K:10:LEU:CD2</td>
<td>16:K:17:ARG:CB</td>
<td>2.85</td>
<td>0.54</td>
</tr>
<tr>
<td>19:N:13:ARG:O</td>
<td>19:N:16:LYS:HB2</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>20:O:74:TYR:OH</td>
<td>20:O:76:SER:HB3</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>23:R:93:ARG:NH1</td>
<td>23:R:108:VAL:O</td>
<td>2.41</td>
<td>0.54</td>
</tr>
<tr>
<td>24:S:149:ALA:C</td>
<td>24:S:151:ASP:H</td>
<td>2.11</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1074:G:C2'</td>
<td>29:X:1075:G:H5'</td>
<td>2.37</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1096:A:H4'</td>
<td>29:X:1097:A:OP1</td>
<td>2.06</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1544:A:C2</td>
<td>29:X:1560:A:C5</td>
<td>2.96</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1812:U:O2</td>
<td>29:X:1812:U:H2'</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2174:G:H2'</td>
<td>29:X:2175:A:C8</td>
<td>2.43</td>
<td>0.54</td>
</tr>
<tr>
<td>7:B:82:ARG:NH2</td>
<td>29:X:2616:U:H5''</td>
<td>2.22</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:573:C:O2'</td>
<td>29:X:574:C:H5'</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:695:G:O2'</td>
<td>29:X:696:U:H5'</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:888:G:HG2</td>
<td>29:X:889:G:O4'</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:954:U:C2'</td>
<td>29:X:955:G:H5''</td>
<td>2.38</td>
<td>0.54</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>7:B:37:LYS:CD</td>
<td>7:B:42:ASP:OD1</td>
<td>2.51</td>
<td>0.54</td>
</tr>
<tr>
<td>9:D:7:LYS:HA</td>
<td>9:D:10:ASP:HB2</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>9:D:143:TYR:CA</td>
<td>9:D:146:VAL:HG22</td>
<td>2.32</td>
<td>0.54</td>
</tr>
<tr>
<td>9:D:52:LYS:HE2</td>
<td>9:D:56:GLU:OE2</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>10:E:149:ARG:HG2</td>
<td>10:E:149:ARG:O</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>12:G:160:ALA:C</td>
<td>12:G:161:GLN:HG3</td>
<td>2.28</td>
<td>0.54</td>
</tr>
<tr>
<td>12:G:49:VAL:HG21</td>
<td>12:G:170:PRO:HG2</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>14:I:28:LYS:NZ</td>
<td>14:I:37:GLN:H</td>
<td>2.03</td>
<td>0.54</td>
</tr>
<tr>
<td>15:J:69:ILE:HG21</td>
<td>15:J:104:MET:HG2</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>16:K:16:ALA:O</td>
<td>16:K:17:ARG:C</td>
<td>2.45</td>
<td>0.54</td>
</tr>
<tr>
<td>17:L:15:ARG:CA</td>
<td>17:L:15:ARG:HH11</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>18:M:24:LEU:HB3</td>
<td>18:M:25:PRO:HD2</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>23:R:92:THR:C</td>
<td>23:R:95:ARG:NH2</td>
<td>2.61</td>
<td>0.54</td>
</tr>
<tr>
<td>26:U:54:ASN:O</td>
<td>26:U:56:GLN:N</td>
<td>2.38</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1053:G:N2</td>
<td>29:X:1124:U:O2</td>
<td>2.38</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:594:CH2′</td>
<td>29:X:1264:C:N4</td>
<td>2.20</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1752:U:H5′</td>
<td>29:X:1753:A:OP2</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1804:U:H2′</td>
<td>29:X:1805:G:H8</td>
<td>1.73</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1979:C:H6</td>
<td>29:X:1979:C:OP1</td>
<td>1.91</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2202:G:C2</td>
<td>29:X:2203:G:H1′</td>
<td>2.43</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:418:CO4′</td>
<td>29:X:418:C:OP2</td>
<td>2.26</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:482:A:C2′</td>
<td>29:X:483:A:H5′</td>
<td>2.37</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:528:CH2′</td>
<td>29:X:529:U:C6</td>
<td>2.43</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:660:GC2′</td>
<td>29:X:661:CH5′</td>
<td>2.37</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:699:GC4′</td>
<td>29:X:700:C:OP2</td>
<td>2.55</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:829:CH2′</td>
<td>29:X:830:CH6</td>
<td>1.72</td>
<td>0.54</td>
</tr>
<tr>
<td>4:4:24:VAL:O</td>
<td>4:4:33:LYS:HA</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>6:A:80:ALA:O</td>
<td>6:A:81:ALA:HB2</td>
<td>2.08</td>
<td>0.54</td>
</tr>
<tr>
<td>7:B:68:ALA:O</td>
<td>7:B:70:ALA:N</td>
<td>2.40</td>
<td>0.54</td>
</tr>
<tr>
<td>9:D:100:LEU:HG</td>
<td>9:D:104:ILE:HD11</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>9:D:26:MET:HB3</td>
<td>31:Z:59:A:C2</td>
<td>2.42</td>
<td>0.54</td>
</tr>
<tr>
<td>9:D:5:LYS:HA</td>
<td>9:D:8:TYR:HB3</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>5:5:15:BB9:HN1</td>
<td>11:F:29:GLN:NE2</td>
<td>2.05</td>
<td>0.54</td>
</tr>
<tr>
<td>11:F:53:ILE:CG1</td>
<td>11:F:72:PRO:HB3</td>
<td>2.29</td>
<td>0.54</td>
</tr>
<tr>
<td>12:G:69:ASP:C</td>
<td>12:G:70:PHE:CD2</td>
<td>2.81</td>
<td>0.54</td>
</tr>
<tr>
<td>12:G:72:PRO:O</td>
<td>12:G:74:MET:N</td>
<td>2.41</td>
<td>0.54</td>
</tr>
<tr>
<td>15:J:35:LEU:HD11</td>
<td>15:J:130:THR:CB</td>
<td>2.38</td>
<td>0.54</td>
</tr>
<tr>
<td>16:K:13:ASN:HD22</td>
<td>16:K:14:SER:N</td>
<td>2.05</td>
<td>0.54</td>
</tr>
<tr>
<td>17:L:91:ARG:HN2</td>
<td>29:X:2356:A:H2</td>
<td>2.03</td>
<td>0.54</td>
</tr>
<tr>
<td>21:P:133:ASN:ND2</td>
<td>21:P:133:ASN:N</td>
<td>2.54</td>
<td>0.54</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>26:U:39:LYS:O</td>
<td>26:U:40:ARG:CB</td>
<td>2.56</td>
<td>0.54</td>
</tr>
<tr>
<td>27:V:18:ILE:C</td>
<td>27:V:20:ALA:N</td>
<td>2.61</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:1402:G:H2'</td>
<td>29:X:1403:U:O4'</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:2824:C:O2'</td>
<td>29:X:2825:A:O5'</td>
<td>2.24</td>
<td>0.54</td>
</tr>
<tr>
<td>29:X:471:A:C8</td>
<td>29:X:472:C:C5</td>
<td>2.96</td>
<td>0.54</td>
</tr>
<tr>
<td>8:C:104:LEU:HA</td>
<td>8:C:107:ALA:HB3</td>
<td>1.91</td>
<td>0.53</td>
</tr>
<tr>
<td>10:E:43:VAL:HB</td>
<td>10:E:52:VAL:CA</td>
<td>2.32</td>
<td>0.53</td>
</tr>
<tr>
<td>15:J:83:ARG:HH22</td>
<td>29:X:971:A:H61</td>
<td>1.54</td>
<td>0.53</td>
</tr>
<tr>
<td>15:J:79:PRO:HD2</td>
<td>15:J:88:LYS:HD2</td>
<td>1.88</td>
<td>0.53</td>
</tr>
<tr>
<td>18:M:66:PHE:CE2</td>
<td>18:M:81:PHE:HB2</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>19:N:93:LYS:O</td>
<td>19:N:94:VAL:HG23</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:130:C:H2'</td>
<td>29:X:131:C:C6</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1359:G:O2'</td>
<td>29:X:1360:G:H5'</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1673:C:N3</td>
<td>29:X:1674:C:C5</td>
<td>2.76</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:176:A:H2'</td>
<td>29:X:177:U:C5</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2178:U:H2'</td>
<td>29:X:2179:C:C6</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2286:G:N2</td>
<td>29:X:2290:A:N6</td>
<td>2.52</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2323:U:C5'</td>
<td>29:X:2323:U:C6</td>
<td>2.81</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2570:C:H2'</td>
<td>29:X:2571:G:C8</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>7:B:111:LYS:NZ</td>
<td>29:X:2704:U:OP1</td>
<td>2.41</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2820:C:O2'</td>
<td>29:X:2821:G:H5'</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:544:U:H2'</td>
<td>29:X:545:C:C6</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:660:G:O2'</td>
<td>29:X:661:C:H5'</td>
<td>2.07</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:759:C:C5'</td>
<td>29:X:759:C:C6</td>
<td>2.90</td>
<td>0.53</td>
</tr>
<tr>
<td>9:D:92:ARG:NH1</td>
<td>31:Z:46:G:O3'</td>
<td>2.40</td>
<td>0.53</td>
</tr>
<tr>
<td>7:B:105:THR:HG23</td>
<td>7:B:197:VAL:HB</td>
<td>1.89</td>
<td>0.53</td>
</tr>
<tr>
<td>8:C:9:GLN:HG2</td>
<td>8:C:120:VAL:HG21</td>
<td>1.89</td>
<td>0.53</td>
</tr>
<tr>
<td>9:D:54:ALA:O</td>
<td>9:D:55:LYS:C</td>
<td>2.46</td>
<td>0.53</td>
</tr>
<tr>
<td>12:G:154:GLU:O</td>
<td>12:G:157:PRO:HD2</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>12:G:66:HIS:O</td>
<td>12:G:70:PHE:CE1</td>
<td>2.61</td>
<td>0.53</td>
</tr>
<tr>
<td>14:I:45:LYS:CG</td>
<td>14:I:46:GLY:N</td>
<td>2.70</td>
<td>0.53</td>
</tr>
<tr>
<td>18:M:102:ALA:C</td>
<td>18:M:103:LYS:HD2</td>
<td>2.28</td>
<td>0.53</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>23:R:25:LEU:HD22</td>
<td>23:R:26:SER:CB</td>
<td>2.37</td>
<td>0.53</td>
</tr>
<tr>
<td>23:R:25:LEU:HD12</td>
<td>23:R:25:LEU:H</td>
<td>1.74</td>
<td>0.53</td>
</tr>
<tr>
<td>23:R:41:PRO:HG2</td>
<td>23:R:42:ARG:H</td>
<td>1.73</td>
<td>0.53</td>
</tr>
<tr>
<td>26:U:66:ALA:O</td>
<td>26:U:70:LEU:HB2</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2184:C:C4</td>
<td>29:X:2185:U:C4</td>
<td>2.97</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2666:U:O2'</td>
<td>29:X:2767:C:H5'</td>
<td>2.07</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:690:A:O2'</td>
<td>29:X:691:C:H5'</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:828:C:H2'</td>
<td>29:X:829:C:H6</td>
<td>1.74</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:88:G:H3'</td>
<td>29:X:89:A:C5'</td>
<td>2.28</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:988:G:N3</td>
<td>29:X:1012:A:C2</td>
<td>2.76</td>
<td>0.53</td>
</tr>
<tr>
<td>8:C:120:VAL:O</td>
<td>8:C:121:ASP:O</td>
<td>2.27</td>
<td>0.53</td>
</tr>
<tr>
<td>8:C:125:ILE:HD12</td>
<td>8:C:133:PHE:HA</td>
<td>1.89</td>
<td>0.53</td>
</tr>
<tr>
<td>8:C:169:VAL:O</td>
<td>8:C:170:LEU:HD13</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>9:D:156:ILE:HG23</td>
<td>9:D:158:THR:HG23</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>9:D:70:ALA:C</td>
<td>9:D:72:LYS:N</td>
<td>2.61</td>
<td>0.53</td>
</tr>
<tr>
<td>10:E:33:LEU:HG</td>
<td>10:E:34:THR:H</td>
<td>1.73</td>
<td>0.53</td>
</tr>
<tr>
<td>23:R:93:ARG:C</td>
<td>23:R:95:ARG:CZ</td>
<td>2.76</td>
<td>0.53</td>
</tr>
<tr>
<td>24:S:19:ILE:CD1</td>
<td>24:S:36:ARG:HA</td>
<td>2.38</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:116:A:H1'</td>
<td>29:X:155:G:O4'</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1416:A:C2</td>
<td>29:X:1417:C:C2</td>
<td>2.96</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1509:A:C8</td>
<td>29:X:1510:A:C8</td>
<td>2.97</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2404:A:H1'</td>
<td>29:X:2406:C:C5</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2546:G:H2'</td>
<td>29:X:2547:C:H6</td>
<td>1.73</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:393:U:O2'</td>
<td>29:X:394:U:H5'</td>
<td>2.08</td>
<td>0.53</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:732:G:H8</td>
<td>29:X:732:G:O5'</td>
<td>1.91</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:872:G:OP2</td>
<td>29:X:872:G:H8</td>
<td>1.91</td>
<td>0.53</td>
</tr>
<tr>
<td>7:B:159:HIS:NE2</td>
<td>7:B:162:MET:HB2</td>
<td>2.23</td>
<td>0.53</td>
</tr>
<tr>
<td>8:C:125:ILE:O</td>
<td>8:C:126:ALA:CB</td>
<td>2.56</td>
<td>0.53</td>
</tr>
<tr>
<td>8:C:53:LYS:O</td>
<td>8:C:54:THR:OG1</td>
<td>2.19</td>
<td>0.53</td>
</tr>
<tr>
<td>10:E:139:GLN:HB3</td>
<td>10:E:143:GLN:OE1</td>
<td>2.07</td>
<td>0.53</td>
</tr>
<tr>
<td>11:F:2:LYS:HD3</td>
<td>11:F:2:LYS:N</td>
<td>2.23</td>
<td>0.53</td>
</tr>
<tr>
<td>12:G:84:ASN:O</td>
<td>12:G:85:ALA:CB</td>
<td>2.57</td>
<td>0.53</td>
</tr>
<tr>
<td>15:J:19:THR:CG2</td>
<td>15:J:20:GLY:N</td>
<td>2.71</td>
<td>0.53</td>
</tr>
<tr>
<td>20:O:38:LEU:O</td>
<td>20:O:39:PHE:HB3</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>23:R:46:VAL:O</td>
<td>23:R:75:ALA:HA</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1724:C:N3</td>
<td>29:X:1747:G:C6</td>
<td>2.77</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1835:C:H2'</td>
<td>29:X:1836:C:H6</td>
<td>1.72</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1882:C:H4'</td>
<td>29:X:2703:C:O2</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>19:N:10:ARG:NH1</td>
<td>29:X:592:G:OP2</td>
<td>2.29</td>
<td>0.53</td>
</tr>
<tr>
<td>8:C:138:LYS:C</td>
<td>8:C:140:ASN:H</td>
<td>2.11</td>
<td>0.53</td>
</tr>
<tr>
<td>8:C:43:ALA:HB3</td>
<td>8:C:88:PRO:N</td>
<td>2.23</td>
<td>0.53</td>
</tr>
<tr>
<td>9:D:75:SER:C</td>
<td>9:D:79:LEU:HD13</td>
<td>2.28</td>
<td>0.53</td>
</tr>
<tr>
<td>14:I:117:ALA:HB2</td>
<td>14:I:137:GLY:HA3</td>
<td>1.91</td>
<td>0.53</td>
</tr>
<tr>
<td>14:I:32:ARG:NH1</td>
<td>20:O:81:ARG:NH2</td>
<td>2.56</td>
<td>0.53</td>
</tr>
<tr>
<td>15:J:15:ARG:CD2</td>
<td>15:J:73:LYS:HG3</td>
<td>1.91</td>
<td>0.53</td>
</tr>
<tr>
<td>15:J:44:LYS:HD3</td>
<td>15:J:47:GLN:CD</td>
<td>2.29</td>
<td>0.53</td>
</tr>
<tr>
<td>23:R:17:LYS:HB3</td>
<td>23:R:18:LYS:HE2</td>
<td>1.89</td>
<td>0.53</td>
</tr>
<tr>
<td>26:U:10:LYS:HG2</td>
<td>26:U:11:LYS:CG</td>
<td>2.38</td>
<td>0.53</td>
</tr>
<tr>
<td>26:U:10:LYS:CD</td>
<td>26:U:11:LYS:HG3</td>
<td>2.38</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1356:G:H1'</td>
<td>29:X:1613:G:N3</td>
<td>2.23</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1552:C:O2'</td>
<td>29:X:1553:G:O5'</td>
<td>2.25</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1802:A:H2'</td>
<td>29:X:1803:G:O4'</td>
<td>2.08</td>
<td>0.53</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:B:149:ARG:HA</td>
<td>29:X:2035:G:N3</td>
<td>2.23</td>
<td>0.53</td>
</tr>
<tr>
<td>6:A:151:LYS:HD3</td>
<td>29:X:2186:G:O3'</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2200:G:H2'</td>
<td>29:X:2201:G:H8</td>
<td>1.73</td>
<td>0.53</td>
</tr>
<tr>
<td>26:U:33:LYS:NZ</td>
<td>29:X:2375:G:H1'</td>
<td>2.24</td>
<td>0.53</td>
</tr>
<tr>
<td>7:B:150:VAL:CG2</td>
<td>29:X:2508:C:O4'</td>
<td>2.56</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:462:G:N1</td>
<td>29:X:466:A:OP2</td>
<td>2.40</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:537:C:O2'</td>
<td>29:X:538:A:C4</td>
<td>2.61</td>
<td>0.53</td>
</tr>
<tr>
<td>14:I:45:LYS:HA</td>
<td>29:X:683:A:H5''</td>
<td>1.89</td>
<td>0.53</td>
</tr>
<tr>
<td>7:B:134:TRP:O</td>
<td>7:B:135:HIS:C</td>
<td>2.45</td>
<td>0.53</td>
</tr>
<tr>
<td>8:C:112:GLN:HB3</td>
<td>8:C:116:LYS:HZ2</td>
<td>1.74</td>
<td>0.53</td>
</tr>
<tr>
<td>8:C:158:ARG:C</td>
<td>8:C:160:ALA:N</td>
<td>2.62</td>
<td>0.53</td>
</tr>
<tr>
<td>7:B:152:LYS:CB</td>
<td>12:G:106:TYR:HB3</td>
<td>2.28</td>
<td>0.53</td>
</tr>
<tr>
<td>12:G:36:ASN:CG</td>
<td>12:G:37:ASP:N</td>
<td>2.61</td>
<td>0.53</td>
</tr>
<tr>
<td>17:J:99:ARG:O</td>
<td>17:L:102:ALA:HB3</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>17:J:15:ARG:NH1</td>
<td>17:L:15:ARG:HA</td>
<td>2.07</td>
<td>0.53</td>
</tr>
<tr>
<td>17:J:21:THR:CG2</td>
<td>17:L:22:ALA:N</td>
<td>2.68</td>
<td>0.53</td>
</tr>
<tr>
<td>21:J:78:ASN:C</td>
<td>21:J:80:LEU:N</td>
<td>2.60</td>
<td>0.53</td>
</tr>
<tr>
<td>26:U:10:LYS:CG</td>
<td>26:U:11:LYS:HG3</td>
<td>2.39</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1478:U:H2'</td>
<td>29:X:1479:G:C8</td>
<td>2.41</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1685:A:C8</td>
<td>29:X:1691:G:C6</td>
<td>2.96</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1731:C:H3'</td>
<td>29:X:1732:U:C5'</td>
<td>2.38</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2396:C:H6</td>
<td>29:X:2396:C:H5'</td>
<td>1.74</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2800:C:H3'</td>
<td>29:X:2801:A:H8</td>
<td>1.74</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:3:U:H2'</td>
<td>29:X:4:C:H6</td>
<td>1.73</td>
<td>0.53</td>
</tr>
<tr>
<td>14:I:101:ARG:HD3</td>
<td>29:X:637:G:C6</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:737:C:H2'</td>
<td>29:X:738:G:C8</td>
<td>2.44</td>
<td>0.53</td>
</tr>
<tr>
<td>9:D:92:ARG:NE</td>
<td>31:Z:47:A:H8</td>
<td>2.05</td>
<td>0.53</td>
</tr>
<tr>
<td>7:B:1:MET:O</td>
<td>7:B:2:LYS:C</td>
<td>2.47</td>
<td>0.53</td>
</tr>
<tr>
<td>8:C:153:ASP:OD1</td>
<td>8:C:172:VAL:HA</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>9:D:135:GLN:OE1</td>
<td>9:D:150:ARG:HB3</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>9:D:15:ALA:O</td>
<td>9:D:19:GLN:HB2</td>
<td>2.09</td>
<td>0.53</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:D:79:LEU:HA</td>
<td>9:D:80:ARG:NH2</td>
<td>2.24</td>
<td>0.53</td>
</tr>
<tr>
<td>9:D:92:ARG:HG3</td>
<td>9:D:92:ARG:NH2</td>
<td>2.22</td>
<td>0.53</td>
</tr>
<tr>
<td>10:E:13:SER:O</td>
<td>10:E:15:VAL:N</td>
<td>2.42</td>
<td>0.53</td>
</tr>
<tr>
<td>12:G:155:THR:O</td>
<td>12:G:158:HIS:HB2</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>14:I:80:LEU:HG</td>
<td>14:I:97:ARG:HH22</td>
<td>1.74</td>
<td>0.53</td>
</tr>
<tr>
<td>14:I:84:GLU:O</td>
<td>14:I:116:ARG:NH2</td>
<td>2.38</td>
<td>0.53</td>
</tr>
<tr>
<td>23:R:84:VAL:HG11</td>
<td>23:R:88:THR:N</td>
<td>2.24</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1148:G:H5&quot;</td>
<td>29:X:1149:G:OP2</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2546:G:H2&quot;</td>
<td>29:X:2547:C:C6</td>
<td>2.44</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2849:C:C2</td>
<td>29:X:2850:U:C5</td>
<td>2.96</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:617:U:O2</td>
<td>29:X:617:U:C3'</td>
<td>2.56</td>
<td>0.53</td>
</tr>
<tr>
<td>31:Z:15:A:O2'</td>
<td>31:Z:17:A:H5&quot;</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>8:C:102:LEU:O</td>
<td>8:C:102:LEU:HD23</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>8:C:14:THR:O</td>
<td>8:C:15:ILE:HB</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>9:D:35:VAL:O</td>
<td>9:D:154:ILE:HA</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>9:D:52:LYS:HG2</td>
<td>9:D:56:GLU:OE2</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>10:E:54:ARG:CZ</td>
<td>10:E:57:ASP:OD2</td>
<td>2.57</td>
<td>0.53</td>
</tr>
<tr>
<td>11:F:9:LYS:C</td>
<td>11:F:10:LEU:HD23</td>
<td>2.29</td>
<td>0.53</td>
</tr>
<tr>
<td>14:I:141:VAL:O</td>
<td>14:I:142:LEU:HD23</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>20:O:33:VAL:O</td>
<td>20:O:33:VAL:HG23</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>20:O:54:TYR:HD1</td>
<td>20:O:54:TYR:H</td>
<td>1.57</td>
<td>0.53</td>
</tr>
<tr>
<td>22:Q:14:GLU:HG3</td>
<td>22:Q:15:LYS:HD2</td>
<td>1.91</td>
<td>0.53</td>
</tr>
<tr>
<td>26:U:11:LYS:HZ1</td>
<td>26:U:75:TYR:HD1</td>
<td>1.51</td>
<td>0.53</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>29:X:1474:A:H1'</td>
<td>29:X:1475:U:H5'</td>
<td>1.91</td>
<td>0.53</td>
</tr>
<tr>
<td>6:A:59:LYS:O</td>
<td>29:X:1584:G:H5'</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2234:G:H2'</td>
<td>29:X:2235:G:O4'</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:312:G:O2'</td>
<td>29:X:313:U:O4'</td>
<td>2.27</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:537:C:H1'</td>
<td>29:X:538:A:N6</td>
<td>2.23</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:580:A:C8</td>
<td>29:X:584:A:C6</td>
<td>2.96</td>
<td>0.53</td>
</tr>
<tr>
<td>8:C:98:GLN:O2</td>
<td>29:X:611:C:O5'</td>
<td>2.42</td>
<td>0.53</td>
</tr>
<tr>
<td>31:Z:4:C:H2'</td>
<td>31:Z:5:C:C5'</td>
<td>2.38</td>
<td>0.53</td>
</tr>
<tr>
<td>7:B:38:THR:HB</td>
<td>7:B:41:THR:HG23</td>
<td>1.90</td>
<td>0.53</td>
</tr>
<tr>
<td>9:D:33:LYS:HD2</td>
<td>9:D:90:THR:CG2</td>
<td>2.39</td>
<td>0.53</td>
</tr>
<tr>
<td>10:E:18:ASN:C</td>
<td>10:E:20:GLN:H</td>
<td>2.12</td>
<td>0.53</td>
</tr>
<tr>
<td>14:I:38:LYS:HA</td>
<td>29:X:953:G:O3'</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>15:J:116:LYS:O</td>
<td>15:J:117:GLU:HB2</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>15:J:79:PRO:CD</td>
<td>15:J:88:LYS:HZ3</td>
<td>2.22</td>
<td>0.53</td>
</tr>
<tr>
<td>16:K:83:VAL:HG23</td>
<td>16:K:87:TYR:HE2</td>
<td>1.73</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1006:C:H2'</td>
<td>29:X:1007:A:OP1</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1233:A:HO2'</td>
<td>29:X:1234:C:P</td>
<td>2.31</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2037:A:N7</td>
<td>29:X:2039:G:O1'</td>
<td>2.24</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2391:A:C8</td>
<td>29:X:2392:G:C8</td>
<td>2.96</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2675:U:H2'</td>
<td>29:X:2676:G:C8</td>
<td>2.44</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:446:CH2'</td>
<td>29:X:447:U:O4'</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:454:G:H4'</td>
<td>29:X:455:G:O1'</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:913:A:C2'</td>
<td>29:X:914:C:O5'</td>
<td>2.57</td>
<td>0.53</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>31:Z:5:C:H2'</td>
<td>31:Z:6:C:H6</td>
<td>1.74</td>
<td>0.53</td>
</tr>
<tr>
<td>4:4:30:VAL:O</td>
<td>4:4:33:LYS:N</td>
<td>2.32</td>
<td>0.53</td>
</tr>
<tr>
<td>7:B:19:ARG:HZ</td>
<td>7:B:21:ILE:HD11</td>
<td>1.91</td>
<td>0.53</td>
</tr>
<tr>
<td>8:C:45:THR:CG2</td>
<td>8:C:47:THR:OG1</td>
<td>2.57</td>
<td>0.53</td>
</tr>
<tr>
<td>10:E:154:PRO:HG3</td>
<td>10:E:162:VAL:O</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>14:I:45:LYS:CG</td>
<td>14:I:46:GLY:H</td>
<td>2.22</td>
<td>0.53</td>
</tr>
<tr>
<td>16:K:106:ASP:CG</td>
<td>16:K:108:VAL:HG23</td>
<td>2.30</td>
<td>0.53</td>
</tr>
<tr>
<td>12:G:56:THR:HG21</td>
<td>29:X:1016:C:O2'</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1648:C:H6</td>
<td>29:X:1648:C:C5'</td>
<td>2.22</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1685:A:C5</td>
<td>29:X:1691:G:C4</td>
<td>2.97</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:1769:U:O4</td>
<td>29:X:1775:A:H1'</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:211:U:O2'</td>
<td>29:X:212:U:H5'</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2187:A:C6</td>
<td>29:X:2188:A:C6</td>
<td>2.97</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:2200:G:H2'</td>
<td>29:X:2201:G:C8</td>
<td>2.43</td>
<td>0.53</td>
</tr>
<tr>
<td>17:L:89:PHE:CD2</td>
<td>29:X:2355:A:H2</td>
<td>2.26</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:417:C:C4</td>
<td>29:X:419:G:C4</td>
<td>2.97</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:663:G:C3'</td>
<td>29:X:664:C:C5'</td>
<td>2.86</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:692:C:H2'</td>
<td>29:X:693:A:H8</td>
<td>1.73</td>
<td>0.53</td>
</tr>
<tr>
<td>29:X:73:A:H5'</td>
<td>29:X:74:G:O4'</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>7:B:118:LYS:CG</td>
<td>7:B:118:LYS:O</td>
<td>2.57</td>
<td>0.52</td>
</tr>
<tr>
<td>7:B:25:VAL:HG13</td>
<td>7:B:183:LEU:HD22</td>
<td>1.89</td>
<td>0.52</td>
</tr>
<tr>
<td>8:C:29:GLU:OE1</td>
<td>14:I:18:ARG:NH1</td>
<td>2.27</td>
<td>0.52</td>
</tr>
<tr>
<td>10:E:76:VAL:C</td>
<td>10:E:78:GLY:N</td>
<td>2.62</td>
<td>0.52</td>
</tr>
<tr>
<td>12:G:33:ILE:CB</td>
<td>12:G:34:PRO:CD</td>
<td>2.70</td>
<td>0.52</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:I:107:LYS:HA</td>
<td>14:I:124:ALA:O</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>12:G:66:HIS:HA</td>
<td>19:N:67:ALA:HB1</td>
<td>1.90</td>
<td>0.52</td>
</tr>
<tr>
<td>24:S:13:LYS:HB2</td>
<td>24:S:18:MET:HB2</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>24:S:120:LEU:CD2</td>
<td>24:S:162:ALA:HB2</td>
<td>2.24</td>
<td>0.52</td>
</tr>
<tr>
<td>26:U:32:ARG:H</td>
<td>26:U:32:ARG:CD</td>
<td>2.18</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1094:C:H2'</td>
<td>29:X:1096:A:C5'</td>
<td>2.38</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1399:C:H5'</td>
<td>29:X:1664:G:O2'</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1473:C:H2'</td>
<td>29:X:1400:A:H5'</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1703:C:H2'</td>
<td>29:X:1704:G:O4'</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2063:A:H5'</td>
<td>29:X:2064:U:C6</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2171:A:O1'</td>
<td>29:X:2171:A:O4'</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:332:C:H5'</td>
<td>29:X:333:A:OP2</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>21:P:39:ARG:HH12</td>
<td>29:X:528:G:C5'</td>
<td>2.22</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:661:C:C2</td>
<td>29:X:662:G:C8</td>
<td>2.96</td>
<td>0.52</td>
</tr>
<tr>
<td>7:B:53:PRO:CD</td>
<td>18:M:5:ILE:HG22</td>
<td>2.38</td>
<td>0.52</td>
</tr>
<tr>
<td>8:C:129:LYS:C</td>
<td>8:C:131:LYS:N</td>
<td>2.62</td>
<td>0.52</td>
</tr>
<tr>
<td>9:D:74:ILE:HG23</td>
<td>9:D:80:ARG:CA</td>
<td>2.33</td>
<td>0.52</td>
</tr>
<tr>
<td>10:E:103:LEU:HD21</td>
<td>10:E:131:ILE:CD1</td>
<td>2.37</td>
<td>0.52</td>
</tr>
<tr>
<td>11:F:25:PRO:HG2</td>
<td>11:F:26:ALA:N</td>
<td>2.24</td>
<td>0.52</td>
</tr>
<tr>
<td>12:G:117:GLU:C</td>
<td>12:G:119:LEU:N</td>
<td>2.57</td>
<td>0.52</td>
</tr>
<tr>
<td>14:I:127:ALA:C</td>
<td>14:I:129:ALA:N</td>
<td>2.61</td>
<td>0.52</td>
</tr>
<tr>
<td>16:K:94:TYR:CE1</td>
<td>16:K:115:LEU:O</td>
<td>2.62</td>
<td>0.52</td>
</tr>
<tr>
<td>16:K:95:THR:CE2</td>
<td>16:K:95:THR:O</td>
<td>2.08</td>
<td>0.52</td>
</tr>
<tr>
<td>21:P:91:PHE:CE1</td>
<td>21:P:131:LYS:HA</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>26:U:22:GLY:HA3</td>
<td>26:U:39:LYS:HG3</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>26:U:23:LYS:HE3</td>
<td>26:U:26:ALA:HA</td>
<td>1.90</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1300:A:C2</td>
<td>29:X:1301:U:C2</td>
<td>2.97</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1474:A:C2</td>
<td>29:X:1476:G:C6</td>
<td>2.97</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1541:G:H2'</td>
<td>29:X:1542:G:H8</td>
<td>1.72</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1713:G:C6</td>
<td>29:X:1714:A:C4</td>
<td>2.97</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1785:A:H2'</td>
<td>29:X:1786:C:H6</td>
<td>1.73</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:204:A:O2'</td>
<td>29:X:205:A:C8</td>
<td>2.61</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2261:G:H5'</td>
<td>29:X:2262:C:O4'</td>
<td>2.09</td>
<td>0.52</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:2507:U:O2'</td>
<td>29:X:2508:G:H3'</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2824:C:O2'</td>
<td>29:X:2825:A:P</td>
<td>2.67</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:404:A:C4</td>
<td>29:X:424:G:C2</td>
<td>2.97</td>
<td>0.52</td>
</tr>
<tr>
<td>31:Z:3:A:H2'</td>
<td>31:Z:4:C:H5'</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>8:C:23:ASN:HB3</td>
<td>8:C:26:VAL:CG2</td>
<td>2.36</td>
<td>0.52</td>
</tr>
<tr>
<td>11:F:12:LEU:HD12</td>
<td>11:F:37:PHE:CE2</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>15:J:18:MET:HG2</td>
<td>15:J:19:THR:H</td>
<td>1.74</td>
<td>0.52</td>
</tr>
<tr>
<td>23:R:11:ASN:ND2</td>
<td>23:R:11:ASN:O</td>
<td>2.42</td>
<td>0.52</td>
</tr>
<tr>
<td>24:S:3:LEU:HD13</td>
<td>24:S:33:ALA:O</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1141:U:HO2'</td>
<td>29:X:1142:G:P</td>
<td>2.32</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1558:C:O2'</td>
<td>29:X:1559:G:H5'</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>6:A:261:ARG:NH2</td>
<td>29:X:1790:G:O3'</td>
<td>2.42</td>
<td>0.52</td>
</tr>
<tr>
<td>6:A:149:PRO:CG</td>
<td>29:X:2200:G:O2'</td>
<td>2.53</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:971:A:C4'</td>
<td>29:X:2436:U:H4'</td>
<td>2.40</td>
<td>0.52</td>
</tr>
<tr>
<td>31:Z:54:U:O2'</td>
<td>31:Z:55:C:H5'</td>
<td>2.08</td>
<td>0.52</td>
</tr>
<tr>
<td>7:B:179:GLU:O</td>
<td>7:B:180:ASN:C</td>
<td>2.47</td>
<td>0.52</td>
</tr>
<tr>
<td>8:C:104:LEU:N</td>
<td>8:C:104:LEU:CD2</td>
<td>2.72</td>
<td>0.52</td>
</tr>
<tr>
<td>8:C:138:LYS:O</td>
<td>8:C:140:ASN:N</td>
<td>2.37</td>
<td>0.52</td>
</tr>
<tr>
<td>9:D:111:ILE:HA</td>
<td>9:D:137:ILE:CG2</td>
<td>2.39</td>
<td>0.52</td>
</tr>
<tr>
<td>10:E:9:ILE:HG21</td>
<td>10:E:50:LEU:HB3</td>
<td>1.90</td>
<td>0.52</td>
</tr>
<tr>
<td>12:G:106:TYR:CZ</td>
<td>12:G:108:GLY:HA2</td>
<td>2.45</td>
<td>0.52</td>
</tr>
<tr>
<td>12:G:36:ASN:C</td>
<td>12:G:38:GLU:N</td>
<td>2.52</td>
<td>0.52</td>
</tr>
<tr>
<td>16:K:3:HIS:NE2</td>
<td>29:X:2797:G:OP2</td>
<td>2.42</td>
<td>0.52</td>
</tr>
<tr>
<td>16:K:76:VAL:HG13</td>
<td>16:K:77:ARG:N</td>
<td>2.24</td>
<td>0.52</td>
</tr>
<tr>
<td>17:L:66:ASP:O</td>
<td>17:L:68:ALA:N</td>
<td>2.42</td>
<td>0.52</td>
</tr>
<tr>
<td>26:U:49:LYS:HD3</td>
<td>26:U:61:TRP:CD2</td>
<td>2.45</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1145:C:C6</td>
<td>29:X:1147:G:P</td>
<td>3.03</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1318:A:C2</td>
<td>29:X:1319:C:C2</td>
<td>2.97</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1555:A:H2'</td>
<td>29:X:1556:A:O4'</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:17:G:N2</td>
<td>29:X:18:U:C2</td>
<td>2.78</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:203:G:N2</td>
<td>29:X:204:A:C2</td>
<td>2.77</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:649:G:H22</td>
<td>29:X:661:C:C1'</td>
<td>2.22</td>
<td>0.52</td>
</tr>
<tr>
<td>6:A:143:HIS:ND1</td>
<td>6:A:143:HIS:N</td>
<td>2.57</td>
<td>0.52</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:B:136:ARG:O</td>
<td>29:X:1674:C:OP1</td>
<td>2.27</td>
<td>0.52</td>
</tr>
<tr>
<td>8:C:102:LEU:HD21</td>
<td>8:C:106:MET:CE</td>
<td>2.39</td>
<td>0.52</td>
</tr>
<tr>
<td>8:C:128:ALA:HB1</td>
<td>29:X:332:C:H5</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>8:C:175:VAL:HG23</td>
<td>8:C:176:ASN:N</td>
<td>2.24</td>
<td>0.52</td>
</tr>
<tr>
<td>8:C:35:LEU:HD23</td>
<td>8:C:38:ARG:HD2</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>12:G:70:PHE:N</td>
<td>12:G:70:PHE:CD2</td>
<td>2.78</td>
<td>0.52</td>
</tr>
<tr>
<td>15:J:76:THR:CG2</td>
<td>15:J:88:LYS:O</td>
<td>2.57</td>
<td>0.52</td>
</tr>
<tr>
<td>16:K:76:VAL:O</td>
<td>16:K:79:VAL:CG1</td>
<td>2.57</td>
<td>0.52</td>
</tr>
<tr>
<td>17:L:60:LYS:HG3</td>
<td>17:L:63:ASN:O</td>
<td>2.08</td>
<td>0.52</td>
</tr>
<tr>
<td>20:O:20:ILE:CD1</td>
<td>20:O:21:ARG:N</td>
<td>2.72</td>
<td>0.52</td>
</tr>
<tr>
<td>20:O:35:LEU:HD22</td>
<td>20:O:36:LYS:O</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>20:O:64:GLY:HA3</td>
<td>20:O:90:PHE:CE1</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>23:R:10:HIS:CB</td>
<td>23:R:44:GLN:NE2</td>
<td>2.72</td>
<td>0.52</td>
</tr>
<tr>
<td>24:S:84:TYR:CE1</td>
<td>31:Z:107:C:H4&quot;</td>
<td>2.42</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1002:C:C4</td>
<td>29:X:1003:C:C5</td>
<td>2.97</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1398:G:H4&quot;</td>
<td>29:X:1398:G:OP1</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1504:G:H2&quot;</td>
<td>29:X:1505:U:C2</td>
<td>2.45</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1657:A:H8</td>
<td>29:X:1657:A:H5&quot;</td>
<td>1.74</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1793:A:C6</td>
<td>29:X:1809:G:N2</td>
<td>2.77</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:223:CH2&quot;</td>
<td>29:X:224:G:H5&quot;</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2576:G:C5</td>
<td>29:X:2577:A:C6</td>
<td>2.98</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2837:G:C6</td>
<td>29:X:2838:U:C4</td>
<td>2.98</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2856:U:C2</td>
<td>29:X:2857:C:C5</td>
<td>2.98</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:4:CO2&quot;</td>
<td>29:X:5:A:H5&quot;</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>14:J:26:THR:OG1</td>
<td>29:X:676:G:OP1</td>
<td>2.28</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:829:C:O2&quot;</td>
<td>29:X:830:C:H5&quot;</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:836:G:H2&quot;</td>
<td>29:X:837:U:C6</td>
<td>2.43</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:8:A:H2&quot;</td>
<td>29:X:9:U:O4&quot;</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>31:Z:36:A:C2</td>
<td>31:Z:51:G:C6</td>
<td>2.98</td>
<td>0.52</td>
</tr>
<tr>
<td>8:C:136:TRP:CD2</td>
<td>8:C:140:ASN:ND2</td>
<td>2.78</td>
<td>0.52</td>
</tr>
<tr>
<td>8:C:186:LEU:HG</td>
<td>8:C:188:ILE:CG1</td>
<td>2.34</td>
<td>0.52</td>
</tr>
<tr>
<td>10:E:144:VAL:C</td>
<td>10:E:146:ALA:N</td>
<td>2.61</td>
<td>0.52</td>
</tr>
<tr>
<td>10:E:57:ASP:O</td>
<td>10:E:58:ALA:HB2</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>16:K:28:LEU:C</td>
<td>16:K:28:LEU:HD23</td>
<td>2.29</td>
<td>0.52</td>
</tr>
<tr>
<td>16:K:3:HIS:CE1</td>
<td>29:X:2796:A:P</td>
<td>2.97</td>
<td>0.52</td>
</tr>
<tr>
<td>17:L:33:ARG:HH12</td>
<td>17:L:103:LEU:H</td>
<td>1.58</td>
<td>0.52</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>24:S:64:ALA:HA</td>
<td>24:S:85:MET:HA</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>27:V:37:LEU:CD1</td>
<td>29:X:60:A:H4'</td>
<td>2.37</td>
<td>0.52</td>
</tr>
<tr>
<td>28:W:1:MET:O</td>
<td>28:W:34:VAL:HG12</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1135:C:C4</td>
<td>29:X:1136:G:N7</td>
<td>2.77</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1240:C:O2'</td>
<td>29:X:1241:G:H5'</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1249:C:O2'</td>
<td>29:X:1250:A:O5'</td>
<td>2.25</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1372:A:C4</td>
<td>29:X:1373:G:C8</td>
<td>2.98</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1569:A:N1</td>
<td>29:X:1571:G:H1'</td>
<td>2.24</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1602:G:H5'</td>
<td>29:X:1603:A:OP2</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1923:U:O2'</td>
<td>29:X:1924:C:OP2</td>
<td>2.28</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:208:C:N4</td>
<td>29:X:209:G:N2</td>
<td>2.57</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2204:A:O2'</td>
<td>29:X:2205:C:OP2</td>
<td>2.20</td>
<td>0.52</td>
</tr>
<tr>
<td>17:L:89:PHE:CA</td>
<td>29:X:2356:A:H1'</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>15:J:47:GLN:NE2</td>
<td>29:X:2464:G:OP1</td>
<td>2.40</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2705:A:O2'</td>
<td>29:X:2706:U:C6</td>
<td>2.63</td>
<td>0.52</td>
</tr>
<tr>
<td>23:R:4:PRO:CA</td>
<td>29:X:34:U:H1'</td>
<td>2.40</td>
<td>0.52</td>
</tr>
<tr>
<td>8:C:176:ASN:CB</td>
<td>29:X:626:A:O2'</td>
<td>2.58</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:756:C:C2'</td>
<td>29:X:757:U:H5'</td>
<td>2.40</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:77:C:C2</td>
<td>29:X:78:C:C5</td>
<td>2.97</td>
<td>0.52</td>
</tr>
<tr>
<td>7:B:115:GLY:HA2</td>
<td>7:B:157:ALA:HB2</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>7:B:198:LEU:CD1</td>
<td>7:B:198:LEU:N</td>
<td>2.68</td>
<td>0.52</td>
</tr>
<tr>
<td>8:C:108:ILE:O</td>
<td>8:C:111:ARG:N</td>
<td>2.43</td>
<td>0.52</td>
</tr>
<tr>
<td>11:F:52:ILE:H</td>
<td>11:F:73:PRO:HD2</td>
<td>1.75</td>
<td>0.52</td>
</tr>
<tr>
<td>12:G:131:VAL:C</td>
<td>12:G:133:GLY:N</td>
<td>2.63</td>
<td>0.52</td>
</tr>
<tr>
<td>15:J:82:THR:O</td>
<td>15:J:83:ARG:HB2</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>17:L:56:SER:HG</td>
<td>17:L:71:VAL:HB</td>
<td>1.75</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1052:C:H3'</td>
<td>29:X:1053:G:H5'</td>
<td>1.89</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1179:A:H2'</td>
<td>29:X:1180:A:C8</td>
<td>2.45</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1242:A:C2</td>
<td>29:X:1243:G:C4</td>
<td>2.98</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1350:G:C4</td>
<td>29:X:1351:G:C8</td>
<td>2.97</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1505:U:H2'</td>
<td>29:X:1506:C:C5'</td>
<td>2.37</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1817:U:H2'</td>
<td>29:X:1818:G:O4'</td>
<td>2.10</td>
<td>0.52</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:2175:A:O2'</td>
<td>29:X:2176:U:H5'</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>10:E:160:LYS:HZ1</td>
<td>29:X:2637:C:P</td>
<td>2.32</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2656:C:C4</td>
<td>29:X:2704:U:C5</td>
<td>2.98</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2674:C:H2'</td>
<td>29:X:2675:U:C6</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2805:G:H2'</td>
<td>29:X:2806:G:O4'</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:356:A:C2'</td>
<td>29:X:357:A:C8</td>
<td>2.92</td>
<td>0.52</td>
</tr>
<tr>
<td>6:A:211:ARG:NH1</td>
<td>6:A:211:ARG:CG</td>
<td>2.55</td>
<td>0.52</td>
</tr>
<tr>
<td>7:B:127:ALA:CB</td>
<td>7:B:135:HIS:HE1</td>
<td>2.23</td>
<td>0.52</td>
</tr>
<tr>
<td>8:C:42:THR:HG22</td>
<td>29:X:38:G:N3</td>
<td>2.25</td>
<td>0.52</td>
</tr>
<tr>
<td>9:D:65:PRO:CB</td>
<td>9:D:89:VAL:HG22</td>
<td>2.36</td>
<td>0.52</td>
</tr>
<tr>
<td>15:J:95:VAL:HG12</td>
<td>15:J:96:SER:N</td>
<td>2.25</td>
<td>0.52</td>
</tr>
<tr>
<td>16:K:24:GLN:O</td>
<td>16:K:25:ALA:C</td>
<td>2.48</td>
<td>0.52</td>
</tr>
<tr>
<td>16:K:87:TYR:CE1</td>
<td>16:K:94:TYR:CD2</td>
<td>2.82</td>
<td>0.52</td>
</tr>
<tr>
<td>19:N:45:TYR:O</td>
<td>19:N:46:GLU:C</td>
<td>2.48</td>
<td>0.52</td>
</tr>
<tr>
<td>14:I:32:ARG:CD</td>
<td>20:O:81:ARG:HD2</td>
<td>2.39</td>
<td>0.52</td>
</tr>
<tr>
<td>23:R:25:LEU:CD1</td>
<td>23:R:25:LEU:N</td>
<td>2.72</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1242:A:H2'</td>
<td>29:X:1243:G:C8</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>6:A:254:THR:H</td>
<td>29:X:1787:U:H4'</td>
<td>1.75</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:565:A:H2'</td>
<td>29:X:566:U:C6</td>
<td>2.45</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:566:U:H2'</td>
<td>29:X:567:G:C8</td>
<td>2.44</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:636:C:C5'</td>
<td>29:X:636:G:H8</td>
<td>2.14</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:847:C:N3</td>
<td>29:X:848:A:N7</td>
<td>2.58</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:929:AH2</td>
<td>31:Z:81:C:O2</td>
<td>1.93</td>
<td>0.52</td>
</tr>
<tr>
<td>6:A:184:ARG:HH21</td>
<td>6:A:268:ARG:NH1</td>
<td>2.06</td>
<td>0.52</td>
</tr>
<tr>
<td>6:A:243:GLY:C</td>
<td>6:A:244:ARG:HD3</td>
<td>2.30</td>
<td>0.52</td>
</tr>
<tr>
<td>7:B:120:TRP:CE3</td>
<td>7:B:155:ARG:HD2</td>
<td>2.45</td>
<td>0.52</td>
</tr>
<tr>
<td>7:B:95:ILE:HG22</td>
<td>7:B:96:PHE:N</td>
<td>2.25</td>
<td>0.52</td>
</tr>
<tr>
<td>9:D:27:ALA:HB2</td>
<td>31:Z:59:A:CT1'</td>
<td>2.23</td>
<td>0.52</td>
</tr>
<tr>
<td>12:G:33:ILE:HD12</td>
<td>12:G:34:PRO:N</td>
<td>2.25</td>
<td>0.52</td>
</tr>
<tr>
<td>15:J:15:ARG:NH1</td>
<td>15:J:15:ARG:CG</td>
<td>2.72</td>
<td>0.52</td>
</tr>
<tr>
<td>15:J:27:TYR:HB3</td>
<td>15:J:137:VAL:CG1</td>
<td>2.40</td>
<td>0.52</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17:L:11:LEU:HD21</td>
<td>29:X:2273:C:C5'</td>
<td>2.40</td>
<td>0.52</td>
</tr>
<tr>
<td>17:L:89:PHE:O</td>
<td>17:L:89:PHE:HD1</td>
<td>1.93</td>
<td>0.52</td>
</tr>
<tr>
<td>12:G:70:PHE:CB</td>
<td>19:N:64:ARG:HG2</td>
<td>2.39</td>
<td>0.52</td>
</tr>
<tr>
<td>26:U:10:LYS:HD3</td>
<td>26:U:11:LYS:HG3</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>28:W:9:VAL:O</td>
<td>28:W:12:ARG:HB2</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1074:G:O2'</td>
<td>29:X:1075:C:H5'</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>8:C:66:ASN:HA</td>
<td>29:X:1268:U:C5</td>
<td>2.45</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1448:A:H2'</td>
<td>29:X:1449:C:C6</td>
<td>2.45</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1753:A:O5'</td>
<td>29:X:1753:A:H8</td>
<td>1.93</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:229:G:H2'</td>
<td>29:X:230:C:H6</td>
<td>1.75</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2431:C:O2'</td>
<td>29:X:2432:A:H5'</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:457:C:N4</td>
<td>29:X:458:G:C6</td>
<td>2.78</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:694:G:H2'</td>
<td>29:X:695:G:O4'</td>
<td>2.09</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:777:A:HO2'</td>
<td>29:X:778:G:P</td>
<td>2.31</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:872:G:N2</td>
<td>29:X:928:G:H2'</td>
<td>2.25</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2039:G:N2</td>
<td>30:Y:4:HIS:O</td>
<td>2.43</td>
<td>0.52</td>
</tr>
<tr>
<td>7:B:188:ILE:CG2</td>
<td>7:B:189:PRO:CD</td>
<td>2.84</td>
<td>0.52</td>
</tr>
<tr>
<td>7:B:93:VAL:O</td>
<td>7:B:94:ASP:HB2</td>
<td>2.08</td>
<td>0.52</td>
</tr>
<tr>
<td>11:F:78:ILE:O</td>
<td>11:F:81:ALA:N</td>
<td>2.40</td>
<td>0.52</td>
</tr>
<tr>
<td>17:L:67:THR:O</td>
<td>17:L:71:VAL:HG12</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>21:P:30:TYR:CD1</td>
<td>21:P:123:HIS:HE1</td>
<td>2.28</td>
<td>0.52</td>
</tr>
<tr>
<td>26:U:59:THR:O</td>
<td>26:U:60:VAL:O</td>
<td>2.28</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1336:G:O2'</td>
<td>29:X:1337:G:H5'</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1918:G:C4</td>
<td>29:X:1945:C:N4</td>
<td>2.77</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:1918:G:H1'</td>
<td>29:X:1947:G:N2</td>
<td>2.25</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2178:U:H2'</td>
<td>29:X:2179:G:H6</td>
<td>1.73</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:219:G:H2'</td>
<td>29:X:231:G:O6</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:2662:G:O2'</td>
<td>29:X:2663:U:H5'</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:222:G:H1'</td>
<td>29:X:397:U:O2</td>
<td>2.10</td>
<td>0.52</td>
</tr>
<tr>
<td>29:X:930:A:C8</td>
<td>29:X:931:G:C8</td>
<td>2.98</td>
<td>0.52</td>
</tr>
<tr>
<td>24:S:67:LYS:NZ</td>
<td>31:Z:106:U:O3'</td>
<td>2.43</td>
<td>0.52</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:B:141:ILE:HG23</td>
<td>7:B:154:LYS:HD3</td>
<td>1.90</td>
<td>0.51</td>
</tr>
<tr>
<td>8:C:151:VAL:HG11</td>
<td>8:C:175:VAL:HG12</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>8:C:171:PRO:O</td>
<td>8:C:173:ALA:N</td>
<td>2.42</td>
<td>0.51</td>
</tr>
<tr>
<td>8:C:186:LEU:CG</td>
<td>8:C:188:ILE:HG12</td>
<td>2.35</td>
<td>0.51</td>
</tr>
<tr>
<td>9:D:34:ILE:HD11</td>
<td>9:D:156:ILE:HG12</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>12:G:103:TYR:CG</td>
<td>12:G:111:LYS:HA</td>
<td>2.45</td>
<td>0.51</td>
</tr>
<tr>
<td>12:G:68:PRO:O</td>
<td>12:G:70:PHE:CE2</td>
<td>2.63</td>
<td>0.51</td>
</tr>
<tr>
<td>12:G:84:ASN:C</td>
<td>12:G:86:ALA:N</td>
<td>2.63</td>
<td>0.51</td>
</tr>
<tr>
<td>13:H:100:ASN:OD1</td>
<td>13:H:100:ASN:C</td>
<td>2.49</td>
<td>0.51</td>
</tr>
<tr>
<td>14:I:39:SER:O</td>
<td>14:I:40:ARG:CB</td>
<td>2.58</td>
<td>0.51</td>
</tr>
<tr>
<td>16:K:79:VAL:CA</td>
<td>16:K:83:VAL:HG13</td>
<td>2.31</td>
<td>0.51</td>
</tr>
<tr>
<td>17:L:21:THR:HG22</td>
<td>17:L:22:ALA:H</td>
<td>1.70</td>
<td>0.51</td>
</tr>
<tr>
<td>19:N:114:ARG:NH1</td>
<td>19:N:115:ASN:ND2</td>
<td>2.54</td>
<td>0.51</td>
</tr>
<tr>
<td>27:V:64:GLY:O</td>
<td>27:V:65:GLU:CB</td>
<td>2.57</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:102:C:C4</td>
<td>29:X:103:U:C4</td>
<td>2.98</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1216:G:C6</td>
<td>29:X:1217:U:C4</td>
<td>2.98</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1329:U:C2</td>
<td>29:X:1330:G:C8</td>
<td>2.98</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1494:G:N2</td>
<td>29:X:1495:G:H1'</td>
<td>2.25</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:172:A:C2</td>
<td>29:X:227:G:N2</td>
<td>2.60</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1911:A:H2'</td>
<td>29:X:1912:G:C1'</td>
<td>2.39</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:197:G:N3</td>
<td>29:X:210:A:C2</td>
<td>2.76</td>
<td>0.51</td>
</tr>
<tr>
<td>25:T:60:PHE:CE2</td>
<td>29:X:2344:G:H4'</td>
<td>2.45</td>
<td>0.51</td>
</tr>
<tr>
<td>17:L:89:PHE:HZ</td>
<td>29:X:2356:A:HO2'</td>
<td>1.50</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:497:C:C6</td>
<td>29:X:497:C:C3'</td>
<td>2.93</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:946:U:C2</td>
<td>29:X:947:C:C5</td>
<td>2.98</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:945:G:C5</td>
<td>29:X:946:U:C5</td>
<td>2.97</td>
<td>0.51</td>
</tr>
<tr>
<td>6:A:244:ARG:HG2</td>
<td>29:X:1884:A:O2'</td>
<td>2.09</td>
<td>0.51</td>
</tr>
<tr>
<td>7:B:68:ALA:C</td>
<td>7:B:70:ALA:H</td>
<td>2.12</td>
<td>0.51</td>
</tr>
<tr>
<td>8:C:112:GLN:CA</td>
<td>8:C:116:LYS:HD3</td>
<td>2.40</td>
<td>0.51</td>
</tr>
<tr>
<td>10:E:9:ILE:O</td>
<td>10:E:11:VAL:HG23</td>
<td>2.09</td>
<td>0.51</td>
</tr>
<tr>
<td>17:L:53:ALA:C</td>
<td>17:L:75:LEU:HD13</td>
<td>2.30</td>
<td>0.51</td>
</tr>
<tr>
<td>23:R:8:SER:C</td>
<td>23:R:10:HIS:H</td>
<td>2.13</td>
<td>0.51</td>
</tr>
<tr>
<td>24:S:71:MET:NE2</td>
<td>24:S:71:MET:HE2</td>
<td>2.25</td>
<td>0.51</td>
</tr>
<tr>
<td>27:V:37:LEU:C</td>
<td>27:V:37:LEU:HD23</td>
<td>2.30</td>
<td>0.51</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>29:X:1154:A:H4'</td>
<td>29:X:1155:G:OP2</td>
<td>2.08</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1236:G:H2'</td>
<td>29:X:1238:A:OP2</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:762:A:C6</td>
<td>29:X:1634:A:C2</td>
<td>2.98</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:171:G:C2</td>
<td>29:X:179:U:H1'</td>
<td>2.45</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2210:C:C2</td>
<td>29:X:2211:U:C5</td>
<td>2.97</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2264:C:H5'</td>
<td>29:X:2267:A:N6</td>
<td>2.25</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2379:G:O2'</td>
<td>29:X:2380:U:H5'</td>
<td>2.09</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:492:G:H1'</td>
<td>29:X:516:G:N2</td>
<td>2.25</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:549:G:H2'</td>
<td>29:X:550:C:H6</td>
<td>1.75</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:584:A:C2</td>
<td>29:X:585:U:C5</td>
<td>2.97</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:664:C:H3'</td>
<td>29:X:665:A:C2</td>
<td>2.45</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:889:C:H2'</td>
<td>29:X:890:U:C6</td>
<td>2.46</td>
<td>0.51</td>
</tr>
<tr>
<td>28:X:49:HIS:CD2</td>
<td>31:Z:85:G:H5'</td>
<td>2.46</td>
<td>0.51</td>
</tr>
<tr>
<td>7:B:9:ILE:O</td>
<td>7:B:9:ILE:HG22</td>
<td>2.08</td>
<td>0.51</td>
</tr>
<tr>
<td>8:C:195:ILE:HG13</td>
<td>8:C:195:ILE:O</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>9:D:60:ILE:HD12</td>
<td>9:D:138:PHE:CD2</td>
<td>2.45</td>
<td>0.51</td>
</tr>
<tr>
<td>10:E:103:LEU:HB2</td>
<td>10:E:123:PHE:CE2</td>
<td>2.45</td>
<td>0.51</td>
</tr>
<tr>
<td>14:I:11:GLY:N</td>
<td>14:I:14:LYS:CB</td>
<td>2.61</td>
<td>0.51</td>
</tr>
<tr>
<td>14:I:18:ARG:HD2</td>
<td>14:I:21:ARG:HG3</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>15:J:119:PHE:O</td>
<td>15:J:123:GLY:N</td>
<td>2.43</td>
<td>0.51</td>
</tr>
<tr>
<td>15:J:30:PHE:HB3</td>
<td>15:J:66:TYR:CE2</td>
<td>2.46</td>
<td>0.51</td>
</tr>
<tr>
<td>16:K:11:ASN:HD21</td>
<td>16:K:12:ARG:NE</td>
<td>2.06</td>
<td>0.51</td>
</tr>
<tr>
<td>17:L:32:TYR:CZ</td>
<td>31:Z:9:G:H5'</td>
<td>2.45</td>
<td>0.51</td>
</tr>
<tr>
<td>23:R:111:GLY:H</td>
<td>23:R:112:LYS:HD2</td>
<td>1.75</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:105:G:O2'</td>
<td>29:X:106:G:H5'</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1016:C:C2</td>
<td>29:X:1154:A:C5</td>
<td>2.99</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1246:G:C5</td>
<td>29:X:1247:U:C5</td>
<td>2.99</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2018:G:H4'</td>
<td>29:X:2019:C:OP2</td>
<td>2.09</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2060:A:H1'</td>
<td>29:X:2414:A:O4'</td>
<td>2.09</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>29:X:994:A:N7</td>
<td>29:X:995:A:C6</td>
<td>2.79</td>
<td>0.51</td>
</tr>
<tr>
<td>31:Z:62:C:H2'</td>
<td>31:Z:63:A:C8</td>
<td>2.45</td>
<td>0.51</td>
</tr>
<tr>
<td>8:C:162:ARG:NH1</td>
<td>29:X:310:A:N1</td>
<td>2.59</td>
<td>0.51</td>
</tr>
<tr>
<td>7:B:152:LYS:H</td>
<td>12:G:106:TYR:HB3</td>
<td>1.74</td>
<td>0.51</td>
</tr>
<tr>
<td>14:I:89:ASP:C</td>
<td>14:I:90:ARG:HG3</td>
<td>2.31</td>
<td>0.51</td>
</tr>
<tr>
<td>15:J:17:ARG:NH1</td>
<td>29:X:967:G:O6</td>
<td>2.43</td>
<td>0.51</td>
</tr>
<tr>
<td>15:J:36:ILE:HG23</td>
<td>15:J:102:ARG:O</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>16:K:45:ARG:O</td>
<td>16:K:48:VAL:HG12</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>23:R:93:ARG:HG2</td>
<td>23:R:108:VAL:CA</td>
<td>2.73</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1302:C:H2'</td>
<td>29:X:1303:U:H6</td>
<td>1.75</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1404:C:H5'</td>
<td>29:X:1405:A:OP2</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1525:A:C5</td>
<td>29:X:1526:U:H1'</td>
<td>2.46</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1705:U:O2</td>
<td>29:X:1717:A:C5'</td>
<td>2.58</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:20:C:H2'</td>
<td>29:X:21:A:C8</td>
<td>2.46</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2236:U:H2'</td>
<td>29:X:2237:C:H6</td>
<td>1.75</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2619:G:C6</td>
<td>29:X:2755:A:C2</td>
<td>2.98</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:357:A:H2'</td>
<td>29:X:358:C:H5'</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:498:C:C5</td>
<td>29:X:499:G:N7</td>
<td>2.79</td>
<td>0.51</td>
</tr>
<tr>
<td>12:G:74:MET:SD</td>
<td>29:X:566:U:H4'</td>
<td>2.50</td>
<td>0.51</td>
</tr>
<tr>
<td>8:C:129:LYS:O</td>
<td>8:C:131:LYS:N</td>
<td>2.35</td>
<td>0.51</td>
</tr>
<tr>
<td>8:C:136:TRP:O</td>
<td>8:C:137:ALA:C</td>
<td>2.48</td>
<td>0.51</td>
</tr>
<tr>
<td>9:D:16:LEU:HD13</td>
<td>9:D:28:VAL:CG1</td>
<td>2.41</td>
<td>0.51</td>
</tr>
<tr>
<td>9:D:166:ALA:C</td>
<td>9:D:170:LEU:HG</td>
<td>2.31</td>
<td>0.51</td>
</tr>
<tr>
<td>12:G:141:GLY:O</td>
<td>12:G:142:ARG:C</td>
<td>2.49</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>14:I:134:GLU:C</td>
<td>14:I:136:ALA:H</td>
<td>2.13</td>
<td>0.51</td>
</tr>
<tr>
<td>15:J:119:PHE:O</td>
<td>15:J:120:ARG:C</td>
<td>2.49</td>
<td>0.51</td>
</tr>
<tr>
<td>24:S:19:ILE:CD1</td>
<td>24:S:36:ARG:HG3</td>
<td>2.41</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1069:G:H3'</td>
<td>29:X:1070:G:H5'</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1234:C:N3</td>
<td>29:X:1242:A:C6</td>
<td>2.78</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1629:G:C6</td>
<td>29:X:1633:C:C6</td>
<td>2.97</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:165:G:HI'</td>
<td>29:X:1378:A:C6</td>
<td>2.45</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1765:C:C4</td>
<td>29:X:1772:C:C2</td>
<td>2.98</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2275:U:CH1'</td>
<td>29:X:2276:C:OP1</td>
<td>2.56</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2334:C:H6</td>
<td>29:X:2334:C:O5'</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2345:A:O2'</td>
<td>29:X:2346:G:H5'</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2376:G:C2</td>
<td>29:X:2399:C:C2</td>
<td>2.99</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:24:G:N2</td>
<td>29:X:25:U:HI'</td>
<td>2.25</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2816:G:C2</td>
<td>29:X:2852:G:N2</td>
<td>2.78</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:361:G:O5'</td>
<td>29:X:361:G:H8</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:549:G:HI'</td>
<td>29:X:550:C:C6</td>
<td>2.46</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:748:A:C5'</td>
<td>29:X:749:C:OP2</td>
<td>2.58</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:939:C:C5'</td>
<td>29:X:940:G:O5'</td>
<td>2.57</td>
<td>0.51</td>
</tr>
<tr>
<td>7:B:37:LYS:HB3</td>
<td>7:B:32:ASP:HB2</td>
<td>1.91</td>
<td>0.51</td>
</tr>
<tr>
<td>8:C:158:ARG:HB3</td>
<td>8:C:169:VAL:HG11</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>9:D:122:PHE:HD2</td>
<td>9:D:129:ASN:N</td>
<td>2.09</td>
<td>0.51</td>
</tr>
<tr>
<td>14:I:9:THR:O</td>
<td>14:I:13:ARG:HD2</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>17:L:34:SER:HB2</td>
<td>17:L:94:TYR:HE2</td>
<td>1.75</td>
<td>0.51</td>
</tr>
<tr>
<td>17:L:87:VAL:CG1</td>
<td>17:L:88:VAL:N</td>
<td>2.73</td>
<td>0.51</td>
</tr>
<tr>
<td>24:S:10:PRO:O</td>
<td>24:S:13:LYS:CG</td>
<td>2.56</td>
<td>0.51</td>
</tr>
<tr>
<td>24:S:92:VAL:HG23</td>
<td>24:S:93:GLU:N</td>
<td>2.25</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1031:C:O2'</td>
<td>29:X:1032:A:H5'</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1102:G:H2'</td>
<td>29:X:1103:C:H6</td>
<td>1.75</td>
<td>0.51</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:1125:G:H2’</td>
<td>29:X:1126:A:H8</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2016:A:N1</td>
<td>29:X:2019:C:C6</td>
<td>2.78</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2607:C:O2’</td>
<td>29:X:2761:A:H2’</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>7:B:144:ARG:O</td>
<td>7:B:146:THR:N</td>
<td>2.44</td>
<td>0.51</td>
</tr>
<tr>
<td>7:B:61:LYS:N</td>
<td>7:B:62:PRO:CD</td>
<td>2.73</td>
<td>0.51</td>
</tr>
<tr>
<td>8:C:169:VAL:CG1</td>
<td>8:C:170:LEU:N</td>
<td>2.74</td>
<td>0.51</td>
</tr>
<tr>
<td>9:D:11:GLN:O</td>
<td>9:D:15:ALA:CB</td>
<td>2.59</td>
<td>0.51</td>
</tr>
<tr>
<td>9:D:138:PHE:HB2</td>
<td>9:D:141:ILE:HG12</td>
<td>1.91</td>
<td>0.51</td>
</tr>
<tr>
<td>9:D:16:LEU:O</td>
<td>9:D:20:PHE:CD1</td>
<td>2.63</td>
<td>0.51</td>
</tr>
<tr>
<td>15:J:56:SER:O</td>
<td>15:J:57:ARG:C</td>
<td>2.49</td>
<td>0.51</td>
</tr>
<tr>
<td>17:L:10:LYS:C</td>
<td>17:L:14:ARG:HE</td>
<td>2.14</td>
<td>0.51</td>
</tr>
<tr>
<td>17:L:83:GLY:C</td>
<td>17:L:84:ILE:HD12</td>
<td>2.31</td>
<td>0.51</td>
</tr>
<tr>
<td>18:M:38:LYS:HD3</td>
<td>18:M:41:GLU:OE2</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>24:S:105:GLN:OE1</td>
<td>24:S:140:LYS:CA</td>
<td>2.53</td>
<td>0.51</td>
</tr>
<tr>
<td>24:S:138:VAL:O</td>
<td>24:S:141:MET:HB2</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1031:C:C2’</td>
<td>29:X:1031:C:O2</td>
<td>2.57</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:357:A:C5</td>
<td>29:X:358:C:HI’</td>
<td>2.45</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:437:G:O2’</td>
<td>29:X:438:G:H5’</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>31:Z:42:U:N3</td>
<td>31:Z:45:C:H5&quot;</td>
<td>2.25</td>
<td>0.51</td>
</tr>
<tr>
<td>7:B:119:ARG:HA</td>
<td>7:B:160:MET:HE3</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>7:B:188:ILE:HG22</td>
<td>7:B:189:PRO:CD</td>
<td>2.41</td>
<td>0.51</td>
</tr>
<tr>
<td>8:C:30:VAL:O</td>
<td>8:C:31:VAL:C</td>
<td>2.47</td>
<td>0.51</td>
</tr>
<tr>
<td>8:C:42:THR:HG21</td>
<td>29:X:454:G:N3</td>
<td>2.24</td>
<td>0.51</td>
</tr>
<tr>
<td>8:C:48:ARG:O</td>
<td>8:C:51:VAL:CG2</td>
<td>2.59</td>
<td>0.51</td>
</tr>
<tr>
<td>10:E:11:VAL:HG21</td>
<td>10:E:50:LEU:HB2</td>
<td>1.91</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>14:I:13:ARG:HG2</td>
<td>14:I:14:LYS:N</td>
<td>2.24</td>
<td>0.51</td>
</tr>
<tr>
<td>15:J:28:VAL:O</td>
<td>15:J:29:ALA:HB2</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>17:L:77:ALA:O</td>
<td>17:L:80:ALA:HB3</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>18:M:93:ILE:N</td>
<td>18:M:93:ILE:CD1</td>
<td>2.74</td>
<td>0.51</td>
</tr>
<tr>
<td>23:R:93:ARG:O</td>
<td>23:R:95:ARG:NE</td>
<td>2.44</td>
<td>0.51</td>
</tr>
<tr>
<td>24:S:105:GLN:O</td>
<td>24:S:141:MET:O</td>
<td>2.29</td>
<td>0.51</td>
</tr>
<tr>
<td>27:V:26:MET:HA</td>
<td>27:V:29:ARG:NE2</td>
<td>2.25</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1570:C:H5'</td>
<td>29:X:1571:G:O2'</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:162:C:O2'</td>
<td>29:X:163:A:H5'</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1681:A:O5'</td>
<td>29:X:1681:A:H8</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1838:G:H3'</td>
<td>29:X:1839:A:H8</td>
<td>1.75</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:223:C:O2'</td>
<td>29:X:398:C:H5'</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2266:A:N6</td>
<td>29:X:2333:U:C4</td>
<td>2.77</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2826:C:H6</td>
<td>29:X:2826:C:O5'</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:417:C:N3</td>
<td>29:X:419:G:C5</td>
<td>2.79</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:539:A:N3</td>
<td>29:X:540:G:O6</td>
<td>2.43</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:813:A:C2</td>
<td>29:X:815:A:C8</td>
<td>2.98</td>
<td>0.51</td>
</tr>
<tr>
<td>7:B:133:LYS:HG2</td>
<td>7:B:137:ARG:HB3</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>9:D:111:ILE:HB</td>
<td>9:D:114:PHE:CB</td>
<td>2.34</td>
<td>0.51</td>
</tr>
<tr>
<td>9:D:14:PRO:O</td>
<td>9:D:17:MET:N</td>
<td>2.44</td>
<td>0.51</td>
</tr>
<tr>
<td>10:E:126:PRO:CG</td>
<td>10:E:127:GLU:H</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>10:E:43:VAL:CG2</td>
<td>10:E:44:ARG:N</td>
<td>2.74</td>
<td>0.51</td>
</tr>
<tr>
<td>10:E:89:LEU:HD12</td>
<td>10:E:129:THR:HA</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>14:I:94:GLU:O</td>
<td>14:I:99:VAL:HG22</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>23:R:17:LYS:C</td>
<td>23:R:19:GLY:N</td>
<td>2.65</td>
<td>0.51</td>
</tr>
<tr>
<td>24:S:72:ASP:O</td>
<td>24:S:75:LYS:O</td>
<td>2.29</td>
<td>0.51</td>
</tr>
<tr>
<td>26:U:68:ARG:NH1</td>
<td>29:X:412:U:C5</td>
<td>2.79</td>
<td>0.51</td>
</tr>
<tr>
<td>12:G:103:TYR:CE2</td>
<td>29:X:1142:G:H1'</td>
<td>2.45</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>29:X:1779:C:H2'</td>
<td>29:X:1780:A:C8</td>
<td>2.46</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2048:C:O2'</td>
<td>29:X:2049:C:H5'</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2216:G:O5'</td>
<td>29:X:2216:G:H8</td>
<td>1.94</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2247:A:H5''</td>
<td>29:X:2247:A:C8</td>
<td>2.46</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2510:A:C6</td>
<td>29:X:2511:G:C5</td>
<td>2.99</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2597:G:C2</td>
<td>29:X:2598:C:C2</td>
<td>2.99</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2645:C:H3'</td>
<td>29:X:2646:C:C6</td>
<td>2.45</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:750:C:H2'</td>
<td>29:X:751:G:H5'</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:972:C:C4'</td>
<td>29:X:973:U:O2'</td>
<td>2.57</td>
<td>0.51</td>
</tr>
<tr>
<td>31:Z:106:U:H6</td>
<td>31:Z:106:U:O5'</td>
<td>1.94</td>
<td>0.51</td>
</tr>
<tr>
<td>9:D:119:PRO:HG2</td>
<td>9:D:120:ASN:N</td>
<td>2.20</td>
<td>0.51</td>
</tr>
<tr>
<td>12:G:67:ARG:HB3</td>
<td>12:G:70:PHE:CB</td>
<td>2.40</td>
<td>0.51</td>
</tr>
<tr>
<td>14:I:36:GLY:O</td>
<td>14:I:37:GLN:HB2</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>15:J:128:ILE:CD1</td>
<td>15:J:130:THR:HG23</td>
<td>2.42</td>
<td>0.51</td>
</tr>
<tr>
<td>15:J:31:GLY:CA</td>
<td>15:J:108:ALA:HB2</td>
<td>2.40</td>
<td>0.51</td>
</tr>
<tr>
<td>17:L:106:ALA:O</td>
<td>17:L:109:GLU:HG2</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>19:N:93:LYS:HD2</td>
<td>20:O:10:LYS:HZ1</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>21:P:38:VAL:HG22</td>
<td>21:P:64:ALA:CB</td>
<td>2.41</td>
<td>0.51</td>
</tr>
<tr>
<td>25:T:44:LYS:HE3</td>
<td>25:T:45:PHE:HE1</td>
<td>1.75</td>
<td>0.51</td>
</tr>
<tr>
<td>28:W:14:GLY:O</td>
<td>28:W:18:LYS:HG2</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1053:G:C2'</td>
<td>29:X:1054:C:O4'</td>
<td>2.59</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1332:G:C2</td>
<td>29:X:1333:G:N2</td>
<td>2.79</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1495:G:H5'</td>
<td>29:X:1574:A:C2</td>
<td>2.46</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1361:G:C6</td>
<td>29:X:1615:C:N4</td>
<td>2.78</td>
<td>0.51</td>
</tr>
<tr>
<td>7:B:129:HIS:CE1</td>
<td>29:X:1692:C:N3</td>
<td>2.79</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:1757:C:O2</td>
<td>29:X:1970:G:C2</td>
<td>2.64</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>29:X:2228:U:C5'</td>
<td>29:X:2229:G:OP2</td>
<td>2.57</td>
<td>0.51</td>
</tr>
<tr>
<td>9:D:88:LYS:NZ</td>
<td>29:X:2293:G:OP1</td>
<td>2.42</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2429:A:OP1</td>
<td>29:X:2476:A:C8</td>
<td>2.64</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2635:U:OP2</td>
<td>29:X:2643:G:N1</td>
<td>2.31</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:2778:U:H5'</td>
<td>29:X:2779:C:H1'</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:462:G:O6</td>
<td>29:X:465:C:OP1</td>
<td>2.28</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:774:A:C8</td>
<td>29:X:774:A:C3'</td>
<td>2.94</td>
<td>0.51</td>
</tr>
<tr>
<td>29:X:79:G:H2'</td>
<td>29:X:80:A:O4'</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>31:Z:29:C:C5</td>
<td>31:Z:30:C:C5</td>
<td>2.99</td>
<td>0.51</td>
</tr>
<tr>
<td>31:Z:49:C:H5'</td>
<td>31:Z:50:U:OP2</td>
<td>2.10</td>
<td>0.51</td>
</tr>
<tr>
<td>6:A:77:ALA:CB</td>
<td>6:A:97:TYR:CD1</td>
<td>2.87</td>
<td>0.50</td>
</tr>
<tr>
<td>7:B:52:ALA:HB3</td>
<td>7:B:76:ARG:HD2</td>
<td>1.92</td>
<td>0.50</td>
</tr>
<tr>
<td>9:D:110:ARG:HH21</td>
<td>9:D:110:ARG:HG2</td>
<td>1.75</td>
<td>0.50</td>
</tr>
<tr>
<td>9:D:65:PRO:HB3</td>
<td>9:D:89:VAL:CG2</td>
<td>2.39</td>
<td>0.50</td>
</tr>
<tr>
<td>11:F:83:GLY:C</td>
<td>11:F:84:ILE:HG13</td>
<td>2.31</td>
<td>0.50</td>
</tr>
<tr>
<td>14:I:36:GLY:O</td>
<td>14:I:37:GLN:HG3</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>14:I:76:LYS:HB3</td>
<td>14:I:79:GLN:NE2</td>
<td>2.26</td>
<td>0.50</td>
</tr>
<tr>
<td>14:I:80:LEU:CD2</td>
<td>14:I:97:ARG:NH2</td>
<td>2.74</td>
<td>0.50</td>
</tr>
<tr>
<td>15:J:8:THR:HA</td>
<td>15:J:70:PHE:HZ</td>
<td>1.77</td>
<td>0.50</td>
</tr>
<tr>
<td>18:M:28:ARG:CB</td>
<td>18:M:29:PRO:CD</td>
<td>2.73</td>
<td>0.50</td>
</tr>
<tr>
<td>19:N:11:ARG:O</td>
<td>19:N:15:LYS:HG3</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>23:R:95:ARG:NH1</td>
<td>23:R:106:VAL:HG12</td>
<td>2.25</td>
<td>0.50</td>
</tr>
<tr>
<td>28:W:14:GLY:O</td>
<td>28:W:17:VAL:HB</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1542:G:N2</td>
<td>29:X:1562:G:N1</td>
<td>2.42</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1652:G:C4</td>
<td>29:X:1653:C:C5</td>
<td>2.99</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1731:C:C3'</td>
<td>29:X:1732:U:C5'</td>
<td>2.89</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2288:A:H2'</td>
<td>29:X:2289:A:C8</td>
<td>2.45</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:341:A:O2'</td>
<td>29:X:342:G:H8</td>
<td>1.92</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:591:G:H2'</td>
<td>29:X:592:G:H8</td>
<td>1.74</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>6:A:257:LEU:HD13</td>
<td>29:X:1795:C:P</td>
<td>2.51</td>
<td>0.50</td>
</tr>
<tr>
<td>7:B:136:ARG:HH11</td>
<td>7:B:136:ARG:HG2</td>
<td>1.76</td>
<td>0.50</td>
</tr>
<tr>
<td>7:B:120:TRP:CE2</td>
<td>7:B:155:ARG:HD2</td>
<td>2.47</td>
<td>0.50</td>
</tr>
<tr>
<td>9:D:29:PRO:HA</td>
<td>9:D:159:THR:OG1</td>
<td>2.09</td>
<td>0.50</td>
</tr>
<tr>
<td>10:E:97:LYS:O</td>
<td>10:E:98:LEU:HB3</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>15:J:79:PRO:CD</td>
<td>15:J:88:LYS:NZ</td>
<td>2.74</td>
<td>0.50</td>
</tr>
<tr>
<td>17:L:42:ILE:HG22</td>
<td>17:L:51:LEU:HB2</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>18:M:39:VAL:HA</td>
<td>18:M:45:THR:HA</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>24:S:97:PRO:HB2</td>
<td>24:S:99:HIS:CE1</td>
<td>2.45</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1032:A:C8</td>
<td>29:X:1032:A:H3'</td>
<td>2.46</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1042:G:H2'</td>
<td>29:X:1043:A:C8</td>
<td>2.47</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1139:A:O2'</td>
<td>29:X:1140:A:O4'</td>
<td>2.28</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1261:G:O2'</td>
<td>29:X:1262:U:P</td>
<td>2.69</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1391:A:H1'</td>
<td>29:X:1392:U:C4</td>
<td>2.46</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1762:C:H2'</td>
<td>29:X:1763:G:O4'</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:176:A:C3'</td>
<td>29:X:177:U:C5</td>
<td>2.88</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2016:A:N6</td>
<td>29:X:2019:C:C2</td>
<td>2.80</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2382:C:O2</td>
<td>29:X:2382:C:H2'</td>
<td>2.10</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2707:G:H8</td>
<td>29:X:2707:G:H5'</td>
<td>1.76</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2756:A:H4'</td>
<td>29:X:2757:G:H5''</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:27:G:HO2'</td>
<td>29:X:28:A:H8</td>
<td>1.60</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:754:G:C6</td>
<td>29:X:770:U:O2</td>
<td>2.64</td>
<td>0.50</td>
</tr>
<tr>
<td>30:Y:43:HIS:C</td>
<td>30:Y:44:HIS:CD2</td>
<td>2.84</td>
<td>0.50</td>
</tr>
<tr>
<td>4:4:29:ASN:OD1</td>
<td>4:4:31:LYS:HD3</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>7:B:1:MET:CG</td>
<td>7:B:2:LYS:N</td>
<td>2.73</td>
<td>0.50</td>
</tr>
<tr>
<td>7:B:53:PRO:HD3</td>
<td>18:M:5:ILE:HG22</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>8:C:122:GLY:C</td>
<td>8:C:124:ASP:H</td>
<td>2.14</td>
<td>0.50</td>
</tr>
<tr>
<td>8:C:3:GLN:NE2</td>
<td>8:C:4:ILE:CG1</td>
<td>2.71</td>
<td>0.50</td>
</tr>
<tr>
<td>9:D:74:ILE:HG23</td>
<td>9:D:79:LEU:C</td>
<td>2.31</td>
<td>0.50</td>
</tr>
<tr>
<td>10:E:103:LEU:HD21</td>
<td>10:E:105:MET:HE3</td>
<td>1.93</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>17:L:42:ILE:CG2</td>
<td>17:L:51:LEU:HB2</td>
<td>2.42</td>
<td>0.50</td>
</tr>
<tr>
<td>23:R:24:VAL:HG11</td>
<td>23:R:29:HIS:HB2</td>
<td>1.92</td>
<td>0.50</td>
</tr>
<tr>
<td>26:U:32:ARG:HG2</td>
<td>26:U:34:THR:N</td>
<td>2.25</td>
<td>0.50</td>
</tr>
<tr>
<td>27:V:14:PHE:HE2</td>
<td>27:V:57:LYS:N</td>
<td>2.09</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1194:U:C5'</td>
<td>29:X:1194:U:H6</td>
<td>2.18</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1332:G:C2</td>
<td>29:X:1333:G:C2</td>
<td>2.98</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1357:U:C2'</td>
<td>29:X:1358:C:OP1</td>
<td>2.60</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1363:C:O2'</td>
<td>29:X:1364:C:H5'</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1517:C:H2'</td>
<td>29:X:1518:C:C6</td>
<td>2.43</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:171:G:C6</td>
<td>29:X:179:U:C2</td>
<td>2.98</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:172:A:C6</td>
<td>29:X:175:C:C5</td>
<td>3.00</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2031:A:H2'</td>
<td>29:X:2032:G:O4'</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2038:C:H2'</td>
<td>29:X:2483:U:C4'</td>
<td>2.42</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2651:U:O2</td>
<td>29:X:2652:G:C8</td>
<td>2.64</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:861:G:H1'</td>
<td>29:X:944:A:N3</td>
<td>2.26</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2590:U:O2</td>
<td>30:Y:2:ALA:N</td>
<td>2.44</td>
<td>0.50</td>
</tr>
<tr>
<td>30:Y:52:TYR:O</td>
<td>30:Y:53:ASP:HB2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>6:A:62:TYR:CE2</td>
<td>29:X:1808:C:C4</td>
<td>3.00</td>
<td>0.50</td>
</tr>
<tr>
<td>7:B:67:PHE:CE1</td>
<td>7:B:75:THR:HG22</td>
<td>2.47</td>
<td>0.50</td>
</tr>
<tr>
<td>8:C:191:ALA:O</td>
<td>8:C:194:GLU:O</td>
<td>2.29</td>
<td>0.50</td>
</tr>
<tr>
<td>8:C:47:THR:CG2</td>
<td>8:C:84:PHE:H</td>
<td>2.24</td>
<td>0.50</td>
</tr>
<tr>
<td>14:I:4:HIS:HA</td>
<td>14:I:7:LYS:HZ1</td>
<td>1.74</td>
<td>0.50</td>
</tr>
<tr>
<td>15:I:64:LYS:HG2</td>
<td>15:I:108:ALA:O</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>19:N:91:ASN:HA</td>
<td>20:O:10:LYS:HZ2</td>
<td>1.76</td>
<td>0.50</td>
</tr>
<tr>
<td>24:S:3:LEU:HD13</td>
<td>24:S:33:ALA:N</td>
<td>2.25</td>
<td>0.50</td>
</tr>
<tr>
<td>24:S:73:LYS:O</td>
<td>24:S:75:LYS:N</td>
<td>2.44</td>
<td>0.50</td>
</tr>
</tbody>
</table>

*Continued on next page...*
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>27:V:1:MET:HG3</td>
<td>27:V:2:LYS:H</td>
<td>1.75</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1307:U:H2'</td>
<td>29:X:1308:C:O4'</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1411:C:H2'</td>
<td>29:X:1412:C:H6</td>
<td>1.76</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1629:G:C6</td>
<td>29:X:1633:C:C5</td>
<td>3.00</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2055:G:O2'</td>
<td>29:X:2056:C:H5'</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2279:G:H2'</td>
<td>29:X:2280:A:H8</td>
<td>1.74</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2299:A:C2</td>
<td>29:X:2312:A:C5</td>
<td>2.99</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2471:U:N3</td>
<td>29:X:2472:U:C4</td>
<td>2.79</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2701:A:H2'</td>
<td>29:X:2702:G:O4'</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2660:C:C2</td>
<td>29:X:2704:U:C4</td>
<td>2.99</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:342:G:H4'</td>
<td>29:X:343:A:OP1</td>
<td>2.10</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:670:U:H2'</td>
<td>29:X:671:A:C8</td>
<td>2.46</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:75:C:H2'</td>
<td>29:X:76:C:C5'</td>
<td>2.42</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:874:A:C2</td>
<td>31:Z:80:A:H2</td>
<td>2.29</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:956:A:H5'</td>
<td>29:X:957:G:OP2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:994:A:H2'</td>
<td>29:X:995:A:C8</td>
<td>2.47</td>
<td>0.50</td>
</tr>
<tr>
<td>31:Z:4:C:C6</td>
<td>31:Z:4:C:C3'</td>
<td>2.95</td>
<td>0.50</td>
</tr>
<tr>
<td>8:C:147:LYS:HB2</td>
<td>8:C:184:ASP:OD2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>9:D:52:LYS:O</td>
<td>9:D:56:GLU:HB2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>14:I:118:VAL:O</td>
<td>14:I:138:GLY:HA3</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>14:I:14:HI:HA</td>
<td>14:I:17:LYS:HZ2</td>
<td>1.76</td>
<td>0.50</td>
</tr>
<tr>
<td>19:N:13:ARG:CZ</td>
<td>29:X:1264:C:H5''</td>
<td>2.41</td>
<td>0.50</td>
</tr>
<tr>
<td>20:O:79:GLN:OE1</td>
<td>20:O:79:GLN:CA</td>
<td>2.58</td>
<td>0.50</td>
</tr>
<tr>
<td>23:R:96:LYS:CG</td>
<td>23:R:97:GLN:N</td>
<td>2.70</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1102:G:H2'</td>
<td>29:X:1103:C:C6</td>
<td>2.46</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1681:A:C6</td>
<td>29:X:2706:U:C5</td>
<td>3.00</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:2165:A:H2'</td>
<td>29:X:2166:G:C8</td>
<td>2.45</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2299:A:H2'</td>
<td>29:X:2312:A:N6</td>
<td>2.27</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2551:A:O2'</td>
<td>29:X:2552:C:OP2</td>
<td>2.28</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:413:G:O5'</td>
<td>29:X:413:G:H8</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:917:U:H2'</td>
<td>29:X:918:A:C5'</td>
<td>2.40</td>
<td>0.50</td>
</tr>
<tr>
<td>30:Y:19:ARG:CG</td>
<td>30:Y:20:ARG:N</td>
<td>2.74</td>
<td>0.50</td>
</tr>
<tr>
<td>4:4:1:MET:HE2</td>
<td>4:4:33:LYS:HB3</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>8:C:166:TRP:CE3</td>
<td>8:C:166:TRP:N</td>
<td>2.79</td>
<td>0.50</td>
</tr>
<tr>
<td>8:C:19:LEU:HA</td>
<td>8:C:20:PRO:O</td>
<td>2.10</td>
<td>0.50</td>
</tr>
<tr>
<td>9:D:130:LEU:HD23</td>
<td>9:D:131:GLY:N</td>
<td>2.27</td>
<td>0.50</td>
</tr>
<tr>
<td>9:D:56:GLU:O</td>
<td>9:D:57:LEU:C</td>
<td>2.49</td>
<td>0.50</td>
</tr>
<tr>
<td>9:D:40:LEU:HD12</td>
<td>9:D:85:VAL:O</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>11:F:50:ASP:O</td>
<td>11:F:51:ALA:CB</td>
<td>2.60</td>
<td>0.50</td>
</tr>
<tr>
<td>12:G:154:GLU:O</td>
<td>12:G:157:PRO:HB2</td>
<td>2.10</td>
<td>0.50</td>
</tr>
<tr>
<td>16:K:10:LEU:HD23</td>
<td>16:K:17:ARG:HG2</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>16:K:24:GLN:CB</td>
<td>16:K:44:LEU:HD22</td>
<td>2.42</td>
<td>0.50</td>
</tr>
<tr>
<td>17:L:38:ILE:CG1</td>
<td>17:L:39:TYR:N</td>
<td>2.74</td>
<td>0.50</td>
</tr>
<tr>
<td>13:H:92:ASP:OD1</td>
<td>18:M:69:ARG:NH1</td>
<td>2.45</td>
<td>0.50</td>
</tr>
<tr>
<td>27:V:35:GLY:O</td>
<td>27:V:36:GLN:HB2</td>
<td>2.10</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1219:C:H2'</td>
<td>29:X:1220:G:O4'</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1468:A:P</td>
<td>29:X:1468:A:C8</td>
<td>3.02</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:165:G:H2'</td>
<td>29:X:166:G:C5'</td>
<td>2.42</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:186:C:O2'</td>
<td>29:X:187:U:H5'</td>
<td>2.10</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2198:U:N3</td>
<td>29:X:2199:G:C5</td>
<td>2.79</td>
<td>0.50</td>
</tr>
<tr>
<td>13:H:1:MET:CE</td>
<td>29:X:2706:U:H1'</td>
<td>2.41</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:417:C:C6</td>
<td>29:X:419:G:C4</td>
<td>2.99</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:733:G:O2'</td>
<td>29:X:734:G:H5'</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:859:U:H1'</td>
<td>29:X:860:U:N3</td>
<td>2.27</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>31:Z:78:A:H2'</td>
<td>31:Z:79:U:O4'</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>6:A:96:His:HE1</td>
<td>6:A:100:GLY:HA2</td>
<td>1.77</td>
<td>0.50</td>
</tr>
<tr>
<td>7:B:133:LYS:O</td>
<td>7:B:134:TRP:C</td>
<td>2.49</td>
<td>0.50</td>
</tr>
<tr>
<td>7:B:136:ARG:NH1</td>
<td>7:B:136:ARG:CG</td>
<td>2.73</td>
<td>0.50</td>
</tr>
<tr>
<td>7:B:183:LEU:CD1</td>
<td>18:M:16:ILE:HG23</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>9:D:111:ILE:HG22</td>
<td>9:D:114:PHE:HB2</td>
<td>1.92</td>
<td>0.50</td>
</tr>
<tr>
<td>11:F:100:ASN:HA</td>
<td>11:F:139:GLU:OE1</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>26:U:48:LYS:CG</td>
<td>26:U:49:LYS:N</td>
<td>2.54</td>
<td>0.50</td>
</tr>
<tr>
<td>14:1:13:ARG:NH1</td>
<td>29:X:1218:C:C4'</td>
<td>2.67</td>
<td>0.50</td>
</tr>
<tr>
<td>19:N:13:ARG:NH1</td>
<td>29:X:1264:C:H5'</td>
<td>2.27</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1336:G:H2'</td>
<td>29:X:1337:G:H5'</td>
<td>1.92</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1419:G:H2'</td>
<td>29:X:1420:A:O4'</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:141:G:H2'</td>
<td>29:X:142:U:O4'</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1624:A:C5</td>
<td>29:X:1627:C:C4</td>
<td>2.98</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1731:G:H2'</td>
<td>29:X:1732:U:H5''</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2314:A:O2'</td>
<td>29:X:2315:A:H8</td>
<td>1.95</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2642:G:C2'</td>
<td>29:X:2643:G:H5'</td>
<td>2.41</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2701:A:H2'</td>
<td>29:X:2702:G:C5'</td>
<td>2.41</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:860:U:C2'</td>
<td>29:X:860:U:O2</td>
<td>2.60</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:996:G:O3'</td>
<td>29:X:996:G:H3'</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>31:Z:42:U:H1'</td>
<td>31:Z:47:A:O4'</td>
<td>1.75</td>
<td>0.50</td>
</tr>
<tr>
<td>8:C:117:LEU:CD2</td>
<td>8:C:117:LEU:C</td>
<td>2.80</td>
<td>0.50</td>
</tr>
<tr>
<td>10:E:83:TYR:OH</td>
<td>10:E:138:LYS:HD2</td>
<td>2.10</td>
<td>0.50</td>
</tr>
<tr>
<td>10:E:54:ARG:NH1</td>
<td>10:E:57:ASP:HB3</td>
<td>2.22</td>
<td>0.50</td>
</tr>
<tr>
<td>10:E:76:VAL:O</td>
<td>10:E:78:GLY:N</td>
<td>2.45</td>
<td>0.50</td>
</tr>
<tr>
<td>14:I:13:ARG:NH1</td>
<td>29:X:1218:C:C4'</td>
<td>2.67</td>
<td>0.50</td>
</tr>
<tr>
<td>15:J:100:PRO:CB</td>
<td>24:J:74:ARG:HE</td>
<td>2.25</td>
<td>0.50</td>
</tr>
<tr>
<td>15:J:86:LYS:HB2</td>
<td>29:X:2256:G:P</td>
<td>2.52</td>
<td>0.50</td>
</tr>
<tr>
<td>17:L:27:LEU:HD23</td>
<td>17:L:44:ASP:HA</td>
<td>1.94</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21:P:105:ARG:NH1</td>
<td>21:P:119:LYS:HZ1</td>
<td>2.09</td>
<td>0.50</td>
</tr>
<tr>
<td>24:S:71:MET:HA</td>
<td>24:S:78:PRO:HA</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>27:V:52:GLN:O</td>
<td>27:V:53:LEU:C</td>
<td>2.50</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1135:C:C2</td>
<td>29:X:1136:G:C8</td>
<td>2.99</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1361:G:C6</td>
<td>29:X:1362:A:C6</td>
<td>3.00</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1450:G:C2’</td>
<td>29:X:1451:C:H5’</td>
<td>2.41</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1524:C:H2’</td>
<td>29:X:1524:C:O2</td>
<td>2.10</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1685:A:N7</td>
<td>29:X:1691:G:C6</td>
<td>2.79</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1770:U:O2</td>
<td>29:X:1774:A:C6</td>
<td>2.65</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1818:G:C5</td>
<td>29:X:1819:U:C5</td>
<td>2.99</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2243:C:H2’</td>
<td>29:X:2244:C:O4’</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2738:A:OP2</td>
<td>29:X:2739:G:OP2</td>
<td>2.30</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2779:C:H3’</td>
<td>29:X:2779:C:H6</td>
<td>1.77</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:330:C:C2</td>
<td>29:X:331:U:C6</td>
<td>3.00</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:391:C:O2’</td>
<td>29:X:392:G:H5’</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:455:A:H5’</td>
<td>29:X:456:C:OP1</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:463:C:C2</td>
<td>29:X:465:C:C5</td>
<td>3.00</td>
<td>0.50</td>
</tr>
<tr>
<td>30:Y:42:SER:O</td>
<td>30:Y:43:HIS:HB2</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>16:K:98:LEU:CD2</td>
<td>30:Y:56:GLN:HG2</td>
<td>2.38</td>
<td>0.50</td>
</tr>
<tr>
<td>31:Z:5:C:H2’</td>
<td>31:Z:6:C:C6</td>
<td>2.46</td>
<td>0.50</td>
</tr>
<tr>
<td>7:B:150:VAL:CG2</td>
<td>29:X:2598:C:C4’</td>
<td>2.90</td>
<td>0.50</td>
</tr>
<tr>
<td>7:B:1:MET:CG</td>
<td>7:B:2:LYS:H</td>
<td>2.24</td>
<td>0.50</td>
</tr>
<tr>
<td>9:D:108:LEU:HA</td>
<td>9:D:111:ILE:HG13</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>10:E:7:GLN:H</td>
<td>10:E:8:PRO:CD</td>
<td>2.25</td>
<td>0.50</td>
</tr>
<tr>
<td>17:L:8:ARG:CB</td>
<td>17:L:8:ARG:NH1</td>
<td>2.71</td>
<td>0.50</td>
</tr>
<tr>
<td>19:N:10:ARG:NH1</td>
<td>29:X:592:G:P</td>
<td>2.83</td>
<td>0.50</td>
</tr>
<tr>
<td>19:N:50:ARG:HA</td>
<td>19:N:53:LYS:HG2</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>23:R:4:PRO:HA</td>
<td>29:X:34:U:H1’</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>26:U:14:VAL:O</td>
<td>26:U:15:VAL:CG2</td>
<td>2.60</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1035:G:C8</td>
<td>29:X:1036:G:C8</td>
<td>2.99</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1053:G:C5</td>
<td>29:X:1054:C:C4</td>
<td>3.00</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>29:X:1256:C:H2'</td>
<td>29:X:1257:U:O4'</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1304:U:O2'</td>
<td>29:X:1305:C:H5'</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1557:G:O2'</td>
<td>29:X:1558:C:H5'</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:1442:C:C4</td>
<td>29:X:1585:A:H5''</td>
<td>2.46</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2082:C:H2'</td>
<td>29:X:2083:G:H5'</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2214:G:H2'</td>
<td>29:X:2215:C:O4'</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2396:C:H2'</td>
<td>29:X:2397:A:O4'</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2662:C:C2</td>
<td>29:X:2663:U:C5</td>
<td>3.00</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:2782:G:O6</td>
<td>29:X:2867:G:O6</td>
<td>2.30</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:533:C:H1'</td>
<td>29:X:563:U:O2'</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>14:I:107:LYS:HE3</td>
<td>29:X:647:G:C6</td>
<td>2.47</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:695:G:H2'</td>
<td>29:X:696:U:H6</td>
<td>1.75</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:751:G:H2'</td>
<td>29:X:752:G:H8</td>
<td>1.68</td>
<td>0.50</td>
</tr>
<tr>
<td>29:X:810:U:C3'</td>
<td>29:X:810:U:C6</td>
<td>2.95</td>
<td>0.50</td>
</tr>
<tr>
<td>30:Y:16:ARG:HD3</td>
<td>30:Y:20:ARG:NH1</td>
<td>2.24</td>
<td>0.50</td>
</tr>
<tr>
<td>7:B:117:MET:HB2</td>
<td>7:B:136:ARG:CD</td>
<td>2.42</td>
<td>0.49</td>
</tr>
<tr>
<td>9:D:12:VAL:C</td>
<td>9:D:16:LEU:HG</td>
<td>2.33</td>
<td>0.49</td>
</tr>
<tr>
<td>9:D:63:GLN:HG3</td>
<td>9:D:95:ARG:NH2</td>
<td>2.27</td>
<td>0.49</td>
</tr>
<tr>
<td>12:G:115:ALA:O</td>
<td>12:G:118:ALA:CB</td>
<td>2.56</td>
<td>0.49</td>
</tr>
<tr>
<td>12:G:35:LYS:O</td>
<td>12:G:36:ASN:CB</td>
<td>2.55</td>
<td>0.49</td>
</tr>
<tr>
<td>12:G:44:VAL:HG12</td>
<td>12:G:45:ASP:N</td>
<td>2.27</td>
<td>0.49</td>
</tr>
<tr>
<td>14:I:45:LYS:HG2</td>
<td>14:I:46:GLY:N</td>
<td>2.22</td>
<td>0.49</td>
</tr>
<tr>
<td>15:J:113:GLU:O</td>
<td>15:J:115:ALA:N</td>
<td>2.45</td>
<td>0.49</td>
</tr>
<tr>
<td>17:L:37:His:HD2</td>
<td>31:Z:29:C:O3'</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>17:L:41:GLN:HG2</td>
<td>17:L:43:ILE:CD1</td>
<td>2.42</td>
<td>0.49</td>
</tr>
<tr>
<td>17:L:89:PHE:CD1</td>
<td>17:L:91:ARG:NH2</td>
<td>2.80</td>
<td>0.49</td>
</tr>
<tr>
<td>19:N:13:ARG:NH1</td>
<td>29:X:1264:C:C5'</td>
<td>2.75</td>
<td>0.49</td>
</tr>
<tr>
<td>20:O:49:GLU:C</td>
<td>20:O:51:ALA:H</td>
<td>2.15</td>
<td>0.49</td>
</tr>
<tr>
<td>21:P:45:ILE:CD1</td>
<td>21:P:57:LEU:HG</td>
<td>2.35</td>
<td>0.49</td>
</tr>
<tr>
<td>24:S:64:ALA:CA</td>
<td>24:S:85:MET:HA</td>
<td>2.42</td>
<td>0.49</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>27:V:4:SER:HA</td>
<td>27:V:7:ARG:HG3</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1051:U:C2'</td>
<td>29:X:1052:C:O4'</td>
<td>2.59</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1182:U:H2'</td>
<td>29:X:1183:C:O5'</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1179:A:C2</td>
<td>29:X:1196:G:C2</td>
<td>3.00</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1467:U:H3'</td>
<td>29:X:1468:A:C5'</td>
<td>2.42</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1776:A:C8</td>
<td>29:X:1778:U:C5</td>
<td>3.00</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1780:A:H2'</td>
<td>29:X:1781:C:O4'</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1804:U:H2'</td>
<td>29:X:1805:G:C8</td>
<td>2.47</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2209:G:C5</td>
<td>29:X:2210:C:C5</td>
<td>3.00</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:805:G:N7</td>
<td>29:X:2419:C:H1'</td>
<td>2.27</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2550:C:C4</td>
<td>29:X:2553:G:C8</td>
<td>3.00</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:531:G:C2</td>
<td>29:X:532:A:C5</td>
<td>3.00</td>
<td>0.49</td>
</tr>
<tr>
<td>7:B:183:LEU:HD21</td>
<td>18:M:16:ILE:CD1</td>
<td>2.24</td>
<td>0.49</td>
</tr>
<tr>
<td>9:D:10:ASP:C</td>
<td>9:D:14:PRO:HD2</td>
<td>2.32</td>
<td>0.49</td>
</tr>
<tr>
<td>10:E:12:PRO:O</td>
<td>10:E:15:VAL:HG13</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>11:F:7:ILE:HG22</td>
<td>11:F:8:VAL:N</td>
<td>2.27</td>
<td>0.49</td>
</tr>
<tr>
<td>15:J:100:PRO:CB</td>
<td>24:S:74:ARG:HG2</td>
<td>2.43</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1348:C:H2'</td>
<td>29:X:1349:G:A:C8</td>
<td>2.44</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1385:C:H2'</td>
<td>29:X:1386:A:O4'</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>7:B:141:ILE:CD1</td>
<td>29:X:2034:G:O:4'</td>
<td>2.42</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2742:G:O2'</td>
<td>29:X:2743:G:H5'</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2753:G:O2'</td>
<td>29:X:2754:G:H5'</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:212:U:C2</td>
<td>29:X:443:G:C2</td>
<td>3.00</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:768:U:H2'</td>
<td>29:X:769:G:C:O4'</td>
<td>2.11</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued on 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>29:X:78:C:O2'</td>
<td>29:X:79:G:H5'</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:884:C:H2'</td>
<td>29:X:885:A:H8</td>
<td>1.77</td>
<td>0.49</td>
</tr>
<tr>
<td>7:B:127:ALA:HB2</td>
<td>7:B:135:His:HE1</td>
<td>1.76</td>
<td>0.49</td>
</tr>
<tr>
<td>7:B:159:His:CE1</td>
<td>7:B:162:MET:HB2</td>
<td>2.47</td>
<td>0.49</td>
</tr>
<tr>
<td>7:B:75:THR:HG23</td>
<td>7:B:76:ARG:H</td>
<td>1.76</td>
<td>0.49</td>
</tr>
<tr>
<td>9:D:6:THR:HG22</td>
<td>9:D:7:LYS:N</td>
<td>2.26</td>
<td>0.49</td>
</tr>
<tr>
<td>10:E:95:ARG:HG3</td>
<td>10:E:106:ASN:HB3</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>14:I:105:pro:O</td>
<td>14:I:106:VAL:HG23</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>15:J:60:ARG:HH11</td>
<td>15:J:60:ARG:HG2</td>
<td>1.77</td>
<td>0.49</td>
</tr>
<tr>
<td>15:J:81:GLU:HG2</td>
<td>15:J:82:THR:N</td>
<td>2.28</td>
<td>0.49</td>
</tr>
<tr>
<td>20:O:36:LYS:HD2</td>
<td>20:O:55:THR:N</td>
<td>2.27</td>
<td>0.49</td>
</tr>
<tr>
<td>21:P:76:LYS:C</td>
<td>21:P:78:ASN:H</td>
<td>2.16</td>
<td>0.49</td>
</tr>
<tr>
<td>23:R:24:VAL:O</td>
<td>23:R:31:GLY:N</td>
<td>2.45</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1441:ALA:HO4'</td>
<td>29:X:1442:C:O5'</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1459:U:H4'</td>
<td>29:X:1460:G:OP1</td>
<td>2.10</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2197:U:N3</td>
<td>29:X:2198:U:C5</td>
<td>2.81</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2522:G:H2</td>
<td>29:X:2523:G:H8</td>
<td>1.75</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2797:G:H2'</td>
<td>29:X:2798:AL:HO5</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:333:A:O4'</td>
<td>29:X:351:A:H1'</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:36:G:HO2</td>
<td>29:X:462:G:C2</td>
<td>2.25</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:847:C:H2</td>
<td>29:X:848:AC8</td>
<td>2.40</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:863:CH2</td>
<td>29:X:864:C:C6</td>
<td>2.47</td>
<td>0.49</td>
</tr>
<tr>
<td>4:4:27:CYS:HG</td>
<td>4:4:32:HIS:CG</td>
<td>2.30</td>
<td>0.49</td>
</tr>
<tr>
<td>8:C:104:LEU:HD23</td>
<td>8:C:105:ALA:H</td>
<td>1.77</td>
<td>0.49</td>
</tr>
<tr>
<td>9:D:6:THR:O</td>
<td>9:D:10:ASP:HB2</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>10:E:17:VAL:CG1</td>
<td>10:E:18:ASN:N</td>
<td>2.74</td>
<td>0.49</td>
</tr>
<tr>
<td>11:F:35:MET:C</td>
<td>11:F:37:PHE:H</td>
<td>2.15</td>
<td>0.49</td>
</tr>
<tr>
<td>15:J:30:PHE:CD1</td>
<td>15:J:66:TYR:CE2</td>
<td>3.00</td>
<td>0.49</td>
</tr>
<tr>
<td>13:H:76:ARG:NH2</td>
<td>18:M:75:GLU:OE2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>21:P:112:GLY:O</td>
<td>21:P:113:SER:O</td>
<td>2.31</td>
<td>0.49</td>
</tr>
<tr>
<td>23:R:98:ILE:C</td>
<td>23:R:100:ASP:N</td>
<td>2.64</td>
<td>0.49</td>
</tr>
<tr>
<td>24:S:17:SER:O</td>
<td>24:S:18:MET:HG2</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1278:A:O2'</td>
<td>29:X:1279:G:P</td>
<td>2.70</td>
<td>0.49</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>29:X:1287:A:H2</td>
<td>29:X:1661:C:O2</td>
<td>1.95</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1372:A:N7</td>
<td>29:X:1373:G:N7</td>
<td>2.61</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1386:A:N6</td>
<td>29:X:1387:G:C2</td>
<td>2.80</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1560:A:N1</td>
<td>29:X:1561:A:C2</td>
<td>2.80</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1578:U:C2</td>
<td>29:X:1579:G:C8</td>
<td>3.00</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:789:G:O6</td>
<td>29:X:2055:G:OP1</td>
<td>2.31</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2526:U:H2’</td>
<td>29:X:2527:G:C8</td>
<td>2.45</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2532:G:C2</td>
<td>29:X:2562:G:H1’</td>
<td>2.47</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2851:G:H5”</td>
<td>29:X:2851:G:H8</td>
<td>1.77</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:47:G:N3</td>
<td>29:X:48:A:C2</td>
<td>2.80</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:553:C:C4</td>
<td>29:X:557:U:C2</td>
<td>3.01</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:928:G:O6</td>
<td>29:X:928:G:O6</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>31:Z:26:G:N3</td>
<td>31:Z:29:C:N4</td>
<td>2.60</td>
<td>0.49</td>
</tr>
<tr>
<td>6:A:60:ARG:NE2</td>
<td>29:X:1583:A:OP1</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>7:B:38:THR:HG22</td>
<td>7:B:39:ALA:N</td>
<td>2.28</td>
<td>0.49</td>
</tr>
<tr>
<td>8:C:104:LEU:HD12</td>
<td>8:C:175:VAL:HG21</td>
<td>1.93</td>
<td>0.49</td>
</tr>
<tr>
<td>8:C:158:ARG:C</td>
<td>8:C:160:ALA:H</td>
<td>2.16</td>
<td>0.49</td>
</tr>
<tr>
<td>8:C:43:ALA:HB1</td>
<td>8:C:86:PRO:C</td>
<td>2.31</td>
<td>0.49</td>
</tr>
<tr>
<td>8:C:48:ARG:N</td>
<td>8:C:48:ARG:HD2</td>
<td>2.24</td>
<td>0.49</td>
</tr>
<tr>
<td>12:G:84:ASN:CA</td>
<td>12:G:153:GLY:O</td>
<td>2.61</td>
<td>0.49</td>
</tr>
<tr>
<td>16:K:60:LEU:CD1</td>
<td>16:K:64:ARG:NE</td>
<td>2.72</td>
<td>0.49</td>
</tr>
<tr>
<td>17:L:102:ALA:O</td>
<td>17:L:104:ALA:N</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>23:R:48:VAL:HG12</td>
<td>23:R:50:GLY:H</td>
<td>1.76</td>
<td>0.49</td>
</tr>
<tr>
<td>26:U:32:ARG:NE</td>
<td>26:U:32:ARG:N</td>
<td>2.35</td>
<td>0.49</td>
</tr>
<tr>
<td>28:W:45:LYS:HA</td>
<td>28:W:45:LYS:HE3</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:120:G:H8</td>
<td>29:X:120:G:H8</td>
<td>1.76</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1352:G:H2’</td>
<td>29:X:1353:A:C8</td>
<td>2.48</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1468:A:C5’</td>
<td>29:X:1472:C:H42</td>
<td>2.23</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1569:A:C6</td>
<td>29:X:1571:G:C4</td>
<td>3.00</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1673:C:H2’</td>
<td>29:X:1674:C:H6</td>
<td>1.77</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>29:X:2201:G:H2'</td>
<td>29:X:2202:G:H8</td>
<td>1.77</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:353:G:H2'</td>
<td>29:X:354:C:H6</td>
<td>1.78</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:55:A:H2'</td>
<td>29:X:56:C:C6</td>
<td>2.48</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:580:A:N7</td>
<td>29:X:584:A:C6</td>
<td>2.81</td>
<td>0.49</td>
</tr>
<tr>
<td>30:Y:52:TYR:O</td>
<td>30:Y:53:ASP:CB</td>
<td>2.60</td>
<td>0.49</td>
</tr>
<tr>
<td>7:B:172:VAL:HG12</td>
<td>7:B:172:VAL:O</td>
<td>2.10</td>
<td>0.49</td>
</tr>
<tr>
<td>7:B:19:ARG:NH1</td>
<td>7:B:185:LYS:NZ</td>
<td>2.61</td>
<td>0.49</td>
</tr>
<tr>
<td>7:B:203:LYS:HE3</td>
<td>29:X:2713:A:N1</td>
<td>2.28</td>
<td>0.49</td>
</tr>
<tr>
<td>8:C:24:SER:O</td>
<td>8:C:25:GLY:C</td>
<td>2.51</td>
<td>0.49</td>
</tr>
<tr>
<td>9:D:122:PHE:CE2</td>
<td>9:D:129:ASN:O</td>
<td>2.65</td>
<td>0.49</td>
</tr>
<tr>
<td>9:D:34:ILE:HA</td>
<td>9:D:155:THR:O</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>9:D:81:GLN:CG</td>
<td>9:D:82:GLY:H</td>
<td>2.06</td>
<td>0.49</td>
</tr>
<tr>
<td>11:F:54:PRO:CG</td>
<td>11:F:70:LYS:HB2</td>
<td>2.30</td>
<td>0.49</td>
</tr>
<tr>
<td>15:J:40:PRO:HG3</td>
<td>15:J:99:LYS:HZ1</td>
<td>1.77</td>
<td>0.49</td>
</tr>
<tr>
<td>20:O:11:GLN:OE1</td>
<td>20:O:38:LEU:HD12</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>23:R:25:LEU:C</td>
<td>23:R:25:LEU:HD22</td>
<td>2.33</td>
<td>0.49</td>
</tr>
<tr>
<td>24:S:62:PHE:HB3</td>
<td>24:S:85:MET:CE</td>
<td>2.43</td>
<td>0.49</td>
</tr>
<tr>
<td>26:U:33:LYS:HZ2</td>
<td>29:X:2375:G:H1'</td>
<td>1.78</td>
<td>0.49</td>
</tr>
<tr>
<td>26:U:75:TYR:O</td>
<td>26:U:76:LYS:CB</td>
<td>2.60</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1053:G:O2'</td>
<td>29:X:1054:C:O4'</td>
<td>2.19</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:455:A:H1'</td>
<td>29:X:1215:A:O4'</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1373:G:H2'</td>
<td>29:X:1374:G:C5'</td>
<td>2.43</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1476:G:C6</td>
<td>29:X:1477:C:C4</td>
<td>3.01</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1687:C:P</td>
<td>29:X:1688:U:H5</td>
<td>2.36</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1699:A:C2</td>
<td>29:X:1700:C:C2</td>
<td>3.01</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2026:C:H1'</td>
<td>29:X:2759:U:O4</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2239:C:C2</td>
<td>29:X:2240:C:C5</td>
<td>3.00</td>
<td>0.49</td>
</tr>
<tr>
<td>17:L:15:ARG:HH21</td>
<td>29:X:2272:A:P</td>
<td>2.35</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Continued on next page...
### Atom-1  | Atom-2  | Interatomic distance (Å) | Clash overlap (Å)
--- | --- | --- | ---
29:X:438:G:O2'  | 29:X:439:C:H5' | 2.13 | 0.49
29:X:632:A:C2  | 29:X:633:G:C5 | 3.01 | 0.49
29:X:663:G:H3'  | 29:X:664:C:C5' | 2.25 | 0.49
29:X:692:C:O2  | 29:X:693:A:C8 | 2.65 | 0.49
29:X:929:A:C2  | 31:Z:81:C:O2 | 2.66 | 0.49
29:X:937:C:C4  | 29:X:938:G:N7 | 2.81 | 0.49
7:B:141:ILE:HG23 | 7:B:154:LYS:CD | 2.43 | 0.49
9:D:5:LYS:C  | 9:D:8:TYR:HB3 | 2.32 | 0.49
10:E:101:LYS:HB2 | 10:E:117:PRO:HG3 | 1.95 | 0.49
12:G:155:THR:HG23 | 12:G:156:HIS:N | 2.21 | 0.49
14:I:76:LYS:C | 14:I:79:GLN:HG2 | 2.31 | 0.49
15:J:18:MET:HG2 | 15:J:19:THR:N | 2.27 | 0.49
15:J:71:PRO:CA | 15:J:96:SER:HB2 | 2.43 | 0.49
17:L:8:ARG:O | 17:L:9:ARG:C | 2.49 | 0.49
24:S:3:LEU:HB2 | 24:S:34:LEU:HA | 1.94 | 0.49
26:U:53:GLU:OE1 | 26:U:58:LYS:N | 2.37 | 0.49
26:U:49:LYS:CB | 26:U:61:TRP:CE3 | 2.84 | 0.49
29:X:1095:A:H2' | 29:X:1096:A:C5' | 2.41 | 0.49
29:X:1177:U:C2 | 29:X:1198:C:O2 | 2.66 | 0.49
29:X:11:G:O5' | 29:X:11:G:H8 | 1.96 | 0.49
29:X:165:G:H2' | 29:X:166:G:H5' | 1.94 | 0.49
29:X:1673:C:C2 | 29:X:1674:C:C5 | 3.01 | 0.49
29:X:182:G:H1' | 29:X:183:U:H5 | 1.77 | 0.49
29:X:1858:C:H2' | 29:X:1859:A:O4' | 2.13 | 0.49
29:X:1965:U:C2 | 29:X:1966:C:C5 | 3.01 | 0.49
29:X:2189:A:H2 | 29:X:2196:U:N3 | 2.06 | 0.49
29:X:2261:G:H5' | 29:X:2262:C:C4' | 2.42 | 0.49
19:N:31:GLN:CD | 29:X:589:CH4' | 2.33 | 0.49
29:X:683:A:H4' | 29:X:684:C:C5' | 2.39 | 0.49
30:Y:25:LEU:O | 30:Y:25:LEU:HD12 | 2.27 | 0.49
31:Z:75:A:N3 | 31:Z:75:A:H2' | 2.28 | 0.49

*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:C:145:THR:O</td>
<td>8:C:146:GLU:OE2</td>
<td>2.30</td>
<td>0.49</td>
</tr>
<tr>
<td>8:C:46:ARG:HA</td>
<td>8:C:51:VAL:HG21</td>
<td>1.93</td>
<td>0.49</td>
</tr>
<tr>
<td>9:D:10:ASP:HA</td>
<td>9:D:14:PRO:CG</td>
<td>2.42</td>
<td>0.49</td>
</tr>
<tr>
<td>10:E:18:ASN:O</td>
<td>10:E:20:GLN:N</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>10:E:27:LYS:HG2</td>
<td>10:E:32:GLU:HB2</td>
<td>1.95</td>
<td>0.49</td>
</tr>
<tr>
<td>12:G:46:ALA:HB3</td>
<td>12:G:85:ALA:H</td>
<td>1.77</td>
<td>0.49</td>
</tr>
<tr>
<td>14:I:77:LEU:HB3</td>
<td>14:I:112:GLY:N</td>
<td>2.28</td>
<td>0.49</td>
</tr>
<tr>
<td>16:K:10:LEU:O</td>
<td>16:K:11:ASN:OD1</td>
<td>2.31</td>
<td>0.49</td>
</tr>
<tr>
<td>17:L:76:ALA:HB1</td>
<td>17:L:110:GLY:C</td>
<td>2.33</td>
<td>0.49</td>
</tr>
<tr>
<td>24:S:112:LEU:O</td>
<td>24:S:172:LEU:HB2</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>27:V:30:PHE:O</td>
<td>27:V:31:GLN:C</td>
<td>2.50</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1482:U:OP2</td>
<td>29:X:1562:G:O2'</td>
<td>2.30</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1920:A:C5</td>
<td>29:X:1922:U:C5</td>
<td>3.01</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2195:C:N1</td>
<td>29:X:2196:U:C5</td>
<td>2.81</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2395:C:C2'</td>
<td>29:X:2396:C:H5'</td>
<td>2.42</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:545:C:O2'</td>
<td>29:X:546:A:H5’</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:921:A:C6</td>
<td>29:X:924:C:C2</td>
<td>3.01</td>
<td>0.49</td>
</tr>
<tr>
<td>30:Y:31:THR:HG22</td>
<td>30:Y:32:GLU:N</td>
<td>2.27</td>
<td>0.49</td>
</tr>
<tr>
<td>7:B:33:ILE:HG21</td>
<td>7:B:36:ARG:HH12</td>
<td>1.77</td>
<td>0.49</td>
</tr>
<tr>
<td>7:B:75:THR:HG21</td>
<td>7:B:78:LEU:HD21</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>8:C:60:GLY:O</td>
<td>8:C:61:GLN:C</td>
<td>2.52</td>
<td>0.49</td>
</tr>
<tr>
<td>9:D:119:PRO:O</td>
<td>9:D:167:ARG:NH2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>10:E:54:ARG:HD2</td>
<td>10:E:56:SER:O</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>10:E:41:LEU:CD1</td>
<td>10:E:64:LEU:HB3</td>
<td>2.43</td>
<td>0.49</td>
</tr>
<tr>
<td>12:G:44:VAL:CG1</td>
<td>12:G:45:ASP:N</td>
<td>2.75</td>
<td>0.49</td>
</tr>
<tr>
<td>15:J:119:PHE:CD1</td>
<td>15:J:132:MET:HG3</td>
<td>2.48</td>
<td>0.49</td>
</tr>
<tr>
<td>16:K:99:ARG:HG2</td>
<td>16:K:99:ARG:NH1</td>
<td>2.28</td>
<td>0.49</td>
</tr>
<tr>
<td>17:L:39:TYR:O</td>
<td>17:L:40:ALA:C</td>
<td>2.51</td>
<td>0.49</td>
</tr>
<tr>
<td>20:O:71:ILE:CD1</td>
<td>20:X:1003:C:O2'</td>
<td>2.61</td>
<td>0.49</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>21:P:8:PHE:O</td>
<td>21:P:9:ARG:CB</td>
<td>2.52</td>
<td>0.49</td>
</tr>
<tr>
<td>22:Q:15:LYS:HG2</td>
<td>29:X:1404:C:O2</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>23:R:97:GLN:CB</td>
<td>23:R:101:GLY:HA2</td>
<td>2.28</td>
<td>0.49</td>
</tr>
<tr>
<td>26:U:17:SER:OG</td>
<td>26:U:45:ASN:N</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1022:A:C6</td>
<td>29:X:1162:A:C6</td>
<td>3.00</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1142:G:H8</td>
<td>29:X:2008:C:H4'</td>
<td>1.76</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1606:C:O2'</td>
<td>29:X:1607:A:H5'</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2044:G:O2'</td>
<td>29:X:2046:C:H5</td>
<td>1.96</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2236:U:C4</td>
<td>29:X:2237:C:N4</td>
<td>2.81</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2271:C:N4</td>
<td>29:X:2272:A:H62</td>
<td>2.09</td>
<td>0.49</td>
</tr>
<tr>
<td>7:B:42:ASP:OD2</td>
<td>29:X:2764:U:C4'</td>
<td>2.61</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2827:G:C6</td>
<td>29:X:2828:C:N3</td>
<td>2.81</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2844:G:O2'</td>
<td>29:X:2845:C:H5'</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:328:A:H2'</td>
<td>29:X:329:C:C6</td>
<td>2.47</td>
<td>0.49</td>
</tr>
<tr>
<td>31:Z:69:G:O2'</td>
<td>31:Z:70:C:H5'</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>4:4:9:LYS:NZ</td>
<td>4:4:16:VAL:HG21</td>
<td>2.27</td>
<td>0.49</td>
</tr>
<tr>
<td>8:C:7:ILE:HB</td>
<td>8:C:120:VAL:H</td>
<td>1.78</td>
<td>0.49</td>
</tr>
<tr>
<td>8:C:154:ASP:HB2</td>
<td>8:C:157:THR:CG2</td>
<td>2.43</td>
<td>0.49</td>
</tr>
<tr>
<td>8:C:24:SER:O</td>
<td>8:C:28:HIS:N</td>
<td>2.41</td>
<td>0.49</td>
</tr>
<tr>
<td>9:D:7:LYS:O</td>
<td>9:D:11:GLN:HB2</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>9:D:122:PHE:O</td>
<td>9:D:123:ASP:C</td>
<td>2.51</td>
<td>0.49</td>
</tr>
<tr>
<td>9:D:102:LYS:NZ</td>
<td>9:D:140:GLU:OE2</td>
<td>2.42</td>
<td>0.49</td>
</tr>
<tr>
<td>9:D:9:ASN:O</td>
<td>9:D:14:PRO:HD2</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>12:G:103:TYR:CE1</td>
<td>12:G:111:LYS:CA</td>
<td>2.96</td>
<td>0.49</td>
</tr>
<tr>
<td>16:K:60:LEU:HD13</td>
<td>29:X:1469:U:H2'</td>
<td>1.95</td>
<td>0.49</td>
</tr>
<tr>
<td>16:K:76:VAL:O</td>
<td>16:K:79:VAL:HG13</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>20:O:26:GLN:HA</td>
<td>20:O:63:HIS:NE2</td>
<td>2.27</td>
<td>0.49</td>
</tr>
<tr>
<td>11:F:116:ASN:OD1</td>
<td>29:X:1069:G:H1'</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1235:C:H2'</td>
<td>29:X:1236:G:C8</td>
<td>2.48</td>
<td>0.49</td>
</tr>
</tbody>
</table>
### Interatomic Distances and Clash Overlaps

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21:P:105:ARG:NH1</td>
<td>29:X:1337:G:OP2</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1371:G:O5'</td>
<td>29:X:1371:G:H8</td>
<td>1.95</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:1411:C:C2</td>
<td>29:X:1412:C:C5</td>
<td>3.01</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:177:U:H3'</td>
<td>29:X:178:C:H6</td>
<td>1.78</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2304:G:H8</td>
<td>29:X:2304:G:OP2</td>
<td>1.95</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2440:C:C2</td>
<td>29:X:2441:U:C5</td>
<td>3.01</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2629:U:O2'</td>
<td>29:X:2630:C:H5'</td>
<td>2.13</td>
<td>0.49</td>
</tr>
<tr>
<td>29:X:2826:C:H2'</td>
<td>29:X:2827:G:C5'</td>
<td>2.43</td>
<td>0.49</td>
</tr>
<tr>
<td>8:C:40:ARG:NH1</td>
<td>29:X:453:U:O2'</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>8:C:98:GLN:NE2</td>
<td>29:X:611:C:C4'</td>
<td>2.61</td>
<td>0.49</td>
</tr>
<tr>
<td>31:Z:35:C:H2'</td>
<td>31:Z:36:A:C8</td>
<td>2.47</td>
<td>0.49</td>
</tr>
<tr>
<td>4:4:19:ARG:HH11</td>
<td>4:4:24:LEU:HD22</td>
<td>1.76</td>
<td>0.48</td>
</tr>
<tr>
<td>8:C:48:ARG:CZ</td>
<td>8:C:87:LYS:HE2</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>8:C:46:ARG:HB3</td>
<td>8:C:51:VAL:HG23</td>
<td>1.94</td>
<td>0.48</td>
</tr>
<tr>
<td>11:F:57:ILE:CG2</td>
<td>11:F:58:THR:N</td>
<td>2.76</td>
<td>0.48</td>
</tr>
<tr>
<td>11:F:90:THR:OG1</td>
<td>11:F:93:LYS:HB2</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>12:G:107:GLN:HG2</td>
<td>29:X:1142:G:C8</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>14:I:97:ARG:O</td>
<td>14:I:98:LEU:CB</td>
<td>2.61</td>
<td>0.48</td>
</tr>
<tr>
<td>18:M:24:LEU:C</td>
<td>18:M:25:PRO:O</td>
<td>2.51</td>
<td>0.48</td>
</tr>
<tr>
<td>24:S:4:THR:CB</td>
<td>24:S:57:GLU:HB2</td>
<td>2.39</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1089:C:H5''</td>
<td>29:X:1090:C:OP1</td>
<td>2.12</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:116:A:C5'</td>
<td>29:X:117:A:H8</td>
<td>2.18</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1312:G:C5'</td>
<td>29:X:1313:U:OP1</td>
<td>2.60</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1514:C:O4'</td>
<td>29:X:1593:C:C4'</td>
<td>2.61</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1734:C:H3'</td>
<td>29:X:1735:G:O4'</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1734:C:C6</td>
<td>29:X:1735:G:H1'</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1735:G:C6</td>
<td>29:X:1736:C:C4</td>
<td>3.02</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1770:U:C2</td>
<td>29:X:1774:A:C5</td>
<td>3.01</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1935:A:H2</td>
<td>29:X:2539:C:O2</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2240:C:HO2'</td>
<td>29:X:2241:U:H5'</td>
<td>1.75</td>
<td>0.48</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>29:X:2382:C:N4</td>
<td>29:X:2394:G:C6</td>
<td>2.80</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:242:G:C2'</td>
<td>29:X:243:G:H4'</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2578:G:N2</td>
<td>29:X:2579:A:H1'</td>
<td>2.28</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:317:U:C3'</td>
<td>29:X:318:G:C5'</td>
<td>2.91</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:338:G:O6</td>
<td>29:X:343:A:C8</td>
<td>2.65</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:683:A:O2'</td>
<td>29:X:684:C:P</td>
<td>2.71</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:753:U:C2</td>
<td>29:X:754:G:N7</td>
<td>2.81</td>
<td>0.48</td>
</tr>
<tr>
<td>31:Z:73:C:H2'</td>
<td>31:Z:74:A:O4'</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>7:B:109:LYS:HZ3</td>
<td>29:X:2703:C:P</td>
<td>2.36</td>
<td>0.48</td>
</tr>
<tr>
<td>7:B:4:ILE:HG23</td>
<td>7:B:5:LEU:N</td>
<td>2.28</td>
<td>0.48</td>
</tr>
<tr>
<td>8:C:19:LEU:HA</td>
<td>8:C:20:PRO:C</td>
<td>2.33</td>
<td>0.48</td>
</tr>
<tr>
<td>8:C:48:ARG:C</td>
<td>8:C:50:GLN:H</td>
<td>2.15</td>
<td>0.48</td>
</tr>
<tr>
<td>8:C:51:VAL:HG22</td>
<td>8:C:51:VAL:HG22</td>
<td>2.44</td>
<td>0.48</td>
</tr>
<tr>
<td>9:D:138:PHE:CZ</td>
<td>9:D:152:MET:SD</td>
<td>3.06</td>
<td>0.48</td>
</tr>
<tr>
<td>10:E:108:GLY:O</td>
<td>29:X:2645:C:N4</td>
<td>2.42</td>
<td>0.48</td>
</tr>
<tr>
<td>10:E:109:TYR:CE1</td>
<td>10:E:152:ARG:NH1</td>
<td>2.80</td>
<td>0.48</td>
</tr>
<tr>
<td>12:G:103:TYR:CE2</td>
<td>12:G:111:LYS:CB</td>
<td>2.96</td>
<td>0.48</td>
</tr>
<tr>
<td>13:H:133:VAL:O</td>
<td>18:M:38:LYS:NZ</td>
<td>2.41</td>
<td>0.48</td>
</tr>
<tr>
<td>15:J:37:ALA:HB2</td>
<td>15:J:104:MET:HE2</td>
<td>1.94</td>
<td>0.48</td>
</tr>
<tr>
<td>15:J:70:PHE:O</td>
<td>15:J:96:SER:OG</td>
<td>2.29</td>
<td>0.48</td>
</tr>
<tr>
<td>16:K:16:ALA:O</td>
<td>16:K:18:VAL:N</td>
<td>2.45</td>
<td>0.48</td>
</tr>
<tr>
<td>17:L:10:LYS:CB</td>
<td>17:L:14:ARG:HH21</td>
<td>2.15</td>
<td>0.48</td>
</tr>
<tr>
<td>19:N:84:LYS:CA</td>
<td>19:N:92:ARG:NH2</td>
<td>2.76</td>
<td>0.48</td>
</tr>
<tr>
<td>23:R:28:LYS:O</td>
<td>23:R:29:HIS:CB</td>
<td>2.60</td>
<td>0.48</td>
</tr>
<tr>
<td>23:R:96:LYS:HG3</td>
<td>23:R:97:GLN:O</td>
<td>2.12</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1002:C:O2</td>
<td>29:X:1175:A:C2</td>
<td>2.66</td>
<td>0.48</td>
</tr>
<tr>
<td>11:F:89:SER:HA</td>
<td>29:X:1075:C:O2'</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1236:G:N2</td>
<td>29:X:1239:A:OP2</td>
<td>2.40</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1504:G:H21</td>
<td>29:X:1506:C:H41</td>
<td>1.61</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1587:A:C2</td>
<td>29:X:1588:A:C4</td>
<td>3.01</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1774:A:H5'</td>
<td>29:X:2587:G:H4'</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1873:A:H2</td>
<td>29:X:2213:G:N3</td>
<td>2.10</td>
<td>0.48</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>29:X:3:95:G:C4</td>
<td>29:X:4:06:G:N2</td>
<td>2.81</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:4:28:A:C5</td>
<td>29:X:4:29:C:C4</td>
<td>3.01</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:4:3:A:H8</td>
<td>29:X:4:3:A:O5'</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:4:77:A:C2</td>
<td>29:X:8:09:C:O4'</td>
<td>2.66</td>
<td>0.48</td>
</tr>
<tr>
<td>12:G:1:6:2:LYS:HZ2</td>
<td>29:X:5:A:H1'</td>
<td>1.74</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:9:58:G:C4</td>
<td>29:X:9:59:C:C5</td>
<td>3.01</td>
<td>0.48</td>
</tr>
<tr>
<td>7:B:1:20:TRP:O</td>
<td>7:B:1:21:ASN:CB</td>
<td>2.58</td>
<td>0.48</td>
</tr>
<tr>
<td>7:B:6:7:PHE:CD2</td>
<td>7:B:7:4:PRO:HA</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>8:C:1:76:ASN:ND2</td>
<td>8:C:1:78:TYR:HB3</td>
<td>2.22</td>
<td>0.48</td>
</tr>
<tr>
<td>10:E:3:7:TYR:CE2</td>
<td>10:E:6:8:THR:HG23</td>
<td>2.47</td>
<td>0.48</td>
</tr>
<tr>
<td>11:F:2:7:LEU:HA</td>
<td>11:F:3:0:TYR:CE2</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>15:J:2:8:VAL:HG22</td>
<td>15:J:1:34:LYS:O</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>17:L:4:6:SER:OG</td>
<td>17:L:4:7:ARG:N</td>
<td>2.46</td>
<td>0.48</td>
</tr>
<tr>
<td>17:L:8:ARG:HH11</td>
<td>17:L:8:ARG:HB3</td>
<td>1.77</td>
<td>0.48</td>
</tr>
<tr>
<td>23:R:1:10:GLY:C</td>
<td>23:R:1:103:LYS:N</td>
<td>2.66</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1:0:0:2:C:C2</td>
<td>29:X:1:0:03:C:C5</td>
<td>3.01</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1:1:45:C:C5</td>
<td>29:X:1:1:47:G:P</td>
<td>3.06</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1:7:11:C:H4'</td>
<td>29:X:1:7:12:G:C5'</td>
<td>2.36</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2:0:0:7:G:C2</td>
<td>29:X:2:0:2:3:C:C2</td>
<td>3.01</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2:1:9:0:A:C8</td>
<td>29:X:2:1:9:0:A:C3'</td>
<td>2.87</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2:4:0:4:A:H1'</td>
<td>29:X:2:4:0:6:C:C4</td>
<td>2.48</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>29:X:640:C:C4</td>
<td>29:X:641:G:N7</td>
<td>2.82</td>
<td>0.48</td>
</tr>
<tr>
<td>30:Y:44:His:CD2</td>
<td>30:Y:44:His:N</td>
<td>2.79</td>
<td>0.48</td>
</tr>
<tr>
<td>31:Z:96:C:H2'</td>
<td>31:Z:97:C:C6</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>6:A:93:ala:Ha3</td>
<td>6:A:105:Ile:o</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>7:B:131:Ser:o</td>
<td>7:B:132:lys:cg</td>
<td>2.59</td>
<td>0.48</td>
</tr>
<tr>
<td>7:B:159:His:ce1</td>
<td>7:B:162:met:cb</td>
<td>2.97</td>
<td>0.48</td>
</tr>
<tr>
<td>7:B:27:Leu:hd23</td>
<td>7:B:27:Leu:o</td>
<td>2.14</td>
<td>0.48</td>
</tr>
<tr>
<td>9:D:60:Ile:hg13</td>
<td>9:D:61:Thr:hg23</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>10:E:94:Phe:cg</td>
<td>10:E:107:Ile:hg22</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>14:I:38:Lys:cg</td>
<td>29:X:954:U:op2</td>
<td>2.61</td>
<td>0.48</td>
</tr>
<tr>
<td>19:N:47:tyr:cd1</td>
<td>20:O:73:Lys:hg2</td>
<td>2.49</td>
<td>0.48</td>
</tr>
<tr>
<td>24:S:91:Pro:hd3</td>
<td>24:S:127:Pro:cg</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1153:A:C4</td>
<td>29:X:1155:G:N7</td>
<td>2.82</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1368:G:H2'</td>
<td>29:X:1369:G:O4'</td>
<td>2.12</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1428:G:H3'</td>
<td>29:X:1428:G:N3</td>
<td>2.29</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1631:C:C2'</td>
<td>29:X:1631:C:O2</td>
<td>2.62</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1730:G:C2'</td>
<td>29:X:1731:C:H5'</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>18:M:100:Arg:hd3</td>
<td>29:X:1744:G:H5''</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1835:C:H2'</td>
<td>29:X:1836:C:C6</td>
<td>2.47</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:311:A:C5</td>
<td>29:X:345:U:H4'</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:427:C:o2</td>
<td>29:X:1856:U:H4'</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>7:B:182:ile:o</td>
<td>7:B:182:ile:hg23</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>8:C:107:ala:cb</td>
<td>8:C:180:ile:hd13</td>
<td>2.44</td>
<td>0.48</td>
</tr>
<tr>
<td>8:C:173:ala:hb1</td>
<td>8:C:193:Leu:hb2</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>8:C:33:Trp:cg</td>
<td>8:C:95:Leu:hd12</td>
<td>2.49</td>
<td>0.48</td>
</tr>
<tr>
<td>8:C:43:ala:cb</td>
<td>8:C:87:Lys:c</td>
<td>2.81</td>
<td>0.48</td>
</tr>
<tr>
<td>9:D:60:ile:ha</td>
<td>9:D:140:Glu:hg3</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>12:G:57:Leu:hd22</td>
<td>12:G:170:Pro:ha</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>16:K:16:ala:o</td>
<td>16:K:19:ala:n</td>
<td>2.45</td>
<td>0.48</td>
</tr>
<tr>
<td>16:K:24:Gln:hb3</td>
<td>16:K:44:Leu:hd22</td>
<td>1.95</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>17:L:18:ARG:HH12</td>
<td>29:X:2272:A:P</td>
<td>2.36</td>
<td>0.48</td>
</tr>
<tr>
<td>12:G:70:PHE:CG</td>
<td>19:N:64:ARG:HG2</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>24:S:3:LEU:HD12</td>
<td>24:S:3:LEU:C</td>
<td>2.33</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1228:G:C6</td>
<td>29:X:1229:C:C4</td>
<td>3.02</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1229:C:H2'</td>
<td>29:X:1230:C:C6</td>
<td>2.40</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1687:C:H3'</td>
<td>29:X:1688:U:C6</td>
<td>2.47</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1929:U:H2'</td>
<td>29:X:1930:C:C6</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2170:C:C2'</td>
<td>29:X:2171:U:H4'</td>
<td>2.41</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2266:A:C2</td>
<td>29:X:2268:G:H1'</td>
<td>2.49</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2634:G:C2'</td>
<td>29:X:2643:G:O6</td>
<td>2.58</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2769:C:O2</td>
<td>29:X:2866:A:H2</td>
<td>1.97</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:596:C:C2</td>
<td>29:X:684:C:H1'</td>
<td>2.47</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:600:G:C6</td>
<td>29:X:602:C:C4</td>
<td>3.02</td>
<td>0.48</td>
</tr>
<tr>
<td>6:A:209:ALA:CB</td>
<td>29:X:1781:C:H4'</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>7:B:141:ILE:HG21</td>
<td>7:B:150:VAL:CG1</td>
<td>2.43</td>
<td>0.48</td>
</tr>
<tr>
<td>8:C:112:GLN:HA</td>
<td>8:C:116:LYS:CB</td>
<td>2.44</td>
<td>0.48</td>
</tr>
<tr>
<td>9:D:132:ILE:HG22</td>
<td>9:D:133:LYS:N</td>
<td>2.28</td>
<td>0.48</td>
</tr>
<tr>
<td>15:J:36:ILE:HG12</td>
<td>15:J:103:VAL:HG23</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>16:K:13:ASN:HD21</td>
<td>16:K:16:ALA:H</td>
<td>1.60</td>
<td>0.48</td>
</tr>
<tr>
<td>17:L:18:ARG:HH21</td>
<td>29:X:2271:C:P</td>
<td>2.36</td>
<td>0.48</td>
</tr>
<tr>
<td>23:R:82:ALA:C</td>
<td>23:R:83:LEU:HD12</td>
<td>2.34</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:82:G:N2</td>
<td>29:X:100:G:H2'</td>
<td>2.28</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1094:C:H2'</td>
<td>29:X:1096:A:H5'</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:17:G:C2</td>
<td>29:X:18:U:C2</td>
<td>3.01</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1836:C:H2'</td>
<td>29:X:1837:G:H8</td>
<td>1.77</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1856:U:O3'</td>
<td>29:X:2388:G:N2</td>
<td>2.46</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2084:G:O2'</td>
<td>29:X:2085:G:H5'</td>
<td>2.13</td>
<td>0.48</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:2511:G:C6</td>
<td>29:X:2512:A:C5</td>
<td>3.02</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2651:U:C2’</td>
<td>29:X:2652:G:O5’</td>
<td>2.61</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2799:C:H2’</td>
<td>29:X:2800:C:O4’</td>
<td>2.14</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2784:A:C6</td>
<td>29:X:2866:A:C8</td>
<td>3.02</td>
<td>0.48</td>
</tr>
<tr>
<td>14:I:38:LYS:CE</td>
<td>29:X:954:U:OP2</td>
<td>2.61</td>
<td>0.48</td>
</tr>
<tr>
<td>7:B:85:ALA:CB</td>
<td>7:B:86:PRO:CD</td>
<td>2.88</td>
<td>0.48</td>
</tr>
<tr>
<td>8:C:33:TRP:HB2</td>
<td>8:C:93:TYR:OH</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>9:D:151:GLY:O</td>
<td>9:D:152:MET:CB</td>
<td>2.62</td>
<td>0.48</td>
</tr>
<tr>
<td>15:J:22:ALA:CB</td>
<td>15:J:100:PRO:O</td>
<td>2.55</td>
<td>0.48</td>
</tr>
<tr>
<td>15:J:30:PHE:HD1</td>
<td>15:J:66:TYR:CE2</td>
<td>2.32</td>
<td>0.48</td>
</tr>
<tr>
<td>18:M:17:GLU:OE2</td>
<td>18:M:63:ARG:NH2</td>
<td>2.47</td>
<td>0.48</td>
</tr>
<tr>
<td>23:R:48:VAL:O</td>
<td>23:R:50:GLY:N</td>
<td>2.45</td>
<td>0.48</td>
</tr>
<tr>
<td>24:S:71:MET:CA</td>
<td>24:S:78:PRO:HA</td>
<td>2.42</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1168:G:C2</td>
<td>29:X:1169:C:C2</td>
<td>3.02</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1827:G:H1’</td>
<td>29:X:1914:U:C2</td>
<td>2.49</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1830:G:N4</td>
<td>29:X:1881:U:C3’</td>
<td>2.77</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2301:G:C6</td>
<td>29:X:2312:A:N6</td>
<td>2.77</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2345:A:H2’</td>
<td>29:X:2346:G:C8</td>
<td>2.49</td>
<td>0.48</td>
</tr>
<tr>
<td>7:B:109:LYS:NZ</td>
<td>29:X:2703:C:P</td>
<td>2.86</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2779:C:H2’</td>
<td>29:X:2780:A:C8</td>
<td>2.49</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:396:U:N3</td>
<td>29:X:398:C:C4</td>
<td>2.82</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:465:C:HO2’</td>
<td>29:X:467:U:H1’</td>
<td>1.77</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:497:C:C6</td>
<td>29:X:497:C:H3’</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:558:G:H8</td>
<td>29:X:559:C:C4</td>
<td>2.31</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:624:A:N3</td>
<td>29:X:624:A:H5’</td>
<td>2.29</td>
<td>0.48</td>
</tr>
<tr>
<td>10:E:109:TYR:C</td>
<td>10:E:111:HIS:N</td>
<td>2.64</td>
<td>0.48</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>17:L:54:ALA:CB2</td>
<td>17:L:75:LEU:HA</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>21:P:71:VAL:CG1</td>
<td>21:P:126:ILE:CG2</td>
<td>2.87</td>
<td>0.48</td>
</tr>
<tr>
<td>23:R:93:ARG:NH1</td>
<td>23:R:93:ARG:HG2</td>
<td>2.21</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:100:2:C:N3</td>
<td>29:X:1003:2:H5</td>
<td>2.09</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1121:2:C2'</td>
<td>29:X:1122:2:C8</td>
<td>2.97</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1332:2:C5</td>
<td>29:X:1333:2:N1</td>
<td>2.82</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1547:2:H2'</td>
<td>29:X:1548:2:C6</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1626:2:HZ5&quot;</td>
<td>29:X:1627:2:OP2</td>
<td>2.12</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1736:2:H2'</td>
<td>29:X:1737:G:C8</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1765:2:C5</td>
<td>29:X:1772:2:C2</td>
<td>3.02</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2040:2:O2'</td>
<td>29:X:2041:2:H5'</td>
<td>2.14</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2692:2:HZ5'</td>
<td>29:X:2693:2:OP2</td>
<td>2.14</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:576:2:C2</td>
<td>29:X:577:2:O1</td>
<td>2.49</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:697:2:C2</td>
<td>29:X:807:2:C2</td>
<td>3.02</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:825:2:H2'</td>
<td>29:X:826:2:H6</td>
<td>1.78</td>
<td>0.48</td>
</tr>
<tr>
<td>30:Y:3:LYS:O</td>
<td>30:Y:4:HIS:C</td>
<td>2.52</td>
<td>0.48</td>
</tr>
<tr>
<td>31:Z:30:2:H42</td>
<td>31:Z:58:2:O1</td>
<td>1.62</td>
<td>0.48</td>
</tr>
<tr>
<td>4:4:9:LYS:NZ</td>
<td>29:X:1043:2:H5&quot;</td>
<td>2.29</td>
<td>0.48</td>
</tr>
<tr>
<td>7:B:27:LEU:O</td>
<td>7:B:29:GLY:N</td>
<td>2.47</td>
<td>0.48</td>
</tr>
<tr>
<td>7:B:61:LYS:HZ3</td>
<td>7:B:62:PRO:OD3</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>10:E:6:LYS:O</td>
<td>10:E:7:GLN:HG3</td>
<td>2.14</td>
<td>0.48</td>
</tr>
<tr>
<td>14:I:116:ARG:CG</td>
<td>14:I:117:ALA:N</td>
<td>2.77</td>
<td>0.48</td>
</tr>
<tr>
<td>14:I:18:ARG:HB2</td>
<td>14:I:21:ARG:CB</td>
<td>2.41</td>
<td>0.48</td>
</tr>
<tr>
<td>14:I:85:ASP:HA</td>
<td>14:I:116:ARG:HH12</td>
<td>1.78</td>
<td>0.48</td>
</tr>
<tr>
<td>15:J:125:LYS:HZ2</td>
<td>15:J:125:LYS:CA</td>
<td>2.27</td>
<td>0.48</td>
</tr>
<tr>
<td>21:P:46:ARG:CG</td>
<td>21:P:46:ARG:NH1</td>
<td>2.72</td>
<td>0.48</td>
</tr>
<tr>
<td>21:P:82:ASN:OD1</td>
<td>29:X:506:G:H1&quot;</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1329:U:H2'</td>
<td>29:X:1330:G:C8</td>
<td>2.44</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1343:2:C2</td>
<td>29:X:1344:2:C6</td>
<td>2.49</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1399:2:C2</td>
<td>29:X:1400:2:C8</td>
<td>3.02</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>29:X:140:G:H2'</td>
<td>29:X:141:G:C8</td>
<td>2.49</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:1440:G:C8</td>
<td>29:X:1441:A:C5'</td>
<td>2.40</td>
<td>0.48</td>
</tr>
<tr>
<td>17:L:11:LEU:HD21</td>
<td>29:X:2273:C:O5'</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2335:U:H2'</td>
<td>29:X:2336:G:C8</td>
<td>2.49</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2511:G:H2'</td>
<td>29:X:2512:A:C8</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:487:G:H4'</td>
<td>29:X:512:A:C6</td>
<td>2.48</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:694:G:C2</td>
<td>29:X:695:G:C4</td>
<td>3.02</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:886:A:H21</td>
<td>29:X:937:C:H42</td>
<td>1.60</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:982:C:O2'</td>
<td>29:X:985:G:N7</td>
<td>2.46</td>
<td>0.48</td>
</tr>
<tr>
<td>4:4:17:VAL:HG12</td>
<td>4:4:18:ARG:N</td>
<td>2.28</td>
<td>0.48</td>
</tr>
<tr>
<td>8:C:67:ALA:H</td>
<td>29:X:1268:U:H5</td>
<td>1.53</td>
<td>0.48</td>
</tr>
<tr>
<td>9:D:111:ILE:HA</td>
<td>9:D:137:ILE:HG21</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>10:E:9:ILE:HB</td>
<td>10:E:50:LEU:O</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>14:I:56:THR:N</td>
<td>14:I:116:ARG:NH1</td>
<td>2.57</td>
<td>0.48</td>
</tr>
<tr>
<td>14:I:11:GLY:C</td>
<td>14:I:13:ARG:N</td>
<td>2.66</td>
<td>0.48</td>
</tr>
<tr>
<td>15:J:106:GLU:N</td>
<td>15:J:106:GLU:OE1</td>
<td>2.61</td>
<td>0.48</td>
</tr>
<tr>
<td>17:L:54:ALA:N</td>
<td>17:L:75:LEU:HD13</td>
<td>2.29</td>
<td>0.48</td>
</tr>
<tr>
<td>20:F:19:VAL:CG1</td>
<td>20:F:60:PRO:CG</td>
<td>2.97</td>
<td>0.48</td>
</tr>
<tr>
<td>24:S:91:PRO:HD3</td>
<td>24:S:127:PRO:HG3</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:227:G:O2'</td>
<td>29:X:228:A:C8</td>
<td>2.49</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2306:A:C5</td>
<td>29:X:2367:A:N1</td>
<td>2.82</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:971:A:H4'</td>
<td>29:X:2436:U:H5'</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:2705:A:O2'</td>
<td>29:X:2706:U:C5</td>
<td>2.66</td>
<td>0.48</td>
</tr>
<tr>
<td>7:B:203:LYS:CG</td>
<td>29:X:2713:A:N1</td>
<td>2.77</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:947:C:CG</td>
<td>29:X:948:C:C6</td>
<td>2.49</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>29:X:947:C:C2</td>
<td>29:X:948:C:C5</td>
<td>3.01</td>
<td>0.48</td>
</tr>
<tr>
<td>29:X:982:CH2'</td>
<td>29:X:983:G:O5'</td>
<td>2.14</td>
<td>0.48</td>
</tr>
<tr>
<td>8:C:24:SER:HA</td>
<td>8:C:27:LEU:CD1</td>
<td>2.43</td>
<td>0.47</td>
</tr>
<tr>
<td>8:C:47:THR:HG23</td>
<td>8:C:85:GLY:N</td>
<td>2.18</td>
<td>0.47</td>
</tr>
<tr>
<td>8:C:62:LYS:HE3</td>
<td>29:X:2042:A:O3'</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>18:M:91:VAL:CG1</td>
<td>18:M:92:THR:N</td>
<td>2.76</td>
<td>0.47</td>
</tr>
<tr>
<td>20:O:90:PHE:CD1</td>
<td>20:O:90:PHE:C</td>
<td>2.88</td>
<td>0.47</td>
</tr>
<tr>
<td>23:R:93:ARG:HH12</td>
<td>23:R:107:ALA:C</td>
<td>2.16</td>
<td>0.47</td>
</tr>
<tr>
<td>24:S:103:ARG:NH2</td>
<td>24:S:108:VAL:CG2</td>
<td>2.73</td>
<td>0.47</td>
</tr>
<tr>
<td>25:T:3:HIS:C</td>
<td>25:T:4:LYS:HG2</td>
<td>2.35</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1050:G:C2'</td>
<td>29:X:1051:U:C5</td>
<td>2.92</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1301:U:O2'</td>
<td>29:X:1664:G:N2</td>
<td>2.38</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1550:C:C2'</td>
<td>29:X:1553:G:N2</td>
<td>2.58</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2321:C:O2'</td>
<td>29:X:2353:G:OP1</td>
<td>2.31</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2824:C:H2'</td>
<td>29:X:2824:C:O2</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:30:G:H2'</td>
<td>29:X:31:C:C6</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>7:B:136:ARG:O</td>
<td>7:B:137:ARG:HB2</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>9:D:80:ARG:N</td>
<td>9:D:80:ARG:HD2</td>
<td>2.29</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>16:K:13:ASN:HD22</td>
<td>16:K:16:ALA:H</td>
<td>1.60</td>
<td>0.47</td>
</tr>
<tr>
<td>16:K:44:LEU:O</td>
<td>16:K:45:ARG:C</td>
<td>2.53</td>
<td>0.47</td>
</tr>
<tr>
<td>17:L:104:ALA:O</td>
<td>17:L:105:ASP:C</td>
<td>2.52</td>
<td>0.47</td>
</tr>
<tr>
<td>19:N:34:ASN:O</td>
<td>19:N:35:ALA:C</td>
<td>2.52</td>
<td>0.47</td>
</tr>
<tr>
<td>19:N:93:LYS:HD2</td>
<td>20:O:10:LYS:NZ</td>
<td>2.29</td>
<td>0.47</td>
</tr>
<tr>
<td>23:R:77:HIS:C</td>
<td>23:R:79:SER:H</td>
<td>2.16</td>
<td>0.47</td>
</tr>
<tr>
<td>23:R:84:VAL:CG1</td>
<td>23:R:88:THR:O</td>
<td>2.61</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1253:C:H5</td>
<td>29:X:1253:C:C6</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1256:C:H2</td>
<td>29:X:1257:U:C6</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2058:U:H1</td>
<td>29:X:2576:G:N2</td>
<td>2.29</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2046:C:O2</td>
<td>29:X:2429:A:N1</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2710:C:O2</td>
<td>29:X:2711:G:H5</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:828:C:C2</td>
<td>29:X:1207:G:C2</td>
<td>3.02</td>
<td>0.47</td>
</tr>
<tr>
<td>28:W:18:LYS:HB2</td>
<td>29:X:863:C:H4</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>8:C:194:GLU:O</td>
<td>8:C:195:ILE:CG1</td>
<td>2.58</td>
<td>0.47</td>
</tr>
<tr>
<td>8:C:62:LYS:CG</td>
<td>8:C:63:GLY:N</td>
<td>2.77</td>
<td>0.47</td>
</tr>
<tr>
<td>8:C:98:GLN:HE22</td>
<td>29:X:611:C:C5</td>
<td>2.25</td>
<td>0.47</td>
</tr>
<tr>
<td>10:E:10:ALA:O</td>
<td>10:E:12:PRO:CD</td>
<td>2.62</td>
<td>0.47</td>
</tr>
<tr>
<td>16:K:98:LEU:O</td>
<td>16:K:112:LEU:N</td>
<td>2.36</td>
<td>0.47</td>
</tr>
<tr>
<td>17:L:37:HIS:CG</td>
<td>17:L:37:HIS:O</td>
<td>2.67</td>
<td>0.47</td>
</tr>
</tbody>
</table>
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:G:31:Thr:OG1</td>
<td>29:X:1006:C:N3</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1724:C:C4</td>
<td>29:X:1747:G:C6</td>
<td>3.02</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2393:G:C6</td>
<td>29:X:2394:G:N7</td>
<td>2.82</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2494:C:N3</td>
<td>29:X:2549:G:C6</td>
<td>2.82</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2604:G:H2'</td>
<td>29:X:2605:G:O4'</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:343:Asp:O2'</td>
<td>29:X:343:Asp:C4</td>
<td>2.67</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:358:Ch6</td>
<td>29:X:358:O5'</td>
<td>1.98</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:485:G:C4</td>
<td>29:X:520:G:C5</td>
<td>3.01</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:614:G:C2'</td>
<td>29:X:615:G:H5'</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:826:U:O2</td>
<td>29:X:827:G:C6</td>
<td>2.68</td>
<td>0.47</td>
</tr>
<tr>
<td>7:B:136:Arg:G2</td>
<td>7:B:137:Arg:H</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>7:B:59:Val:G12</td>
<td>7:B:64:Gln:G3</td>
<td>1.95</td>
<td>0.47</td>
</tr>
<tr>
<td>8:C:44:Ser:CB</td>
<td>29:X:37:C:H1'</td>
<td>2.44</td>
<td>0.47</td>
</tr>
<tr>
<td>9:D:156:Ile:O</td>
<td>9:D:156:Ile:G22</td>
<td>2.13</td>
<td>0.47</td>
</tr>
<tr>
<td>14:I:43:Ala:CB</td>
<td>29:X:684:Ala:H41</td>
<td>2.27</td>
<td>0.47</td>
</tr>
<tr>
<td>15:J:11:Arg:NH2</td>
<td>15:J:15:Arg:HH22</td>
<td>2.12</td>
<td>0.47</td>
</tr>
<tr>
<td>15:J:79:Pro:HD3</td>
<td>15:J:88:Lys:HZ2</td>
<td>1.80</td>
<td>0.47</td>
</tr>
<tr>
<td>16:K:41:Ala:O</td>
<td>16:K:44:Leu:N</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>17:L:89:Phe:CD2</td>
<td>29:X:2355:Phe:C2</td>
<td>3.03</td>
<td>0.47</td>
</tr>
<tr>
<td>18:M:69:Arg:G3</td>
<td>18:M:70:Lys:N</td>
<td>2.30</td>
<td>0.47</td>
</tr>
<tr>
<td>19:N:76:Tyr:CE1</td>
<td>19:N:80:Ile:G13</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>20:O:34:Glu:O</td>
<td>20:O:35:Leu:O</td>
<td>2.33</td>
<td>0.47</td>
</tr>
<tr>
<td>21:P:17:Gln:G3</td>
<td>21:P:18:Val:G23</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>22:Q:53:Ile:CG1</td>
<td>22:Q:54:Ser:N</td>
<td>2.77</td>
<td>0.47</td>
</tr>
<tr>
<td>24:S:64:Ala:HB2</td>
<td>24:S:85:Met:CE</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>28:W:49:His:CD2</td>
<td>31:Z:85:G:C5'</td>
<td>2.98</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1061:Asp:H2'</td>
<td>29:X:1062:G:C5'</td>
<td>2.44</td>
<td>0.47</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:1301:U:C5'</td>
<td>29:X:1302:C:OP2</td>
<td>2.63</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2311:U:C5'</td>
<td>29:X:2315:A:N6</td>
<td>2.72</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2327:U:C4</td>
<td>29:X:2361:G:N2</td>
<td>2.82</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2426:G:C4</td>
<td>29:X:2480:C:C4</td>
<td>3.02</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2587:G:H8</td>
<td>29:X:2587:G:O5'</td>
<td>1.98</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2685:A:C2</td>
<td>29:X:2686:C:N1</td>
<td>2.82</td>
<td>0.47</td>
</tr>
<tr>
<td>8:C:162:ARG:CZ</td>
<td>29:X:333:A:H5''</td>
<td>2.44</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:6:2:LYS:HB3</td>
<td>29:X:7:G:C8</td>
<td>3.01</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:826:U:N3</td>
<td>29:X:827:C:C4</td>
<td>2.82</td>
<td>0.47</td>
</tr>
<tr>
<td>7:B:15:TRP:CE2</td>
<td>18:M:86:PRO:HD3</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>7:B:181:LEU:CD1</td>
<td>18:M:16:ILE:HD11</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>7:B:68:ALA:C</td>
<td>7:B:70:ALA:N</td>
<td>2.68</td>
<td>0.47</td>
</tr>
<tr>
<td>9:D:135:GLN:O</td>
<td>9:D:138:PHEN:C1</td>
<td>2.67</td>
<td>0.47</td>
</tr>
<tr>
<td>10:E:43:VAL:HG22</td>
<td>10:E:44:ARG:N</td>
<td>2.30</td>
<td>0.47</td>
</tr>
<tr>
<td>11:F:1:MET:HB3</td>
<td>11:F:2:LYS:HD3</td>
<td>1.95</td>
<td>0.47</td>
</tr>
<tr>
<td>12:G:142:ARG:O</td>
<td>12:G:144:MET:N</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>16:K:44:LEU:HD11</td>
<td>16:K:48:VAL:HB</td>
<td>1.95</td>
<td>0.47</td>
</tr>
<tr>
<td>17:L:79:ALA:O</td>
<td>17:L:82:LYS:HB2</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>18:M:50:PHEN:CZ</td>
<td>18:M:70:LYS:HB3</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>24:S:13:LYS:HZ2</td>
<td>24:S:18:MET:HB2</td>
<td>1.80</td>
<td>0.47</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:105:G:H5′</td>
<td>29:X:105:G:C8</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1135:C:H2′</td>
<td>29:X:1136:G:C8</td>
<td>2.46</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1412:C:HO2′</td>
<td>29:X:1413:U:P</td>
<td>2.37</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1337:G:H4′</td>
<td>29:X:1632:A:N7</td>
<td>2.29</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:623:G:H3′</td>
<td>29:X:624:A:C5′</td>
<td>2.29</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:982:C:OP2</td>
<td>29:X:985:G:C8</td>
<td>2.67</td>
<td>0.47</td>
</tr>
<tr>
<td>7:B:117:MET:O</td>
<td>7:B:121:ASN:HA</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>7:B:118:LYS:HG3</td>
<td>7:B:118:LYS:O</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>7:B:189:PRO:HA</td>
<td>29:X:2659:C:C5′</td>
<td>2.40</td>
<td>0.47</td>
</tr>
<tr>
<td>7:B:5:LEU:CD1</td>
<td>7:B:81:PHE:CZ</td>
<td>2.97</td>
<td>0.47</td>
</tr>
<tr>
<td>10:E:127:GLU:O</td>
<td>10:E:129:THR:N</td>
<td>2.44</td>
<td>0.47</td>
</tr>
<tr>
<td>10:E:155:ASP:OD1</td>
<td>10:E:160:LYS:N</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>10:E:9:ILE:HD12</td>
<td>10:E:51:LEU:CA</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>10:E:9:ILE:HB</td>
<td>10:E:50:LEU:C</td>
<td>2.34</td>
<td>0.47</td>
</tr>
<tr>
<td>12:G:131:VAL:C</td>
<td>12:G:133:GLY:H</td>
<td>2.18</td>
<td>0.47</td>
</tr>
<tr>
<td>15:J:35:LEU:CD1</td>
<td>15:J:130:THR:HB</td>
<td>2.43</td>
<td>0.47</td>
</tr>
<tr>
<td>15:J:89:GLY:O</td>
<td>15:J:91:VAL:N</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>16:K:76:VAL:HA</td>
<td>16:K:79:VAL:HG12</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>16:K:83:VAL:HG23</td>
<td>16:K:87:TYR:CE2</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>17:L:42:ILE:C</td>
<td>17:L:43:ILE:HD12</td>
<td>2.35</td>
<td>0.47</td>
</tr>
<tr>
<td>20:O:53:LYS:HB2</td>
<td>20:O:54:TYR:CD1</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>28:W:45:LYS:HE3</td>
<td>28:W:45:LYS:CA</td>
<td>2.44</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1350:G:H2′</td>
<td>29:X:1351:G:H8</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1359:G:H8</td>
<td>29:X:1359:G:H5′</td>
<td>1.79</td>
<td>0.47</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:165:G:C2'</td>
<td>29:X:166:G:H5'</td>
<td>2.43</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:165:G:C2'</td>
<td>29:X:166:G:H5'</td>
<td>2.43</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2084:G:H2'</td>
<td>29:X:2085:G:C8</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2321:C:O2'</td>
<td>29:X:2353:G:H5&quot;</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2594:U:O2'</td>
<td>29:X:2595:C:C6</td>
<td>2.67</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2659:C:H2'</td>
<td>29:X:2660:C:C6</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2659:C:N4</td>
<td>29:X:2660:C:H41</td>
<td>2.12</td>
<td>0.47</td>
</tr>
<tr>
<td>4:4:19:ARG:HE</td>
<td>29:X:2735:C:H3'</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:632:A:H3'</td>
<td>29:X:633:G:C8</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:632:A:H3'</td>
<td>29:X:633:G:C8</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:682:G:C2'</td>
<td>29:X:682:G:N3</td>
<td>2.77</td>
<td>0.47</td>
</tr>
<tr>
<td>30:Y:58:LEU:CD1</td>
<td>30:Y:58:LEU:H</td>
<td>2.22</td>
<td>0.47</td>
</tr>
<tr>
<td>30:Y:8:LYS:O</td>
<td>30:Y:9:LYS:HD3</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>31:Z:71:G:C5</td>
<td>31:Z:72:C:C5</td>
<td>3.03</td>
<td>0.47</td>
</tr>
<tr>
<td>7:B:120:TRP:CG</td>
<td>7:B:155:ARG:HB3</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>7:B:14:ILE:CD1</td>
<td>7:B:183:LEU:CD1</td>
<td>2.91</td>
<td>0.47</td>
</tr>
<tr>
<td>8:C:15:ILE:HG22</td>
<td>8:C:17:LEU:HD13</td>
<td>1.95</td>
<td>0.47</td>
</tr>
<tr>
<td>9:D:12:VAL:CG1</td>
<td>9:D:16:LEU:HD11</td>
<td>2.32</td>
<td>0.47</td>
</tr>
<tr>
<td>14:I:87:SER:CA</td>
<td>14:I:112:GLY:HA3</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>16:K:65:LEU:HD11</td>
<td>29:X:2845:C:H5&quot;</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>19:N:13:ARG:CS</td>
<td>29:X:1264:C:C5'</td>
<td>2.93</td>
<td>0.47</td>
</tr>
<tr>
<td>23:R:95:ARG:CH2</td>
<td>23:R:106:VAL:HG12</td>
<td>2.30</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1364:C:HO2'</td>
<td>29:X:1587:A:H1'</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1550:C:H2'</td>
<td>29:X:1553:G:H21</td>
<td>1.71</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1575:C:H4'</td>
<td>29:X:1576:G:OP2</td>
<td>2.14</td>
<td>0.47</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:1872:A:N1</td>
<td>29:X:2213:G:H1'</td>
<td>2.29</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2071:G:H2'</td>
<td>29:X:2072:C:H6</td>
<td>1.80</td>
<td>0.47</td>
</tr>
<tr>
<td>25:T:17:ASN:OD1</td>
<td>29:X:2240:C:C6</td>
<td>2.68</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:529:U:C2</td>
<td>29:X:530:G:N7</td>
<td>2.83</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:63:A:C2</td>
<td>29:X:64:C:C6</td>
<td>3.03</td>
<td>0.47</td>
</tr>
<tr>
<td>31:Z:4:C:HO2'</td>
<td>31:Z:5:C:H5'</td>
<td>1.80</td>
<td>0.47</td>
</tr>
<tr>
<td>4:4:30:VAL:C</td>
<td>4:4:32:HIS:N</td>
<td>2.65</td>
<td>0.47</td>
</tr>
<tr>
<td>8:C:173:ALA:HB1</td>
<td>8:C:193:LEU:CD1</td>
<td>2.44</td>
<td>0.47</td>
</tr>
<tr>
<td>8:C:47:THR:HA</td>
<td>8:C:82:VAL:HB</td>
<td>1.95</td>
<td>0.47</td>
</tr>
<tr>
<td>9:D:33:LYS:HD2</td>
<td>9:D:90:THR:HG23</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>10:E:12:PRO:O</td>
<td>10:E:15:VAL:HG22</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>10:E:89:LEU:HB2</td>
<td>10:E:129:THR:CA</td>
<td>2.33</td>
<td>0.47</td>
</tr>
<tr>
<td>15:J:71:PRO:HA</td>
<td>15:J:96:SER:CB</td>
<td>2.43</td>
<td>0.47</td>
</tr>
<tr>
<td>15:J:99:LYS:HD2</td>
<td>15:J:100:PRO:CD</td>
<td>2.44</td>
<td>0.47</td>
</tr>
<tr>
<td>17:L:89:PHE,O</td>
<td>17:L:91:ARG:NH2</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>23:R:112:LYS:O</td>
<td>23:R:113:THR:CG2</td>
<td>2.57</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1053:G:C6</td>
<td>29:X:1054:C:C4</td>
<td>3.03</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1304:U:H2'</td>
<td>29:X:1305:C:C6</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1332:G:N2</td>
<td>29:X:1347:C:C2</td>
<td>2.83</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1395:A:H2'</td>
<td>29:X:1396:C:C6</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1746:A:H2'</td>
<td>29:X:1747:G:O5'</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2189:A:C2</td>
<td>29:X:2196:U:N3</td>
<td>2.79</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2395:C:C2'</td>
<td>29:X:2396:C:C5'</td>
<td>2.93</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:540:G:O2'</td>
<td>29:X:542:A:H2</td>
<td>1.95</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:736:G:C2</td>
<td>29:X:737:C:H1'</td>
<td>2.50</td>
<td>0.47</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:746:G:O6</td>
<td>29:X:774:A:C8</td>
<td>2.67</td>
<td>0.47</td>
</tr>
<tr>
<td>8:C:172:VAL:C</td>
<td>8:C:174:GLY:N</td>
<td>2.68</td>
<td>0.47</td>
</tr>
<tr>
<td>9:D:175:LEU:HG</td>
<td>9:D:177:PHE:HE1</td>
<td>1.80</td>
<td>0.47</td>
</tr>
<tr>
<td>15:J:42:TRP:CB</td>
<td>15:J:95:VAL:HG11</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>16:K:72:ASP:CB</td>
<td>16:K:75:VAL:HG23</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>17:L:9:ARG:O</td>
<td>17:L:12:ARG:N</td>
<td>2.44</td>
<td>0.47</td>
</tr>
<tr>
<td>23:R:35:LYS:HE3</td>
<td>23:R:37:LEU:CD2</td>
<td>2.44</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1162:A:H2'</td>
<td>29:X:1163:C:C6</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1552:C:H1'</td>
<td>29:X:1553:G:C4</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1629:C:C2'</td>
<td>29:X:1633:C:H42</td>
<td>2.28</td>
<td>0.47</td>
</tr>
<tr>
<td>7:B:128:SER:OG</td>
<td>29:X:1692:C:N3</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2286:G:N7</td>
<td>29:X:2287:G:C8</td>
<td>2.83</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2262:C:C5</td>
<td>29:X:2368:G:C4</td>
<td>3.03</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2488:G:H2'</td>
<td>29:X:2489:C:H6</td>
<td>1.80</td>
<td>0.47</td>
</tr>
<tr>
<td>10:E:110:SER:OG</td>
<td>29:X:2646:C:N3</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2779:C:C2'</td>
<td>29:X:2780:A:O4'</td>
<td>2.63</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2823:G:O2'</td>
<td>29:X:2824:C:P</td>
<td>2.73</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:428:A:H2'</td>
<td>29:X:429:C:O4'</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:708:G:OP1</td>
<td>29:X:1393:G:O2'</td>
<td>2.32</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:830:C:H2'</td>
<td>29:X:831:G:H8</td>
<td>1.80</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:938:G:HO2'</td>
<td>29:X:939:C:P</td>
<td>2.38</td>
<td>0.47</td>
</tr>
<tr>
<td>17:L:50:THR:N</td>
<td>31:Z:116:C:O2'</td>
<td>2.44</td>
<td>0.47</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:B:14:ILE:HD12</td>
<td>7:B:23:VAL:HG21</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>7:B:192:ASN:HD22</td>
<td>18:M:9:ARG:NH1</td>
<td>2.12</td>
<td>0.47</td>
</tr>
<tr>
<td>9:D:44:LYS:HB3</td>
<td>9:D:46:ASP:OD2</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>14:I:92:THR:C</td>
<td>14:I:94:GLU:N</td>
<td>2.68</td>
<td>0.47</td>
</tr>
<tr>
<td>15:J:100:PRO:HG2</td>
<td>24:S:74:ARG:NH1</td>
<td>2.27</td>
<td>0.47</td>
</tr>
<tr>
<td>23:R:36:VAL:O</td>
<td>23:R:37:LEU:HD23</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:162:C:H2'</td>
<td>29:X:163:A:C8</td>
<td>2.49</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1725:C:O2'</td>
<td>29:X:1726:C:H5'</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2082:C:H2'</td>
<td>29:X:2083:G:H5&quot;</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2196:C:H2'</td>
<td>29:X:2197:U:C6</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2242:C:N4</td>
<td>29:X:2243:C:N4</td>
<td>2.62</td>
<td>0.47</td>
</tr>
<tr>
<td>4:4:2:LYS:HE3</td>
<td>29:X:2457:A:OP2</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>12:G:104:THR:HB</td>
<td>29:X:2620:G:H5&quot;</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:520:C:C2'</td>
<td>29:X:520:C:O2</td>
<td>2.59</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:790:A:C2</td>
<td>29:X:791:G:C8</td>
<td>3.03</td>
<td>0.47</td>
</tr>
<tr>
<td>31:Z:80:A:H2'</td>
<td>31:Z:81:C:O4'</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>7:B:16:LYS:HB2</td>
<td>7:B:21:ILE:CD1</td>
<td>2.45</td>
<td>0.47</td>
</tr>
<tr>
<td>8:C:169:VAL:HG12</td>
<td>8:C:170:LEU:N</td>
<td>2.29</td>
<td>0.47</td>
</tr>
<tr>
<td>8:C:195:ILE:O</td>
<td>8:C:196:VAL:HB</td>
<td>2.14</td>
<td>0.47</td>
</tr>
<tr>
<td>15:J:36:ILE:HD12</td>
<td>15:J:133:VAL:HG11</td>
<td>1.96</td>
<td>0.47</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17:L:38:ILE:HD12</td>
<td>17:L:40:ALA:H</td>
<td>1.74</td>
<td>0.47</td>
</tr>
<tr>
<td>17:L:91:ARG:NH2</td>
<td>29:X:2356:A:C2</td>
<td>2.82</td>
<td>0.47</td>
</tr>
<tr>
<td>20:O:90:PHE:HD1</td>
<td>20:O:91:THR:N</td>
<td>2.13</td>
<td>0.47</td>
</tr>
<tr>
<td>23:R:16:PHE:CD2</td>
<td>23:R:80:LYS:NZ</td>
<td>2.83</td>
<td>0.47</td>
</tr>
<tr>
<td>24:S:63:PRO:C</td>
<td>24:S:86:VAL:HG23</td>
<td>2.34</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1249:G:O2'</td>
<td>29:X:1250:A:P</td>
<td>2.73</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:1685:A:N7</td>
<td>29:X:1691:G:C5</td>
<td>2.83</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2348:A:H2'</td>
<td>29:X:2349:G:C8</td>
<td>2.50</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:2654:A:C2</td>
<td>29:X:2655:C:C2</td>
<td>3.03</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:26:G:C6</td>
<td>29:X:27:G:N2</td>
<td>2.83</td>
<td>0.47</td>
</tr>
<tr>
<td>10:E:150:LYS:NZ</td>
<td>29:X:2724:G:H1'</td>
<td>2.29</td>
<td>0.47</td>
</tr>
<tr>
<td>29:X:991:A:C5</td>
<td>29:X:992:A:C6</td>
<td>3.03</td>
<td>0.47</td>
</tr>
<tr>
<td>14:J:64:LYS:CG</td>
<td>15:J:108:ALA:C</td>
<td>2.63</td>
<td>0.46</td>
</tr>
<tr>
<td>17:L:81:GLU:O</td>
<td>17:L:82:LYS:CG</td>
<td>2.64</td>
<td>0.46</td>
</tr>
<tr>
<td>17:L:87:VAL:CG1</td>
<td>17:L:88:VAL:H</td>
<td>2.25</td>
<td>0.46</td>
</tr>
<tr>
<td>19:N:82:GLY:C</td>
<td>19:N:84:LYS:N</td>
<td>2.68</td>
<td>0.46</td>
</tr>
<tr>
<td>20:O:23:GLU:O</td>
<td>20:O:24:SER:HB3</td>
<td>2.15</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>24:S:13:LYS:HE2</td>
<td>24:S:20:ALA:HB2</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>26:U:23:LYS:HE3</td>
<td>26:U:26:ALA:CB</td>
<td>2.45</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1134:C:H2'</td>
<td>29:X:1135:C:C6</td>
<td>2.48</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1200:G:N7</td>
<td>29:X:1201:G:N7</td>
<td>2.62</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1296:G:H22</td>
<td>29:X:1299:A:H5'</td>
<td>1.79</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1474:A:C1'</td>
<td>29:X:1475:U:H5'</td>
<td>2.44</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1594:U:H2'</td>
<td>29:X:1595:A:C8</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>6:A:62:TYR:CE2</td>
<td>29:X:1808:C:C5</td>
<td>3.03</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1933:G:C8</td>
<td>29:X:1934:U:H5</td>
<td>2.31</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1681:A:N6</td>
<td>29:X:1979:C:H42</td>
<td>2.10</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2379:G:H2'</td>
<td>29:X:2380:U:C5'</td>
<td>2.45</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:971:A:H4'</td>
<td>29:X:2436:U:C5'</td>
<td>2.45</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2496:C:O2'</td>
<td>29:X:2497:A:O5'</td>
<td>2.31</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2681:AN7</td>
<td>29:X:2682:AC5</td>
<td>2.83</td>
<td>0.46</td>
</tr>
<tr>
<td>10:E:150:LYS:HZ2</td>
<td>29:X:2724:G:H1'</td>
<td>1.81</td>
<td>0.46</td>
</tr>
<tr>
<td>10:E:66:GLY:O</td>
<td>29:X:2728:G:H4'</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2729:A:N1</td>
<td>29:X:2730:A:N6</td>
<td>2.64</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2780:A:H2'</td>
<td>29:X:2781:G:H8</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:541:C:O2'</td>
<td>29:X:542:A:OP2</td>
<td>2.31</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:921:A:N1</td>
<td>29:X:924:C:H1'</td>
<td>2.30</td>
<td>0.46</td>
</tr>
<tr>
<td>31:Z:39:C:N4</td>
<td>31:Z:51:G:O4'</td>
<td>2.48</td>
<td>0.46</td>
</tr>
<tr>
<td>31:Z:72:C:O2'</td>
<td>31:Z:73:C:H5'</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>9:D:36:VAL:O</td>
<td>9:D:89:VAL:HG23</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>9:D:53:ALA:O</td>
<td>9:D:57:LEU:N</td>
<td>2.45</td>
<td>0.46</td>
</tr>
<tr>
<td>10:E:24:PHE:CD1</td>
<td>10:E:37:TYR:HD1</td>
<td>2.32</td>
<td>0.46</td>
</tr>
<tr>
<td>12:G:155:THR:HG23</td>
<td>12:G:156:HIS:CE1</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>15:J:106:GLU:OE1</td>
<td>15:J:106:GLU:O</td>
<td>2.34</td>
<td>0.46</td>
</tr>
<tr>
<td>7:B:9:ILE:CD1</td>
<td>18:M:12:LEU:HD13</td>
<td>2.32</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>18:M:34:ARG:NE</td>
<td>18:M:88:VAL:CG1</td>
<td>2.78</td>
<td>0.46</td>
</tr>
<tr>
<td>20:O:56:VAL:HA</td>
<td>20:O:97:GLY:HA3</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>25:T:3:HIS:CG</td>
<td>25:T:4:LYS:H</td>
<td>2.32</td>
<td>0.46</td>
</tr>
<tr>
<td>26:U:58:LYS:O</td>
<td>26:U:59:THR:HG23</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1108:U:C2</td>
<td>29:X:1109:A:H1'</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1629:G:N1</td>
<td>29:X:1633:C:C6</td>
<td>2.83</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1313:U:H1'</td>
<td>29:X:1642:G:C2</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1722:G:C6</td>
<td>29:X:1723:U:N3</td>
<td>2.83</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1887:G:N3</td>
<td>29:X:1911:A:H2</td>
<td>2.13</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2185:U:H2'</td>
<td>29:X:2186:G:C8</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2379:G:N2</td>
<td>29:X:2380:U:H1'</td>
<td>2.30</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2388:G:C4</td>
<td>29:X:2389:G:C8</td>
<td>3.03</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2448:A:H5'</td>
<td>29:X:2448:A:H8</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2652:G:N3</td>
<td>29:X:2653:A:C8</td>
<td>2.83</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:343:A:H1'</td>
<td>29:X:346:C:H42</td>
<td>1.79</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:559:C:C2</td>
<td>29:X:560:G:H1'</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:215:G:N2</td>
<td>29:X:632:A:H8</td>
<td>2.06</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:792:U:O2'</td>
<td>29:X:793:G:H5'</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>6:A:218:LYS:NZ</td>
<td>29:X:794:A:H5'</td>
<td>2.31</td>
<td>0.46</td>
</tr>
<tr>
<td>30:Y:51:TYR:CE1</td>
<td>30:Y:55:ARG:CB</td>
<td>2.94</td>
<td>0.46</td>
</tr>
<tr>
<td>8:C:136:TRP:O</td>
<td>8:C:140:ASN:ND2</td>
<td>2.42</td>
<td>0.46</td>
</tr>
<tr>
<td>8:C:144:GLY:CA</td>
<td>8:C:166:TRP:NE1</td>
<td>2.78</td>
<td>0.46</td>
</tr>
<tr>
<td>12:G:131:VAL:O</td>
<td>12:G:133:GLY:N</td>
<td>2.48</td>
<td>0.46</td>
</tr>
<tr>
<td>18:M:34:ARG:CZ</td>
<td>18:M:88:VAL:CG2</td>
<td>2.93</td>
<td>0.46</td>
</tr>
<tr>
<td>18:M:34:ARG:NE</td>
<td>18:M:88:VAL:HG11</td>
<td>2.30</td>
<td>0.46</td>
</tr>
<tr>
<td>20:O:25:LEU:HG</td>
<td>20:O:32:LYS:NZ</td>
<td>2.30</td>
<td>0.46</td>
</tr>
<tr>
<td>23:R:100:ASP:C</td>
<td>23:R:102:LYS:N</td>
<td>2.66</td>
<td>0.46</td>
</tr>
<tr>
<td>23:R:14:LEU:CD1</td>
<td>23:R:39:ALA:HB1</td>
<td>2.45</td>
<td>0.46</td>
</tr>
<tr>
<td>25:T:44:LYS:HG2</td>
<td>25:T:45:PHE:CE1</td>
<td>2.50</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>27:V:14:PHE:HZ</td>
<td>27:V:56:VAL:HG11</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1193:G:C6</td>
<td>29:X:1194:U:C4</td>
<td>3.02</td>
<td>0.46</td>
</tr>
<tr>
<td>14:I:7:LYS:O</td>
<td>29:X:1219:C:H5'</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1355:A:O2'</td>
<td>29:X:1357:U:OP2</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:138:G:HA2'</td>
<td>29:X:139:A:H8</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1401:G:O2'</td>
<td>29:X:1402:G:H5'</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>6:A:61:LEU:CD1</td>
<td>29:X:1584:G:H5''</td>
<td>2.45</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1924:C:C4</td>
<td>29:X:1925:C:C4</td>
<td>3.03</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2046:C:C5</td>
<td>29:X:2047:C:N4</td>
<td>2.83</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2264:C:N4</td>
<td>29:X:2325:A:C2</td>
<td>2.82</td>
<td>0.46</td>
</tr>
<tr>
<td>26:U:33:LYS:HE3</td>
<td>29:X:2400:G:H21</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>26:U:35:THR:HB</td>
<td>29:X:401:G:OP1</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:613:AC2</td>
<td>29:X:636:G:N3</td>
<td>2.83</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:596:C:N1</td>
<td>29:X:684:CH1'</td>
<td>2.30</td>
<td>0.46</td>
</tr>
<tr>
<td>30:Y:17:ASP:O</td>
<td>30:Y:18:MET:C</td>
<td>2.53</td>
<td>0.46</td>
</tr>
<tr>
<td>8:C:144:GLY:HA2</td>
<td>8:C:166:TRP:CD1</td>
<td>2.51</td>
<td>0.46</td>
</tr>
<tr>
<td>8:C:112:GLN:HE22</td>
<td>8:C:188:ILE:HD11</td>
<td>1.79</td>
<td>0.46</td>
</tr>
<tr>
<td>9:D:108:LEU:HA</td>
<td>9:D:111:ILE:CG1</td>
<td>2.45</td>
<td>0.46</td>
</tr>
<tr>
<td>9:D:14:PRO:C</td>
<td>9:D:16:LEU:N</td>
<td>2.68</td>
<td>0.46</td>
</tr>
<tr>
<td>9:D:75:SER:HB2</td>
<td>9:D:79:LEU:HD22</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>10:E:110:SER:HB2</td>
<td>29:X:2646:C:O2</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>12:G:142:ARG:O</td>
<td>12:G:143:ALA:C</td>
<td>2.53</td>
<td>0.46</td>
</tr>
<tr>
<td>15:J:28:VAL:HG23</td>
<td>15:J:137:VAL:CG2</td>
<td>2.45</td>
<td>0.46</td>
</tr>
<tr>
<td>17:L:28:ARG:O</td>
<td>17:L:42:ILE:HD13</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>18:M:26:ASP:O</td>
<td>18:M:27:PHE:CG</td>
<td>2.68</td>
<td>0.46</td>
</tr>
<tr>
<td>18:M:94:VAL:HG12</td>
<td>18:M:95:GLU:HG2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>20:O:71:ILE:HD11</td>
<td>29:X:1003:C:O2'</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>23:R:106:VAL:O</td>
<td>23:R:107:ALA:HB2</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>23:R:90:LYS:C</td>
<td>23:R:91:ALA:O</td>
<td>2.49</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>27:V:6:MET:HE1</td>
<td>27:V:52:GLN:HB3</td>
<td>1.96</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1336:G:C2</td>
<td>29:X:1346:C:H1'</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:144:U:O2'</td>
<td>29:X:145:C:H5'</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1467:U:H2'</td>
<td>29:X:1468:A:O1'</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1569:A:C5</td>
<td>29:X:1571:G:C5</td>
<td>3.04</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2028:C:O2'</td>
<td>30:Y:18:MET:O</td>
<td>2.32</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:230:C:H2'</td>
<td>29:X:231:G:O4'</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2526:U:C6</td>
<td>29:X:2545:A:C6</td>
<td>3.03</td>
<td>0.46</td>
</tr>
<tr>
<td>7:B:145:LYS:HB2</td>
<td>29:X:2551:A:N7</td>
<td>2.30</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2762:G:C2</td>
<td>29:X:2763:U:C6</td>
<td>3.02</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:497:C:C6</td>
<td>29:X:497:C:C5'</td>
<td>2.89</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:633:G:O2'</td>
<td>29:X:634:G:H8</td>
<td>2.89</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:644:A:H2'</td>
<td>29:X:645:G:O4'</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:771:C:O2'</td>
<td>29:X:772:G:H5'</td>
<td>1.31</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:771:C:O2'</td>
<td>31:Z:77:G:C1'</td>
<td>2.45</td>
<td>0.46</td>
</tr>
<tr>
<td>9:D:159:THR:O</td>
<td>9:D:160:ALA:C</td>
<td>2.54</td>
<td>0.46</td>
</tr>
<tr>
<td>10:E:37:TYR:HE2</td>
<td>10:E:71:LEU:CB</td>
<td>2.27</td>
<td>0.46</td>
</tr>
<tr>
<td>16:K:103:ARG:HD2</td>
<td>29:X:1300:A:OP2</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>17:L:69:ALA:HA</td>
<td>17:L:106:ALA:HB2</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>19:N:13:ARG:NE</td>
<td>29:X:1264:C:C5'</td>
<td>2.74</td>
<td>0.46</td>
</tr>
<tr>
<td>20:O:35:LEU:HD21</td>
<td>20:O:52:GLY:CA</td>
<td>2.41</td>
<td>0.46</td>
</tr>
<tr>
<td>26:U:47:HIS:HB2</td>
<td>26:U:48:LYS:H</td>
<td>1.54</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1010:U:O2'</td>
<td>29:X:1011:A:H5'</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1018:C:C3'</td>
<td>29:X:1019:U:C5'</td>
<td>2.87</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>29:X:1175:A:H2'</td>
<td>29:X:1176:U:O4'</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1274:C:H2'</td>
<td>29:X:1275:A:O5'</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1357:U:O2'</td>
<td>29:X:1358:C:OP1</td>
<td>2.33</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1391:A:C8</td>
<td>29:X:1393:G:N7</td>
<td>2.83</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1514:C:H4'</td>
<td>29:X:1592:U:O2'</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1557:G:H2'</td>
<td>29:X:1558:C:H6</td>
<td>1.79</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1587:A:C2</td>
<td>29:X:1588:A:C5</td>
<td>3.04</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:172:A:N1</td>
<td>29:X:178:C:C2</td>
<td>2.84</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1918:G:C2'</td>
<td>29:X:1945:C:H42</td>
<td>2.28</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1941:C:O2'</td>
<td>29:X:1942:G:H5'</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2170:C:C5'</td>
<td>29:X:2171:U:C5'</td>
<td>2.87</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2280:A:H2'</td>
<td>29:X:2281:C:H6</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2324:G:N7</td>
<td>29:X:2351:G:C2</td>
<td>2.83</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2508:G:O5'</td>
<td>29:X:2509:A:H5'</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2821:G:H2'</td>
<td>29:X:2822:U:H6</td>
<td>1.73</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:353:G:H2'</td>
<td>29:X:354:C:O4'</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:224:G:C4'</td>
<td>29:X:399:G:C6</td>
<td>2.87</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:55:A:C2</td>
<td>29:X:56:C:C2</td>
<td>3.02</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:641:G:H4'</td>
<td>29:X:651:C:O2'</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:754:G:C4</td>
<td>29:X:755:C:C5</td>
<td>3.03</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:868:U:H2'</td>
<td>29:X:869:C:C6</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:931:G:C4</td>
<td>29:X:932:G:C8</td>
<td>3.04</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:934:G:H2'</td>
<td>29:X:935:C:O4'</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>30:Y:12:SER:C</td>
<td>30:Y:14:SER:N</td>
<td>2.64</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:760:U:C6</td>
<td>30:Y:3:LYS:HG3</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>6:A:208:LYS:CE</td>
<td>6:A:208:LYS:HA</td>
<td>2.46</td>
<td>0.46</td>
</tr>
<tr>
<td>6:A:262:LYS:HE3</td>
<td>29:X:2206:C:H1'</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>10:E:22:GLY:O</td>
<td>10:E:24:PHE:CE1</td>
<td>2.68</td>
<td>0.46</td>
</tr>
<tr>
<td>10:E:65:HIS:C</td>
<td>10:E:67:LEU:N</td>
<td>2.67</td>
<td>0.46</td>
</tr>
<tr>
<td>10:E:89:LEU:CD1</td>
<td>10:E:96:ALA:N</td>
<td>2.78</td>
<td>0.46</td>
</tr>
<tr>
<td>11:F:54:PRO:HG2</td>
<td>11:F:70:LYS:CD</td>
<td>2.40</td>
<td>0.46</td>
</tr>
<tr>
<td>15:J:121:LEU:O</td>
<td>15:J:125:LYS:HE2</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>15:J:28:VAL:N</td>
<td>15:J:137:VAL:HG11</td>
<td>2.30</td>
<td>0.46</td>
</tr>
<tr>
<td>15:J:17:ARG:HB2</td>
<td>29:X:969:U:C4</td>
<td>2.51</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>15:J:8:THR:CA</td>
<td>15:J:70:PHE:HZ</td>
<td>2.29</td>
<td>0.46</td>
</tr>
<tr>
<td>15:J:19:THR:CG2</td>
<td>15:J:99:LYS:HZ3</td>
<td>2.29</td>
<td>0.46</td>
</tr>
<tr>
<td>19:N:3:ARG:HB2</td>
<td>29:X:457:C:H5&quot;</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>20:O:35:LEU:HD22</td>
<td>20:O:36:LYS:N</td>
<td>2.31</td>
<td>0.46</td>
</tr>
<tr>
<td>21:P:93:LYS:HB2</td>
<td>21:P:129:ALA:CB</td>
<td>2.46</td>
<td>0.46</td>
</tr>
<tr>
<td>21:P:76:LYS:O</td>
<td>21:P:78:ASN:N</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>27:V:2:LYS:H</td>
<td>27:V:3:PRO:CD</td>
<td>2.28</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1215:A:H2'</td>
<td>29:X:1216:G:H8</td>
<td>1.78</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1463:A:H2'</td>
<td>29:X:1464:A:H8</td>
<td>1.79</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1741:A:C2'</td>
<td>29:X:1742:G:H5'</td>
<td>2.46</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1744:A:N2</td>
<td>29:X:1746:A:H3'</td>
<td>2.31</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1807:A:H1'</td>
<td>29:X:1809:G:C8</td>
<td>2.51</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2083:G:H3'</td>
<td>29:X:2083:G:C8</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2194:A:H2'</td>
<td>29:X:2195:C:C5'</td>
<td>2.44</td>
<td>0.46</td>
</tr>
<tr>
<td>25:T:24:LYS:CD</td>
<td>29:X:2334:C:H4'</td>
<td>2.42</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2433:G:C4</td>
<td>29:X:2434:G:C8</td>
<td>3.03</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2792:C:C2</td>
<td>29:X:2805:G:C2</td>
<td>3.04</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:494:A:C8</td>
<td>29:X:495:C:C5</td>
<td>3.04</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:516:G:O2'</td>
<td>29:X:517:A:P</td>
<td>2.74</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:529:U:O2'</td>
<td>29:X:530:G:H5'</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:969:U:O2'</td>
<td>29:X:970:A:P</td>
<td>2.74</td>
<td>0.46</td>
</tr>
<tr>
<td>8:C:109:ALA:O</td>
<td>8:C:110:SER:C</td>
<td>2.52</td>
<td>0.46</td>
</tr>
<tr>
<td>8:C:31:VAL:O</td>
<td>8:C:34:GLN:HB2</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>9:D:130:LEU:HD22</td>
<td>9:D:132:ILE:CD1</td>
<td>2.46</td>
<td>0.46</td>
</tr>
<tr>
<td>10:E:15:VAL:O</td>
<td>10:E:16:THR:OG1</td>
<td>2.23</td>
<td>0.46</td>
</tr>
<tr>
<td>10:E:172:LYS:CE</td>
<td>29:X:2508:G:OP2</td>
<td>2.63</td>
<td>0.46</td>
</tr>
<tr>
<td>10:E:37:TYR:HB3</td>
<td>10:E:41:LEU:HD23</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>12:G:32:TYR:OH</td>
<td>12:G:35:LYS:CE</td>
<td>2.64</td>
<td>0.46</td>
</tr>
</tbody>
</table>
### Atom-1 Atom-2 Interatomic distance (Å) Clash overlap (Å)

| 15:J:33:TYR:CE2  | 15:J:112:GLU:HA  | 2.51    | 0.46  |
| 15:J:125:LYS:CD  | 15:J:125:LYS:N  | 2.79    | 0.46  |
| 17:L:75:LEU:HA  | 17:L:78:ALA:HB3 | 1.97    | 0.46  |
| 23:R:16:PHE:CZ  | 23:R:46:VAL:HG22 | 2.49    | 0.46  |
| 24:S:2:GLU:O  | 24:S:3:LEU:C  | 2.53    | 0.46  |
| 25:R:45:PHE:CZ  | 25:T:77:ARG:HZ2 | 2.98    | 0.46  |
| 29:X:1117:G:HZ1 | 29:X:1118:G:HZ2 | 1.72    | 0.46  |
| 29:X:1292:A:HZ1 | 29:X:1293:A:HZ4 | 2.16    | 0.46  |
| 29:X:1479:G:HZ1 | 29:X:1480:G:HZ2 | 2.50    | 0.46  |
| 29:X:1486:A:HZ1 | 29:X:1487:A:HZ2 | 1.78    | 0.46  |
| 29:X:1947:G:HZ1 | 29:X:1950:G:HZ2 | 2.27    | 0.46  |
| 29:X:805:G:HZ1 | 29:X:2190:G:HZ2 | 2.79    | 0.46  |
| 29:X:2838:U:HZ1 | 29:X:2839:G:HZ2 | 2.46    | 0.46  |
| 29:X:319:G:HZ1 | 29:X:511:G:HZ2 | 2.16    | 0.46  |
| 29:X:78:G:HZ1 | 29:X:357:G:HZ2 | 1.99    | 0.46  |
| 29:X:412:G:HZ1 | 29:X:413:G:HZ2 | 2.15    | 0.46  |
| 29:X:417:G:HZ1 | 29:X:418:G:HZ2 | 2.45    | 0.46  |
| 29:X:796:A:HZ1 | 29:X:796:A:HZ2 | 2.51    | 0.46  |
| 29:X:972:G:HZ1 | 29:X:973:U:HZ2 | 2.16    | 0.46  |
| 31:Z:93:G:HZ1 | 31:Z:94:G:HZ2 | 2.16    | 0.46  |
| 6:A:257:LEU:HZ1 | 29:X:1794:G:HZ2 | 2.15    | 0.46  |
| 6:A:70:ARG:C | 6:A:72:LYS:HZ1 | 2.18    | 0.46  |
| 7:B:142:GLY:CA | 7:B:143:GLN:HE2 | 2.74    | 0.46  |
| 8:C:158:ARG:HZ1 | 8:C:169:VAL:HZ2 | 2.46    | 0.46  |
| 8:C:2:ALA:HA | 8:C:13:ARG:CA | 2.29    | 0.46  |
| 9:D:175:LEU:HZ1 | 9:D:177:PHE:CE1 | 2.51    | 0.46  |
| 9:D:77:PHE:CE1 | 9:D:77:PHE:HZ1 | 2.84    | 0.46  |
| 15:J:59:PHE:CE1 | 15:J:65:ILE:HZ2 | 2.50    | 0.46  |
| 17:L:44:ASP:CE1 | 17:L:44:ASP:HZ1 | 2.53    | 0.46  |

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>19:N:75:ASN:O</td>
<td>19:N:75:ASN:ND2</td>
<td>2.48</td>
<td>0.46</td>
</tr>
<tr>
<td>23:R:56:LYS:HZ1</td>
<td>23:R:56:LYS:H</td>
<td>1.46</td>
<td>0.46</td>
</tr>
<tr>
<td>27:V:7:ARG:HE</td>
<td>27:V:7:ARG:HZ</td>
<td>1.81</td>
<td>0.46</td>
</tr>
<tr>
<td>29:O:10:ARG:O</td>
<td>29:O:10:ARG:HZ</td>
<td>1.51</td>
<td>0.46</td>
</tr>
<tr>
<td>29:O:10:GLU:C</td>
<td>29:O:10:GLU:OE1</td>
<td>2.54</td>
<td>0.46</td>
</tr>
<tr>
<td>30:Y:10:LYS:H</td>
<td>30:Y:10:LYS:HZ</td>
<td>2.28</td>
<td>0.46</td>
</tr>
<tr>
<td>31:Z:12:GLY:C</td>
<td>31:Z:12:GLY:HZ</td>
<td>1.78</td>
<td>0.46</td>
</tr>
<tr>
<td>7:B:19:ARG:O</td>
<td>7:B:19:ARG:HZ</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>12:G:12:GLU:HA</td>
<td>12:G:12:GLU:HZ</td>
<td>1.96</td>
<td>0.46</td>
</tr>
<tr>
<td>15:J:14:LYS:CB</td>
<td>15:J:14:GLN:HZ</td>
<td>2.39</td>
<td>0.46</td>
</tr>
<tr>
<td>17:L:10:ARG:CD1</td>
<td>17:L:10:ARG:HZ</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>17:L:10:LYS:H</td>
<td>17:L:10:LYS:HZ</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>18:M:10:ARG:O</td>
<td>18:M:10:GLN:HZ</td>
<td>2.54</td>
<td>0.46</td>
</tr>
<tr>
<td>23:R:59:LYS:HZ1</td>
<td>23:R:59:GLN:HZ</td>
<td>2.51</td>
<td>0.46</td>
</tr>
<tr>
<td>27:V:7:ARG:HE</td>
<td>27:V:7:ARG:HZ</td>
<td>1.81</td>
<td>0.46</td>
</tr>
<tr>
<td>29:O:10:ARG:O</td>
<td>29:O:10:ARG:HZ</td>
<td>1.51</td>
<td>0.46</td>
</tr>
<tr>
<td>29:O:10:GLU:C</td>
<td>29:O:10:GLU:OE1</td>
<td>2.54</td>
<td>0.46</td>
</tr>
<tr>
<td>30:Y:10:LYS:H</td>
<td>30:Y:10:LYS:HZ</td>
<td>2.28</td>
<td>0.46</td>
</tr>
<tr>
<td>31:Z:12:GLY:C</td>
<td>31:Z:12:GLY:HZ</td>
<td>1.78</td>
<td>0.46</td>
</tr>
<tr>
<td>7:B:19:ARG:O</td>
<td>7:B:19:ARG:HZ</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>12:G:12:GLU:HA</td>
<td>12:G:12:GLU:HZ</td>
<td>1.96</td>
<td>0.46</td>
</tr>
<tr>
<td>15:J:14:LYS:CB</td>
<td>15:J:14:GLN:HZ</td>
<td>2.39</td>
<td>0.46</td>
</tr>
<tr>
<td>17:L:10:ARG:CD1</td>
<td>17:L:10:ARG:HZ</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>17:L:10:LYS:H</td>
<td>17:L:10:LYS:HZ</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>18:M:10:ARG:O</td>
<td>18:M:10:GLN:HZ</td>
<td>2.54</td>
<td>0.46</td>
</tr>
<tr>
<td>23:R:59:LYS:HZ1</td>
<td>23:R:59:GLN:HZ</td>
<td>2.51</td>
<td>0.46</td>
</tr>
<tr>
<td>27:V:7:ARG:HE</td>
<td>27:V:7:ARG:HZ</td>
<td>1.81</td>
<td>0.46</td>
</tr>
<tr>
<td>29:O:10:ARG:O</td>
<td>29:O:10:ARG:HZ</td>
<td>1.51</td>
<td>0.46</td>
</tr>
<tr>
<td>29:O:10:GLU:C</td>
<td>29:O:10:GLU:OE1</td>
<td>2.54</td>
<td>0.46</td>
</tr>
<tr>
<td>30:Y:10:LYS:H</td>
<td>30:Y:10:LYS:HZ</td>
<td>2.28</td>
<td>0.46</td>
</tr>
<tr>
<td>31:Z:12:GLY:C</td>
<td>31:Z:12:GLY:HZ</td>
<td>1.78</td>
<td>0.46</td>
</tr>
<tr>
<td>7:B:19:ARG:O</td>
<td>7:B:19:ARG:HZ</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>12:G:12:GLU:HA</td>
<td>12:G:12:GLU:HZ</td>
<td>1.96</td>
<td>0.46</td>
</tr>
<tr>
<td>15:J:14:LYS:CB</td>
<td>15:J:14:GLN:HZ</td>
<td>2.39</td>
<td>0.46</td>
</tr>
<tr>
<td>17:L:10:ARG:CD1</td>
<td>17:L:10:ARG:HZ</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>17:L:10:LYS:H</td>
<td>17:L:10:LYS:HZ</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>18:M:10:ARG:O</td>
<td>18:M:10:GLN:HZ</td>
<td>2.54</td>
<td>0.46</td>
</tr>
<tr>
<td>23:R:59:LYS:HZ1</td>
<td>23:R:59:GLN:HZ</td>
<td>2.51</td>
<td>0.46</td>
</tr>
<tr>
<td>27:V:7:ARG:HE</td>
<td>27:V:7:ARG:HZ</td>
<td>1.81</td>
<td>0.46</td>
</tr>
<tr>
<td>29:O:10:ARG:O</td>
<td>29:O:10:ARG:HZ</td>
<td>1.51</td>
<td>0.46</td>
</tr>
<tr>
<td>29:O:10:GLU:C</td>
<td>29:O:10:GLU:OE1</td>
<td>2.54</td>
<td>0.46</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>29:X:2561:G:H5'</td>
<td>29:X:2561:G:H8</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2718:A:C2</td>
<td>29:X:2719:U:H1'</td>
<td>2.51</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2799:C:C4</td>
<td>29:X:2800:C:N3</td>
<td>2.83</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2849:C:C2'</td>
<td>29:X:2850:U:H5&quot;</td>
<td>2.46</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:678:G:O2'</td>
<td>29:X:679:C:H5'</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:756:C:H2'</td>
<td>29:X:757:U:H5'</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:947:C:H2'</td>
<td>29:X:948:C:H6</td>
<td>1.81</td>
<td>0.46</td>
</tr>
<tr>
<td>6:A:186:His:O</td>
<td>6:A:188:Glu:N</td>
<td>2.45</td>
<td>0.46</td>
</tr>
<tr>
<td>6:A:75:Val:HG11</td>
<td>6:A:97:Thr:HB3</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>8:C:187:Val:HG12</td>
<td>8:C:187:Val:O</td>
<td>2.15</td>
<td>0.46</td>
</tr>
<tr>
<td>9:D:123:Asp:HB3</td>
<td>9:D:127:Asn: HB2</td>
<td>1.97</td>
<td>0.46</td>
</tr>
<tr>
<td>11:F:103:Gln:H</td>
<td>11:F:103:Gln:CD</td>
<td>2.19</td>
<td>0.46</td>
</tr>
<tr>
<td>7:B:151:Ty:R:HG3</td>
<td>12:G:106:Ty:R:CE2</td>
<td>2.51</td>
<td>0.46</td>
</tr>
<tr>
<td>12:G:79:Phe:CZ</td>
<td>12:G:147:Arg:NE</td>
<td>2.84</td>
<td>0.46</td>
</tr>
<tr>
<td>12:G:66:His:C</td>
<td>19:N:67:Ala:HB1</td>
<td>2.37</td>
<td>0.46</td>
</tr>
<tr>
<td>13:H:133:Val:HG12</td>
<td>18:M:38:Lys:NZ</td>
<td>2.31</td>
<td>0.46</td>
</tr>
<tr>
<td>14:1:102:Lys:C</td>
<td>14:1:104:Arg:H</td>
<td>2.17</td>
<td>0.46</td>
</tr>
<tr>
<td>18:M:5:ILE:C</td>
<td>18:M:5:ILE:HD12</td>
<td>2.35</td>
<td>0.46</td>
</tr>
<tr>
<td>19:N:93:Lys:O</td>
<td>19:N:94:Val:CG2</td>
<td>2.64</td>
<td>0.46</td>
</tr>
<tr>
<td>23:R:105:Arg:NH2</td>
<td>23:R:112:Lys:CA</td>
<td>2.67</td>
<td>0.46</td>
</tr>
<tr>
<td>24:S:47:Ser:OG</td>
<td>24:S:48:Thr:N</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1074:G:C2</td>
<td>29:X:1075:C:H1'</td>
<td>2.50</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1373:G:N2</td>
<td>29:X:2193:C:H1'</td>
<td>2.30</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1455:C:O2'</td>
<td>29:X:1456:C:H5'</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:1819:U:O2'</td>
<td>29:X:1820:G:H5'</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:185:C:H2'</td>
<td>29:X:186:C:H6</td>
<td>1.81</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2043:A:C2</td>
<td>29:X:2481:G:C5</td>
<td>3.04</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2068:C:H2'</td>
<td>29:X:2069:U:O4'</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2359:U:N3</td>
<td>29:X:2360:C:C5</td>
<td>2.85</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2558:C:O2'</td>
<td>29:X:2586:G:H5'</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2849:C:O2'</td>
<td>29:X:2850:U:H5&quot;</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>29:X:2870:C:H2'</td>
<td>29:X:2871:U:H6</td>
<td>1.81</td>
<td>0.46</td>
</tr>
<tr>
<td>4:4:7:Val:HG32</td>
<td>4:4:34:Gln:HB3</td>
<td>1.97</td>
<td>0.45</td>
</tr>
<tr>
<td>7:B:14:ILE:CD1</td>
<td>7:B:183:Leu:HD12</td>
<td>2.46</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:164:Val:HB</td>
<td>8:C:165:Ser:H</td>
<td>1.41</td>
<td>0.45</td>
</tr>
</tbody>
</table>
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:D:10:ASP:CA</td>
<td>9:D:14:PRO:HD2</td>
<td>2.46</td>
<td>0.45</td>
</tr>
<tr>
<td>10:E:18:ASN:CB</td>
<td>10:E:25:LYS:HB3</td>
<td>2.33</td>
<td>0.45</td>
</tr>
<tr>
<td>10:E:38:ASN:HB2</td>
<td>10:E:41:LEU:CB</td>
<td>2.42</td>
<td>0.45</td>
</tr>
<tr>
<td>11:F:42:ASN:HA</td>
<td>11:F:45:THR:HG23</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:17:ARG:HH11</td>
<td>29:X:969:U:C5'</td>
<td>2.21</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:19:THR:CG2</td>
<td>31:Z:93:G:H5'</td>
<td>2.45</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:75:VAL:HG21</td>
<td>15:J:93:TYR:CE2</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>19:N:61:TRP:CA3</td>
<td>19:N:93:LYS:HA</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>20:O:49:GLU:C</td>
<td>20:O:51:ALA:N</td>
<td>2.68</td>
<td>0.45</td>
</tr>
<tr>
<td>23:R:93:ARG:NH1</td>
<td>23:R:108:VAL:C</td>
<td>2.70</td>
<td>0.45</td>
</tr>
<tr>
<td>23:R:83:LEU:O</td>
<td>23:R:84:VAL:CG2</td>
<td>2.59</td>
<td>0.45</td>
</tr>
<tr>
<td>23:R:88:THR:O</td>
<td>23:R:89:GLY:C</td>
<td>2.54</td>
<td>0.45</td>
</tr>
<tr>
<td>24:S:133:GLU:O</td>
<td>24:S:134:LEU:HB2</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>24:S:56:VAL:O</td>
<td>24:S:57:GLU:C</td>
<td>2.54</td>
<td>0.45</td>
</tr>
<tr>
<td>25:T:3:HIS:HD2</td>
<td>25:T:5:LYS:CD</td>
<td>2.15</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1122:A:C2</td>
<td>29:X:1123:G:O5'</td>
<td>2.64</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:122:G:O2'</td>
<td>29:X:123:U:H5&quot;</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>14:I:17:LYS:NZ</td>
<td>29:X:1258:G:OP2</td>
<td>2.46</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2055:G:C6</td>
<td>29:X:2056:C:C4</td>
<td>3.04</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2289:U:H3'</td>
<td>29:X:2290:G:C8</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2625:U:C6</td>
<td>29:X:2625:U:OP2</td>
<td>2.69</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2642:G:O2'</td>
<td>29:X:2643:G:H5'</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2698:G:H2'</td>
<td>29:X:2699:G:C8</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:327:G:H2'</td>
<td>29:X:328:G:H5'</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:44:SER:HG</td>
<td>29:X:37:G:OH1'</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:438:G:H2'</td>
<td>29:X:439:G:O6'</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:537:G:O2</td>
<td>29:X:537:G:H2'</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:649:G:N2</td>
<td>29:X:661:G:C2</td>
<td>2.84</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:88:G:O5'</td>
<td>29:X:89:G:H5'</td>
<td>2.15</td>
<td>0.45</td>
</tr>
<tr>
<td>9:D:92:ARG:HG1</td>
<td>31:Z:46:G:C4'</td>
<td>2.67</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>31:Z:27:A:N6</td>
<td>31:Z:56:G:OP2</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>10:E:7:GLN:HB3</td>
<td>10:E:51:LEU:HD13</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>12:G:106:TYR:O</td>
<td>12:G:110:LEU:CD1</td>
<td>2.64</td>
<td>0.45</td>
</tr>
<tr>
<td>12:G:94:LYS:O</td>
<td>12:G:117:GLU:N</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>12:G:42:VAL:HG22</td>
<td>12:G:166:LEU:HB2</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>14:I:64:GLY:O</td>
<td>14:I:65:PHE:CB</td>
<td>2.63</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:111:THR:HG23</td>
<td>15:J:114:GLN:CG</td>
<td>2.46</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:28:VAL:H</td>
<td>15:J:137:VAL:HG21</td>
<td>1.80</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:77:LYS:HG3</td>
<td>15:J:78:LYS:N</td>
<td>2.30</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:81:GLU:HG2</td>
<td>15:J:82:THR:H</td>
<td>1.80</td>
<td>0.45</td>
</tr>
<tr>
<td>21:P:12:LYS:O</td>
<td>21:P:16:GLN:HG2</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>23:R:90:LYS:HG3</td>
<td>23:R:91:ALA:O</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>26:U:15:VAL:O</td>
<td>26:U:16:ASN:C</td>
<td>2.54</td>
<td>0.45</td>
</tr>
<tr>
<td>27:V:17:GLU:O</td>
<td>27:V:21:ARG:HD3</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1173:G:C4</td>
<td>29:X:1174:G:C8</td>
<td>3.04</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1234:C:O2</td>
<td>29:X:1242:AC2</td>
<td>2.70</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1288:AC2</td>
<td>29:X:1289:AC2</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1376:C:AC2</td>
<td>29:X:1377:G:C8</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1724:C:AC2</td>
<td>29:X:1725:C:H5</td>
<td>2.46</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1802:AC2</td>
<td>29:X:1803:G:H5</td>
<td>2.47</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1858:AC2</td>
<td>29:X:1859:AC2</td>
<td>2.64</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:192:G:O2</td>
<td>29:X:193:AC2</td>
<td>2.32</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2038:C:H2</td>
<td>29:X:2483:U:H4</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2199:C:AC2</td>
<td>29:X:2200:G:C8</td>
<td>3.04</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2404:AC2</td>
<td>29:X:2405:AC2</td>
<td>2.32</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2797:G:O2</td>
<td>29:X:2798:G:O5</td>
<td>2.34</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2849:AC2</td>
<td>29:X:2850:U:H5</td>
<td>1.97</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:404:AC2</td>
<td>29:X:405:AC2</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:638:AC4</td>
<td>29:X:639:G:H5</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:732:G:AC2</td>
<td>29:X:733:G:C8</td>
<td>3.04</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:741:G:AC2</td>
<td>29:X:743:AC2</td>
<td>3.04</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:745:C:H2'</td>
<td>29:X:746:G:O4'</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:796:A:C3'</td>
<td>29:X:796:A:C8</td>
<td>3.00</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:862:A:H2'</td>
<td>29:X:863:C:O4'</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>6:A:72:LYS:HG3</td>
<td>6:A:97:TYR:HE2</td>
<td>1.82</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:154:ASP:O</td>
<td>8:C:157:THR:OG1</td>
<td>2.34</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:144:GLY:CA</td>
<td>8:C:166:TRP:CE2</td>
<td>2.99</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:173:ALA:HB1</td>
<td>8:C:193:LEU:CB</td>
<td>2.47</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:45:THR:O</td>
<td>8:C:87:LYS:NZ</td>
<td>2.47</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:74:VAL:O</td>
<td>8:C:76:THR:N</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>9:D:67:ILE:HG21</td>
<td>9:D:84:PRO:HB3</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>11:F:122:ALA:CB</td>
<td>29:X:1092:U:HB2</td>
<td>2.46</td>
<td>0.45</td>
</tr>
<tr>
<td>14:154:SER:O</td>
<td>14:159:ARG:HD3</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>23:R:93:ARG:O</td>
<td>23:R:95:ARG:CD</td>
<td>2.64</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1332:G:C2</td>
<td>29:X:1347:C:C2</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1651:U:HB2</td>
<td>29:X:1652:G:OP2</td>
<td>2.10</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1681:A:C8</td>
<td>29:X:1681:A:O5'</td>
<td>2.70</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1710:U:C5'</td>
<td>29:X:1711:C:C5</td>
<td>2.93</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2048:C:O2</td>
<td>29:X:2428:U:N3</td>
<td>2.44</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2209:G:C4</td>
<td>29:X:2210:C:C5</td>
<td>3.04</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2315:A:C2</td>
<td>29:X:2364:C:H1'</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:404:A:C5</td>
<td>29:X:405:C:C4</td>
<td>3.03</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:558:G:H2'</td>
<td>29:X:559:C:O4'</td>
<td>2.15</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:17:ARG:HZ</td>
<td>29:X:967:G:O6</td>
<td>2.64</td>
<td>0.45</td>
</tr>
<tr>
<td>7:B:136:ARG:NH1</td>
<td>7:B:137:ARG:N</td>
<td>2.65</td>
<td>0.45</td>
</tr>
<tr>
<td>7:B:38:THR:CG2</td>
<td>7:B:39:ALA:N</td>
<td>2.79</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:101:GLN:C</td>
<td>8:C:103:GLY:N</td>
<td>2.70</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:54:THR:HB</td>
<td>8:C:73:SER:HB3</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>9:D:8:TYR:O</td>
<td>9:D:12:VAL:CB</td>
<td>2.61</td>
<td>0.45</td>
</tr>
<tr>
<td>11:F:50:ASP:HB3</td>
<td>11:F:76:TYR:CE2</td>
<td>2.51</td>
<td>0.45</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>14:1:72:TYR:CE1</td>
<td>14:1:105:PRO:HG3</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:64:LYS:O</td>
<td>15:J:107:VAL:HA</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:35:LEU:HD11</td>
<td>15:J:130:THR:OG1</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>16:K:84:ALA:N</td>
<td>16:K:85:PRO:CD</td>
<td>2.80</td>
<td>0.45</td>
</tr>
<tr>
<td>16:K:94:TYR:CZ</td>
<td>16:K:115:LEU:O</td>
<td>2.70</td>
<td>0.45</td>
</tr>
<tr>
<td>18:M:8:ASN:HA</td>
<td>29:X:2851:G:OP1</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>20:O:38:LEU:O</td>
<td>20:O:39:PHE:CB</td>
<td>2.64</td>
<td>0.45</td>
</tr>
<tr>
<td>23:R:10:His:CD2</td>
<td>23:R:44:GLN:HE21</td>
<td>2.35</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1033:G:N2</td>
<td>29:X:1035:G:N2</td>
<td>2.64</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1174:G:N2</td>
<td>29:X:1175:A:C4</td>
<td>2.84</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1173:G:C6</td>
<td>29:X:1174:G:N7</td>
<td>2.84</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1373:G:N2</td>
<td>29:X:1374:G:O4'</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1491:C:C2</td>
<td>29:X:1492:A:C8</td>
<td>3.04</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1796:A:C2</td>
<td>29:X:1797:C:C5</td>
<td>3.04</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:181:A:H1'</td>
<td>29:X:183:U:C5</td>
<td>2.52</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2197:U:N3</td>
<td>29:X:2198:U:C4</td>
<td>2.84</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2043:A:H1'</td>
<td>29:X:2481:G:O4'</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2576:G:C6</td>
<td>29:X:2577:A:C6</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2721:A:H2'</td>
<td>29:X:2722:C:O4'</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:329:C:O2'</td>
<td>29:X:330:C:H5'</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:343:A:O2'</td>
<td>29:X:346:C:N4</td>
<td>2.48</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:531:G:O2'</td>
<td>29:X:532:A:H5'</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:805:G:C8</td>
<td>29:X:2419:C:H1'</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>17:L:37:His:HB2</td>
<td>31:Z:30:C:OP1</td>
<td>2.13</td>
<td>0.45</td>
</tr>
<tr>
<td>4:4:11:CYS:HG</td>
<td>4:4:32:HIS:CE1</td>
<td>2.35</td>
<td>0.45</td>
</tr>
<tr>
<td>7:B:143:GLN:HB3</td>
<td>29:X:2553:G:O2'</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:102:LEU:HD21</td>
<td>8:C:106:MET:HE1</td>
<td>1.97</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:50:GLN:HB2</td>
<td>29:X:814:G:OP1</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>9:D:108:LEU:HD22</td>
<td>9:D:114:PHE:HE1</td>
<td>1.80</td>
<td>0.45</td>
</tr>
<tr>
<td>10:E:9:ILE:HG22</td>
<td>10:E:11:VAL:CG2</td>
<td>2.46</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>10:E:126:PRO:HG3</td>
<td>10:E:130:ARG:HD3</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>11:F:111:LYS:HB3</td>
<td>11:F:111:LYS:HE3</td>
<td>1.87</td>
<td>0.45</td>
</tr>
<tr>
<td>11:F:119:SER:O</td>
<td>11:F:121:GLU:N</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>17:L:47:ARG:O</td>
<td>17:L:49:GLN:N</td>
<td>2.45</td>
<td>0.45</td>
</tr>
<tr>
<td>25:T:3:His:CD2</td>
<td>25:T:4:LYS:H</td>
<td>2.34</td>
<td>0.45</td>
</tr>
<tr>
<td>28:W:46:THR:OG1</td>
<td>29:X:864:C:H5'</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1086:C:C2'</td>
<td>29:X:1087:C:H5''</td>
<td>2.46</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1086:C:H2'</td>
<td>29:X:1087:C:H5''</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1324:G:O2'</td>
<td>29:X:1325:U:O5'</td>
<td>2.32</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1385:C:C1'</td>
<td>29:X:2192:U:C6</td>
<td>2.94</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:965:G:C2'</td>
<td>29:X:2253:A:N1</td>
<td>2.79</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2351:G:C2</td>
<td>29:X:2352:A:N7</td>
<td>2.84</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2438:A:C6</td>
<td>29:X:2473:G:C2</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2511:G:C4</td>
<td>29:X:2512:A:C8</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2602:G:H2'</td>
<td>29:X:2603:G:H8</td>
<td>1.82</td>
<td>0.45</td>
</tr>
<tr>
<td>10:E:160:LYS:NZ</td>
<td>29:X:2636:A:O3'</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2827:G:C2</td>
<td>29:X:2828:C:C2</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:862:A:C4</td>
<td>29:X:863:C:C5</td>
<td>3.04</td>
<td>0.45</td>
</tr>
<tr>
<td>7:B:19:ARG:NH1</td>
<td>7:B:185:LYS:HZ1</td>
<td>2.14</td>
<td>0.45</td>
</tr>
<tr>
<td>7:B:35:GLN:HB3</td>
<td>7:B:48:GLN:HB3</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:8:GLY:O</td>
<td>8:C:9:GLN:CB</td>
<td>2.62</td>
<td>0.45</td>
</tr>
<tr>
<td>9:D:14:PRO:O</td>
<td>9:D:15:ALA:C</td>
<td>2.55</td>
<td>0.45</td>
</tr>
<tr>
<td>10:E:113:VAL:HG11</td>
<td>10:E:151:VAL:HG13</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>10:E:38:ASN:H</td>
<td>10:E:41:LEU:CD2</td>
<td>2.29</td>
<td>0.45</td>
</tr>
<tr>
<td>12:G:43:VAL:HG23</td>
<td>12:G:165:VAL:HA</td>
<td>1.98</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:J:78:LYS:HG3</td>
<td>15:J:80:ALA:H</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>17:L:32:TYR:CE1</td>
<td>31:Z:9:G:H5&quot;</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>18:M:100:ARG:O</td>
<td>18:M:101:ARG:HB3</td>
<td>2.15</td>
<td>0.45</td>
</tr>
<tr>
<td>19:N:24:PHE:CD1</td>
<td>29:X:543:G:C5'</td>
<td>2.97</td>
<td>0.45</td>
</tr>
<tr>
<td>20:O:6:GLN:O</td>
<td>20:O:7:THR:CB</td>
<td>2.64</td>
<td>0.45</td>
</tr>
<tr>
<td>23:R:25:LEU:N</td>
<td>23:R:25:LEU:HD13</td>
<td>2.32</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1393:G:C2</td>
<td>29:X:1394:G:C8</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1608:U:H2'</td>
<td>29:X:1609:G:C8</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2282:G:C6</td>
<td>29:X:2293:G:C6</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2290:A:C8</td>
<td>29:X:2290:A:O5'</td>
<td>2.70</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2437:G:O2'</td>
<td>29:X:2439:U:C4</td>
<td>2.70</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1773:C:C2'</td>
<td>29:X:2587:G:O2'</td>
<td>2.65</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2779:C:C6</td>
<td>29:X:2779:C:H3'</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2797:G:H8</td>
<td>29:X:2797:G:O5'</td>
<td>2.00</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:492:G:O2'</td>
<td>29:X:517:A:N6</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:651:C:H42</td>
<td>29:X:658:G:H1</td>
<td>1.63</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:664:C:O2'</td>
<td>29:X:665:A:OP1</td>
<td>2.31</td>
<td>0.45</td>
</tr>
<tr>
<td>31:Z:35:C:H2'</td>
<td>31:Z:36:A:H8</td>
<td>1.80</td>
<td>0.45</td>
</tr>
<tr>
<td>31:Z:50:U:H2'</td>
<td>31:Z:51:G:H8</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>31:Z:54:U:H2'</td>
<td>31:Z:55:C:C6</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>31:Z:93:G:N2</td>
<td>31:Z:94:G:H1'</td>
<td>2.31</td>
<td>0.45</td>
</tr>
<tr>
<td>7:B:136:ARG:HH12</td>
<td>7:B:137:ARG:HA</td>
<td>1.82</td>
<td>0.45</td>
</tr>
<tr>
<td>7:B:5:LEU:CD1</td>
<td>7:B:81:PHE:HZ</td>
<td>2.29</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:122:GLY:CA</td>
<td>8:C:124:ASP:OD1</td>
<td>2.61</td>
<td>0.45</td>
</tr>
<tr>
<td>9:D:138:PHE:N</td>
<td>9:D:138:PHE:HD1</td>
<td>2.15</td>
<td>0.45</td>
</tr>
<tr>
<td>9:D:36:VAL:CG1</td>
<td>9:D:57:LEU:HD22</td>
<td>2.45</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:29:ALA:O</td>
<td>15:J:30:PHE:HB2</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:70:PHE:HA</td>
<td>15:J:71:PRO:HD3</td>
<td>1.61</td>
<td>0.45</td>
</tr>
<tr>
<td>19:N:49:ASP:O</td>
<td>19:N:53:LYS:HG2</td>
<td>2.16</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>29:X:177:A:H1'</td>
<td>29:X:1921:A:N6</td>
<td>2.32</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:203:G:N2</td>
<td>29:X:204:A:H2</td>
<td>2.15</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2324:G:C2</td>
<td>29:X:2360:C:H2'</td>
<td>2.52</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:235:C:C5</td>
<td>29:X:236:C:C4</td>
<td>3.04</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:235:C:C5</td>
<td>29:X:236:C:C5</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2380:U:C4</td>
<td>29:X:2381:A:C2</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2433:G:O2'</td>
<td>29:X:2434:G:H5'</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:198:A:C8</td>
<td>29:X:243:G:C5</td>
<td>3.04</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2652:G:C2</td>
<td>29:X:2653:A:C8</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2738:A:C2'</td>
<td>29:X:2739:G:H5'</td>
<td>2.46</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2770:A:O2'</td>
<td>29:X:2771:C:P</td>
<td>2.75</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2876:C:H2'</td>
<td>29:X:2877:A:C8</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:314:G:C6</td>
<td>29:X:326:A:C2</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:482:A:HO2'</td>
<td>29:X:483:A:H5'</td>
<td>1.78</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:732:G:O5'</td>
<td>29:X:732:G:C8</td>
<td>2.70</td>
<td>0.45</td>
</tr>
<tr>
<td>31:Z:38:C:OP2</td>
<td>31:Z:38:C:H6</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>9:D:133:LYS:O</td>
<td>9:D:134:GLU:C</td>
<td>2.54</td>
<td>0.45</td>
</tr>
<tr>
<td>9:D:39:GLY:HA2</td>
<td>9:D:86:GLY:CA</td>
<td>2.46</td>
<td>0.45</td>
</tr>
<tr>
<td>9:D:70:ALA:O</td>
<td>9:D:82:GLY:HA2</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>12:G:45:ASP:O</td>
<td>12:G:54:LEU:HD11</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:15:ARG:HD3</td>
<td>15:J:73:LYS:NZ</td>
<td>2.31</td>
<td>0.45</td>
</tr>
<tr>
<td>16:K:72:ASP:CG</td>
<td>16:K:75:VAL:HG23</td>
<td>2.37</td>
<td>0.45</td>
</tr>
<tr>
<td>20:O:30:GLY:O</td>
<td>20:O:31:ASP:C</td>
<td>2.55</td>
<td>0.45</td>
</tr>
<tr>
<td>23:R:93:ARG:CG</td>
<td>23:R:93:ARG:HH11</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>24:S:123:VAL:CA</td>
<td>24:S:161:ALA:HB2</td>
<td>2.45</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>29:X:1147:G:C4</td>
<td>29:X:1148:G:C8</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1176:C:H2'</td>
<td>29:X:1377:G:O4'</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1586:A:C5</td>
<td>29:X:1587:A:N7</td>
<td>2.85</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1655:G:O2'</td>
<td>29:X:1666:G:H5'</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1730:G:C6</td>
<td>29:X:1737:G:N1</td>
<td>2.85</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2264:C:H4'</td>
<td>29:X:2267:A:C5</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2646:C:H2'</td>
<td>29:X:2647:G:O4'</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2756:A:O2'</td>
<td>29:X:2761:A:O2'</td>
<td>2.32</td>
<td>0.45</td>
</tr>
<tr>
<td>12:G:162:LYS:NZ</td>
<td>29:X:2873:G:H21</td>
<td>2.15</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:311:A:N3</td>
<td>29:X:330:C:H1'</td>
<td>2.32</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:33:C:N4</td>
<td>29:X:4585:G:O2'</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:496:C:C2'</td>
<td>29:X:497:C:H5'</td>
<td>2.47</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:529:U:H2'</td>
<td>29:X:530:G:O4'</td>
<td>2.45</td>
<td>0.45</td>
</tr>
<tr>
<td>7:B:147:PRO:HG3</td>
<td>29:X:1141:U:C2</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:165:SER:O</td>
<td>8:C:166:TRP:O</td>
<td>2.34</td>
<td>0.45</td>
</tr>
<tr>
<td>9:D:34:ILE:HD13</td>
<td>9:D:156:ILE:HA</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>10:E:139:GLN:O</td>
<td>10:E:140:LEU:C</td>
<td>2.55</td>
<td>0.45</td>
</tr>
<tr>
<td>11:F:26:ALA:O</td>
<td>11:F:30:TYR:HE2</td>
<td>2.00</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:103:VAL:O</td>
<td>15:J:103:VAL:CG1</td>
<td>2.63</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:12:LYS:HD3</td>
<td>29:X:923:A:C6</td>
<td>2.52</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:12:LYS:O</td>
<td>15:J:13:GLN:CB</td>
<td>2.48</td>
<td>0.45</td>
</tr>
<tr>
<td>15:J:19:THR:HG21</td>
<td>15:J:99:LYS:HZ2</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>18:M:100:ARG:HB3</td>
<td>18:M:100:ARG:HE</td>
<td>1.65</td>
<td>0.45</td>
</tr>
<tr>
<td>19:N:14:HIS:CD2</td>
<td>19:N:32:TYR:CE1</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>21:P:11:LYS:O</td>
<td>21:P:13:GLN:N</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>23:R:17:LYS:HB3</td>
<td>23:R:18:LYS:CE</td>
<td>2.47</td>
<td>0.45</td>
</tr>
<tr>
<td>22:Q:15:LYS:CG</td>
<td>29:X:1404:C:O2</td>
<td>2.64</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1556:A:H2'</td>
<td>29:X:1557:G:H8</td>
<td>1.82</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>29:X:1558:C:C2'</td>
<td>29:X:1559:G:O5'</td>
<td>2.65</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2030:U:O2'</td>
<td>29:X:2031:A:C5'</td>
<td>2.65</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2229:G:O4'</td>
<td>29:X:2229:G:N3</td>
<td>2.46</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:24:G:C4</td>
<td>29:X:25:U:C6</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2629:U:H2'</td>
<td>29:X:2630:C:H6</td>
<td>1.82</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2847:G:C4</td>
<td>29:X:2848:U:N7</td>
<td>2.85</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2849:C:H2'</td>
<td>29:X:2850:U:H5''</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:330:C:C4</td>
<td>29:X:331:U:C4</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:764:A:C6</td>
<td>29:X:802:A:C6</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:849:G:C5</td>
<td>29:X:850:C:C4</td>
<td>3.04</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:876:A:C2</td>
<td>29:X:877:G:C4</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:677:G:H5'</td>
<td>29:X:951:G:H4'</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>31:Z:15:A:N1</td>
<td>31:Z:72:C:H5'</td>
<td>2.31</td>
<td>0.45</td>
</tr>
<tr>
<td>31:Z:2:C:HO5'</td>
<td>31:Z:2:C:H6</td>
<td>1.64</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:94:THR:HG21</td>
<td>29:X:618:A:OP1</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>9:D:36:VAL:HG13</td>
<td>9:D:152:MET:HE3</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>12:G:85:ALA:C</td>
<td>12:G:87:GLN:N</td>
<td>2.70</td>
<td>0.45</td>
</tr>
<tr>
<td>17:L:76:ALA:HB1</td>
<td>17:L:111:GLY:CA</td>
<td>2.47</td>
<td>0.45</td>
</tr>
<tr>
<td>18:M:32:THR:HG22</td>
<td>18:M:33:VAL:H</td>
<td>1.82</td>
<td>0.45</td>
</tr>
<tr>
<td>20:O:26:GLN:O</td>
<td>20:O:27:GLY:C</td>
<td>2.55</td>
<td>0.45</td>
</tr>
<tr>
<td>24:S:8:ARG:O</td>
<td>24:S:10:PRO:HD3</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1073:G:H2'</td>
<td>29:X:1074:G:H8</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1226:A:C2</td>
<td>29:X:1250:A:H1'</td>
<td>2.51</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:1399:C:O2'</td>
<td>29:X:1400:A:C5'</td>
<td>2.65</td>
<td>0.45</td>
</tr>
<tr>
<td>6:A:60:ARG:OZ</td>
<td>29:X:1583:A:OP1</td>
<td>2.64</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1778:U:C4</td>
<td>29:X:1779:C:N4</td>
<td>2.85</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:1939:U:C4</td>
<td>29:X:1940:C:C4</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2088:U:H2'</td>
<td>29:X:2089:C:C6</td>
<td>2.52</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2179:C:H2'</td>
<td>29:X:2180:U:O4'</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2487:G:C2</td>
<td>29:X:2561:G:C6</td>
<td>3.05</td>
<td>0.45</td>
</tr>
<tr>
<td>7:B:154:LYS:HE3</td>
<td>29:X:2598:C:O2'</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:2870:C:H2'</td>
<td>29:X:2871:U:C6</td>
<td>2.52</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:194:G:O6</td>
<td>29:X:444:U:O2</td>
<td>2.35</td>
<td>0.45</td>
</tr>
<tr>
<td>8:C:93:TYR:CE1</td>
<td>29:X:673:G:H5'</td>
<td>2.51</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:731:G:C2'</td>
<td>29:X:732:G:C4'</td>
<td>2.95</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:808:O:O2'</td>
<td>29:X:809:C:H5'</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>29:X:677:G:C4'</td>
<td>29:X:951:G:H5''</td>
<td>2.46</td>
<td>0.45</td>
</tr>
<tr>
<td>7:B:85:ALA:N</td>
<td>7:B:86:PRO:HD2</td>
<td>2.30</td>
<td>0.44</td>
</tr>
<tr>
<td>9:D:123:ASP:CB</td>
<td>9:D:127:ASN:HB2</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>14:I:36:GLY:CA</td>
<td>15:I:114:GLN:O</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>16:K:66:VAL:CG1</td>
<td>16:K:70:ILE:HG13</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>17:L:15:ARG:CD</td>
<td>17:L:91:ARG:NH1</td>
<td>2.65</td>
<td>0.44</td>
</tr>
<tr>
<td>17:L:97:HIP:CD2</td>
<td>17:L:98:GLY:N</td>
<td>2.72</td>
<td>0.44</td>
</tr>
<tr>
<td>19:N:31:GLN:NE2</td>
<td>29:X:589:C:C4</td>
<td>2.73</td>
<td>0.44</td>
</tr>
<tr>
<td>21:P:78:ASN:O</td>
<td>21:P:79:ALA:C</td>
<td>2.54</td>
<td>0.44</td>
</tr>
<tr>
<td>23:R:11:ASN:CB</td>
<td>23:R:12:ASN:CB</td>
<td>2.59</td>
<td>0.44</td>
</tr>
<tr>
<td>23:R:87:GLU:H</td>
<td>23:R:87:GLU:H</td>
<td>2.21</td>
<td>0.44</td>
</tr>
<tr>
<td>24:S:100:THR:HG23</td>
<td>24:S:138:VAL:CG2</td>
<td>2.46</td>
<td>0.44</td>
</tr>
<tr>
<td>24:S:43:PHE:CE1</td>
<td>24:S:47:SER:HA</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>26:U:21:ARG:NH1</td>
<td>29:X:394:U:OP2</td>
<td>2.50</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:82:G:G2</td>
<td>29:X:100:G:H2''</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1153:G:O2'</td>
<td>29:X:1153:G:O2'</td>
<td>2.65</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1290:A:C8</td>
<td>29:X:1290:A:C8</td>
<td>3.05</td>
<td>0.44</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>29:X:1716:G:O3'</td>
<td>29:X:1717:A:H4'</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2661:G:N2</td>
<td>29:X:2662:C:H1'</td>
<td>2.32</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2707:G:H2'</td>
<td>29:X:2708:U:H6</td>
<td>1.82</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2026:C:N3</td>
<td>29:X:2757:G:C2</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:474:G:N2</td>
<td>29:X:477:A:C8</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:757:U:H2'</td>
<td>29:X:758:G:C5'</td>
<td>2.47</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:91:A:H2'</td>
<td>29:X:92:U:C6</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>17:L:64:LYS:HZ3</td>
<td>31:Z:53:G:P</td>
<td>2.40</td>
<td>0.44</td>
</tr>
<tr>
<td>6:A:208:LYS:HD2</td>
<td>29:X:1764:A:N6</td>
<td>2.31</td>
<td>0.44</td>
</tr>
<tr>
<td>7:B:60:ASN:CB</td>
<td>7:B:62:PRO:HD2</td>
<td>2.46</td>
<td>0.44</td>
</tr>
<tr>
<td>8:C:112:GLN:HB3</td>
<td>8:C:116:LYS:HD3</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>8:C:144:GLY:HA2</td>
<td>8:C:166:TRP:NE1</td>
<td>2.32</td>
<td>0.44</td>
</tr>
<tr>
<td>8:C:28:HIS:O</td>
<td>8:C:29:GLU:C</td>
<td>2.56</td>
<td>0.44</td>
</tr>
<tr>
<td>8:C:83:ALA:O</td>
<td>8:C:84:PHE:CB</td>
<td>2.64</td>
<td>0.44</td>
</tr>
<tr>
<td>9:D:108:LEU:O</td>
<td>9:D:111:ILE:HG13</td>
<td>2.16</td>
<td>0.44</td>
</tr>
<tr>
<td>10:E:83:TYR:CE1</td>
<td>10:E:138:LYS:HB2</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>15:J:99:LYS:CE</td>
<td>15:J:100:PRO:HD2</td>
<td>2.45</td>
<td>0.44</td>
</tr>
<tr>
<td>17:L:33:ARG:HH22</td>
<td>17:L:103:LEU:CA</td>
<td>2.31</td>
<td>0.44</td>
</tr>
<tr>
<td>18:M:38:LYS:O</td>
<td>18:M:40:ARG:N</td>
<td>2.50</td>
<td>0.44</td>
</tr>
<tr>
<td>19:N:91:ASN:HA</td>
<td>20:O:10:LYS:NZ</td>
<td>2.33</td>
<td>0.44</td>
</tr>
<tr>
<td>21:P:81:HIS:O</td>
<td>21:P:83:ASP:N</td>
<td>2.50</td>
<td>0.44</td>
</tr>
<tr>
<td>24:S:132:GLN:O</td>
<td>24:S:133:GLU:HB3</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>24:S:141:MET:HB3</td>
<td>24:S:145:ASP:HB2</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>25:T:32:LYS:HB2</td>
<td>25:T:35:ASN:ND2</td>
<td>2.32</td>
<td>0.44</td>
</tr>
<tr>
<td>25:T:56:ASP:CG</td>
<td>25:T:58:THR:OG1</td>
<td>2.56</td>
<td>0.44</td>
</tr>
<tr>
<td>27:V:1:MET:HG3</td>
<td>27:V:3:PRO:CD</td>
<td>2.48</td>
<td>0.44</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>29:X:1003:C:O2</td>
<td>29:X:1003:C:H2'</td>
<td>2.16</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1411:C:O2'</td>
<td>29:X:1412:C:H5'</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1462:C:O2'</td>
<td>29:X:1463:A:H5'</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1698:C:H4'</td>
<td>29:X:1699:A:OP2</td>
<td>2.13</td>
<td>0.44</td>
</tr>
<tr>
<td>6:A:37:LEU:CD1</td>
<td>29:X:1808:C:H41</td>
<td>2.29</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1820:G:O2'</td>
<td>29:X:1821:A:C5'</td>
<td>2.65</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2057:U:H1'</td>
<td>29:X:2577:A:N3</td>
<td>2.32</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2634:G:O2'</td>
<td>29:X:2643:G:C6</td>
<td>2.71</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:729:A:C2</td>
<td>29:X:730:C:OP2</td>
<td>2.70</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:939:C:C4'</td>
<td>29:X:940:G:O5'</td>
<td>2.65</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:984:A:C4</td>
<td>29:X:1202:U:C4</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>31:Z:120:G:C6</td>
<td>31:Z:121:G:N7</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>31:Z:30:C:H2'</td>
<td>31:Z:31:A:C8</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>8:C:112:GLN:NE2</td>
<td>8:C:116:LYS:HB2</td>
<td>2.33</td>
<td>0.44</td>
</tr>
<tr>
<td>10:E:22:GLY:O</td>
<td>10:E:24:PHE:CD1</td>
<td>2.70</td>
<td>0.44</td>
</tr>
<tr>
<td>12:G:107:GLN:HA</td>
<td>12:G:110:LEU:CG</td>
<td>2.43</td>
<td>0.44</td>
</tr>
<tr>
<td>12:G:155:THR:O</td>
<td>12:G:156:HIS:C</td>
<td>2.56</td>
<td>0.44</td>
</tr>
<tr>
<td>12:G:32:TYR:CD1</td>
<td>12:G:33:ILE:N</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>7:B:176:ARG:NE</td>
<td>18:M:16:ILE:HG12</td>
<td>2.24</td>
<td>0.44</td>
</tr>
<tr>
<td>23:R:14:LEU:HD13</td>
<td>23:R:39:ALA:HB1</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>23:R:58:VAL:C</td>
<td>23:R:60:PRO:HD3</td>
<td>2.38</td>
<td>0.44</td>
</tr>
<tr>
<td>23:R:93:ARG:C</td>
<td>23:R:95:ARG:NH1</td>
<td>2.70</td>
<td>0.44</td>
</tr>
<tr>
<td>19:N:58:ARG:CZ</td>
<td>29:X:1008:G:OP2</td>
<td>2.65</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>29:X:1135:C:C2</td>
<td>29:X:1136:G:N7</td>
<td>2.86</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1332:G:C2</td>
<td>29:X:1347:C:N3</td>
<td>2.86</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1375:C:N3</td>
<td>29:X:1376:C:C6</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1424:C:H2'</td>
<td>29:X:1425:G:H8</td>
<td>1.82</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1569:A:C5</td>
<td>29:X:1571:G:C4</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1629:G:H3'</td>
<td>29:X:1633:C:N4</td>
<td>2.33</td>
<td>0.44</td>
</tr>
<tr>
<td>6:A:179:SER:CB</td>
<td>29:X:1790:G:O6</td>
<td>2.65</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1804:U:O2'</td>
<td>29:X:1805:G:H5'</td>
<td>2.16</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2055:G:N1</td>
<td>29:X:2417:U:C2</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2073:A:C6</td>
<td>29:X:2074:U:C4</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>13:H:1:MET:HE1</td>
<td>29:X:2706:U:H1'</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2814:G:C4</td>
<td>29:X:2815:C:C6</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>8:C:98:GLN:NE2</td>
<td>29:X:611:C:O4'</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:692:C:H2'</td>
<td>29:X:693:A:C8</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>6:A:255:LYS:O</td>
<td>29:X:1788:C:H4'</td>
<td>2.16</td>
<td>0.44</td>
</tr>
<tr>
<td>7:B:80:GLU:OE2</td>
<td>29:X:2615:U:C4'</td>
<td>2.64</td>
<td>0.44</td>
</tr>
<tr>
<td>9:D:120:ASN:O</td>
<td>9:D:122:PHE:CE1</td>
<td>2.71</td>
<td>0.44</td>
</tr>
<tr>
<td>9:D:133:LYS:O</td>
<td>9:D:151:GLY:CA</td>
<td>2.64</td>
<td>0.44</td>
</tr>
<tr>
<td>9:D:40:LEU:HA</td>
<td>9:D:150:ARG:HH21</td>
<td>1.82</td>
<td>0.44</td>
</tr>
<tr>
<td>12:G:140:GLN:O</td>
<td>12:G:141:GLY:C</td>
<td>2.54</td>
<td>0.44</td>
</tr>
<tr>
<td>14:I:8:PRO:C</td>
<td>29:X:1218:C:O2'</td>
<td>2.55</td>
<td>0.44</td>
</tr>
<tr>
<td>15:J:112:GLU:O</td>
<td>15:J:115:ALA:HB3</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>16:K:56:LYS:HG2</td>
<td>16:K:56:LYS:O</td>
<td>2.16</td>
<td>0.44</td>
</tr>
<tr>
<td>23:R:25:LEU:C</td>
<td>23:R:25:LEU:HD13</td>
<td>2.38</td>
<td>0.44</td>
</tr>
<tr>
<td>24:S:70:GLN:HA</td>
<td>24:S:70:GLN:NE2</td>
<td>2.33</td>
<td>0.44</td>
</tr>
<tr>
<td>26:U:64:ALA:C</td>
<td>26:U:66:ALA:N</td>
<td>2.70</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1038:U:O2</td>
<td>29:X:2466:G:O3'</td>
<td>2.35</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1136:G:H3'</td>
<td>29:X:1137:A:H8</td>
<td>1.82</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>29:X:1248:G:C6</td>
<td>29:X:1249:G:N1</td>
<td>2.86</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1372:A:C5</td>
<td>29:X:1373:G:C8</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1816:G:C6</td>
<td>29:X:1817:U:C4</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1947:G:N1</td>
<td>29:X:1950:C:C4</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:208:C:N4</td>
<td>29:X:209:G:H21</td>
<td>2.15</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2311:U:O2</td>
<td>29:X:2311:U:C3</td>
<td>2.65</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2576:G:C6</td>
<td>29:X:2577:A:N6</td>
<td>2.86</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:580:A:C5</td>
<td>29:X:584:A:N7</td>
<td>2.86</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:757:U:C2</td>
<td>29:X:758:G:C5</td>
<td>2.92</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:936:A:H2</td>
<td>29:X:937:C:C6</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:944:A:T0</td>
<td>29:X:945:G:H5</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>31:Z:25:G:H2</td>
<td>31:Z:26:G:C8</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>31:Z:3:AC8</td>
<td>31:Z:3:AO5</td>
<td>2.71</td>
<td>0.44</td>
</tr>
<tr>
<td>31:Z:75:AC6</td>
<td>31:Z:76:U:C2</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>4:4:1:MET:HA</td>
<td>4:4:1:MET:CE</td>
<td>2.45</td>
<td>0.44</td>
</tr>
<tr>
<td>7:B:59:VAL:HG21</td>
<td>7:B:74:PRO:HB3</td>
<td>1.99</td>
<td>0.44</td>
</tr>
<tr>
<td>8:C:161:ALA:HB3</td>
<td>8:C:169:VAL:HG21</td>
<td>1.99</td>
<td>0.44</td>
</tr>
<tr>
<td>10:E:10:ALA:O</td>
<td>10:E:12:PRO:HD3</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>11:F:69:THR:HG22</td>
<td>11:F:70:LYS:N</td>
<td>2.32</td>
<td>0.44</td>
</tr>
<tr>
<td>16:K:10:LEU:HD23</td>
<td>16:K:17:ARG:HB2</td>
<td>1.95</td>
<td>0.44</td>
</tr>
<tr>
<td>21:P:18:VAL:CG1</td>
<td>21:P:19:LYS:N</td>
<td>2.80</td>
<td>0.44</td>
</tr>
<tr>
<td>23:R:17:LYS:O</td>
<td>23:R:19:GLY:N</td>
<td>2.51</td>
<td>0.44</td>
</tr>
<tr>
<td>24:S:1:MET:N</td>
<td>24:S:52:PHE:HE2</td>
<td>2.15</td>
<td>0.44</td>
</tr>
<tr>
<td>24:S:64:ALA:HB2</td>
<td>24:S:85:MET:HE2</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>26:U:11:LYS:NZ</td>
<td>26:U:75:TYR:CB</td>
<td>2.76</td>
<td>0.44</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>27:V:14:PHE:HE2</td>
<td>27:V:57:LYS:H</td>
<td>1.65</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1215:A:C2</td>
<td>29:X:1258:G:C4</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1351:G:C2</td>
<td>29:X:1352:G:C4</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1375:C:N3</td>
<td>29:X:1376:C:C5</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2212:U:C2'</td>
<td>29:X:2213:G:H8</td>
<td>2.29</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2239:C:N3</td>
<td>29:X:2240:C:C5</td>
<td>2.86</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2493:U:N3</td>
<td>29:X:2494:C:N4</td>
<td>2.65</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1922:U:O2'</td>
<td>29:X:2571:G:C1'</td>
<td>2.66</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2618:A:H1'</td>
<td>29:X:2758:A:C2</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2767:C:O2'</td>
<td>29:X:2768:C:H5'</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:938:G:O2'</td>
<td>29:X:939:C:O5'</td>
<td>2.26</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:965:G:H2'</td>
<td>29:X:966:A:O4'</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>31:Z:16:U:O2'</td>
<td>31:Z:110:U:HI'</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>4:4:15:LYS:HB2</td>
<td>4:4:26:ILE:CG1</td>
<td>2.47</td>
<td>0.44</td>
</tr>
<tr>
<td>4:4:8:LYS:H</td>
<td>4:4:34:GLN:HE22</td>
<td>1.66</td>
<td>0.44</td>
</tr>
<tr>
<td>9:D:33:LYS:HE3</td>
<td>9:D:157:VAL:HG21</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>11:F:100:ASN:N</td>
<td>11:F:103:GLN:NE2</td>
<td>2.51</td>
<td>0.44</td>
</tr>
<tr>
<td>11:F:25:PRO:O</td>
<td>11:F:26:ALA:C</td>
<td>2.54</td>
<td>0.44</td>
</tr>
<tr>
<td>12:G:75:ILE:HD13</td>
<td>12:G:144:MET:HG2</td>
<td>1.99</td>
<td>0.44</td>
</tr>
<tr>
<td>14:I:7:LYS:N</td>
<td>14:I:7:LYS:HD3</td>
<td>2.32</td>
<td>0.44</td>
</tr>
<tr>
<td>15:J:99:LYS:CD</td>
<td>15:J:100:PRO:CD</td>
<td>2.95</td>
<td>0.44</td>
</tr>
<tr>
<td>16:K:90:ARG:HA</td>
<td>16:K:91:PRO:HD3</td>
<td>1.62</td>
<td>0.44</td>
</tr>
<tr>
<td>17:L:39:TYR:O</td>
<td>17:L:41:GLN:N</td>
<td>2.51</td>
<td>0.44</td>
</tr>
<tr>
<td>21:P:112:GLY:O</td>
<td>21:P:113:SER:C</td>
<td>2.54</td>
<td>0.44</td>
</tr>
<tr>
<td>21:P:41:VAL:O</td>
<td>21:P:44:VAL:HG22</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>23:R:41:PRO:O</td>
<td>23:R:44:GLN:OE1</td>
<td>2.35</td>
<td>0.44</td>
</tr>
<tr>
<td>24:S:24:TYR:O</td>
<td>24:S:85:MET:HB2</td>
<td>2.17</td>
<td>0.44</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>26:U:20:ARG:HD3</td>
<td>26:U:43:ARG:NH2</td>
<td>2.32</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1174:G:N2</td>
<td>29:X:1175:A:C5</td>
<td>2.86</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:121:G:O3'</td>
<td>29:X:1389:C:H4'</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1230:C:N3</td>
<td>29:X:1231:A:N7</td>
<td>2.66</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1399:C:H2'</td>
<td>29:X:1400:A:C8</td>
<td>2.45</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1552:C:O2</td>
<td>29:X:1553:G:C2</td>
<td>2.71</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1621:C:O4'</td>
<td>29:X:1626:A:C6</td>
<td>2.70</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1832:G:C6</td>
<td>29:X:1833:U:C4</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1840:A:C8</td>
<td>29:X:1841:G:C8</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:184:A:C8</td>
<td>29:X:185:C:C5</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2033:C:C4</td>
<td>29:X:2034:A:C6</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:204:A:N7</td>
<td>29:X:2386:G:C4'</td>
<td>2.81</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2232:G:H2'</td>
<td>29:X:2233:C:C6</td>
<td>2.53</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2327:U:O4</td>
<td>29:X:2361:G:N2</td>
<td>2.51</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2329:C:H2'</td>
<td>29:X:2330:G:C8</td>
<td>2.53</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2423:G:C2</td>
<td>29:X:2424:G:H1'</td>
<td>2.53</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2666:U:C5</td>
<td>29:X:2667:C:C4</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2714:A:H2'</td>
<td>29:X:2715:C:O4'</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2828:C:O2'</td>
<td>29:X:2829:A:H5'</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:416:U:H4'</td>
<td>29:X:419:G:C1'</td>
<td>2.47</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:671:A:H2'</td>
<td>29:X:672:C:C6</td>
<td>2.53</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:76:C:H2'</td>
<td>29:X:77:C:H6</td>
<td>1.83</td>
<td>0.44</td>
</tr>
<tr>
<td>31:Z:116:C:H2'</td>
<td>31:Z:117:G:O4'</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>6:A:160:GLY:HA2</td>
<td>6:A:197:GLY:HA2</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>7:B:117:MET:SD</td>
<td>7:B:136:ARG:HG3</td>
<td>2.58</td>
<td>0.44</td>
</tr>
<tr>
<td>7:B:143:GLN:NE2</td>
<td>7:B:143:GLN:N</td>
<td>2.61</td>
<td>0.44</td>
</tr>
<tr>
<td>10:E:54:ARG:HE</td>
<td>10:E:57:ASP:CA</td>
<td>2.29</td>
<td>0.44</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>12:G:43:VAL:O</td>
<td>12:G:167:LYS:HG3</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>17:L:107:ALA:C</td>
<td>17:L:109:GLU:N</td>
<td>2.71</td>
<td>0.44</td>
</tr>
<tr>
<td>18:M:93:ILE:CG2</td>
<td>18:M:94:VAL:N</td>
<td>2.81</td>
<td>0.44</td>
</tr>
<tr>
<td>21:P:85:MET:HE2</td>
<td>21:P:130:GLU:HG3</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>23:R:95:ARG:O</td>
<td>23:R:96:LYS:HB3</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>24:S:6:LYS:HB2</td>
<td>24:S:31:SER:CB</td>
<td>2.45</td>
<td>0.44</td>
</tr>
<tr>
<td>24:S:73:LYS:C</td>
<td>24:S:75:LYS:N</td>
<td>2.70</td>
<td>0.44</td>
</tr>
<tr>
<td>24:S:67:LYS:HB3</td>
<td>24:S:82:ASP:CB</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>26:U:11:LYS:O</td>
<td>26:U:12:ASN:HB2</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1031:C:P</td>
<td>29:X:1045:G:H21</td>
<td>2.40</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1094:C:C2'</td>
<td>29:X:1096:A:H5'</td>
<td>2.46</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1183:C:H2'</td>
<td>29:X:1184:G:C8</td>
<td>2.53</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1385:C:H1'</td>
<td>29:X:2192:U:C4</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1515:U:O2'</td>
<td>29:X:1516:A:H5'</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1652:G:C6</td>
<td>29:X:1653:C:C4</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>6:A:159:ALA:O</td>
<td>29:X:1812:U:C2</td>
<td>2.70</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2022:C:C4</td>
<td>29:X:2023:C:C5</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2229:G:HO2'</td>
<td>29:X:2230:G:P</td>
<td>2.41</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2232:G:H2'</td>
<td>29:X:2233:C:H6</td>
<td>1.83</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2301:A:C5</td>
<td>29:X:2312:A:N6</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2499:C:O2'</td>
<td>29:X:2500:C:H5'</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2586:G:C2</td>
<td>29:X:2587:G:C4</td>
<td>3.05</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1:G:H2'</td>
<td>29:X:2:G:O4'</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:338:G:N7</td>
<td>29:X:343:A:N7</td>
<td>2.66</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:353:G:H2'</td>
<td>29:X:354:C:C6</td>
<td>2.53</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:427:C:H1'</td>
<td>29:X:1856:U:C1'</td>
<td>2.41</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:532:A:H2'</td>
<td>29:X:533:C:H6</td>
<td>1.82</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:676:G:C6</td>
<td>29:X:677:G:C5</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:915:C:O2'</td>
<td>29:X:916:U:H5'</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:973:U:C4</td>
<td>29:X:974:U:C5</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:972:C:H5'</td>
<td>29:X:973:U:P</td>
<td>2.58</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2861:A:O2'</td>
<td>30:Y:31:THR:HG23</td>
<td>2.18</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>7:B:136:ARG:CB</td>
<td>7:B:136:ARG:HH11</td>
<td>2.31</td>
<td>0.44</td>
</tr>
<tr>
<td>7:B:136:ARG:HH12</td>
<td>7:B:150:VAL:CG1</td>
<td>2.95</td>
<td>0.44</td>
</tr>
<tr>
<td>7:B:136:ARG:HH12</td>
<td>7:B:181:LEU:N</td>
<td>2.70</td>
<td>0.44</td>
</tr>
<tr>
<td>7:B:179:GLU:C</td>
<td>7:B:178:LEU:HD21</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>8:C:158:ARG:HD21</td>
<td>8:C:169:VAL:CG1</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>8:C:179:ASP:C</td>
<td>8:C:182:ARG:HB3</td>
<td>2.37</td>
<td>0.44</td>
</tr>
<tr>
<td>9:D:80:ARG:CG</td>
<td>9:D:81:GLN:N</td>
<td>2.80</td>
<td>0.44</td>
</tr>
<tr>
<td>14:I:55:ARG:O</td>
<td>14:I:56:LEU:HB2</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>15:J:44:LYS:O</td>
<td>15:J:45:SER:C</td>
<td>2.55</td>
<td>0.44</td>
</tr>
<tr>
<td>15:J:89:GLY:C</td>
<td>15:J:91:VAL:N</td>
<td>2.72</td>
<td>0.44</td>
</tr>
<tr>
<td>17:L:37:HIS:C</td>
<td>17:L:38:ILE:O</td>
<td>2.55</td>
<td>0.44</td>
</tr>
<tr>
<td>17:L:81:GLU:C</td>
<td>17:L:82:LYS:HG2</td>
<td>2.38</td>
<td>0.44</td>
</tr>
<tr>
<td>17:L:89:PHE:CD1</td>
<td>17:L:89:PHE:N</td>
<td>2.83</td>
<td>0.44</td>
</tr>
<tr>
<td>21:P:118:LYS:HD21</td>
<td>21:P:120:ARG:NH2</td>
<td>2.33</td>
<td>0.44</td>
</tr>
<tr>
<td>21:P:37:LYS:NZ</td>
<td>21:P:64:ALA:N</td>
<td>2.66</td>
<td>0.44</td>
</tr>
<tr>
<td>21:P:8:PHE:O</td>
<td>21:P:17:GLN:NE2</td>
<td>2.46</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1369:G:N2</td>
<td>29:X:1370:U:H1'</td>
<td>2.33</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1414:G:H2'</td>
<td>29:X:1415:G:O4'</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:1502:G:N1</td>
<td>29:X:1503:G:C5</td>
<td>2.86</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2298:U:O2'</td>
<td>29:X:2299:G:C4</td>
<td>2.68</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2697:G:O2'</td>
<td>29:X:2698:G:H5'</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:423:G:C6</td>
<td>29:X:431:G:C6</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:469:G:H22</td>
<td>29:X:480:G:H2'</td>
<td>1.82</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:526:G:H1'</td>
<td>29:X:524:G:H61</td>
<td>1.82</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:679:G:H2'</td>
<td>29:X:680:G:C6</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>14:I:45:LYS:NZ</td>
<td>29:X:817:A:OP1</td>
<td>2.47</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:84:G:N3</td>
<td>29:X:101:G:C2</td>
<td>2.86</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:959:G:H2'</td>
<td>29:X:960:G:C6</td>
<td>2.52</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>8:C:31:VAL:O</td>
<td>8:C:32:THR:C</td>
<td>2.57</td>
<td>0.44</td>
</tr>
<tr>
<td>8:C:45:THR:O</td>
<td>8:C:45:THR:HG22</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>12:G:104:THR:OG1</td>
<td>12:G:105:GLY:N</td>
<td>2.49</td>
<td>0.44</td>
</tr>
<tr>
<td>14:I:11:GLY:O</td>
<td>14:I:13:ARG:N</td>
<td>2.50</td>
<td>0.44</td>
</tr>
<tr>
<td>14:I:18:ARG:CG</td>
<td>14:I:21:ARG:HD3</td>
<td>2.47</td>
<td>0.44</td>
</tr>
<tr>
<td>15:J:53:ILE:O</td>
<td>15:J:54:VAL:C</td>
<td>2.54</td>
<td>0.44</td>
</tr>
<tr>
<td>20:O:32:LYS:HA</td>
<td>20:O:32:LYS:HD3</td>
<td>1.89</td>
<td>0.44</td>
</tr>
<tr>
<td>24:S:112:LEU:O</td>
<td>24:S:172:LEU:N</td>
<td>2.48</td>
<td>0.44</td>
</tr>
<tr>
<td>24:S:35:ASP:OD1</td>
<td>24:S:38:ALA:N</td>
<td>2.36</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:985:G:C4</td>
<td>29:X:1200:G:N2</td>
<td>2.85</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2262:G:C2</td>
<td>29:X:2368:G:C2</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2271:G:H2</td>
<td>29:X:2272:A:C8</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:2321:G:H2'</td>
<td>29:X:2321:C:O2</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:209:G:N2</td>
<td>29:X:433:G:OP1</td>
<td>2.51</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:714:G:C6</td>
<td>29:X:715:U:C5</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:862:G:C4</td>
<td>29:X:863:C:C6</td>
<td>3.06</td>
<td>0.44</td>
</tr>
<tr>
<td>29:X:927:G:O2</td>
<td>31:Z:103:G:H4'</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>7:B:110:GLY:O</td>
<td>16:K:3:HIS:CD2</td>
<td>2.71</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:179:ASP:HA</td>
<td>8:C:182:ARG:HB3</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:28:ARG:CG</td>
<td>14:I:21:ARG:NH1</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:3:GLN:HE22</td>
<td>8:C:4:ILE:HG13</td>
<td>1.81</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:61:GLN:HA</td>
<td>8:C:61:GLN:HE21</td>
<td>1.80</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:8:TYR:CD1</td>
<td>9:D:173:MET:SD</td>
<td>2.97</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:88:LYS:HE3</td>
<td>29:X:2293:G:OP1</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>11:F:26:ALA:HB1</td>
<td>11:F:27:LEU:HD12</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>11:F:49:GLY:O</td>
<td>11:F:50:ASP:HB2</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>11:F:7:ILE:HG23</td>
<td>11:F:57:ILE:O</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>12:G:33:ILE:C</td>
<td>12:G:33:ILE:HD12</td>
<td>2.38</td>
<td>0.43</td>
</tr>
<tr>
<td>15:J:26:ASP:O</td>
<td>15:J:27:TYR:HD1</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>22:Q:89:GLU:HB3</td>
<td>22:Q:91:LEU:HD23</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>25:T:46:LYS:HB2</td>
<td>25:T:78:PHE:CE2</td>
<td>2.52</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>27:V:64:GLY:O</td>
<td>27:V:65:GLU:HB2</td>
<td>2.17</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1055:A:C4</td>
<td>29:X:1055:A:C3'</td>
<td>2.83</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1114:A:N3</td>
<td>29:X:1114:A:H2'</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1539:U:C2</td>
<td>29:X:1540:C:C5</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1549:C:H2'</td>
<td>29:X:1550:C:C6</td>
<td>2.52</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2212:U:C2'</td>
<td>29:X:2213:G:C8</td>
<td>2.90</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2048:C:H1'</td>
<td>29:X:2142:U:N3</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2491:C:N3</td>
<td>29:X:2492:G:C8</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2663:U:N3</td>
<td>29:X:2664:G:N7</td>
<td>2.65</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2663:U:C4</td>
<td>29:X:2664:G:N7</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2787:A:C4</td>
<td>29:X:2788:C:C5</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>18:M:10:GLY:HA3</td>
<td>29:X:2850:U:O2'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:349:G:H3'</td>
<td>29:X:350:U:C5</td>
<td>2.52</td>
<td>0.43</td>
</tr>
<tr>
<td>21:P:39:ARG:HH12</td>
<td>29:X:528:G:H5'</td>
<td>1.81</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:601:A:C2'</td>
<td>29:X:602:C:OP1</td>
<td>2.65</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:688:A:C2</td>
<td>29:X:689:A:N7</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:757:U:H2'</td>
<td>29:X:758:G:H5'</td>
<td>1.98</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:930:A:N7</td>
<td>29:X:931:G:C8</td>
<td>2.85</td>
<td>0.43</td>
</tr>
<tr>
<td>30:Y:46:CYS:HA</td>
<td>30:Y:47:PRO:HD2</td>
<td>1.80</td>
<td>0.43</td>
</tr>
<tr>
<td>31:Z:35:C:O2'</td>
<td>31:Z:36:A:H5'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>6:A:182:LEU:O</td>
<td>6:A:268:ARG:HB2</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>7:B:189:PRO:HB3</td>
<td>29:X:2658:A:O2'</td>
<td>2.17</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:13:ARG:NH2</td>
<td>9:D:14:PRO:HG3</td>
<td>2.32</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:75:SER:HB2</td>
<td>9:D:79:LEU:HD13</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>10:E:163:ARG:HD3</td>
<td>10:E:167:GLU:HB3</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>12:G:150:VAL:O</td>
<td>12:G:151:TYR:CD1</td>
<td>2.71</td>
<td>0.43</td>
</tr>
<tr>
<td>12:G:39:GLN:HB2</td>
<td>12:G:79:PHE:CE1</td>
<td>2.52</td>
<td>0.43</td>
</tr>
<tr>
<td>14:I:82:ASP:HA</td>
<td>14:I:114:ILE:HG21</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>16:K:76:VAL:CG1</td>
<td>16:K:77:ARG:N</td>
<td>2.82</td>
<td>0.43</td>
</tr>
<tr>
<td>18:M:78:GLU:OE2</td>
<td>18:M:108:ARG:CZ</td>
<td>2.65</td>
<td>0.43</td>
</tr>
<tr>
<td>19:N:14:HIS:CD2</td>
<td>19:N:32:TYR:CD1</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>22:Q:28:TRP:CE3</td>
<td>22:Q:77:LYS:N</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>23:R:84:VAL:HG11</td>
<td>23:R:88:THR:C</td>
<td>2.38</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>24:S:25:ASN:O</td>
<td>24:S:26:LYS:HB3</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1004:A:O2'</td>
<td>29:X:1005:U:H5'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1051:U:H3'</td>
<td>29:X:1051:U:C6</td>
<td>2.52</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1030:U:H5'</td>
<td>29:X:1132:C:OH1'</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1237:G:H2'</td>
<td>29:X:1238:A:C8</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1388:C:H6</td>
<td>29:X:1388:C:O5'</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1436:G:C4</td>
<td>29:X:1437:A:C8</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1479:G:H2'</td>
<td>29:X:1480:G:H8</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:148:C:C6</td>
<td>29:X:148:C:OP1</td>
<td>2.68</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1707:G:H3'</td>
<td>29:X:1708:C:H6</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1786:C:C2</td>
<td>29:X:1787:U:C6</td>
<td>3.05</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1916:G:H2'</td>
<td>29:X:1917:C:O4'</td>
<td>2.17</td>
<td>0.43</td>
</tr>
<tr>
<td>15:J:86:LYS:CD</td>
<td>29:X:2256:G:OP2</td>
<td>2.66</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2372:G:H2'</td>
<td>29:X:2373:C:C6</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2642:G:H2'</td>
<td>29:X:2643:G:O5'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2667:C:H5</td>
<td>29:X:2699:G:C5</td>
<td>2.36</td>
<td>0.43</td>
</tr>
<tr>
<td>16:K:3:HIS:CE1</td>
<td>29:X:2795:A:O3'</td>
<td>2.68</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:6:VAL:HG23</td>
<td>8:C:118:VAL:HG23</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:145:THR:O</td>
<td>8:C:145:THR:HG22</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:189:ASP:O</td>
<td>8:C:190:ALA:C</td>
<td>2.57</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:138:PHE:CE2</td>
<td>9:D:152:MET:SD</td>
<td>3.11</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:80:ARG:CD</td>
<td>9:D:80:ARG:N</td>
<td>2.81</td>
<td>0.43</td>
</tr>
<tr>
<td>10:E:33:LEU:O</td>
<td>10:E:34:THR:CG2</td>
<td>2.65</td>
<td>0.43</td>
</tr>
<tr>
<td>12:G:53:ARG:O</td>
<td>12:G:54:LEU:C</td>
<td>2.56</td>
<td>0.43</td>
</tr>
<tr>
<td>14:I:101:ARG:HD3</td>
<td>29:X:637:G:O6</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>14:I:9:THR:OG1</td>
<td>29:X:1218:C:H4'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>15:J:11:ARG:HB3</td>
<td>15:J:12:LYS:H</td>
<td>1.47</td>
<td>0.43</td>
</tr>
<tr>
<td>15:J:33:TYR:O</td>
<td>15:J:106:GLU:CA</td>
<td>2.66</td>
<td>0.43</td>
</tr>
<tr>
<td>16:K:30:ARG:C</td>
<td>16:K:31:GLU:HG2</td>
<td>2.38</td>
<td>0.43</td>
</tr>
<tr>
<td>17:L:38:ILE:HG13</td>
<td>17:L:39:TYR:N</td>
<td>2.32</td>
<td>0.43</td>
</tr>
<tr>
<td>17:L:72:GLY:HA3</td>
<td>17:L:106:ALA:HB3</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>21:P:95:ALA:HB1</td>
<td>21:P:126:ILE:HB</td>
<td>2.00</td>
<td>0.43</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>27:V:26:MET:O</td>
<td>27:V:27:GLU:C</td>
<td>2.56</td>
<td>0.43</td>
</tr>
<tr>
<td>28:W:45:LYS:N</td>
<td>28:W:45:LYS:HE3</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1082:G:HI'</td>
<td>29:X:1100:G:C4</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1126:A:C2</td>
<td>29:X:1127:C:C2</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1039:A:C5</td>
<td>29:X:1136:G:N2</td>
<td>2.85</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1144:U:H2'</td>
<td>29:X:1147:G:OP1</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1174:G:N3</td>
<td>29:X:1175:A:C8</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:86:PRO:HD3</td>
<td>29:X:1261:G:O5'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1375:C:C4</td>
<td>29:X:1376:C:C5</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1549:C:HE2'</td>
<td>29:X:1550:C:O4'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:161:U:HE2'</td>
<td>29:X:162:C:C6</td>
<td>2.52</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1830:C:H41</td>
<td>29:X:1881:U:C3'</td>
<td>2.25</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:182:G:O2'</td>
<td>29:X:183:U:OP2</td>
<td>2.37</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2167:A:HE2'</td>
<td>29:X:2168:A:C8</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2198:U:C2'</td>
<td>29:X:2199:C:O4'</td>
<td>2.58</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2319:G:C2'</td>
<td>29:X:2320:G:HE5'</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2383:C:C6</td>
<td>29:X:2393:G:N2</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2523:G:O2'</td>
<td>29:X:2524:G:HE5'</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2778:U:HE4'</td>
<td>29:X:2779:G:O2</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2820:G:O2</td>
<td>29:X:2821:G:C8</td>
<td>2.71</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2849:C:C2'</td>
<td>29:X:2850:U:C5'</td>
<td>2.96</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2861:A:H2'</td>
<td>29:X:2862:G:HE8</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:514:G:N3</td>
<td>29:X:514:G:HE2'</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>30:Y:31:THR:CG2</td>
<td>30:Y:32:GLU:N</td>
<td>2.81</td>
<td>0.43</td>
</tr>
<tr>
<td>7:B:178:GLY:O</td>
<td>7:B:179:GLU:CG</td>
<td>2.63</td>
<td>0.43</td>
</tr>
<tr>
<td>7:B:1:MET:O</td>
<td>7:B:2:LYS:O</td>
<td>2.35</td>
<td>0.43</td>
</tr>
<tr>
<td>7:B:37:LYS:HB3</td>
<td>7:B:42:ASP:OD1</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>7:B:59:VAL:HG21</td>
<td>7:B:74:PRO:CB</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>7:B:85:ALA:H</td>
<td>7:B:86:PRO:HD2</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:112:GLN:NE2</td>
<td>8:C:116:LYS:CB</td>
<td>2.82</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:125:ILE:CD1</td>
<td>8:C:133:PHE:HA</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:139:GLN:NE2</td>
<td>8:C:139:GLN:CA</td>
<td>2.74</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:75:PRO:HG2</td>
<td>8:C:83:ALA:HB2</td>
<td>1.93</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:97:TYR:HA</td>
<td>9:D:100:LEU:HB3</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:33:LYS:O</td>
<td>9:D:157:VAL:HG23</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:41:GLY:O</td>
<td>9:D:43:SER:N</td>
<td>2.50</td>
<td>0.43</td>
</tr>
<tr>
<td>10:E:96:ALA:HB2</td>
<td>10:E:105:MET:HE1</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>10:E:133:VAL:HG12</td>
<td>10:E:141:VAL:HG13</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>11:F:19:PRO:HD2</td>
<td>11:F:22:PRO:HG2</td>
<td>2.00</td>
<td>0.43</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:H:24:VAL:HG22</td>
<td>13:H:45:ALA:HB2</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>15:J:69:ILE:O</td>
<td>15:J:69:ILE:HG13</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>15:J:86:LYS:HD2</td>
<td>29:X:2256:G:OP2</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>17:L:37:HIS:O</td>
<td>17:L:38:ILE:C</td>
<td>2.56</td>
<td>0.43</td>
</tr>
<tr>
<td>13:H:116:ARG:NH1</td>
<td>18:M:38:LYS:HZ3</td>
<td>2.16</td>
<td>0.43</td>
</tr>
<tr>
<td>20:O:74:TYR:OH</td>
<td>20:O:76:SER:CB</td>
<td>2.65</td>
<td>0.43</td>
</tr>
<tr>
<td>23:R:86:PRO:O</td>
<td>23:R:87:GLU:HB2</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1025:A:C2</td>
<td>29:X:1160:C:C2</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1051:U:C6</td>
<td>29:X:1051:U:C3'</td>
<td>3.02</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1097:A:H3'</td>
<td>29:X:1097:A:N3</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1255:A:C4</td>
<td>29:X:1256:C:C5</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>14:L:17:LYS:HE2</td>
<td>29:X:1258:G:P</td>
<td>2.57</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1275:A:N3</td>
<td>30:Y:10:LYS:CE</td>
<td>2.81</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1371:G:C8</td>
<td>29:X:1371:G:H3'</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1529:C:H2'</td>
<td>29:X:1530:U:O4'</td>
<td>2.17</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1785:A:H2'</td>
<td>29:X:1786:C:C6</td>
<td>2.52</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:166:G:H2'</td>
<td>29:X:182:G:N2</td>
<td>2.34</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2018:G:O2'</td>
<td>29:X:2019:C:OP1</td>
<td>2.35</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2351:G:C2</td>
<td>29:X:2352:A:C8</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:23:G:C6</td>
<td>29:X:528:G:C6</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2594:U:C6</td>
<td>30:Y:7:PRO:HA</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2876:C:H2'</td>
<td>29:X:2877:A:N9</td>
<td>2.34</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:421:G:O2'</td>
<td>29:X:422:CH5'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:471:A:C2</td>
<td>29:X:481:A:C4</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:822:G:O2'</td>
<td>29:X:823:U:H5'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:82:G:OP2</td>
<td>29:X:82:G:C8</td>
<td>2.72</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:830:C:O2'</td>
<td>29:X:831:G:H5'</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:840:U:H2'</td>
<td>29:X:2051:U:O2</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:965:G:H1'</td>
<td>29:X:2253:A:N1</td>
<td>2.32</td>
<td>0.43</td>
</tr>
<tr>
<td>31:Z:15:A:C2'</td>
<td>31:Z:16:U:H5''</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>31:Z:42:U:H2'</td>
<td>31:Z:45:C:H5</td>
<td>1.82</td>
<td>0.43</td>
</tr>
<tr>
<td>6:A:243:GLY:C</td>
<td>6:A:244:ARG:CD</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:160:ALA:O</td>
<td>8:C:161:ALA:HB2</td>
<td>2.18</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>10:E:59:GLN:O</td>
<td>10:E:60:LYS:C</td>
<td>2.57</td>
<td>0.43</td>
</tr>
<tr>
<td>14:I:82:ASP:CA</td>
<td>14:I:114:ILE:HG21</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>18:M:82:PRO:O</td>
<td>18:M:84:ALA:N</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>18:M:98:LYS:HD2</td>
<td>18:M:98:LYS:HA</td>
<td>1.93</td>
<td>0.43</td>
</tr>
<tr>
<td>19:N:25:TRP:CE3</td>
<td>19:N:26:GLY:HA3</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>19:N:86:ALA:O</td>
<td>19:N:87:ASN:C</td>
<td>2.56</td>
<td>0.43</td>
</tr>
<tr>
<td>23:R:25:LEU:O</td>
<td>23:R:79:SER:O</td>
<td>2.35</td>
<td>0.43</td>
</tr>
<tr>
<td>26:U:24:ALA:C</td>
<td>26:U:26:ALA:N</td>
<td>2.69</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1053:G:HA</td>
<td>29:X:1054:CO:OP1</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1275:A:C5</td>
<td>29:X:1275:A:C5</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1459:U:N3</td>
<td>29:X:1475:U:H1'</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1692:C:H2'</td>
<td>29:X:1693:A:O4'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>6:A:159:ALA:HB1</td>
<td>29:X:1812:U:O2</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1933:G:H2</td>
<td>29:X:1934:U:C6</td>
<td>2.52</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2022:C:C5</td>
<td>29:X:2023:C:C5</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2024:U:O2'</td>
<td>29:X:2025:A:H5'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2039:G:C2</td>
<td>29:X:2040:A:C8</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2061:C:O4'</td>
<td>29:X:2413:A:O4'</td>
<td>2.36</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2086:U:H6</td>
<td>29:X:2086:U:O5'</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2222:U:O2</td>
<td>29:X:2223:U:C6</td>
<td>2.71</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2345:A:H2</td>
<td>29:X:2346:G:H8</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>17:L:89:PHE:HE2</td>
<td>29:X:2356:A:HO2</td>
<td>1.59</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2371:A:C8</td>
<td>29:X:2372:A:C8</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2551:A:HO2'</td>
<td>29:X:2552:C:P</td>
<td>2.40</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2642:G:C6</td>
<td>29:X:2643:G:C4</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>7:B:109:LYS:NZ</td>
<td>29:X:2703:CO:OP2</td>
<td>2.50</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:334:G:O2'</td>
<td>29:X:335:A:P</td>
<td>2.77</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:704:G:C2</td>
<td>29:X:705:C:C2</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:197:GLU:HG2</td>
<td>8:C:198:GLU:CG</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:5:ASN:N</td>
<td>8:C:5:ASN:HD22</td>
<td>2.17</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:122:PHE:HD2</td>
<td>9:D:129:ASN:HB2</td>
<td>1.81</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:75:SER:HB2</td>
<td>9:D:79:LEU:CD2</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>10:E:113:VAL:HG11</td>
<td>10:E:151:VAL:CG1</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>11:F:112:MET:C</td>
<td>11:F:114:ASP:H</td>
<td>2.21</td>
<td>0.43</td>
</tr>
<tr>
<td>11:F:121:GLU:O</td>
<td>11:F:122:ALA:C</td>
<td>2.56</td>
<td>0.43</td>
</tr>
<tr>
<td>12:G:61:ARG:HH11</td>
<td>12:G:65:LYS:HD3</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>13:H:12:ASP:OD1</td>
<td>13:H:12:ASP:O</td>
<td>2.37</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>14:I:72:TYR:HB3</td>
<td>14:I:107:LYS:CB</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>14:I:18:ARG:HD2</td>
<td>14:I:21:ARG:CG</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>14:I:32:ARG:HH21</td>
<td>20:O:81:ARG:CG</td>
<td>2.28</td>
<td>0.43</td>
</tr>
<tr>
<td>14:I:32:ARG:NH2</td>
<td>20:O:79:GLN:HA</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>15:I:100:PRO:HB2</td>
<td>24:S:74:ARG:HE</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>15:I:33:TYR:O</td>
<td>15:I:106:GLU:HA</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>16:K:25:ALA:CB</td>
<td>16:K:47:PHE:HE2</td>
<td>2.29</td>
<td>0.43</td>
</tr>
<tr>
<td>17:L:17:VAL:CG1</td>
<td>17:L:18:ARG:N</td>
<td>2.80</td>
<td>0.43</td>
</tr>
<tr>
<td>17:L:28:ARG:HD2</td>
<td>17:L:90:ASP:OD1</td>
<td>2.17</td>
<td>0.43</td>
</tr>
<tr>
<td>17:L:90:ASP:CG</td>
<td>17:L:90:ASP:O</td>
<td>2.57</td>
<td>0.43</td>
</tr>
<tr>
<td>21:P:112:GLY:O</td>
<td>29:X:1630:A:N6</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>21:P:95:ALA:CB</td>
<td>21:P:126:ILE:HB</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>21:P:33:MET:SD</td>
<td>21:P:37:LYS:NZ</td>
<td>2.91</td>
<td>0.43</td>
</tr>
<tr>
<td>21:P:80:LEU:HD21</td>
<td>21:P:90:LEU:HD11</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>23:R:36:VAL:HG12</td>
<td>23:R:37:LEU:N</td>
<td>2.34</td>
<td>0.43</td>
</tr>
<tr>
<td>23:R:84:VAL:HG13</td>
<td>23:R:88:THR:O</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>23:R:98:ILE:C</td>
<td>23:R:100:ASP:H</td>
<td>2.14</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1040:A:N7</td>
<td>29:X:1041:G:C8</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1189:G:H8</td>
<td>29:X:1189:G:O5'</td>
<td>2.02</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1587:A:N1</td>
<td>29:X:1588:A:C6</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1605:A:O2'</td>
<td>29:X:1606:C:H5'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1778:U:C2'</td>
<td>29:X:1779:U:C6</td>
<td>2.98</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1872:A:H1'</td>
<td>29:X:2070:G:O4'</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1928:G:N2</td>
<td>29:X:1929:U:C2</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:204:A:H1'</td>
<td>29:X:205:A:N7</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2586:G:N1</td>
<td>29:X:2587:G:N3</td>
<td>2.66</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2790:U:C2'</td>
<td>30:Y:43:HIS:CD2</td>
<td>2.72</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2876:U:C2'</td>
<td>29:X:2877:U:C5</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:319:G:C1'</td>
<td>29:X:511:A:O4'</td>
<td>2.66</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:310:A:HA2</td>
<td>29:X:331:U:O4'</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:912:A:O5'</td>
<td>29:X:912:A:H8</td>
<td>2.02</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:982:C:O2'</td>
<td>29:X:985:G:C8</td>
<td>3.12</td>
<td>0.43</td>
</tr>
<tr>
<td>31:Z:15:A:C2</td>
<td>31:Z:71:G:N3</td>
<td>2.85</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:111:ARG:NH2</td>
<td>8:C:111:ARG:HG2</td>
<td>2.34</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:108:ILE:O</td>
<td>8:C:112:GLN:N</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:170:LEU:HA</td>
<td>8:C:170:LEU:HD12</td>
<td>1.80</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:28:HIS:C</td>
<td>8:C:30:VAL:N</td>
<td>2.69</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>12:G:67:ARG:O</td>
<td>12:G:70:PHE:CD2</td>
<td>2.72</td>
<td>0.43</td>
</tr>
<tr>
<td>12:G:84:ASN:HA</td>
<td>12:G:153:GLY:O</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>15:J:29:ALA:C</td>
<td>15:J:30:PHE:CD2</td>
<td>2.92</td>
<td>0.43</td>
</tr>
<tr>
<td>19:N:12:ARG:O</td>
<td>19:N:15:LYS:N</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>19:N:66:ASN:HA</td>
<td>19:N:69:ALA:HB3</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>21:P:79:ALA:CB</td>
<td>21:P:85:MET:SD</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>23:R:15:HIS:O</td>
<td>23:R:16:PHE:CB</td>
<td>2.66</td>
<td>0.43</td>
</tr>
<tr>
<td>24:S:100:THR:CG2</td>
<td>24:S:101:THR:N</td>
<td>2.81</td>
<td>0.43</td>
</tr>
<tr>
<td>25:T:42:GLY:HA3</td>
<td>29:X:2310:G:C4'</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1047:G:C2</td>
<td>29:X:1131:G:C4</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1099:A:H4'</td>
<td>29:X:1100:G:H8</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1122:A:H2'</td>
<td>29:X:1123:G:O5'</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1330:G:C4</td>
<td>29:X:1331:G:C8</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1399:C:OP2</td>
<td>29:X:1409:U:N3</td>
<td>2.45</td>
<td>0.43</td>
</tr>
<tr>
<td>6:A:59:LYS:O</td>
<td>29:X:1584:G:H4'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:168:A:H2'</td>
<td>29:X:169:C:C6</td>
<td>2.54</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:125:ARG:CG</td>
<td>29:X:2294:U:O2'</td>
<td>2.64</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2404:A:P</td>
<td>29:X:2406:C:H5'</td>
<td>2.59</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2431:C:C4</td>
<td>29:X:2432:A:C6</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2441:U:C2</td>
<td>29:X:2442:C:C6</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2503:G:N2</td>
<td>29:X:2504:G:H1'</td>
<td>2.34</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2516:U:C2</td>
<td>29:X:2517:C:C5</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2524:G:O2'</td>
<td>29:X:2525:U:H5'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2630:C:H2'</td>
<td>29:X:2631:C:H6</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:27:G:N2</td>
<td>29:X:522:G:O2'</td>
<td>2.52</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:34:GLN:CG</td>
<td>29:X:627:A:OP1</td>
<td>2.67</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:710:G:O2'</td>
<td>29:X:711:C:H5'</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:967:G:H3'</td>
<td>29:X:968:C:H5'</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>31:Z:20:A:C2</td>
<td>31:Z:69:G:O6</td>
<td>2.72</td>
<td>0.43</td>
</tr>
<tr>
<td>4:4:25:VAL:HB</td>
<td>4:4:34:GLN:H</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>4:4:25:VAL:HG21</td>
<td>4:4:34:GLN:NE2</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>4:4:7:VAL:HG13</td>
<td>4:4:34:GLN:NE2</td>
<td>2.34</td>
<td>0.43</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:A:143:HIS:CD2</td>
<td>6:A:196:VAL:HG12</td>
<td>2.54</td>
<td>0.43</td>
</tr>
<tr>
<td>6:A:58:HIS:O</td>
<td>6:A:59:LYS:HB2</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>7:B:179:GLU:HB3</td>
<td>7:B:181:LEU:HG</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:127:ASP:HB2</td>
<td>8:C:129:LYS:HG2</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:150:ARG:HG3</td>
<td>9:D:150:ARG:NH1</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:43:SER:C</td>
<td>9:D:44:LYS:HG3</td>
<td>2.38</td>
<td>0.43</td>
</tr>
<tr>
<td>11:F:61:ALA:O</td>
<td>11:F:64:SER:HB2</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>12:G:131:VAL:O</td>
<td>12:G:134:MET:N</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>12:G:61:ARG:HH22</td>
<td>12:G:78:ASP:CB</td>
<td>2.32</td>
<td>0.43</td>
</tr>
<tr>
<td>14:I:47:ALA:C</td>
<td>14:I:49:PHE:N</td>
<td>2.71</td>
<td>0.43</td>
</tr>
<tr>
<td>14:I:52:GLY:HA3</td>
<td>14:I:55:ARG:CB</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>14:I:92:THR:C</td>
<td>14:I:94:GLU:H</td>
<td>2.22</td>
<td>0.43</td>
</tr>
<tr>
<td>15:J:31:GLY:HA2</td>
<td>15:J:108:ALA:HB2</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>16:K:18:VAL:HG12</td>
<td>16:K:19:ALA:N</td>
<td>2.34</td>
<td>0.43</td>
</tr>
<tr>
<td>17:L:43:ILE:HD12</td>
<td>17:L:43:ILE:N</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>18:M:34:ARG:NH1</td>
<td>18:M:81:PHE:CG</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>23:R:52:ASN:O</td>
<td>23:R:53:VAL:HG23</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>27:V:37:LEU:HD11</td>
<td>29:X:60:A:C4'</td>
<td>2.46</td>
<td>0.43</td>
</tr>
<tr>
<td>27:V:4:SER:O</td>
<td>27:V:8:ASN:OD1</td>
<td>2.36</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1172:U:H2'</td>
<td>29:X:1173:G:H8</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1223:G:H5'</td>
<td>29:X:1225:G:O4'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1331:G:N3</td>
<td>29:X:1331:G:H2'</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1337:G:N2</td>
<td>29:X:1344:C:C2</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1383:C:C4</td>
<td>29:X:1384:G:N7</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1454:U:H2'</td>
<td>29:X:1455:C:C6</td>
<td>2.50</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1687:C:H6</td>
<td>29:X:1687:C:O5'</td>
<td>2.02</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2215:C:N4</td>
<td>29:X:2216:G:C2</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2235:G:N2</td>
<td>29:X:2254:C:C4</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2250:G:O5'</td>
<td>29:X:2250:G:H8</td>
<td>2.02</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2335:U:O2'</td>
<td>29:X:2336:G:H5'</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2350:G:C6</td>
<td>29:X:2351:G:N7</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2652:G:C4</td>
<td>29:X:2653:A:C8</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2806:G:H4'</td>
<td>29:X:2858:A:C6</td>
<td>2.54</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2825:A:H2'</td>
<td>29:X:2826:C:C6</td>
<td>2.54</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:36:G:C5</td>
<td>29:X:37:C:C5</td>
<td>3.06</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:586:G:O3'</td>
<td>29:X:1268:U:H4'</td>
<td>2.17</td>
<td>0.43</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>29:X:832:A:C4</td>
<td>29:X:833:A:C8</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1276:U:C1'</td>
<td>30:Y:10:LYS:HG3</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>30:Y:32:GLU:OE1</td>
<td>30:Y:37:HIS:O</td>
<td>2.37</td>
<td>0.43</td>
</tr>
<tr>
<td>6:A:62:TYR:HE1</td>
<td>29:X:1808:C:H3'</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>7:B:117:MET:HB2</td>
<td>7:B:136:ARG:HG3</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>7:B:137:ARG:HG2</td>
<td>7:B:137:ARG:NH2</td>
<td>2.34</td>
<td>0.43</td>
</tr>
<tr>
<td>7:B:152:LYS:HB2</td>
<td>12:G:106:TYR:CB</td>
<td>2.31</td>
<td>0.43</td>
</tr>
<tr>
<td>11:F:54:PRO:CD</td>
<td>11:F:71:THR:O</td>
<td>2.67</td>
<td>0.43</td>
</tr>
<tr>
<td>14:I:66:ASN:ND2</td>
<td>14:I:67:ASN:N</td>
<td>2.67</td>
<td>0.43</td>
</tr>
<tr>
<td>15:J:48:ILE:O</td>
<td>15:J:51:CYS:N</td>
<td>2.47</td>
<td>0.43</td>
</tr>
<tr>
<td>17:L:84:ILE:CD1</td>
<td>17:L:84:ILE:N</td>
<td>2.81</td>
<td>0.43</td>
</tr>
<tr>
<td>13:H:83:ARG:HH1</td>
<td>18:M:40:ARG:HD3</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>18:M:80:VAL:HG12</td>
<td>18:M:80:VAL:O</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>18:M:81:PHE:HA</td>
<td>18:M:82:PRO:HD3</td>
<td>1.68</td>
<td>0.43</td>
</tr>
<tr>
<td>24:S:91:PRO:CG</td>
<td>24:S:92:VAL:H</td>
<td>2.32</td>
<td>0.43</td>
</tr>
<tr>
<td>24:S:94:VAL:O</td>
<td>24:S:121:GLN:HA</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1136:G:N1</td>
<td>29:X:1137:A:N6</td>
<td>2.66</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1274:C:C2'</td>
<td>29:X:1275:A:O5'</td>
<td>2.67</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1324:G:O2'</td>
<td>29:X:1325:U:P</td>
<td>2.76</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1586:A:H2'</td>
<td>29:X:1587:A:C8</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1599:G:N2</td>
<td>29:X:1600:U:H1'</td>
<td>2.33</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:177:U:H2'</td>
<td>29:X:178:C:O4'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1948:C:C6</td>
<td>29:X:1949:A:C8</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2173:G:O2'</td>
<td>29:X:2174:G:H5'</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2235:G:N2</td>
<td>29:X:2254:C:N4</td>
<td>2.67</td>
<td>0.43</td>
</tr>
<tr>
<td>25:T:17:ASN:OD1</td>
<td>29:X:2240:C:O5'</td>
<td>2.37</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2327:U:O2'</td>
<td>29:X:2328:G:H5'</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2386:G:C4</td>
<td>29:X:2387:U:C5</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:238:G:O4'</td>
<td>29:X:619:A:H2</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2703:C:H2'</td>
<td>29:X:2704:U:C5'</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2778:U:H5'</td>
<td>29:X:2779:C:Cl1'</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2871:U:C2</td>
<td>29:X:2865:U:C5</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:466:A:O2'</td>
<td>29:X:467:U:OP2</td>
<td>2.30</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:522:G:O2'</td>
<td>29:X:523:A:P</td>
<td>2.77</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:549:G:O2'</td>
<td>29:X:550:C:H5'</td>
<td>2.19</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>29:X:603:C:O2</td>
<td>29:X:603:C:C2'</td>
<td>2.64</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:815:A:C5</td>
<td>29:X:816:U:C5</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>30:Y:37:His:C</td>
<td>30:Y:38:GLY:O</td>
<td>2.55</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:158:ARG:CG</td>
<td>8:C:158:ARG:HH11</td>
<td>2.32</td>
<td>0.43</td>
</tr>
<tr>
<td>8:C:162:ARG:NH1</td>
<td>29:X:333:A:C3'</td>
<td>2.77</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:5:LYS:HA</td>
<td>9:D:8:TYR:CB</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:78:LYS:C</td>
<td>9:D:79:LEU:HD12</td>
<td>2.39</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:37:ASN:HA</td>
<td>9:D:87:ILE:O</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>10:E:117:PRO:HB3</td>
<td>10:E:123:PHE:CD1</td>
<td>2.54</td>
<td>0.43</td>
</tr>
<tr>
<td>10:E:9:ILE:HD12</td>
<td>10:E:51:LEU:HA</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>11:F:23:VAL:CA</td>
<td>11:F:26:ALA:HB3</td>
<td>2.43</td>
<td>0.43</td>
</tr>
<tr>
<td>14:150:GLU:OE1</td>
<td>29:X:678:G:H4'</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>22:Q:35:LYS:CA</td>
<td>22:Q:38:ILE:HG23</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>23:R:93:ARG:CZ</td>
<td>23:R:108:VAL:C</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>23:R:95:ARG:N</td>
<td>23:R:95:ARG:HD2</td>
<td>2.34</td>
<td>0.43</td>
</tr>
<tr>
<td>24:S:96:VAL:N</td>
<td>24:S:119:ASN:OD1</td>
<td>2.52</td>
<td>0.43</td>
</tr>
<tr>
<td>25:T:20:TYR:HB3</td>
<td>25:T:21:LEU:H</td>
<td>1.64</td>
<td>0.43</td>
</tr>
<tr>
<td>22:Q:7:LEU:CD2</td>
<td>27:V:30:PHE:HE2</td>
<td>2.15</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1135:C:N3</td>
<td>29:X:1136:G:N7</td>
<td>2.67</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1153:A:N3</td>
<td>29:X:1155:G:C8</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1318:A:H2'</td>
<td>29:X:1319:C:O5'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1478:U:C2</td>
<td>29:X:1479:G:C8</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1811:A:H1'</td>
<td>29:X:1813:A:C5</td>
<td>2.53</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:1882:G:N2</td>
<td>29:X:1885:CN4</td>
<td>2.66</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2022:C:H2'</td>
<td>29:X:2023:C:O5'</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2044:G:O2'</td>
<td>29:X:2046:CN5</td>
<td>2.71</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2276:C:O2'</td>
<td>29:X:2277:A:H5'</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>9:D:88:LYS:CE</td>
<td>29:X:2293:G:OP1</td>
<td>2.67</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2528:G:C2</td>
<td>29:X:2529:G:N7</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2695:C:H2'</td>
<td>29:X:2696:A:H8</td>
<td>1.83</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:2714:ASH:H2'</td>
<td>29:X:2715:SH:H6</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:30:G:H2'</td>
<td>29:X:31:CH6</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:312:G:C5</td>
<td>29:X:313:U:C4</td>
<td>3.07</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>29:X:314:G:C6</td>
<td>29:X:326:A:N1</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:393:U:H2'</td>
<td>29:X:394:U:C6</td>
<td>2.54</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:430:C:C2</td>
<td>29:X:431:G:C8</td>
<td>3.07</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:765:C:N4</td>
<td>29:X:1772:C:C2</td>
<td>2.87</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:83:A:O3'</td>
<td>29:X:84:G:O4'</td>
<td>2.37</td>
<td>0.43</td>
</tr>
<tr>
<td>29:X:930:A:C3'</td>
<td>29:X:930:A:C8</td>
<td>3.02</td>
<td>0.43</td>
</tr>
<tr>
<td>7:B:155:ARG:HH11</td>
<td>7:B:155:ARG:CG</td>
<td>2.31</td>
<td>0.42</td>
</tr>
<tr>
<td>8:C:178:TYR:O</td>
<td>8:C:179:ASP:C</td>
<td>2.56</td>
<td>0.42</td>
</tr>
<tr>
<td>9:D:19:GLN:HB3</td>
<td>9:D:20:PHE:CD1</td>
<td>2.54</td>
<td>0.42</td>
</tr>
<tr>
<td>11:F:111:LYS:HB2</td>
<td>11:F:115:LEU:HD11</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>11:F:23:VAL:HB</td>
<td>11:F:34:ILE:HD13</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>12:G:83:ILE:HB</td>
<td>12:G:154:GLU:HA</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>14:I:76:LYS:HB3</td>
<td>14:I:79:GLN:HE21</td>
<td>1.82</td>
<td>0.42</td>
</tr>
<tr>
<td>15:J:34:GLY:C</td>
<td>15:J:119:PHE:HE1</td>
<td>2.23</td>
<td>0.42</td>
</tr>
<tr>
<td>15:J:54:VAL:HG12</td>
<td>15:J:55:MET:N</td>
<td>2.33</td>
<td>0.42</td>
</tr>
<tr>
<td>15:J:79:PRO:HG2</td>
<td>15:J:88:LYS:HD2</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>17:L:27:LEU:O</td>
<td>17:L:88:VAL:HG23</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>17:L:89:PHE:CD1</td>
<td>17:L:89:PHE:O</td>
<td>2.72</td>
<td>0.42</td>
</tr>
<tr>
<td>18:M:93:ILE:CD1</td>
<td>18:M:93:ILE:H</td>
<td>2.32</td>
<td>0.42</td>
</tr>
<tr>
<td>23:R:22:VAL:CG1</td>
<td>23:R:23:ILE:N</td>
<td>2.82</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1182:U:H2'</td>
<td>29:X:1183:C:O4'</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1597:A:C2</td>
<td>29:X:1598:C:N3</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:171:G:O2'</td>
<td>29:X:172:A:H5'</td>
<td>2.18</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:172:A:C6</td>
<td>29:X:175:C:H5</td>
<td>2.32</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1824:C:H6</td>
<td>29:X:1824:C:O5'</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:212:U:O2'</td>
<td>29:X:213:C:H5'</td>
<td>2.18</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>29:X:2511:G:C5</td>
<td>29:X:2512:A:N7</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2759:U:H1'</td>
<td>29:X:2761:A:C6</td>
<td>2.54</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2813:G:H2'</td>
<td>29:X:2814:G:O4'</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:788:G:H4'</td>
<td>29:X:789:G:O5'</td>
<td>2.18</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:915:C:H2'</td>
<td>29:X:916:U:H6</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:982:C:C2'</td>
<td>29:X:983:G:O5'</td>
<td>2.67</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:997:C:O2'</td>
<td>29:X:998:C:H5'</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>31:Z:42:U:H3</td>
<td>31:Z:45:C:H5''</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>31:Z:75:A:C2</td>
<td>31:Z:76:U:C1'</td>
<td>3.01</td>
<td>0.42</td>
</tr>
<tr>
<td>7:B:154:LYS:HZ2</td>
<td>7:B:156:MET:HE3</td>
<td>1.83</td>
<td>0.42</td>
</tr>
<tr>
<td>7:B:181:LEU:HD13</td>
<td>18:M:16:ILE:CD1</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>7:B:26:VAL:HG12</td>
<td>7:B:27:LEU:N</td>
<td>2.33</td>
<td>0.42</td>
</tr>
<tr>
<td>8:C:112:GLN:HG3</td>
<td>8:C:116:LYS:HZ3</td>
<td>1.82</td>
<td>0.42</td>
</tr>
<tr>
<td>8:C:32:THR:HG22</td>
<td>8:C:33:TRP:N</td>
<td>2.33</td>
<td>0.42</td>
</tr>
<tr>
<td>8:C:82:VAL:O</td>
<td>8:C:83:ALA:C</td>
<td>2.57</td>
<td>0.42</td>
</tr>
<tr>
<td>9:D:117:ILE:HD12</td>
<td>9:D:175:LEU:CD1</td>
<td>2.48</td>
<td>0.42</td>
</tr>
<tr>
<td>9:D:119:PRO:CG</td>
<td>9:D:120:ASN:N</td>
<td>2.80</td>
<td>0.42</td>
</tr>
<tr>
<td>15:J:111:THR:O</td>
<td>15:J:112:GLU:C</td>
<td>2.57</td>
<td>0.42</td>
</tr>
<tr>
<td>15:J:95:VAL:CG1</td>
<td>15:J:96:SER:N</td>
<td>2.82</td>
<td>0.42</td>
</tr>
<tr>
<td>18:M:11:GLU:O</td>
<td>18:M:13:LEU:N</td>
<td>2.51</td>
<td>0.42</td>
</tr>
<tr>
<td>19:N:84:LYS:HA</td>
<td>19:N:92:ARG:NH2</td>
<td>2.34</td>
<td>0.42</td>
</tr>
<tr>
<td>19:N:84:LYS:CB</td>
<td>19:N:92:ARG:NH2</td>
<td>2.81</td>
<td>0.42</td>
</tr>
<tr>
<td>21:P:110:ALA:HB2</td>
<td>29:X:761:G:O5'</td>
<td>2.18</td>
<td>0.42</td>
</tr>
<tr>
<td>23:R:8:SER:O</td>
<td>23:R:9:HIS:C</td>
<td>2.57</td>
<td>0.42</td>
</tr>
<tr>
<td>24:S:114:ASP:HB2</td>
<td>24:S:172:LEU:HD12</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1031:C:O2'</td>
<td>29:X:1032:A:P</td>
<td>2.77</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1159:U:O2'</td>
<td>29:X:1160:C:H5'</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1210:C:C2</td>
<td>29:X:1211:G:C8</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1250:A:O2'</td>
<td>29:X:1251:G:C4'</td>
<td>2.67</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>29:X:1337:G:C5</td>
<td>29:X:1341:G:O6</td>
<td>2.72</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:174:A:N1</td>
<td>29:X:175:C:O2</td>
<td>2.52</td>
<td>0.42</td>
</tr>
<tr>
<td>6:A:209:ALA:HB2</td>
<td>29:X:1781:C:H4'</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2240:C:N3</td>
<td>29:X:2241:U:C5</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2292:C:C2'</td>
<td>29:X:2293:G:H5'</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2423:G:C2'</td>
<td>29:X:2424:G:O5'</td>
<td>2.67</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2484:G:C6</td>
<td>29:X:2555:G:C5</td>
<td>3.06</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2493:U:C2</td>
<td>29:X:2494:C:C5</td>
<td>3.06</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2786:G:C6</td>
<td>29:X:2787:A:C5</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:212:U:O2</td>
<td>29:X:443:A:C2</td>
<td>2.72</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:544:U:C4</td>
<td>29:X:545:C:N4</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:754:G:C6</td>
<td>29:X:755:C:C4</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>4:4:19:ARG:HH11</td>
<td>4:4:19:ARG:HG3</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>7:B:141:ILE:CG2</td>
<td>7:B:154:LYS:NZ</td>
<td>2.82</td>
<td>0.42</td>
</tr>
<tr>
<td>7:B:156:MET:CE</td>
<td>29:X:2033:C:H1'</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>7:B:8:LYS:HD3</td>
<td>7:B:190:GLY:O</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>8:C:147:LYS:O</td>
<td>8:C:183:HIS:HB3</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>9:D:58:ALA:O</td>
<td>9:D:62:LEU:CA</td>
<td>2.64</td>
<td>0.42</td>
</tr>
<tr>
<td>10:E:139:GLN:O</td>
<td>10:E:143:GLN:HG3</td>
<td>2.18</td>
<td>0.42</td>
</tr>
<tr>
<td>11:F:139:GLU:HG2</td>
<td>11:F:140:GLY:N</td>
<td>2.34</td>
<td>0.42</td>
</tr>
<tr>
<td>12:G:63:ARG:CB</td>
<td>12:G:70:PHE:HA</td>
<td>2.30</td>
<td>0.42</td>
</tr>
<tr>
<td>15:J:19:THR:HB</td>
<td>31:Z:93:G:H5'</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>15:J:76:THR:HG22</td>
<td>15:J:89:GLY:C</td>
<td>2.40</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>23:R:95:ARG:HG3</td>
<td>23:R:95:ARG:NH1</td>
<td>2.33</td>
<td>0.42</td>
</tr>
<tr>
<td>24:S:26:LYS:HE3</td>
<td>24:S:26:LYS:HB2</td>
<td>1.75</td>
<td>0.42</td>
</tr>
<tr>
<td>27:V:4:SER:HE3</td>
<td>27:V:7:ARG:NE</td>
<td>2.35</td>
<td>0.42</td>
</tr>
<tr>
<td>4:4:18:ARG:HG3</td>
<td>29:X:1045:G:H5&quot;</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1048:U:H6</td>
<td>29:X:1048:U:O5&quot;</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1118:G:C2&quot;</td>
<td>29:X:1119:U:C5&quot;</td>
<td>2.80</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1214:C:O2</td>
<td>29:X:1259:A:C2</td>
<td>2.72</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:127:C:H2&quot;</td>
<td>29:X:128:C:C6</td>
<td>2.55</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1490:U:H2&quot;</td>
<td>29:X:1491:C:C6</td>
<td>2.45</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:188:G:C2</td>
<td>29:X:189:A:C4</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1924:C:C4</td>
<td>29:X:1925:C:N4</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:417:C:N3</td>
<td>29:X:419:G:C6</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:760:U:C1&quot;</td>
<td>30:Y:3:LYS:HE3</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:807:A:C4</td>
<td>29:X:808:C:C5</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>31:Z:52:G:N2</td>
<td>31:Z:53:G:H1&quot;</td>
<td>2.33</td>
<td>0.42</td>
</tr>
<tr>
<td>9:D:52:LYS:NZ</td>
<td>9:D:149:THR:CA</td>
<td>2.82</td>
<td>0.42</td>
</tr>
<tr>
<td>9:D:52:LYS:CE</td>
<td>9:D:56:GLU:OE2</td>
<td>2.67</td>
<td>0.42</td>
</tr>
<tr>
<td>9:D:74:ILE:HG12</td>
<td>9:D:80:ARG:CA</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>10:E:72:VAL:C</td>
<td>10:E:74:ASN:N</td>
<td>2.72</td>
<td>0.42</td>
</tr>
<tr>
<td>15:J:86:LYS:HE3</td>
<td>25:T:12:ASN:HA</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>17:L:42:ILE:HD11</td>
<td>17:L:87:VAL:HG13</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>18:M:32:THR:CG2</td>
<td>18:M:33:VAL:N</td>
<td>2.82</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>21:P:79:ALA:O</td>
<td>21:P:85:MET:CB</td>
<td>2.64</td>
<td>0.42</td>
</tr>
<tr>
<td>26:U:10:LYS:HE2</td>
<td>26:U:11:LYS:HE2</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1050:G:C2'</td>
<td>29:X:1051:U:H5''</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1391:A:HH1</td>
<td>29:X:1392:U:C5</td>
<td>2.54</td>
<td>0.42</td>
</tr>
<tr>
<td>6:A:59:LYS:O</td>
<td>29:X:1584:G:C4'</td>
<td>2.68</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1687:C:H2'</td>
<td>29:X:1688:U:O4'</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2257:A:H2'</td>
<td>29:X:2258:G:H5'</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2496:C:C6</td>
<td>29:X:2521:A:N7</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:26:G:H1'</td>
<td>29:X:524:A:N6</td>
<td>2.34</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:630:G:H3'</td>
<td>29:X:631:G:H21</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:640:C:H4'</td>
<td>29:X:660:G:H21</td>
<td>1.82</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:729:A:H2'</td>
<td>29:X:730:C:C4'</td>
<td>2.46</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:695:G:N2</td>
<td>29:X:809:C:C2</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>31:Z:18:G:C2'</td>
<td>31:Z:19:C:H5'</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>7:B:20:ALA:O</td>
<td>7:B:21:ILE:HG13</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>8:C:147:LYS:O</td>
<td>8:C:184:ASP:N</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>8:C:34:GLN:OE1</td>
<td>8:C:176:ASN:OD1</td>
<td>2.37</td>
<td>0.42</td>
</tr>
<tr>
<td>9:D:32:GLU:HB3</td>
<td>9:D:157:VAL:HG12</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>9:D:34:ILE:CD1</td>
<td>9:D:156:ILE:HG12</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>11:F:54:PRO:CB</td>
<td>11:F:70:LYS:HD2</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>12:G:40:ASN:HB3</td>
<td>12:G:78:ASP:OD1</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>18:M:25:PRO:HB3</td>
<td>18:M:93:ILE:CD1</td>
<td>2.48</td>
<td>0.42</td>
</tr>
<tr>
<td>19:N:52:ASN:C</td>
<td>19:N:54:LYS:N</td>
<td>2.70</td>
<td>0.42</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20:O:26:GLN:CG</td>
<td>20:O:27:GLY:N</td>
<td>2.76</td>
<td>0.42</td>
</tr>
<tr>
<td>23:R:38:LEU:HB2</td>
<td>23:R:47:VAL:HG23</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1101:U:O2</td>
<td>29:X:1113:C:H1'</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>14:I:13:ARG:NE</td>
<td>29:X:1218:C:H1'</td>
<td>2.29</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1256:C:H2'</td>
<td>29:X:1257:U:H6</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1363:C:C2'</td>
<td>29:X:1364:C:H5'</td>
<td>2.48</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1376:C:C4</td>
<td>29:X:1377:G:N7</td>
<td>2.86</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1606:C:H2'</td>
<td>29:X:1607:A:H8</td>
<td>1.85</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1707:A:C8</td>
<td>29:X:1708:C:C6</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1723:U:O2'</td>
<td>29:X:1724:C:P</td>
<td>2.78</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1858:C:H2'</td>
<td>29:X:1859:A:C8</td>
<td>2.54</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2301:A:H2'</td>
<td>29:X:2302:G:C8</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:837:U:H1'</td>
<td>29:X:2337:A:N7</td>
<td>2.35</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2559:U:C5</td>
<td>29:X:2560:G:C5</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2594:U:O2</td>
<td>29:X:2595:G:C5</td>
<td>2.73</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2641:A:O5'</td>
<td>29:X:2641:A:H8</td>
<td>2.03</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:463:C:O2</td>
<td>29:X:465:C:N4</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:729:A:C4</td>
<td>29:X:729:A:H3'</td>
<td>2.54</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:807:A:H2'</td>
<td>29:X:808:C:C6</td>
<td>2.55</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:830:C:H2'</td>
<td>29:X:831:G:O4'</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>6:A:244:ARG:HB3</td>
<td>6:A:252:LYS:HZ3</td>
<td>1.81</td>
<td>0.42</td>
</tr>
<tr>
<td>9:D:129:ASN:ND2</td>
<td>29:X:2282:G:H1'</td>
<td>2.33</td>
<td>0.42</td>
</tr>
<tr>
<td>9:D:15:ALA:O</td>
<td>9:D:18:GLN:C</td>
<td>2.58</td>
<td>0.42</td>
</tr>
<tr>
<td>10:E:7:GLN:O</td>
<td>10:E:9:ILE:HG13</td>
<td>2.18</td>
<td>0.42</td>
</tr>
<tr>
<td>12:G:51:LEU:HD13</td>
<td>12:G:88:VAL:HG11</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>14:I:89:ASP:O</td>
<td>14:I:91:ASP:N</td>
<td>2.53</td>
<td>0.42</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:K:54:THR:HG22</td>
<td>16:K:66:VAL:HG23</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>16:K:73:LYS:HA</td>
<td>16:K:76:VAL:HG12</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>17:L:95:LYS:HD3</td>
<td>31:Z:49:C:O2'</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>20:O:28:GLU:C</td>
<td>20:O:30:GLY:N</td>
<td>2.71</td>
<td>0.42</td>
</tr>
<tr>
<td>23:R:105:ARG:NH1</td>
<td>23:R:112:LYS:CA</td>
<td>2.79</td>
<td>0.42</td>
</tr>
<tr>
<td>27:V:6:MET:O</td>
<td>27:V:14:PHE:HE1</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1032:A:C8</td>
<td>29:X:1032:A:C3'</td>
<td>3.03</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1032:A:O2'</td>
<td>29:X:1134:C:H5'</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1094:C:H6</td>
<td>29:X:1094:C:O5'</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1231:A:C5</td>
<td>29:X:1232:U:C4</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1287:A:N3</td>
<td>29:X:1310:C:H1'</td>
<td>2.35</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1571:G:N2</td>
<td>29:X:1572:C:C2</td>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:177:H3'</td>
<td>29:X:178:C:C6</td>
<td>2.54</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1791:C:C5'</td>
<td>29:X:1792:C:OP1</td>
<td>2.66</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2627:G:C6</td>
<td>29:X:2652:G:C5</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2656:G:O2'</td>
<td>29:X:2657:G:H5'</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>19:N:37:GLN:NE2</td>
<td>29:X:572:G:N3</td>
<td>2.68</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:599:A:H2'</td>
<td>29:X:600:G:C8</td>
<td>2.55</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:602:C:H2'</td>
<td>29:X:603:C:H6</td>
<td>1.85</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:629:C:H2'</td>
<td>29:X:630:G:O4'</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>4:4:13:ASN:O</td>
<td>4:4:15:LYS:HG3</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>4:4:15:LYS:O</td>
<td>4:4:17:VAL:HG23</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>4:4:30:VAL:C</td>
<td>4:4:32:HIS:H</td>
<td>2.23</td>
<td>0.42</td>
</tr>
<tr>
<td>6:A:96:HIS:CE1</td>
<td>6:A:100:GLY:HA2</td>
<td>2.54</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>8:C:56:ARG:NH1</td>
<td>29:X:814:G:OP2</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>10:E:126:PRO:CG</td>
<td>10:E:127:GLU:N</td>
<td>2.70</td>
<td>0.42</td>
</tr>
<tr>
<td>10:E:115:ILE:HD11</td>
<td>10:E:151:VAL:HG21</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>10:E:9:ILE:HB</td>
<td>10:E:50:LEU:HB3</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>12:G:32:TYR:OH</td>
<td>12:G:35:LYS:NZ</td>
<td>2.47</td>
<td>0.42</td>
</tr>
<tr>
<td>16:K:103:ARG:O</td>
<td>16:K:107:GLY:HA2</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>16:K:27:ALA:O</td>
<td>16:K:30:ARG:N</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>17:L:29:LEU:HD12</td>
<td>17:L:41:GLN:O</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>17:L:36:LYS:N</td>
<td>17:L:36:LYS:HD2</td>
<td>2.34</td>
<td>0.42</td>
</tr>
<tr>
<td>23:R:25:LEU:HD12</td>
<td>23:R:81:VAL:H</td>
<td>1.82</td>
<td>0.42</td>
</tr>
<tr>
<td>23:R:60:PRO:C</td>
<td>23:R:62:MET:N</td>
<td>2.73</td>
<td>0.42</td>
</tr>
<tr>
<td>24:S:30:VAL:HG12</td>
<td>24:S:31:SER:O</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>26:U:11:LYS:NZ</td>
<td>26:U:75:TYR:CG</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>26:U:17:SER:CB</td>
<td>26:U:44:ALA:HA</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>27:V:37:LEU:C</td>
<td>27:V:37:LEU:CD2</td>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1122:A:C2'</td>
<td>29:X:1123:G:H4'</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1496:G:C2'</td>
<td>29:X:1497:C:O5'</td>
<td>2.67</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1674:C:O2'</td>
<td>29:X:1675:C:H5'</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1701:C:C2</td>
<td>29:X:1722:G:N2</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1973:C:H6</td>
<td>29:X:1973:C:O5'</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2324:G:H4'</td>
<td>29:X:2326:G:H5&quot;</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2399:C:O5'</td>
<td>29:X:2399:C:H6</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2703:C:H2'</td>
<td>29:X:2704:U:O5'</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2707:G:H2'</td>
<td>29:X:2708:U:C6</td>
<td>2.55</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:416:U:H5&quot;</td>
<td>29:X:419:G:H4'</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:531:G:N2</td>
<td>29:X:532:A:C4</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:749:C:C2</td>
<td>29:X:750:C:C5</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:931:G:C5</td>
<td>29:X:932:G:C8</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:953:G:O5'</td>
<td>29:X:953:G:H8</td>
<td>2.03</td>
<td>0.42</td>
</tr>
<tr>
<td>8:C:112:GLN:NE2</td>
<td>8:C:188:ILE:HD11</td>
<td>2.34</td>
<td>0.42</td>
</tr>
<tr>
<td>8:C:39:ARG:HG2</td>
<td>8:C:39:ARG:HH11</td>
<td>1.85</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>10:E:25:LYS:O</td>
<td>10:E:26:VAL:HG23</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>14:I:117:ALA:CB</td>
<td>14:I:137:GLY:HA3</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>15:J:99:LYS:HA</td>
<td>15:J:99:LYS:HD2</td>
<td>1.81</td>
<td>0.42</td>
</tr>
<tr>
<td>16:K:76:VAL:HA</td>
<td>16:K:79:VAL:CG1</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>23:R:93:ARG:CG</td>
<td>23:R:94:VAL:HG23</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>24:S:141:MET:HB3</td>
<td>24:S:171:VAL:HG23</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1030:U:H5&quot;</td>
<td>29:X:1132:C:O2</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>4:4:36:GLN:NE2</td>
<td>29:X:1135:C:H1'</td>
<td>2.34</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1318:A:C2'</td>
<td>29:X:1319:C:O5'</td>
<td>2.67</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:137:A:H2'</td>
<td>29:X:138:G:H5'</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1512:A:N3</td>
<td>29:X:1593:C:O2'</td>
<td>2.51</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1629:G:C2'</td>
<td>29:X:1633:C:N4</td>
<td>2.81</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1715:A:H4'</td>
<td>29:X:1716:G:O5'</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1727:C:H4'</td>
<td>29:X:2833:C:N3</td>
<td>2.34</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1790:G:C4</td>
<td>29:X:1811:A:N6</td>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1876:C:C5</td>
<td>29:X:1877:C:C5</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2210:C:O2</td>
<td>29:X:2211:U:C6</td>
<td>2.73</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2290:A:N1</td>
<td>29:X:2291:U:C4</td>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2519:C:H2'</td>
<td>29:X:2520:A:H5'</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>7:B:154:LYS:HE2</td>
<td>29:X:2598:C:H1'</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2027:C:C2</td>
<td>29:X:2604:G:C2</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2860:C:C2'</td>
<td>29:X:2861:A:H5'</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:43:A:N1</td>
<td>29:X:44:G:C6</td>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:559:C:O2</td>
<td>29:X:560:G:H1'</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:587:A:H2'</td>
<td>29:X:588:G:H5&quot;</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:651:C:N4</td>
<td>29:X:658:G:H1</td>
<td>2.18</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:677:G:C2</td>
<td>29:X:678:G:C8</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:6:A:C5</td>
<td>29:X:7:G:N7</td>
<td>2.88</td>
<td>0.42</td>
</tr>
</tbody>
</table>

Continued on next page...
### Interatomic distances and clash overlap

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21:P:36:ARG:CZ</td>
<td>30:Y:20:ARG:NH1</td>
<td>2.83</td>
<td>0.42</td>
</tr>
<tr>
<td>31:Z:15:A:N1</td>
<td>31:Z:71:G:H2'</td>
<td>2.34</td>
<td>0.42</td>
</tr>
<tr>
<td>4:4:31:LYS:H</td>
<td>4:4:31:LYS:HD2</td>
<td>1.81</td>
<td>0.42</td>
</tr>
<tr>
<td>7:B:134:TRP:CD1</td>
<td>7:B:134:TRP:N</td>
<td>2.72</td>
<td>0.42</td>
</tr>
<tr>
<td>8:C:117:LEU:HD23</td>
<td>8:C:117:LEU:O</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>8:C:137:ALA:HB1</td>
<td>8:C:142:LEU:HB2</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>8:C:161:ALA:CB</td>
<td>8:C:169:VAL:CG2</td>
<td>2.98</td>
<td>0.42</td>
</tr>
<tr>
<td>9:D:53:ALA:O</td>
<td>9:D:56:GLU:HB2</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>10:E:140:LEU:HD23</td>
<td>10:E:140:LEU:HA</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>12:G:105:GLY:O</td>
<td>12:G:110:LEU:CD1</td>
<td>2.64</td>
<td>0.42</td>
</tr>
<tr>
<td>14:I:8:PRO:C</td>
<td>29:X:1218:C:HO2'</td>
<td>2.23</td>
<td>0.42</td>
</tr>
<tr>
<td>16:K:97:ILE:HA</td>
<td>16:K:112:LEU:O</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>19:N:75:ASN:ND2</td>
<td>19:N:77:SER:HB3</td>
<td>2.34</td>
<td>0.42</td>
</tr>
<tr>
<td>23:R:15:HIS:CE1</td>
<td>23:R:16:PHE:CE2</td>
<td>3.08</td>
<td>0.42</td>
</tr>
<tr>
<td>23:R:48:VAL:C</td>
<td>23:R:50:GLY:N</td>
<td>2.73</td>
<td>0.42</td>
</tr>
<tr>
<td>24:S:139:THR:O</td>
<td>24:S:140:LYS:C</td>
<td>2.57</td>
<td>0.42</td>
</tr>
<tr>
<td>24:S:13:LYS:CB</td>
<td>24:S:13:LYS:HZ2</td>
<td>2.31</td>
<td>0.42</td>
</tr>
<tr>
<td>26:U:33:LYS:HD3</td>
<td>29:X:2375:G:H1'</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1888:C:H2'</td>
<td>29:X:1913:G:N7</td>
<td>2.35</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1873:AH4</td>
<td>29:X:2069:U:H4'</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:21:A:N1</td>
<td>29:X:530:G:C6</td>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2312:A:O2'</td>
<td>29:X:2313:G:P</td>
<td>2.78</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2534:U:C5</td>
<td>29:X:2535:C:C2</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2814:G:C5</td>
<td>29:X:2815:C:C4</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2869:U:H2'</td>
<td>29:X:2870:C:O4'</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:346:C:O2</td>
<td>29:X:347:C:C6</td>
<td>2.73</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:403:A:H4'</td>
<td>29:X:404:A:C5'</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:33:C:O2</td>
<td>29:X:466:A:C2</td>
<td>2.73</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:783:G:C6</td>
<td>29:X:784:U:N3</td>
<td>2.87</td>
<td>0.42</td>
</tr>
<tr>
<td>7:B:95:ILE:HA</td>
<td>7:B:95:ILE:HD13</td>
<td>1.65</td>
<td>0.42</td>
</tr>
<tr>
<td>8:C:173:ALA:C</td>
<td>8:C:175:VAL:N</td>
<td>2.72</td>
<td>0.42</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:D:106:ILE:HG23</td>
<td>9:D:110:ARG:HD2</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>9:D:135:GLN:HG3</td>
<td>9:D:151:GLY:N</td>
<td>2.35</td>
<td>0.42</td>
</tr>
<tr>
<td>9:D:92:ARG:HH12</td>
<td>31:Z:46:G:C3'</td>
<td>2.32</td>
<td>0.42</td>
</tr>
<tr>
<td>15:J:17:ARG:NH1</td>
<td>29:X:969:U:C5'</td>
<td>2.75</td>
<td>0.42</td>
</tr>
<tr>
<td>15:J:39:GLU:HA</td>
<td>15:J:40:PRO:HD3</td>
<td>1.74</td>
<td>0.42</td>
</tr>
<tr>
<td>16:K:51:LEU:HD12</td>
<td>16:K:66:VAL:HG22</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>16:K:78:LYS:HG2</td>
<td>16:K:83:VAL:HG12</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>17:L:33:ARG:CZ</td>
<td>17:L:103:LEU:HD12</td>
<td>2.49</td>
<td>0.42</td>
</tr>
<tr>
<td>17:L:44:ASP:O</td>
<td>17:L:44:ASP:OD1</td>
<td>2.38</td>
<td>0.42</td>
</tr>
<tr>
<td>18:M:70:LYS:HG2</td>
<td>18:M:71:ILE:N</td>
<td>2.34</td>
<td>0.42</td>
</tr>
<tr>
<td>21:P:45:ILE:HD13</td>
<td>21:P:53:ALA:HB1</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>25:T:11:LYS:H</td>
<td>25:T:11:LYS:HG3</td>
<td>1.77</td>
<td>0.42</td>
</tr>
<tr>
<td>25:T:41:ARG:NH1</td>
<td>25:T:41:ARG:HG3</td>
<td>2.33</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:984:A:C8</td>
<td>29:X:1202:U:N3</td>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1441:A:O2'</td>
<td>29:X:1442:C:OP2</td>
<td>2.34</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:148:C:H3'</td>
<td>29:X:149:A:H8</td>
<td>1.84</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1682:A:C2'</td>
<td>29:X:1683:G:H5'</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:1147:G:O2'</td>
<td>29:X:2022:C:H5''</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2542:U:O2'</td>
<td>29:X:2544:A:C8</td>
<td>2.70</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2546:G:O2'</td>
<td>29:X:2547:C:H5'</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>7:B:154:LYS:HE3</td>
<td>29:X:2598:C:H1'</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:2792:C:N3</td>
<td>29:X:2805:G:C2</td>
<td>2.88</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:328:A:O2'</td>
<td>29:X:329:C:H5'</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:404:A:C5</td>
<td>29:X:405:C:C5</td>
<td>3.07</td>
<td>0.42</td>
</tr>
<tr>
<td>29:X:879:A:OP1</td>
<td>29:X:879:A:C8</td>
<td>2.73</td>
<td>0.42</td>
</tr>
<tr>
<td>3:3:12:ARG:CA</td>
<td>14:I:62:LYS:HB3</td>
<td>2.50</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>6:A:264:LYS:HA</td>
<td>6:A:264:LYS:HD2</td>
<td>1.83</td>
<td>0.41</td>
</tr>
<tr>
<td>7:B:85:ALA:HB3</td>
<td>7:B:86:PRO:HD2</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:122:GLY:O</td>
<td>8:C:123:PHE:C</td>
<td>2.58</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:158:ARG:HH11</td>
<td>8:C:158:ARG:CB</td>
<td>2.32</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:50:GLN:CG</td>
<td>8:C:50:GLN:O</td>
<td>2.68</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:16:LEU:HD22</td>
<td>9:D:20:PHE:CE1</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>14:I:105:PRO:C</td>
<td>14:I:106:VAL:HG23</td>
<td>2.40</td>
<td>0.41</td>
</tr>
<tr>
<td>15:J:36:ILE:HA</td>
<td>15:J:102:ARG:O</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>15:J:23:LYS:HA</td>
<td>24:S:73:LYS:HZ3</td>
<td>1.83</td>
<td>0.41</td>
</tr>
<tr>
<td>15:J:75:VAL:CG2</td>
<td>15:J:93:TYR:HE2</td>
<td>2.32</td>
<td>0.41</td>
</tr>
<tr>
<td>17:L:98:GLY:O</td>
<td>17:L:99:ARG:C</td>
<td>2.58</td>
<td>0.41</td>
</tr>
<tr>
<td>20:O:86:HIS:CD2</td>
<td>20:O:87:ARG:N</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>26:U:23:LYS:HE3</td>
<td>26:U:26:ALA:CA</td>
<td>2.49</td>
<td>0.41</td>
</tr>
<tr>
<td>27:V:47:ARG:O</td>
<td>27:V:50:VAL:N</td>
<td>2.52</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1002:C:H2'</td>
<td>29:X:1003:C:H6</td>
<td>1.84</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1247:U:C2'</td>
<td>29:X:1248:G:H5'</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1248:G:O5'</td>
<td>29:X:1248:G:H8</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1426:U:O2'</td>
<td>29:X:1427:G:H5'</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1778:U:C6</td>
<td>29:X:1779:C:H5</td>
<td>2.38</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2217:G:H2'</td>
<td>29:X:2217:G:N3</td>
<td>2.34</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2343:C:H2'</td>
<td>29:X:2344:G:H5'</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2381:A:C2'</td>
<td>29:X:2382:C:OP2</td>
<td>2.68</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2440:C:C4</td>
<td>29:X:2441:U:O4</td>
<td>2.72</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2707:G:C8</td>
<td>29:X:2707:G:H5'</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:847:C:C2</td>
<td>29:X:848:A:N7</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>15:J:12:LYS:HD3</td>
<td>29:X:923:A:C5</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>6:A:160:GLU:N</td>
<td>6:A:196:VAL:CG2</td>
<td>2.84</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:102:LEU:CD2</td>
<td>8:C:106:MET:CE</td>
<td>2.98</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:32:THR:O</td>
<td>8:C:33:TRP:C</td>
<td>2.59</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:70:ALA:HB3</td>
<td>9:D:83:MET:H</td>
<td>1.84</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:131:ILE:CG2</td>
<td>10:E:132:ASP:N</td>
<td>2.82</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>12:G:57:LEU:CD2</td>
<td>12:G:170:PRO:HA</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>15:J:119:PHE:HA</td>
<td>15:J:132:MET:HG3</td>
<td>1.84</td>
<td>0.41</td>
</tr>
<tr>
<td>18:M:72:SER:HG</td>
<td>18:M:73:PHE:HD1</td>
<td>1.68</td>
<td>0.41</td>
</tr>
<tr>
<td>24:S:72:ASP:N</td>
<td>24:S:77:ALA:O</td>
<td>2.49</td>
<td>0.41</td>
</tr>
<tr>
<td>20:O:78:VAL:CG2</td>
<td>29:X:1202:U:H5'</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1426:U:H2'</td>
<td>29:X:1427:G:C5'</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1495:G:H5'</td>
<td>29:X:1574:A:H2</td>
<td>1.85</td>
<td>0.41</td>
</tr>
<tr>
<td>6:A:59:LYS:CG</td>
<td>29:X:1584:G:H4'</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1730:G:C4</td>
<td>29:X:1737:G:N2</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2029:G:N2</td>
<td>29:X:2030:U:C2</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2261:G:H5'</td>
<td>29:X:2262:U:O5'</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:312:G:C4</td>
<td>29:X:313:U:C5</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:356:A:H2'</td>
<td>29:X:357:AN7</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:400:U:H4'</td>
<td>29:X:401:G:O4'</td>
<td>2.19</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:404:A:C6</td>
<td>29:X:405:C:N3</td>
<td>2.87</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:439:C:O2'</td>
<td>29:X:440:U:H5'</td>
<td>2.19</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:471:A:C2</td>
<td>29:X:481:A:C5</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>21:P:82:ASN:ND2</td>
<td>29:X:505:G:N3</td>
<td>2.68</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:586:G:C6</td>
<td>29:X:587:AN6</td>
<td>2.87</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:59:G:HI'</td>
<td>29:X:73:A:C2</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:751:L:O2'</td>
<td>29:X:752:G:OP1</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:767:G:O2'</td>
<td>29:X:768:U:H5'</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>31:Z:23:G:C6</td>
<td>31:Z:24:U:C4</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>6:A:151:LYS:HD2</td>
<td>6:A:151:LYS:HA</td>
<td>1.87</td>
<td>0.41</td>
</tr>
<tr>
<td>6:A:209:ALA:HB2</td>
<td>29:X:1781:C:C2'</td>
<td>2.49</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>8:C:130:THR:HA</td>
<td>8:C:160:ALA:HB1</td>
<td>2.01</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:46:ASP:O</td>
<td>9:D:50:ILE:HG13</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:102:ALA:HB1</td>
<td>10:E:115:ILE:O</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:164:PHE:O</td>
<td>10:E:165:VAL:C</td>
<td>2.58</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:89:LEU:HD11</td>
<td>10:E:96:ALA:HB2</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>11:F:51:ALA:CB</td>
<td>11:F:72:PRO:HB2</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>11:F:98:LYS:HE2</td>
<td>11:F:139:GLU:HB2</td>
<td>2.01</td>
<td>0.41</td>
</tr>
<tr>
<td>14:I:126:SER:O</td>
<td>14:I:130:ILE:HG13</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>14:I:83:LEU:HA</td>
<td>14:I:83:LEU:HD23</td>
<td>1.80</td>
<td>0.41</td>
</tr>
<tr>
<td>17:L:10:LYS:HB2</td>
<td>17:L:14:ARG:NH2</td>
<td>2.15</td>
<td>0.41</td>
</tr>
<tr>
<td>23:R:18:LYS:C</td>
<td>23:R:36:VAL:HB</td>
<td>2.40</td>
<td>0.41</td>
</tr>
<tr>
<td>24:S:71:MET:CE</td>
<td>24:S:71:MET:H</td>
<td>2.33</td>
<td>0.41</td>
</tr>
<tr>
<td>25:T:43:THR:HG22</td>
<td>25:T:46:LYS:HG2</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>26:U:41:VAL:CG2</td>
<td>26:U:43:ARG:NH2</td>
<td>2.81</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:102:U:C5</td>
<td>29:X:103:U:C4</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1526:U:H2'</td>
<td>29:X:1527:U:C8</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2041:U:O5'</td>
<td>29:X:2041:U:H8</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2528:U:C2</td>
<td>29:X:2529:U:C8</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2670:U:C6</td>
<td>29:X:2847:U:C6</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2781:U:C3'</td>
<td>29:X:2782:U:H5''</td>
<td>2.49</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>29:X:803:C:H4'</td>
<td>29:X:804:C:OP1</td>
<td>2.15</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:815:A:C4</td>
<td>29:X:816:U:C5</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:24:SER:OG</td>
<td>31:Z:57:U:O3'</td>
<td>2.37</td>
<td>0.41</td>
</tr>
<tr>
<td>4:4:25:VAL:CB</td>
<td>4:4:34:GLN:HB2</td>
<td>2.48</td>
<td>0.41</td>
</tr>
<tr>
<td>6:A:244:ARG:HE</td>
<td>6:A:244:ARG:HB2</td>
<td>1.69</td>
<td>0.41</td>
</tr>
<tr>
<td>7:B:77:ILE:O</td>
<td>7:B:78:LEU:HD23</td>
<td>2.19</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:47:THR:HA</td>
<td>8:C:82:VAL:O</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:71:LYS:C</td>
<td>9:D:73:SER:N</td>
<td>2.74</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:69:ARG:O</td>
<td>10:E:70:THR:C</td>
<td>2.57</td>
<td>0.41</td>
</tr>
<tr>
<td>11:F:13:PRO:HG3</td>
<td>11:F:52:ILE:CD1</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>12:G:50:PRO:HD3</td>
<td>29:X:1152:C:H4'</td>
<td>1.85</td>
<td>0.41</td>
</tr>
<tr>
<td>14:I:107:LYS:HB2</td>
<td>14:I:107:LYS:HE2</td>
<td>1.87</td>
<td>0.41</td>
</tr>
<tr>
<td>18:M:104:LEU:HD23</td>
<td>18:M:106:TYR:HE2</td>
<td>1.84</td>
<td>0.41</td>
</tr>
<tr>
<td>19:N:75:ASN:ND2</td>
<td>19:N:78:THR:H</td>
<td>2.18</td>
<td>0.41</td>
</tr>
<tr>
<td>20:O:39:PHE:CE1</td>
<td>20:O:46:VAL:HB</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>23:R:84:VAL:HG2</td>
<td>23:R:90:LYS:N</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>25:T:3:HIS:CG</td>
<td>25:T:4:LYS:N</td>
<td>2.89</td>
<td>0.41</td>
</tr>
<tr>
<td>25:T:40:GLN:NE2</td>
<td>25:T:57:HIS:HB3</td>
<td>2.29</td>
<td>0.41</td>
</tr>
<tr>
<td>26:U:17:SER:HB2</td>
<td>26:U:44:ALA:CA</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1438:G:H2'</td>
<td>29:X:1439:G:C8</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1658:G:N6</td>
<td>29:X:1659:G:C2</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1781:G:H2'</td>
<td>29:X:1782:A:C5</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1933:G:N7</td>
<td>29:X:1934:U:C5</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2082:G:C2'</td>
<td>29:X:2023:G:H5&quot;</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:21:A:H2'</td>
<td>29:X:22:C:C6</td>
<td>2.54</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2006:G:H5'</td>
<td>29:X:2596:C:H4'</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2779:G:C6</td>
<td>29:X:3779:G:C3'</td>
<td>3.03</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2799:G:C3</td>
<td>29:X:2800:G:C2</td>
<td>2.89</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:459:G:C2</td>
<td>29:X:466:G:C8</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:820:G:H2'</td>
<td>29:X:821:A:C8</td>
<td>2.49</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>8:C:177:VAL:O</td>
<td>8:C:180:ILE:HG23</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:61:GLN:CD</td>
<td>29:X:688:A:H4'</td>
<td>2.40</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:146:VAL:HB</td>
<td>9:D:147:ASP:H</td>
<td>1.62</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:35:VAL:CG1</td>
<td>9:D:36:VAL:H</td>
<td>2.29</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:41:LEU:HD22</td>
<td>10:E:64:LEU:HD22</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:9:ILE:CD1</td>
<td>10:E:51:LEU:HA</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>11:F:11:GLN:HG2</td>
<td>11:F:11:GLN:O</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>11:F:12:LEU:HD12</td>
<td>11:F:37:PHE:CZ</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>12:G:45:ASP:OD1</td>
<td>12:G:47:SER:N</td>
<td>2.47</td>
<td>0.41</td>
</tr>
<tr>
<td>14:I:28:LYS:NZ</td>
<td>14:I:37:GLN:N</td>
<td>2.58</td>
<td>0.41</td>
</tr>
<tr>
<td>15:J:79:PRO:CG</td>
<td>15:J:88:LYS:HD2</td>
<td>2.49</td>
<td>0.41</td>
</tr>
<tr>
<td>16:K:31:GLU:C</td>
<td>16:K:33:ARG:H</td>
<td>2.22</td>
<td>0.41</td>
</tr>
<tr>
<td>16:K:60:LEU:O</td>
<td>16:K:63:ARG:HB3</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>17:L:10:LYS:HB3</td>
<td>17:L:14:ARG:HE</td>
<td>1.85</td>
<td>0.41</td>
</tr>
<tr>
<td>13:H:116:ARG:CZ</td>
<td>18:M:38:LYS:HD3</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>24:S:5:ALA:HB1</td>
<td>24:S:7:PRO:HD3</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1424:U:H2'</td>
<td>29:X:1425:G:C8</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1742:G:C2</td>
<td>29:X:1743:C:C4</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1845:A:N3</td>
<td>29:X:2212:U:O2'</td>
<td>2.45</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1978:U:H3'</td>
<td>29:X:1979:C:C5'</td>
<td>2.30</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2047:U:H1'</td>
<td>29:X:2429:A:C5</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2070:G:C6</td>
<td>29:X:2212:U:N3</td>
<td>2.89</td>
<td>0.41</td>
</tr>
<tr>
<td>17:L:14:ARG:HH12</td>
<td>29:X:2274:C:H5</td>
<td>1.69</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2434:G:N1</td>
<td>29:X:2477:C:N4</td>
<td>2.69</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2564:U:H4'</td>
<td>29:X:2565:C:OP1</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2566:A:N6</td>
<td>29:X:2587:G:H1'</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:24:G:C5</td>
<td>29:X:25:U:C5</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>7:B:82:ARG:NH2</td>
<td>29:X:2617:G:OP2</td>
<td>2.53</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2650:G:C5</td>
<td>29:X:2651:U:C5</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2684:A:C4</td>
<td>29:X:2685:A:C8</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:312:G:C6</td>
<td>29:X:328:A:C6</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:584:A:OP1</td>
<td>29:X:584:A:H8</td>
<td>2.04</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>29:X:618:A:C2</td>
<td>29:X:619:A:C4</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:630:G:H3'</td>
<td>29:X:631:G:N2</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:640:C:N4</td>
<td>29:X:641:G:O6</td>
<td>2.54</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:812:G:C6</td>
<td>29:X:813:A:C6</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:920:G:C2'</td>
<td>29:X:921:A:O5'</td>
<td>2.69</td>
<td>0.41</td>
</tr>
<tr>
<td>7:B:16:LYS:O</td>
<td>7:B:17:ASN:HB2</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:22:VAL:HG21</td>
<td>8:C:110:SER:OG</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:191:ALA:O</td>
<td>8:C:192:ALA:C</td>
<td>2.57</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:53:ALA:O</td>
<td>9:D:54:ALA:C</td>
<td>2.58</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:71:LYS:O</td>
<td>9:D:72:LYS:HB2</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:95:ARG:O</td>
<td>10:E:106:ASN:HB3</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:84:THR:HB</td>
<td>10:E:134:SER:CB</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:64:LEU:CA</td>
<td>10:E:67:LEU:HB2</td>
<td>2.49</td>
<td>0.41</td>
</tr>
<tr>
<td>15:J:27:TYR:OH</td>
<td>24:S:76:ARG:HG2</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>15:J:80:ALA:C</td>
<td>15:J:81:GLU:OE1</td>
<td>2.59</td>
<td>0.41</td>
</tr>
<tr>
<td>21:P:29:LYS:O</td>
<td>21:P:30:TYR:HB2</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>21:P:49:SER:C</td>
<td>21:P:51:GLN:N</td>
<td>2.73</td>
<td>0.41</td>
</tr>
<tr>
<td>23:R:17:LYS:HB3</td>
<td>23:R:18:LYS:NZ</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>23:R:94:VAL:C</td>
<td>23:R:95:ARG:HH11</td>
<td>2.24</td>
<td>0.41</td>
</tr>
<tr>
<td>24:S:125:PRO:CG</td>
<td>24:S:126:GLY:N</td>
<td>2.83</td>
<td>0.41</td>
</tr>
<tr>
<td>27:V:50:VAL:HA</td>
<td>27:V:53:LEU:CD1</td>
<td>2.34</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1149:G:N3</td>
<td>29:X:1154:A:C2</td>
<td>2.77</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1153:A:C4</td>
<td>29:X:1155:G:C5</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1164:C:O2'</td>
<td>29:X:1165:G:H5'</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:184:A:H2'</td>
<td>29:X:185:C:O4'</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2201:G:C2</td>
<td>29:X:2202:G:C8</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2378:G:H2'</td>
<td>29:X:2379:G:O4'</td>
<td>2.19</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:242:A:H2'</td>
<td>29:X:243:G:C1'</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2441:U:N3</td>
<td>29:X:2442:C:C5</td>
<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>29:X:2513:A:C6</td>
<td>29:X:2514:G:C8</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:158:HIS:NE2</td>
<td>29:X:2638:G:OP1</td>
<td>2.41</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2673:G:H2'</td>
<td>29:X:2674:C:H6</td>
<td>1.86</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2798:A:C5</td>
<td>29:X:2799:C:C5</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:339:U:O4</td>
<td>29:X:343:A:C8</td>
<td>2.73</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:341:A:O2'</td>
<td>29:X:342:G:P</td>
<td>2.78</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:447:U:O2'</td>
<td>29:X:448:C:C5</td>
<td>2.72</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:468:A:H1'</td>
<td>29:X:470:U:C6</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:930:A:H3'</td>
<td>29:X:930:A:C8</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:95:G:O2'</td>
<td>29:X:96:C:H5'</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>6:A:186:HIS:N1</td>
<td>6:A:186:HIS:N</td>
<td>2.69</td>
<td>0.41</td>
</tr>
<tr>
<td>6:A:227:ASN:HD21</td>
<td>29:X:797:A:C5'</td>
<td>2.34</td>
<td>0.41</td>
</tr>
<tr>
<td>7:B:11:MET:HG2</td>
<td>7:B:24:THR:OG1</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>7:B:131:SER:C</td>
<td>7:B:132:LYS:CG</td>
<td>2.80</td>
<td>0.41</td>
</tr>
<tr>
<td>7:B:31:CYS:HA</td>
<td>7:B:32:PRO:HD3</td>
<td>1.75</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:163:ASN:O</td>
<td>8:C:164:VAL:O</td>
<td>2.38</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:144:ASP:O</td>
<td>9:D:145:MET:HG2</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:148:VAL:O</td>
<td>10:E:150:LYS:N</td>
<td>2.53</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:18:ASN:C</td>
<td>10:E:20:GLN:N</td>
<td>2.73</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:24:PHE:CD1</td>
<td>10:E:24:PHE:N</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>11:F:25:PRO:CG</td>
<td>11:F:26:ALA:N</td>
<td>2.83</td>
<td>0.41</td>
</tr>
<tr>
<td>12:G:96:ASP:OD1</td>
<td>12:G:97:ASP:HB2</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>14:I:134:GLU:C</td>
<td>14:I:136:ALA:N</td>
<td>2.74</td>
<td>0.41</td>
</tr>
<tr>
<td>16:K:38:LEU:O</td>
<td>16:K:41:ALA:HB3</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>16:K:76:VAL:O</td>
<td>16:K:79:VAL:HG12</td>
<td>2.19</td>
<td>0.41</td>
</tr>
<tr>
<td>17:L:104:ALA:O</td>
<td>17:L:107:ALA:N</td>
<td>2.54</td>
<td>0.41</td>
</tr>
<tr>
<td>17:L:99:ARG:HG2</td>
<td>31:Z:51:G:OP1</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>17:L:33:ARG:NH1</td>
<td>17:L:99:ARG:O</td>
<td>2.54</td>
<td>0.41</td>
</tr>
<tr>
<td>18:M:87:LEU:O</td>
<td>18:M:87:LEU:HD13</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>20:O:29:ALA:O</td>
<td>20:O:30:GLY:C</td>
<td>2.57</td>
<td>0.41</td>
</tr>
<tr>
<td>20:O:9:GLY:O</td>
<td>20:O:10:LYS:CB</td>
<td>2.67</td>
<td>0.41</td>
</tr>
<tr>
<td>23:R:84:VAL:CA</td>
<td>23:R:90:LYS:HD3</td>
<td>2.24</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>24:S:45:GLN:HB2</td>
<td>24:S:46:GLN:H</td>
<td>1.71</td>
<td>0.41</td>
</tr>
<tr>
<td>26:U:23:LYS:HD2</td>
<td>26:U:35:THR:CB</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>26:U:50:ALA:HB3</td>
<td>26:U:52:ARG:NH2</td>
<td>2.24</td>
<td>0.41</td>
</tr>
<tr>
<td>26:U:53:GLU:HB3</td>
<td>26:U:58:LYS:N</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>27:V:48:ARG:NE</td>
<td>29:X:75:C:OP1</td>
<td>2.53</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1081:A:C5</td>
<td>29:X:1108:U:H4'</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1211:G:N2</td>
<td>29:X:1263:G:C5</td>
<td>2.89</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1313:U:O2'</td>
<td>29:X:1314:A:OP2</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1494:G:H2'</td>
<td>29:X:1495:G:O4'</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1509:A:C2'</td>
<td>29:X:1510:A:H5'</td>
<td>2.49</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1707:A:C8</td>
<td>29:X:1708:C:C5</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2328:G:H8</td>
<td>29:X:2328:G:OP2</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2373:C:H2'</td>
<td>29:X:2374:C:H6</td>
<td>1.84</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:204:AN7</td>
<td>29:X:2386:G:H5'</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>15:J:125:LYS:HB2</td>
<td>29:X:2463:G:H1'</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:541:C:O2'</td>
<td>29:X:542:A:P</td>
<td>2.79</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:657:AN3</td>
<td>29:X:2329:C:O2'</td>
<td>2.47</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:887:G:O2'</td>
<td>29:X:888:G:H5'</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:33:TRP:CH2</td>
<td>8:C:100:ARG:HD2</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:79:LEU:HA</td>
<td>9:D:80:ARG:NH1</td>
<td>2.34</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:61:THR:HG22</td>
<td>9:D:99:PHE:CE2</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:77:LYS:HA</td>
<td>10:E:80:SER:CB</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>14:I:88:PHE:O</td>
<td>14:I:93:LEU:HB2</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>15:J:119:PHE:HA</td>
<td>15:J:122:ALA:HB3</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>15:J:104:MET:CE</td>
<td>15:J:130:THR:HG21</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>16:K:71:HIS:ND1</td>
<td>16:K:71:HIS:N</td>
<td>2.68</td>
<td>0.41</td>
</tr>
<tr>
<td>20:O:35:LEU:CD2</td>
<td>20:O:36:LYS:N</td>
<td>2.84</td>
<td>0.41</td>
</tr>
<tr>
<td>24:S:36:ARG:C</td>
<td>24:S:40:ASP:OD2</td>
<td>2.59</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1006:C:HO2'</td>
<td>29:X:1007:A:C5'</td>
<td>2.34</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1166:A:C3'</td>
<td>29:X:1167:A:H5''</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1355:A:H1'</td>
<td>29:X:1410:U:H4'</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1569:A:C4</td>
<td>29:X:1571:G:C8</td>
<td>3.09</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>29:X:1687:C:OP2</td>
<td>29:X:1688:U:O4</td>
<td>2.39</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1794:A:H2’</td>
<td>29:X:1795:C:H5’</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2299:A:O2</td>
<td>29:X:2312:A:N6</td>
<td>2.54</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2229:G:O2’</td>
<td>29:X:2475:C:OP1</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2510:A:N6</td>
<td>29:X:2511:G:C6</td>
<td>2.88</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2519:C:C2’</td>
<td>29:X:2520:A:H5’</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2587:G:C8</td>
<td>29:X:2587:G:H3’</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2505:G:H5’</td>
<td>29:X:2722:C:O2’</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2733:A:O5’</td>
<td>29:X:2733:A:H8</td>
<td>2.04</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:516:G:O2’</td>
<td>29:X:517:A:C8</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:620:G:C4</td>
<td>29:X:621:U:C5</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:760:U:C4</td>
<td>30:Y:3:LYS:CG</td>
<td>2.95</td>
<td>0.41</td>
</tr>
<tr>
<td>15:J:70:PHE:CG</td>
<td>29:X:884:CH4’</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:861:G:N2</td>
<td>29:X:943:U:H1’</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>4:4:24:LEU:HG</td>
<td>4:4:35:ARG:CG</td>
<td>2.41</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:23:ASN:C</td>
<td>8:C:27:LEU:HD12</td>
<td>2.41</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:155:ASP:OD2</td>
<td>10:E:158:HIS:HB2</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:175:LYS:HD3</td>
<td>10:E:175:LYS:HA</td>
<td>1.89</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:20:GLN:O</td>
<td>10:E:21:ASP:HB2</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>12:G:61:ARG:HH22</td>
<td>12:G:78:ASP:HB2</td>
<td>1.84</td>
<td>0.41</td>
</tr>
<tr>
<td>14:1:92:THR:O</td>
<td>14:1:95:ALA:N</td>
<td>2.53</td>
<td>0.41</td>
</tr>
<tr>
<td>15:J:68:ARG:HE</td>
<td>15:J:103:VAL:HG11</td>
<td>1.86</td>
<td>0.41</td>
</tr>
<tr>
<td>19:N:25:TRP:CE3</td>
<td>19:N:26:GLY:CA</td>
<td>3.03</td>
<td>0.41</td>
</tr>
<tr>
<td>20:O:26:GLN:CG</td>
<td>20:O:27:GLY:H</td>
<td>2.09</td>
<td>0.41</td>
</tr>
<tr>
<td>24:S:89:GLY:C</td>
<td>24:S:127:PRO:HD2</td>
<td>2.41</td>
<td>0.41</td>
</tr>
<tr>
<td>25:T:5:LYS:HD2</td>
<td>25:T:5:LYS:N</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>28:W:45:LYS:CE</td>
<td>28:W:45:LYS:HA</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>5:5:6:BB9:O</td>
<td>29:X:1106:A:H1’</td>
<td>2.20</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>29:X:1211:G:C2</td>
<td>29:X:1263:G:C5</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1355:A:C2'</td>
<td>29:X:1357:U:OP2</td>
<td>2.69</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1429:A:C2'</td>
<td>29:X:1430:G:H4'</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1494:G:HO2'</td>
<td>29:X:1574:A:H2</td>
<td>1.69</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1623:C:O2'</td>
<td>29:X:1624:A:OP2</td>
<td>2.34</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1641:C:O2</td>
<td>29:X:1641:C:C2'</td>
<td>2.64</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1695:U:C2'</td>
<td>29:X:1696:C:H5'</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1811:A:C4</td>
<td>29:X:1813:A:N1</td>
<td>2.89</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1830:C:N4</td>
<td>29:X:1881:U:H2'</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2046:C:N3</td>
<td>29:X:2429:A:N6</td>
<td>2.61</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2264:C:C4'</td>
<td>29:X:2267:A:C6</td>
<td>3.03</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2281:C:C2</td>
<td>29:X:2282:G:C8</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2394:G:C6</td>
<td>29:X:2395:C:C4</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2433:G:C5</td>
<td>29:X:2434:G:N7</td>
<td>2.89</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:172:LYS:CD</td>
<td>29:X:2508:G:OP2</td>
<td>2.69</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2578:G:C2</td>
<td>29:X:2579:A:C8</td>
<td>3.08</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2649:A:C2</td>
<td>29:X:2650:G:C4</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2800:C:C5</td>
<td>29:X:2801:A:C8</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2864:C:H2'</td>
<td>29:X:2864:C:O2</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:497:C:C4'</td>
<td>29:X:497:C:C6</td>
<td>3.03</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:551:A:H2'</td>
<td>29:X:552:C:O4'</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:643:A:N3</td>
<td>29:X:2382:C:H1'</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:658:G:H4'</td>
<td>29:X:2330:G:H5'</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:685:U:O2'</td>
<td>29:X:686:C:C5'</td>
<td>2.63</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:925:U:C4'</td>
<td>29:X:926:C:OP1</td>
<td>2.63</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:971:A:H4'</td>
<td>29:X:2436:U:C4'</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:760:U:H1'</td>
<td>30:Y:3:LYS:HE3</td>
<td>2.01</td>
<td>0.41</td>
</tr>
<tr>
<td>31:Z:70:C:H2'</td>
<td>31:Z:71:G:O4'</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>6:A:218:LYS:CD</td>
<td>6:A:218:LYS:C</td>
<td>2.84</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>8:C:137:ALA:HA</td>
<td>8:C:142:LEU:HD12</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:60:GLY:O</td>
<td>8:C:62:LYS:N</td>
<td>2.54</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:67:ALA:O</td>
<td>8:C:68:ARG:HB3</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:120:ASN:O</td>
<td>9:D:122:PHE:CD1</td>
<td>2.74</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:138:PHE:CB</td>
<td>9:D:141:ILE:HG12</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:91:LEU:HB3</td>
<td>9:D:96:MET:HA</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:148:VAL:C</td>
<td>10:E:150:LYS:N</td>
<td>2.74</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:28:GLY:HA3</td>
<td>10:E:79:VAL:HB</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>14:I:9:THR:OG1</td>
<td>14:I:13:ARG:CZ</td>
<td>2.69</td>
<td>0.41</td>
</tr>
<tr>
<td>14:I:90:ARG:O</td>
<td>14:I:91:ASP:HB3</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>16:K:94:TYR:CD1</td>
<td>16:K:115:LEU:O</td>
<td>2.74</td>
<td>0.41</td>
</tr>
<tr>
<td>16:K:22:ARG:O</td>
<td>16:K:25:ALA:HB3</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>17:L:101:LYS:O</td>
<td>17:L:102:ALA:O</td>
<td>2.38</td>
<td>0.41</td>
</tr>
<tr>
<td>17:L:64:LYS:HA</td>
<td>17:L:67:THR:OG1</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>19:N:4:ALA:HB3</td>
<td>19:N:4:LEU:HG23</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>20:O:61:VAL:HG23</td>
<td>20:O:94:LYS:N</td>
<td>2.30</td>
<td>0.41</td>
</tr>
<tr>
<td>24:S:13:LYS:HZ2</td>
<td>24:S:18:MET:CB</td>
<td>2.33</td>
<td>0.41</td>
</tr>
<tr>
<td>24:S:91:PRO:CG</td>
<td>24:S:92:VAL:N</td>
<td>2.84</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1014:G:C6</td>
<td>29:X:1015:U:C4</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>5:5:10:TS9:CD1</td>
<td>29:X:1078:A:H1'</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1244:U:C2</td>
<td>29:X:1245:G:C8</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1299:A:C6</td>
<td>29:X:1302:C:C4</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1309:G:C2'</td>
<td>29:X:1310:C:O5'</td>
<td>2.68</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1347:C:H2'</td>
<td>29:X:1348:C:O5'</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1350:G:H2'</td>
<td>29:X:1351:G:O4'</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1414:G:C5</td>
<td>29:X:1415:C:C4</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1526:U:H3'</td>
<td>29:X:1527:G:C8</td>
<td>2.56</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1672:A:H3'</td>
<td>29:X:1673:C:C5</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1683:G:O2'</td>
<td>29:X:1684:G:H5'</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:179:U:H2'</td>
<td>29:X:180:C:O4'</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2209:G:C6</td>
<td>29:X:2210:C:N4</td>
<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>29:X:2238:G:C6</td>
<td>29:X:2239:C:C4</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:872:G:C1'</td>
<td>29:X:2247:A:H1'</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2262:C:H2'</td>
<td>29:X:2263:C:O4'</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2543:A:C2</td>
<td>29:X:2626:U:C4'</td>
<td>3.03</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:33:C:O2'</td>
<td>29:X:34:U:O4'</td>
<td>2.39</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:644:A:C8</td>
<td>29:X:645:G:H1'</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:730:C:H4'</td>
<td>29:X:731:A:OP1</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:759:C:C4'</td>
<td>29:X:759:C:C6</td>
<td>3.04</td>
<td>0.41</td>
</tr>
<tr>
<td>27:V:51:ALA:HB3</td>
<td>29:X:75:C:H4'</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>7:B:52:ALA:HA</td>
<td>18:M:5:ILE:CG2</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:17:LEU:HA</td>
<td>8:C:18:PRO:HD3</td>
<td>1.79</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:77:PHE:O</td>
<td>8:C:79:GLY:N</td>
<td>2.54</td>
<td>0.41</td>
</tr>
<tr>
<td>8:C:47:THR:HG23</td>
<td>8:C:84:PHE:H</td>
<td>1.82</td>
<td>0.41</td>
</tr>
<tr>
<td>9:D:175:LEU:CG</td>
<td>9:D:177:PHE:HE1</td>
<td>2.34</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:143:GLN:HG2</td>
<td>29:X:2725:C:C2'</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>10:E:27:LYS:HA</td>
<td>10:E:32:GLU:HA</td>
<td>2.01</td>
<td>0.41</td>
</tr>
<tr>
<td>14:I:71:THR:HG21</td>
<td>14:I:104:ARG:HZ</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>14:I:17:LYS:HE2</td>
<td>29:X:1258:G:OP2</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>17:L:54:ALA:CB</td>
<td>17:L:75:LEU:CA</td>
<td>2.99</td>
<td>0.41</td>
</tr>
<tr>
<td>18:M:104:LEU:HA</td>
<td>18:M:106:TYR:HE2</td>
<td>1.82</td>
<td>0.41</td>
</tr>
<tr>
<td>21:P:102:THR:HG2</td>
<td>21:P:104:LYS:HD3</td>
<td>2.01</td>
<td>0.41</td>
</tr>
<tr>
<td>23:R:25:LEU:CD1</td>
<td>23:R:81:VAL:N</td>
<td>2.83</td>
<td>0.41</td>
</tr>
<tr>
<td>23:R:84:VAL:CG2</td>
<td>23:R:89:GLY:CA</td>
<td>2.94</td>
<td>0.41</td>
</tr>
<tr>
<td>25:T:3:HIS:HB2</td>
<td>25:T:5:LYS:HE2</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>26:U:54:ASN:C</td>
<td>26:U:56:GLN:N</td>
<td>2.58</td>
<td>0.41</td>
</tr>
<tr>
<td>27:V:31:GLN:CA</td>
<td>27:V:34:ALA:HB3</td>
<td>2.49</td>
<td>0.41</td>
</tr>
<tr>
<td>27:V:4:SER:O</td>
<td>27:V:7:ARG:HG3</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1098:G:H8</td>
<td>29:X:1098:G:PO</td>
<td>2.44</td>
<td>0.41</td>
</tr>
<tr>
<td>12:G:130:ALA:CB</td>
<td>29:X:1149:G:OP1</td>
<td>2.69</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1211:G:C2</td>
<td>29:X:1263:G:C6</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1514:C:C1'</td>
<td>29:X:1593:C:H4'</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:172:A:H2'</td>
<td>29:X:175:C:H42</td>
<td>1.86</td>
<td>0.41</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29:X:1876:C:H2'</td>
<td>29:X:1877:C:H5'</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:1923:U:O2'</td>
<td>29:X:1924:C:P</td>
<td>2.79</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:208:C:H2'</td>
<td>29:X:209:G:C5'</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>14:I:53:ARG:NE</td>
<td>29:X:227:G:HO2'</td>
<td>2.18</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2332:G:H2'</td>
<td>29:X:2333:A:O4'</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2691:C:H1'</td>
<td>29:X:2692:A:C8</td>
<td>2.55</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2698:G:H2'</td>
<td>29:X:2699:G:H8</td>
<td>1.86</td>
<td>0.41</td>
</tr>
<tr>
<td>7:B:109:LYS:NZ</td>
<td>29:X:2703:C:OP1</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:2869:U:O2'</td>
<td>29:X:2870:C:H5'</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:417:C:C4</td>
<td>29:X:419:G:C5</td>
<td>3.09</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:464:G:C6</td>
<td>29:X:465:C:N4</td>
<td>2.89</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:466:A:H4'</td>
<td>29:X:467:U:O5'</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>29:X:847:C:H2'</td>
<td>29:X:848:A:O4'</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>30:Y:15:LYS:O</td>
<td>30:Y:16:ARG:O</td>
<td>2.57</td>
<td>0.41</td>
</tr>
<tr>
<td>30:Y:19:ARG:C</td>
<td>30:Y:21:SER:N</td>
<td>2.70</td>
<td>0.41</td>
</tr>
<tr>
<td>31:Z:5:C:C2'</td>
<td>31:Z:6:C:O4'</td>
<td>2.68</td>
<td>0.41</td>
</tr>
<tr>
<td>6:A:209:ALA:O</td>
<td>29:X:742:G:N7</td>
<td>2.54</td>
<td>0.40</td>
</tr>
<tr>
<td>6:A:73:SER:HB2</td>
<td>6:A:120:GLY:HA3</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>7:B:117:MET:CB</td>
<td>7:B:136:ARG:HG3</td>
<td>2.51</td>
<td>0.40</td>
</tr>
<tr>
<td>7:B:27:LEU:HD22</td>
<td>7:B:51:TYR:OH</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>7:B:97:ALA:O</td>
<td>7:B:98:GLU:O</td>
<td>2.57</td>
<td>0.40</td>
</tr>
<tr>
<td>8:C:144:GLY:HA3</td>
<td>8:C:166:TRP:NE1</td>
<td>2.36</td>
<td>0.40</td>
</tr>
<tr>
<td>12:G:141:GLY:O</td>
<td>12:G:144:MET:N</td>
<td>2.55</td>
<td>0.40</td>
</tr>
<tr>
<td>17:L:12:ARG:O</td>
<td>17:L:16:LYS:HB2</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>21:P:37:LYS:HZ3</td>
<td>21:P:64:ALA:CA</td>
<td>2.34</td>
<td>0.40</td>
</tr>
<tr>
<td>23:R:28:LYS:HG2</td>
<td>23:R:29:His:CD2</td>
<td>2.55</td>
<td>0.40</td>
</tr>
<tr>
<td>23:R:29:His:O</td>
<td>23:R:32:GLN:HB2</td>
<td>2.21</td>
<td>0.40</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>28:W:3:ILE:CG2</td>
<td>28:W:4:LYS:N</td>
<td>2.84</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1018:C:C4</td>
<td>29:X:1019:U:H5</td>
<td>2.40</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1145:C:C6</td>
<td>29:X:1147:G:OP1</td>
<td>2.74</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1460:G:C6</td>
<td>29:X:1461:C:C4</td>
<td>3.09</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1581:G:C6</td>
<td>29:X:1582:A:O5'</td>
<td>2.27</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1710:U:O2'</td>
<td>29:X:1711:C:P</td>
<td>2.79</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:172:A:H2'</td>
<td>29:X:175:C:N4</td>
<td>2.35</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1730:G:N2</td>
<td>29:X:1731:C:H1'</td>
<td>2.37</td>
<td>0.40</td>
</tr>
<tr>
<td>6:A:62:TYR:CE1</td>
<td>29:X:1808:C:H3'</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:224:G:N2</td>
<td>29:X:227:G:H3'</td>
<td>2.36</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2557:G:H2'</td>
<td>29:X:2558:C:C6</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2645:C:H3'</td>
<td>29:X:2646:C:H6</td>
<td>1.84</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:391:C:C2'</td>
<td>29:X:392:G:H5'</td>
<td>2.51</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:487:G:N2</td>
<td>29:X:490:A:O4'</td>
<td>2.54</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:664:C:O3'</td>
<td>29:X:665:A:H3'</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:70:A:C4'</td>
<td>29:X:71:A:H3'</td>
<td>2.46</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:759:C:C3'</td>
<td>29:X:759:C:C6</td>
<td>3.04</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:825:C:H1'</td>
<td>29:X:1263:G:N2</td>
<td>2.36</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:939:C:H4'</td>
<td>29:X:940:G:O5'</td>
<td>2.20</td>
<td>0.40</td>
</tr>
<tr>
<td>9:D:92:ARG:NH1</td>
<td>31:Z:46:G:C5'</td>
<td>2.76</td>
<td>0.40</td>
</tr>
<tr>
<td>7:B:56:GLU:C</td>
<td>7:B:58:LYS:H</td>
<td>2.23</td>
<td>0.40</td>
</tr>
<tr>
<td>8:C:164:VAL:C</td>
<td>8:C:166:TRP:N</td>
<td>2.74</td>
<td>0.40</td>
</tr>
<tr>
<td>9:D:106:ILE:CG2</td>
<td>9:D:110:ARG:HD2</td>
<td>2.50</td>
<td>0.40</td>
</tr>
<tr>
<td>9:D:122:PHE:HA</td>
<td>29:X:2282:G:C4'</td>
<td>2.43</td>
<td>0.40</td>
</tr>
<tr>
<td>9:D:41:GLY:HA2</td>
<td>9:D:44:LYS:O</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>10:E:33:LEU:CG</td>
<td>10:E:34:THR:H</td>
<td>2.34</td>
<td>0.40</td>
</tr>
<tr>
<td>11:F:54:PRO:HB2</td>
<td>11:F:70:LYS:HD2</td>
<td>2.04</td>
<td>0.40</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>12:88:VAL:HG13</td>
<td>12:89:ALA:N</td>
<td>2.36</td>
<td>0.40</td>
</tr>
<tr>
<td>14:L:56:LEU:C</td>
<td>14:L:58:ALA:O</td>
<td>2.59</td>
<td>0.40</td>
</tr>
<tr>
<td>15:L:91:VAL:O</td>
<td>15:L:92:GLU:C</td>
<td>2.58</td>
<td>0.40</td>
</tr>
<tr>
<td>17:L:69:ALA:CB</td>
<td>17:L:106:ALA:HB2</td>
<td>2.51</td>
<td>0.40</td>
</tr>
<tr>
<td>18:M:11:GLU:C</td>
<td>18:M:13:LEU:N</td>
<td>2.70</td>
<td>0.40</td>
</tr>
<tr>
<td>7:B:53:PRO:HG2</td>
<td>18:M:6:LYS:NZ</td>
<td>2.35</td>
<td>0.40</td>
</tr>
<tr>
<td>19:N:5:LYS:HB3</td>
<td>19:N:7:GLY:H</td>
<td>1.86</td>
<td>0.40</td>
</tr>
<tr>
<td>20:O:78:VAL:HG22</td>
<td>29:X:1202:U:C5′</td>
<td>2.51</td>
<td>0.40</td>
</tr>
<tr>
<td>24:S:51:LEU:CD2</td>
<td>24:S:51:LEU:N</td>
<td>2.74</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:126:C:C2</td>
<td>29:X:127:C:C5</td>
<td>3.09</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1379:A:H2′</td>
<td>29:X:1380:C:C6</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1477:C:HI′</td>
<td>29:X:2681:A:N3</td>
<td>2.36</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1506:C:H2′</td>
<td>29:X:1507:A:H5′</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1739:G:H2′</td>
<td>29:X:1740:G:C8</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1764:A:C2′</td>
<td>29:X:1765:C:H5′</td>
<td>2.49</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2047:C:C4</td>
<td>29:X:2048:C:N4</td>
<td>2.90</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2071:G:C5</td>
<td>29:X:2072:C:C5</td>
<td>3.09</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2195:C:C2′</td>
<td>29:X:2196:U:C6</td>
<td>2.84</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2209:G:C4</td>
<td>29:X:2210:C:H5</td>
<td>2.40</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2231:G:C6</td>
<td>29:X:2232:G:N7</td>
<td>2.89</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2280:A:C6</td>
<td>29:X:2281:C:N4</td>
<td>2.90</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2529:G:C6</td>
<td>29:X:2530:C:C4</td>
<td>3.10</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2718:U:O5′</td>
<td>29:X:2719:U:O5′</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>8:C:130:THR:O</td>
<td>8:C:133:PHE:N</td>
<td>2.54</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>8:C:33:TRP:O</td>
<td>8:C:36:ALA:HB3</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>9:D:154:ILE:HD12</td>
<td>9:D:154:ILE:N</td>
<td>2.36</td>
<td>0.40</td>
</tr>
<tr>
<td>11:F:12:LEU:CD1</td>
<td>11:F:37:PHE:HE2</td>
<td>2.34</td>
<td>0.40</td>
</tr>
<tr>
<td>14:I:78:SER:N</td>
<td>14:I:112:GLY:HA3</td>
<td>2.36</td>
<td>0.40</td>
</tr>
<tr>
<td>15:J:40:PRO:HG3</td>
<td>15:J:99:LYS:NZ</td>
<td>2.36</td>
<td>0.40</td>
</tr>
<tr>
<td>16:K:20:LEU:HA</td>
<td>16:K:20:LEU:HD12</td>
<td>1.87</td>
<td>0.40</td>
</tr>
<tr>
<td>17:L:100:VAL:HG13</td>
<td>17:L:101:LYS:N</td>
<td>2.37</td>
<td>0.40</td>
</tr>
<tr>
<td>17:L:17:VAL:HB</td>
<td>29:X:2313:G:N2</td>
<td>2.37</td>
<td>0.40</td>
</tr>
<tr>
<td>17:L:72:GLY:O</td>
<td>17:L:107:ALA:HB2</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>18:M:39:VAL:HA</td>
<td>18:M:45:THR:HG23</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>19:N:86:ALA:O</td>
<td>19:N:89:ASP:N</td>
<td>2.54</td>
<td>0.40</td>
</tr>
<tr>
<td>21:P:118:LYS:HD2</td>
<td>21:P:120:ARG:HH21</td>
<td>1.86</td>
<td>0.40</td>
</tr>
<tr>
<td>23:R:15:HIS:CE1</td>
<td>23:R:16:PHE:HE2</td>
<td>2.40</td>
<td>0.40</td>
</tr>
<tr>
<td>23:R:59:LYS:HA</td>
<td>23:R:62:MET:HG3</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1089:C:O2</td>
<td>29:X:1099:A:H5'</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>12:G:107:GLN:O</td>
<td>29:X:1142:G:P</td>
<td>2.79</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1235:C:H2'</td>
<td>29:X:1236:G:H8</td>
<td>1.85</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1625:A:H1'</td>
<td>29:X:1632:G:A2'</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1687:C:OP2</td>
<td>29:X:2529:G:OP1</td>
<td>2.40</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2036:G:N1</td>
<td>29:X:2037:A:C4</td>
<td>2.89</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2039:G:C5</td>
<td>29:X:2556:A:C4</td>
<td>3.10</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2221:G:C2'</td>
<td>29:X:2222:U:O5'</td>
<td>2.69</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2309:G:H2'</td>
<td>29:X:2310:G:H5'</td>
<td>2.01</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2605:C:H2'</td>
<td>29:X:2606:G:A4'</td>
<td>2.21</td>
<td>0.40</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>29:X:30:G:O2'</td>
<td>29:X:31:C:H5'</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:648:A:H4'</td>
<td>29:X:649:G:C4'</td>
<td>2.52</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:674:U:H2'</td>
<td>29:X:675:C:O4'</td>
<td>2.22</td>
<td>0.40</td>
</tr>
<tr>
<td>25:T:72:LYS:HD3</td>
<td>31:Z:14:C:O5'</td>
<td>2.22</td>
<td>0.40</td>
</tr>
<tr>
<td>7:B:11:MET:SD</td>
<td>29:X:2661:G:C8</td>
<td>3.15</td>
<td>0.40</td>
</tr>
<tr>
<td>7:B:116:VAL:CG2</td>
<td>7:B:136:ARG:NE</td>
<td>2.74</td>
<td>0.40</td>
</tr>
<tr>
<td>8:C:116:LYS:O</td>
<td>8:C:117:LEU:CB</td>
<td>2.70</td>
<td>0.40</td>
</tr>
<tr>
<td>8:C:151:VAL:HA</td>
<td>8:C:170:LEU:O</td>
<td>2.22</td>
<td>0.40</td>
</tr>
<tr>
<td>8:C:66:ASN:HA</td>
<td>29:X:1268:U:C2</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>9:D:63:GLN:HG2</td>
<td>31:Z:44:C:O2'</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>9:D:79:LEU:CA</td>
<td>9:D:80:ARG:CZ</td>
<td>2.97</td>
<td>0.40</td>
</tr>
<tr>
<td>12:G:46:ALA:CB</td>
<td>12:G:54:LEU:HD21</td>
<td>2.51</td>
<td>0.40</td>
</tr>
<tr>
<td>15:J:122:ALA:HA</td>
<td>15:J:125:LYS:HD3</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>16:K:3:HIS:HB3</td>
<td>16:K:5:LYS:HG3</td>
<td>2.04</td>
<td>0.40</td>
</tr>
<tr>
<td>16:K:99:ARG:HH21</td>
<td>29:X:2792:C:P</td>
<td>2.44</td>
<td>0.40</td>
</tr>
<tr>
<td>17:L:46:SER:OG</td>
<td>17:L:47:ARG:HG3</td>
<td>2.22</td>
<td>0.40</td>
</tr>
<tr>
<td>17:L:41:GLN:HG3</td>
<td>17:L:50:THR:HG21</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>17:L:40:ALA:CB</td>
<td>17:L:75:LEU:HD22</td>
<td>2.42</td>
<td>0.40</td>
</tr>
<tr>
<td>20:O:34:GLU:HH22</td>
<td>20:O:56:VAL:HG23</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>23:R:105:ARG:HH12</td>
<td>23:R:113:THR:N</td>
<td>2.16</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>29:X:1460:G:N3</td>
<td>29:X:1460:G:H2'</td>
<td>2.36</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1551:U:OP2</td>
<td>29:X:1553:G:N2</td>
<td>2.48</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1514:C:O4'</td>
<td>29:X:1593:C:C5'</td>
<td>2.69</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2060:A:C5</td>
<td>29:X:2414:A:C5</td>
<td>3.10</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2202:G:N2</td>
<td>29:X:2203:G:H1'</td>
<td>2.36</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2326:C:H2'</td>
<td>29:X:2327:U:C5</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2542:U:H1'</td>
<td>29:X:2545:A:C6</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2751:C:H2'</td>
<td>29:X:2752:C:C6</td>
<td>2.57</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2827:G:C2</td>
<td>29:X:2828:C:O2</td>
<td>2.74</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2860:C:H2'</td>
<td>29:X:2861:A:C5'</td>
<td>2.51</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:29:U:H6</td>
<td>29:X:29:U:O5'</td>
<td>2.05</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:312:G:C4</td>
<td>29:X:313:U:C4</td>
<td>3.10</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:36:G:HO2'</td>
<td>29:X:462:G:H2'</td>
<td>1.86</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:550:C:H2'</td>
<td>29:X:560:G:C4'</td>
<td>2.52</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:749:C:N3</td>
<td>29:X:750:C:C5</td>
<td>2.89</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:82:G:N1</td>
<td>29:X:100:G:H2'</td>
<td>2.37</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:936:A:H2'</td>
<td>29:X:937:C:O4'</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>7:B:115:GLY:O</td>
<td>7:B:119:ARG:HB3</td>
<td>2.22</td>
<td>0.40</td>
</tr>
<tr>
<td>7:B:141:ILE:HG21</td>
<td>7:B:154:LYS:NZ</td>
<td>2.34</td>
<td>0.40</td>
</tr>
<tr>
<td>7:B:5:LEU:HD22</td>
<td>7:B:49:ILE:HG23</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>8:C:47:THR:HG23</td>
<td>8:C:82:VAL:O</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>10:E:156:ALA:C</td>
<td>10:E:157:TYR:CD1</td>
<td>2.95</td>
<td>0.40</td>
</tr>
<tr>
<td>10:E:95:ARG:CE</td>
<td>10:E:97:LYS:CE</td>
<td>2.93</td>
<td>0.40</td>
</tr>
<tr>
<td>11:F:122:ALA:HB1</td>
<td>29:X:1092:U:H4'</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>14:I:133:VAL:HG21</td>
<td>14:I:140:VAL:HG22</td>
<td>2.01</td>
<td>0.40</td>
</tr>
<tr>
<td>14:I:76:LYS:HB3</td>
<td>14:I:79:GLN:CG</td>
<td>2.49</td>
<td>0.40</td>
</tr>
<tr>
<td>14:I:92:THR:O</td>
<td>14:I:94:GLU:N</td>
<td>2.54</td>
<td>0.40</td>
</tr>
<tr>
<td>15:J:11:ARG:HG3</td>
<td>15:J:11:ARG:NH1</td>
<td>2.37</td>
<td>0.40</td>
</tr>
<tr>
<td>16:K:103:ARG:NH1</td>
<td>16:K:110:MET:CE</td>
<td>2.85</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>17:L:15:ARG:NH2</td>
<td>17:L:18:ARG:NH1</td>
<td>2.70</td>
<td>0.40</td>
</tr>
<tr>
<td>19:N:43:ALA:HB3</td>
<td>20:O:74:TYR:HB3</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>23:R:103:LYS:CG</td>
<td>23:R:104:VAL:N</td>
<td>2.85</td>
<td>0.40</td>
</tr>
<tr>
<td>24:S:1:MET:HE1</td>
<td>24:S:52:PHE:HB3</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>24:S:80:His:CG</td>
<td>24:S:81:VAL:N</td>
<td>2.89</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1050:G:C2'</td>
<td>29:X:1051:U:H5'</td>
<td>2.49</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1336:G:O6</td>
<td>29:X:1337:G:C6</td>
<td>2.74</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1436:G:C5</td>
<td>29:X:1437:G:N7</td>
<td>2.89</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1438:G:C5</td>
<td>29:X:1439:G:C5</td>
<td>3.10</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1534:G:O2'</td>
<td>29:X:1535:G:H5'</td>
<td>2.21</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:1850:G:C2'</td>
<td>29:X:1851:G:C8</td>
<td>2.95</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2240:G:H2'</td>
<td>29:X:2241:U:H5'</td>
<td>2.02</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2564:U:C4'</td>
<td>29:X:2565:G:OP1</td>
<td>2.70</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2599:U:C2'</td>
<td>29:X:2600:G:O5'</td>
<td>2.69</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2705:G:O2'</td>
<td>29:X:2706:G:P</td>
<td>2.80</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:2728:G:H2'</td>
<td>29:X:2729:G:C8</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>12:G:125:ARG:NH1</td>
<td>29:X:2760:G:N1</td>
<td>2.69</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:631:G:N3</td>
<td>29:X:631:G:O4'</td>
<td>2.54</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:640:G:H4'</td>
<td>29:X:660:G:N2</td>
<td>2.37</td>
<td>0.40</td>
</tr>
<tr>
<td>29:X:834:G:H5''</td>
<td>29:X:835:U:C6</td>
<td>2.56</td>
<td>0.40</td>
</tr>
<tr>
<td>31:Z:7:C:H2'</td>
<td>31:Z:8:C:C6</td>
<td>2.56</td>
<td>0.40</td>
</tr>
</tbody>
</table>
There are no symmetry-related clashes.

### 5.3 Torsion angles

#### 5.3.1 Protein backbone

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

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Analysed</th>
<th>Favoured</th>
<th>Allowed</th>
<th>Outliers</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
<td>35/37 (95%)</td>
<td>20 (57%)</td>
<td>10 (29%)</td>
<td>5 (14%)</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>5/19 (26%)</td>
<td>4 (80%)</td>
<td>1 (20%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>238/274 (87%)</td>
<td>154 (65%)</td>
<td>50 (21%)</td>
<td>34 (14%)</td>
<td>0 1</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>203/211 (96%)</td>
<td>148 (73%)</td>
<td>32 (16%)</td>
<td>23 (11%)</td>
<td>0 3</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>195/205 (95%)</td>
<td>97 (50%)</td>
<td>54 (28%)</td>
<td>44 (23%)</td>
<td>0 0</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>175/180 (97%)</td>
<td>95 (54%)</td>
<td>48 (27%)</td>
<td>32 (18%)</td>
<td>0 1</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>169/185 (91%)</td>
<td>100 (59%)</td>
<td>38 (22%)</td>
<td>31 (18%)</td>
<td>0 1</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>142/144 (99%)</td>
<td>94 (66%)</td>
<td>29 (20%)</td>
<td>19 (13%)</td>
<td>0 2</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>140/174 (80%)</td>
<td>76 (54%)</td>
<td>34 (24%)</td>
<td>30 (21%)</td>
<td>0 1</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>132/134 (98%)</td>
<td>105 (80%)</td>
<td>18 (14%)</td>
<td>9 (7%)</td>
<td>1 9</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>139/156 (89%)</td>
<td>59 (42%)</td>
<td>45 (32%)</td>
<td>35 (25%)</td>
<td>0 0</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>134/142 (94%)</td>
<td>82 (61%)</td>
<td>31 (23%)</td>
<td>21 (16%)</td>
<td>0 1</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>111/116 (96%)</td>
<td>74 (67%)</td>
<td>25 (22%)</td>
<td>12 (11%)</td>
<td>0 3</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>102/114 (90%)</td>
<td>59 (58%)</td>
<td>19 (19%)</td>
<td>24 (24%)</td>
<td>0 0</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>106/166 (64%)</td>
<td>70 (66%)</td>
<td>23 (22%)</td>
<td>13 (12%)</td>
<td>0 2</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>115/118 (98%)</td>
<td>57 (50%)</td>
<td>40 (35%)</td>
<td>18 (16%)</td>
<td>0 1</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>92/100 (92%)</td>
<td>57 (62%)</td>
<td>10 (11%)</td>
<td>25 (27%)</td>
<td>0 0</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>125/134 (93%)</td>
<td>89 (71%)</td>
<td>21 (17%)</td>
<td>15 (12%)</td>
<td>0 2</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>91/95 (96%)</td>
<td>39 (43%)</td>
<td>28 (31%)</td>
<td>24 (26%)</td>
<td>0 0</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>108/115 (94%)</td>
<td>62 (57%)</td>
<td>27 (25%)</td>
<td>19 (18%)</td>
<td>0 1</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>173/237 (73%)</td>
<td>93 (54%)</td>
<td>46 (27%)</td>
<td>34 (20%)</td>
<td>0 1</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>82/91 (90%)</td>
<td>47 (57%)</td>
<td>19 (23%)</td>
<td>16 (20%)</td>
<td>0 1</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Analysed</th>
<th>Favoured</th>
<th>Allowed</th>
<th>Outliers</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>U</td>
<td>70/81 (86%)</td>
<td>35 (50%)</td>
<td>16 (23%)</td>
<td>19 (27%)</td>
<td>0 0</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>64/67 (96%)</td>
<td>35 (55%)</td>
<td>16 (25%)</td>
<td>13 (20%)</td>
<td>0 1</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>53/55 (96%)</td>
<td>38 (72%)</td>
<td>9 (17%)</td>
<td>6 (11%)</td>
<td>0 3</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>56/60 (93%)</td>
<td>40 (71%)</td>
<td>9 (16%)</td>
<td>7 (12%)</td>
<td>0 2</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>3055/3410 (90%)</td>
<td>1829 (60%)</td>
<td>698 (23%)</td>
<td>528 (17%)</td>
<td>0 1</td>
</tr>
</tbody>
</table>

All (528) Ramachandran outliers are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>A</td>
<td>59</td>
<td>LYS</td>
<td>LYS</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>145</td>
<td>LEU</td>
<td>LEU</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>168</td>
<td>LYS</td>
<td>LYS</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>217</td>
<td>ARG</td>
<td>ARG</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>220</td>
<td>HIS</td>
<td>HIS</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>71</td>
<td>GLY</td>
<td>GLY</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>73</td>
<td>ALA</td>
<td>ALA</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>85</td>
<td>ALA</td>
<td>ALA</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>86</td>
<td>PRO</td>
<td>PRO</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>122</td>
<td>PHE</td>
<td>PHE</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>132</td>
<td>LYS</td>
<td>LYS</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>137</td>
<td>ARG</td>
<td>ARG</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>147</td>
<td>PRO</td>
<td>PRO</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>179</td>
<td>GLU</td>
<td>GLU</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>9</td>
<td>GLN</td>
<td>GLN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>10</td>
<td>ASN</td>
<td>ASN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>13</td>
<td>ARG</td>
<td>ARG</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>30</td>
<td>VAL</td>
<td>VAL</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>31</td>
<td>VAL</td>
<td>VAL</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>66</td>
<td>ASN</td>
<td>ASN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>67</td>
<td>ALA</td>
<td>ALA</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>75</td>
<td>PRO</td>
<td>PRO</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>121</td>
<td>ASP</td>
<td>ASP</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>138</td>
<td>LYS</td>
<td>LYS</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>161</td>
<td>ALA</td>
<td>ALA</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>164</td>
<td>VAL</td>
<td>VAL</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>165</td>
<td>SER</td>
<td>SER</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>166</td>
<td>TRP</td>
<td>TRP</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>172</td>
<td>VAL</td>
<td>VAL</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>175</td>
<td>VAL</td>
<td>VAL</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>192</td>
<td>ALA</td>
<td>ALA</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>195</td>
<td>ILE</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>9</td>
<td>D</td>
<td>10</td>
<td>ASP</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>123</td>
<td>ASP</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>137</td>
<td>ILE</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>149</td>
<td>THR</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>13</td>
<td>SER</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>14</td>
<td>GLY</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>15</td>
<td>VAL</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>16</td>
<td>THR</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>55</td>
<td>PRO</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>58</td>
<td>ALA</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>93</td>
<td>GLY</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>98</td>
<td>LEU</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>110</td>
<td>SER</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>126</td>
<td>PRO</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>129</td>
<td>THR</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>143</td>
<td>GLN</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>165</td>
<td>VAL</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>14</td>
<td>ALA</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>20</td>
<td>ALA</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>26</td>
<td>ALA</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>50</td>
<td>ASP</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>82</td>
<td>ALA</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>117</td>
<td>ALA</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>120</td>
<td>VAL</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>33</td>
<td>ILE</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>34</td>
<td>PRO</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>36</td>
<td>ASN</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>37</td>
<td>ASP</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>65</td>
<td>LYS</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>67</td>
<td>ARG</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>72</td>
<td>PRO</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>73</td>
<td>ASN</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>97</td>
<td>ASP</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>104</td>
<td>THR</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>107</td>
<td>GLN</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>118</td>
<td>ALA</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>163</td>
<td>PRO</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>170</td>
<td>PRO</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>27</td>
<td>SER</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>42</td>
<td>LYS</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>17</td>
<td>LYS</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>14</td>
<td>I</td>
<td>38</td>
<td>LYS</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>39</td>
<td>SER</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>54</td>
<td>SER</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>65</td>
<td>PHE</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>86</td>
<td>THR</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>91</td>
<td>ASP</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>103</td>
<td>ASN</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>114</td>
<td>ILE</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>127</td>
<td>ALA</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>131</td>
<td>LYS</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>11</td>
<td>ARG</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>22</td>
<td>ALA</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>26</td>
<td>ASP</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>29</td>
<td>ALA</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>80</td>
<td>ALA</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>82</td>
<td>THR</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>87</td>
<td>GLY</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>117</td>
<td>GLU</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>6</td>
<td>ALA</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>11</td>
<td>ASN</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>92</td>
<td>GLY</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>26</td>
<td>ARG</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>31</td>
<td>VAL</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>38</td>
<td>ILE</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>40</td>
<td>ALA</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>45</td>
<td>ASP</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>55</td>
<td>SER</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>56</td>
<td>SER</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>60</td>
<td>LYS</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>68</td>
<td>ALA</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>94</td>
<td>TYR</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>102</td>
<td>ALA</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>104</td>
<td>ALA</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>25</td>
<td>PRO</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>28</td>
<td>ARG</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>29</td>
<td>PRO</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>39</td>
<td>VAL</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>46</td>
<td>ARG</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>53</td>
<td>VAL</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>102</td>
<td>ALA</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>5</td>
<td>LYS</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>8</td>
<td>ILE</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>19</td>
<td>N</td>
<td>76</td>
<td>TYR</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>94</td>
<td>VAL</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>7</td>
<td>THR</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>9</td>
<td>GLY</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>10</td>
<td>LYS</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>13</td>
<td>ARG</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>21</td>
<td>ARG</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>25</td>
<td>LEU</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>26</td>
<td>GLN</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>29</td>
<td>ALA</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>30</td>
<td>GLY</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>35</td>
<td>LEU</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>36</td>
<td>LYS</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>48</td>
<td>GLY</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>49</td>
<td>GLU</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>97</td>
<td>GLY</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>9</td>
<td>ARG</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>11</td>
<td>LYS</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>32</td>
<td>ARG</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>81</td>
<td>HIS</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>33</td>
<td>ALA</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>40</td>
<td>ASP</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>41</td>
<td>ALA</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>63</td>
<td>LYS</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>67</td>
<td>ARG</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>69</td>
<td>ILE</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>74</td>
<td>ASP</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>87</td>
<td>SER</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>7</td>
<td>GLY</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>12</td>
<td>ASP</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>26</td>
<td>SER</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>60</td>
<td>PRO</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>65</td>
<td>PRO</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>75</td>
<td>ALA</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>83</td>
<td>LEU</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>96</td>
<td>LYS</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>6</td>
<td>LYS</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>12</td>
<td>GLN</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>26</td>
<td>LYS</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>36</td>
<td>ARG</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>49</td>
<td>THR</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>88</td>
<td>TYR</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>S</td>
<td>92</td>
<td>VAL</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>118</td>
<td>HIS</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>124</td>
<td>ALA</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>125</td>
<td>PRO</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>3</td>
<td>HIS</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>4</td>
<td>LYS</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>7</td>
<td>VAL</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>10</td>
<td>SER</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>19</td>
<td>LYS</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>21</td>
<td>LEU</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>31</td>
<td>VAL</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>75</td>
<td>GLY</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>13</td>
<td>LEU</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>14</td>
<td>VAL</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>16</td>
<td>ASN</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>29</td>
<td>GLY</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>30</td>
<td>VAL</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>34</td>
<td>THR</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>41</td>
<td>VAL</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>56</td>
<td>GLN</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>60</td>
<td>VAL</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>2</td>
<td>LYS</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>8</td>
<td>ASN</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>19</td>
<td>ASP</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>36</td>
<td>GLN</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>54</td>
<td>GLN</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>4</td>
<td>HIS</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>20</td>
<td>ARG</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>36</td>
<td>CYS</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>52</td>
<td>TYR</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>53</td>
<td>ASP</td>
</tr>
<tr>
<td>4</td>
<td>A</td>
<td>14</td>
<td>CYS</td>
</tr>
<tr>
<td>4</td>
<td>A</td>
<td>21</td>
<td>GLY</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>45</td>
<td>ASN</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>47</td>
<td>GLY</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>52</td>
<td>ARG</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>56</td>
<td>GLY</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>109</td>
<td>GLU</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>125</td>
<td>PRO</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>159</td>
<td>ALA</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>160</td>
<td>GLY</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>187</td>
<td>SER</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>6</td>
<td>A</td>
<td>214</td>
<td>TRP</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>232</td>
<td>PRO</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>240</td>
<td>THR</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>243</td>
<td>GLY</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>244</td>
<td>ARG</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>252</td>
<td>LYS</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>2</td>
<td>LYS</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>9</td>
<td>LYS</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>74</td>
<td>PRO</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>76</td>
<td>ARG</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>123</td>
<td>ALA</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>145</td>
<td>LYS</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>152</td>
<td>LYS</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>180</td>
<td>ASN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>11</td>
<td>GLY</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>15</td>
<td>ILE</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>22</td>
<td>VAL</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>103</td>
<td>GLY</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>117</td>
<td>LEU</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>129</td>
<td>LYS</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>139</td>
<td>GLN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>152</td>
<td>THR</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>153</td>
<td>ASP</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>159</td>
<td>ARG</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>178</td>
<td>TYR</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>196</td>
<td>VAL</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>9</td>
<td>ASN</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>71</td>
<td>LYS</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>77</td>
<td>PHE</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>94</td>
<td>GLU</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>107</td>
<td>GLY</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>119</td>
<td>PRO</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>124</td>
<td>GLY</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>145</td>
<td>MET</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>19</td>
<td>ALA</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>106</td>
<td>ASN</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>112</td>
<td>PRO</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>119</td>
<td>ALA</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>139</td>
<td>GLN</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>24</td>
<td>GLY</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>51</td>
<td>ALA</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>61</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>11</td>
<td>F</td>
<td>118</td>
<td>GLY</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>55</td>
<td>ALA</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>86</td>
<td>ALA</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>105</td>
<td>GLY</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>139</td>
<td>ARG</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>37</td>
<td>GLY</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>79</td>
<td>HIS</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>101</td>
<td>ASN</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>29</td>
<td>THR</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>43</td>
<td>ALA</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>44</td>
<td>GLY</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>47</td>
<td>ALA</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>56</td>
<td>LEU</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>98</td>
<td>LEU</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>99</td>
<td>VAL</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>105</td>
<td>PRO</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>106</td>
<td>VAL</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>115</td>
<td>SER</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>128</td>
<td>ALA</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>135</td>
<td>ALA</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>13</td>
<td>GLN</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>27</td>
<td>TYR</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>81</td>
<td>GLU</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>83</td>
<td>ARG</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>7</td>
<td>GLY</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>32</td>
<td>GLY</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>95</td>
<td>THR</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>33</td>
<td>ARG</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>53</td>
<td>ALA</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>82</td>
<td>LYS</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>91</td>
<td>ARG</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>108</td>
<td>ARG</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>27</td>
<td>PHE</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>47</td>
<td>SER</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>95</td>
<td>GLU</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>51</td>
<td>ARG</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>110</td>
<td>VAL</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>8</td>
<td>GLY</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>14</td>
<td>VAL</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>15</td>
<td>SER</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>66</td>
<td>GLY</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>10</td>
<td>ASN</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>P</td>
<td>12</td>
<td>LYS</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>77</td>
<td>ALA</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>82</td>
<td>ASN</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>89</td>
<td>ARG</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>113</td>
<td>SER</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>4</td>
<td>TYR</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>12</td>
<td>ILE</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>42</td>
<td>ILE</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>60</td>
<td>GLY</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>61</td>
<td>LYS</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>65</td>
<td>VAL</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>86</td>
<td>GLN</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>93</td>
<td>GLY</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>6</td>
<td>ALA</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>9</td>
<td>HIS</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>50</td>
<td>GLY</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>61</td>
<td>SER</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>63</td>
<td>THR</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>89</td>
<td>GLY</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>17</td>
<td>SER</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>43</td>
<td>PHE</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>45</td>
<td>GLN</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>46</td>
<td>GLN</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>128</td>
<td>ARG</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>134</td>
<td>LEU</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>156</td>
<td>GLU</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>11</td>
<td>LYS</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>30</td>
<td>VAL</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>73</td>
<td>GLY</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>74</td>
<td>LYS</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>83</td>
<td>ALA</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>10</td>
<td>LYS</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>27</td>
<td>ASP</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>42</td>
<td>GLN</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>65</td>
<td>ASN</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>76</td>
<td>LYS</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>65</td>
<td>GLU</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>37</td>
<td>HIS</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>9</td>
<td>LYS</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>35</td>
<td>ARG</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>81</td>
<td>ALA</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>154</td>
<td>GLN</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>6</td>
<td>A</td>
<td>197</td>
<td>GLY</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>241</td>
<td>GLY</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>258</td>
<td>LYS</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>121</td>
<td>ASN</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>135</td>
<td>HIS</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>179</td>
<td>ASP</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>5</td>
<td>LYS</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>53</td>
<td>ALA</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>68</td>
<td>THR</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>152</td>
<td>MET</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>168</td>
<td>ALA</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>7</td>
<td>GLN</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>76</td>
<td>VAL</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>77</td>
<td>LYS</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>149</td>
<td>ARG</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>156</td>
<td>ALA</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>173</td>
<td>ALA</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>169</td>
<td>GLN</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>32</td>
<td>LYS</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>10</td>
<td>PRO</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>18</td>
<td>ARG</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>37</td>
<td>GLN</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>40</td>
<td>ARG</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>49</td>
<td>PHE</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>62</td>
<td>LYS</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>132</td>
<td>ALA</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>106</td>
<td>GLU</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>20</td>
<td>LEU</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>56</td>
<td>LYS</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>91</td>
<td>PRO</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>17</td>
<td>GLU</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>105</td>
<td>TYR</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>3</td>
<td>ARG</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>13</td>
<td>ARG</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>75</td>
<td>ASN</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>77</td>
<td>SER</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>78</td>
<td>THR</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>39</td>
<td>PHE</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>87</td>
<td>ARG</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>79</td>
<td>ALA</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>101</td>
<td>PRO</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>3</td>
<td>HIS</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Q</td>
<td>13</td>
<td>SER</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>91</td>
<td>LEU</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>49</td>
<td>GLU</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>13</td>
<td>LYS</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>25</td>
<td>ASN</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>63</td>
<td>PRO</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>110</td>
<td>GLY</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>133</td>
<td>GLU</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>165</td>
<td>GLU</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>54</td>
<td>GLY</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>32</td>
<td>ARG</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>47</td>
<td>HIS</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>72</td>
<td>LYS</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>57</td>
<td>LYS</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>8</td>
<td>SER</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>15</td>
<td>ASN</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>23</td>
<td>LEU</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>49</td>
<td>HIS</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>54</td>
<td>ILE</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>55</td>
<td>GLY</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>58</td>
<td>HIS</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>219</td>
<td>PRO</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>131</td>
<td>SER</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>20</td>
<td>PRO</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>89</td>
<td>ARG</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>105</td>
<td>ALA</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>114</td>
<td>GLY</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>126</td>
<td>ALA</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>127</td>
<td>ASP</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>190</td>
<td>ALA</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>41</td>
<td>GLY</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>146</td>
<td>VAL</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>164</td>
<td>GLU</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>19</td>
<td>PRO</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>22</td>
<td>PRO</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>84</td>
<td>ILE</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>122</td>
<td>ALA</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>135</td>
<td>GLY</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>68</td>
<td>PRO</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>70</td>
<td>PHE</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>143</td>
<td>ALA</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>154</td>
<td>GLU</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>G</td>
<td>155</td>
<td>THR</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>61</td>
<td>ARG</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>33</td>
<td>GLY</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>64</td>
<td>GLY</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>52</td>
<td>ARG</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>56</td>
<td>SER</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>114</td>
<td>GLN</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>122</td>
<td>ALA</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>45</td>
<td>ARG</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>21</td>
<td>THR</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>67</td>
<td>THR</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>12</td>
<td>ARG</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>28</td>
<td>ARG</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>46</td>
<td>GLU</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>73</td>
<td>GLY</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>88</td>
<td>ILE</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>108</td>
<td>ALA</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>12</td>
<td>TYR</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>24</td>
<td>SER</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>44</td>
<td>GLN</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>96</td>
<td>LEU</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>87</td>
<td>GLU</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>44</td>
<td>GLN</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>16</td>
<td>PHE</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>91</td>
<td>ALA</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>108</td>
<td>VAL</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>42</td>
<td>ALA</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>47</td>
<td>SER</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>91</td>
<td>PRO</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>106</td>
<td>GLY</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>107</td>
<td>GLU</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>138</td>
<td>VAL</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>13</td>
<td>GLY</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>15</td>
<td>VAL</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>39</td>
<td>GLN</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>43</td>
<td>VAL</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>61</td>
<td>ALA</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>19</td>
<td>ARG</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>153</td>
<td>ALA</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>198</td>
<td>ASN</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>249</td>
<td>PRO</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>108</td>
<td>SER</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>C</td>
<td>61</td>
<td>GLN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>91</td>
<td>TYR</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>123</td>
<td>PHE</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>125</td>
<td>ILE</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>154</td>
<td>ASP</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>13</td>
<td>ARG</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>19</td>
<td>GLN</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>40</td>
<td>LEU</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>47</td>
<td>SER</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>141</td>
<td>ILE</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>25</td>
<td>LYS</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>140</td>
<td>LEU</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>152</td>
<td>ARG</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>40</td>
<td>ASN</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>48</td>
<td>GLY</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>53</td>
<td>ARG</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>162</td>
<td>LYS</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>33</td>
<td>GLY</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>47</td>
<td>VAL</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>84</td>
<td>GLU</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>90</td>
<td>ARG</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>15</td>
<td>ARG</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>57</td>
<td>ARG</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>89</td>
<td>GLY</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>90</td>
<td>ALA</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>21</td>
<td>ALA</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>97</td>
<td>HIS</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>103</td>
<td>LEU</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>56</td>
<td>ALA</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>34</td>
<td>THR</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>3</td>
<td>LEU</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>76</td>
<td>ARG</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>84</td>
<td>ALA</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>40</td>
<td>ARG</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>32</td>
<td>ALA</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>37</td>
<td>LEU</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>56</td>
<td>VAL</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>21</td>
<td>SER</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>190</td>
<td>TYR</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>271</td>
<td>VAL</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>15</td>
<td>ALA</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>54</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>9</td>
<td>D</td>
<td>76</td>
<td>ASN</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>11</td>
<td>VAL</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>84</td>
<td>ASN</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>165</td>
<td>VAL</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>19</td>
<td>VAL</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>9</td>
<td>ARG</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>46</td>
<td>SER</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>64</td>
<td>LYS</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>38</td>
<td>PRO</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>126</td>
<td>PRO</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>55</td>
<td>GLY</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>25</td>
<td>PRO</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>100</td>
<td>VAL</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>12</td>
<td>VAL</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>128</td>
<td>PRO</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>87</td>
<td>GLY</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>6</td>
<td>ILE</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>47</td>
<td>GLY</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>174</td>
<td>PRO</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>83</td>
<td>GLY</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>21</td>
<td>GLY</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>140</td>
<td>GLY</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>65</td>
<td>ILE</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>60</td>
<td>VAL</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>68</td>
<td>VAL</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>9</td>
<td>ALA</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>85</td>
<td>ASP</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>102</td>
<td>GLY</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>164</td>
<td>PRO</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>14</td>
<td>PRO</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>43</td>
<td>VAL</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>144</td>
<td>VAL</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>35</td>
<td>GLY</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>92</td>
<td>VAL</td>
</tr>
</tbody>
</table>

#### 5.3.2 Protein sidechains

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

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.
<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Analysed</th>
<th>Rotameric</th>
<th>Outliers</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
<td>35/35 (100%)</td>
<td>32 (91%)</td>
<td>3 (9%)</td>
<td>11 39</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>3/4 (75%)</td>
<td>3 (100%)</td>
<td>0</td>
<td>100 100</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>185/215 (86%)</td>
<td>161 (87%)</td>
<td>24 (13%)</td>
<td>4 20</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>155/157 (99%)</td>
<td>132 (85%)</td>
<td>23 (15%)</td>
<td>3 16</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>157/163 (96%)</td>
<td>131 (83%)</td>
<td>26 (17%)</td>
<td>2 12</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>153/156 (98%)</td>
<td>138 (90%)</td>
<td>15 (10%)</td>
<td>9 32</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>136/144 (94%)</td>
<td>128 (94%)</td>
<td>8 (6%)</td>
<td>21 55</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>107/107 (100%)</td>
<td>100 (94%)</td>
<td>7 (6%)</td>
<td>19 51</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>118/146 (81%)</td>
<td>96 (81%)</td>
<td>22 (19%)</td>
<td>2 8</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>103/103 (100%)</td>
<td>88 (85%)</td>
<td>15 (15%)</td>
<td>3 16</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>108/121 (89%)</td>
<td>91 (84%)</td>
<td>17 (16%)</td>
<td>3 14</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>110/116 (95%)</td>
<td>89 (81%)</td>
<td>21 (19%)</td>
<td>1 7</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>90/93 (97%)</td>
<td>76 (84%)</td>
<td>14 (16%)</td>
<td>3 14</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>74/82 (90%)</td>
<td>54 (73%)</td>
<td>20 (27%)</td>
<td>0 2</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>94/134 (70%)</td>
<td>72 (77%)</td>
<td>22 (23%)</td>
<td>1 8</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>96/97 (99%)</td>
<td>83 (86%)</td>
<td>13 (14%)</td>
<td>4 18</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>75/79 (95%)</td>
<td>70 (93%)</td>
<td>5 (7%)</td>
<td>18 50</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>109/115 (95%)</td>
<td>100 (92%)</td>
<td>9 (8%)</td>
<td>12 40</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>75/76 (99%)</td>
<td>67 (89%)</td>
<td>8 (11%)</td>
<td>7 28</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>91/96 (95%)</td>
<td>72 (79%)</td>
<td>19 (21%)</td>
<td>1 5</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>149/192 (78%)</td>
<td>137 (92%)</td>
<td>12 (8%)</td>
<td>13 41</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>62/67 (92%)</td>
<td>57 (92%)</td>
<td>5 (8%)</td>
<td>13 41</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>57/66 (86%)</td>
<td>44 (77%)</td>
<td>13 (23%)</td>
<td>1 3</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>54/55 (98%)</td>
<td>48 (89%)</td>
<td>6 (11%)</td>
<td>7 26</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>48/48 (100%)</td>
<td>38 (79%)</td>
<td>10 (21%)</td>
<td>4 5</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>51/53 (96%)</td>
<td>48 (94%)</td>
<td>3 (6%)</td>
<td>21 55</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>2495/2720 (92%)</td>
<td>2155 (86%)</td>
<td>340 (14%)</td>
<td>4 18</td>
</tr>
</tbody>
</table>

All (340) 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>4</td>
<td>4</td>
<td>22</td>
<td>ARG</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>27</td>
<td>CYS</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>31</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>6</td>
<td>A</td>
<td>40</td>
<td>THR</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>43</td>
<td>ARG</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>44</td>
<td>ASN</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>48</td>
<td>ARG</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>49</td>
<td>ILE</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>68</td>
<td>LYS</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>101</td>
<td>GLU</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>122</td>
<td>GLU</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>157</td>
<td>ARG</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>161</td>
<td>THR</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>162</td>
<td>SER</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>164</td>
<td>GLN</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>183</td>
<td>ARG</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>196</td>
<td>VAL</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>208</td>
<td>LYS</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>211</td>
<td>ARG</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>214</td>
<td>TRP</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>215</td>
<td>LEU</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>218</td>
<td>LYS</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>231</td>
<td>HIS</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>232</td>
<td>PRO</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>244</td>
<td>ARG</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>252</td>
<td>LYS</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>260</td>
<td>ARG</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>53</td>
<td>PRO</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>69</td>
<td>LYS</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>75</td>
<td>THR</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>79</td>
<td>ARG</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>86</td>
<td>PRO</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>87</td>
<td>ASP</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>91</td>
<td>VAL</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>94</td>
<td>ASP</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>105</td>
<td>THR</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>126</td>
<td>PRO</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>131</td>
<td>SER</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>133</td>
<td>LYS</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>134</td>
<td>TRP</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>136</td>
<td>ARG</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>137</td>
<td>ARG</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>140</td>
<td>SER</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>143</td>
<td>GLN</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>147</td>
<td>PRO</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>7</td>
<td>B</td>
<td>150</td>
<td>VAL</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>155</td>
<td>ARG</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>159</td>
<td>HIS</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>162</td>
<td>MET</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>200</td>
<td>SER</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>5</td>
<td>ASN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>13</td>
<td>ARG</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>17</td>
<td>LEU</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>45</td>
<td>THR</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>59</td>
<td>TYR</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>62</td>
<td>LYS</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>64</td>
<td>THR</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>66</td>
<td>ASN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>82</td>
<td>VAL</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>91</td>
<td>TYR</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>92</td>
<td>ASP</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>93</td>
<td>TYR</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>94</td>
<td>THR</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>95</td>
<td>LEU</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>104</td>
<td>LEU</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>113</td>
<td>GLU</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>121</td>
<td>ASP</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>124</td>
<td>ASP</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>136</td>
<td>TRP</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>139</td>
<td>GLN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>153</td>
<td>ASP</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>154</td>
<td>ASP</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>155</td>
<td>GLU</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>158</td>
<td>ARG</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>166</td>
<td>TRP</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>176</td>
<td>ASN</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>6</td>
<td>THR</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>10</td>
<td>ASP</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>40</td>
<td>LEU</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>51</td>
<td>ASP</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>80</td>
<td>ARG</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>89</td>
<td>VAL</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>112</td>
<td>ARG</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>123</td>
<td>ASP</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>125</td>
<td>ARG</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>130</td>
<td>LEU</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>137</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>9</td>
<td>D</td>
<td>138</td>
<td>PHE</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>144</td>
<td>ASP</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>147</td>
<td>ASP</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>156</td>
<td>ILE</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>35</td>
<td>VAL</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>67</td>
<td>LEU</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>72</td>
<td>VAL</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>80</td>
<td>SER</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>107</td>
<td>ILE</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>129</td>
<td>THR</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>136</td>
<td>ILE</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>163</td>
<td>ARG</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>2</td>
<td>LYS</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>10</td>
<td>LEU</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>63</td>
<td>ARG</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>99</td>
<td>LEU</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>103</td>
<td>GLN</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>119</td>
<td>SER</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>137</td>
<td>THR</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>31</td>
<td>THR</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>34</td>
<td>PRO</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>37</td>
<td>ASP</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>38</td>
<td>GLU</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>41</td>
<td>TRP</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>61</td>
<td>ARG</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>70</td>
<td>PHE</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>71</td>
<td>THR</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>93</td>
<td>LYS</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>94</td>
<td>LYS</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>100</td>
<td>TYR</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>101</td>
<td>THR</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>102</td>
<td>ARG</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>104</td>
<td>THR</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>106</td>
<td>TYR</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>110</td>
<td>LEU</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>113</td>
<td>GLU</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>123</td>
<td>PRO</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>132</td>
<td>PHE</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>154</td>
<td>GLU</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>157</td>
<td>PRO</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>169</td>
<td>GLN</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>1</td>
<td>MET</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>13</td>
<td>H</td>
<td>22</td>
<td>ILE</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>23</td>
<td>ARG</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>25</td>
<td>LEU</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>26</td>
<td>ASN</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>27</td>
<td>SER</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>41</td>
<td>ASN</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>57</td>
<td>ASP</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>81</td>
<td>ILE</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>89</td>
<td>ILE</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>92</td>
<td>ASP</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>104</td>
<td>GLU</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>120</td>
<td>ASP</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>127</td>
<td>VAL</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>132</td>
<td>GLU</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>7</td>
<td>LYS</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>10</td>
<td>PRO</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>13</td>
<td>ARG</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>23</td>
<td>PRO</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>26</td>
<td>THR</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>32</td>
<td>ARG</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>34</td>
<td>HIS</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>45</td>
<td>LYS</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>53</td>
<td>ARG</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>61</td>
<td>PRO</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>65</td>
<td>PHE</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>84</td>
<td>GLU</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>88</td>
<td>PHE</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>89</td>
<td>ASP</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>94</td>
<td>GLU</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>103</td>
<td>ASN</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>142</td>
<td>LEU</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>8</td>
<td>THR</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>11</td>
<td>ARG</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>21</td>
<td>ASP</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>26</td>
<td>ASP</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>27</td>
<td>TYR</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>32</td>
<td>ASP</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>60</td>
<td>ARG</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>64</td>
<td>LYS</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>68</td>
<td>ARG</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>78</td>
<td>LYS</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>79</td>
<td>PRO</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>J</td>
<td>81</td>
<td>GLU</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>82</td>
<td>THR</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>91</td>
<td>VAL</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>93</td>
<td>TYR</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>94</td>
<td>TRP</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>103</td>
<td>VAL</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>106</td>
<td>GLU</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>111</td>
<td>THR</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>125</td>
<td>LYS</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>132</td>
<td>MET</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>3</td>
<td>HIS</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>5</td>
<td>LYS</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>11</td>
<td>ASN</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>13</td>
<td>ASN</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>17</td>
<td>ARG</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>37</td>
<td>THR</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>43</td>
<td>GLU</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>51</td>
<td>LEU</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>71</td>
<td>HIS</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>83</td>
<td>VAL</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>95</td>
<td>THR</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>98</td>
<td>LEU</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>102</td>
<td>THR</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>104</td>
<td>ARG</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>8</td>
<td>ARG</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>13</td>
<td>THR</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>15</td>
<td>ARG</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>31</td>
<td>VAL</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>37</td>
<td>HIS</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>38</td>
<td>ILE</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>39</td>
<td>TYR</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>42</td>
<td>ILE</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>44</td>
<td>ASP</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>45</td>
<td>ASP</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>51</td>
<td>LEU</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>59</td>
<td>LEU</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>60</td>
<td>LYS</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>64</td>
<td>LYS</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>65</td>
<td>THR</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>67</td>
<td>THR</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>71</td>
<td>VAL</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>89</td>
<td>PHE</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>17</td>
<td>L</td>
<td>91</td>
<td>ARG</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>93</td>
<td>SER</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>6</td>
<td>LYS</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>7</td>
<td>ILE</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>22</td>
<td>ARG</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>25</td>
<td>PRO</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>26</td>
<td>ASP</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>28</td>
<td>ARG</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>31</td>
<td>ASP</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>34</td>
<td>ARG</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>43</td>
<td>ASN</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>46</td>
<td>ARG</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>48</td>
<td>GLN</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>51</td>
<td>GLU</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>63</td>
<td>ARG</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>69</td>
<td>ARG</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>72</td>
<td>SER</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>79</td>
<td>ARG</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>80</td>
<td>VAL</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>87</td>
<td>LEU</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>89</td>
<td>ASN</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>92</td>
<td>THR</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>98</td>
<td>LYS</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>100</td>
<td>ARG</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>3</td>
<td>ARG</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>9</td>
<td>VAL</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>13</td>
<td>ARG</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>18</td>
<td>LEU</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>22</td>
<td>LYS</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>33</td>
<td>ARG</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>47</td>
<td>TYR</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>60</td>
<td>LEU</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>71</td>
<td>LEU</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>85</td>
<td>ARG</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>90</td>
<td>LEU</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>93</td>
<td>LYS</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>111</td>
<td>ASP</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>18</td>
<td>ASP</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>20</td>
<td>ILE</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>28</td>
<td>GLU</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>47</td>
<td>PHE</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>54</td>
<td>TYR</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>P</td>
<td>16</td>
<td>GLN</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>32</td>
<td>ARG</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>46</td>
<td>ARG</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>65</td>
<td>SER</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>67</td>
<td>PRO</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>86</td>
<td>LEU</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>87</td>
<td>GLU</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>126</td>
<td>ILE</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>133</td>
<td>ASN</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>5</td>
<td>ASP</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>7</td>
<td>LEU</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>10</td>
<td>PRO</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>12</td>
<td>ILE</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>15</td>
<td>LYS</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>27</td>
<td>PHE</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>38</td>
<td>ILE</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>62</td>
<td>ARG</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>11</td>
<td>ASN</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>18</td>
<td>LYS</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>23</td>
<td>ILE</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>25</td>
<td>LEU</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>26</td>
<td>SER</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>32</td>
<td>GLN</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>44</td>
<td>GLN</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>56</td>
<td>LYS</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>65</td>
<td>PRO</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>79</td>
<td>SER</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>80</td>
<td>LYS</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>83</td>
<td>LEU</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>93</td>
<td>ARG</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>95</td>
<td>ARG</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>105</td>
<td>ARG</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>106</td>
<td>VAL</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>108</td>
<td>VAL</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>112</td>
<td>LYS</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>113</td>
<td>THR</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>3</td>
<td>LEU</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>9</td>
<td>THR</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>13</td>
<td>LYS</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>28</td>
<td>ASN</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>49</td>
<td>THR</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>51</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>24</td>
<td>S</td>
<td>63</td>
<td>PRO</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>71</td>
<td>MET</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>92</td>
<td>VAL</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>104</td>
<td>SER</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>119</td>
<td>ASN</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>120</td>
<td>LEU</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>5</td>
<td>LYS</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>18</td>
<td>PRO</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>31</td>
<td>VAL</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>41</td>
<td>ARG</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>71</td>
<td>ASN</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>13</td>
<td>LEU</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>14</td>
<td>VAL</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>32</td>
<td>ARG</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>35</td>
<td>THR</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>37</td>
<td>ILE</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>42</td>
<td>GLN</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>47</td>
<td>HIS</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>53</td>
<td>GLU</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>54</td>
<td>ASN</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>60</td>
<td>VAL</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>69</td>
<td>THR</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>70</td>
<td>LEU</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>78</td>
<td>ILE</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>2</td>
<td>LYS</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>6</td>
<td>MET</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>13</td>
<td>ASP</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>19</td>
<td>ASP</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>21</td>
<td>ARG</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>41</td>
<td>HIS</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>6</td>
<td>VAL</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>8</td>
<td>SER</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>12</td>
<td>ARG</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>15</td>
<td>ASN</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>26</td>
<td>ARG</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>32</td>
<td>ARG</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>35</td>
<td>SER</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>36</td>
<td>ASP</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>45</td>
<td>LYS</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>46</td>
<td>THR</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>19</td>
<td>ARG</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>57</td>
<td>VAL</td>
</tr>
</tbody>
</table>

*Continued on next page...*
Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (78) 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>30</td>
<td>Y</td>
<td>58</td>
<td>LEU</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>34</td>
<td>GLN</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>36</td>
<td>GLN</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>44</td>
<td>ASN</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>96</td>
<td>HIS</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>129</td>
<td>ASN</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>166</td>
<td>GLN</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>231</td>
<td>HIS</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>135</td>
<td>HIS</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>143</td>
<td>GLN</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>192</td>
<td>ASN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>3</td>
<td>GLN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>5</td>
<td>ASN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>50</td>
<td>GLN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>61</td>
<td>GLN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>98</td>
<td>GLN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>112</td>
<td>GLN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>132</td>
<td>ASN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>139</td>
<td>GLN</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>140</td>
<td>ASN</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>120</td>
<td>ASN</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>129</td>
<td>ASN</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>18</td>
<td>ASN</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>45</td>
<td>GLN</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>61</td>
<td>HIS</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>111</td>
<td>HIS</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>139</td>
<td>GLN</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>29</td>
<td>GLN</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>42</td>
<td>ASN</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>92</td>
<td>ASN</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>73</td>
<td>ASN</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>107</td>
<td>GLN</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>122</td>
<td>HIS</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>140</td>
<td>GLN</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>158</td>
<td>HIS</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>5</td>
<td>GLN</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>41</td>
<td>ASN</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>79</td>
<td>HIS</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>14</td>
<td>I</td>
<td>34</td>
<td>HIS</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>37</td>
<td>GLN</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>66</td>
<td>ASN</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>79</td>
<td>GLN</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>13</td>
<td>GLN</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>13</td>
<td>ASN</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>37</td>
<td>HIS</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>49</td>
<td>GLN</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>97</td>
<td>HIS</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>48</td>
<td>GLN</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>31</td>
<td>GLN</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>72</td>
<td>HIS</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>75</td>
<td>ASN</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>115</td>
<td>ASN</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>11</td>
<td>GLN</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>57</td>
<td>GLN</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>73</td>
<td>ASN</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>78</td>
<td>ASN</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>81</td>
<td>HIS</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>133</td>
<td>ASN</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>73</td>
<td>ASN</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>10</td>
<td>HIS</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>11</td>
<td>ASN</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>29</td>
<td>HIS</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>64</td>
<td>ASN</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>71</td>
<td>GLN</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>45</td>
<td>GLN</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>70</td>
<td>GLN</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>146</td>
<td>HIS</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>3</td>
<td>HIS</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>17</td>
<td>ASN</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>35</td>
<td>ASN</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>71</td>
<td>ASN</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>41</td>
<td>HIS</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>45</td>
<td>GLN</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>15</td>
<td>ASN</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>49</td>
<td>HIS</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>29</td>
<td>ASN</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>43</td>
<td>HIS</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>44</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>29</td>
<td>X</td>
<td>2680/2880 (93%)</td>
<td>688 (25%)</td>
<td>313 (11%)</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>121/123 (98%)</td>
<td>24 (19%)</td>
<td>1 (0%)</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>2801/3003 (93%)</td>
<td>712 (25%)</td>
<td>314 (11%)</td>
</tr>
</tbody>
</table>

All (712) 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>29</td>
<td>X</td>
<td>2</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>4</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>13</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>14</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>27</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>34</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>35</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>39</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>45</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>49</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>59</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>63</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>70</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>71</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>72</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>74</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>76</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>82</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>83</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>84</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>87</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>89</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>90</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>91</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>98</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>99</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>100</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>105</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>110</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>116</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>117</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>118</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>119</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>123</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>29</td>
<td>X</td>
<td>124</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>126</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>127</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>135</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>143</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>147</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>149</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>158</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>173</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>181</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>182</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>183</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>193</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>199</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>200</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>205</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>206</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>207</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>210</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>218</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>219</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>220</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>225</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>226</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>227</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>242</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>243</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>245</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>304</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>305</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>318</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>323</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>333</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>334</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>335</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>340</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>341</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>342</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>343</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>399</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>400</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>401</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>29</td>
<td>X</td>
<td>403</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>404</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>414</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>416</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>417</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>418</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>419</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>424</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>425</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>441</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>447</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>448</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>453</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>455</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>456</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>458</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>459</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>460</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>461</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>463</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>466</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>467</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>468</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>470</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>491</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>492</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>497</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>498</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>514</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>515</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>517</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>519</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>523</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>534</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>537</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>538</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>539</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>540</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>541</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>542</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>554</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>555</td>
<td>U</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>29</td>
<td>X</td>
<td>556</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>558</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>559</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>571</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>572</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>580</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>581</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>582</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>583</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>584</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>587</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>595</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>601</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>613</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>614</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>617</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>624</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>625</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>626</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>627</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>628</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>631</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>632</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>633</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>636</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>639</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>649</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>652</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>654</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>655</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>657</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>664</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>665</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>666</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>667</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>668</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>684</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>699</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>700</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>718</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>728</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>29</td>
<td>X</td>
<td>729</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>730</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>731</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>732</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>740</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>741</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>742</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>743</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>752</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>753</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>759</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>760</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>766</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>775</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>776</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>778</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>781</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>789</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>790</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>795</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>797</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>798</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>802</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>803</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>804</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>805</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>806</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>807</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>813</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>814</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>815</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>818</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>819</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>825</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>832</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>833</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>840</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>841</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>843</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>844</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>859</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>862</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>29</td>
<td>X</td>
<td>872</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>873</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>878</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>879</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>914</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>919</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>922</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>926</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>927</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>939</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>940</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>944</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>952</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>955</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>956</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>957</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>968</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>969</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>970</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>972</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>973</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>984</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>985</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>994</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>995</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>996</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1000</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1006</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1007</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1016</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1019</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1023</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1024</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1032</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1033</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1034</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1036</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1037</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1044</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1045</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1051</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1053</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>29</td>
<td>X</td>
<td>1054</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1055</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1056</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1057</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1058</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1059</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1060</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1069</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1070</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1071</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1072</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1073</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1078</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1079</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1081</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1082</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1087</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1090</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1096</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1097</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1098</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1099</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1107</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1108</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1119</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1123</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1128</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1129</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1133</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1137</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1139</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1140</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1142</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1145</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1146</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1149</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1152</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1153</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1154</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1155</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1167</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1168</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>29</td>
<td>X</td>
<td>1182</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1183</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1185</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1187</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1189</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1192</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1194</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1195</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1213</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1220</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1222</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1225</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1234</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1250</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1251</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1253</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1261</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1262</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1264</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1265</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1266</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1269</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1278</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1279</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1282</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1284</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1285</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1286</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1288</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1289</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1300</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1302</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1313</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1314</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1315</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1316</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1319</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1325</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1326</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1333</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1334</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1338</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>29</td>
<td>X</td>
<td>1339</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1342</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1343</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1345</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1346</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1353</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1354</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1355</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1356</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1358</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1359</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1378</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1381</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1391</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1392</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1398</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1404</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1409</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1410</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1411</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1413</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1428</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1429</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1432</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1433</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1434</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1440</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1441</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1442</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1443</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1460</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1465</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1467</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1468</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1469</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1470</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1473</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1474</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1475</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1482</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1489</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1490</td>
<td>U</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>29</td>
<td>X</td>
<td>1497</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1498</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1513</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1514</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1522</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1523</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1524</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1525</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1528</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1531</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1551</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1553</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1554</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1562</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1570</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1571</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1574</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1575</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1576</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1582</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1583</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1585</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1594</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1601</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1602</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1603</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1608</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1614</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1624</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1625</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1626</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1627</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1632</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1633</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1634</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1635</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1648</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1651</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1652</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1657</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1664</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1665</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>29</td>
<td>X</td>
<td>1668</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1671</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1686</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1691</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1692</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1699</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1710</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1711</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1712</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1713</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1715</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1716</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1717</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1718</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1724</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1732</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1733</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1734</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1747</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1749</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1750</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1754</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1755</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1764</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1771</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1772</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1773</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1776</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1778</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1782</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1790</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1791</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1792</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1793</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1800</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1801</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1802</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1807</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1808</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1812</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1813</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1821</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>29</td>
<td>X</td>
<td>1822</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1825</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1831</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1842</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1851</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1852</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1854</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1855</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1856</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1857</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1859</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1861</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1865</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1867</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1868</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1869</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1871</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1883</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1910</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1912</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1914</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1919</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1920</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1922</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1923</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1924</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1926</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1927</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1928</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1938</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1939</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1946</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1947</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1948</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1949</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1950</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1953</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1954</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1955</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1964</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1965</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1976</td>
<td>U</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>29</td>
<td>X</td>
<td>1979</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1980</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2004</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2005</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2006</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2014</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2015</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2016</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2019</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2026</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2034</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2035</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2038</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2039</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2044</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2045</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2046</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2052</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2075</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2076</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2083</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2089</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2171</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2190</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2191</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2192</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2195</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2196</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2197</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2198</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2199</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2200</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2205</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2217</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2218</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2229</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2230</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2238</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2245</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2246</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2247</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2252</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>29</td>
<td>X</td>
<td>2257</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2261</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2262</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2265</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2266</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2267</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2268</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2276</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2284</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2285</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2286</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2287</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2288</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2289</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2300</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2305</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2306</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2313</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2314</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2315</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2318</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2320</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2322</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2323</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2324</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2325</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2326</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2328</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2351</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2358</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2362</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2364</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2368</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2369</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2381</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2386</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2396</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2402</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2403</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2405</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2406</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2408</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>29</td>
<td>X</td>
<td>2409</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2410</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2418</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2419</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2420</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2427</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2428</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2438</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2448</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2452</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2455</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2469</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2470</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2476</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2477</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2480</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2481</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2482</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2483</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2484</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2485</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2486</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2497</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2498</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2499</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2508</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2521</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2522</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2545</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2546</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2552</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2556</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2560</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2561</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2564</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2565</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2580</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2581</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2582</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2588</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2591</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2592</td>
<td>U</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>29</td>
<td>X</td>
<td>2593</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2594</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2608</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2609</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2625</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2633</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2634</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2650</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2661</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2666</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2668</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2669</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2670</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2691</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2692</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2693</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2694</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2700</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2706</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2707</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2708</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2712</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2713</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2728</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2730</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2731</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2732</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2736</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2737</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2738</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2744</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2745</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2757</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2758</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2759</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2760</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2761</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2770</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2771</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2774</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2775</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2777</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>29</td>
<td>X</td>
<td>2778</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2779</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2780</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2782</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2795</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2796</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2798</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2808</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2809</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2810</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2811</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2824</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2825</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2827</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2841</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2842</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2847</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2850</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2854</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2855</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2858</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2859</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2867</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2868</td>
<td>G</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>4</td>
<td>C</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>14</td>
<td>C</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>15</td>
<td>A</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>17</td>
<td>A</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>18</td>
<td>G</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>26</td>
<td>G</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>27</td>
<td>A</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>28</td>
<td>A</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>37</td>
<td>C</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>38</td>
<td>C</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>43</td>
<td>G</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>44</td>
<td>C</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>46</td>
<td>G</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>47</td>
<td>A</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>59</td>
<td>A</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>68</td>
<td>A</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>69</td>
<td>G</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>93</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>31</td>
<td>Z</td>
<td>102</td>
<td>A</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>110</td>
<td>U</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>111</td>
<td>C</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>112</td>
<td>A</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>115</td>
<td>G</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>123</td>
<td>U</td>
</tr>
</tbody>
</table>

All (314) 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>29</td>
<td>X</td>
<td>3</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>13</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>33</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>38</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>48</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>62</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>69</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>71</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>73</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>82</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>117</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>118</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>154</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>173</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>176</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>181</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>182</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>192</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>198</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>199</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>218</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>219</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>226</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>312</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>322</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>332</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>333</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>334</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>340</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>341</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>342</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>399</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>29</td>
<td>X</td>
<td>400</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>403</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>417</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>424</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>454</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>458</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>459</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>460</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>466</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>467</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>468</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>469</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>490</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>513</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>516</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>522</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>538</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>539</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>541</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>542</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>553</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>554</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>555</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>556</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>557</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>571</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>580</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>582</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>583</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>596</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>613</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>631</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>638</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>648</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>664</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>682</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>683</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>698</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>699</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>717</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>729</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>730</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>29</td>
<td>X</td>
<td>739</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>741</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>751</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>752</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>765</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>775</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>777</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>780</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>788</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>789</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>795</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>797</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>801</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>802</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>803</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>804</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>805</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>806</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>813</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>814</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>818</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>824</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>842</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>843</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>872</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>878</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>925</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>938</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>939</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>955</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>956</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>968</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>969</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>972</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>984</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>985</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>994</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1000</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1006</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1023</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1031</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1033</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>29</td>
<td>X</td>
<td>1036</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1044</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1053</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1054</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1055</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1071</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1072</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1096</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1122</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1137</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1139</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1141</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1142</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1152</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1153</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1154</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1182</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1186</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1188</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1194</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1212</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1223</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1224</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1233</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1249</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1260</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1261</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1263</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1265</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1266</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1278</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1285</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1299</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1301</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1313</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1314</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1315</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1324</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1325</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1333</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1337</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1338</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>29</td>
<td>X</td>
<td>1342</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1345</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1353</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1354</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1355</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1357</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1391</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1409</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1410</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1412</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1439</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1441</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1442</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1459</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1473</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1474</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1496</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1552</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1561</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1575</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1581</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1582</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1583</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1601</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1607</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1618</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1623</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1624</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1625</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1626</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1632</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1633</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1634</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1651</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1664</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1670</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1685</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1691</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1698</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1710</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1711</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1712</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>29</td>
<td>X</td>
<td>1715</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1716</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1723</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1732</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1749</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1771</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1772</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1775</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1777</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1790</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1791</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1799</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1807</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1811</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1820</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1867</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1913</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1920</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1921</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1922</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1923</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1926</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1927</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1937</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1938</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1947</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1953</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1963</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1975</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1979</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2004</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2005</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2014</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2015</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2016</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2018</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2034</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2044</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2045</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2050</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2075</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2088</td>
<td>U</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>29</td>
<td>X</td>
<td>2196</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2197</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2204</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2217</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2228</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2229</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2237</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2245</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2254</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2261</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2265</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2267</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2275</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2312</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2313</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2315</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2322</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2323</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2324</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2325</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2370</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2396</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2402</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2404</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2405</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2418</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2426</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2427</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2428</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2469</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2476</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2482</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2485</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2496</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2497</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2498</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2521</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2551</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2560</td>
<td>G</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2564</td>
<td>U</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2580</td>
<td>C</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2589</td>
<td>C</td>
</tr>
</tbody>
</table>

Continued on next page...
5.4 Non-standard residues in protein, DNA, RNA chains

11 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. 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 $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).
In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. ‘-’ means no outliers of that kind were identified.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Type</th>
<th>Chain</th>
<th>Res</th>
<th>Link</th>
<th>Chirals</th>
<th>Torsions</th>
<th>Rings</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>TS9</td>
<td>5</td>
<td>10</td>
<td>5</td>
<td>-</td>
<td>0/9/12/16</td>
<td>0/0/0/0</td>
</tr>
<tr>
<td>5</td>
<td>BB9</td>
<td>5</td>
<td>11</td>
<td>5</td>
<td>-</td>
<td>0/0/4/6</td>
<td>0/0/0/0</td>
</tr>
<tr>
<td>5</td>
<td>BB9</td>
<td>5</td>
<td>13</td>
<td>5</td>
<td>-</td>
<td>0/0/2/6</td>
<td>0/0/0/0</td>
</tr>
<tr>
<td>5</td>
<td>MH6</td>
<td>5</td>
<td>14</td>
<td>5</td>
<td>-</td>
<td>0/0/0/6</td>
<td>0/0/0/0</td>
</tr>
<tr>
<td>5</td>
<td>DHA</td>
<td>5</td>
<td>16</td>
<td>5</td>
<td>-</td>
<td>0/0/4/6</td>
<td>0/0/0/0</td>
</tr>
<tr>
<td>5</td>
<td>DHA</td>
<td>5</td>
<td>17</td>
<td>5</td>
<td>-</td>
<td>0/0/2/4</td>
<td>0/0/0/0</td>
</tr>
<tr>
<td>5</td>
<td>DHA</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>-</td>
<td>0/0/2/4</td>
<td>0/0/0/0</td>
</tr>
<tr>
<td>5</td>
<td>BB9</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>-</td>
<td>0/0/4/6</td>
<td>0/0/0/0</td>
</tr>
<tr>
<td>5</td>
<td>DBU</td>
<td>5</td>
<td>8</td>
<td>5</td>
<td>-</td>
<td>0/1/2/6</td>
<td>0/0/0/0</td>
</tr>
<tr>
<td>5</td>
<td>DCY</td>
<td>5</td>
<td>9</td>
<td>5</td>
<td>-</td>
<td>0/1/4/6</td>
<td>0/0/0/0</td>
</tr>
</tbody>
</table>

All (10) bond length outliers are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Atoms</th>
<th>Z</th>
<th>Observed(Å)</th>
<th>Ideal(Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>15</td>
<td>BB9</td>
<td>O-C</td>
<td>-6.38</td>
<td>1.07</td>
<td>1.22</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>16</td>
<td>DHA</td>
<td>C-CA</td>
<td>-2.56</td>
<td>1.40</td>
<td>1.45</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>DBU</td>
<td>C-CA</td>
<td>-2.03</td>
<td>1.43</td>
<td>1.49</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>DHA</td>
<td>C-CA</td>
<td>2.23</td>
<td>1.48</td>
<td>1.45</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>13</td>
<td>BB9</td>
<td>CA-N</td>
<td>2.31</td>
<td>1.39</td>
<td>1.33</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>BB9</td>
<td>O-C</td>
<td>2.88</td>
<td>1.28</td>
<td>1.22</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>DHA</td>
<td>CA-N</td>
<td>2.92</td>
<td>1.42</td>
<td>1.34</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Atoms</th>
<th>Z</th>
<th>Observed(Å)</th>
<th>Ideal(Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5</td>
<td>17</td>
<td>DHA</td>
<td>CA-N</td>
<td>3.20</td>
<td>1.43</td>
<td>1.34</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>8</td>
<td>DBU</td>
<td>CA-N</td>
<td>5.73</td>
<td>1.47</td>
<td>1.33</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>16</td>
<td>DHA</td>
<td>CA-N</td>
<td>8.00</td>
<td>1.55</td>
<td>1.34</td>
</tr>
</tbody>
</table>

All (12) 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>5</td>
<td>5</td>
<td>16</td>
<td>DHA</td>
<td>O-C-CA</td>
<td>-7.77</td>
<td>111.08</td>
<td>125.47</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>9</td>
<td>DCY</td>
<td>CA-CB-SG</td>
<td>-4.54</td>
<td>104.20</td>
<td>114.42</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>17</td>
<td>DHA</td>
<td>O-C-CA</td>
<td>-3.00</td>
<td>119.92</td>
<td>125.47</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>13</td>
<td>BB9</td>
<td>CB-CA-N</td>
<td>-2.67</td>
<td>113.96</td>
<td>122.50</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>6</td>
<td>BB9</td>
<td>O-C-CA</td>
<td>-2.62</td>
<td>122.15</td>
<td>125.46</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>11</td>
<td>BB9</td>
<td>O-C-CA</td>
<td>-2.61</td>
<td>122.17</td>
<td>125.46</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>9</td>
<td>DCY</td>
<td>O-C-CA</td>
<td>-2.52</td>
<td>118.03</td>
<td>124.96</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>3</td>
<td>DHA</td>
<td>O-C-CA</td>
<td>-2.51</td>
<td>120.82</td>
<td>125.47</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>13</td>
<td>BB9</td>
<td>C-CA-N</td>
<td>2.48</td>
<td>119.35</td>
<td>116.55</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>8</td>
<td>DBU</td>
<td>CB-CA-N</td>
<td>2.75</td>
<td>124.33</td>
<td>122.87</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>13</td>
<td>BB9</td>
<td>C-CA-CB</td>
<td>2.93</td>
<td>126.66</td>
<td>121.27</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>15</td>
<td>BB9</td>
<td>O-C-CA</td>
<td>3.97</td>
<td>130.46</td>
<td>125.46</td>
</tr>
</tbody>
</table>

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

5 monomers are involved in 5 short contacts:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Clashes</th>
<th>Symm-Clashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5</td>
<td>10</td>
<td>TS9</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>13</td>
<td>BB9</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>14</td>
<td>MH6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>15</td>
<td>BB9</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>6</td>
<td>BB9</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

5.5 Carbohydrates

There are no carbohydrates in this entry.

5.6 Ligand geometry

Of 36 ligands modelled in this entry, 36 are monoatomic - leaving 0 for Mogul analysis.
There are no bond length outliers.
There are no bond angle outliers.
There are no chirality outliers.
There are no torsion outliers.
There are no ring outliers.
No monomer is involved in short contacts.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.
6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Analysed</th>
<th>&lt;RSRZ&gt;</th>
<th>#RSRZ&gt;2</th>
<th>OWAB(Å²)</th>
<th>Q&lt;0.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>53/55 (96%)</td>
<td>3.45</td>
<td>39 (73%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>46/47 (97%)</td>
<td>5.52</td>
<td>46 (100%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>63/66 (95%)</td>
<td>5.06</td>
<td>59 (93%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>37/37 (100%)</td>
<td>1.16</td>
<td>7 (18%)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>6/19 (31%)</td>
<td>1.08</td>
<td>1 (16%)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>240/274 (87%)</td>
<td>-0.11</td>
<td>6 (2%)</td>
<td>57</td>
<td>55</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>205/211 (97%)</td>
<td>-0.69</td>
<td>1 (0%)</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>197/205 (96%)</td>
<td>-0.30</td>
<td>4 (2%)</td>
<td>65</td>
<td>64</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>177/180 (98%)</td>
<td>0.03</td>
<td>10 (5%)</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>171/185 (92%)</td>
<td>-0.34</td>
<td>3 (1%)</td>
<td>68</td>
<td>67</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>144/144 (100%)</td>
<td>1.48</td>
<td>41 (28%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>142/174 (81%)</td>
<td>-0.29</td>
<td>3 (2%)</td>
<td>63</td>
<td>62</td>
</tr>
<tr>
<td>13</td>
<td>H</td>
<td>134/134 (100%)</td>
<td>-0.78</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>141/156 (90%)</td>
<td>0.25</td>
<td>12 (8%)</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>136/142 (95%)</td>
<td>-0.33</td>
<td>2 (1%)</td>
<td>73</td>
<td>71</td>
</tr>
<tr>
<td>16</td>
<td>K</td>
<td>113/116 (97%)</td>
<td>-0.83</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>104/114 (91%)</td>
<td>-0.06</td>
<td>4 (3%)</td>
<td>40</td>
<td>38</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>108/166 (65%)</td>
<td>-0.74</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>19</td>
<td>N</td>
<td>117/118 (99%)</td>
<td>-0.57</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>20</td>
<td>O</td>
<td>94/100 (94%)</td>
<td>-0.43</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>21</td>
<td>P</td>
<td>127/134 (94%)</td>
<td>-0.72</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>93/95 (97%)</td>
<td>-0.41</td>
<td>1 (1%)</td>
<td>80</td>
<td>81</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>110/115 (95%)</td>
<td>-0.15</td>
<td>5 (4%)</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>175/237 (73%)</td>
<td>0.23</td>
<td>13 (7%)</td>
<td>14</td>
<td>16</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Analysed</th>
<th>&lt;RSRZ&gt;</th>
<th>#RSRZ&gt;2</th>
<th>OWAB(Å²)</th>
<th>Q&lt;0.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>T</td>
<td>84/91 (92%)</td>
<td>0.02</td>
<td>8 (9%)</td>
<td>35, 51, 80, 90</td>
<td>0</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>72/81 (88%)</td>
<td>0.09</td>
<td>3 (4%)</td>
<td>45, 61, 72, 78</td>
<td>0</td>
</tr>
<tr>
<td>27</td>
<td>V</td>
<td>66/67 (98%)</td>
<td>-0.49</td>
<td>0 100</td>
<td>49, 61, 81, 88</td>
<td>0</td>
</tr>
<tr>
<td>28</td>
<td>W</td>
<td>55/55 (100%)</td>
<td>-0.42</td>
<td>0 100</td>
<td>23, 41, 61, 78</td>
<td>0</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2686/2880 (93%)</td>
<td>-0.37</td>
<td>60 (2%)</td>
<td>4, 41, 116, 151</td>
<td>0</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>58/60 (96%)</td>
<td>-0.52</td>
<td>1 (1%)</td>
<td>4, 17, 44, 52</td>
<td>0</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>122/123 (99%)</td>
<td>-0.11</td>
<td>3 (2%)</td>
<td>30, 75, 102, 129</td>
<td>0</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>6076/6581 (92%)</td>
<td>-0.15</td>
<td>332 (5%)</td>
<td>3, 49, 95, 151</td>
<td>0</td>
</tr>
</tbody>
</table>

All (332) RSRZ outliers are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>39</td>
<td>ASP</td>
<td>15.9</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>26</td>
<td>SER</td>
<td>9.7</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>ALA</td>
<td>9.6</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>31</td>
<td>HIS</td>
<td>9.6</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>4</td>
<td>THR</td>
<td>9.5</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>36</td>
<td>ALA</td>
<td>9.3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>33</td>
<td>ASN</td>
<td>9.2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>41</td>
<td>ILE</td>
<td>9.1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>1</td>
<td>MET</td>
<td>8.8</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>32</td>
<td>GLN</td>
<td>8.8</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>37</td>
<td>SER</td>
<td>8.6</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>7</td>
<td>HIS</td>
<td>8.6</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>42</td>
<td>ARG</td>
<td>8.5</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>30</td>
<td>ARG</td>
<td>8.5</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>29</td>
<td>ASN</td>
<td>8.3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>34</td>
<td>THR</td>
<td>8.3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>37</td>
<td>LYS</td>
<td>8.1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>25</td>
<td>THR</td>
<td>8.0</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>35</td>
<td>GLY</td>
<td>8.0</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>24</td>
<td>THR</td>
<td>8.0</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>7</td>
<td>PRO</td>
<td>7.9</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>27</td>
<td>SER</td>
<td>7.9</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>9</td>
<td>ASN</td>
<td>7.8</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td>LYS</td>
<td>7.8</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>28</td>
<td>GLY</td>
<td>7.7</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>63</td>
<td>PRO</td>
<td>7.7</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>43</td>
<td>VAL</td>
<td>7.6</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>8</td>
<td>ASN</td>
<td>7.6</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Z</td>
<td>123</td>
<td>U</td>
<td>7.3</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>42</td>
<td>PRO</td>
<td>6.8</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>35</td>
<td>ARG</td>
<td>6.7</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>22</td>
<td>MET</td>
<td>6.7</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>25</td>
<td>LYS</td>
<td>6.6</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>41</td>
<td>ASP</td>
<td>6.5</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>8</td>
<td>LYS</td>
<td>6.4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>44</td>
<td>LYS</td>
<td>6.4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>40</td>
<td>GLU</td>
<td>6.2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>23</td>
<td>THR</td>
<td>6.1</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>36</td>
<td>LYS</td>
<td>6.1</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>10</td>
<td>ALA</td>
<td>6.1</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>11</td>
<td>LYS</td>
<td>6.1</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>6</td>
<td>THR</td>
<td>6.0</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>4</td>
<td>MET</td>
<td>6.0</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>47</td>
<td>HIS</td>
<td>6.0</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>44</td>
<td>ALA</td>
<td>6.0</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>731</td>
<td>A</td>
<td>5.9</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>91</td>
<td>PRO</td>
<td>5.8</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>3</td>
<td>ARG</td>
<td>5.8</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>40</td>
<td>HIS</td>
<td>5.7</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>20</td>
<td>ALA</td>
<td>5.6</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>32</td>
<td>ALA</td>
<td>5.6</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>24</td>
<td>THR</td>
<td>5.5</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>2</td>
<td>PRO</td>
<td>5.5</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>15</td>
<td>THR</td>
<td>5.5</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>16</td>
<td>HIS</td>
<td>5.5</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>23</td>
<td>LYS</td>
<td>5.5</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>27</td>
<td>ASN</td>
<td>5.4</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>28</td>
<td>ARG</td>
<td>5.4</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>137</td>
<td>THR</td>
<td>5.4</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>9</td>
<td>ILE</td>
<td>5.3</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1085</td>
<td>G</td>
<td>5.3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>38</td>
<td>GLY</td>
<td>5.2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>46</td>
<td>LYS</td>
<td>5.2</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>43</td>
<td>SER</td>
<td>5.1</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>58</td>
<td>MET</td>
<td>5.1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>40</td>
<td>TYR</td>
<td>5.0</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>6</td>
<td>GLN</td>
<td>5.0</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>6</td>
<td>LEU</td>
<td>5.0</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>33</td>
<td>ARG</td>
<td>5.0</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>26</td>
<td>LYS</td>
<td>4.9</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>42</td>
<td>LEU</td>
<td>4.9</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>10</td>
<td>ARG</td>
<td>4.9</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>45</td>
<td>SER</td>
<td>4.8</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>5</td>
<td>TYR</td>
<td>4.8</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>9</td>
<td>MET</td>
<td>4.7</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>55</td>
<td>TRP</td>
<td>4.7</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>51</td>
<td>ALA</td>
<td>4.7</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2780</td>
<td>A</td>
<td>4.7</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>20</td>
<td>PHE</td>
<td>4.7</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>18</td>
<td>GLY</td>
<td>4.6</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>5</td>
<td>ASP</td>
<td>4.6</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>45</td>
<td>GLY</td>
<td>4.6</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>10</td>
<td>VAL</td>
<td>4.5</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>43</td>
<td>THR</td>
<td>4.5</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>18</td>
<td>THR</td>
<td>4.5</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>11</td>
<td>LYS</td>
<td>4.4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>47</td>
<td>GLY</td>
<td>4.4</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>114</td>
<td>ASP</td>
<td>4.3</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>891</td>
<td>A</td>
<td>4.3</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>19</td>
<td>LEU</td>
<td>4.3</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>92</td>
<td>VAL</td>
<td>4.3</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1187</td>
<td>A</td>
<td>4.2</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>250</td>
<td>TRP</td>
<td>4.2</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>84</td>
<td>ILE</td>
<td>4.2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>54</td>
<td>GLU</td>
<td>4.2</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>13</td>
<td>ALA</td>
<td>4.2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>19</td>
<td>THR</td>
<td>4.2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>5</td>
<td>LYS</td>
<td>4.2</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>12</td>
<td>ARG</td>
<td>4.1</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>125</td>
<td>ASN</td>
<td>4.1</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>62</td>
<td>LEU</td>
<td>4.1</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>17</td>
<td>THR</td>
<td>4.1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>44</td>
<td>VAL</td>
<td>4.1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>38</td>
<td>GLY</td>
<td>4.1</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2088</td>
<td>U</td>
<td>4.1</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>53</td>
<td>ALA</td>
<td>4.0</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2779</td>
<td>C</td>
<td>4.0</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>38</td>
<td>LYS</td>
<td>4.0</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>31</td>
<td>LEU</td>
<td>4.0</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>52</td>
<td>GLY</td>
<td>4.0</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>119</td>
<td>SER</td>
<td>4.0</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>41</td>
<td>GLN</td>
<td>4.0</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>G</td>
<td>97</td>
<td>ASP</td>
<td>4.0</td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>2</td>
<td>ALA</td>
<td>4.0</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>46</td>
<td>ASP</td>
<td>3.9</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>58</td>
<td>VAL</td>
<td>3.9</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>83</td>
<td>GLY</td>
<td>3.9</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>10</td>
<td>PRO</td>
<td>3.9</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>147</td>
<td>ASP</td>
<td>3.9</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>558</td>
<td>G</td>
<td>3.9</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>25</td>
<td>PHE</td>
<td>3.8</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>129</td>
<td>GLY</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>19</td>
<td>GLY</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>45</td>
<td>LYS</td>
<td>3.8</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>64</td>
<td>ARG</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>31</td>
<td>THR</td>
<td>3.8</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1086</td>
<td>C</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>30</td>
<td>ASN</td>
<td>3.8</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1057</td>
<td>A</td>
<td>3.7</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>32</td>
<td>ALA</td>
<td>3.7</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>27</td>
<td>GLY</td>
<td>3.7</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>8</td>
<td>PRO</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>22</td>
<td>TYR</td>
<td>3.7</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>97</td>
<td>GLY</td>
<td>3.7</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1067</td>
<td>G</td>
<td>3.7</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>12</td>
<td>ARG</td>
<td>3.6</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>26</td>
<td>LYS</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>14</td>
<td>SER</td>
<td>3.6</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>18</td>
<td>PHE</td>
<td>3.6</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1552</td>
<td>C</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>36</td>
<td>GLU</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>21</td>
<td>TYR</td>
<td>3.6</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>56</td>
<td>ALA</td>
<td>3.6</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>20</td>
<td>HIS</td>
<td>3.5</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>7</td>
<td>VAL</td>
<td>3.5</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>136</td>
<td>VAL</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>46</td>
<td>LYS</td>
<td>3.5</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>248</td>
<td>A</td>
<td>3.5</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>122</td>
<td>ALA</td>
<td>3.5</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>144</td>
<td>ALA</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>39</td>
<td>LYS</td>
<td>3.5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>49</td>
<td>VAL</td>
<td>3.5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>24</td>
<td>LEU</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>28</td>
<td>ARG</td>
<td>3.5</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>14</td>
<td>LYS</td>
<td>3.5</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>17</td>
<td>GLY</td>
<td>3.5</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>203</td>
<td>ASN</td>
<td>3.4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>22</td>
<td>ARG</td>
<td>3.4</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>35</td>
<td>MET</td>
<td>3.4</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1077</td>
<td>U</td>
<td>3.4</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>30</td>
<td>ILE</td>
<td>3.4</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>80</td>
<td>LYS</td>
<td>3.4</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>145</td>
<td>MET</td>
<td>3.4</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1058</td>
<td>G</td>
<td>3.3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>34</td>
<td>ARG</td>
<td>3.3</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>10</td>
<td>LEU</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>11</td>
<td>LYS</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>37</td>
<td>LEU</td>
<td>3.3</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>27</td>
<td>LEU</td>
<td>3.2</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>29</td>
<td>THR</td>
<td>3.2</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>39</td>
<td>ARG</td>
<td>3.2</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1553</td>
<td>G</td>
<td>3.2</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1095</td>
<td>A</td>
<td>3.2</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>84</td>
<td>MET</td>
<td>3.2</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>730</td>
<td>C</td>
<td>3.2</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>67</td>
<td>PHE</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>16</td>
<td>ALA</td>
<td>3.1</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2409</td>
<td>A</td>
<td>3.1</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2776</td>
<td>U</td>
<td>3.1</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>1</td>
<td>ILE</td>
<td>3.1</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>15</td>
<td>ASP</td>
<td>3.1</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>52</td>
<td>LYS</td>
<td>3.1</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>9</td>
<td>SER</td>
<td>3.1</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>727</td>
<td>U</td>
<td>3.0</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1037</td>
<td>U</td>
<td>3.0</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>57</td>
<td>ASN</td>
<td>3.0</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1523</td>
<td>A</td>
<td>3.0</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3</td>
<td>LYS</td>
<td>3.0</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1055</td>
<td>A</td>
<td>3.0</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>57</td>
<td>ARG</td>
<td>3.0</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>29</td>
<td>LYS</td>
<td>3.0</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>205</td>
<td>SER</td>
<td>3.0</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>G</td>
<td>156</td>
<td>HIS</td>
<td>3.0</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>143</td>
<td>ASN</td>
<td>2.9</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>67</td>
<td>GLY</td>
<td>2.9</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>96</td>
<td>VAL</td>
<td>2.9</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2778</td>
<td>U</td>
<td>2.9</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>23</td>
<td>MET</td>
<td>2.9</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2170</td>
<td>C</td>
<td>2.9</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>20</td>
<td>PRO</td>
<td>2.9</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>165</td>
<td>SER</td>
<td>2.9</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>59</td>
<td>LYS</td>
<td>2.8</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>16</td>
<td>ASN</td>
<td>2.8</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2775</td>
<td>U</td>
<td>2.8</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>24</td>
<td>ALA</td>
<td>2.8</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>174</td>
<td>PRO</td>
<td>2.8</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>73</td>
<td>SER</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>12</td>
<td>MET</td>
<td>2.8</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>111</td>
<td>LYS</td>
<td>2.8</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>9</td>
<td>THR</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>48</td>
<td>VAL</td>
<td>2.8</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>120</td>
<td>VAL</td>
<td>2.8</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>2</td>
<td>C</td>
<td>2.7</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>197</td>
<td>GLU</td>
<td>2.7</td>
</tr>
<tr>
<td>12</td>
<td>G</td>
<td>155</td>
<td>THR</td>
<td>2.7</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>32</td>
<td>PHE</td>
<td>2.7</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>128</td>
<td>ALA</td>
<td>2.7</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2781</td>
<td>G</td>
<td>2.7</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>249</td>
<td>PRO</td>
<td>2.6</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>43</td>
<td>GLY</td>
<td>2.6</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>36</td>
<td>GLN</td>
<td>2.6</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2774</td>
<td>U</td>
<td>2.6</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>142</td>
<td>THR</td>
<td>2.6</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>60</td>
<td>LEU</td>
<td>2.6</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>155</td>
<td>PRO</td>
<td>2.6</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>53</td>
<td>ARG</td>
<td>2.6</td>
</tr>
<tr>
<td>15</td>
<td>J</td>
<td>141</td>
<td>ALA</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>15</td>
<td>SER</td>
<td>2.6</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>113</td>
<td>PRO</td>
<td>2.6</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>50</td>
<td>LEU</td>
<td>2.6</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>58</td>
<td>ALA</td>
<td>2.6</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1090</td>
<td>C</td>
<td>2.6</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2173</td>
<td>G</td>
<td>2.5</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>126</td>
<td>THR</td>
<td>2.5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>T</td>
<td>3</td>
<td>HIS</td>
<td>2.5</td>
</tr>
<tr>
<td>4</td>
<td>F</td>
<td>12</td>
<td>LEU</td>
<td>2.5</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>52</td>
<td>ILE</td>
<td>2.5</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>10</td>
<td>SER</td>
<td>2.5</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>19</td>
<td>ARG</td>
<td>2.5</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2877</td>
<td>A</td>
<td>2.5</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>121</td>
<td>GLU</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>17</td>
<td>GLY</td>
<td>2.5</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1054</td>
<td>C</td>
<td>2.5</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>130</td>
<td>THR</td>
<td>2.5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>21</td>
<td>GLY</td>
<td>2.5</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>23</td>
<td>ALA</td>
<td>2.5</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>143</td>
<td>ILE</td>
<td>2.5</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>68</td>
<td>VAL</td>
<td>2.4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>48</td>
<td>PHE</td>
<td>2.4</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>28</td>
<td>GLY</td>
<td>2.4</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2290</td>
<td>A</td>
<td>2.4</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>146</td>
<td>VAL</td>
<td>2.4</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>62</td>
<td>GLY</td>
<td>2.4</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>729</td>
<td>A</td>
<td>2.4</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>82</td>
<td>ALA</td>
<td>2.4</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>34</td>
<td>ILE</td>
<td>2.4</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1524</td>
<td>C</td>
<td>2.4</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>665</td>
<td>A</td>
<td>2.4</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>17</td>
<td>ALA</td>
<td>2.4</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>82</td>
<td>ALA</td>
<td>2.4</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>8</td>
<td>GLY</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>13</td>
<td>GLU</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>52</td>
<td>GLU</td>
<td>2.4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>16</td>
<td>ILE</td>
<td>2.4</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>123</td>
<td>ALA</td>
<td>2.4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>35</td>
<td>ARG</td>
<td>2.4</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>48</td>
<td>PHE</td>
<td>2.3</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>6</td>
<td>GLY</td>
<td>2.3</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>242</td>
<td>ALA</td>
<td>2.3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>20</td>
<td>GLY</td>
<td>2.3</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>86</td>
<td>VAL</td>
<td>2.3</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>127</td>
<td>VAL</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>4</td>
<td>ASP</td>
<td>2.3</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>13</td>
<td>PRO</td>
<td>2.3</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2087</td>
<td>U</td>
<td>2.3</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>X</td>
<td>1069</td>
<td>G</td>
<td>2.3</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>46</td>
<td>ASP</td>
<td>2.3</td>
</tr>
<tr>
<td>22</td>
<td>Q</td>
<td>64</td>
<td>ARG</td>
<td>2.3</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2090</td>
<td>U</td>
<td>2.3</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>37</td>
<td>TYR</td>
<td>2.3</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>57</td>
<td>ALA</td>
<td>2.3</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1114</td>
<td>A</td>
<td>2.3</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2773</td>
<td>G</td>
<td>2.2</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1551</td>
<td>U</td>
<td>2.2</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1120</td>
<td>C</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>8</td>
<td>ILE</td>
<td>2.2</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1099</td>
<td>A</td>
<td>2.2</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1104</td>
<td>G</td>
<td>2.2</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>123</td>
<td>VAL</td>
<td>2.2</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1068</td>
<td>A</td>
<td>2.2</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>7</td>
<td>LYS</td>
<td>2.2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>13</td>
<td>ARG</td>
<td>2.2</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1080</td>
<td>A</td>
<td>2.2</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1084</td>
<td>A</td>
<td>2.2</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>144</td>
<td>ASP</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>49</td>
<td>VAL</td>
<td>2.2</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>56</td>
<td>GLU</td>
<td>2.2</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>28</td>
<td>GLY</td>
<td>2.2</td>
</tr>
<tr>
<td>26</td>
<td>U</td>
<td>27</td>
<td>ASP</td>
<td>2.2</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>44</td>
<td>LYS</td>
<td>2.2</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>14</td>
<td>ALA</td>
<td>2.1</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>171</td>
<td>VAL</td>
<td>2.1</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1100</td>
<td>G</td>
<td>2.1</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1188</td>
<td>A</td>
<td>2.1</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>418</td>
<td>C</td>
<td>2.1</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1071</td>
<td>U</td>
<td>2.1</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1909</td>
<td>U</td>
<td>2.1</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>58</td>
<td>ALA</td>
<td>2.1</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>219</td>
<td>PRO</td>
<td>2.1</td>
</tr>
<tr>
<td>17</td>
<td>L</td>
<td>34</td>
<td>SER</td>
<td>2.1</td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>4</td>
<td>C</td>
<td>2.1</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>116</td>
<td>ASN</td>
<td>2.1</td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>4</td>
<td>LYS</td>
<td>2.1</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>4</td>
<td>HIS</td>
<td>2.1</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>2777</td>
<td>A</td>
<td>2.1</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>84</td>
<td>TYR</td>
<td>2.0</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>81</td>
<td>ALA</td>
<td>2.0</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>X</td>
<td>1556</td>
<td>A</td>
<td>2.0</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>173</td>
<td>PRO</td>
<td>2.0</td>
</tr>
<tr>
<td>23</td>
<td>R</td>
<td>94</td>
<td>VAL</td>
<td>2.0</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1103</td>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1093</td>
<td>U</td>
<td>2.0</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>5</td>
<td>ALA</td>
<td>2.0</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>149</td>
<td>ALA</td>
<td>2.0</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>86</td>
<td>GLY</td>
<td>2.0</td>
</tr>
<tr>
<td>24</td>
<td>S</td>
<td>113</td>
<td>VAL</td>
<td>2.0</td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>1189</td>
<td>G</td>
<td>2.0</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>Mol</th>
<th>Type</th>
<th>Chain</th>
<th>Res</th>
<th>Atoms</th>
<th>RCCC</th>
<th>RSR</th>
<th>B-factors(A²)</th>
<th>Q&lt;0.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>DHA</td>
<td>5</td>
<td>16</td>
<td>5/6</td>
<td>0.52</td>
<td>0.55</td>
<td>83,83,85,86</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>DHA</td>
<td>5</td>
<td>17</td>
<td>5/6</td>
<td>0.55</td>
<td>0.39</td>
<td>76,77,78,80</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>DHA</td>
<td>5</td>
<td>3</td>
<td>5/6</td>
<td>0.76</td>
<td>0.47</td>
<td>82,83,84,85</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>BB9</td>
<td>5</td>
<td>15</td>
<td>6/7</td>
<td>0.78</td>
<td>0.48</td>
<td>88,88,88,88</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>DCY</td>
<td>5</td>
<td>9</td>
<td>6/7</td>
<td>0.81</td>
<td>0.18</td>
<td>87,87,87,87</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>BB9</td>
<td>5</td>
<td>13</td>
<td>5/7</td>
<td>0.83</td>
<td>0.22</td>
<td>85,86,86,87</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>MH6</td>
<td>5</td>
<td>14</td>
<td>4/7</td>
<td>0.85</td>
<td>0.30</td>
<td>86,86,87,87</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>BB9</td>
<td>5</td>
<td>11</td>
<td>6/7</td>
<td>0.86</td>
<td>0.23</td>
<td>85,87,87,88</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>TS9</td>
<td>5</td>
<td>10</td>
<td>9/11</td>
<td>0.87</td>
<td>0.38</td>
<td>87,88,89,89</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>BB9</td>
<td>5</td>
<td>6</td>
<td>6/7</td>
<td>0.88</td>
<td>0.18</td>
<td>82,84,85,86</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>DBU</td>
<td>5</td>
<td>8</td>
<td>5/7</td>
<td>0.93</td>
<td>0.16</td>
<td>85,86,87,87</td>
<td>0</td>
</tr>
</tbody>
</table>

6.3 Carbohydrates

There are no carbohydrates in this entry.

6.4 Ligands

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled ‘Q< 0.9’ lists the number of atoms with occupancy less than 0.9.
<table>
<thead>
<tr>
<th>Mol</th>
<th>Type</th>
<th>Chain</th>
<th>Res</th>
<th>Atoms</th>
<th>RSCC</th>
<th>RSR</th>
<th>B-factors(Å²)</th>
<th>Q&lt;0.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2884</td>
<td>1/1</td>
<td>0.82</td>
<td>0.79</td>
<td>55,55,55,55</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2910</td>
<td>1/1</td>
<td>0.90</td>
<td>0.38</td>
<td>19,19,19,19</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2898</td>
<td>1/1</td>
<td>0.90</td>
<td>0.54</td>
<td>19,19,19,19</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2890</td>
<td>1/1</td>
<td>0.91</td>
<td>0.34</td>
<td>49,49,49,49</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2886</td>
<td>1/1</td>
<td>0.91</td>
<td>0.26</td>
<td>41,41,41,41</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2885</td>
<td>1/1</td>
<td>0.93</td>
<td>0.41</td>
<td>56,56,56,56</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>Z</td>
<td>124</td>
<td>1/1</td>
<td>0.95</td>
<td>0.31</td>
<td>26,26,26,26</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>Z</td>
<td>126</td>
<td>1/1</td>
<td>0.95</td>
<td>0.34</td>
<td>25,25,25,25</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2903</td>
<td>1/1</td>
<td>0.95</td>
<td>0.30</td>
<td>3,3,3,3</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2896</td>
<td>1/1</td>
<td>0.95</td>
<td>0.26</td>
<td>3,3,3,3</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2889</td>
<td>1/1</td>
<td>0.95</td>
<td>0.77</td>
<td>3,3,3,3</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2881</td>
<td>1/1</td>
<td>0.95</td>
<td>0.24</td>
<td>59,59,59,59</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>Z</td>
<td>127</td>
<td>1/1</td>
<td>0.95</td>
<td>0.17</td>
<td>12,12,12,12</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2892</td>
<td>1/1</td>
<td>0.95</td>
<td>0.16</td>
<td>22,22,22,22</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2888</td>
<td>1/1</td>
<td>0.95</td>
<td>0.30</td>
<td>3,3,3,3</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2893</td>
<td>1/1</td>
<td>0.96</td>
<td>0.15</td>
<td>13,13,13,13</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2905</td>
<td>1/1</td>
<td>0.96</td>
<td>0.50</td>
<td>13,13,13,13</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2907</td>
<td>1/1</td>
<td>0.96</td>
<td>0.73</td>
<td>17,17,17,17</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2900</td>
<td>1/1</td>
<td>0.96</td>
<td>0.26</td>
<td>3,3,3,3</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2902</td>
<td>1/1</td>
<td>0.96</td>
<td>0.39</td>
<td>24,24,24,24</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>Z</td>
<td>128</td>
<td>1/1</td>
<td>0.96</td>
<td>0.09</td>
<td>41,41,41,41</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2892</td>
<td>1/1</td>
<td>0.97</td>
<td>0.36</td>
<td>12,12,12,12</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2909</td>
<td>1/1</td>
<td>0.97</td>
<td>0.21</td>
<td>3,3,3,3</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2904</td>
<td>1/1</td>
<td>0.97</td>
<td>0.32</td>
<td>6,6,6,6</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2908</td>
<td>1/1</td>
<td>0.97</td>
<td>0.11</td>
<td>3,3,3,3</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2897</td>
<td>1/1</td>
<td>0.98</td>
<td>0.47</td>
<td>3,3,3,3</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>M</td>
<td>167</td>
<td>1/1</td>
<td>0.98</td>
<td>0.54</td>
<td>3,3,3,3</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2895</td>
<td>1/1</td>
<td>0.98</td>
<td>0.25</td>
<td>3,3,3,3</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2987</td>
<td>1/1</td>
<td>0.98</td>
<td>0.18</td>
<td>3,3,3,3</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2901</td>
<td>1/1</td>
<td>0.98</td>
<td>0.09</td>
<td>60,60,60,60</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2906</td>
<td>1/1</td>
<td>0.98</td>
<td>0.19</td>
<td>58,58,58,58</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>Z</td>
<td>125</td>
<td>1/1</td>
<td>0.98</td>
<td>0.29</td>
<td>9,9,9,9</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2894</td>
<td>1/1</td>
<td>0.99</td>
<td>0.40</td>
<td>15,15,15,15</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2883</td>
<td>1/1</td>
<td>0.99</td>
<td>0.10</td>
<td>49,49,49,49</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2891</td>
<td>1/1</td>
<td>0.99</td>
<td>0.41</td>
<td>12,12,12,12</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>MG</td>
<td>X</td>
<td>2899</td>
<td>1/1</td>
<td>0.99</td>
<td>0.53</td>
<td>3,3,3,3</td>
<td>0</td>
</tr>
</tbody>
</table>

### 6.5 Other polymers

There are no such residues in this entry.